CANADIAN SHEET STEEL BUILDING INSTITUTE

Design of Steel Deck Diaphragms

3rd Edition

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Preface

One of the objectives of the Canadian Sheet Steel Building Institute is the development of design criteria that promote safety, performance and good practice. This bulletin is published as an aid to designers and building officials. It offers a practical approach to the design of steel deck diaphragms consisting of steel roof or floor deck supported by a steel structure. Such construction is capable of providing an efficient diaphragm to resist lateral forces when all components are suitably interconnected. Although the design approach is to some extent empirical, manufacturer's tests have confirmed the design values given.

The material contained herein has been prepared for the general information of the reader. While the material is believed to be technically correct and in accordance with recognized practice at the time of publication, it does not obviate the need to determine its suitability for a given situation. Neither the Canadian Sheet Steel Building Institute nor its Members warrant or assume any liability for the suitability of this material for any general or particular application.

CANADIAN SHEET STEEL BUILDING INSTITUTE

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CSSBI
Canadian Sheet Steel Building Institute

1. Introduction

Building structures must resist the lateral forces to which they are subjected. The nature and magnitude of these forces depends upon the location of the building as well as its geometry and orientation. The most common lateral force to be considered is that due to wind acting on the building surfaces; the wind force magnitude being a function of the building height, shape and area, as well as the wind velocity pressure and gust factor. Earthquake or seismic shock is a second potential generator of lateral force due to the inertia of the building mass subjected to ground motion. With the advent of the 2005 National Building Code of Canada (NBC 2005), seismic loading has become more significant than wind effects for many low rise buildings.

The magnitude of both wind and seismic loads to be considered in design are specified in the applicable building regulations and may vary considerably from locality to locality. The NBC 2005 provides a comprehensive treatment of such forces and should be consulted in absence of specific legal requirements.

Lateral forces may also be caused by moving loads, asymmetrical loading, or sway, all of which must be considered in the design.

The action of lateral forces requires an adequate in-plane distribution system at each floor and roof level to distribute the imposed lateral forces to columns, walls or vertical bracing systems and thence eventually to the ground. Such a distribution system may be in-plane (usually horizontal) bracing installed specifically for that purpose; by diaphragm action of the floor or roof deck construction alone; or by a combination of these methods.

Steel floor and roof deck, combining high strength with light weight, are ideally suited to lateral force distributing diaphragms in addition to their primary gravity load carrying function. When so used, the steel deck, and its method of attachment, must be checked to ensure that sufficient strength can be developed. In many cases the strength and stiffness of the diaphragm will eliminate the need for an independent horizontal bracing system. The stiffness required to control the lateral deflection of a diaphragm will be governed by the type of construction and the choice of materials used in the walls, partitions and other elements that may be affected by lateral movement.

2. Design Methods

Currently in North America there are two methods commonly used to calculate the strength and stiffness of a steel deck diaphragm: the "Tri-Services Method"[1] and the "SDI Method"[2].

The Tri-Services Method was developed by S.B. Barnes and Associates and is based on a series of full-scale tests from which empirical equations for both strength and stiffness were developed. The CSSBI adopted this method as the basis for its first diaphragm design bulletin in 1972 and is included in this current edition. Since this method is empirically based, it does not indicate the failure mode of the diaphragm and is limited in the type of fasteners that can be included. Also, no explicit factor of safety has been stated, although a value of 2.5 has typically been assumed.

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1 *Seismic Design for Buildings*, TM 5-809-10/NAV FAC P-355/AFM 88-3, Chap. 13, Departments of the Army, the Navy and the Air Force, USA. April 1973

2 *Diaphragm Design Manual*, 3rd Edition, Steel Deck Institute, Fox River Grove, Ill, USA, September 2004

The following limitations apply to this method:

a. Connections of the deck to the supporting structure must be welded with 12 mm (1/2 in) minimum effective diameter.
b. Side lap connections between sheets must be button punched or seam welded.
c. Sheet thickness must be at least 0.76 mm (0.030 in). The maximum thickness is 1.52 mm (0.060 in).
d. Each deck unit must be attached to the framing member by at least two welds.
e. Side lap attachments have a maximum spacing of 0.9 m (3 ft).
f. The original tests were based only on horizontal assemblies.

This method has the following advantages:

a. The strength and stiffness of the individual deck sheets can be tabulated. This allows a deck manufacturer to publish tables for each deck profile.
b. It is independent of deck orientation.
c. It can be used for concrete filled assemblies.
d. This is a hand-calculation method that can be easily computerized.

The Tri-Services method has become the most popular method used in Canada, in part because it has been promoted by the CSSBI, but also because it fits the standard construction practices. Tests conducted over the years have confirmed the validity of this method for welded and button-punched diaphragms.

The SDI Method was developed by Dr. L.D. Luttrell for the Steel Deck Institute, and is based on analytical work and tests conducted at West Virginia University. The method is easy to use and is considered as a hand calculation method. The first edition of the SDI Diaphragm Design Manual was published in 1981, and the current third edition was published in 2004.The ultimate strength of the diaphragm is limited by any one of four failure modes:

a. Fastener failure along outer panel edge.
b. Fastener failure around interior panel.
c. Failure of the corner fasteners.
d. Plate-like shear buckling.

This method is flexible because it is an analytical approach that has been confirmed by tests and allows the tabulation of strength and stiffness values. Any type of fastener can be included, or mixed types, if the strength and stiffness characteristics are known. This method is used extensively in the United States, and is included in this publication for those fastener configurations that are not covered by the Tri-Services Method.

3. Design Analogy

The discussion in this publication will focus on the Tri-Service Method, since that is the method historically used in Canada. Details of the method are included in Appendix A. For details of the SDI method, refer to the SDI publication "Diaphragm Design Manual", 3rd edition. This publication can be obtained from the SDI through their web site at www.sdi.org.

As depicted in Figure 1, a diaphragm may be considered analogous to a plate girder having its web (the steel floor or roof deck) in a horizontal or inclined plane constructed to resist the lateral forces applied to the building. The flanges of the girder are the perimeter supporting members, required on all four sides of the diaphragm. The analogous plate girder is considered to span between locations of vertical support capable of transferring the horizontal forces into the vertical plane (i.e. shear walls, braced or moment-resisting frames). To simplify design, the web is considered to resist

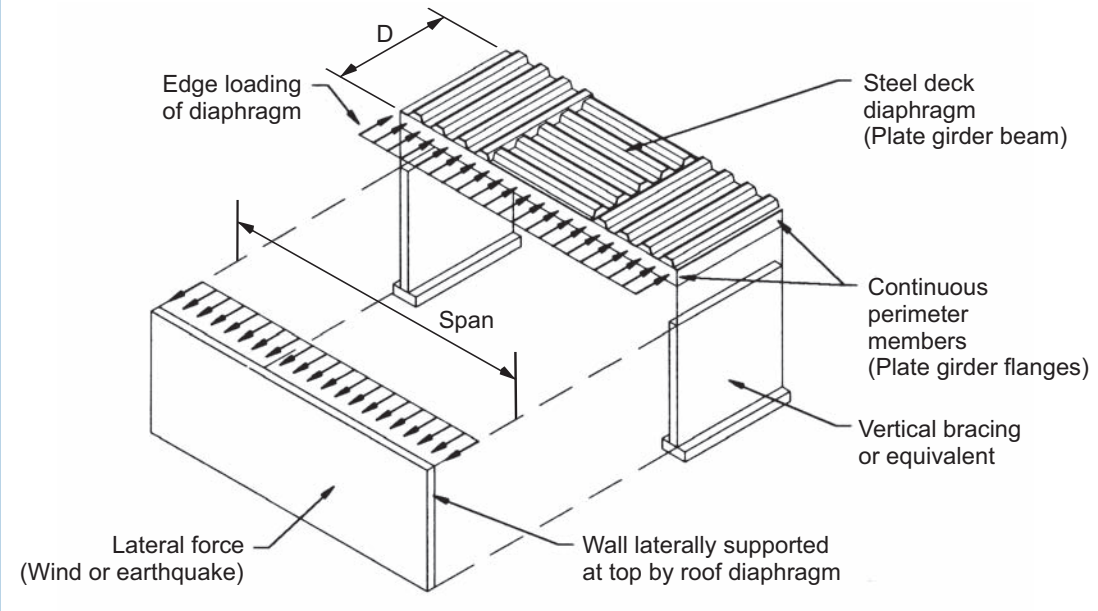
only shear forces whereas the flanges (the perimeter members parallel to the span of the girder) are assumed to resist only flexural forces, determined by the relationship:

$$P_a = M/D$$

where,

P_a = axial force in the perimeter member (tension or compression)
M = girder bending moment at the particular point investigated
D = distance between centre lines of perimeter members, measured perpendicular to the span, in the plane of the web

Figure 1 • Diaphragm Plate Girder Analogy



The ability of the web to resist shear depends on the cross-sectional area and profile of the steel deck and on the type, location and spacing of connections. The orientation of the deck unit relative to the loading of the diaphragm does not influence the strength of the diaphragm since in a beam or girder web the shear on the two perpendicular faces of a small element is equal in magnitude and opposite in sign. In actual buildings any one of several framing arrangements and consequent deck orientations are a possibility.

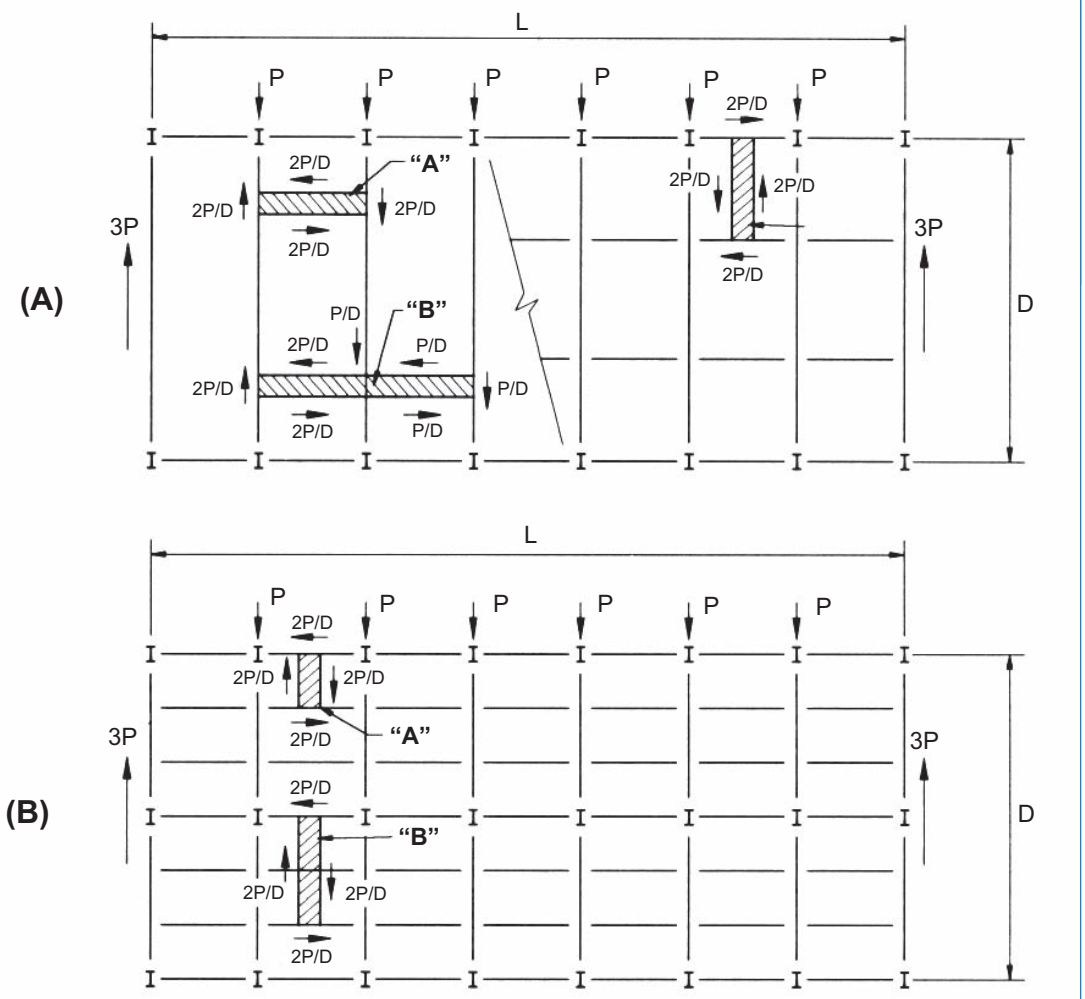
As shown in Figure 2(A) the roof structure depicted has trusses spanning in the short direction of the building with deck units spanning directly between the trusses or (alternatively) between secondary structural members. Considering the horizontal wind loads applied as concentrations (P) along the column lines, the total wall shear reaction at either end of the building will be 3P and the total shear force along all of the deck units in the second bay will be 2P. The unit shear (v) can be closely approximated simply by dividing the total shear force by the web depth (D), giving v=2P/D acting on the short ends of deck unit "A". Taking the moments about any corner of the panel, an equal shear of 2P/D acting along the long edges of the panel is determined. The same analysis can be applied to deck unit "A" in Figure 2(B) that spans between joists (or beams) that in turn are supported by girders at the column lines. Here again an equal shear of 2P/D acts along the four edges of the deck unit.

In the case of multi-span deck units (designated in Figure 2 as "B") where the unit is oriented so it is subjected to a constant shear value as in Figure 2(B), the connections along the intermediate support member carry no computed stress. That, however, may not be the case under other

loading situations. In Figure 2(A) the left and right halves of deck unit "B" are subjected to different unit shears and it is necessary to connect the deck unit to the intermediate member to accommodate a shear differential equal to P/D.

Because diaphragms may be called upon to resist external loads coming from any direction, it is necessary to ensure that the deck units and their connections are adequate to resist all diaphragm forces to which they may be subjected. The design values given in this bulletin are applicable irrespective of whether the span direction of the individual deck units is parallel or perpendicular to the span of the diaphragm, including any combination.

Figure 2 • Diaphragm Shear on Individual Deck Units in Various Orientations



4. Diaphragm Deflection

The deflection of a steel deck diaphragm is assumed to consist of two components, the flexural component (Δ_F) and the web component (Δ_W). These components are considered to be directly additive, thus the total deflection is the sum of the two (See Figure 3).

4.1 Flexural Deflection (Δ_F)

The flexural deflection of a diaphragm is determined by conventional beam deflection formulae as given in Table 1. The moment of inertia of the diaphragm is computed using only the flange areas; except when concrete cover is placed over the steel deck the transformed area of the concrete cover may also be utilized.

4.2 Web Deflection (Δ_W)

The web deflection of a diaphragm depends not only on the shear deformation of the deck profile, but on the flexibility of the attachments of the deck to the framing members and the amount of slip of the side lap connections between the deck units. It can be assumed, for practical purposes, that web deflection is directly proportional to the product of the average shear (q_{avg}) per unit width of diaphragm web and the length of the diaphragm measured from the point of support (i.e. shear wall, braced bent) to the point at which deflection is to be determined. The proportional constant (F), termed the "Flexibility Factor" of the diaphragm, is measured in mmx10^{-6}/N (inchesx10^{-6}/lb). This constant represents the average deflection a diaphragm web will deflect in a span of one metre under a shear of one Newton per metre of diaphragm width.

The SDI Method uses a stiffness parameter (Q') instead of a flexibility factor for determining web deflections. The units of Q' are 10^3 N/mm (10^3 lbs/in) and is the inverse of the Flexibility Factor. The method for determining deflections is the same for both methods, except if Q' is used it must first be converted to a Flexibility Factor by inverting and multiply by 10^3.

Web deflection formulae are given in Table 1. Design values of the Flexibility Factor and stiffness for typical deck profiles and fastener configurations are given in the Appendix B along with the strength values.

Figure 3 • Diaphragm Deflection for Simple Span

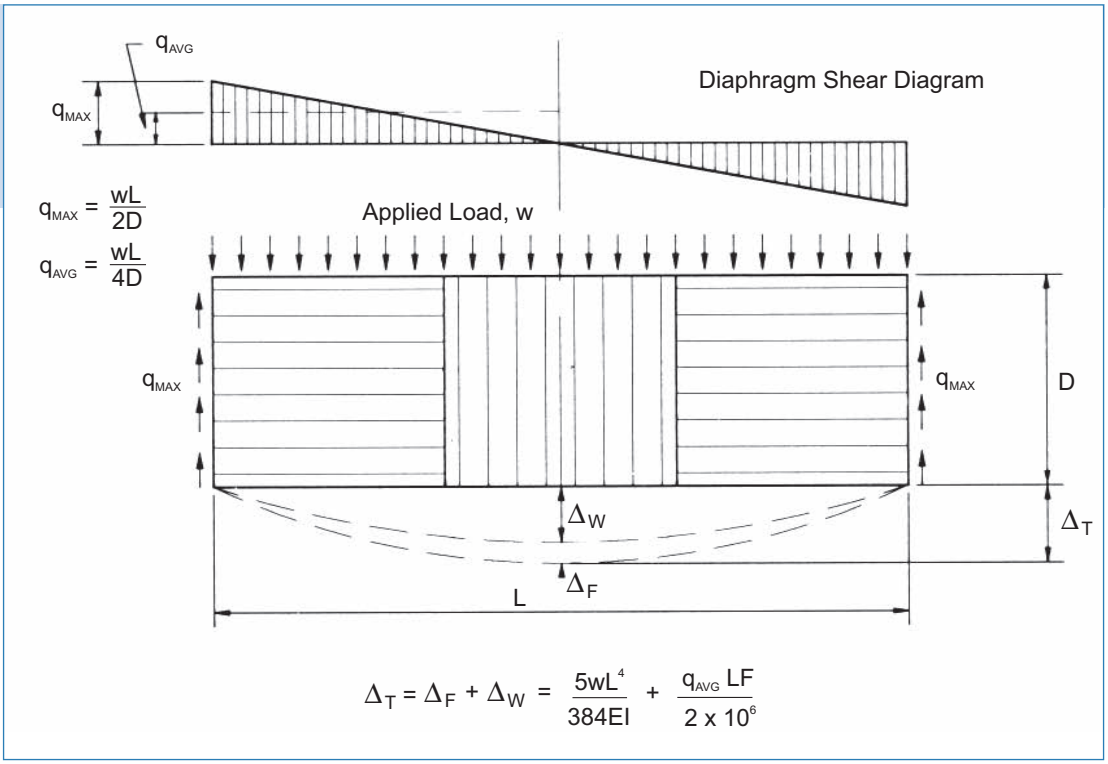


Table 1 • Formulae for Maximum Diaphragm Deflection

Diaphragm Span Condition	Diaphragm Loading Condition	Flexural Deflection Δ_F	Web Deflection Δ_W
Simple	Uniform	$\frac{5wL^4}{384EI}$	$\frac{q_{avg}LF}{2x10^6}$
	Load applied at centre	$\frac{PL^3}{48EI}$	
Cantilever	Load applied at each third point	$\frac{23PL^3}{684EI}$	$\frac{q_{avg}aF}{10^6}$
	Uniform	$\frac{wa^4}{8EI}$	
	Load applied at free end	$\frac{Pa^3}{3EI}$	
Total Deflection $\Delta_T = \Delta_F + \Delta_W$			

E = Modulus of elasticity of steel (200,000 MPa)
I = Moment of inertia of diaphragm flange (perimeter) members about centroidal axis of diaphragm (mm^4)
L = Span of simple beam (mm)
a = Span of cantilever beam (mm)
P = Concentrated lateral load (N)
w = Uniform lateral load (N/mm)
F = Flexibility factor ($mmx10^{-6}/N$)
q_{avg} = Average shear (per unit of diaphragm width) along length L/2 or "a" (N/mm)

5. Flexibility Limitations

Table 2 provides a guide to the practical limits of diaphragms based on flexibility considerations. To provide a means of classifying the flexibility of a diaphragm web, the Flexibility Factor "F" is used. It is equal to the average deflection of the diaphragm per unit span when subjected to a unit shear. Expressed as a formula this becomes:

$$F = \frac{\Delta_w x 10^6}{q_{avg} L_1}$$

where,

Δ_W = web deflection
q_{avg} = average shear per unit width along the diaphragm length L_1
L_1 = distance between vertical resisting element (e.g. shear wall) and the point to which the deflection is to be determined

Table 2 • Formulae for Maximum Diaphragm Deflection

Diaphragm Flexibility Category	Range of Flexibility Factor (mmx10^{-6}/N) (inx10^{-6}/lb)	Maximum Span if Laterally Supporting Masonry or Concrete Walls (m) (ft)	Maximum Diaphragm Span/Depth Ratios[1]			
			No Torsion on Structure		Torsion on Structure	
			Masonry or Concrete Walls	Flexible Walls	Masonry or Concrete Walls	Flexible Walls
Flexible	400 – 850 (70 – 150)	30 (100)	2 or as req'd for deflection	3	Not used	2
Semi-Flexible	60 – 400 (10 – 70)	60 (200)	2.5 or as req'd for deflection	4	Not used	2.5
Semi-Rigid	6 - 60 (1 – 10)	90 (300)	3 or as req'd for deflection	5	2	3
Rigid	< 6 (< 1)	120 (400)	as req'd for deflection	Not limited	as req'd for deflection	3.5

[1]For cantilever diaphragms the recommended maximum diaphragm span/depth ratio is one half of the values shown.

6. Shear Distribution to Lateral Force Resisting Elements

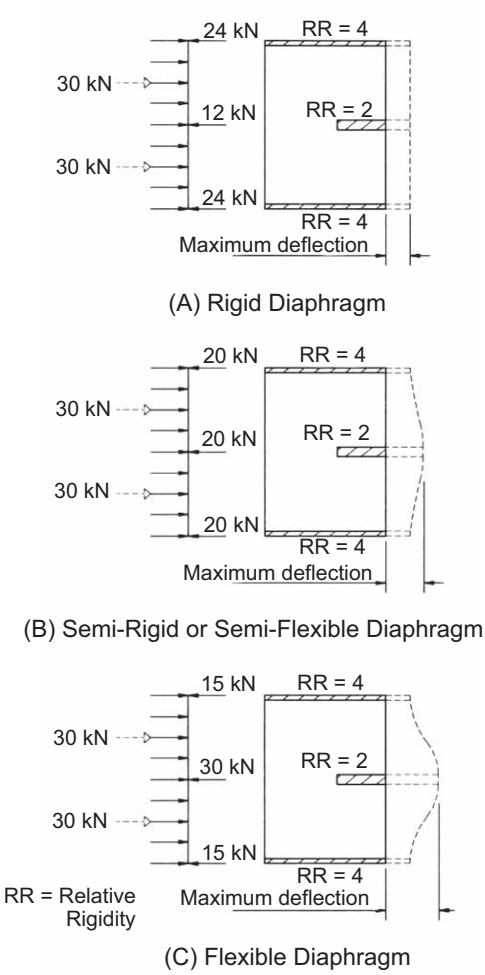
Shear distribution between the various lateral force resisting elements is governed by the relative rigidities of these elements and the flexibility of the diaphragm. Diaphragm flexibility as measured by the Flexibility Factor (F) ranges from "rigid" (F < 6 mmx10^{-6}/N or 1 inx10^{-6}/lb) to "very flexible" (F > 850 mmx10^{-6}/N or 150 inx10^{-6}/lb). Diaphragms in which the flexibility factor exceeds 850 (150) are limited in effectiveness.

With a rigid diaphragm lateral forces applied to the diaphragm are assumed to be distributed to the vertical supporting members in proportion to their relative stiffness. The diaphragm is assumed to be rigid relative to its supports and will cause each vertical element to deflect an equal amount. The vertical elements with the greater stiffness will resist a greater proportion of the lateral load (See Figure 4(A)).

With a flexible diaphragm the vertical supports are assumed to be rigid relative to the diaphragm. The flexible diaphragm is analogous to a beam, or series of beams, spanning between rigid supports. Thus with a flexible diaphragm the lateral loading is assumed to be distributed to the vertical supports in proportion to the contributing diaphragm area, neglecting continuity effects (See Figure 4(C)).

Semi-rigid and semi-flexible diaphragms have significant deflection under load but also have sufficient stiffness to distribute a portion of their load to the vertical elements in proportion to the rigidities of these elements. The action is analogous to a continuous beam on yielding supports. The support reactions are dependent on the relative stiffness of both diaphragm and vertical elements (See Figure 4(B)). However, a rigorous analysis is not always necessary and one of the other methods of distribution (i.e. rigid or flexible) is usually used for diaphragms of intermediate flexibility depending on which idealized situation is more closely approximated.

Figure 4 • Diaphragm Flexibilities Relative to Lateral Stiffness of Supporting Structure



7. Rotation of Diaphragm Due to Torsion of the Structure

When lateral forces are applied to a diaphragm such that the centroid of these forces does not coincide with the centroid of resistance of the vertical supports, the diaphragm will be subject to a rotational force about a vertical axis. The rotational force creates torsional stress in the diaphragm and supporting structure that are superimposed on the stresses existing if no rotational forces were present. Such stresses may be determined by the usual methods of torsional analysis, taking into account the centre of rotation of the structure as a whole and the torsional stiffness of the vertical supporting members, taken as a group. NBC 2005 requires that all buildings designed for earthquake loading must include a minimum eccentricity for determining the effects of accidental torsion.

Rotational effects can be accommodated by rigid and semi-rigid diaphragms, including cantilevered diaphragms, employed in conjunction with steel frames. The use of flexible diaphragms (F > 400 metric or 70 imperial) is not recommended where the diaphragm is subject to significant torsion. The effects of rotation should be kept to a minimum in all diaphragms supported on unit masonry. See Table 2 for additional guidance.

8. Data for Diaphragm Design

8.1 Tri-Services Method

Data for the design of diaphragms employing typical 38 mm (1-1/2 in) and 76 mm (3 in) deep steel deck units, with and without concrete cover, are given in the Appendix B. The index for these tables is given on pages 27 (metric) and 29 (imperial).

The shear strength and flexibility factors for other deck profiles can be calculated using the general design criteria given in Appendix A. However, the steel deck fabricators should first be contacted for available diaphragm load tables pertaining to their own products.

8.2 SDI Method

Data for the design of diaphragms employing typical 38 mm (1-1/2 in) and 76 mm (3 in) deep steel deck units, with and without concrete cover, are also given in the Appendix B. The index for these tables is given on pages 28 (metric) and 30 (imperial). The shear strength and stiffness factors for other deck profiles can be calculated using the SDI Diaphragm Design Manual, 3rd Edition.

8.3 Limit States Design

Canadian design practice is based on Limit States Design (LSD) that compares the effects of factored loads (αLL) to the effects of factored resistance of the structural member of component (ϕR_n). Thus $\alpha_L L \leq \phi R_n$.

The Tri-Services Method of diaphragm design is based on Allowable Stress Design (ASD) that compares the effects of specified loads (L) to the nominal resistance divided by a nominal factor of safety (R_n/Ω). The factor of safety for the Tri-Services Method has commonly been taken as 2.5. Thus $L \leq R_n/\Omega = R_n/2.5$. The resistance factor for steel deck diaphragms is specified by CAN/CSA-S136-01, and is 0.50 for all connection types. The factored shear resistance values listed in the Appendices were determined by multiplying the allowable values calculated using the Tri-Services Methods by 2.5 (to get nominal resistances) and by 0.50 (to get factored resistances).

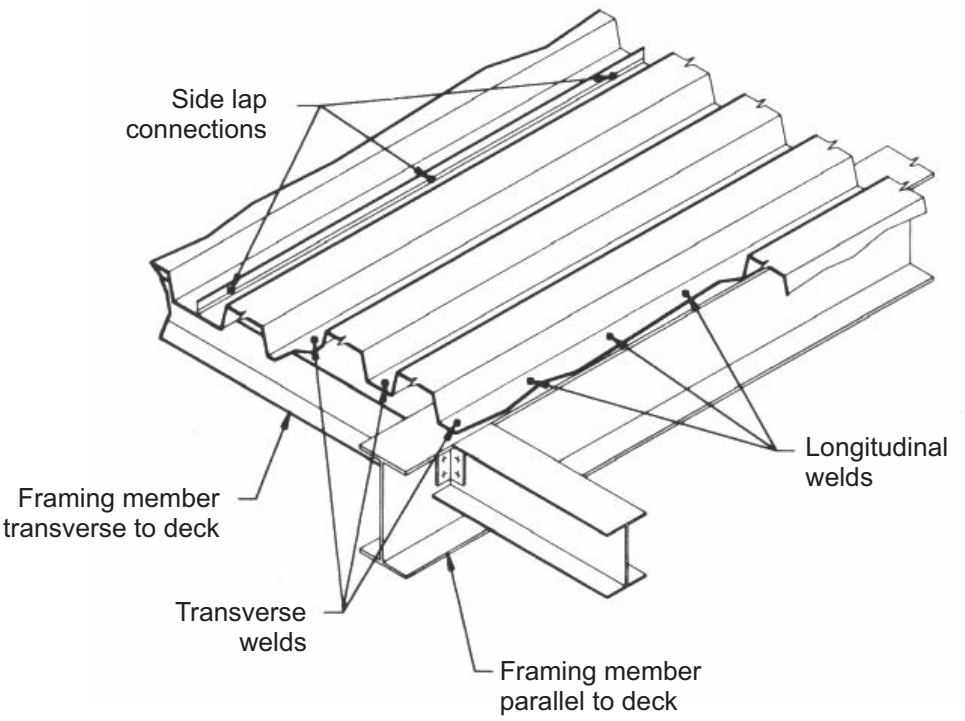
9. Connection Details

9.1 General

For a steel floor or roof deck assembly to develop meaningful diaphragm strength, it is necessary for the deck units and the steel frame to be integrated structurally. This is achieved through suitable connection details. The design of these details is normally considered within the responsibility of the structural engineer. For deck profiles or connection details other than those given in Tables 3, 4 and 5, the detailed calculation method given in Appendix A may be used to determine the diaphragm capacity, or the deck supplier may be consulted for the properties of the particular deck profile under consideration. The varying deck thicknesses and connection patterns must be shown clearly on the structural drawings or detailed in the specifications.

In general, the strength and stiffness of a steel deck diaphragm is largely governed by the connection of the deck units to the structural framing and to each other. Therefore, the connection details need to be carefully specified. See Figures 5 and 6 for typical connection details.

Figure 5 • Typical Connection Details for Beam and Girder Framing



9.2 Welding of the Deck to Structural Framing

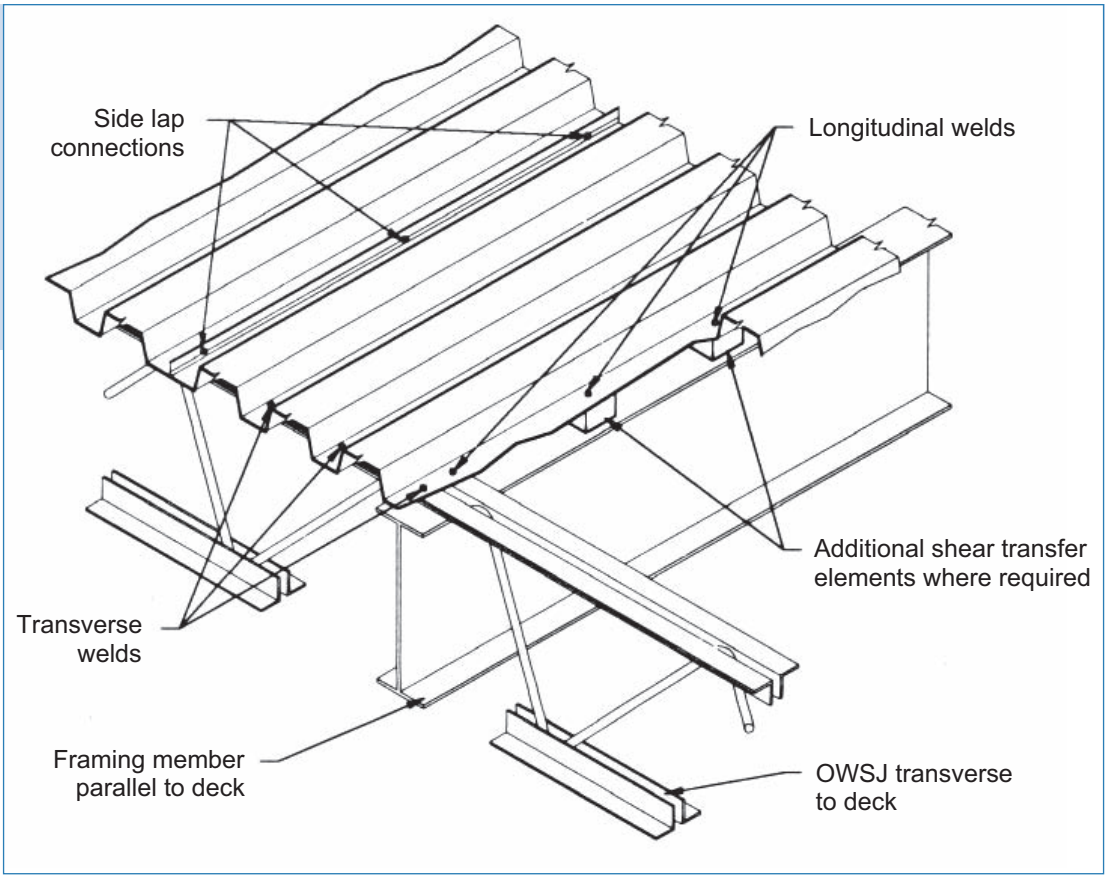
The standard welds are generally specified as arc spot welds with a nominal visible diameter of 19 mm (3/4 in) or the equivalent size of an arc seam weld. The welding process requires melting through the deck, thus fusing the steel deck to the supporting structural member.

According to the location, arc spot welds can be divided into two groups, namely (a) transverse welds, and (b) longitudinal welds.

(a) Transverse welds are located in the valleys between the ribs of the deck where the deck is in contact with the supporting member. Thus, the spacing between such welds is governed by the profile of the deck. The required number of transverse welds per deck sheet is specified in the design. There should be a weld in at least every other valley and at each of the corners of the deck sheet.

(b) The longitudinal welds are also located in a valley of the deck except in this case the framing member is parallel to the corrugation. In some types of construction the framing members parallel to the span of the deck are at a lower elevation than the framing members perpendicular to the span of the deck, such as shown in Figure 6 for open web steel joist framing. In such cases, direct welding of the deck to the parallel framing is not possible. Therefore, special attention must be paid to the connection details to ensure that adequate means of transferring the shear from the deck to the framing member, or vice versa, are provided. The spacing of longitudinal welds should be no greater than the maximum distance obtained using the equation given in section 9.4.

Figure 6 • Typical Connection Details for Open Web Steel Joist Framing



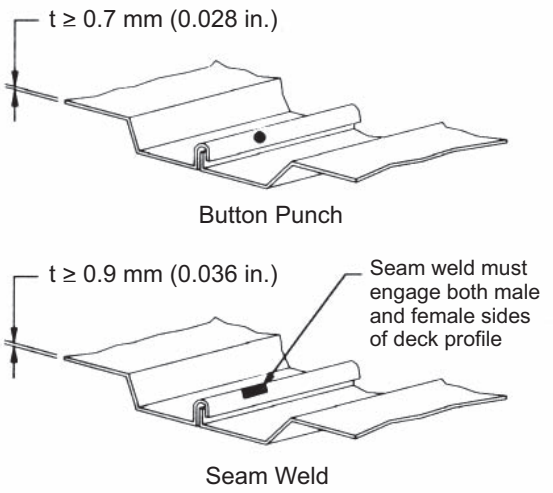
9.3 Side Lap Connection of Deck Units

The shear induced in the plane of the diaphragm is transmitted from one deck sheet to the other in part through the side lap connections. The typical steel deck has an interlocking male and female side lap as shown in Figure 7. There are two methods of fastening considered in this bulletin for the Tri-Services Method. One is to mechanically clinch (button punch) the male and female components together; the other is to seam weld. The button punch has a low resistance to slip and, therefore, is better suited to situations where diaphragm shear is moderate. Seam welding offers a stronger, stiffer connection and is more suitable for higher diaphragm shear situations; however, it is more costly and is limited to 0.9 mm (0.035 in) or thicker material to ensure successful welding.

The spacing of side lap connections influences both diaphragm shear capacity and flexibility, as indicated in the tables in the Appendices, and the appropriate spacing must be specified.

When concrete is placed to a minimum of 65 mm (2-1/2 in) above the steel deck, the concrete slab itself is capable of transmitting the diaphragm shear across the side lap of the deck units. Therefore, no special side lap connection need be provided (other than a recommended maximum spacing of button punches at 900 mm (36 in) intervals) except when the steel deck acts alone as a diaphragm prior to concrete placement (e.g. floor deck in multi-storey buildings during construction).

Figure 7 • Side Lap Connections



9.4 Perimeter Framing Members

The members around the perimeter of the deck diaphragm function as the flanges of the analogous plate girder and are required to resist direct tensile or compressive forces resulting from the flexure of the diaphragm. It is important that these members be positioned to allow direct welding of the steel deck. Figure 8 illustrates two types of continuous perimeter members: a perimeter angle, and an embedded plate.

Special attention must be given to the interconnection of a line of these members to ensure they act as a continuous flange over the entire length of the diaphragm. Perimeter members that support loads additional to those resulting from diaphragm behaviour (e.g. spandrel beams) should be designed for the applicable combined loading case.

The welds fastening the deck to the perimeter members must be capable of transferring the entire shear from the diaphragm to the lateral force resisting structure. Therefore, the spacing of these perimeter welds is limited as follows:

[metric] $a_w = \frac{V_{rw} x 10^3}{q_{max}} \leq 900mm$ [imperial] $a_w = \frac{V_{rw} x 12}{q_{max}} \leq 36in$

where,

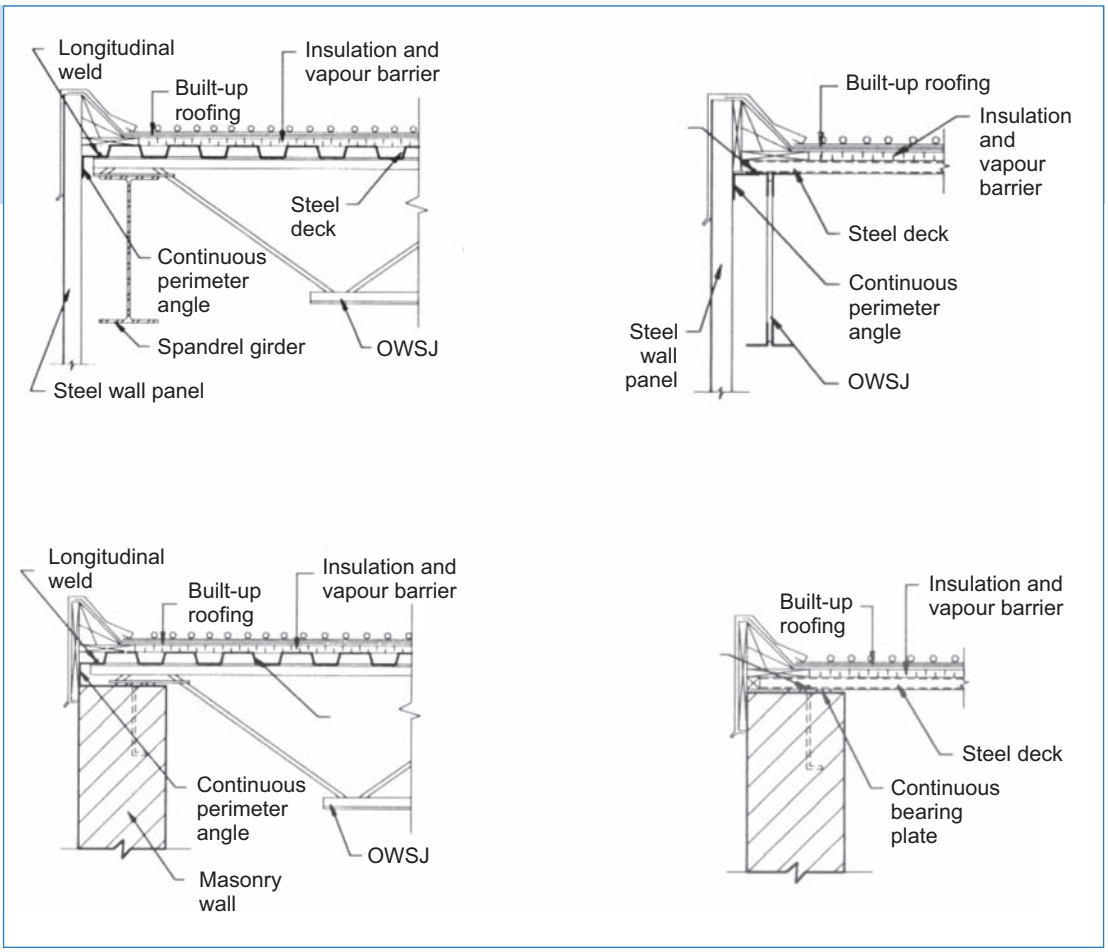
a_w = centre-to-centre maximum spacing of perimeter welds (mm or in)
V_{rw} = factored shear resistance of a perimeter weld calculated in accordance with CAN/CSA-S136 (N or lbs)
q_{max} = factored shear force carried by the diaphragm (N/m or lbs/ft)

9.5 Intermediate Framing Members

Steel floor and roof decks are often connected to intermediate framing members in addition to the perimeter members and the transverse members (Figure 6). Intermediate framing members are usually beams located along column lines, and can be the means by which lateral loads acting on the structure are transferred into the diaphragm.

The connections from the diaphragm to the intermediate framing members must be designed to transfer any differential shear introduced at that location. Illustrated in Figure 9 are two different methods of shear transfer within a diaphragm.

Figure 8 • Continuous Perimeter Member Detail



Case (A) in Figure 9 occurs when the wall cladding is supported by girts that transfer the wind load to the columns. The load then passes from the columns to the intermediate framing members and then into the shear diaphragm. The additional shear transfer elements connecting the deck and the intermediate framing are shown in Figure 6. Shear transfer elements are spaced as required to transfer the shear along this framing line.

Case (B) in Figure 9 occurs when the wall cladding spans completely from the base angle to the roof and is supported by the perimeter framing member at the deck edge, which transfers the applied wind load directly into the diaphragm as a uniform load. Alternatively, earthquake induced forces are distributed according to building mass and can often be taken as a uniformly applied load. For uniform loading there is no significant differential shear at the intermediate framing members, and, therefore, no additional shear transfer elements would be required.

In actuality, most structural framing would create a shear force diagram that is a combination of the two types. Shear transfer elements along the intermediate framing members are needed to transfer only the differential shear between the diaphragm panels. The maximum spacing of shear transfer elements should not exceed the deck span. The differential shear used in design should take into account the non-uniform wind loading patterns and the eccentricities of earthquake forces.

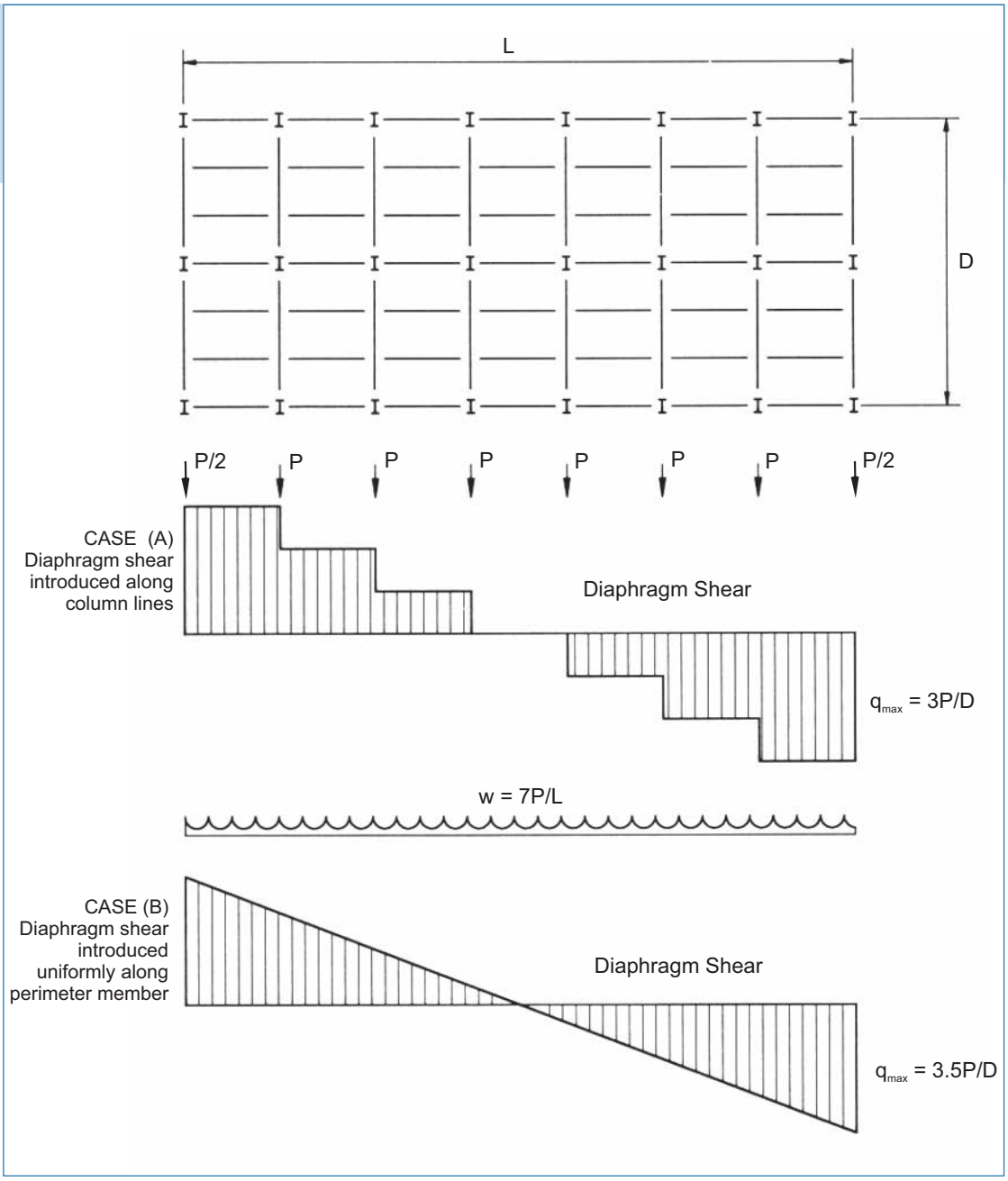
9.6 Welding Qualifications

The following is recommended for inclusion in job specifications covering the use of steel floor and/or steel roof deck as diaphragms:

> *"Erection of steel deck by welding shall be done by companies certified by the Canadian Welding Bureau (CWB) under CSA W47.1, 'Certification of Companies for Fusion Welding of*

Steel Structures'. Welders shall be certified by the CWB for deck welding. Practice welds shall be made prior to actual job welding to check the adequacy of the welding rod amperage and burn-off rate for the various welds required. Both the practice welds and the actual job welds shall be inspected by the steel deck erector as to size and spacing and tested by pry tests to demonstrate metal-to-metal fusion."

Figure 9 • Diaphragm Shear Diagrams



10. Design Example

10.1 General Description

The details of the building selected as the design example are shown in Figures 10 and 11. The structure consists of approximately 4,350 m^2 of single storey warehouse floor space with a two-storey office structure of 1,376 m^2 attached to the front. The roof of each portion is at the same elevation. The structure is to be located in Prescott, Ontario.

The horizontal bracing to resist lateral forces due to wind and earthquake is provided by a steel roof deck diaphragm. In this example (Figure 10) the roof deck diaphragm (A) allows the roof structure of the warehouse to carry lateral loads to vertical bracing systems located at the edges of the diaphragm.

The roof deck diaphragm (B) transfers the lateral loads acting at the office roof level to the vertical bracing system at the end walls and to the conventional masonry firewall. For this example, consider the design of roof diaphragm (A) for the warehouse section of the building.

10.2 Loads

From the NBC 2005:

Wind:	q(1/50) = 0.44 kPa
Snow and rain:	S_S = 2.2 kPa S_R = 0.4 kPa
Seismic:	$S_a(0.2)$ = 0.44 $S_a(0.5)$ = 0.23 $S_a(1.0)$ = 0.12 $S_a(2.0)$ = 0.033 PGA = 0.27
Roof dead load:	0.70 kPa plus structural steel weight of 0.17 kPa = 0.87 kPa
Wall dead load:	0.25 kPa

Note: The Structural Commentaries on the National Building Code (Part4) were not available during the preparation of this document. As a result, there may be assumptions made in this design example that are not consistent with the intent of the NBC 2005 as provided in the Commentaries.

10.3 Wind Loads Acting on the Roof Diaphragm

The wind direction under consideration is acting perpendicular to the long dimension of the building as indicated by the arrows marked on the reference column lines 3 to 17 in Figure 10. The details of the structure are shown in Figure 11. The transfer of the wind loads to the diaphragm is from the cladding, to the girts, to the exterior columns, to the roof beams and then into the diaphragm. At columns where no beams frame in, struts are provided to transfer the wind load into the diaphragm (see Figure 12).

The tributary area and the areas of the end zones for determining the wind load pressure coefficients C_pC_g are shown in Figure 10. For computing overall diaphragm design loads, the value of the internal pressure coefficient, C_{pi}, is irrelevant. The point loads acting on column lines 4 through 16 are computed as follows.

Tributary area ≈ (5.25)(9.25)/2 = 24.3 m^2
Reference wind pressure (1/50) = 0.44 kPa
C_pC_g for end zones = +1.15 and –0.80
C_pC_g for interior zones = +0.75 and –0.55

Column Line	Windward Force (kN) (Pressure)	Leeward Force (kN) (Suction)
4 to 14	(24.3)(0.44)(0.75) = 8.02	(24.3)(0.44)(0.55) = 5.88
	Combined = 8.02 + 5.88 = **13.9**	
15	(24.3)(0.44)(0.75+1.15)/2 = 10.2	(24.3)(0.44)(0.55+0.80)/2 = 7.22
	Combined = 10.2 + 7.2 = **17.4**	
16	(24.3)(0.44)(1.15) = 6.15	(24.3)(0.44)(0.80) = 8.55
	Combined = 6.15 + 8.55 = **14.7**	

The total wind load acting on the roof diaphragm is:

$V_w = (11)(13.9) + (17.4) + (14.7) = 185$ kN (specified)

or $V_w = (185)(1.5) =$ **278 kN** (factored)

Figure 10 • Building Layout

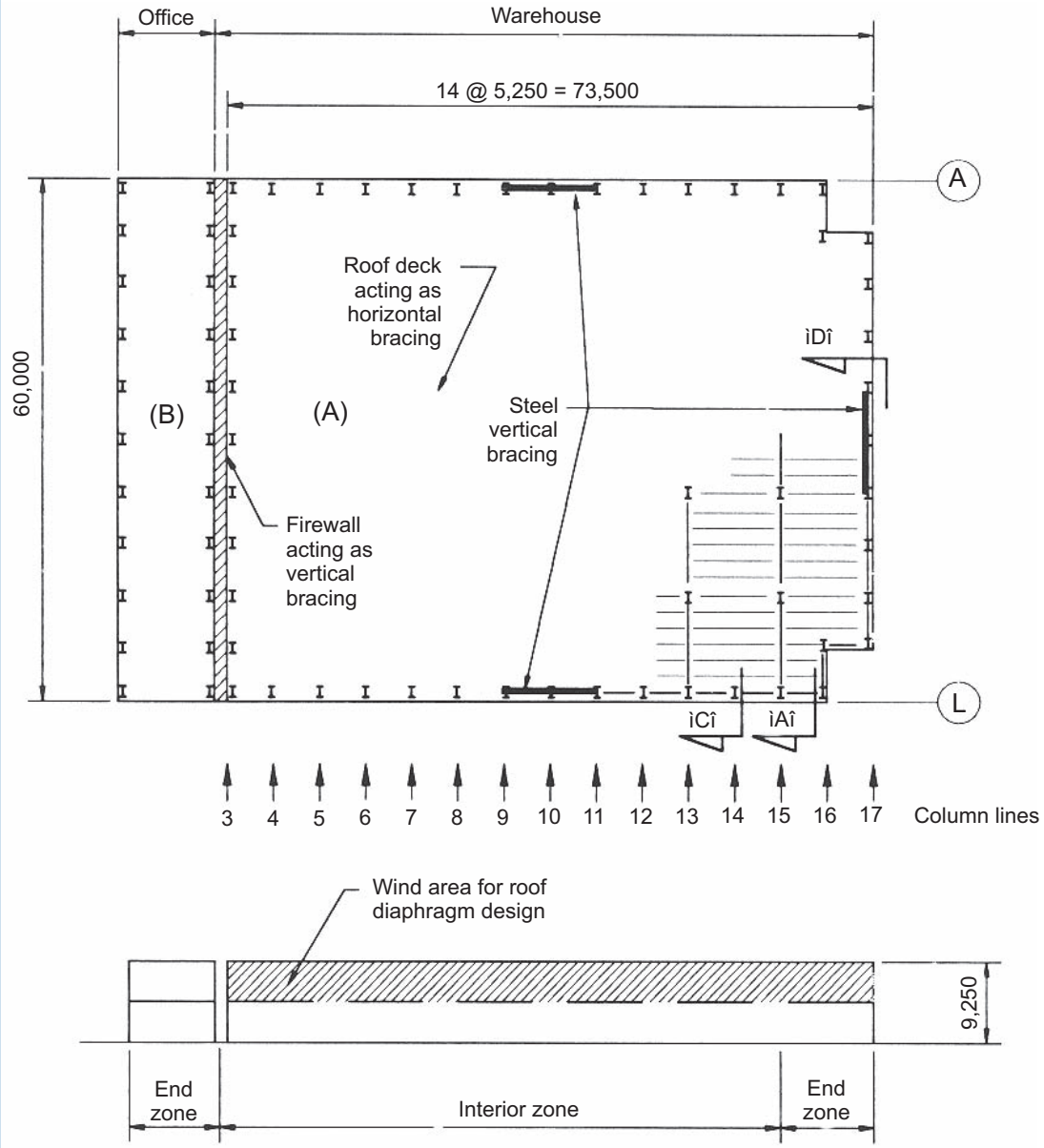


Figure 11 • Building Sections

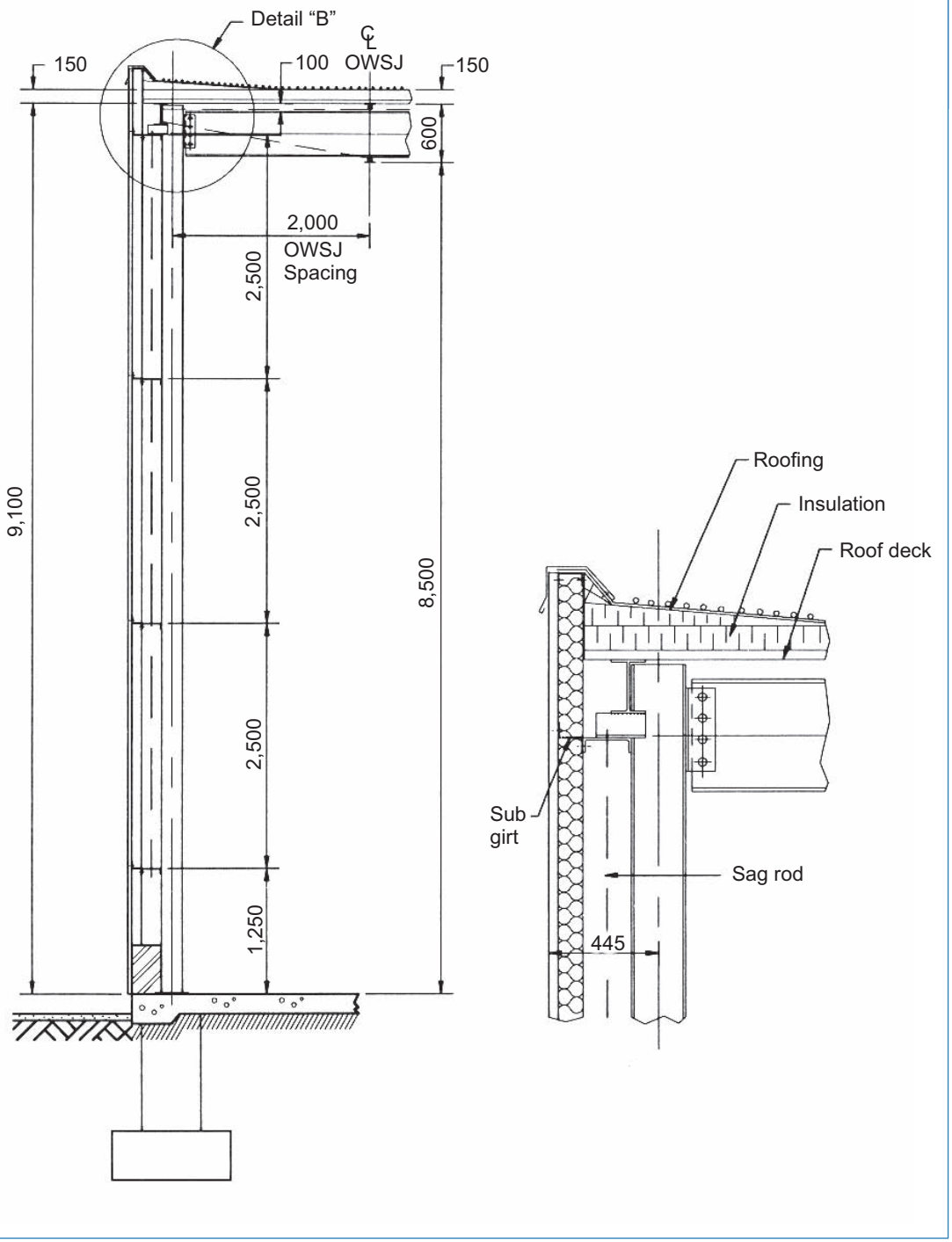
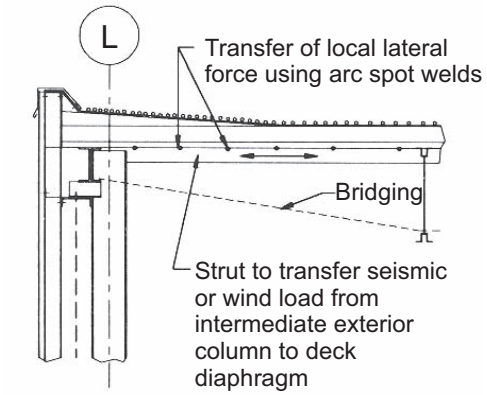
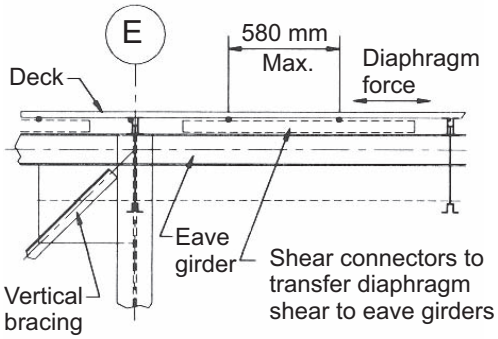


Figure 12 • Building Details



(A) Section "C" (from Figure 10)



(B) Section "D" (from Figure 10)

10.4 Earthquake Loads Acting on the Roof Diaphragm

The design for earthquake forces complies with NBC 4.1.8 as follows:
Site Classification "C" (assumed for this example)

$F_a = F_v = 1.0$ (NBC Tables 4.1.8.4.B and 4.1.8.4.C)

$I_E = 1.0$ (NBC Table 4.1.8.5)

Regular structure (NBC 4.1.8.6)

Design using the Equivalent Static Force Procedure (NBC 4.1.8.7.b)

Conventional steel construction with braced frames (NBC Table 4.1.8.9):

$R_d = 1.5, R_o = 1.3$

NBC 4.1.8.9.3) requires that for combinations of different types of SFRS acting in the same direction, R_dR_o shall be taken as the lowest values corresponding to these systems. In this example the conventional masonry construction shear wall would have a higher R_dR_o than the steel braced frame, therefore, the lower values of $R_d = 1.5$, $R_o = 1.3$ are used.

$I_EF_aS_a(0.2) = (1)(1)(0.44) = 0.44$

Maximum height limitation (NBC Table 4.1.8.9) = 15 m > 9.1 m storey height ∴ OK

For braced frames, $T_a = 0.025h_n = (0.025)(9.1) = 0.23$ (NBC 4.1.8.11.3.b))
$S_a(0.2)/ S_a(2.0) = 0.44/0.033 = 13.3$, and $T_a \leq 1.0$, then $M_v = 1.0$ (NBC Table 4.1.8.11)
$S(0.23) = 0.42$ through interpolation (NBC 4.1.8.4.6)
Weight of roof, $W_r = (0.87)[(73.5)(60)-(2)(5.25)(5.25)] = 3790$ kN

Weight of walls assuming only half the tributary area transfers to the roof, and ignore the block firewall since it is itself the SFRS.

$W_w = (0.25)(73.5+73.5+60)(9.1)/2 = 240$ kN

Snow load (NBC 4.1.6.2)

$I_s = C_w = C_s = C_a = 1.0$
$l = 73.5$, $w = 60$, $l_c = 2w\text{-}w^2/l = (2)(60)\text{-}(60)^2/(73.5) = 71 > 70$
$C_b = 1.0 - (30/l_c)^2 = 1.0 - (30/71)^2 = 0.82$
$S = I_s[S_sC_bC_wC_sC_a + S_r] = (2.2)(0.82) + (0.40) = 2.2$ kPa

Weight of building for earthquake load calculations (NBC 4.1.8.11.4)

$W = W_r + W_w + 0.25S(\text{Roof Area})$
$= 3790 + 240 + (0.25)(2.2)[(73.5)(60)-(2)(5.25)(5.25)] = 6430$ kN

The minimum earthquake lateral force (NBC 4.1.8.11.2) is:

$V = S(T_a)M_vI_EW/(R_dR_o) = (0.42)(1.0)(1.0)6430/[(1.5)(1.3)] =$ **1,380 kN**

However, NBC 4.1.8.11.2) states that for SFRS with $R_d \geq 1.5$, V need not be greater than:

$V = (2/3)S(0.2)I_EW/(R_dR_o) = (0.67)(0.44)(1.0)6430/[(1.5)(1.3)] =$ **967 kN**

Since the earthquake load of 967 kN is much larger that the factored wind load of 278 kN, earthquake forces will govern the diaphragm design.

Diaphragm mid-span moment,

$= (967)(73.5)/8 = 880$ kN.m

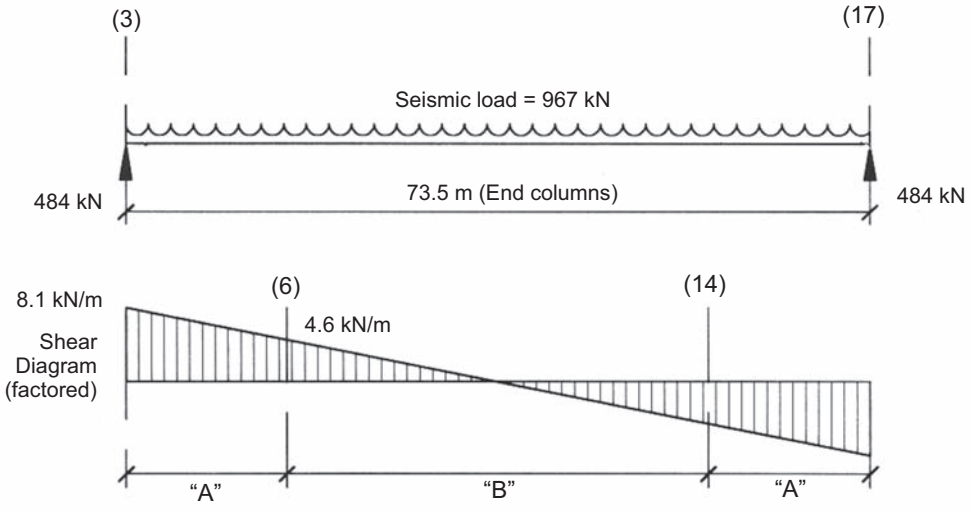
Force on eave members acting as flanges in the equivalent plate girder,

$= (880)/60 = 148$ kN

This force (tension or compression) must be included in the design of the structural eave members.

The provisions of NBC 4.1.8.12.8 require the structure to also resist torsional effects caused by accidental eccentricities or by differences between the centres of mass and the torsional resistances. In this example these additional torsional forces have been ignored for simplicity.

Figure 13 • Diaphragm Shear



10.5 Selection of Steel Deck Diaphragm

From the manufacturers' span tables, a 38 mm deep deck, 0.76 mm thick, 3 continuous spans, 2000 mm span, can carry the specified loads (0.87 + 2.2) = 3.1 kPa. The tables in Appendix B are used to select the configuration of fasteners needed to transfer the earthquake loads.

Shown in Figure 13 is the shear force diagram for the deck diaphragm divided into regions "A" and "B". For larger diaphragm areas it may be feasible to change the diaphragm to accommodate areas of lower shear. It is possible to vary the fastener pattern more or less continuously across the diaphragm to more closely match the diaphragm shear strength to the applied shear loads. This is not recommended, however, since the effects of partial loadings (e.g. wind) or eccentric loadings (e.g. earthquake) will affect the shear distribution. Also a more complex fastener pattern is difficult to monitor during construction.

Tri-Services Deck Selection:

In Region "A" the maximum factored shear force in the diaphragm = 484/60 = 8.1 kN/m. From the tables in Appendix B a 38 mm deck, 0.76 mm thick, , welded to the supports in a 914/7 pattern, side lap connections button punched at 150 mm spacing, and at a deck span of 2,100 mm, the factored resistance = 8.6 kN/m and flexibility F = 135×10^{-6} mm/N.

In Region "B" the maximum factored shear force in the diaphragm = 484(4/7)/60 = 4.6 kN/m. The selection is a 0.76 mm thick deck, welded to the supports in a 914/4 pattern, side lap connections button punched at 300 mm spacing. At a deck span of 2,100 mm, the factored resistance = 4.7 kN/m and flexibility F = 388×10^{-6} mm/N.

SDI Deck Selection:

Using the tables in Appendix B based on the SDI method, in Region A the deck selection is a 0.76 mm thick deck, welded to the supports in a 914/9 pattern, side lap connections button punched at 300 mm spacing. At a deck span of 2,100 mm, the factored resistance = 8.3 kN/m and stiffness G' = 10.9×10^3 N/mm.

In Region "B" the selection is a 0.76 mm thick deck, welded to the supports in a 914/4 pattern, side lap connections button punched at 230 mm spacing. At a deck span of 2,100 mm, the factored resistance = 4.9 kN/m and stiffness G' = 2.9×10^3 N/mm.

10.6 Perimeter Connections

The diaphragm shear must be taken out of the deck at the perimeter where it is transferred through the structural frame to the vertical bracing systems. The factored shear force of 484 kN calculated in section 10.5 will be transferred via the perimeter connections at the two ends of the diaphragm into the eave members. Since the seismic-induced shear is a factored live load, the spacing of the perimeter welds, a_w, can be determined as follows (see also section 9.4):

$$a_w = \frac{V_{rw} \times 10^3}{q_{max}} \leq 900\text{mm}$$

where V_r is calculated in accordance with CSA-S136-01, and is the smaller of:

(a) $V_r = \phi \frac{\pi d_e^2}{4} 0.75 F_{xx} = (0.5) \frac{\pi 10.5^2}{4} (0.75)(480) = 15.6$ kN, or

(b) $V_r = \phi 2.20 t d_a F_u = (0.5)(2.2)(0.76)(18.2)(310) = 4.72$ kN

where,

$d_a = (d - t) = (19 - 0.76) = 18.2$ mm

$d_e = 0.55d = (0.55)(19) = 10.5$

Therefore,

$$a_w = \frac{V_{rw}x10^3}{q_{max}} = \frac{(4.72)(10^3)}{8.1} = 580 \text{ mm}$$

Given that the joist spacing is 2,000 mm, 3 shear transfer elements are required between each joist along column lines 3, 17 and the re-entrant corners (see Figure 13(B)). Along column lines A and L, the deck rests directly on the eave member and can be welded directly without shear transfer elements.

10.7 Intermediate Connections

As noted in section 9.5, the connections between the deck as a diaphragm web and an intermediate framing member are designed to transmit the differential shear occurring at that location. For the selected example, the larger earthquake load is taken as a uniformly distributed load whose magnitude depends on the mass of the roof. Based on that assumption, there is no differential shear at intermediate beam lines and, therefore, shear connectors are not required.

A different situation occurs when considering the smaller wind load. The structural framing system in this design example transfers the wind load from the walls to the columns, which in turn transfer lateral forces into the diaphragm. These forces must be transferred into the diaphragm along the intermediate beams or struts through a system of shear transfer elements.

The factored wind induced shear force acting at column line (15) is 10.2 kN pressure on the windward side and 7.2 kN suction on the leeward side. The number of shear transfer welds required is calculated based on the shear resistance of an arc spot weld as calculated in section 10.6. The required number of welds = (10.2 + 7.2)/4.72 = 3.7. Therefore, a minimum of 4 welds, or the equivalent, are required to transfer this force.

Along column lines that have beams framing in, the forces can be transferred through the beam/column connections. Along alternate column lines, the addition of struts can be used as shown in Figure 13(A).

10.8 Deflection Under Wind Load

Deflection is a serviceability limit state calculated using the specified load having a return period of 1 in 50 years multiplied by 0.75 importance factor, and using the flexibility factors (or stiffness) given in the appendix appropriate to the deck, fastener configuration and design methodology.

Assuming that the deck has three continuous spans (R=1/3), then in Region "A", $F = 135x10^{-6}$ mm/N and in Region "B", $F = 388x10^{-6}$ mm/N. An initial conservative calculation of the diaphragm deflection can be determined by using the higher F valued for Region "B" and apply it to the whole diaphragm. If necessary, the deflection can be re-calculated taking into account the stiffer Region "A".

$V_w = (185)(0.75) = 139$ kN

$q_{avg} = (V/2)/2D = (139)/[(4)(60)] = 0.58$ kN/m

The deflection of the diaphragm under an average shear of 0.58 kN/m with $F = 388x10^{-6}$ mm/N, and using the equation from Table 1:

$\Delta_w = (580 \text{ N/m})(73.5 \text{ m})(388 \text{ mm/N})/(2x10^6) = 8.3$ mm

The total deflection of the diaphragm also includes the flexural deflection of the analogous plate girder. In this example, the eave members, which are the flanges of the analogous plate girder, are W250 x 33 structural sections with an area of 4,170 mm^2. Δ_F is determined as follows:

$$\Delta_F = 5wL^4/384EI$$

where,

$w = (139)/(73.5) = 1.89$ N/mm
$L = 73{,}500$ mm
$E = 200{,}000$ MPa
$I = 2Ad^2 = 2(4170)(30{,}000)^2 = 7.5 \times 10^{12}$ mm^4

$$\Delta_F = (5)(1.89)(73500)^4/[(384)(200\,000)(7.5x10^{12})] = 0.5 \text{ mm}$$

The total deflection of the diaphragm at the centre of the building is determined from the above calculations to be:

$$\Delta_T = \Delta_W + \Delta_F = 8.3 + 0.5 = 8.8 \text{ mm}$$

This deflection corresponds to an H/ Δ_T ratio = 9250/8.8 = 1050, which is substantially more conservative than the limit of 240 to 400 usually taken as appropriate for a building of this type.

Deflection check of the diaphragm for wind is OK.

10.9 Deflection under Seismic Load

The deflection of the diaphragm under seismic loads is calculated in the same manner as deflection under wind.

$V_{EQ} = 967$ kN
$q_{avg} = (V/2)/2D = (967)/[(4)(60)] = 4.03$ kN/m

Since the earthquake loading is uniformly distributed, the same as for the wind loading, the deflection can be determined by factoring the deflection calculated for the wind load.

$\Delta_W = (8.3 \text{ mm})(4.03)/(0.58) = 57.7$ mm
$\Delta_F = (0.5 \text{ mm})(4.03)/(0.58) = 3.5$ mm
$\Delta_T = 57.7 + 3.5 = 61.2$ mm

For deflection calculations, NBC requires that the deflections calculated using a linear elastic model be multiplied by R_dR_o/I_E to give realistic values of anticipated deflection. Therefore,

$$\Delta_{Max} = (\Delta_T)\, R_dR_o/I_E = (61.2)(1.5)(1.3)/(1.0) = 119 \text{ mm}.$$

According to NBC 4.1.8.13.3, the inter-storey deflection shall be limited to $0.025h_s$:

$\Delta_{Limit} = (0.025)(9{,}250) = 231 \text{ mm} > 119 \text{ mm}$ $\therefore$ OK

Note that this deflection is calculated for the diaphragm only. The deflection of the seismic force resisting system must also be taken into account to determine the overall drift of the structure.

A. Appendix: Tri-Services Method

The following equations are taken directly from the Tri-Service Manual.

A.1 Definitions

a = Number of seam attachments in span L_v along a seam

a_s = Centre to centre spacing of seam welds, usually L_v/a (ft)

a_w = Spacing of marginal welds (ft)

b = Width of deck unit (ft)

C_1 = 1

C_2 = 1 for button punched seams;
= $40t_s^{1/2}l_w'$ for welded seams

C_3 = 1 for button punched seams; $150t_s l_w'$ for welded seams

C_4 = 1 for button punched seams;
= $6/L_v$ for welded seams

d = Distance between outermost puddle welds attaching a deck unit to the supporting framing member (ft)

E = Modulus of elasticity
= 29.5×10^6 psi

F_i = Components contributing to the flexibility factor ($F = \Sigma F_i$) ($in x 10^{-6}$/lb)

G = Shear modulus of elasticity
= 11.3×10^6 psi

h = height of fluted elements (in) (1.5 in minimum)

I_D = Moment of inertia of the fully effective cross-sectional area of the deck unit about the vertical centerline axis (in^4)

I_x = Moment of inertia of the fully effective cross-sectional area of the deck unit about the horizontal neutral axis (in^4/ft of deck width)

L_1 = Distance between vertical resisting element (e.g. shear wall) and the point to which the deflection is to be determined (ft)

L_2 = Average length of deck unit (ft)

L_v = Vertical load span of deck unit (ft)

l_w = Length of seam weld (in)
(1 in $\leq l_w \leq$ 2 in)

l_w' = Effective length of seam weld (in) (The ratio $l_w' = 0.3l_w$ for seam welds illustrated in Figure 7)

n = Average number of vertical deck elements (per foot) that are laterally restrained at the bottom by puddle welds

q_i = Component of limiting values for shear resistance (lb/ft)

q = Shear resistance of the diaphragm (lb/ft)

R = L_v/L_2

S = Section modulus of arc spot weld group at supports (ft) (Each weld is assumed a unit area)

t_1 = Base steel thickness of flat sheet element of cellular deck unit (in) (0.030 in min. to 0.060 in max.)

t_2 = Base steel thickness of fluted element of deck unit (in) (0.030 in min. to 0.060 in max.)

t_2' = Effective thickness of fluted element (in). For single fluted elements with $t_1 = 0$, the ratio $t_2'/t_2 = 1.0$. For cellular deck fabricated from multiple elements, consult Tri-Services Manual.

t_s = Base steel thickness of deck unit at seams (in) (0.060 in max.)

V_{rw} = Shear resistance of an arc spot weld (kips)

Δ_w = Web deflection (in)

A.2 Shear Resistance (Deck without concrete fill)

The allowable shear resistance of a steel deck diaphragm is limited to the lesser of:

(a) $q_D = (q_1 + q_2)q_3/q_2$ where $q_3/q_2 \leq 1$

or

(b) $$q_D = \frac{I_x x 10^6}{2L_v^2}$$ (lb/ft of deck width)

where,

$$K = \frac{1000}{\left[1 + S\left[\frac{1}{\frac{(t_1 + t_2)t_1}{t_2^2} + 100n^{1/2}t_2^2\left[\frac{43}{h}\right]^{1/2}\left[\frac{t_2}{(t_1 + t_2)}\right]^3}\right]^2\right]^{1/2}}$$

$$q_1 = \frac{92S(t_1 + t_2')K}{bL_v}$$

$$q_2 = \frac{abt_s^{1/2}C_2}{L_v}\left[q_1\left(\frac{500}{I_D} + \frac{1}{L_v dS(t_1 + t_2')^2}\right)\right]^{1/2}$$

$$q_3 = \frac{3600t_s aC_3}{L_v}$$

A.3 Flexibility Calculations (Deck without concrete fill)

The flexibility of the diaphragm is a summation of the contributions of its various components, similar to the determination of the diaphragm strength.

$$F = F_1 + F_2 + F_3$$

where,

$$F_1 = \frac{1}{12(t_1 + t_2)}$$

$$F_2 = \frac{bL_v C_4}{160}\left[\frac{500}{I_D} + \frac{1}{L_v dS(t_1 + t_2)^2}\right]\frac{q_1}{q_1 + q_2}$$

$$F_3 = \frac{R}{L_v\left(t_1 + \frac{12.5n^2C_1^2t_2^3}{h}\right)}$$

A.4 Shear Resistance (Deck with concrete fill)

The Tri-Services method assumes the steel deck has a superimposed concrete fill having a minimum compressive strength, f'_c, of 2,500 p.s.i. at 28 days and a minimum weight of 90 p.c.f. Minimum temperature reinforcement in the form of 6 x 6/#10 - #10 welded wire mesh is also required.

If the diaphragm is loaded and reacts without shear stresses passing through the steel deck or attachments, the diaphragm is a concrete diaphragm and these formulae do not apply. If, however, the shear stresses pass through the steel deck and its attachments, the allowable shear will be determined by the following formulae.

$$q_D = q_1 + q'_6 + q''_6$$

where,

$$K = 1{,}000$$

$$q_1 = \frac{92S(t_1 + t'_2)K}{bL_v}$$

$$q'_6 = \frac{t_f w^{1.5}\sqrt{f'_c}}{200}$$

$$q''_6 = 2\left\{\sqrt{\frac{Kb}{d(t_1 + t'_2)}}\right\}$$

A.5 Flexibility Calculations (Deck with concrete fill)

The flexibility of a concrete filled diaphragm usually falls into the rigid category. The flexibility factor, F, is determined by the following formula.

$$F = \frac{20q''_6}{b^2 q_D}$$

B. Appendix: Load Tables

Tri-Services Method (Metric) • Standard Deck				
Deck Type	**Support Connection**	**Side Lap Connection**	**Support Connection Pattern**	**Page(s)**
38 mm DEEP 914 mm WIDE 152 mm FLUTE SPACING	19 mm ARC SPOT WELD	BUTTON PUNCH	914/4 914/7 914/9	31-34
		38 mm SEAM WELD	914/4 914/7 914/9	35-37
76 mm DEEP 610 mm WIDE 152 mm FLUTE SPACING	19 mm ARC SPOT WELD	BUTTON PUNCH	610/3 610/5 610/7	38-41
		38 mm SEAM WELD	610/3 610/5 610/7	42-44
76 mm DEEP 610 mm WIDE 203 mm FLUTE SPACING	19 mm ARC SPOT WELD	BUTTON PUNCH	610/4 610/6	45-48
		38 mm SEAM WELD	610/4 610/6	49-51

Tri-Services Method (Metric) • Composite Deck (65 mm concrete cover)				
Deck Type	**Support Connection**	**Side Lap Connection**	**Support Connection Pattern**	**Page(s)**
38 mm DEEP 914 mm WIDE 152 mm FLUTE SPACING	19 mm ARC SPOT WELD	BUTTON PUNCH	914/4 914/7 914/9	52
76 mm DEEP 610 mm WIDE 152 mm FLUTE SPACING	19 mm ARC SPOT WELD	BUTTON PUNCH	610/3 610/5 610/7	53
76 mm DEEP 610 mm WIDE 203 mm FLUTE SPACING	19 mm ARC SPOT WELD	BUTTON PUNCH	610/4 610/6	54

SDI Method (Metric) • Standard Deck

Deck Type	Side Lap Connection	Support Connection Pattern	Support Connection		
			19 mm Arc Spot Weld	#12 Screw	Hilti ENP2K or X-EDNK22
			Page(s)		
38 mm DEEP 914 mm WIDE 152 mm FLUTE SPACING	BUTTON PUNCH	914/4	55-58	66-69	74-77
		914/7			
		914/9			
	38 mm SEAM WELD	914/4	59-61		
		914/7			
		914/9			
	#10 SCREW	914/4	62-65	70-73	78-81
		914/7			
		914/9			
76 mm DEEP 610 mm WIDE 152 mm FLUTE SPACING	BUTTON PUNCH	610/3	82-85	93-96	101-104
		610/5			
		610/7			
	38 mm SEAM WELD	610/3	86-88		
		610/5			
		610/7			
	#10 SCREW	610/3	89-92	97-100	105-108
		610/5			
		610/7			
76 mm DEEP 610 mm WIDE 203 mm FLUTE SPACING	BUTTON PUNCH	610/4	109-112	120-123	128-131
		610/6			
	38 mm SEAM WELD	610/4	113-115		
		610/6			
	#10 SCREW	610/4	116-119	124-127	132-135
		610/6			

SDI Method (Metric) • Composite Deck (65 mm concrete cover)

Deck Type	Side Lap Connection	Support Connection Pattern	Support Connection		
			19 mm Arc Spot Weld	#12 Screw	Hilti ENP2K or X-EDNK22
			Page(s)		
38 mm DEEP 914 mm WIDE 152 mm FLUTE SPACING	BUTTON PUNCH	914/4	136	138	140
		914/7			
		914/9			
	#10 SCREW	914/4	137	139	141
		914/7			
		914/9			
76 mm DEEP 610 mm WIDE 152 mm FLUTE SPACING	BUTTON PUNCH	610/3	142	144	146
		610/5			
		610/7			
	#10 SCREW	610/3	143	145	147
		610/5			
		610/7			
76 mm DEEP 610 mm WIDE 203 mm FLUTE SPACING	BUTTON PUNCH	610/4	148	150	152
		610/6			
	#10 SCREW	610/4	149	151	153
		610/6			

Tri-Services Method (Imperial) • Standard Deck

Deck Type	Support Connection	Side Lap Connection	Support Connection Pattern	Page(s)
1-1/2 in. DEEP 36 in. WIDE 6 in. FLUTE SPACING	3/4 in. ARC SPOT WELD	BUTTON PUNCH	36/4	155-158
			36/7	
			36/9	
		1-1/2 in. SEAM WELD	36/4	159-161
			36/7	
			36/9	
3 in. DEEP 24 in. WIDE 6 in. FLUTE SPACING	3/4 in. ARC SPOT WELD	BUTTON PUNCH	24/3	162-165
			24/5	
			24/7	
		1-1/2 in. SEAM WELD	24/3	166-168
			24/5	
			24/7	
3 in. DEEP 24 in. WIDE 8 in. FLUTE SPACING	3/4 in. ARC SPOT WELD	BUTTON PUNCH	24/4	169-172
			24/6	
		1-1/2 in. SEAM WELLD	24/4	173-175
			24/6	

Tri-Services Method (Imperial) • Composite Deck (2.5 in. concrete cover)

Deck Type	Support Connection	Side Lap Connection	Support Connection Pattern	Page(s)
1-1/2 in. DEEP 36 in. WIDE 6 in. FLUTE SPACING	3/4 in. ARC SPOT WELD	BUTTON PUNCH	36/4	176
			36/7	
			36/9	
3 in. DEEP 24 in. WIDE 6 in. FLUTE SPACING	3/4 in. ARC SPOT WELD	BUTTON PUNCH	24/3	177
			24/5	
			24/7	
3 in. DEEP 24 in. WIDE 8 in. FLUTE SPACING	3/4 in. ARC SPOT WELD	BUTTON PUNCH	24/4	178
			24/6	

SDI Method (Imperial) • Standard Deck

Deck Type	Side Lap Connection	Support Connection Pattern	Support Connection		
			3/4 in. Arc Spot Weld	#12 Screw	Hilti ENP2K or X-EDNK22
			Page(s)		
1-1/2 in. DEEP 36 in. WIDE 6 in. FLUTE SPACING	BUTTON PUNCH	36/4	179-182	190-193	198-201
		36/7			
		36/9			
	1-1/2 in. SEAM WELD	36/4	183-185		
		36/7			
		36/9			
	#10 SCREW	36/4	186-189	194-197	202-205
		36/7			
		36/9			
3 in. DEEP 24 in. WIDE 6 in. FLUTE SPACING	BUTTON PUNCH	24/3	206-209	217-220	225-228
		24/5			
		24/7			
	1-1/2 in. SEAM WELD	24/3	210-212		
		24/5			
		24/7			
	#10 SCREW	24/3	213-216	221-224	229-232
		24/5			
		24/7			
3 in. DEEP 24 in. WIDE 8 in. FLUTE SPACING	BUTTON PUNCH	24/4	233-236	244-247	252-255
		24/6			
	1-1/2 in. SEAM WELD	24/4	237-239		
		24/6			
	#10 SCREW	24/4	240-243	248-251	256-259
		24/6			

SDI Method (Imperial) • Composite Deck (2.5 in. concrete cover)

Deck Type	Side Lap Connection	Support Connection Pattern	Support Connection		
			3/4 in. Arc Spot Weld	#12 Screw	Hilti ENP2K or X-EDNK22
			Page(s)		
1-1/2 in.DEEP 36 in. WIDE 6 in. FLUTE SPACING	BUTTON PUNCH	36/4	260	262	264
		36/7			
		36/9			
	#10 SCREW	36/4	261	263	265
		36/7			
		36/9			
3 in. DEEP 24 in. WIDE 6 in. FLUTE SPACING	BUTTON PUNCH	24/3	266	268	270
		24/5			
		24/7			
	#10 SCREW	24/3	267	269	271
		24/5			
		24/7			
3 in. DEEP 24 in. WIDE 8 in. FLUTE SPACING	BUTTON PUNCH	24/4	272	274	276
		24/6			
	#10 SCREW	24/4	273	275	277
		24/6			

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			900	1050	1200	1350	1500	1650	1800	1950	2100
914/4	900	Strength, (kN/m)	7.2	6.3	5.6	5.0	4.6	4.2	3.9	3.7	3.5
		Flexibility, F, (mmx10^{-6}/N)	774	677	606	552	510	477	450	428	410
	600	Strength, (kN/m)	7.5	6.6	5.9	5.3	4.9	4.5	4.2	4.0	3.8
		Flexibility, F, (mmx10^{-6}/N)	773	675	604	549	506	472	445	422	403
	300	Strength, (kN/m)	8.4	7.5	6.8	6.2	5.8	5.5	5.2	4.9	4.7
		Flexibility, F, (mmx10^{-6}/N)	769	670	597	541	497	462	432	408	388
	230	Strength, (kN/m)	9.0	8.0	7.3	6.8	6.4	6.0	5.7	5.5	5.3
		Flexibility, F, (mmx10^{-6}/N)	767	668	594	538	493	457	427	402	381
	150	Strength, (kN/m)	10.2	9.3	8.6	8.1	7.7	7.3	7.0	6.8	6.6
		Flexibility, F, (mmx10^{-6}/N)	763	663	589	531	486	448	418	392	370
914/7	900	Strength, (kN/m)	11.6	10.0	8.9	7.9	7.2	6.6	6.1	5.6	5.2
		Flexibility, F, (mmx10^{-6}/N)	225	204	189	179	172	167	164	162	161
	600	Strength, (kN/m)	11.9	10.3	9.2	8.3	7.6	7.0	6.4	6.0	5.6
		Flexibility, F, (mmx10^{-6}/N)	224	203	188	177	170	165	161	159	157
	300	Strength, (kN/m)	12.9	11.3	10.2	9.3	8.6	8.0	7.4	7.0	6.6
		Flexibility, F, (mmx10^{-6}/N)	222	200	184	173	165	158	154	150	148
	230	Strength, (kN/m)	13.5	11.9	10.8	9.9	9.2	8.6	8.1	7.6	7.2
		Flexibility, F, (mmx10^{-6}/N)	221	198	182	171	162	155	150	146	143
	150	Strength, (kN/m)	14.8	13.3	12.2	11.3	10.6	10.0	9.5	9.0	8.6
		Flexibility, F, (mmx10^{-6}/N)	218	196	179	167	157	150	144	139	135
914/9	900	Strength, (kN/m)	15.0	13.0	11.4	10.2	9.3	8.5	7.8	7.3	6.8
		Flexibility, F, (mmx10^{-6}/N)	215	193	177	166	158	152	147	144	143
	600	Strength, (kN/m)	15.3	13.3	11.7	10.5	9.6	8.8	8.2	7.6	7.2
		Flexibility, F, (mmx10^{-6}/N)	215	192	177	165	157	150	146	143	140
	300	Strength, (kN/m)	16.2	14.2	12.7	11.5	10.6	9.8	9.2	8.6	8.2
		Flexibility, F, (mmx10^{-6}/N)	214	191	175	163	154	147	142	138	135
	230	Strength, (kN/m)	16.8	14.7	13.2	12.1	11.1	10.4	9.8	9.2	8.8
		Flexibility, F, (mmx10^{-6}/N)	213	190	174	161	152	145	139	135	132
	150	Strength, (kN/m)	18.0	16.0	14.5	13.4	12.5	11.7	11.1	10.6	10.2
		Flexibility, F, (mmx10^{-6}/N)	212	189	172	159	149	142	135	131	127

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1200	1350	1500	1650	1800	1950	2100	2250	2400
914/4	900	Strength, (kN/m)	8.7	7.8	7.1	6.6	6.1	5.7	5.3	5.0	4.8
		Flexibility, F, (mmx10^{-6}/N)	365	334	311	293	279	267	258	251	245
	600	Strength, (kN/m)	9.1	8.2	7.5	6.9	6.4	6.0	5.7	5.4	5.1
		Flexibility, F, (mmx10^{-6}/N)	363	333	309	290	275	263	254	246	240
	300	Strength, (kN/m)	10.2	9.3	8.6	8.0	7.5	7.1	6.8	6.5	6.3
		Flexibility, F, (mmx10^{-6}/N)	360	328	303	284	268	255	244	235	227
	230	Strength, (kN/m)	10.8	9.9	9.2	8.7	8.2	7.8	7.5	7.2	6.9
		Flexibility, F, (mmx10^{-6}/N)	358	326	301	281	264	251	239	230	222
	150	Strength, (kN/m)	12.3	11.4	10.7	10.2	9.7	9.4	9.0	8.7	8.5
		Flexibility, F, (mmx10^{-6}/N)	354	322	296	275	258	244	232	221	213
914/7	900	Strength, (kN/m)	13.7	12.3	11.2	10.2	9.4	8.8	8.2	7.6	7.1
		Flexibility, F, (mmx10^{-6}/N)	120	115	112	110	109	109	110	111	112
	600	Strength, (kN/m)	14.1	12.7	11.6	10.6	9.8	9.2	8.6	8.0	7.6
		Flexibility, F, (mmx10^{-6}/N)	119	114	111	109	107	107	107	108	109
	300	Strength, (kN/m)	15.3	13.9	12.7	11.8	11.1	10.4	9.8	9.3	8.8
		Flexibility, F, (mmx10^{-6}/N)	117	111	107	105	103	102	101	101	101
	230	Strength, (kN/m)	16.0	14.6	13.5	12.5	11.8	11.2	10.5	10.0	9.5
		Flexibility, F, (mmx10^{-6}/N)	116	110	106	103	101	99	98	98	98
	150	Strength, (kN/m)	17.6	16.2	15.1	14.2	13.5	12.8	12.2	11.7	11.2
		Flexibility, F, (mmx10^{-6}/N)	114	108	103	99	96	94	93	92	91
914/9	900	Strength, (kN/m)	18.3	16.3	14.8	13.5	12.5	11.6	10.8	10.2	9.5
		Flexibility, F, (mmx10^{-6}/N)	111	105	101	99	97	96	96	96	97
	600	Strength, (kN/m)	18.7	16.7	15.2	13.9	12.9	12.0	11.2	10.6	9.9
		Flexibility, F, (mmx10^{-6}/N)	111	105	101	98	96	95	95	95	95
	300	Strength, (kN/m)	19.8	17.8	16.3	15.1	14.0	13.2	12.4	11.8	11.2
		Flexibility, F, (mmx10^{-6}/N)	110	104	99	96	94	92	91	91	91
	230	Strength, (kN/m)	20.4	18.5	17.0	15.8	14.8	13.9	13.2	12.5	11.9
		Flexibility, F, (mmx10^{-6}/N)	109	103	98	95	92	90	89	89	88
	150	Strength, (kN/m)	22.0	20.1	18.6	17.4	16.4	15.5	14.8	14.2	13.6
		Flexibility, F, (mmx10^{-6}/N)	108	101	96	93	90	88	86	85	84

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 1.22 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1500	1650	1800	1950	2100	2250	2400	2550	2700
914/4	900	Strength, (kN/m)	13.5	12.4	11.4	10.6	9.9	9.3	8.8	8.4	8.0
		Flexibility, F, (mmx10^{-6}/N)	142	136	131	128	125	123	122	122	122
	600	Strength, (kN/m)	13.9	12.8	11.9	11.1	10.4	9.8	9.3	8.8	8.4
		Flexibility, F, (mmx10^{-6}/N)	142	135	130	126	123	121	120	119	119
	300	Strength, (kN/m)	15.3	14.2	13.2	12.4	11.8	11.2	10.7	10.3	9.9
		Flexibility, F, (mmx10^{-6}/N)	139	132	127	122	119	116	114	112	111
	230	Strength, (kN/m)	16.1	15.0	14.1	13.3	12.6	12.1	11.6	11.1	10.7
		Flexibility, F, (mmx10^{-6}/N)	138	131	125	120	117	114	111	109	108
	150	Strength, (kN/m)	18.0	16.9	16.0	15.2	14.5	14.0	13.5	13.1	12.7
		Flexibility, F, (mmx10^{-6}/N)	136	128	122	117	112	109	106	104	102
914/7	900	Strength, (kN/m)	20.4	18.7	17.2	16.0	14.9	14.0	13.2	12.5	11.9
		Flexibility, F, (mmx10^{-6}/N)	58	58	58	59	61	62	64	66	68
	600	Strength, (kN/m)	20.9	19.2	17.7	16.5	15.4	14.5	13.7	13.0	12.4
		Flexibility, F, (mmx10^{-6}/N)	57	57	58	59	60	61	63	64	66
	300	Strength, (kN/m)	22.4	20.6	19.2	18.0	16.9	16.0	15.3	14.6	14.0
		Flexibility, F, (mmx10^{-6}/N)	56	56	56	56	57	58	59	60	62
	230	Strength, (kN/m)	23.2	21.5	20.1	18.9	17.8	17.0	16.2	15.5	14.9
		Flexibility, F, (mmx10^{-6}/N)	55	55	55	55	56	56	57	58	59
	150	Strength, (kN/m)	25.2	23.5	22.1	21.0	19.9	19.1	18.3	17.7	17.1
		Flexibility, F, (mmx10^{-6}/N)	54	53	53	53	53	53	54	54	55
914/9	900	Strength, (kN/m)	29.1	26.5	24.4	22.6	21.1	19.8	18.6	17.6	16.7
		Flexibility, F, (mmx10^{-6}/N)	52	51	51	52	53	54	55	56	58
	600	Strength, (kN/m)	29.6	27.0	24.9	23.1	21.6	20.3	19.2	18.1	17.2
		Flexibility, F, (mmx10^{-6}/N)	51	51	51	51	52	53	54	56	57
	300	Strength, (kN/m)	31.0	28.5	26.4	24.7	23.2	21.9	20.8	19.8	18.9
		Flexibility, F, (mmx10^{-6}/N)	51	50	50	50	51	51	52	53	54
	230	Strength, (kN/m)	31.9	29.4	27.3	25.6	24.1	22.8	21.7	20.7	19.9
		Flexibility, F, (mmx10^{-6}/N)	50	50	49	49	50	50	51	52	53
	150	Strength, (kN/m)	33.9	31.5	29.4	27.7	26.3	25.0	23.9	23.0	22.1
		Flexibility, F, (mmx10^{-6}/N)	50	49	48	48	48	48	49	49	50

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness =1.52 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1800	1950	2100	2250	2400	2550	2700	2850	3000
914/4	900	Strength, (kN/m)	16.7	15.5	14.5	13.6	12.8	12.1	11.5	11.0	10.5
		Flexibility, F, (mmx10^{-6}/N)	77	75	75	75	75	75	76	77	78
	600	Strength, (kN/m)	17.2	16.0	15.0	14.1	13.3	12.7	12.1	11.5	11.0
		Flexibility, F, (mmx10^{-6}/N)	76	75	74	73	73	74	74	75	76
	300	Strength, (kN/m)	18.7	17.5	16.5	15.7	14.9	14.3	13.7	13.2	12.7
		Flexibility, F, (mmx10^{-6}/N)	74	72	71	71	70	70	70	70	71
	230	Strength, (kN/m)	19.6	18.5	17.5	16.6	15.9	15.2	14.7	14.1	13.7
		Flexibility, F, (mmx10^{-6}/N)	73	71	70	69	68	68	68	68	68
	150	Strength, (kN/m)	21.8	20.6	19.7	18.8	18.1	17.5	16.9	16.4	16.0
		Flexibility, F, (mmx10^{-6}/N)	71	69	67	66	65	65	64	64	63
914/7	900	Strength, (kN/m)	24.5	22.7	21.1	19.8	18.7	17.7	16.8	15.9	15.2
		Flexibility, F, (mmx10^{-6}/N)	38	39	40	42	43	45	47	49	51
	600	Strength, (kN/m)	25.0	23.2	21.7	20.4	19.2	18.2	17.3	16.5	15.8
		Flexibility, F, (mmx10^{-6}/N)	38	39	40	41	42	44	46	47	49
	300	Strength, (kN/m)	26.6	24.9	23.4	22.1	21.0	20.0	19.1	18.3	17.6
		Flexibility, F, (mmx10^{-6}/N)	36	37	38	39	40	42	43	44	46
	230	Strength, (kN/m)	27.6	25.9	24.4	23.1	22.0	21.0	20.2	19.4	18.7
		Flexibility, F, (mmx10^{-6}/N)	36	36	37	38	39	40	41	43	44
	150	Strength, (kN/m)	29.9	28.2	26.8	25.5	24.4	23.5	22.6	21.9	21.2
		Flexibility, F, (mmx10^{-6}/N)	35	35	36	36	37	38	39	40	41
914/9	900	Strength, (kN/m)	36.6	33.9	31.6	29.6	27.8	26.3	24.9	23.7	22.6
		Flexibility, F, (mmx10^{-6}/N)	33	34	35	36	37	39	40	42	43
	600	Strength, (kN/m)	37.2	34.5	32.2	30.2	28.4	26.9	25.5	24.3	23.2
		Flexibility, F, (mmx10^{-6}/N)	33	34	35	36	37	38	40	41	43
	300	Strength, (kN/m)	38.9	36.2	34.0	32.0	30.3	28.8	27.4	26.3	25.2
		Flexibility, F, (mmx10^{-6}/N)	32	33	34	35	36	37	38	39	40
	230	Strength, (kN/m)	40.0	37.3	35.1	33.1	31.4	29.9	28.6	27.4	26.4
		Flexibility, F, (mmx10^{-6}/N)	32	33	33	34	35	36	37	38	39
	150	Strength, (kN/m)	42.4	39.8	37.6	35.6	34.0	32.5	31.3	30.1	29.1
		Flexibility, F, (mmx10^{-6}/N)	31	32	32	33	34	34	35	36	37

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1200	1350	1500	1650	1800	1950	2100	2250	2400
914/4	900	Strength, (kN/m)	8.5	7.7	7.1	6.6	6.2	5.8	5.5	5.3	5.1
		Flexibility, F, (mmx10^{-6}/N)	375	339	310	287	267	250	236	223	212
	600	Strength, (kN/m)	9.5	8.7	8.1	7.6	7.2	6.8	6.5	6.3	6.0
		Flexibility, F, (mmx10^{-6}/N)	370	334	305	281	261	244	229	217	205
	300	Strength, (kN/m)	12.4	11.6	11.0	10.5	10.1	9.8	9.5	9.2	9.0
		Flexibility, F, (mmx10^{-6}/N)	360	324	294	270	250	233	218	205	194
	230	Strength, (kN/m)	14.2	13.4	12.8	12.3	11.9	11.6	11.3	11.0	10.8
		Flexibility, F, (mmx10^{-6}/N)	356	320	290	266	246	229	214	202	190
	150	Strength, (kN/m)	18.3	17.6	16.9	16.4	16.0	15.7	15.4	15.1	14.9
		Flexibility, F, (mmx10^{-6}/N)	350	314	284	260	240	223	209	196	185
914/7	900	Strength, (kN/m)	11.6	10.5	9.5	8.8	8.2	7.6	7.2	6.8	6.5
		Flexibility, F, (mmx10^{-6}/N)	129	120	113	107	102	98	95	91	89
	600	Strength, (kN/m)	12.6	11.5	10.5	9.8	9.2	8.6	8.2	7.8	7.4
		Flexibility, F, (mmx10^{-6}/N)	126	117	110	104	99	94	90	87	84
	300	Strength, (kN/m)	15.6	14.4	13.5	12.7	12.1	11.6	11.1	10.7	10.4
		Flexibility, F, (mmx10^{-6}/N)	120	110	103	96	91	86	82	78	75
	230	Strength, (kN/m)	17.4	16.2	15.3	14.5	13.9	13.4	12.9	12.5	12.2
		Flexibility, F, (mmx10^{-6}/N)	117	108	100	93	88	83	79	75	72
	150	Strength, (kN/m)	21.5	20.3	19.4	18.6	18.0	17.5	17.0	16.6	16.3
		Flexibility, F, (mmx10^{-6}/N)	113	103	95	88	83	78	74	71	67
914/9	900	Strength, (kN/m)	15.7	14.0	12.6	11.5	10.6	9.9	9.2	8.6	8.2
		Flexibility, F, (mmx10^{-6}/N)	119	110	103	98	93	90	86	83	81
	600	Strength, (kN/m)	16.6	15.0	13.6	12.5	11.6	10.8	10.2	9.6	9.1
		Flexibility, F, (mmx10^{-6}/N)	117	108	101	96	91	87	84	81	78
	300	Strength, (kN/m)	19.6	17.9	16.6	15.5	14.6	13.8	13.1	12.6	12.1
		Flexibility, F, (mmx10^{-6}/N)	113	104	97	91	86	82	78	75	72
	230	Strength, (kN/m)	21.4	19.7	18.4	17.3	16.4	15.6	14.9	14.4	13.9
		Flexibility, F, (mmx10^{-6}/N)	112	103	95	89	84	80	76	72	70
	150	Strength, (kN/m)	25.5	23.8	22.5	21.4	20.5	19.7	19.0	18.5	18.0
		Flexibility, F, (mmx10^{-6}/N)	109	99	92	86	80	76	72	69	66

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness =1.22 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1500	1650	1800	1950	2100	2250	2400	2550	2700
914/4	900	Strength, (kN/m)	16.1	14.9	13.9	13.0	12.3	11.6	11.1	10.6	10.1
		Flexibility, F, (mmx10^{-6}/N)	143	133	125	118	112	107	103	99	95
	600	Strength, (kN/m)	17.9	16.7	15.7	14.8	14.0	13.4	12.8	12.3	11.9
		Flexibility, F, (mmx10^{-6}/N)	140	130	122	115	109	104	99	95	91
	300	Strength, (kN/m)	23.2	22.0	21.0	20.1	19.3	18.7	18.1	17.6	17.2
		Flexibility, F, (mmx10^{-6}/N)	134	124	116	109	102	97	92	88	84
	230	Strength, (kN/m)	26.4	25.2	24.2	23.3	22.6	21.9	21.4	20.9	20.4
		Flexibility, F, (mmx10^{-6}/N)	132	122	113	106	100	95	90	85	82
	150	Strength, (kN/m)	33.8	32.6	31.6	30.7	30.0	29.3	28.7	28.2	27.8
		Flexibility, F, (mmx10^{-6}/N)	128	118	110	102	96	91	86	82	78
914/7	900	Strength, (kN/m)	21.6	19.8	18.3	17.0	15.9	15.0	14.1	13.4	12.8
		Flexibility, F, (mmx10^{-6}/N)	59	57	55	53	52	51	50	49	48
	600	Strength, (kN/m)	23.4	21.6	20.1	18.8	17.7	16.7	15.9	15.2	14.5
		Flexibility, F, (mmx10^{-6}/N)	58	55	53	51	50	48	47	46	45
	300	Strength, (kN/m)	28.7	26.9	25.4	24.1	23.0	22.0	21.2	20.5	19.8
		Flexibility, F, (mmx10^{-6}/N)	54	51	49	47	45	44	42	41	40
	230	Strength, (kN/m)	31.9	30.1	28.6	27.3	26.2	25.3	24.4	23.7	23.1
		Flexibility, F, (mmx10^{-6}/N)	52	49	47	45	43	42	40	39	38
	150	Strength, (kN/m)	39.3	37.5	36.0	34.7	33.6	32.6	31.8	31.1	30.5
		Flexibility, F, (mmx10^{-6}/N)	49	46	44	42	40	38	37	36	35
914/9	900	Strength, (kN/m)	29.5	26.7	24.5	22.6	20.9	19.6	18.3	17.3	16.4
		Flexibility, F, (mmx10^{-6}/N)	53	51	50	48	47	46	45	44	44
	600	Strength, (kN/m)	31.2	28.5	26.2	24.3	22.7	21.3	20.1	19.1	18.1
		Flexibility, F, (mmx10^{-6}/N)	52	50	48	47	46	45	44	43	42
	300	Strength, (kN/m)	36.5	33.8	31.5	29.6	28.0	26.6	25.4	24.4	23.4
		Flexibility, F, (mmx10^{-6}/N)	50	48	46	44	43	41	40	39	38
	230	Strength, (kN/m)	39.8	37.0	34.8	32.9	31.2	29.9	28.6	27.6	26.7
		Flexibility, F, (mmx10^{-6}/N)	49	47	44	43	41	40	39	38	37
	150	Strength, (kN/m)	47.1	44.4	42.1	40.2	38.6	37.2	36.0	35.0	34.0
		Flexibility, F, (mmx10^{-6}/N)	47	45	42	40	39	37	36	35	34

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness =1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1800	1950	2100	2250	2400	2550	2700	2850	3000
914/4	900	Strength, (kN/m)	20.1	19.0	18.0	17.1	16.4	15.8	15.2	14.7	14.2
		Flexibility, F, (mmx10^{-6}/N)	73	69	66	64	62	60	58	56	55
	600	Strength, (kN/m)	22.4	21.2	20.3	19.5	18.7	18.1	17.6	17.1	16.6
		Flexibility, F, (mmx10^{-6}/N)	71	67	64	62	59	57	55	53	52
	300	Strength, (kN/m)	29.1	28.0	27.1	26.4	25.7	25.2	24.7	24.3	23.9
		Flexibility, F, (mmx10^{-6}/N)	67	63	60	57	55	52	50	49	47
	230	Strength, (kN/m)	33.2	32.2	31.3	30.6	30.0	29.5	29.0	28.6	28.3
		Flexibility, F, (mmx10^{-6}/N)	65	61	58	55	53	51	49	47	45
	150	Strength, (kN/m)	42.6	41.6	40.9	40.2	39.7	39.3	38.9	38.6	38.4
		Flexibility, F, (mmx10^{-6}/N)	63	59	56	53	50	48	46	44	43
914/7	900	Strength, (kN/m)	28.2	26.4	25.0	23.7	22.6	21.6	20.8	20.0	19.3
		Flexibility, F, (mmx10^{-6}/N)	36	35	34	34	33	33	33	32	32
	600	Strength, (kN/m)	30.6	28.9	27.4	26.2	25.1	24.2	23.3	22.6	22.0
		Flexibility, F, (mmx10^{-6}/N)	35	34	33	32	32	31	31	30	30
	300	Strength, (kN/m)	37.8	36.2	34.8	33.7	32.7	31.9	31.1	30.5	29.9
		Flexibility, F, (mmx10^{-6}/N)	32	31	30	29	28	28	27	27	26
	230	Strength, (kN/m)	42.2	40.7	39.4	38.3	37.3	36.5	35.8	35.2	34.7
		Flexibility, F, (mmx10^{-6}/N)	30	29	28	28	27	26	26	25	25
	150	Strength, (kN/m)	52.3	50.8	49.7	48.7	47.9	47.2	46.6	46.2	45.8
		Flexibility, F, (mmx10^{-6}/N)	28	27	26	25	25	24	23	23	22
914/9	900	Strength, (kN/m)	40.5	37.9	35.6	33.7	32.0	30.4	28.7	27.1	25.8
		Flexibility, F, (mmx10^{-6}/N)	32	32	31	31	30	30	30	30	30
	600	Strength, (kN/m)	43.1	40.5	38.3	36.4	34.7	33.1	31.4	29.9	28.5
		Flexibility, F, (mmx10^{-6}/N)	31	31	30	30	29	29	29	28	28
	300	Strength, (kN/m)	50.7	48.2	46.2	44.4	42.9	41.4	39.6	38.1	36.7
		Flexibility, F, (mmx10^{-6}/N)	30	29	28	27	27	26	26	26	25
	230	Strength, (kN/m)	55.4	53.0	51.0	49.3	47.8	46.4	44.7	43.1	41.8
		Flexibility, F, (mmx10^{-6}/N)	29	28	27	27	26	25	25	24	24
	150	Strength, (kN/m)	66.0	63.8	62.0	60.4	59.2	57.8	56.1	54.6	53.2
		Flexibility, F, (mmx10^{-6}/N)	27	26	26	25	24	24	23	23	22

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2400	2550	2700	2850	3000	3150	3300	3450	3600
610/3	900	Strength, (kN/m)	2.6	2.5	2.4	2.3	2.2	2.1	2.1	2.0	2.0
		Flexibility, F, (mmx10^{-6}/N)	719	697	678	661	647	636	626	617	610
	600	Strength, (kN/m)	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.3
		Flexibility, F, (mmx10^{-6}/N)	703	678	657	639	623	609	597	587	578
	300	Strength, (kN/m)	3.8	3.7	3.6	3.5	3.4	3.4	3.3	3.3	3.2
		Flexibility, F, (mmx10^{-6}/N)	668	641	617	595	577	560	545	531	519
	230	Strength, (kN/m)	4.4	4.3	4.2	4.1	4.0	3.9	3.9	3.8	3.8
		Flexibility, F, (mmx10^{-6}/N)	654	626	601	579	559	541	525	511	497
	150	Strength, (kN/m)	5.6	5.5	5.4	5.4	5.3	5.2	5.2	5.2	5.1
		Flexibility, F, (mmx10^{-6}/N)	633	603	577	553	532	513	496	481	467
610/5	900	Strength, (kN/m)	3.7	3.5	3.4	3.2	3.1	2.9	2.8	2.7	2.6
		Flexibility, F, (mmx10^{-6}/N)	293	294	296	299	302	306	310	314	319
	600	Strength, (kN/m)	4.1	3.9	3.7	3.6	3.4	3.3	3.2	3.1	3.0
		Flexibility, F, (mmx10^{-6}/N)	282	281	282	283	284	286	289	292	295
	300	Strength, (kN/m)	5.1	4.9	4.7	4.6	4.4	4.3	4.2	4.1	4.0
		Flexibility, F, (mmx10^{-6}/N)	256	253	251	249	248	247	247	247	247
	230	Strength, (kN/m)	5.7	5.5	5.3	5.2	5.1	4.9	4.8	4.7	4.6
		Flexibility, F, (mmx10^{-6}/N)	245	241	237	235	233	231	230	229	228
	150	Strength, (kN/m)	7.1	6.9	6.8	6.6	6.5	6.3	6.2	6.1	6.0
		Flexibility, F, (mmx10^{-6}/N)	226	221	216	212	209	206	204	201	199
610/7	900	Strength, (kN/m)	5.0	4.8	4.6	4.3	4.1	3.9	3.7	3.6	3.4
		Flexibility, F, (mmx10^{-6}/N)	250	249	249	250	252	255	257	261	265
	600	Strength, (kN/m)	5.4	5.1	4.9	4.7	4.5	4.3	4.1	3.9	3.8
		Flexibility, F, (mmx10^{-6}/N)	244	242	242	242	243	244	246	248	250
	300	Strength, (kN/m)	6.4	6.1	5.9	5.7	5.5	5.3	5.1	4.9	4.8
		Flexibility, F, (mmx10^{-6}/N)	230	226	224	222	221	220	220	220	220
	230	Strength, (kN/m)	7.0	6.7	6.5	6.3	6.1	5.9	5.7	5.6	5.4
		Flexibility, F, (mmx10^{-6}/N)	223	219	216	213	211	209	208	208	207
	150	Strength, (kN/m)	8.3	8.1	7.9	7.7	7.5	7.3	7.1	7.0	6.8
		Flexibility, F, (mmx10^{-6}/N)	211	206	202	198	195	192	190	188	186

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2700	2850	3000	3150	3300	3450	3600	3750	3900
610/3	900	Strength, (kN/m)	3.6	3.5	3.3	3.2	3.1	3.0	2.9	2.8	2.8
		Flexibility, F, (mmx10^{-6}/N)	434	427	421	417	414	411	410	409	408
	600	Strength, (kN/m)	4.0	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1
		Flexibility, F, (mmx10^{-6}/N)	421	413	406	400	395	391	388	386	384
	300	Strength, (kN/m)	5.1	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.3
		Flexibility, F, (mmx10^{-6}/N)	394	383	374	366	358	352	346	342	337
	230	Strength, (kN/m)	5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.0	5.0
		Flexibility, F, (mmx10^{-6}/N)	382	371	361	352	344	336	330	324	319
	150	Strength, (kN/m)	7.2	7.1	7.0	6.9	6.8	6.7	6.7	6.6	6.6
		Flexibility, F, (mmx10^{-6}/N)	364	351	340	330	321	313	305	298	292
610/5	900	Strength, (kN/m)	5.2	4.9	4.7	4.5	4.3	4.1	3.9	3.8	3.7
		Flexibility, F, (mmx10^{-6}/N)	206	210	214	219	223	228	234	239	245
	600	Strength, (kN/m)	5.6	5.3	5.1	4.9	4.7	4.5	4.3	4.2	4.1
		Flexibility, F, (mmx10^{-6}/N)	197	200	203	207	210	214	218	222	227
	300	Strength, (kN/m)	6.8	6.5	6.3	6.1	5.9	5.7	5.6	5.4	5.3
		Flexibility, F, (mmx10^{-6}/N)	177	178	179	180	181	183	185	187	189
	230	Strength, (kN/m)	7.5	7.3	7.0	6.8	6.6	6.5	6.3	6.2	6.0
		Flexibility, F, (mmx10^{-6}/N)	168	168	168	169	169	170	171	172	173
	150	Strength, (kN/m)	9.2	9.0	8.7	8.5	8.3	8.2	8.0	7.9	7.7
		Flexibility, F, (mmx10^{-6}/N)	153	151	150	150	149	149	149	149	149
610/7	900	Strength, (kN/m)	7.1	6.7	6.4	6.1	5.8	5.5	5.3	5.1	4.8
		Flexibility, F, (mmx10^{-6}/N)	171	174	176	180	183	187	192	196	201
	600	Strength, (kN/m)	7.5	7.1	6.8	6.5	6.2	5.9	5.7	5.5	5.3
		Flexibility, F, (mmx10^{-6}/N)	166	168	170	173	176	179	183	186	190
	300	Strength, (kN/m)	8.8	8.4	8.0	7.7	7.4	7.1	6.9	6.7	6.5
		Flexibility, F, (mmx10^{-6}/N)	155	155	156	157	159	160	162	164	166
	230	Strength, (kN/m)	9.5	9.1	8.7	8.4	8.1	7.9	7.6	7.4	7.2
		Flexibility, F, (mmx10^{-6}/N)	149	149	150	150	151	152	153	154	156
	150	Strength, (kN/m)	11.2	10.8	10.4	10.1	9.8	9.6	9.3	9.1	8.9
		Flexibility, F, (mmx10^{-6}/N)	140	138	138	137	137	137	137	137	138

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.22 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3000	3150	3300	3450	3600	3750	3900	4050	4200
610/3	900	Strength, (kN/m)	6.1	5.9	5.7	5.5	5.3	5.1	5.0	4.8	4.7
		Flexibility, F, (mmx10^{-6}/N)	217	217	219	220	222	225	227	230	233
	600	Strength, (kN/m)	6.6	6.4	6.1	5.9	5.8	5.6	5.5	5.3	5.2
		Flexibility, F, (mmx10^{-6}/N)	210	209	210	211	212	213	215	217	219
	300	Strength, (kN/m)	8.0	7.8	7.6	7.4	7.2	7.1	6.9	6.8	6.7
		Flexibility, F, (mmx10^{-6}/N)	193	191	190	190	189	189	189	189	189
	230	Strength, (kN/m)	8.8	8.6	8.4	8.3	8.1	7.9	7.8	7.7	7.6
		Flexibility, F, (mmx10^{-6}/N)	185	183	182	180	179	178	178	177	177
	150	Strength, (kN/m)	10.8	10.6	10.4	10.2	10.1	10.0	9.8	9.7	9.6
		Flexibility, F, (mmx10^{-6}/N)	173	170	167	165	163	161	160	158	157
610/5	900	Strength, (kN/m)	8.6	8.3	7.9	7.7	7.4	7.1	6.8	6.6	6.3
		Flexibility, F, (mmx10^{-6}/N)	126	130	134	139	143	148	153	158	163
	600	Strength, (kN/m)	9.1	8.8	8.5	8.2	7.9	7.7	7.4	7.1	6.9
		Flexibility, F, (mmx10^{-6}/N)	121	124	128	132	136	140	144	148	153
	300	Strength, (kN/m)	10.7	10.4	10.1	9.8	9.6	9.3	9.0	8.8	8.5
		Flexibility, F, (mmx10^{-6}/N)	108	111	113	116	118	121	124	126	129
	230	Strength, (kN/m)	11.7	11.4	11.1	10.8	10.6	10.3	10.0	9.8	9.5
		Flexibility, F, (mmx10^{-6}/N)	102	104	106	108	110	112	114	116	119
	150	Strength, (kN/m)	13.9	13.6	13.3	13.0	12.8	12.6	12.3	12.0	11.8
		Flexibility, F, (mmx10^{-6}/N)	92	93	94	95	96	98	99	100	101
610/7	900	Strength, (kN/m)	12.6	11.9	11.3	10.8	10.3	9.8	9.4	9.0	8.6
		Flexibility, F, (mmx10^{-6}/N)	103	106	110	114	118	122	126	131	135
	600	Strength, (kN/m)	13.2	12.5	11.9	11.3	10.8	10.3	9.9	9.5	9.2
		Flexibility, F, (mmx10^{-6}/N)	100	103	106	110	113	117	121	125	129
	300	Strength, (kN/m)	14.8	14.1	13.5	12.9	12.4	12.0	11.5	11.2	10.8
		Flexibility, F, (mmx10^{-6}/N)	93	95	98	100	103	105	108	111	114
	230	Strength, (kN/m)	15.8	15.1	14.5	13.9	13.4	13.0	12.5	12.2	11.8
		Flexibility, F, (mmx10^{-6}/N)	90	91	93	95	97	100	102	104	107
	150	Strength, (kN/m)	18.1	17.4	16.8	16.2	15.7	15.2	14.8	14.4	14.1
		Flexibility, F, (mmx10^{-6}/N)	83	84	85	87	88	89	91	92	94

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3300	3450	3600	3750	3900	4050	4200	4350	4500
610/3	900	Strength, (kN/m)	8.2	7.9	7.7	7.4	7.2	7.0	6.8	6.6	6.4
		Flexibility, F, (mmx10^{-6}/N)	139	142	144	147	150	153	157	160	164
	600	Strength, (kN/m)	8.8	8.5	8.2	8.0	7.7	7.5	7.3	7.1	7.0
		Flexibility, F, (mmx10^{-6}/N)	134	136	138	140	143	145	148	151	154
	300	Strength, (kN/m)	10.4	10.1	9.9	9.6	9.4	9.2	9.0	8.9	8.7
		Flexibility, F, (mmx10^{-6}/N)	122	123	124	125	126	128	129	130	132
	230	Strength, (kN/m)	11.4	11.1	10.9	10.6	10.4	10.2	10.1	9.9	9.8
		Flexibility, F, (mmx10^{-6}/N)	117	117	117	118	119	120	120	121	122
	150	Strength, (kN/m)	13.7	13.4	13.2	13.0	12.8	12.6	12.4	12.3	12.2
		Flexibility, F, (mmx10^{-6}/N)	107	106	106	106	106	106	106	107	107
610/5	900	Strength, (kN/m)	11.2	10.7	10.4	10.0	9.7	9.4	9.1	8.8	8.6
		Flexibility, F, (mmx10^{-6}/N)	93	97	101	105	109	113	117	121	126
	600	Strength, (kN/m)	11.8	11.3	11.0	10.6	10.3	10.0	9.7	9.5	9.2
		Flexibility, F, (mmx10^{-6}/N)	89	93	96	100	103	107	111	114	118
	300	Strength, (kN/m)	13.6	13.2	12.8	12.5	12.2	11.9	11.6	11.4	11.2
		Flexibility, F, (mmx10^{-6}/N)	80	83	85	88	90	93	95	98	101
	230	Strength, (kN/m)	14.7	14.3	13.9	13.6	13.3	13.0	12.8	12.6	12.4
		Flexibility, F, (mmx10^{-6}/N)	76	78	80	82	84	86	88	91	93
	150	Strength, (kN/m)	17.2	16.8	16.5	16.2	15.9	15.7	15.4	15.2	15.1
		Flexibility, F, (mmx10^{-6}/N)	68	69	71	72	73	75	76	78	79
610/7	900	Strength, (kN/m)	17.6	16.9	16.2	15.5	14.8	14.1	13.5	13.0	12.5
		Flexibility, F, (mmx10^{-6}/N)	77	80	83	87	90	94	98	102	106
	600	Strength, (kN/m)	18.2	17.6	16.9	16.1	15.4	14.8	14.2	13.7	13.1
		Flexibility, F, (mmx10^{-6}/N)	75	78	81	84	87	91	94	98	102
	300	Strength, (kN/m)	20.2	19.6	18.9	18.2	17.5	16.8	16.2	15.7	15.2
		Flexibility, F, (mmx10^{-6}/N)	69	72	74	77	79	82	85	87	90
	230	Strength, (kN/m)	21.4	20.8	20.2	19.4	18.7	18.1	17.5	16.9	16.4
		Flexibility, F, (mmx10^{-6}/N)	67	69	71	73	75	78	80	82	85
	150	Strength, (kN/m)	24.2	23.6	23.0	22.3	21.6	20.9	20.3	19.8	19.3
		Flexibility, F, (mmx10^{-6}/N)	61	63	65	66	68	70	71	73	75

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2700	2850	3000	3150	3300	3450	3600	3750	3900
610/3	900	Strength, (kN/m)	4.3	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.5
		Flexibility, F, (mmx10^{-6}/N)	358	342	328	315	303	292	282	273	265
	600	Strength, (kN/m)	5.2	5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.5
		Flexibility, F, (mmx10^{-6}/N)	346	330	316	303	291	280	270	261	252
	300	Strength, (kN/m)	8.2	8.1	7.9	7.8	7.7	7.6	7.6	7.5	7.4
		Flexibility, F, (mmx10^{-6}/N)	327	312	297	285	273	262	252	243	235
	230	Strength, (kN/m)	10.0	9.9	9.7	9.6	9.5	9.4	9.4	9.3	9.2
		Flexibility, F, (mmx10^{-6}/N)	322	306	292	279	267	257	247	238	229
	150	Strength, (kN/m)	14.1	14.0	13.8	13.7	13.6	13.5	13.5	13.4	13.3
		Flexibility, F, (mmx10^{-6}/N)	314	298	284	272	260	250	240	231	223
610/5	900	Strength, (kN/m)	5.1	4.9	4.7	4.6	4.4	4.3	4.2	4.1	4.0
		Flexibility, F, (mmx10^{-6}/N)	144	140	136	132	129	126	123	121	118
	600	Strength, (kN/m)	6.0	5.9	5.7	5.5	5.4	5.3	5.2	5.1	5.0
		Flexibility, F, (mmx10^{-6}/N)	134	130	126	122	119	116	113	110	107
	300	Strength, (kN/m)	9.0	8.8	8.6	8.5	8.4	8.2	8.1	8.0	7.9
		Flexibility, F, (mmx10^{-6}/N)	118	113	109	105	102	99	96	93	91
	230	Strength, (kN/m)	10.8	10.6	10.4	10.3	10.2	10.0	9.9	9.8	9.7
		Flexibility, F, (mmx10^{-6}/N)	112	108	104	100	97	93	91	88	85
	150	Strength, (kN/m)	14.9	14.7	14.5	14.4	14.3	14.1	14.0	13.9	13.8
		Flexibility, F, (mmx10^{-6}/N)	105	100	96	93	89	86	84	81	79
610/7	900	Strength, (kN/m)	6.4	6.2	5.9	5.7	5.5	5.3	5.1	5.0	4.8
		Flexibility, F, (mmx10^{-6}/N)	130	127	123	120	118	115	113	111	109
	600	Strength, (kN/m)	7.4	7.2	6.9	6.7	6.5	6.3	6.1	6.0	5.8
		Flexibility, F, (mmx10^{-6}/N)	124	120	117	114	111	108	106	103	101
	300	Strength, (kN/m)	10.4	10.1	9.9	9.6	9.4	9.2	9.1	8.9	8.8
		Flexibility, F, (mmx10^{-6}/N)	113	109	105	102	98	96	93	90	88
	230	Strength, (kN/m)	12.2	11.9	11.6	11.4	11.2	11.0	10.9	10.7	10.6
		Flexibility, F, (mmx10^{-6}/N)	109	104	101	97	94	91	89	86	84
	150	Strength, (kN/m)	16.3	16.0	15.8	15.5	15.3	15.1	15.0	14.8	14.7
		Flexibility, F, (mmx10^{-6}/N)	102	98	95	91	88	85	83	80	78

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.22 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3000	3150	3300	3450	3600	3750	3900	4050	4200
610/3	900	Strength, (kN/m)	8.5	8.2	8.0	7.8	7.6	7.4	7.2	7.0	6.9
		Flexibility, F, (mmx10^{-6}/N)	158	153	148	143	139	135	132	128	125
	600	Strength, (kN/m)	10.3	10.0	9.8	9.5	9.3	9.1	9.0	8.8	8.7
		Flexibility, F, (mmx10^{-6}/N)	151	145	140	135	131	127	124	120	117
	300	Strength, (kN/m)	15.6	15.3	15.1	14.8	14.6	14.4	14.3	14.1	14.0
		Flexibility, F, (mmx10^{-6}/N)	139	133	128	123	119	115	111	108	105
	230	Strength, (kN/m)	18.8	18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.2
		Flexibility, F, (mmx10^{-6}/N)	135	129	124	119	115	111	108	104	101
	150	Strength, (kN/m)	26.2	25.9	25.7	25.4	25.2	25.1	24.9	24.7	24.6
		Flexibility, F, (mmx10^{-6}/N)	129	124	119	114	110	106	103	100	96
610/5	900	Strength, (kN/m)	10.0	9.6	9.3	9.0	8.7	8.5	8.3	8.0	7.9
		Flexibility, F, (mmx10^{-6}/N)	77	75	74	73	72	71	70	69	68
	600	Strength, (kN/m)	11.8	11.4	11.1	10.8	10.5	10.3	10.0	9.8	9.6
		Flexibility, F, (mmx10^{-6}/N)	71	69	68	66	65	64	63	62	61
	300	Strength, (kN/m)	17.1	16.7	16.4	16.1	15.8	15.6	15.3	15.1	14.9
		Flexibility, F, (mmx10^{-6}/N)	60	58	57	55	54	53	52	51	50
	230	Strength, (kN/m)	20.3	19.9	19.6	19.3	19.0	18.8	18.6	18.4	18.2
		Flexibility, F, (mmx10^{-6}/N)	56	55	53	52	50	49	48	47	46
	150	Strength, (kN/m)	27.7	27.3	27.0	26.7	26.4	26.2	25.9	25.7	25.5
		Flexibility, F, (mmx10^{-6}/N)	51	49	48	47	45	44	43	42	41
610/7	900	Strength, (kN/m)	13.0	12.4	11.9	11.5	11.1	10.7	10.3	10.0	9.7
		Flexibility, F, (mmx10^{-6}/N)	69	68	67	66	65	65	64	63	63
	600	Strength, (kN/m)	14.8	14.2	13.7	13.3	12.8	12.5	12.1	11.8	11.5
		Flexibility, F, (mmx10^{-6}/N)	65	64	63	62	61	60	59	58	58
	300	Strength, (kN/m)	20.1	19.5	19.0	18.6	18.1	17.8	17.4	17.1	16.8
		Flexibility, F, (mmx10^{-6}/N)	58	56	55	54	52	51	50	50	49
	230	Strength, (kN/m)	23.3	22.7	22.2	21.8	21.4	21.0	20.6	20.3	20.0
		Flexibility, F, (mmx10^{-6}/N)	55	53	52	51	49	48	47	46	46
	150	Strength, (kN/m)	30.7	30.1	29.6	29.2	28.7	28.4	28.0	27.7	27.4
		Flexibility, F, (mmx10^{-6}/N)	50	49	47	46	45	44	43	42	41

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness =1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3300	3450	3600	3750	3900	4050	4200	4350	4500
610/3	900	Strength, (kN/m)	12.2	11.9	11.7	11.4	11.2	11.0	10.9	10.7	10.6
		Flexibility, F, (mmx10^{-6}/N)	89	87	84	83	81	79	77	76	74
	600	Strength, (kN/m)	14.6	14.4	14.1	13.9	13.7	13.6	13.4	13.3	13.2
		Flexibility, F, (mmx10^{-6}/N)	84	81	79	77	75	73	72	70	69
	300	Strength, (kN/m)	22.0	21.8	21.6	21.4	21.3	21.2	21.1	21.0	20.9
		Flexibility, F, (mmx10^{-6}/N)	75	73	70	68	66	64	63	61	60
	230	Strength, (kN/m)	26.4	26.3	26.1	26.0	25.9	25.8	25.8	25.7	25.7
		Flexibility, F, (mmx10^{-6}/N)	72	70	67	65	63	62	60	58	57
	150	Strength, (kN/m)	36.6	36.5	36.5	36.4	36.4	36.4	36.5	36.5	36.5
		Flexibility, F, (mmx10^{-6}/N)	68	66	63	61	60	58	56	55	53
610/5	900	Strength, (kN/m)	15.3	14.9	14.5	14.2	13.9	13.5	13.2	12.8	12.5
		Flexibility, F, (mmx10^{-6}/N)	50	50	49	49	48	48	47	47	47
	600	Strength, (kN/m)	17.9	17.5	17.2	16.9	16.6	16.3	15.9	15.6	15.3
		Flexibility, F, (mmx10^{-6}/N)	46	45	44	44	43	43	42	42	41
	300	Strength, (kN/m)	25.8	25.6	25.3	25.1	24.9	24.5	24.1	23.8	23.5
		Flexibility, F, (mmx10^{-6}/N)	38	37	37	36	35	35	34	34	33
	230	Strength, (kN/m)	30.7	30.4	30.2	30.1	29.9	29.5	29.2	28.8	28.5
		Flexibility, F, (mmx10^{-6}/N)	35	35	34	33	32	32	31	31	30
	150	Strength, (kN/m)	41.7	41.6	41.5	41.4	41.3	41.0	40.6	40.3	40.0
		Flexibility, F, (mmx10^{-6}/N)	31	31	30	29	29	28	28	27	27
610/7	900	Strength, (kN/m)	20.7	19.9	19.1	18.4	17.8	17.2	16.6	16.1	15.7
		Flexibility, F, (mmx10^{-6}/N)	45	45	45	45	44	44	44	44	44
	600	Strength, (kN/m)	23.5	22.6	21.9	21.2	20.5	19.9	19.4	18.9	18.4
		Flexibility, F, (mmx10^{-6}/N)	43	42	42	41	41	41	40	40	40
	300	Strength, (kN/m)	31.7	30.9	30.1	29.4	28.8	28.2	27.6	27.1	26.7
		Flexibility, F, (mmx10^{-6}/N)	37	36	36	35	35	34	34	33	33
	230	Strength, (kN/m)	36.7	35.9	35.1	34.4	33.8	33.2	32.6	32.1	31.7
		Flexibility, F, (mmx10^{-6}/N)	35	34	33	33	32	32	31	31	30
	150	Strength, (kN/m)	48.2	47.3	46.6	45.9	45.2	44.6	44.1	43.6	43.1
		Flexibility, F, (mmx10^{-6}/N)	31	31	30	29	29	28	28	27	27

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.76 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2400	2550	2700	2850	3000	3150	3300	3450	3600
610/4	900	Strength, (kN/m)	3.2	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3
		Flexibility, F, (mmx10^{-6}/N)	407	401	397	395	393	393	393	394	395
	600	Strength, (kN/m)	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.8	2.7
		Flexibility, F, (mmx10^{-6}/N)	393	386	381	376	373	371	369	368	368
	300	Strength, (kN/m)	4.5	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.7
		Flexibility, F, (mmx10^{-6}/N)	364	354	346	339	333	328	323	319	316
	230	Strength, (kN/m)	5.1	4.9	4.8	4.7	4.6	4.5	4.4	4.4	4.3
		Flexibility, F, (mmx10^{-6}/N)	351	341	332	324	317	311	305	301	296
	150	Strength, (kN/m)	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.7
		Flexibility, F, (mmx10^{-6}/N)	332	320	309	300	292	285	278	272	267
610/6	900	Strength, (kN/m)	4.2	4.0	3.8	3.6	3.5	3.4	3.3	3.1	3.0
		Flexibility, F, (mmx10^{-6}/N)	355	348	342	338	335	333	331	331	331
	600	Strength, (kN/m)	4.5	4.3	4.1	4.0	3.8	3.7	3.6	3.5	3.4
		Flexibility, F, (mmx10^{-6}/N)	349	340	334	329	324	321	319	317	316
	300	Strength, (kN/m)	5.4	5.2	5.0	4.9	4.7	4.6	4.5	4.4	4.3
		Flexibility, F, (mmx10^{-6}/N)	333	324	315	308	302	297	292	289	285
	230	Strength, (kN/m)	6.0	5.8	5.6	5.4	5.3	5.2	5.1	5.0	4.9
		Flexibility, F, (mmx10^{-6}/N)	326	316	307	299	292	286	281	276	273
	150	Strength, (kN/m)	7.2	7.0	6.9	6.7	6.6	6.5	6.4	6.3	6.2
		Flexibility, F, (mmx10^{-6}/N)	314	303	293	284	276	269	263	257	252

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness =0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2700	2850	3000	3150	3300	3450	3600	3750	3900
610/4	900	Strength, (kN/m)	4.4	4.2	4.0	3.9	3.7	3.6	3.5	3.4	3.3
		Flexibility, F, (mmx10^{-6}/N)	267	268	269	271	273	276	279	283	286
	600	Strength, (kN/m)	4.8	4.6	4.4	4.3	4.1	4.0	3.9	3.8	3.7
		Flexibility, F, (mmx10^{-6}/N)	257	256	256	257	258	260	262	264	266
	300	Strength, (kN/m)	5.9	5.7	5.6	5.4	5.3	5.2	5.1	5.0	4.9
		Flexibility, F, (mmx10^{-6}/N)	234	231	229	228	227	226	226	225	226
	230	Strength, (kN/m)	6.6	6.4	6.3	6.1	6.0	5.9	5.8	5.7	5.6
		Flexibility, F, (mmx10^{-6}/N)	224	220	218	215	214	212	211	210	209
	150	Strength, (kN/m)	8.2	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.3
		Flexibility, F, (mmx10^{-6}/N)	207	203	199	196	193	190	188	186	184
610/6	900	Strength, (kN/m)	6.0	5.7	5.5	5.3	5.1	4.9	4.7	4.6	4.4
		Flexibility, F, (mmx10^{-6}/N)	225	224	224	224	226	227	229	232	234
	600	Strength, (kN/m)	6.4	6.1	5.9	5.7	5.5	5.3	5.1	5.0	4.8
		Flexibility, F, (mmx10^{-6}/N)	220	218	218	217	218	219	220	222	223
	300	Strength, (kN/m)	7.5	7.2	7.0	6.8	6.6	6.4	6.3	6.2	6.0
		Flexibility, F, (mmx10^{-6}/N)	208	205	203	201	200	199	199	199	199
	230	Strength, (kN/m)	8.2	7.9	7.7	7.5	7.3	7.2	7.0	6.9	6.8
		Flexibility, F, (mmx10^{-6}/N)	202	199	196	194	192	191	190	189	189
	150	Strength, (kN/m)	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.5	8.4
		Flexibility, F, (mmx10^{-6}/N)	192	188	184	181	179	176	174	173	171

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness =1.22 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3000	3150	3300	3450	3600	3750	3900	4050	4200
610/4	900	Strength, (kN/m)	7.2	6.9	6.7	6.4	6.2	6.0	5.8	5.7	5.5
		Flexibility, F, (mmx10^{-6}/N)	149	152	156	159	163	167	171	175	179
	600	Strength, (kN/m)	7.7	7.4	7.2	6.9	6.7	6.5	6.3	6.2	6.0
		Flexibility, F, (mmx10^{-6}/N)	143	146	148	151	154	157	161	164	168
	300	Strength, (kN/m)	9.2	8.9	8.6	8.4	8.2	8.0	7.9	7.7	7.6
		Flexibility, F, (mmx10^{-6}/N)	130	131	132	134	135	137	139	140	142
	230	Strength, (kN/m)	10.1	9.8	9.5	9.3	9.1	8.9	8.8	8.6	8.5
		Flexibility, F, (mmx10^{-6}/N)	123	124	125	126	127	128	129	130	132
	150	Strength, (kN/m)	12.1	11.8	11.6	11.4	11.2	11.0	10.9	10.7	10.6
		Flexibility, F, (mmx10^{-6}/N)	112	112	112	112	112	113	113	113	114
610/6	900	Strength, (kN/m)	10.9	10.5	10.0	9.7	9.3	9.0	8.7	8.4	8.1
		Flexibility, F, (mmx10^{-6}/N)	121	124	126	129	131	135	138	141	145
	600	Strength, (kN/m)	11.4	11.0	10.5	10.2	9.8	9.5	9.2	8.9	8.6
		Flexibility, F, (mmx10^{-6}/N)	119	120	122	125	127	130	133	136	139
	300	Strength, (kN/m)	12.9	12.5	12.1	11.7	11.4	11.1	10.8	10.5	10.2
		Flexibility, F, (mmx10^{-6}/N)	112	112	114	115	116	118	120	122	124
	230	Strength, (kN/m)	13.8	13.4	13.0	12.6	12.3	12.0	11.8	11.5	11.2
		Flexibility, F, (mmx10^{-6}/N)	108	109	109	110	111	113	114	115	117
	150	Strength, (kN/m)	15.9	15.5	15.1	14.8	14.5	14.2	14.0	13.8	13.4
		Flexibility, F, (mmx10^{-6}/N)	101	101	101	102	102	103	103	104	105

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness =1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3300	3450	3600	3750	3900	4050	4200	4350	4500
610/4	900	Strength, (kN/m)	9.5	9.1	8.8	8.5	8.2	8.0	7.7	7.5	7.3
		Flexibility, F, (mmx10^{-6}/N)	104	107	110	114	117	121	125	129	132
	600	Strength, (kN/m)	10.0	9.7	9.4	9.1	8.8	8.6	8.3	8.1	7.9
		Flexibility, F, (mmx10^{-6}/N)	100	103	106	109	112	115	118	121	124
	300	Strength, (kN/m)	11.7	11.4	11.1	10.8	10.5	10.3	10.1	9.9	9.7
		Flexibility, F, (mmx10^{-6}/N)	90	92	94	96	98	100	102	104	106
	230	Strength, (kN/m)	12.7	12.4	12.1	11.8	11.6	11.3	11.1	10.9	10.8
		Flexibility, F, (mmx10^{-6}/N)	85	87	88	90	91	93	95	96	98
	150	Strength, (kN/m)	15.0	14.7	14.4	14.2	14.0	13.7	13.6	13.4	13.2
		Flexibility, F, (mmx10^{-6}/N)	77	78	79	79	80	81	82	83	84
610/6	900	Strength, (kN/m)	15.4	14.8	14.2	13.7	13.3	12.8	12.4	12.1	11.7
		Flexibility, F, (mmx10^{-6}/N)	84	87	89	92	95	98	101	105	108
	600	Strength, (kN/m)	16.0	15.4	14.9	14.4	13.9	13.5	13.1	12.7	12.4
		Flexibility, F, (mmx10^{-6}/N)	82	84	87	89	92	95	98	101	104
	300	Strength, (kN/m)	17.8	17.2	16.7	16.2	15.8	15.4	15.0	14.7	14.3
		Flexibility, F, (mmx10^{-6}/N)	77	78	80	82	84	86	88	91	93
	230	Strength, (kN/m)	18.9	18.3	17.8	17.4	16.9	16.5	16.2	15.9	15.5
		Flexibility, F, (mmx10^{-6}/N)	74	76	77	79	80	82	84	86	88
	150	Strength, (kN/m)	21.4	20.9	20.4	20.0	19.6	19.2	18.9	18.6	18.3
		Flexibility, F, (mmx10^{-6}/N)	69	70	71	72	73	74	76	77	78

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2700	2850	3000	3150	3300	3450	3600	3750	3900
610/4	900	Strength, (kN/m)	4.7	4.5	4.4	4.3	4.1	4.0	3.9	3.8	3.8
		Flexibility, F, (mmx10^{-6}/N)	200	192	186	179	174	169	164	160	155
	600	Strength, (kN/m)	5.7	5.5	5.4	5.2	5.1	5.0	4.9	4.8	4.7
		Flexibility, F, (mmx10^{-6}/N)	189	182	175	168	163	158	153	148	144
	300	Strength, (kN/m)	8.6	8.5	8.3	8.2	8.1	8.0	7.9	7.8	7.7
		Flexibility, F, (mmx10^{-6}/N)	172	164	158	151	146	141	136	131	127
	230	Strength, (kN/m)	10.4	10.3	10.1	10.0	9.9	9.8	9.7	9.6	9.5
		Flexibility, F, (mmx10^{-6}/N)	166	159	152	146	140	135	131	126	122
	150	Strength, (kN/m)	14.5	14.4	14.2	14.1	14.0	13.9	13.8	13.7	13.6
		Flexibility, F, (mmx10^{-6}/N)	158	151	145	139	133	128	124	119	116
610/6	900	Strength, (kN/m)	6.1	5.9	5.6	5.4	5.2	5.1	4.9	4.8	4.6
		Flexibility, F, (mmx10^{-6}/N)	184	177	171	166	161	156	152	148	144
	600	Strength, (kN/m)	7.1	6.8	6.6	6.4	6.2	6.0	5.9	5.8	5.6
		Flexibility, F, (mmx10^{-6}/N)	177	171	164	159	154	149	144	140	137
	300	Strength, (kN/m)	10.0	9.8	9.6	9.4	9.2	9.0	8.8	8.7	8.6
		Flexibility, F, (mmx10^{-6}/N)	166	159	153	147	141	137	132	128	124
	230	Strength, (kN/m)	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.5	10.4
		Flexibility, F, (mmx10^{-6}/N)	162	155	148	143	137	132	128	124	120
	150	Strength, (kN/m)	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.6	14.5
		Flexibility, F, (mmx10^{-6}/N)	156	149	143	137	132	127	122	118	114

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness =1.22 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3000	3150	3300	3450	3600	3750	3900	4050	4200
610/4	900	Strength, (kN/m)	9.3	9.0	8.7	8.5	8.2	8.0	7.8	7.6	7.5
		Flexibility, F, (mmx10^{-6}/N)	97	95	93	90	88	87	85	83	82
	600	Strength, (kN/m)	11.1	10.8	10.5	10.2	10.0	9.8	9.6	9.4	9.2
		Flexibility, F, (mmx10^{-6}/N)	91	88	86	84	82	80	78	76	75
	300	Strength, (kN/m)	16.4	16.1	15.8	15.5	15.3	15.1	14.9	14.7	14.5
		Flexibility, F, (mmx10^{-6}/N)	80	77	75	72	70	68	67	65	63
	230	Strength, (kN/m)	19.6	19.3	19.0	18.8	18.5	18.3	18.1	17.9	17.8
		Flexibility, F, (mmx10^{-6}/N)	76	74	71	69	67	65	63	61	60
	150	Strength, (kN/m)	27.0	26.7	26.4	26.2	25.9	25.7	25.5	25.3	25.1
		Flexibility, F, (mmx10^{-6}/N)	71	68	66	64	62	60	58	57	55
610/6	900	Strength, (kN/m)	12.5	12.0	11.5	11.1	10.7	10.3	10.0	9.7	9.4
		Flexibility, F, (mmx10^{-6}/N)	88	86	84	82	81	79	78	77	75
	600	Strength, (kN/m)	14.3	13.7	13.3	12.8	12.5	12.1	11.8	11.5	11.2
		Flexibility, F, (mmx10^{-6}/N)	84	82	80	78	76	75	73	72	70
	300	Strength, (kN/m)	19.6	19.0	18.6	18.1	17.8	17.4	17.1	16.8	16.5
		Flexibility, F, (mmx10^{-6}/N)	77	74	72	70	68	66	65	63	62
	230	Strength, (kN/m)	22.8	22.3	21.8	21.4	21.0	20.6	20.3	20.0	19.7
		Flexibility, F, (mmx10^{-6}/N)	74	72	69	67	65	64	62	60	59
	150	Strength, (kN/m)	30.2	29.6	29.2	28.8	28.4	28.0	27.7	27.4	27.1
		Flexibility, F, (mmx10^{-6}/N)	70	67	65	63	61	59	58	56	55

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness =1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3300	3450	3600	3750	3900	4050	4200	4350	4500
610/4	900	Strength, (kN/m)	13.5	13.2	12.9	12.6	12.4	12.2	11.9	11.8	11.6
		Flexibility, F, (mmx10^{-6}/N)	60	58	58	57	56	55	54	54	53
	600	Strength, (kN/m)	16.0	15.7	15.4	15.2	15.0	14.7	14.6	14.4	14.2
		Flexibility, F, (mmx10^{-6}/N)	55	54	53	52	51	50	49	48	48
	300	Strength, (kN/m)	23.5	23.3	23.0	22.8	22.7	22.5	22.4	22.3	22.2
		Flexibility, F, (mmx10^{-6}/N)	47	46	45	44	43	42	41	40	39
	230	Strength, (kN/m)	28.1	27.8	27.7	27.5	27.4	27.2	27.2	27.1	27.0
		Flexibility, F, (mmx10^{-6}/N)	44	43	42	41	40	39	38	37	37
	150	Strength, (kN/m)	38.4	38.3	38.2	38.1	38.1	38.1	38.0	38.0	38.1
		Flexibility, F, (mmx10^{-6}/N)	41	39	38	37	36	35	35	34	33
610/6	900	Strength, (kN/m)	19.9	19.4	18.7	18.0	17.4	16.8	16.3	15.8	15.4
		Flexibility, F, (mmx10^{-6}/N)	54	53	52	52	51	51	50	50	49
	600	Strength, (kN/m)	22.6	22.1	21.4	20.7	20.1	19.6	19.0	18.6	18.1
		Flexibility, F, (mmx10^{-6}/N)	51	50	49	49	48	47	47	46	45
	300	Strength, (kN/m)	30.8	30.3	29.6	29.0	28.4	27.8	27.3	26.8	26.4
		Flexibility, F, (mmx10^{-6}/N)	46	44	44	43	42	41	40	40	39
	230	Strength, (kN/m)	35.7	35.3	34.6	34.0	33.4	32.8	32.3	31.8	31.4
		Flexibility, F, (mmx10^{-6}/N)	43	42	41	40	40	39	38	37	37
	150	Strength, (kN/m)	47.0	46.7	46.1	45.4	44.8	44.3	43.7	43.3	42.8
		Flexibility, F, (mmx10^{-6}/N)	40	39	38	37	36	35	35	34	33

38 mm deck - 914 mm wide - 152 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

TRI-SERVICES METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		900	1050	1200	1350	1500	1650	1800	1950	2100
914/4	Strength, (kN/m)	48	45	43	42	41	40	39	38	37
	Flexibility, F, (mmx10^{-6}/N)	1.83	1.93	2.02	2.10	2.16	2.22	2.27	2.31	2.35
914/7	Strength, (kN/m)	56	52	49	47	45	44	43	42	41
	Flexibility, F, (mmx10^{-6}/N)	1.57	1.68	1.78	1.86	1.93	2.00	2.06	2.11	2.15
914/9	Strength, (kN/m)	73	67	62	58	56	53	51	50	48
	Flexibility, F, (mmx10^{-6}/N)	1.21	1.32	1.42	1.50	1.58	1.65	1.72	1.78	1.83

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		1200	1350	1500	1650	1800	1950	2100	2250	2400
914/4	Strength, (kN/m)	46	44	42	41	40	39	38	38	37
	Flexibility, F, (mmx10^{-6}/N)	1.76	1.84	1.90	1.96	2.01	2.05	2.09	2.13	2.16
914/7	Strength, (kN/m)	53	50	48	46	45	44	43	42	41
	Flexibility, F, (mmx10^{-6}/N)	1.52	1.60	1.67	1.74	1.79	1.84	1.89	1.93	1.97
914/9	Strength, (kN/m)	68	64	60	57	55	53	51	50	48
	Flexibility, F, (mmx10^{-6}/N)	1.18	1.26	1.34	1.40	1.46	1.52	1.57	1.62	1.66

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		1500	1650	1800	1950	2100	2250	2400	2550	2700
914/4	Strength, (kN/m)	46	44	43	42	41	40	39	39	38
	Flexibility, F, (mmx10^{-6}/N)	1.51	1.56	1.61	1.66	1.70	1.74	1.77	1.80	1.83
914/7	Strength, (kN/m)	54	51	49	48	46	45	44	43	42
	Flexibility, F, (mmx10^{-6}/N)	1.29	1.35	1.40	1.45	1.50	1.54	1.58	1.61	1.64
914/9	Strength, (kN/m)	70	66	63	60	58	56	54	53	51
	Flexibility, F, (mmx10^{-6}/N)	0.99	1.05	1.10	1.15	1.20	1.24	1.28	1.32	1.35

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		1800	1950	2100	2250	2400	2550	2700	2850	3000
914/4	Strength, (kN/m)	46	45	43	42	41	41	40	39	39
	Flexibility, F, (mmx10^{-6}/N)	1.35	1.39	1.43	1.47	1.50	1.53	1.56	1.59	1.61
914/7	Strength, (kN/m)	54	52	50	49	47	46	45	44	43
	Flexibility, F, (mmx10^{-6}/N)	1.15	1.19	1.24	1.27	1.31	1.34	1.38	1.40	1.43
914/9	Strength, (kN/m)	71	68	65	62	60	58	56	55	54
	Flexibility, F, (mmx10^{-6}/N)	0.88	0.92	0.96	1.00	1.04	1.07	1.10	1.13	1.16

76 mm deck - 610 mm wide - 152 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

TRI-SERVICES METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2400	2550	2700	2850	3000	3150	3300	3450	3600
610/3	Strength, (kN/m)	36	35	35	35	34	34	34	34	34
	Flexibility, F, (mmx10^{-6}/N)	5.59	5.65	5.70	5.75	5.79	5.83	5.87	5.90	5.93
610/5	Strength, (kN/m)	37	37	36	36	36	35	35	35	35
	Flexibility, F, (mmx10^{-6}/N)	5.33	5.40	5.46	5.52	5.57	5.62	5.66	5.70	5.74
610/7	Strength, (kN/m)	44	43	42	41	41	40	40	39	39
	Flexibility, F, (mmx10^{-6}/N)	4.58	4.67	4.75	4.82	4.89	4.96	5.02	5.08	5.13

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2700	2850	3000	3150	3300	3450	3600	3750	3900
610/3	Strength, (kN/m)	35	35	35	34	34	34	34	34	33
	Flexibility, F, (mmx10^{-6}/N)	5.14	5.19	5.24	5.28	5.32	5.36	5.39	5.42	5.45
610/5	Strength, (kN/m)	37	37	36	36	36	35	35	35	35
	Flexibility, F, (mmx10^{-6}/N)	4.89	4.95	5.00	5.05	5.10	5.14	5.18	5.22	5.25
610/7	Strength, (kN/m)	44	43	42	42	41	41	40	40	39
	Flexibility, F, (mmx10^{-6}/N)	4.15	4.23	4.30	4.37	4.43	4.49	4.54	4.59	4.64

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		3000	3150	3300	3450	3600	3750	3900	4050	4200
610/3	Strength, (kN/m)	36	36	35	35	35	34	34	34	34
	Flexibility, F, (mmx10^{-6}/N)	4.38	4.42	4.47	4.51	4.55	4.58	4.61	4.64	4.67
610/5	Strength, (kN/m)	38	38	37	37	36	36	36	35	35
	Flexibility, F, (mmx10^{-6}/N)	4.13	4.18	4.23	4.27	4.32	4.36	4.40	4.43	4.46
610/7	Strength, (kN/m)	46	45	44	44	43	42	42	41	41
	Flexibility, F, (mmx10^{-6}/N)	3.41	3.48	3.54	3.60	3.65	3.71	3.75	3.80	3.85

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		3300	3450	3600	3750	3900	4050	4200	4350	4500
610/3	Strength, (kN/m)	36	36	36	35	35	35	34	34	34
	Flexibility, F, (mmx10^{-6}/N)	3.87	3.91	3.95	3.99	4.02	4.06	4.09	4.12	4.14
610/5	Strength, (kN/m)	39	38	38	38	37	37	36	36	36
	Flexibility, F, (mmx10^{-6}/N)	3.62	3.67	3.71	3.76	3.80	3.83	3.87	3.90	3.93
610/7	Strength, (kN/m)	48	47	46	45	45	44	43	43	42
	Flexibility, F, (mmx10^{-6}/N)	2.94	3.00	3.05	3.10	3.15	3.20	3.24	3.28	3.32

76 mm deck - 610 mm wide - 203 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

TRI-SERVICES METHOD – METRIC

Thickness = 0.76 mm										
Support Connection Pattern		Span (mm)								
		2400	2550	2700	2850	3000	3150	3300	3450	3600
610/4	Strength, (kN/m)	36	36	36	35	35	35	34	34	34
	Flexibility, F, (mmx10^{-6}/N)	5.48	5.54	5.60	5.65	5.69	5.74	5.78	5.81	5.85
610/6	Strength, (kN/m)	43	42	41	40	40	39	39	39	38
	Flexibility, F, (mmx10^{-6}/N)	4.68	4.77	4.85	4.92	4.99	5.05	5.11	5.17	5.22

Thickness = 0.91 mm										
Support Connection Pattern		Span (mm)								
		2700	2850	3000	3150	3300	3450	3600	3750	3900
610/4	Strength, (kN/m)	36	36	36	35	35	35	34	34	34
	Flexibility, F, (mmx10^{-6}/N)	5.01	5.07	5.12	5.16	5.21	5.24	5.28	5.32	5.35
610/6	Strength, (kN/m)	43	42	41	41	40	40	39	39	39
	Flexibility, F, (mmx10^{-6}/N)	4.24	4.31	4.38	4.45	4.51	4.56	4.62	4.67	4.71

Thickness = 0.121 mm										
Support Connection Pattern		Span (mm)								
		3000	3150	3300	3450	3600	3750	3900	4050	4200
610/4	Strength, (kN/m)	37	36	36	36	35	35	35	35	34
	Flexibility, F, (mmx10^{-6}/N)	4.26	4.31	4.36	4.40	4.44	4.48	4.52	4.55	4.58
610/6	Strength, (kN/m)	45	44	43	43	42	41	41	40	40
	Flexibility, F, (mmx10^{-6}/N)	3.51	3.57	3.63	3.69	3.74	3.79	3.84	3.89	3.93

Thickness = 0.152 mm										
Support Connection Pattern		Span (mm)								
		3300	3450	3600	3750	3900	4050	4200	4350	4500
610/4	Strength, (kN/m)	37	37	37	36	36	36	35	35	35
	Flexibility, F, (mmx10^{-6}/N)	3.76	3.80	3.84	3.88	3.92	3.96	3.99	4.02	4.05
610/6	Strength, (kN/m)	46	46	45	44	44	43	42	42	41
	Flexibility, F, (mmx10^{-6}/N)	3.03	3.09	3.14	3.19	3.24	3.28	3.32	3.36	3.40

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	900	Strength, (kN/m)	7.0	6.2	5.6	5.0	4.5	4.1	3.8	3.5	3.3
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.4	2.5	2.7	2.8	2.9
	600	Strength, (kN/m)	7.2	6.4	5.8	5.3	4.8	4.4	4.1	3.8	3.6
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.4	2.6	2.7	2.8	2.9
	300	Strength, (kN/m)	7.7	7.0	6.4	6.0	5.6	5.2	4.9	4.6	4.4
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.4	2.6	2.7	2.8	2.9
	230	Strength, (kN/m)	8.0	7.4	6.8	6.4	6.0	5.7	5.4	5.1	4.9
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.4	2.6	2.7	2.8	2.9
	150	Strength, (kN/m)	8.7	8.1	7.6	7.2	6.8	6.5	6.3	6.1	5.9
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.5	2.6	2.7	2.9	3.0
914/7	900	Strength, (kN/m)	10.3	9.1	8.0	7.1	6.4	5.8	5.4	5.0	4.6
		Stiffeness, G', (10^3 N/mm)	8.8	9.1	9.3	9.4	9.3	9.3	9.1	8.9	8.8
	600	Strength, (kN/m)	10.6	9.3	8.2	7.4	6.7	6.1	5.6	5.2	4.9
		Stiffeness, G', (10^3 N/mm)	8.8	9.1	9.3	9.4	9.4	9.3	9.2	9.0	8.8
	300	Strength, (kN/m)	11.2	10.0	9.0	8.2	7.5	6.9	6.4	6.0	5.7
		Stiffeness, G', (10^3 N/mm)	8.8	9.2	9.4	9.5	9.5	9.4	9.3	9.1	9.0
	230	Strength, (kN/m)	11.6	10.4	9.5	8.7	8.0	7.4	6.9	6.5	6.2
		Stiffeness, G', (10^3 N/mm)	8.8	9.2	9.4	9.5	9.5	9.5	9.4	9.2	9.1
	150	Strength, (kN/m)	12.5	11.3	10.4	9.7	9.1	8.5	8.1	7.7	7.3
		Stiffeness, G', (10^3 N/mm)	8.9	9.3	9.5	9.6	9.7	9.6	9.5	9.4	9.3
914/9	900	Strength, (kN/m)	16.1	14.3	12.8	11.4	10.3	9.3	8.5	7.8	7.3
		Stiffeness, G', (10^3 N/mm)	9.5	10.1	10.5	10.8	10.9	11.0	10.9	10.9	10.8
	600	Strength, (kN/m)	16.3	14.5	13.0	11.7	10.5	9.6	8.8	8.1	7.5
		Stiffeness, G', (10^3 N/mm)	9.6	10.1	10.5	10.8	10.9	11.0	11.0	10.9	10.8
	300	Strength, (kN/m)	16.9	15.1	13.6	12.5	11.3	10.4	9.6	8.9	8.3
		Stiffeness, G', (10^3 N/mm)	9.6	10.2	10.6	10.8	11.0	11.1	11.1	11.0	10.9
	230	Strength, (kN/m)	17.2	15.5	14.0	12.9	11.8	10.9	10.1	9.4	8.8
		Stiffeness, G', (10^3 N/mm)	9.6	10.2	10.6	10.9	11.0	11.1	11.1	11.1	11.0
	150	Strength, (kN/m)	18.0	16.3	14.9	13.8	12.8	12.0	11.2	10.5	10.0
		Stiffeness, G', (10^3 N/mm)	9.6	10.2	10.6	10.9	11.1	11.2	11.2	11.2	11.1

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	900	Strength, (kN/m)	6.7	6.1	5.5	5.0	4.6	4.3	4.0	3.8	3.6
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.6	3.8	3.9	4.0	4.0	4.1
	600	Strength, (kN/m)	7.0	6.4	5.9	5.4	5.0	4.7	4.4	4.2	4.0
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.7	3.8	3.9	4.0	4.0	4.1
	300	Strength, (kN/m)	7.9	7.4	6.9	6.5	6.2	5.9	5.6	5.3	5.1
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.7	3.8	3.9	4.0	4.1	4.2
	230	Strength, (kN/m)	8.4	7.9	7.5	7.1	6.8	6.5	6.3	6.0	5.8
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.7	3.9	4.0	4.1	4.2	4.2
	150	Strength, (kN/m)	9.5	9.0	8.6	8.3	8.0	7.8	7.6	7.4	7.2
		Stiffeness, G', (10^3 N/mm)	3.1	3.4	3.6	3.8	3.9	4.0	4.2	4.3	4.3
914/7	900	Strength, (kN/m)	9.6	8.5	7.7	7.1	6.5	6.0	5.6	5.3	5.0
		Stiffeness, G', (10^3 N/mm)	12.1	11.9	11.7	11.5	11.2	10.9	10.5	10.2	9.9
	600	Strength, (kN/m)	9.9	8.9	8.1	7.4	6.9	6.4	6.0	5.7	5.4
		Stiffeness, G', (10^3 N/mm)	12.1	12.0	11.8	11.5	11.2	10.9	10.6	10.3	10.0
	300	Strength, (kN/m)	11.0	10.1	9.3	8.6	8.0	7.6	7.2	6.8	6.5
		Stiffeness, G', (10^3 N/mm)	12.2	12.1	11.9	11.7	11.4	11.1	10.8	10.5	10.2
	230	Strength, (kN/m)	11.6	10.7	10.0	9.3	8.8	8.3	7.9	7.5	7.2
		Stiffeness, G', (10^3 N/mm)	12.2	12.2	12.0	11.8	11.5	11.2	11.0	10.7	10.4
	150	Strength, (kN/m)	13.0	12.1	11.4	10.8	10.4	9.9	9.5	9.1	8.8
		Stiffeness, G', (10^3 N/mm)	12.4	12.3	12.2	12.0	11.8	11.5	11.2	11.0	10.7
914/9	900	Strength, (kN/m)	15.2	13.7	12.3	11.2	10.3	9.5	8.8	8.2	7.7
		Stiffeness, G', (10^3 N/mm)	14.0	14.1	14.1	13.9	13.8	13.5	13.3	13.0	12.7
	600	Strength, (kN/m)	15.5	14.1	12.7	11.6	10.7	9.9	9.2	8.6	8.1
		Stiffeness, G', (10^3 N/mm)	14.0	14.1	14.1	14.0	13.8	13.6	13.3	13.0	12.8
	300	Strength, (kN/m)	16.5	15.1	13.9	12.8	11.8	11.0	10.4	9.8	9.3
		Stiffeness, G', (10^3 N/mm)	14.0	14.2	14.2	14.1	13.9	13.7	13.5	13.2	12.9
	230	Strength, (kN/m)	17.0	15.7	14.5	13.5	12.5	11.7	11.1	10.5	10.0
		Stiffeness, G', (10^3 N/mm)	14.1	14.2	14.2	14.1	14.0	13.8	13.6	13.3	13.0
	150	Strength, (kN/m)	18.3	16.9	15.9	14.9	14.1	13.4	12.7	12.1	11.6
		Stiffeness, G', (10^3 N/mm)	14.1	14.3	14.3	14.3	14.1	14.0	13.8	13.5	13.3

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 1.21 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	900	Strength, (kN/m)	7.4	6.8	6.3	5.9	5.6	5.2	5.0	4.7	4.5
		Stiffeness, G', (10^3 N/mm)	5.9	6.1	6.2	6.2	6.2	6.2	6.1	6.1	6.0
	600	Strength, (kN/m)	8.1	7.5	7.0	6.6	6.2	5.9	5.7	5.4	5.2
		Stiffeness, G', (10^3 N/mm)	6.0	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.1
	300	Strength, (kN/m)	9.7	9.3	8.9	8.5	8.3	8.0	7.7	7.5	7.3
		Stiffeness, G', (10^3 N/mm)	6.0	6.2	6.3	6.4	6.4	6.4	6.4	6.3	6.3
	230	Strength, (kN/m)	10.7	10.2	9.9	9.6	9.3	9.0	8.8	8.6	8.4
		Stiffeness, G', (10^3 N/mm)	6.1	6.2	6.3	6.4	6.5	6.5	6.5	6.5	6.4
	150	Strength, (kN/m)	12.6	12.2	11.9	11.6	11.4	11.2	11.0	10.8	10.7
		Stiffeness, G', (10^3 N/mm)	6.1	6.3	6.5	6.6	6.6	6.7	6.7	6.7	6.7
914/7	900	Strength, (kN/m)	10.3	9.5	8.8	8.2	7.6	7.2	6.8	6.5	6.2
		Stiffeness, G', (10^3 N/mm)	16.0	15.4	14.8	14.2	13.6	13.1	12.6	12.1	11.7
	600	Strength, (kN/m)	11.0	10.2	9.5	8.9	8.3	7.9	7.5	7.1	6.8
		Stiffeness, G', (10^3 N/mm)	16.1	15.5	14.9	14.3	13.7	13.2	12.7	12.2	11.8
	300	Strength, (kN/m)	13.1	12.2	11.5	10.9	10.4	10.0	9.6	9.2	8.9
		Stiffeness, G', (10^3 N/mm)	16.3	15.7	15.1	14.6	14.0	13.5	13.0	12.6	12.2
	230	Strength, (kN/m)	14.2	13.4	12.8	12.2	11.7	11.2	10.8	10.5	10.2
		Stiffeness, G', (10^3 N/mm)	16.4	15.9	15.3	14.7	14.2	13.7	13.2	12.8	12.4
	150	Strength, (kN/m)	16.6	15.9	15.3	14.8	14.3	13.9	13.6	13.3	13.0
		Stiffeness, G', (10^3 N/mm)	16.7	16.2	15.7	15.1	14.6	14.2	13.7	13.3	12.9
914/9	900	Strength, (kN/m)	16.5	15.0	13.8	12.8	11.9	11.1	10.5	9.9	9.4
		Stiffeness, G', (10^3 N/mm)	19.9	19.4	18.8	18.2	17.7	17.1	16.6	16.1	15.6
	600	Strength, (kN/m)	17.2	15.7	14.5	13.5	12.6	11.8	11.2	10.6	10.0
		Stiffeness, G', (10^3 N/mm)	19.9	19.4	18.9	18.3	17.8	17.2	16.7	16.2	15.7
	300	Strength, (kN/m)	19.0	17.8	16.6	15.5	14.7	13.9	13.2	12.6	12.1
		Stiffeness, G', (10^3 N/mm)	20.1	19.6	19.1	18.5	18.0	17.5	16.9	16.4	16.0
	230	Strength, (kN/m)	20.0	18.8	17.8	16.8	15.9	15.1	14.5	13.9	13.4
		Stiffeness, G', (10^3 N/mm)	20.2	19.7	19.2	18.7	18.1	17.6	17.1	16.6	16.1
	150	Strength, (kN/m)	22.3	21.2	20.2	19.4	18.6	18.0	17.4	16.8	16.2
		Stiffeness, G', (10^3 N/mm)	20.4	19.9	19.5	19.0	18.4	17.9	17.5	17.0	16.5

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 1.52 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	900	Strength, (kN/m)	8.1	7.6	7.1	6.8	6.5	6.2	5.9	5.7	5.5
		Stiffeness, G', (10^3 N/mm)	8.5	8.4	8.3	8.2	8.1	7.9	7.7	7.6	7.4
	600	Strength, (kN/m)	9.1	8.6	8.2	7.9	7.5	7.3	7.0	6.8	6.6
		Stiffeness, G', (10^3 N/mm)	8.6	8.5	8.4	8.3	8.1	8.0	7.8	7.7	7.5
	300	Strength, (kN/m)	11.8	11.4	11.1	10.8	10.6	10.3	10.1	9.9	9.8
		Stiffeness, G', (10^3 N/mm)	8.8	8.7	8.6	8.5	8.4	8.3	8.1	8.0	7.9
	230	Strength, (kN/m)	13.3	12.9	12.6	12.4	12.1	11.9	11.7	11.5	11.4
		Stiffeness, G', (10^3 N/mm)	8.9	8.8	8.8	8.7	8.6	8.5	8.3	8.2	8.1
	150	Strength, (kN/m)	16.2	15.9	15.7	15.5	15.3	15.1	14.9	14.8	14.6
		Stiffeness, G', (10^3 N/mm)	9.1	9.1	9.1	9.0	8.9	8.8	8.7	8.6	8.5
914/7	900	Strength, (kN/m)	11.1	10.3	9.7	9.2	8.7	8.3	7.9	7.6	7.3
		Stiffeness, G', (10^3 N/mm)	17.8	17.0	16.2	15.5	14.8	14.2	13.7	13.1	12.6
	600	Strength, (kN/m)	12.1	11.4	10.8	10.3	9.8	9.4	9.0	8.7	8.4
		Stiffeness, G', (10^3 N/mm)	18.0	17.1	16.4	15.6	15.0	14.4	13.8	13.3	12.8
	300	Strength, (kN/m)	15.3	14.6	14.0	13.5	13.0	12.6	12.2	11.9	11.6
		Stiffeness, G', (10^3 N/mm)	18.3	17.5	16.8	16.1	15.4	14.8	14.3	13.8	13.3
	230	Strength, (kN/m)	17.1	16.5	15.9	15.4	15.0	14.6	14.2	13.9	13.6
		Stiffeness, G', (10^3 N/mm)	18.5	17.7	17.0	16.3	15.7	15.1	14.5	14.0	13.6
	150	Strength, (kN/m)	20.9	20.3	19.8	19.4	19.0	18.6	18.3	18.0	17.7
		Stiffeness, G', (10^3 N/mm)	19.0	18.2	17.5	16.9	16.2	15.7	15.1	14.7	14.2
914/9	900	Strength, (kN/m)	17.3	16.1	15.0	14.1	13.3	12.5	11.9	11.3	10.8
		Stiffeness, G', (10^3 N/mm)	23.2	22.3	21.5	20.7	19.9	19.2	18.5	17.9	17.3
	600	Strength, (kN/m)	18.4	17.1	16.1	15.1	14.3	13.6	13.0	12.4	11.9
		Stiffeness, G', (10^3 N/mm)	23.3	22.4	21.6	20.8	20.0	19.3	18.6	18.0	17.4
	300	Strength, (kN/m)	21.5	20.4	19.3	18.4	17.6	16.9	16.2	15.7	15.1
		Stiffeness, G', (10^3 N/mm)	23.6	22.7	21.9	21.1	20.4	19.7	19.0	18.4	17.8
	230	Strength, (kN/m)	23.2	22.1	21.2	20.3	19.5	18.8	18.2	17.6	17.1
		Stiffeness, G', (10^3 N/mm)	23.7	22.9	22.1	21.3	20.6	19.9	19.2	18.6	18.0
	150	Strength, (kN/m)	26.8	25.9	25.0	24.2	23.6	23.0	22.4	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	24.1	23.3	22.5	21.7	21.0	20.4	19.7	19.1	18.6

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	900	Strength, (kN/m)	7.3	7.0	6.7	6.4	6.2	6.0	5.8	5.6	5.5
		Stiffeness, G', (10^3 N/mm)	3.1	3.4	3.6	3.9	4.1	4.2	4.4	4.6	4.7
	600	Strength, (kN/m)	8.7	8.4	8.2	7.9	7.8	7.6	7.5	7.3	7.2
		Stiffeness, G', (10^3 N/mm)	3.2	3.5	3.8	4.0	4.3	4.5	4.7	4.9	5.1
	300	Strength, (kN/m)	12.0	11.8	11.6	11.5	11.4	11.3	11.2	11.1	11.0
		Stiffeness, G', (10^3 N/mm)	3.3	3.7	4.0	4.3	4.6	4.9	5.2	5.4	5.7
	230	Strength, (kN/m)	13.4	13.2	13.1	13.0	12.9	12.8	12.7	12.7	12.6
		Stiffeness, G', (10^3 N/mm)	3.4	3.7	4.1	4.4	4.7	5.0	5.3	5.6	5.9
	150	Strength, (kN/m)	15.4	15.3	15.2	15.2	15.1	15.1	15.0	15.0	13.3
		Stiffeness, G', (10^3 N/mm)	3.5	3.8	4.2	4.5	4.9	5.2	5.5	5.8	6.1
914/7	900	Strength, (kN/m)	10.3	9.6	9.0	8.5	8.1	7.7	7.4	7.1	6.9
		Stiffeness, G', (10^3 N/mm)	12.4	12.5	12.5	12.5	12.4	12.4	12.3	12.1	12.0
	600	Strength, (kN/m)	12.0	11.4	10.8	10.4	10.0	9.6	9.3	9.1	8.9
		Stiffeness, G', (10^3 N/mm)	13.0	13.3	13.4	13.5	13.5	13.6	13.5	13.5	13.5
	300	Strength, (kN/m)	16.6	16.0	15.6	15.2	14.9	14.6	14.4	14.2	13.3
		Stiffeness, G', (10^3 N/mm)	14.5	15.0	15.4	15.7	16.0	16.2	16.4	16.6	16.7
	230	Strength, (kN/m)	19.0	18.5	18.1	17.7	17.5	17.2	17.0	15.2	13.3
		Stiffeness, G', (10^3 N/mm)	15.1	15.7	16.2	16.7	17.0	17.3	17.6	17.9	18.1
	150	Strength, (kN/m)	23.4	23.1	22.8	22.5	22.3	20.2	17.4	15.2	13.3
		Stiffeness, G', (10^3 N/mm)	16.1	16.9	17.6	18.2	18.8	19.2	19.6	20.0	20.4
914/9	900	Strength, (kN/m)	15.8	14.7	13.6	12.6	11.8	11.2	10.6	10.1	9.6
		Stiffeness, G', (10^3 N/mm)	14.2	14.4	14.6	14.6	14.6	14.6	14.5	14.4	14.3
	600	Strength, (kN/m)	17.4	16.2	15.3	14.5	13.8	13.1	12.5	12.0	11.6
		Stiffeness, G', (10^3 N/mm)	14.6	14.9	15.2	15.3	15.4	15.4	15.5	15.4	15.4
	300	Strength, (kN/m)	21.5	20.5	19.7	19.1	18.5	18.0	17.4	15.2	13.3
		Stiffeness, G', (10^3 N/mm)	15.5	16.1	16.5	16.9	17.2	17.4	17.6	17.8	17.9
	230	Strength, (kN/m)	23.7	22.8	22.1	21.5	21.0	20.2	17.4	15.2	13.3
		Stiffeness, G', (10^3 N/mm)	15.9	16.6	17.2	17.6	18.0	18.3	18.6	18.9	19.1
	150	Strength, (kN/m)	27.9	27.2	26.7	26.2	23.7	20.2	17.4	15.2	13.3
		Stiffeness, G', (10^3 N/mm)	16.7	17.5	18.2	18.9	19.4	19.9	20.3	20.7	21.0

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 1.21 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	900	Strength, (kN/m)	8.7	8.4	8.1	7.9	7.7	7.5	7.3	7.1	7.0
		Stiffeness, G', (10^3 N/mm)	6.3	6.6	6.8	7.0	7.2	7.4	7.5	7.7	7.8
	600	Strength, (kN/m)	10.7	10.4	10.2	10.0	9.8	9.6	9.5	9.4	9.2
		Stiffeness, G', (10^3 N/mm)	6.7	7.0	7.3	7.6	7.9	8.1	8.3	8.5	8.7
	300	Strength, (kN/m)	15.2	15.0	14.9	14.7	14.6	14.5	14.4	14.3	14.3
		Stiffeness, G', (10^3 N/mm)	7.3	7.8	8.2	8.7	9.0	9.4	9.8	10.1	10.4
	230	Strength, (kN/m)	17.1	17.0	16.9	16.8	16.7	16.6	16.5	16.5	16.3
		Stiffeness, G', (10^3 N/mm)	7.5	8.1	8.6	9.0	9.5	9.9	10.3	10.7	11.0
	150	Strength, (kN/m)	19.9	19.8	19.8	19.7	19.7	19.6	19.6	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	7.9	8.4	9.0	9.5	10.1	10.6	11.0	11.5	11.9
914/7	900	Strength, (kN/m)	11.8	11.2	10.6	10.2	9.8	9.4	9.1	8.9	8.6
		Stiffeness, G', (10^3 N/mm)	17.3	17.0	16.7	16.4	16.1	15.9	15.6	15.4	15.1
	600	Strength, (kN/m)	14.2	13.6	13.1	12.7	12.3	12.0	11.7	11.4	11.2
		Stiffeness, G', (10^3 N/mm)	18.8	18.6	18.5	18.3	18.1	17.9	17.8	17.6	17.4
	300	Strength, (kN/m)	20.4	19.9	19.5	19.1	18.8	18.5	18.3	18.1	16.3
		Stiffeness, G', (10^3 N/mm)	22.2	22.4	22.5	22.6	22.7	22.7	22.7	22.8	22.8
	230	Strength, (kN/m)	23.7	23.2	22.8	22.5	22.2	22.0	20.6	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	23.8	24.1	24.4	24.6	24.7	24.9	25.0	25.1	25.2
	150	Strength, (kN/m)	29.8	29.5	29.2	28.9	26.9	23.4	20.6	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	26.4	27.0	27.5	27.9	28.3	28.6	28.9	29.1	29.3
914/9	900	Strength, (kN/m)	17.9	16.7	15.6	14.8	14.0	13.3	12.8	12.3	11.8
		Stiffeness, G', (10^3 N/mm)	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.4
	600	Strength, (kN/m)	20.0	19.0	18.1	17.3	16.5	15.9	15.3	14.8	14.4
		Stiffeness, G', (10^3 N/mm)	21.8	21.7	21.5	21.3	21.1	20.9	20.7	20.5	20.3
	300	Strength, (kN/m)	25.8	24.9	24.2	23.5	22.9	22.4	20.6	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	24.4	24.5	24.7	24.7	24.8	24.8	24.8	24.8	24.7
	230	Strength, (kN/m)	29.0	28.1	27.4	26.9	26.3	23.4	20.6	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	25.6	25.9	26.1	26.3	26.5	26.6	26.7	26.8	26.8
	150	Strength, (kN/m)	34.9	34.3	33.7	31.2	26.9	23.4	20.6	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	27.7	28.2	28.7	29.1	29.5	29.8	30.0	30.3	30.5

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	900	Strength, (kN/m)	10.0	9.7	9.5	9.2	9.0	8.8	8.6	8.5	8.3
		Stiffeness, G', (10^3 N/mm)	9.7	9.9	10.1	10.2	10.3	10.4	10.5	10.5	10.6
	600	Strength, (kN/m)	12.5	12.2	12.0	11.8	11.6	11.5	11.3	11.2	11.1
		Stiffeness, G', (10^3 N/mm)	10.6	10.9	11.2	11.4	11.7	11.8	12.0	12.2	12.3
	300	Strength, (kN/m)	18.2	18.1	17.9	17.8	17.7	17.6	17.5	17.4	17.3
		Stiffeness, G', (10^3 N/mm)	12.4	12.9	13.4	13.9	14.3	14.7	15.0	15.3	15.7
	230	Strength, (kN/m)	20.7	20.6	20.5	20.4	20.3	20.2	20.1	20.1	18.3
		Stiffeness, G', (10^3 N/mm)	13.1	13.7	14.2	14.8	15.3	15.7	16.2	16.6	17.0
	150	Strength, (kN/m)	24.3	24.2	24.2	24.1	24.1	24.0	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	14.0	14.8	15.5	16.1	16.7	17.3	17.9	18.4	18.9
914/7	900	Strength, (kN/m)	13.1	12.5	12.0	11.6	11.2	10.9	10.6	10.4	10.1
		Stiffeness, G', (10^3 N/mm)	20.4	19.9	19.5	19.1	18.7	18.3	18.0	17.7	17.4
	600	Strength, (kN/m)	16.1	15.6	15.1	14.7	14.4	14.0	13.7	13.5	13.2
		Stiffeness, G', (10^3 N/mm)	22.8	22.4	22.1	21.7	21.4	21.2	20.9	20.7	20.4
	300	Strength, (kN/m)	23.9	23.4	23.0	22.7	22.4	22.2	21.9	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	28.4	28.3	28.2	28.1	28.1	28.0	27.9	27.8	27.7
	230	Strength, (kN/m)	28.0	27.6	27.3	27.0	26.7	25.4	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	31.0	31.1	31.1	31.2	31.2	31.2	31.2	31.2	31.2
	150	Strength, (kN/m)	35.8	35.5	35.2	32.6	28.6	25.4	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	35.7	36.0	36.2	36.5	36.6	36.8	37.0	37.1	37.2
914/9	900	Strength, (kN/m)	19.3	18.2	17.3	16.5	15.8	15.2	14.6	14.1	13.7
		Stiffeness, G', (10^3 N/mm)	25.2	24.6	24.0	23.5	23.0	22.5	22.1	21.7	21.3
	600	Strength, (kN/m)	22.2	21.3	20.4	19.6	18.9	18.3	17.7	17.2	16.8
		Stiffeness, G', (10^3 N/mm)	27.0	26.6	26.1	25.7	25.3	24.9	24.6	24.2	23.9
	300	Strength, (kN/m)	29.7	28.9	28.1	27.5	27.0	25.4	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	31.5	31.3	31.2	31.0	30.9	30.7	30.6	30.4	30.2
	230	Strength, (kN/m)	33.7	32.9	32.3	31.7	28.6	25.4	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	33.6	33.7	33.6	33.6	33.6	33.5	33.4	33.4	33.3
	150	Strength, (kN/m)	41.4	40.8	37.4	32.6	28.6	25.4	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	37.5	37.8	38.0	38.2	38.3	38.5	38.6	38.7	38.7

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 0.76 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	900	Strength, (kN/m)	7.0	6.3	5.8	5.4	5.0	4.6	4.3	4.1	3.9
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.4	2.6	2.7	2.9	3.0
	600	Strength, (kN/m)	7.6	6.9	6.4	6.1	5.7	5.4	5.2	4.9	4.7
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.5	2.6	2.8	2.9	3.1
	300	Strength, (kN/m)	9.0	8.5	8.1	7.8	7.5	7.3	7.1	6.9	6.8
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.4	2.6	2.8	2.9	3.1	3.3
	230	Strength, (kN/m)	9.8	9.3	9.0	8.7	8.5	8.2	8.1	7.9	7.8
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.2	2.4	2.6	2.8	3.0	3.2	3.4
	150	Strength, (kN/m)	11.1	10.8	10.6	10.4	10.2	10.0	9.9	9.8	9.7
		Stiffeness, G', (10^3 N/mm)	1.7	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.5
914/7	900	Strength, (kN/m)	10.3	9.2	8.2	7.5	6.8	6.3	5.9	5.6	5.2
		Stiffeness, G', (10^3 N/mm)	8.8	9.2	9.4	9.5	9.6	9.6	9.5	9.4	9.3
	600	Strength, (kN/m)	11.0	9.9	9.0	8.3	7.7	7.1	6.7	6.4	6.1
		Stiffeness, G', (10^3 N/mm)	8.9	9.3	9.6	9.8	9.9	9.9	9.9	9.8	9.8
	300	Strength, (kN/m)	12.9	11.9	11.1	10.4	9.9	9.5	9.1	8.8	8.5
		Stiffeness, G', (10^3 N/mm)	9.1	9.7	10.1	10.4	10.6	10.8	10.9	10.9	11.0
	230	Strength, (kN/m)	14.0	13.0	12.3	11.6	11.1	10.7	10.4	10.1	9.8
		Stiffeness, G', (10^3 N/mm)	9.3	9.9	10.3	10.7	11.0	11.2	11.4	11.5	11.6
	150	Strength, (kN/m)	16.3	15.4	14.7	14.2	13.7	13.4	13.1	12.8	12.6
		Stiffeness, G', (10^3 N/mm)	9.5	10.2	10.8	11.3	11.7	12.0	12.3	12.5	12.7
914/9	900	Strength, (kN/m)	16.1	14.4	13.0	11.8	10.7	9.8	9.1	8.4	7.9
		Stiffeness, G', (10^3 N/mm)	9.5	10.1	10.6	10.9	11.1	11.2	11.2	11.2	11.1
	600	Strength, (kN/m)	16.7	15.0	13.6	12.5	11.5	10.6	9.9	9.2	8.7
		Stiffeness, G', (10^3 N/mm)	9.6	10.2	10.7	11.0	11.2	11.4	11.5	11.5	11.5
	300	Strength, (kN/m)	18.3	16.8	15.5	14.5	13.6	12.9	12.3	11.7	11.1
		Stiffeness, G', (10^3 N/mm)	9.7	10.4	11.0	11.4	11.7	11.9	12.1	12.2	12.3
	230	Strength, (kN/m)	19.3	17.8	16.6	15.6	14.8	14.1	13.5	13.0	12.5
		Stiffeness, G', (10^3 N/mm)	9.8	10.6	11.1	11.6	12.0	12.2	12.5	12.6	12.8
	150	Strength, (kN/m)	21.2	19.9	18.8	17.9	17.2	16.6	16.1	15.4	13.3
		Stiffeness, G', (10^3 N/mm)	10.0	10.8	11.4	12.0	12.4	12.8	13.1	13.4	13.6

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	900	Strength, (kN/m)	6.9	6.4	6.0	5.6	5.2	4.9	4.7	4.5	4.3
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.7	3.9	4.0	4.2	4.3	4.4
	600	Strength, (kN/m)	7.7	7.2	6.8	6.5	6.2	5.9	5.7	5.5	5.3
		Stiffeness, G', (10^3 N/mm)	3.1	3.4	3.6	3.8	4.0	4.2	4.3	4.5	4.6
	300	Strength, (kN/m)	9.7	9.3	9.0	8.7	8.5	8.3	8.1	7.9	7.8
		Stiffeness, G', (10^3 N/mm)	3.2	3.5	3.8	4.0	4.3	4.5	4.7	4.9	5.1
	230	Strength, (kN/m)	10.7	10.4	10.1	9.9	9.6	9.5	9.3	9.2	9.1
		Stiffeness, G', (10^3 N/mm)	3.3	3.6	3.9	4.1	4.4	4.6	4.8	5.1	5.3
	150	Strength, (kN/m)	12.6	12.4	12.2	12.0	11.8	11.7	11.6	11.5	11.4
		Stiffeness, G', (10^3 N/mm)	3.3	3.7	4.0	4.3	4.6	4.8	5.1	5.3	5.6
914/7	900	Strength, (kN/m)	9.9	8.9	8.2	7.6	7.1	6.7	6.3	6.0	5.7
		Stiffeness, G', (10^3 N/mm)	12.2	12.2	12.1	11.9	11.7	11.5	11.3	11.0	10.8
	600	Strength, (kN/m)	10.8	9.9	9.2	8.6	8.1	7.6	7.3	6.9	6.7
		Stiffeness, G', (10^3 N/mm)	12.5	12.5	12.5	12.4	12.2	12.1	11.9	11.7	11.5
	300	Strength, (kN/m)	13.2	12.5	11.8	11.3	10.9	10.5	10.2	9.9	9.6
		Stiffeness, G', (10^3 N/mm)	13.3	13.5	13.6	13.6	13.6	13.6	13.5	13.5	13.4
	230	Strength, (kN/m)	14.6	13.9	13.3	12.8	12.4	12.0	11.7	11.5	11.2
		Stiffeness, G', (10^3 N/mm)	13.7	13.9	14.1	14.3	14.3	14.4	14.4	14.4	14.4
	150	Strength, (kN/m)	17.6	17.0	16.4	16.0	15.6	15.3	15.0	14.8	13.3
		Stiffeness, G', (10^3 N/mm)	14.4	14.9	15.2	15.5	15.7	15.9	16.0	16.1	16.2
914/9	900	Strength, (kN/m)	15.5	14.1	12.8	11.7	10.9	10.1	9.5	8.9	8.4
		Stiffeness, G', (10^3 N/mm)	14.0	14.2	14.3	14.2	14.1	14.0	13.8	13.6	13.4
	600	Strength, (kN/m)	16.2	14.9	13.8	12.7	11.8	11.1	10.4	9.9	9.4
		Stiffeness, G', (10^3 N/mm)	14.2	14.4	14.5	14.5	14.5	14.4	14.2	14.1	13.9
	300	Strength, (kN/m)	18.5	17.3	16.2	15.4	14.6	14.0	13.4	12.8	12.3
		Stiffeness, G', (10^3 N/mm)	14.7	15.0	15.3	15.4	15.5	15.5	15.5	15.4	15.3
	230	Strength, (kN/m)	19.8	18.6	17.6	16.8	16.1	15.5	15.0	14.5	13.3
		Stiffeness, G', (10^3 N/mm)	15.0	15.4	15.7	15.9	16.0	16.1	16.1	16.1	16.1
	150	Strength, (kN/m)	22.5	21.4	20.5	19.8	19.2	18.6	17.4	15.2	13.3
		Stiffeness, G', (10^3 N/mm)	15.5	16.0	16.4	16.7	17.0	17.2	17.3	17.5	17.5

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 1.21 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	900	Strength, (kN/m)	7.9	7.4	6.9	6.6	6.2	6.0	5.7	5.5	5.3
		Stiffeness, G', (10^3 N/mm)	6.1	6.3	6.4	6.6	6.7	6.7	6.8	6.8	6.8
	600	Strength, (kN/m)	9.0	8.5	8.2	7.9	7.5	7.3	7.0	6.8	6.6
		Stiffeness, G', (10^3 N/mm)	6.3	6.5	6.7	6.9	7.0	7.1	7.2	7.3	7.4
	300	Strength, (kN/m)	11.8	11.5	11.2	10.9	10.7	10.5	10.3	10.1	10.0
		Stiffeness, G', (10^3 N/mm)	6.7	7.1	7.4	7.6	7.9	8.1	8.3	8.5	8.6
	230	Strength, (kN/m)	13.3	13.0	12.7	12.5	12.3	12.1	12.0	11.8	11.7
		Stiffeness, G', (10^3 N/mm)	6.9	7.3	7.7	8.0	8.3	8.5	8.8	9.0	9.2
	150	Strength, (kN/m)	16.0	15.8	15.6	15.4	15.3	15.2	15.0	14.9	14.9
		Stiffeness, G', (10^3 N/mm)	7.3	7.7	8.1	8.5	8.9	9.3	9.6	9.9	10.2
914/7	900	Strength, (kN/m)	10.8	10.0	9.4	8.8	8.3	7.9	7.6	7.2	7.0
		Stiffeness, G', (10^3 N/mm)	16.5	16.1	15.6	15.1	14.7	14.2	13.8	13.5	13.1
	600	Strength, (kN/m)	12.1	11.3	10.7	10.1	9.6	9.2	8.9	8.5	8.3
		Stiffeness, G', (10^3 N/mm)	17.2	16.8	16.4	16.0	15.6	15.2	14.9	14.5	14.2
	300	Strength, (kN/m)	15.6	14.9	14.4	13.9	13.4	13.1	12.7	12.4	12.1
		Stiffeness, G', (10^3 N/mm)	19.1	18.8	18.6	18.4	18.1	17.9	17.6	17.4	17.2
	230	Strength, (kN/m)	17.6	16.9	16.4	15.9	15.5	15.1	14.8	14.6	14.3
		Stiffeness, G', (10^3 N/mm)	20.0	19.9	19.8	19.6	19.4	19.3	19.1	18.9	18.8
	150	Strength, (kN/m)	21.7	21.1	20.6	20.2	19.9	19.5	19.3	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	21.9	22.0	22.0	22.0	22.0	22.0	21.9	21.9	21.8
914/9	900	Strength, (kN/m)	17.0	15.6	14.4	13.4	12.6	11.9	11.2	10.7	10.2
		Stiffeness, G', (10^3 N/mm)	20.2	19.8	19.4	18.9	18.5	18.0	17.6	17.1	16.7
	600	Strength, (kN/m)	18.2	16.9	15.7	14.7	13.9	13.2	12.5	12.0	11.5
		Stiffeness, G', (10^3 N/mm)	20.7	20.4	20.0	19.6	19.2	18.8	18.4	18.0	17.6
	300	Strength, (kN/m)	21.4	20.2	19.3	18.5	17.8	17.0	16.4	15.8	15.3
		Stiffeness, G', (10^3 N/mm)	22.0	21.9	21.6	21.4	21.1	20.9	20.6	20.3	20.1
	230	Strength, (kN/m)	23.2	22.1	21.2	20.4	19.7	19.1	18.6	18.1	16.3
		Stiffeness, G', (10^3 N/mm)	22.7	22.7	22.5	22.4	22.2	22.0	21.8	21.6	21.4
	150	Strength, (kN/m)	27.1	26.1	25.3	24.6	24.0	23.4	20.6	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	24.1	24.3	24.3	24.3	24.3	24.2	24.1	24.0	23.9

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	900	Strength, (kN/m)	8.6	8.2	7.8	7.4	7.1	6.9	6.6	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	9.0	9.1	9.1	9.1	9.0	9.0	8.9	8.9	8.8
	600	Strength, (kN/m)	10.1	9.7	9.4	9.1	8.8	8.5	8.3	8.1	7.9
		Stiffeness, G', (10^3 N/mm)	9.5	9.6	9.7	9.8	9.8	9.8	9.8	9.8	9.7
	300	Strength, (kN/m)	13.8	13.5	13.2	13.0	12.8	12.6	12.4	12.3	12.1
		Stiffeness, G', (10^3 N/mm)	10.7	11.0	11.2	11.4	11.6	11.7	11.9	12.0	12.1
	230	Strength, (kN/m)	15.8	15.5	15.2	15.0	14.8	14.7	14.5	14.4	14.2
		Stiffeness, G', (10^3 N/mm)	11.3	11.6	11.9	12.2	12.4	12.6	12.8	13.0	13.2
	150	Strength, (kN/m)	19.3	19.1	18.9	18.8	18.6	18.5	18.4	18.3	18.2
		Stiffeness, G', (10^3 N/mm)	12.2	12.7	13.1	13.5	13.9	14.2	14.5	14.8	15.1
914/7	900	Strength, (kN/m)	11.6	10.9	10.3	9.8	9.4	9.0	8.6	8.3	8.1
		Stiffeness, G', (10^3 N/mm)	18.9	18.2	17.6	17.0	16.4	15.9	15.4	15.0	14.6
	600	Strength, (kN/m)	13.2	12.5	12.0	11.5	11.0	10.6	10.3	10.0	9.7
		Stiffeness, G', (10^3 N/mm)	20.0	19.4	18.8	18.2	17.7	17.3	16.8	16.4	16.1
	300	Strength, (kN/m)	17.8	17.2	16.6	16.2	15.8	15.4	15.1	14.8	14.5
		Stiffeness, G', (10^3 N/mm)	22.9	22.5	22.1	21.6	21.3	20.9	20.6	20.3	20.0
	230	Strength, (kN/m)	20.3	19.7	19.2	18.8	18.4	18.1	17.8	17.5	17.2
		Stiffeness, G', (10^3 N/mm)	24.5	24.2	23.8	23.5	23.2	22.9	22.6	22.4	22.1
	150	Strength, (kN/m)	25.6	25.1	24.6	24.3	23.9	23.6	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	27.7	27.5	27.3	27.1	27.0	26.8	26.6	26.5	26.3
914/9	900	Strength, (kN/m)	17.8	16.6	15.6	14.7	13.9	13.3	12.6	12.1	11.6
		Stiffeness, G', (10^3 N/mm)	24.0	23.3	22.5	21.8	21.2	20.6	20.0	19.4	18.9
	600	Strength, (kN/m)	19.5	18.3	17.2	16.3	15.6	14.9	14.3	13.7	13.2
		Stiffeness, G', (10^3 N/mm)	24.9	24.2	23.5	22.9	22.2	21.7	21.1	20.6	20.2
	300	Strength, (kN/m)	23.8	22.8	21.9	21.2	20.4	19.7	19.1	18.6	18.1
		Stiffeness, G', (10^3 N/mm)	27.2	26.6	26.1	25.6	25.2	24.7	24.3	23.9	23.5
	230	Strength, (kN/m)	26.2	25.3	24.4	23.7	23.0	22.4	21.9	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	28.4	28.0	27.6	27.1	26.8	26.4	26.0	25.7	25.4
	150	Strength, (kN/m)	31.3	30.5	29.7	29.0	28.4	25.4	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	30.9	30.7	30.4	30.2	29.9	29.7	29.5	29.2	29.0

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	900	Strength, (kN/m)	3.4	3.1	2.8	2.5	2.3	2.1	2.0	1.9	1.8
		Stiffeness, G', (10^3 N/mm)	1.6	1.9	2.0	2.2	2.4	2.5	2.6	2.7	2.8
	600	Strength, (kN/m)	3.6	3.3	3.0	2.8	2.6	2.4	2.3	2.1	2.0
		Stiffeness, G', (10^3 N/mm)	1.6	1.9	2.0	2.2	2.4	2.5	2.6	2.7	2.8
	300	Strength, (kN/m)	4.1	3.8	3.6	3.4	3.2	3.1	3.0	2.9	2.8
		Stiffeness, G', (10^3 N/mm)	1.6	1.9	2.1	2.2	2.4	2.5	2.6	2.7	2.8
	230	Strength, (kN/m)	4.4	4.1	3.9	3.7	3.6	3.5	3.4	3.3	3.2
		Stiffeness, G', (10^3 N/mm)	1.6	1.9	2.1	2.2	2.4	2.5	2.7	2.8	2.8
	150	Strength, (kN/m)	4.9	4.7	4.6	4.4	4.3	4.2	4.1	4.0	4.0
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.4	2.6	2.7	2.8	2.9
914/7	900	Strength, (kN/m)	5.0	4.5	4.0	3.6	3.2	3.0	2.8	2.6	2.4
		Stiffeness, G', (10^3 N/mm)	8.5	8.8	8.9	8.9	8.9	8.7	8.6	8.4	8.2
	600	Strength, (kN/m)	5.3	4.7	4.2	3.8	3.5	3.2	3.0	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	8.5	8.8	8.9	9.0	8.9	8.8	8.6	8.4	8.2
	300	Strength, (kN/m)	5.9	5.4	4.9	4.6	4.3	4.1	3.8	3.7	3.5
		Stiffeness, G', (10^3 N/mm)	8.5	8.9	9.0	9.0	9.0	8.9	8.8	8.6	8.4
	230	Strength, (kN/m)	6.3	5.8	5.3	5.0	4.7	4.5	4.3	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	8.6	8.9	9.0	9.1	9.1	9.0	8.8	8.7	8.5
	150	Strength, (kN/m)	7.1	6.6	6.2	5.9	5.7	5.5	5.3	5.1	5.0
		Stiffeness, G', (10^3 N/mm)	8.6	9.0	9.1	9.2	9.2	9.1	9.0	8.9	8.7
914/9	900	Strength, (kN/m)	7.9	7.0	6.3	5.7	5.1	4.7	4.3	4.0	3.7
		Stiffeness, G', (10^3 N/mm)	9.3	9.8	10.2	10.4	10.5	10.5	10.4	10.3	10.2
	600	Strength, (kN/m)	8.1	7.2	6.5	5.9	5.4	4.9	4.6	4.2	4.0
		Stiffeness, G', (10^3 N/mm)	9.3	9.9	10.2	10.4	10.5	10.5	10.4	10.3	10.2
	300	Strength, (kN/m)	8.6	7.8	7.1	6.6	6.2	5.7	5.4	5.1	4.8
		Stiffeness, G', (10^3 N/mm)	9.4	9.9	10.2	10.4	10.6	10.6	10.5	10.4	10.3
	230	Strength, (kN/m)	8.9	8.1	7.5	7.0	6.6	6.2	5.9	5.5	5.3
		Stiffeness, G', (10^3 N/mm)	9.4	9.9	10.3	10.5	10.6	10.6	10.6	10.5	10.4
	150	Strength, (kN/m)	9.6	8.9	8.3	7.8	7.4	7.1	6.8	6.5	6.3
		Stiffeness, G', (10^3 N/mm)	9.4	9.9	10.3	10.6	10.7	10.7	10.7	10.7	10.6

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	900	Strength, (kN/m)	3.4	3.1	2.9	2.7	2.5	2.3	2.2	2.1	2.0
		Stiffeness, G', (10^3 N/mm)	3.0	3.2	3.4	3.5	3.6	3.7	3.8	3.8	3.9
	600	Strength, (kN/m)	3.7	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.4
		Stiffeness, G', (10^3 N/mm)	3.0	3.2	3.4	3.5	3.7	3.7	3.8	3.9	3.9
	300	Strength, (kN/m)	4.5	4.3	4.1	4.0	3.8	3.7	3.6	3.5	3.5
		Stiffeness, G', (10^3 N/mm)	3.0	3.2	3.4	3.6	3.7	3.8	3.9	3.9	4.0
	230	Strength, (kN/m)	4.9	4.8	4.6	4.5	4.3	4.2	4.2	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	3.0	3.3	3.5	3.6	3.7	3.8	3.9	4.0	4.1
	150	Strength, (kN/m)	5.8	5.6	5.5	5.4	5.3	5.2	5.2	5.1	5.1
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.7	3.8	3.9	4.0	4.1	4.2
914/7	900	Strength, (kN/m)	4.8	4.3	4.0	3.6	3.4	3.2	3.0	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	11.5	11.3	11.0	10.7	10.4	10.1	9.8	9.4	9.1
	600	Strength, (kN/m)	5.2	4.7	4.3	4.0	3.8	3.6	3.4	3.2	3.1
		Stiffeness, G', (10^3 N/mm)	11.5	11.3	11.1	10.8	10.5	10.2	9.8	9.5	9.2
	300	Strength, (kN/m)	6.2	5.8	5.4	5.2	4.9	4.7	4.5	4.4	4.2
		Stiffeness, G', (10^3 N/mm)	11.6	11.5	11.2	11.0	10.7	10.4	10.1	9.8	9.5
	230	Strength, (kN/m)	6.7	6.4	6.1	5.8	5.6	5.4	5.2	5.1	4.9
		Stiffeness, G', (10^3 N/mm)	11.7	11.5	11.3	11.1	10.8	10.5	10.2	9.9	9.6
	150	Strength, (kN/m)	8.0	7.6	7.4	7.1	6.9	6.7	6.6	6.5	6.3
		Stiffeness, G', (10^3 N/mm)	11.8	11.7	11.5	11.3	11.1	10.8	10.5	10.3	10.0
914/9	900	Strength, (kN/m)	7.6	6.9	6.2	5.7	5.3	4.9	4.6	4.3	4.0
		Stiffeness, G', (10^3 N/mm)	13.4	13.4	13.4	13.2	13.0	12.7	12.4	12.1	11.8
	600	Strength, (kN/m)	7.9	7.2	6.6	6.1	5.6	5.3	4.9	4.7	4.4
		Stiffeness, G', (10^3 N/mm)	13.4	13.5	13.4	13.2	13.0	12.8	12.5	12.2	11.9
	300	Strength, (kN/m)	8.8	8.2	7.6	7.2	6.8	6.4	6.1	5.8	5.6
		Stiffeness, G', (10^3 N/mm)	13.5	13.6	13.5	13.4	13.2	12.9	12.7	12.4	12.1
	230	Strength, (kN/m)	9.3	8.7	8.2	7.8	7.4	7.1	6.8	6.5	6.3
		Stiffeness, G', (10^3 N/mm)	13.5	13.6	13.6	13.4	13.2	13.0	12.8	12.5	12.2
	150	Strength, (kN/m)	10.4	9.9	9.4	9.0	8.7	8.4	8.2	7.9	7.7
		Stiffeness, G', (10^3 N/mm)	13.6	13.7	13.7	13.6	13.4	13.2	13.0	12.7	12.5

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 1.21 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	900	Strength, (kN/m)	4.0	3.7	3.5	3.3	3.2	3.0	2.9	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	5.7	5.8	5.8	5.9	5.8	5.8	5.8	5.7	5.6
	600	Strength, (kN/m)	4.5	4.3	4.2	4.0	3.9	3.7	3.6	3.5	3.4
		Stiffeness, G', (10^3 N/mm)	5.7	5.8	5.9	5.9	5.9	5.9	5.8	5.8	5.7
	300	Strength, (kN/m)	6.1	5.9	5.7	5.6	5.5	5.4	5.3	5.2	5.2
		Stiffeness, G', (10^3 N/mm)	5.8	5.9	6.0	6.0	6.1	6.0	6.0	6.0	5.9
	230	Strength, (kN/m)	6.8	6.7	6.5	6.4	6.3	6.3	6.2	6.1	6.0
		Stiffeness, G', (10^3 N/mm)	5.8	6.0	6.1	6.1	6.2	6.1	6.1	6.1	6.1
	150	Strength, (kN/m)	8.2	8.1	8.0	7.9	7.9	7.8	7.7	7.7	7.7
		Stiffeness, G', (10^3 N/mm)	5.9	6.1	6.2	6.3	6.3	6.4	6.4	6.4	6.3
914/7	900	Strength, (kN/m)	5.4	5.1	4.7	4.5	4.2	4.0	3.8	3.7	3.5
		Stiffeness, G', (10^3 N/mm)	14.9	14.2	13.6	13.1	12.5	12.0	11.5	11.1	10.6
	600	Strength, (kN/m)	6.1	5.7	5.4	5.1	4.9	4.7	4.5	4.4	4.2
		Stiffeness, G', (10^3 N/mm)	15.0	14.3	13.7	13.2	12.6	12.1	11.6	11.2	10.8
	300	Strength, (kN/m)	8.0	7.6	7.4	7.1	6.9	6.7	6.6	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	15.2	14.6	14.0	13.5	12.9	12.5	12.0	11.6	11.2
	230	Strength, (kN/m)	9.0	8.7	8.4	8.2	8.0	7.8	7.7	7.5	7.4
		Stiffeness, G', (10^3 N/mm)	15.4	14.8	14.2	13.7	13.1	12.7	12.2	11.8	11.4
	150	Strength, (kN/m)	11.2	10.9	10.7	10.5	10.3	10.1	10.0	9.9	9.8
		Stiffeness, G', (10^3 N/mm)	15.7	15.1	14.6	14.1	13.6	13.1	12.7	12.3	11.9
914/9	900	Strength, (kN/m)	8.5	7.8	7.2	6.8	6.3	6.0	5.7	5.4	5.1
		Stiffeness, G', (10^3 N/mm)	18.7	18.1	17.6	17.0	16.4	15.8	15.3	14.8	14.3
	600	Strength, (kN/m)	9.2	8.5	7.9	7.5	7.0	6.7	6.4	6.1	5.8
		Stiffeness, G', (10^3 N/mm)	18.8	18.2	17.6	17.1	16.5	15.9	15.4	14.9	14.4
	300	Strength, (kN/m)	10.8	10.3	9.8	9.4	9.1	8.7	8.4	8.1	7.9
		Stiffeness, G', (10^3 N/mm)	18.9	18.4	17.8	17.3	16.7	16.2	15.7	15.2	14.7
	230	Strength, (kN/m)	11.8	11.3	10.8	10.5	10.1	9.8	9.6	9.3	9.1
		Stiffeness, G', (10^3 N/mm)	19.0	18.5	18.0	17.4	16.9	16.4	15.9	15.4	14.9
	150	Strength, (kN/m)	13.9	13.4	13.0	12.6	12.3	12.1	11.8	11.6	11.4
		Stiffeness, G', (10^3 N/mm)	19.3	18.8	18.3	17.8	17.2	16.7	16.3	15.8	15.4

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 1.52 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	900	Strength, (kN/m)	4.6	4.4	4.2	4.1	4.0	3.8	3.7	3.6	3.5
		Stiffeness, G', (10^3 N/mm)	8.0	7.9	7.8	7.6	7.5	7.3	7.1	6.9	6.8
	600	Strength, (kN/m)	5.6	5.4	5.2	5.1	5.0	4.9	4.8	4.7	4.6
		Stiffeness, G', (10^3 N/mm)	8.1	8.0	7.9	7.7	7.6	7.4	7.2	7.1	6.9
	300	Strength, (kN/m)	7.9	7.7	7.6	7.5	7.4	7.4	7.3	7.2	7.2
		Stiffeness, G', (10^3 N/mm)	8.3	8.2	8.1	8.0	7.9	7.7	7.6	7.4	7.3
	230	Strength, (kN/m)	9.0	8.9	8.8	8.7	8.6	8.6	8.5	8.4	8.4
		Stiffeness, G', (10^3 N/mm)	8.4	8.3	8.3	8.2	8.0	7.9	7.8	7.6	7.5
	150	Strength, (kN/m)	10.9	10.8	10.8	10.7	10.7	10.6	10.6	10.6	10.5
		Stiffeness, G', (10^3 N/mm)	8.6	8.6	8.6	8.5	8.4	8.3	8.2	8.1	8.0
914/7	900	Strength, (kN/m)	6.2	5.8	5.6	5.3	5.1	4.9	4.7	4.6	4.5
		Stiffeness, G', (10^3 N/mm)	16.4	15.6	14.8	14.1	13.5	12.9	12.4	11.9	11.5
	600	Strength, (kN/m)	7.2	6.9	6.6	6.4	6.2	6.0	5.8	5.7	5.5
		Stiffeness, G', (10^3 N/mm)	16.5	15.7	15.0	14.3	13.7	13.1	12.6	12.1	11.6
	300	Strength, (kN/m)	10.1	9.8	9.6	9.4	9.2	9.0	8.9	8.8	8.7
		Stiffeness, G', (10^3 N/mm)	16.9	16.1	15.4	14.7	14.1	13.6	13.0	12.6	12.1
	230	Strength, (kN/m)	11.7	11.5	11.2	11.0	10.9	10.7	10.6	10.4	10.3
		Stiffeness, G', (10^3 N/mm)	17.1	16.3	15.6	15.0	14.4	13.8	13.3	12.9	12.4
	150	Strength, (kN/m)	15.0	14.8	14.6	14.4	14.2	14.1	14.0	13.9	13.8
		Stiffeness, G', (10^3 N/mm)	17.6	16.9	16.2	15.6	15.0	14.5	14.0	13.5	13.1
914/9	900	Strength, (kN/m)	9.3	8.7	8.2	7.8	7.4	7.1	6.8	6.5	6.3
		Stiffeness, G', (10^3 N/mm)	21.5	20.6	19.8	19.0	18.3	17.6	16.9	16.3	15.8
	600	Strength, (kN/m)	10.4	9.8	9.3	8.9	8.5	8.1	7.8	7.6	7.3
		Stiffeness, G', (10^3 N/mm)	21.6	20.7	19.9	19.1	18.4	17.7	17.1	16.5	15.9
	300	Strength, (kN/m)	13.2	12.7	12.3	11.9	11.6	11.3	11.0	10.8	10.6
		Stiffeness, G', (10^3 N/mm)	21.9	21.1	20.2	19.5	18.8	18.1	17.5	16.9	16.3
	230	Strength, (kN/m)	14.7	14.2	13.8	13.5	13.2	12.9	12.7	12.4	12.2
		Stiffeness, G', (10^3 N/mm)	22.1	21.3	20.5	19.7	19.0	18.3	17.7	17.1	16.6
	150	Strength, (kN/m)	17.8	17.4	17.1	16.8	16.5	16.3	16.1	15.9	15.7
		Stiffeness, G', (10^3 N/mm)	22.5	21.7	20.9	20.2	19.5	18.8	18.2	17.7	17.2

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 0.76 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	900	Strength, (kN/m)	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.5	2.4
		Stiffeness, G', (10^3 N/mm)	1.6	1.9	2.1	2.2	2.4	2.5	2.7	2.8	2.9
	600	Strength, (kN/m)	4.0	3.8	3.6	3.5	3.4	3.3	3.2	3.1	3.1
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.4	2.6	2.8	2.9	3.0
	300	Strength, (kN/m)	5.2	5.0	4.9	4.9	4.8	4.7	4.7	4.6	4.6
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.2
	230	Strength, (kN/m)	5.7	5.6	5.5	5.4	5.4	5.4	5.3	5.3	5.3
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.2	2.4	2.6	2.8	3.0	3.2	3.3
	150	Strength, (kN/m)	6.4	6.4	6.3	6.3	6.3	6.2	6.2	6.2	6.2
		Stiffeness, G', (10^3 N/mm)	1.7	2.0	2.2	2.4	2.6	2.9	3.1	3.3	3.5
914/7	900	Strength, (kN/m)	5.0	4.6	4.2	3.9	3.7	3.5	3.3	3.2	3.0
		Stiffeness, G', (10^3 N/mm)	8.5	8.8	9.0	9.1	9.1	9.1	9.0	8.9	8.8
	600	Strength, (kN/m)	5.7	5.3	4.9	4.7	4.5	4.3	4.1	4.0	3.8
		Stiffeness, G', (10^3 N/mm)	8.6	9.0	9.2	9.4	9.4	9.4	9.4	9.4	9.3
	300	Strength, (kN/m)	7.5	7.1	6.8	6.6	6.4	6.3	6.1	6.0	5.9
		Stiffeness, G', (10^3 N/mm)	8.9	9.4	9.8	10.1	10.3	10.4	10.5	10.6	10.6
	230	Strength, (kN/m)	8.4	8.1	7.8	7.6	7.5	7.3	7.2	7.1	7.0
		Stiffeness, G', (10^3 N/mm)	9.1	9.7	10.1	10.4	10.7	10.9	11.0	11.2	11.2
	150	Strength, (kN/m)	10.1	9.8	9.7	9.5	9.4	9.3	9.2	9.1	9.1
		Stiffeness, G', (10^3 N/mm)	9.4	10.1	10.6	11.1	11.5	11.8	12.0	12.3	12.4
914/9	900	Strength, (kN/m)	7.9	7.1	6.5	6.0	5.5	5.2	4.8	4.6	4.3
		Stiffeness, G', (10^3 N/mm)	9.3	9.9	10.2	10.5	10.6	10.7	10.7	10.6	10.6
	600	Strength, (kN/m)	8.4	7.7	7.1	6.7	6.3	6.0	5.6	5.4	5.1
		Stiffeness, G', (10^3 N/mm)	9.4	10.0	10.4	10.7	10.8	10.9	11.0	11.0	10.9
	300	Strength, (kN/m)	10.0	9.3	8.9	8.5	8.1	7.9	7.6	7.4	7.2
		Stiffeness, G', (10^3 N/mm)	9.6	10.2	10.7	11.1	11.4	11.6	11.7	11.8	11.9
	230	Strength, (kN/m)	10.7	10.2	9.8	9.4	9.1	8.9	8.7	8.5	8.3
		Stiffeness, G', (10^3 N/mm)	9.7	10.4	10.9	11.3	11.7	11.9	12.1	12.3	12.4
	150	Strength, (kN/m)	12.2	11.8	11.5	11.2	11.0	10.8	10.6	10.5	10.4
		Stiffeness, G', (10^3 N/mm)	9.8	10.6	11.3	11.8	12.2	12.6	12.9	13.1	13.3

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	900	Strength, (kN/m)	3.6	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	3.0	3.3	3.5	3.6	3.8	3.9	4.0	4.1	4.2
	600	Strength, (kN/m)	4.3	4.2	4.0	3.9	3.8	3.8	3.7	3.6	3.6
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.6	3.7	3.9	4.1	4.2	4.3	4.5
	300	Strength, (kN/m)	5.9	5.8	5.8	5.7	5.6	5.6	5.5	5.5	5.5
		Stiffeness, G', (10^3 N/mm)	3.2	3.5	3.7	4.0	4.2	4.4	4.6	4.8	5.0
	230	Strength, (kN/m)	6.6	6.5	6.5	6.4	6.4	6.3	6.3	6.3	6.3
		Stiffeness, G', (10^3 N/mm)	3.2	3.5	3.8	4.1	4.3	4.6	4.8	5.0	5.2
	150	Strength, (kN/m)	7.6	7.5	7.5	7.5	7.5	7.4	7.4	7.4	7.4
		Stiffeness, G', (10^3 N/mm)	3.3	3.6	4.0	4.3	4.5	4.8	5.1	5.3	5.5
914/7	900	Strength, (kN/m)	5.1	4.7	4.4	4.2	4.0	3.8	3.7	3.5	3.4
		Stiffeness, G', (10^3 N/mm)	11.6	11.5	11.4	11.2	11.0	10.8	10.5	10.3	10.1
	600	Strength, (kN/m)	5.9	5.6	5.4	5.1	4.9	4.8	4.6	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	11.9	11.9	11.9	11.7	11.6	11.4	11.2	11.1	10.9
	300	Strength, (kN/m)	8.2	7.9	7.7	7.5	7.4	7.2	7.1	7.0	6.9
		Stiffeness, G', (10^3 N/mm)	12.8	13.0	13.1	13.1	13.1	13.1	13.0	13.0	12.9
	230	Strength, (kN/m)	9.4	9.2	9.0	8.8	8.7	8.5	8.4	8.4	8.3
		Stiffeness, G', (10^3 N/mm)	13.3	13.5	13.7	13.8	13.9	13.9	13.9	13.9	13.9
	150	Strength, (kN/m)	11.6	11.4	11.3	11.2	11.1	11.0	10.9	10.8	10.8
		Stiffeness, G', (10^3 N/mm)	14.1	14.5	14.9	15.1	15.3	15.5	15.6	15.7	15.8
914/9	900	Strength, (kN/m)	7.8	7.2	6.7	6.2	5.8	5.5	5.2	5.0	4.8
		Stiffeness, G', (10^3 N/mm)	13.5	13.6	13.6	13.5	13.4	13.2	13.0	12.8	12.6
	600	Strength, (kN/m)	8.6	8.0	7.5	7.2	6.8	6.5	6.2	6.0	5.7
		Stiffeness, G', (10^3 N/mm)	13.7	13.9	13.9	13.9	13.8	13.7	13.5	13.3	13.2
	300	Strength, (kN/m)	10.6	10.2	9.8	9.4	9.1	8.9	8.7	8.5	8.3
		Stiffeness, G', (10^3 N/mm)	14.3	14.6	14.8	14.9	14.9	14.9	14.9	14.8	14.7
	230	Strength, (kN/m)	11.7	11.3	10.9	10.6	10.4	10.2	10.0	9.8	9.7
		Stiffeness, G', (10^3 N/mm)	14.6	14.9	15.2	15.4	15.5	15.5	15.6	15.6	15.5
	150	Strength, (kN/m)	13.8	13.5	13.2	13.0	12.8	12.6	12.4	12.3	12.2
		Stiffeness, G', (10^3 N/mm)	15.2	15.7	16.0	16.3	16.6	16.8	16.9	17.0	17.1

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 1.21 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	900	Strength, (kN/m)	4.4	4.2	4.1	4.0	3.9	3.8	3.7	3.6	3.5
		Stiffeness, G', (10^3 N/mm)	5.9	6.0	6.2	6.3	6.4	6.4	6.4	6.5	6.5
	600	Strength, (kN/m)	5.4	5.2	5.1	5.0	4.9	4.9	4.8	4.7	4.7
		Stiffeness, G', (10^3 N/mm)	6.1	6.3	6.5	6.7	6.8	6.9	7.0	7.0	7.1
	300	Strength, (kN/m)	7.7	7.6	7.5	7.4	7.4	7.3	7.3	7.2	7.2
		Stiffeness, G', (10^3 N/mm)	6.6	6.9	7.2	7.5	7.7	7.9	8.1	8.3	8.4
	230	Strength, (kN/m)	8.6	8.6	8.5	8.5	8.4	8.4	8.3	8.3	8.3
		Stiffeness, G', (10^3 N/mm)	6.8	7.2	7.5	7.8	8.1	8.4	8.6	8.9	9.1
	150	Strength, (kN/m)	10.0	10.0	10.0	9.9	9.9	9.9	9.9	9.9	9.8
		Stiffeness, G', (10^3 N/mm)	7.2	7.6	8.1	8.5	8.8	9.2	9.5	9.8	10.1
914/7	900	Strength, (kN/m)	5.9	5.6	5.3	5.1	4.9	4.7	4.6	4.5	4.3
		Stiffeness, G', (10^3 N/mm)	15.5	15.0	14.5	14.0	13.6	13.2	12.8	12.5	12.2
	600	Strength, (kN/m)	7.1	6.8	6.6	6.4	6.2	6.0	5.9	5.8	5.6
		Stiffeness, G', (10^3 N/mm)	16.2	15.8	15.4	15.0	14.6	14.3	13.9	13.6	13.3
	300	Strength, (kN/m)	10.3	10.0	9.8	9.7	9.5	9.4	9.3	9.2	9.1
		Stiffeness, G', (10^3 N/mm)	18.2	18.0	17.8	17.5	17.3	17.1	16.9	16.7	16.5
	230	Strength, (kN/m)	11.9	11.7	11.5	11.4	11.3	11.1	11.0	10.9	10.9
		Stiffeness, G', (10^3 N/mm)	19.3	19.2	19.0	18.9	18.7	18.5	18.4	18.2	18.1
	150	Strength, (kN/m)	15.0	14.9	14.7	14.6	14.5	14.4	14.4	14.3	14.2
		Stiffeness, G', (10^3 N/mm)	21.3	21.4	21.4	21.4	21.4	21.4	21.4	21.3	21.3
914/9	900	Strength, (kN/m)	9.0	8.4	7.9	7.4	7.0	6.7	6.4	6.2	5.9
		Stiffeness, G', (10^3 N/mm)	19.1	18.7	18.2	17.7	17.3	16.8	16.4	16.0	15.6
	600	Strength, (kN/m)	10.1	9.5	9.1	8.7	8.3	8.0	7.7	7.5	7.2
		Stiffeness, G', (10^3 N/mm)	19.7	19.3	18.9	18.5	18.1	17.7	17.3	16.9	16.5
	300	Strength, (kN/m)	13.0	12.6	12.2	11.9	11.6	11.3	11.1	10.9	10.7
		Stiffeness, G', (10^3 N/mm)	21.1	20.9	20.7	20.4	20.2	19.9	19.6	19.4	19.1
	230	Strength, (kN/m)	14.6	14.2	13.9	13.6	13.3	13.1	12.9	12.7	12.5
		Stiffeness, G', (10^3 N/mm)	21.9	21.8	21.7	21.5	21.3	21.1	20.9	20.7	20.5
	150	Strength, (kN/m)	17.6	17.3	17.0	16.8	16.6	16.4	16.3	16.1	16.0
		Stiffeness, G', (10^3 N/mm)	23.4	23.5	23.6	23.6	23.5	23.5	23.4	23.3	23.2

38 mm deck - 914 mm wide - 152 mm flute spacing **Thickness = 1.52 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	900	Strength, (kN/m)	5.1	5.0	4.9	4.7	4.6	4.5	4.4	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	8.6	8.6	8.6	8.6	8.5	8.5	8.4	8.3	8.3
	600	Strength, (kN/m)	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.8	5.7
		Stiffeness, G', (10^3 N/mm)	9.1	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3
	300	Strength, (kN/m)	9.4	9.3	9.2	9.2	9.1	9.1	9.0	9.0	8.9
		Stiffeness, G', (10^3 N/mm)	10.4	10.7	10.9	11.1	11.3	11.4	11.5	11.6	11.7
	230	Strength, (kN/m)	10.6	10.6	10.5	10.5	10.4	10.4	10.4	10.3	10.3
		Stiffeness, G', (10^3 N/mm)	11.0	11.4	11.7	11.9	12.2	12.4	12.6	12.7	12.9
	150	Strength, (kN/m)	12.4	12.4	12.4	12.4	12.3	12.3	12.3	12.3	12.3
		Stiffeness, G', (10^3 N/mm)	12.1	12.5	13.0	13.4	13.7	14.0	14.3	14.6	14.9
914/7	900	Strength, (kN/m)	6.7	6.4	6.2	6.0	5.8	5.6	5.5	5.3	5.2
		Stiffeness, G', (10^3 N/mm)	17.5	16.8	16.2	15.7	15.2	14.7	14.3	13.9	13.5
	600	Strength, (kN/m)	8.3	8.0	7.8	7.6	7.4	7.2	7.1	7.0	6.8
		Stiffeness, G', (10^3 N/mm)	18.7	18.1	17.5	17.0	16.5	16.1	15.7	15.4	15.0
	300	Strength, (kN/m)	12.3	12.1	11.9	11.7	11.6	11.4	11.3	11.2	11.1
		Stiffeness, G', (10^3 N/mm)	21.8	21.4	21.0	20.6	20.3	19.9	19.6	19.4	19.1
	230	Strength, (kN/m)	14.4	14.2	14.1	13.9	13.8	13.7	13.6	13.5	13.4
		Stiffeness, G', (10^3 N/mm)	23.5	23.2	22.8	22.5	22.3	22.0	21.7	21.5	21.3
	150	Strength, (kN/m)	18.4	18.3	18.2	18.0	17.9	17.9	17.8	17.7	17.7
		Stiffeness, G', (10^3 N/mm)	26.8	26.7	26.5	26.4	26.2	26.1	25.9	25.8	25.7
914/9	900	Strength, (kN/m)	9.9	9.3	8.9	8.4	8.1	7.8	7.5	7.2	7.0
		Stiffeness, G', (10^3 N/mm)	22.4	21.6	20.9	20.3	19.6	19.1	18.5	18.0	17.5
	600	Strength, (kN/m)	11.4	10.9	10.5	10.1	9.7	9.4	9.1	8.9	8.6
		Stiffeness, G', (10^3 N/mm)	23.3	22.6	22.0	21.4	20.8	20.2	19.7	19.3	18.8
	300	Strength, (kN/m)	15.2	14.8	14.5	14.2	13.9	13.6	13.4	13.2	13.0
		Stiffeness, G', (10^3 N/mm)	25.8	25.3	24.8	24.3	23.9	23.5	23.1	22.7	22.4
	230	Strength, (kN/m)	17.3	16.9	16.6	16.3	16.1	15.9	15.7	15.5	15.3
		Stiffeness, G', (10^3 N/mm)	27.2	26.8	26.3	26.0	25.6	25.2	24.9	24.6	24.3
	150	Strength, (kN/m)	21.3	21.0	20.7	20.5	20.3	20.2	20.0	19.9	18.3
		Stiffeness, G', (10^3 N/mm)	29.9	29.7	29.4	29.2	29.0	28.8	28.5	28.3	28.1

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	900	Strength, (kN/m)	5.0	4.4	4.0	3.6	3.3	3.0	2.8	2.6	2.4
		Stiffeness, G', (10^3 N/mm)	1.6	1.9	2.1	2.2	2.4	2.5	2.6	2.7	2.8
	600	Strength, (kN/m)	5.1	4.6	4.2	3.9	3.5	3.3	3.0	2.9	2.7
		Stiffeness, G', (10^3 N/mm)	1.6	1.9	2.1	2.2	2.4	2.5	2.6	2.7	2.8
	300	Strength, (kN/m)	5.7	5.2	4.8	4.5	4.3	4.0	3.9	3.7	3.5
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.2	2.4	2.5	2.7	2.8	2.9
	230	Strength, (kN/m)	6.0	5.5	5.2	4.9	4.6	4.4	4.3	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.2	2.4	2.5	2.7	2.8	2.9
	150	Strength, (kN/m)	6.6	6.2	5.9	5.6	5.4	5.2	5.1	5.0	4.8
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.4	2.6	2.7	2.8	2.9
914/7	900	Strength, (kN/m)	7.3	6.4	5.7	5.1	4.6	4.2	3.9	3.6	3.4
		Stiffeness, G', (10^3 N/mm)	8.6	8.9	9.0	9.1	9.0	8.9	8.7	8.6	8.4
	600	Strength, (kN/m)	7.5	6.7	6.0	5.4	4.9	4.5	4.2	3.9	3.6
		Stiffeness, G', (10^3 N/mm)	8.6	8.9	9.1	9.1	9.0	8.9	8.8	8.6	8.4
	300	Strength, (kN/m)	8.2	7.4	6.7	6.2	5.7	5.3	5.0	4.7	4.4
		Stiffeness, G', (10^3 N/mm)	8.6	9.0	9.1	9.2	9.2	9.1	8.9	8.8	8.6
	230	Strength, (kN/m)	8.6	7.8	7.1	6.6	6.2	5.8	5.5	5.2	4.9
		Stiffeness, G', (10^3 N/mm)	8.6	9.0	9.2	9.2	9.2	9.1	9.0	8.9	8.7
	150	Strength, (kN/m)	9.4	8.7	8.1	7.6	7.2	6.8	6.5	6.3	6.1
		Stiffeness, G', (10^3 N/mm)	8.7	9.1	9.3	9.3	9.3	9.3	9.2	9.1	8.9
914/9	900	Strength, (kN/m)	11.4	10.1	9.1	8.1	7.3	6.7	6.1	5.6	5.2
		Stiffeness, G', (10^3 N/mm)	9.4	9.9	10.3	10.5	10.6	10.6	10.6	10.5	10.4
	600	Strength, (kN/m)	11.6	10.3	9.3	8.4	7.6	6.9	6.4	5.9	5.5
		Stiffeness, G', (10^3 N/mm)	9.4	9.9	10.3	10.5	10.6	10.7	10.6	10.5	10.4
	300	Strength, (kN/m)	12.2	10.9	9.9	9.1	8.4	7.7	7.2	6.7	6.3
		Stiffeness, G', (10^3 N/mm)	9.4	10.0	10.3	10.6	10.7	10.7	10.7	10.6	10.5
	230	Strength, (kN/m)	12.5	11.3	10.3	9.5	8.9	8.2	7.7	7.2	6.8
		Stiffeness, G', (10^3 N/mm)	9.4	10.0	10.4	10.6	10.7	10.8	10.8	10.7	10.6
	150	Strength, (kN/m)	13.2	12.1	11.2	10.4	9.8	9.2	8.8	8.3	7.9
		Stiffeness, G', (10^3 N/mm)	9.5	10.0	10.4	10.7	10.8	10.9	10.9	10.8	10.7

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	900	Strength, (kN/m)	4.8	4.4	4.0	3.7	3.4	3.2	3.0	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	3.0	3.2	3.4	3.6	3.7	3.8	3.8	3.9	3.9
	600	Strength, (kN/m)	5.1	4.7	4.4	4.1	3.8	3.6	3.4	3.2	3.1
		Stiffeness, G', (10^3 N/mm)	3.0	3.3	3.4	3.6	3.7	3.8	3.9	3.9	4.0
	300	Strength, (kN/m)	6.0	5.6	5.3	5.1	4.9	4.7	4.5	4.4	4.2
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.6	3.8	3.9	3.9	4.0	4.1
	230	Strength, (kN/m)	6.5	6.1	5.9	5.6	5.4	5.3	5.1	5.0	4.9
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.6	3.8	3.9	4.0	4.1	4.1
	150	Strength, (kN/m)	7.4	7.2	6.9	6.7	6.6	6.4	6.3	6.2	6.1
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.7	3.8	4.0	4.1	4.2	4.2
914/7	900	Strength, (kN/m)	6.8	6.1	5.6	5.1	4.7	4.4	4.1	3.9	3.7
		Stiffeness, G', (10^3 N/mm)	11.6	11.5	11.3	11.0	10.7	10.3	10.0	9.7	9.4
	600	Strength, (kN/m)	7.2	6.5	6.0	5.5	5.1	4.8	4.5	4.3	4.1
		Stiffeness, G', (10^3 N/mm)	11.7	11.5	11.3	11.0	10.7	10.4	10.1	9.8	9.5
	300	Strength, (kN/m)	8.2	7.6	7.1	6.7	6.3	5.9	5.7	5.4	5.2
		Stiffeness, G', (10^3 N/mm)	11.8	11.7	11.5	11.2	10.9	10.6	10.3	10.0	9.7
	230	Strength, (kN/m)	8.8	8.2	7.8	7.4	7.0	6.7	6.4	6.1	5.9
		Stiffeness, G', (10^3 N/mm)	11.8	11.7	11.5	11.3	11.0	10.7	10.4	10.2	9.9
	150	Strength, (kN/m)	10.2	9.6	9.1	8.7	8.4	8.1	7.9	7.7	7.5
		Stiffeness, G', (10^3 N/mm)	12.0	11.9	11.7	11.5	11.3	11.0	10.7	10.5	10.2
914/9	900	Strength, (kN/m)	10.8	9.8	8.8	8.1	7.4	6.9	6.4	6.0	5.6
		Stiffeness, G', (10^3 N/mm)	13.6	13.7	13.6	13.4	13.2	13.0	12.7	12.4	12.1
	600	Strength, (kN/m)	11.2	10.2	9.2	8.5	7.8	7.2	6.8	6.4	6.0
		Stiffeness, G', (10^3 N/mm)	13.6	13.7	13.6	13.5	13.3	13.0	12.7	12.5	12.2
	300	Strength, (kN/m)	12.1	11.1	10.3	9.6	9.0	8.4	7.9	7.5	7.2
		Stiffeness, G', (10^3 N/mm)	13.7	13.8	13.7	13.6	13.4	13.2	12.9	12.6	12.4
	230	Strength, (kN/m)	12.6	11.7	10.9	10.3	9.7	9.1	8.6	8.2	7.9
		Stiffeness, G', (10^3 N/mm)	13.7	13.8	13.8	13.7	13.5	13.3	13.0	12.7	12.5
	150	Strength, (kN/m)	13.8	12.9	12.2	11.6	11.1	10.6	10.2	9.8	9.5
		Stiffeness, G', (10^3 N/mm)	13.8	13.9	13.9	13.8	13.7	13.5	13.2	13.0	12.7

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 1.21 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	900	Strength, (kN/m)	5.4	5.0	4.7	4.4	4.2	4.0	3.8	3.6	3.5
		Stiffeness, G', (10^3 N/mm)	5.8	5.9	5.9	6.0	6.0	5.9	5.9	5.8	5.7
	600	Strength, (kN/m)	6.1	5.7	5.4	5.1	4.9	4.7	4.5	4.3	4.2
		Stiffeness, G', (10^3 N/mm)	5.8	5.9	6.0	6.0	6.0	6.0	5.9	5.9	5.8
	300	Strength, (kN/m)	7.7	7.4	7.1	6.9	6.7	6.5	6.4	6.3	6.1
		Stiffeness, G', (10^3 N/mm)	5.9	6.0	6.1	6.1	6.2	6.2	6.1	6.1	6.0
	230	Strength, (kN/m)	8.5	8.3	8.0	7.8	7.7	7.5	7.4	7.2	7.1
		Stiffeness, G', (10^3 N/mm)	5.9	6.1	6.2	6.2	6.3	6.3	6.2	6.2	6.2
	150	Strength, (kN/m)	10.2	10.0	9.8	9.7	9.5	9.4	9.3	9.2	9.1
		Stiffeness, G', (10^3 N/mm)	6.0	6.2	6.3	6.4	6.4	6.5	6.5	6.5	6.5
914/7	900	Strength, (kN/m)	7.5	6.9	6.4	6.0	5.7	5.4	5.1	4.9	4.6
		Stiffeness, G', (10^3 N/mm)	15.2	14.6	14.0	13.4	12.9	12.3	11.8	11.4	11.0
	600	Strength, (kN/m)	8.2	7.6	7.1	6.7	6.4	6.1	5.8	5.6	5.3
		Stiffeness, G', (10^3 N/mm)	15.3	14.7	14.1	13.5	13.0	12.5	12.0	11.5	11.1
	300	Strength, (kN/m)	10.2	9.6	9.2	8.8	8.4	8.1	7.9	7.6	7.4
		Stiffeness, G', (10^3 N/mm)	15.6	15.0	14.4	13.8	13.3	12.8	12.3	11.9	11.5
	230	Strength, (kN/m)	11.2	10.7	10.3	9.9	9.6	9.4	9.1	8.9	8.7
		Stiffeness, G', (10^3 N/mm)	15.7	15.1	14.5	14.0	13.5	13.0	12.5	12.1	11.7
	150	Strength, (kN/m)	13.6	13.1	12.7	12.4	12.1	11.8	11.6	11.4	11.2
		Stiffeness, G', (10^3 N/mm)	16.0	15.5	14.9	14.4	13.9	13.5	13.0	12.6	12.2
914/9	900	Strength, (kN/m)	11.9	10.9	10.0	9.3	8.7	8.2	7.7	7.3	6.9
		Stiffeness, G', (10^3 N/mm)	19.1	18.5	18.0	17.4	16.8	16.2	15.7	15.2	14.7
	600	Strength, (kN/m)	12.6	11.6	10.7	10.0	9.4	8.9	8.4	8.0	7.6
		Stiffeness, G', (10^3 N/mm)	19.1	18.6	18.0	17.5	16.9	16.3	15.8	15.3	14.8
	300	Strength, (kN/m)	14.3	13.5	12.8	12.1	11.5	10.9	10.5	10.1	9.7
		Stiffeness, G', (10^3 N/mm)	19.3	18.8	18.2	17.7	17.1	16.6	16.1	15.6	15.1
	230	Strength, (kN/m)	15.3	14.5	13.8	13.2	12.7	12.2	11.7	11.3	10.9
		Stiffeness, G', (10^3 N/mm)	19.4	18.9	18.4	17.8	17.3	16.8	16.3	15.8	15.3
	150	Strength, (kN/m)	17.5	16.8	16.1	15.6	15.1	14.7	14.3	13.9	13.6
		Stiffeness, G', (10^3 N/mm)	19.6	19.2	18.6	18.1	17.6	17.1	16.6	16.2	15.7

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 1.52 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	900	Strength, (kN/m)	6.1	5.8	5.5	5.2	5.0	4.8	4.7	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	8.2	8.1	8.0	7.8	7.6	7.5	7.3	7.1	7.0
	600	Strength, (kN/m)	7.1	6.8	6.5	6.3	6.1	5.9	5.7	5.6	5.4
		Stiffeness, G', (10^3 N/mm)	8.2	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1
	300	Strength, (kN/m)	9.6	9.4	9.2	9.0	8.8	8.7	8.5	8.4	8.3
		Stiffeness, G', (10^3 N/mm)	8.4	8.4	8.3	8.2	8.0	7.9	7.8	7.6	7.5
	230	Strength, (kN/m)	10.9	10.7	10.5	10.4	10.2	10.1	10.0	9.9	9.8
		Stiffeness, G', (10^3 N/mm)	8.5	8.5	8.4	8.3	8.2	8.1	7.9	7.8	7.7
	150	Strength, (kN/m)	13.4	13.3	13.1	13.0	12.9	12.8	12.7	12.6	12.6
		Stiffeness, G', (10^3 N/mm)	8.8	8.8	8.7	8.7	8.6	8.5	8.4	8.3	8.2
914/7	900	Strength, (kN/m)	8.2	7.7	7.3	6.9	6.6	6.3	6.1	5.9	5.7
		Stiffeness, G', (10^3 N/mm)	16.8	16.0	15.3	14.6	13.9	13.3	12.8	12.3	11.8
	600	Strength, (kN/m)	9.3	8.8	8.4	8.0	7.7	7.4	7.2	6.9	6.7
		Stiffeness, G', (10^3 N/mm)	17.0	16.1	15.4	14.7	14.1	13.5	13.0	12.5	12.0
	300	Strength, (kN/m)	12.4	11.9	11.5	11.2	10.9	10.6	10.4	10.2	10.0
		Stiffeness, G', (10^3 N/mm)	17.3	16.5	15.8	15.1	14.5	13.9	13.4	12.9	12.5
	230	Strength, (kN/m)	14.0	13.6	13.3	12.9	12.7	12.4	12.2	12.0	11.8
		Stiffeness, G', (10^3 N/mm)	17.5	16.8	16.1	15.4	14.8	14.2	13.7	13.2	12.8
	150	Strength, (kN/m)	17.6	17.3	16.9	16.7	16.4	16.2	16.0	15.8	15.6
		Stiffeness, G', (10^3 N/mm)	18.0	17.3	16.6	16.0	15.4	14.8	14.3	13.9	13.4
914/9	900	Strength, (kN/m)	12.7	11.8	11.1	10.4	9.9	9.4	8.9	8.5	8.2
		Stiffeness, G', (10^3 N/mm)	22.1	21.2	20.3	19.5	18.8	18.1	17.4	16.8	16.2
	600	Strength, (kN/m)	13.8	12.9	12.2	11.5	11.0	10.5	10.0	9.6	9.3
		Stiffeness, G', (10^3 N/mm)	22.2	21.3	20.4	19.7	18.9	18.2	17.6	16.9	16.4
	300	Strength, (kN/m)	16.7	16.0	15.3	14.8	14.2	13.7	13.3	12.9	12.5
		Stiffeness, G', (10^3 N/mm)	22.4	21.6	20.8	20.0	19.3	18.6	17.9	17.3	16.8
	230	Strength, (kN/m)	18.3	17.6	17.0	16.5	16.0	15.6	15.2	14.8	14.5
		Stiffeness, G', (10^3 N/mm)	22.6	21.8	21.0	20.2	19.5	18.8	18.2	17.6	17.0
	150	Strength, (kN/m)	21.8	21.1	20.6	20.1	19.7	19.3	18.9	18.6	18.3
		Stiffeness, G', (10^3 N/mm)	23.0	22.2	21.4	20.7	20.0	19.3	18.7	18.1	17.6

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Scews | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	900	Strength, (kN/m)	5.0	4.5	4.2	4.0	3.7	3.5	3.3	3.2	3.0
		Stiffeness, G', (10^3 N/mm)	1.6	1.9	2.1	2.2	2.4	2.6	2.7	2.8	2.9
	600	Strength, (kN/m)	5.5	5.1	4.8	4.6	4.4	4.2	4.1	4.0	3.8
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.5	2.6	2.8	2.9	3.0
	300	Strength, (kN/m)	6.9	6.6	6.4	6.2	6.0	5.9	5.8	5.7	5.6
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.2
	230	Strength, (kN/m)	7.5	7.3	7.1	7.0	6.8	6.7	6.6	6.6	6.5
		Stiffeness, G', (10^3 N/mm)	1.7	1.9	2.2	2.4	2.6	2.8	3.0	3.2	3.3
	150	Strength, (kN/m)	8.6	8.4	8.3	8.2	8.1	8.1	8.0	8.0	7.9
		Stiffeness, G', (10^3 N/mm)	1.7	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.5
914/7	900	Strength, (kN/m)	7.3	6.6	6.0	5.4	5.0	4.7	4.4	4.2	4.0
		Stiffeness, G', (10^3 N/mm)	8.6	8.9	9.1	9.2	9.3	9.2	9.1	9.0	8.9
	600	Strength, (kN/m)	8.0	7.3	6.7	6.3	5.8	5.5	5.2	5.0	4.8
		Stiffeness, G', (10^3 N/mm)	8.7	9.1	9.4	9.5	9.6	9.6	9.6	9.5	9.4
	300	Strength, (kN/m)	9.8	9.2	8.7	8.3	8.0	7.7	7.5	7.3	7.1
		Stiffeness, G', (10^3 N/mm)	9.0	9.5	9.9	10.2	10.4	10.5	10.6	10.7	10.7
	230	Strength, (kN/m)	10.9	10.3	9.8	9.4	9.1	8.9	8.7	8.5	8.3
		Stiffeness, G', (10^3 N/mm)	9.1	9.7	10.2	10.5	10.8	11.0	11.1	11.3	11.3
	150	Strength, (kN/m)	12.9	12.4	12.0	11.7	11.5	11.2	11.1	10.9	10.8
		Stiffeness, G', (10^3 N/mm)	9.4	10.1	10.7	11.1	11.5	11.8	12.1	12.3	12.5
914/9	900	Strength, (kN/m)	11.4	10.2	9.3	8.5	7.8	7.2	6.7	6.2	5.9
		Stiffeness, G', (10^3 N/mm)	9.4	10.0	10.4	10.6	10.8	10.8	10.8	10.8	10.8
	600	Strength, (kN/m)	12.0	10.9	9.9	9.2	8.6	8.0	7.5	7.0	6.7
		Stiffeness, G', (10^3 N/mm)	9.5	10.1	10.5	10.8	11.0	11.1	11.1	11.1	11.1
	300	Strength, (kN/m)	13.6	12.6	11.7	11.1	10.5	10.1	9.7	9.3	9.0
		Stiffeness, G', (10^3 N/mm)	9.6	10.3	10.8	11.2	11.5	11.7	11.9	12.0	12.0
	230	Strength, (kN/m)	14.5	13.5	12.8	12.1	11.6	11.2	10.8	10.5	10.2
		Stiffeness, G', (10^3 N/mm)	9.7	10.4	11.0	11.4	11.8	12.0	12.2	12.4	12.5
	150	Strength, (kN/m)	16.2	15.4	14.8	14.3	13.8	13.5	13.1	12.9	12.6
		Stiffeness, G', (10^3 N/mm)	9.9	10.7	11.3	11.8	12.3	12.6	12.9	13.2	13.4

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Scews | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	900	Strength, (kN/m)	5.0	4.7	4.5	4.2	4.0	3.8	3.7	3.5	3.4
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.5	3.7	3.8	4.0	4.1	4.2	4.3
	600	Strength, (kN/m)	5.8	5.5	5.2	5.0	4.9	4.7	4.6	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	3.1	3.3	3.6	3.8	4.0	4.1	4.3	4.4	4.5
	300	Strength, (kN/m)	7.6	7.4	7.2	7.1	6.9	6.8	6.7	6.6	6.6
		Stiffeness, G', (10^3 N/mm)	3.2	3.5	3.8	4.0	4.2	4.4	4.6	4.8	5.0
	230	Strength, (kN/m)	8.5	8.3	8.2	8.0	7.9	7.8	7.8	7.7	7.6
		Stiffeness, G', (10^3 N/mm)	3.2	3.5	3.8	4.1	4.4	4.6	4.8	5.0	5.2
	150	Strength, (kN/m)	9.9	9.8	9.7	9.7	9.6	9.5	9.5	9.4	9.4
		Stiffeness, G', (10^3 N/mm)	3.3	3.6	4.0	4.3	4.5	4.8	5.1	5.3	5.6
914/7	900	Strength, (kN/m)	7.1	6.5	6.0	5.6	5.3	5.0	4.8	4.6	4.4
		Stiffeness, G', (10^3 N/mm)	11.8	11.7	11.6	11.4	11.2	11.0	10.8	10.5	10.3
	600	Strength, (kN/m)	8.0	7.5	7.0	6.6	6.3	6.0	5.8	5.5	5.4
		Stiffeness, G', (10^3 N/mm)	12.1	12.1	12.1	11.9	11.8	11.6	11.4	11.3	11.1
	300	Strength, (kN/m)	10.4	9.9	9.5	9.2	8.9	8.7	8.5	8.3	8.2
		Stiffeness, G', (10^3 N/mm)	13.0	13.1	13.2	13.3	13.3	13.2	13.2	13.1	13.0
	230	Strength, (kN/m)	11.7	11.3	10.9	10.6	10.4	10.1	9.9	9.8	9.6
		Stiffeness, G', (10^3 N/mm)	13.4	13.7	13.8	14.0	14.0	14.1	14.1	14.1	14.1
	150	Strength, (kN/m)	14.4	14.0	13.7	13.5	13.2	13.1	12.9	12.8	12.6
		Stiffeness, G', (10^3 N/mm)	14.2	14.6	15.0	15.2	15.4	15.6	15.7	15.9	15.9
914/9	900	Strength, (kN/m)	11.1	10.2	9.3	8.6	8.0	7.5	7.0	6.7	6.3
		Stiffeness, G', (10^3 N/mm)	13.7	13.8	13.8	13.7	13.6	13.4	13.2	13.0	12.8
	600	Strength, (kN/m)	11.9	11.0	10.2	9.6	9.0	8.5	8.0	7.6	7.3
		Stiffeness, G', (10^3 N/mm)	13.9	14.1	14.1	14.1	14.0	13.9	13.7	13.6	13.4
	300	Strength, (kN/m)	14.0	13.2	12.6	12.0	11.5	11.1	10.8	10.5	10.2
		Stiffeness, G', (10^3 N/mm)	14.4	14.7	14.9	15.0	15.1	15.1	15.0	15.0	14.9
	230	Strength, (kN/m)	15.2	14.5	13.9	13.4	12.9	12.5	12.2	11.9	11.6
		Stiffeness, G', (10^3 N/mm)	14.7	15.1	15.3	15.5	15.6	15.7	15.7	15.7	15.7
	150	Strength, (kN/m)	17.7	17.1	16.5	16.1	15.7	15.4	15.1	14.9	13.3
		Stiffeness, G', (10^3 N/mm)	15.3	15.8	16.2	16.5	16.7	16.9	17.0	17.2	17.2

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 1.21 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Scews | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	900	Strength, (kN/m)	5.9	5.6	5.3	5.1	4.9	4.7	4.6	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	5.9	6.1	6.3	6.4	6.5	6.5	6.5	6.6	6.6
	600	Strength, (kN/m)	6.9	6.7	6.4	6.3	6.1	5.9	5.8	5.7	5.6
		Stiffeness, G', (10^3 N/mm)	6.2	6.4	6.6	6.7	6.9	7.0	7.0	7.1	7.2
	300	Strength, (kN/m)	9.5	9.4	9.2	9.0	8.9	8.8	8.7	8.6	8.5
		Stiffeness, G', (10^3 N/mm)	6.6	7.0	7.3	7.5	7.8	8.0	8.2	8.4	8.5
	230	Strength, (kN/m)	10.8	10.6	10.5	10.4	10.3	10.2	10.1	10.0	10.0
		Stiffeness, G', (10^3 N/mm)	6.8	7.2	7.6	7.9	8.2	8.4	8.7	8.9	9.1
	150	Strength, (kN/m)	12.9	12.8	12.7	12.6	12.5	12.5	12.4	12.4	12.3
		Stiffeness, G', (10^3 N/mm)	7.2	7.7	8.1	8.5	8.8	9.2	9.5	9.8	10.1
914/7	900	Strength, (kN/m)	8.0	7.5	7.1	6.7	6.4	6.1	5.9	5.6	5.5
		Stiffeness, G', (10^3 N/mm)	15.8	15.3	14.8	14.4	13.9	13.5	13.2	12.8	12.5
	600	Strength, (kN/m)	9.3	8.8	8.4	8.0	7.7	7.4	7.2	6.9	6.8
		Stiffeness, G', (10^3 N/mm)	16.5	16.1	15.7	15.3	14.9	14.6	14.2	13.9	13.6
	300	Strength, (kN/m)	12.6	12.2	11.8	11.5	11.2	11.0	10.8	10.6	10.5
		Stiffeness, G', (10^3 N/mm)	18.5	18.3	18.0	17.8	17.6	17.3	17.1	16.9	16.7
	230	Strength, (kN/m)	14.4	14.1	13.7	13.4	13.2	13.0	12.8	12.6	12.4
		Stiffeness, G', (10^3 N/mm)	19.5	19.4	19.2	19.1	18.9	18.8	18.6	18.5	18.3
	150	Strength, (kN/m)	18.2	17.8	17.5	17.3	17.1	16.9	16.8	16.6	16.3
		Stiffeness, G', (10^3 N/mm)	21.5	21.6	21.6	21.6	21.6	21.6	21.5	21.5	21.5
914/9	900	Strength, (kN/m)	12.4	11.4	10.6	10.0	9.4	8.9	8.5	8.1	7.7
		Stiffeness, G', (10^3 N/mm)	19.5	19.0	18.6	18.1	17.6	17.2	16.8	16.3	15.9
	600	Strength, (kN/m)	13.5	12.7	11.9	11.3	10.7	10.2	9.8	9.4	9.0
		Stiffeness, G', (10^3 N/mm)	20.0	19.6	19.2	18.8	18.4	18.0	17.6	17.2	16.9
	300	Strength, (kN/m)	16.6	15.9	15.3	14.7	14.3	13.9	13.5	13.2	12.9
		Stiffeness, G', (10^3 N/mm)	21.4	21.2	21.0	20.7	20.5	20.2	19.9	19.7	19.4
	230	Strength, (kN/m)	18.4	17.7	17.1	16.6	16.1	15.8	15.4	15.1	14.8
		Stiffeness, G', (10^3 N/mm)	22.2	22.1	21.9	21.8	21.6	21.4	21.2	21.0	20.8
	150	Strength, (kN/m)	21.9	21.3	20.8	20.4	20.0	19.7	19.4	18.2	16.3
		Stiffeness, G', (10^3 N/mm)	23.7	23.8	23.8	23.8	23.8	23.7	23.6	23.5	23.5

38 mm deck - 914 mm wide - 152 mm flute spacing | **Thickness = 1.52 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Scews | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	900	Strength, (kN/m)	6.6	6.3	6.1	5.9	5.7	5.5	5.4	5.2	5.1
		Stiffeness, G', (10^3 N/mm)	8.7	8.8	8.7	8.7	8.7	8.6	8.6	8.5	8.4
	600	Strength, (kN/m)	8.0	7.8	7.6	7.4	7.2	7.1	7.0	6.8	6.7
		Stiffeness, G', (10^3 N/mm)	9.3	9.4	9.4	9.5	9.5	9.5	9.5	9.5	9.4
	300	Strength, (kN/m)	11.4	11.2	11.1	10.9	10.8	10.7	10.6	10.5	10.4
		Stiffeness, G', (10^3 N/mm)	10.5	10.8	11.0	11.2	11.4	11.5	11.6	11.7	11.8
	230	Strength, (kN/m)	13.0	12.9	12.8	12.6	12.5	12.5	12.4	12.3	12.2
		Stiffeness, G', (10^3 N/mm)	11.1	11.4	11.7	12.0	12.2	12.5	12.6	12.8	13.0
	150	Strength, (kN/m)	15.7	15.6	15.6	15.5	15.4	15.4	15.3	15.3	15.2
		Stiffeness, G', (10^3 N/mm)	12.1	12.6	13.0	13.4	13.8	14.1	14.4	14.7	15.0
914/7	900	Strength, (kN/m)	8.8	8.3	7.9	7.6	7.3	7.0	6.8	6.6	6.4
		Stiffeness, G', (10^3 N/mm)	17.9	17.3	16.6	16.1	15.6	15.1	14.6	14.2	13.8
	600	Strength, (kN/m)	10.4	9.9	9.5	9.2	8.9	8.7	8.4	8.2	8.0
		Stiffeness, G', (10^3 N/mm)	19.1	18.5	17.9	17.4	16.9	16.5	16.1	15.7	15.3
	300	Strength, (kN/m)	14.7	14.3	14.0	13.7	13.4	13.2	13.0	12.8	12.7
		Stiffeness, G', (10^3 N/mm)	22.2	21.7	21.3	20.9	20.6	20.2	19.9	19.7	19.4
	230	Strength, (kN/m)	17.0	16.7	16.4	16.1	15.9	15.7	15.5	15.3	15.2
		Stiffeness, G', (10^3 N/mm)	23.8	23.5	23.1	22.8	22.5	22.3	22.0	21.8	21.6
	150	Strength, (kN/m)	21.8	21.5	21.3	21.0	20.8	20.7	20.5	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	27.1	26.9	26.8	26.6	26.4	26.3	26.1	26.0	25.9
914/9	900	Strength, (kN/m)	13.2	12.4	11.7	11.1	10.6	10.1	9.7	9.3	8.9
		Stiffeness, G', (10^3 N/mm)	22.9	22.2	21.4	20.8	20.1	19.5	19.0	18.4	17.9
	600	Strength, (kN/m)	14.9	14.0	13.3	12.7	12.2	11.7	11.3	10.9	10.6
		Stiffeness, G', (10^3 N/mm)	23.8	23.1	22.5	21.8	21.2	20.7	20.2	19.7	19.2
	300	Strength, (kN/m)	18.9	18.3	17.7	17.2	16.7	16.3	16.0	15.7	15.4
		Stiffeness, G', (10^3 N/mm)	26.2	25.7	25.2	24.7	24.3	23.9	23.5	23.1	22.7
	230	Strength, (kN/m)	21.2	20.6	20.0	19.6	19.1	18.8	18.4	18.1	17.9
		Stiffeness, G', (10^3 N/mm)	27.6	27.1	26.7	26.3	26.0	25.6	25.3	24.9	24.6
	150	Strength, (kN/m)	25.8	25.3	24.8	24.4	24.1	23.8	22.6	20.3	18.3
		Stiffeness, G', (10^3 N/mm)	30.2	30.0	29.7	29.5	29.3	29.0	28.8	28.6	28.4

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	900	Strength, (kN/m)	2.6	2.5	2.4	2.3	2.2	2.1	2.0	2.0	1.9
		Stiffeness, G', (10^3 N/mm)	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	600	Strength, (kN/m)	2.9	2.7	2.6	2.5	2.4	2.4	2.3	2.2	2.2
		Stiffeness, G', (10^3 N/mm)	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7
	300	Strength, (kN/m)	3.7	3.5	3.4	3.3	3.2	3.2	3.1	3.0	3.0
		Stiffeness, G', (10^3 N/mm)	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.8
	230	Strength, (kN/m)	4.1	4.0	3.9	3.8	3.7	3.7	3.6	3.5	3.5
		Stiffeness, G', (10^3 N/mm)	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
	150	Strength, (kN/m)	5.3	5.2	5.0	5.0	4.9	4.8	4.7	4.7	4.6
		Stiffeness, G', (10^3 N/mm)	1.7	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.9
610/5	900	Strength, (kN/m)	3.2	3.1	2.9	2.8	2.7	2.6	2.5	2.4	2.3
		Stiffeness, G', (10^3 N/mm)	5.0	4.8	4.6	4.5	4.3	4.2	4.1	3.9	3.8
	600	Strength, (kN/m)	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.7	2.6
		Stiffeness, G', (10^3 N/mm)	5.1	4.9	4.7	4.6	4.4	4.3	4.1	4.0	3.9
	300	Strength, (kN/m)	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.5	3.4
		Stiffeness, G', (10^3 N/mm)	5.2	5.1	4.9	4.8	4.6	4.5	4.3	4.2	4.1
	230	Strength, (kN/m)	4.8	4.7	4.5	4.4	4.3	4.2	4.1	4.0	3.9
		Stiffeness, G', (10^3 N/mm)	5.3	5.2	5.0	4.9	4.7	4.6	4.5	4.4	4.3
	150	Strength, (kN/m)	5.9	5.8	5.6	5.5	5.4	5.3	5.2	5.1	5.0
		Stiffeness, G', (10^3 N/mm)	5.6	5.4	5.3	5.1	5.0	4.9	4.8	4.7	4.6
610/7	900	Strength, (kN/m)	5.5	5.2	4.9	4.7	4.5	4.3	4.1	4.0	3.8
		Stiffeness, G', (10^3 N/mm)	7.0	6.8	6.6	6.4	6.3	6.1	5.9	5.8	5.6
	600	Strength, (kN/m)	5.8	5.5	5.2	5.0	4.8	4.6	4.4	4.2	4.1
		Stiffeness, G', (10^3 N/mm)	7.1	6.9	6.7	6.5	6.3	6.2	6.0	5.8	5.7
	300	Strength, (kN/m)	6.6	6.3	6.0	5.8	5.6	5.4	5.2	5.1	4.9
		Stiffeness, G', (10^3 N/mm)	7.2	7.0	6.8	6.6	6.5	6.3	6.2	6.0	5.9
	230	Strength, (kN/m)	7.1	6.8	6.5	6.3	6.1	5.9	5.7	5.5	5.4
		Stiffeness, G', (10^3 N/mm)	7.3	7.1	6.9	6.7	6.6	6.4	6.3	6.1	6.0
	150	Strength, (kN/m)	8.2	7.9	7.6	7.4	7.2	7.0	6.8	6.7	6.5
		Stiffeness, G', (10^3 N/mm)	7.4	7.3	7.1	6.9	6.8	6.6	6.5	6.4	6.2

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	900	Strength, (kN/m)	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.2
		Stiffeness, G', (10^3 N/mm)	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0
	600	Strength, (kN/m)	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.7	2.6
		Stiffeness, G', (10^3 N/mm)	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1
	300	Strength, (kN/m)	4.4	4.3	4.2	4.1	4.1	4.0	3.9	3.9	3.8
		Stiffeness, G', (10^3 N/mm)	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2
	230	Strength, (kN/m)	5.2	5.0	4.9	4.8	4.8	4.7	4.6	4.6	4.5
		Stiffeness, G', (10^3 N/mm)	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	150	Strength, (kN/m)	6.7	6.6	6.5	6.4	6.3	6.2	6.2	6.1	6.1
		Stiffeness, G', (10^3 N/mm)	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
610/5	900	Strength, (kN/m)	3.6	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	5.3	5.1	4.9	4.8	4.6	4.4	4.3	4.2	4.0
	600	Strength, (kN/m)	4.0	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1
		Stiffeness, G', (10^3 N/mm)	5.4	5.2	5.0	4.8	4.7	4.5	4.4	4.3	4.1
	300	Strength, (kN/m)	5.1	5.0	4.9	4.7	4.6	4.5	4.4	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	5.6	5.4	5.2	5.1	4.9	4.8	4.7	4.5	4.4
	230	Strength, (kN/m)	5.8	5.7	5.6	5.4	5.3	5.2	5.1	5.1	5.0
		Stiffeness, G', (10^3 N/mm)	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.7	4.6
	150	Strength, (kN/m)	7.5	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.6
		Stiffeness, G', (10^3 N/mm)	6.1	5.9	5.7	5.6	5.4	5.3	5.2	5.0	4.9
610/7	900	Strength, (kN/m)	6.0	5.7	5.4	5.2	5.0	4.8	4.7	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	7.7	7.5	7.2	7.0	6.8	6.6	6.4	6.2	6.1
	600	Strength, (kN/m)	6.4	6.1	5.8	5.6	5.4	5.2	5.1	4.9	4.8
		Stiffeness, G', (10^3 N/mm)	7.8	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.2
	300	Strength, (kN/m)	7.5	7.2	7.0	6.8	6.6	6.4	6.2	6.1	5.9
		Stiffeness, G', (10^3 N/mm)	8.0	7.7	7.5	7.3	7.1	6.9	6.7	6.5	6.4
	230	Strength, (kN/m)	8.2	7.9	7.7	7.5	7.3	7.1	6.9	6.8	6.6
		Stiffeness, G', (10^3 N/mm)	8.1	7.8	7.6	7.4	7.2	7.0	6.8	6.7	6.5
	150	Strength, (kN/m)	9.8	9.6	9.3	9.1	8.9	8.7	8.5	8.4	8.2
		Stiffeness, G', (10^3 N/mm)	8.3	8.1	7.9	7.7	7.5	7.3	7.1	7.0	6.8

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.21 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	900	Strength, (kN/m)	3.8	3.7	3.5	3.5	3.4	3.3	3.2	3.1	3.1
		Stiffeness, G', (10^3 N/mm)	3.0	3.0	2.9	2.9	2.8	2.8	2.7	2.7	2.6
	600	Strength, (kN/m)	4.5	4.3	4.2	4.1	4.1	4.0	3.9	3.8	3.8
		Stiffeness, G', (10^3 N/mm)	3.1	3.1	3.0	3.0	2.9	2.9	2.8	2.8	2.7
	300	Strength, (kN/m)	6.5	6.4	6.3	6.2	6.1	6.0	6.0	5.9	5.8
		Stiffeness, G', (10^3 N/mm)	3.3	3.2	3.2	3.2	3.1	3.1	3.0	3.0	3.0
	230	Strength, (kN/m)	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.2	7.1
		Stiffeness, G', (10^3 N/mm)	3.4	3.3	3.3	3.3	3.2	3.2	3.2	3.1	3.1
	150	Strength, (kN/m)	10.1	10.0	9.9	9.9	9.8	9.7	9.6	9.6	9.5
		Stiffeness, G', (10^3 N/mm)	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.4	3.4
610/5	900	Strength, (kN/m)	4.6	4.4	4.3	4.2	4.1	3.9	3.8	3.8	3.7
		Stiffeness, G', (10^3 N/mm)	5.9	5.7	5.5	5.3	5.1	5.0	4.8	4.7	4.5
	600	Strength, (kN/m)	5.3	5.1	5.0	4.9	4.7	4.6	4.5	4.4	4.4
		Stiffeness, G', (10^3 N/mm)	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.6
	300	Strength, (kN/m)	7.3	7.2	7.1	6.9	6.8	6.7	6.6	6.5	6.4
		Stiffeness, G', (10^3 N/mm)	6.3	6.1	5.9	5.7	5.6	5.4	5.3	5.1	5.0
	230	Strength, (kN/m)	8.6	8.5	8.3	8.2	8.1	8.0	7.9	7.8	7.7
		Stiffeness, G', (10^3 N/mm)	6.5	6.3	6.1	5.9	5.8	5.6	5.5	5.3	5.2
	150	Strength, (kN/m)	11.5	11.3	11.2	11.1	10.9	10.8	10.7	10.7	10.6
		Stiffeness, G', (10^3 N/mm)	6.9	6.7	6.5	6.4	6.2	6.1	5.9	5.8	5.6
610/7	900	Strength, (kN/m)	7.4	7.1	6.8	6.6	6.4	6.2	6.0	5.8	5.7
		Stiffeness, G', (10^3 N/mm)	8.9	8.6	8.3	8.1	7.8	7.6	7.3	7.1	6.9
	600	Strength, (kN/m)	8.1	7.8	7.5	7.3	7.1	6.9	6.7	6.5	6.4
		Stiffeness, G', (10^3 N/mm)	9.0	8.7	8.4	8.1	7.9	7.7	7.4	7.2	7.0
	300	Strength, (kN/m)	10.1	9.9	9.6	9.4	9.1	8.9	8.8	8.6	8.4
		Stiffeness, G', (10^3 N/mm)	9.3	9.0	8.7	8.4	8.2	7.9	7.7	7.5	7.3
	230	Strength, (kN/m)	11.4	11.1	10.9	10.6	10.4	10.2	10.0	9.8	9.7
		Stiffeness, G', (10^3 N/mm)	9.4	9.1	8.8	8.6	8.3	8.1	7.9	7.7	7.5
	150	Strength, (kN/m)	14.3	14.0	13.7	13.5	13.3	13.1	12.9	12.7	12.6
		Stiffeness, G', (10^3 N/mm)	9.8	9.5	9.2	9.0	8.7	8.5	8.3	8.1	7.9

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 1.52 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	900	Strength, (kN/m)	4.7	4.6	4.5	4.4	4.3	4.2	4.2	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	3.7	3.6	3.5	3.4	3.3	3.3	3.2	3.1	3.0
	600	Strength, (kN/m)	5.8	5.7	5.6	5.5	5.4	5.3	5.2	5.2	5.1
		Stiffeness, G', (10^3 N/mm)	3.8	3.7	3.6	3.5	3.4	3.4	3.3	3.2	3.2
	300	Strength, (kN/m)	9.0	8.9	8.8	8.7	8.6	8.5	8.5	8.4	8.3
		Stiffeness, G', (10^3 N/mm)	4.0	3.9	3.9	3.8	3.7	3.7	3.6	3.5	3.5
	230	Strength, (kN/m)	10.8	10.6	10.5	10.4	10.4	10.3	10.2	10.1	10.1
		Stiffeness, G', (10^3 N/mm)	4.2	4.1	4.0	4.0	3.9	3.9	3.8	3.7	3.7
	150	Strength, (kN/m)	14.1	14.0	13.9	13.9	13.8	13.7	13.7	13.6	13.5
		Stiffeness, G', (10^3 N/mm)	4.5	4.5	4.4	4.4	4.3	4.3	4.2	4.2	4.1
610/5	900	Strength, (kN/m)	5.6	5.5	5.3	5.2	5.1	5.0	4.9	4.8	4.7
		Stiffeness, G', (10^3 N/mm)	6.3	6.1	5.9	5.7	5.5	5.3	5.1	5.0	4.9
	600	Strength, (kN/m)	6.7	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8
		Stiffeness, G', (10^3 N/mm)	6.4	6.2	6.0	5.8	5.6	5.4	5.3	5.1	5.0
	300	Strength, (kN/m)	9.9	9.8	9.6	9.5	9.4	9.3	9.2	9.1	9.0
		Stiffeness, G', (10^3 N/mm)	6.8	6.6	6.4	6.2	6.0	5.8	5.7	5.5	5.4
	230	Strength, (kN/m)	11.9	11.7	11.6	11.5	11.4	11.3	11.2	11.1	11.0
		Stiffeness, G', (10^3 N/mm)	7.0	6.8	6.6	6.4	6.2	6.1	5.9	5.8	5.6
	150	Strength, (kN/m)	16.3	16.1	16.0	15.9	15.7	15.6	15.5	15.4	15.3
		Stiffeness, G', (10^3 N/mm)	7.5	7.3	7.1	6.9	6.7	6.6	6.4	6.3	6.2
610/7	900	Strength, (kN/m)	8.7	8.5	8.2	8.0	7.7	7.5	7.3	7.2	7.0
		Stiffeness, G', (10^3 N/mm)	9.6	9.3	9.0	8.7	8.4	8.2	7.9	7.7	7.5
	600	Strength, (kN/m)	9.8	9.5	9.3	9.0	8.8	8.6	8.4	8.2	8.1
		Stiffeness, G', (10^3 N/mm)	9.7	9.4	9.1	8.8	8.5	8.3	8.1	7.8	7.6
	300	Strength, (kN/m)	13.1	12.8	12.5	12.3	12.0	11.8	11.6	11.5	11.3
		Stiffeness, G', (10^3 N/mm)	10.0	9.7	9.4	9.2	8.9	8.6	8.4	8.2	8.0
	230	Strength, (kN/m)	15.0	14.7	14.5	14.2	14.0	13.8	13.6	13.4	13.3
		Stiffeness, G', (10^3 N/mm)	10.2	9.9	9.6	9.4	9.1	8.9	8.6	8.4	8.2
	150	Strength, (kN/m)	19.5	19.2	19.0	18.7	18.5	18.3	18.1	17.9	17.8
		Stiffeness, G', (10^3 N/mm)	10.7	10.4	10.1	9.8	9.6	9.3	9.1	8.9	8.7

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	900	Strength, (kN/m)	5.0	4.9	4.9	4.8	4.8	4.7	4.7	4.7	4.6
		Stiffeness, G', (10^3 N/mm)	2.7	2.8	2.9	2.9	3.0	3.1	3.1	3.2	3.2
	600	Strength, (kN/m)	6.8	6.8	6.7	6.6	6.6	6.6	6.5	6.5	6.4
		Stiffeness, G', (10^3 N/mm)	3.0	3.1	3.2	3.3	3.3	3.4	3.5	3.6	3.7
	300	Strength, (kN/m)	10.7	10.7	10.7	10.6	10.6	10.6	10.5	10.5	10.5
		Stiffeness, G', (10^3 N/mm)	3.4	3.5	3.6	3.8	3.9	4.0	4.1	4.2	4.3
	230	Strength, (kN/m)	12.4	12.4	12.4	12.3	12.3	12.3	12.3	12.2	12.2
		Stiffeness, G', (10^3 N/mm)	3.5	3.6	3.8	3.9	4.1	4.2	4.3	4.4	4.6
	150	Strength, (kN/m)	14.9	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
		Stiffeness, G', (10^3 N/mm)	3.7	3.8	4.0	4.1	4.3	4.4	4.6	4.7	4.9
610/5	900	Strength, (kN/m)	5.7	5.6	5.5	5.4	5.3	5.3	5.2	5.2	5.1
		Stiffeness, G', (10^3 N/mm)	7.5	7.4	7.3	7.2	7.2	7.1	7.0	7.0	6.9
	600	Strength, (kN/m)	7.6	7.5	7.4	7.4	7.3	7.2	7.2	7.1	7.1
		Stiffeness, G', (10^3 N/mm)	8.9	8.8	8.8	8.7	8.7	8.6	8.6	8.5	8.5
	300	Strength, (kN/m)	13.0	12.9	12.8	12.7	12.7	12.6	12.5	12.5	12.4
		Stiffeness, G', (10^3 N/mm)	12.0	12.0	12.0	12.1	12.1	12.1	12.1	12.1	12.1
	230	Strength, (kN/m)	15.8	15.7	15.6	15.5	15.5	15.4	15.3	15.3	15.3
		Stiffeness, G', (10^3 N/mm)	13.4	13.5	13.5	13.6	13.6	13.7	13.7	13.7	13.8
	150	Strength, (kN/m)	21.0	21.0	20.9	20.9	20.8	20.8	19.8	18.3	16.9
		Stiffeness, G', (10^3 N/mm)	15.7	15.8	16.0	16.1	16.2	16.3	16.3	16.4	16.5
610/7	900	Strength, (kN/m)	8.0	7.8	7.6	7.4	7.3	7.1	7.0	6.9	6.8
		Stiffeness, G', (10^3 N/mm)	9.4	9.3	9.2	9.0	8.9	8.8	8.7	8.6	8.5
	600	Strength, (kN/m)	10.0	9.8	9.6	9.4	9.2	9.1	8.9	8.8	8.7
		Stiffeness, G', (10^3 N/mm)	10.5	10.4	10.4	10.3	10.2	10.1	10.0	10.0	9.9
	300	Strength, (kN/m)	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.5	14.4
		Stiffeness, G', (10^3 N/mm)	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
	230	Strength, (kN/m)	18.5	18.3	18.1	18.0	17.8	17.7	17.5	17.4	16.9
		Stiffeness, G', (10^3 N/mm)	14.3	14.3	14.4	14.4	14.4	14.5	14.5	14.5	14.5
	150	Strength, (kN/m)	24.2	24.0	23.9	23.7	23.6	21.6	19.8	18.3	16.9
		Stiffeness, G', (10^3 N/mm)	16.3	16.4	16.5	16.6	16.7	16.8	16.9	16.9	17.0

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 1.21 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	900	Strength, (kN/m)	6.4	6.3	6.2	6.2	6.1	6.1	6.1	6.0	6.0
		Stiffeness, G', (10^3 N/mm)	4.5	4.5	4.6	4.7	4.7	4.8	4.8	4.9	4.9
	600	Strength, (kN/m)	8.8	8.7	8.6	8.6	8.5	8.5	8.4	8.4	8.3
		Stiffeness, G', (10^3 N/mm)	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.8
	300	Strength, (kN/m)	13.9	13.9	13.8	13.8	13.8	13.7	13.7	13.7	13.7
		Stiffeness, G', (10^3 N/mm)	6.3	6.4	6.6	6.8	6.9	7.1	7.2	7.4	7.5
	230	Strength, (kN/m)	16.2	16.1	16.1	16.1	16.0	16.0	16.0	16.0	16.0
		Stiffeness, G', (10^3 N/mm)	6.6	6.9	7.1	7.2	7.4	7.6	7.8	7.9	8.1
	150	Strength, (kN/m)	19.4	19.4	19.4	19.4	19.4	19.3	19.3	19.3	19.3
		Stiffeness, G', (10^3 N/mm)	7.2	7.4	7.7	7.9	8.1	8.3	8.5	8.7	8.9
610/5	900	Strength, (kN/m)	7.2	7.1	7.0	6.9	6.8	6.8	6.7	6.6	6.6
		Stiffeness, G', (10^3 N/mm)	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.3
	600	Strength, (kN/m)	9.7	9.6	9.5	9.4	9.4	9.3	9.2	9.2	9.1
		Stiffeness, G', (10^3 N/mm)	10.9	10.8	10.8	10.7	10.6	10.5	10.5	10.4	10.4
	300	Strength, (kN/m)	16.7	16.6	16.5	16.5	16.4	16.3	16.2	16.2	16.1
		Stiffeness, G', (10^3 N/mm)	15.5	15.5	15.5	15.4	15.4	15.4	15.4	15.4	15.4
	230	Strength, (kN/m)	20.4	20.3	20.2	20.1	20.1	20.0	19.9	19.9	19.8
		Stiffeness, G', (10^3 N/mm)	17.6	17.6	17.7	17.7	17.7	17.7	17.7	17.7	17.7
	150	Strength, (kN/m)	27.3	27.3	27.2	27.2	27.1	27.0	26.1	24.2	22.5
		Stiffeness, G', (10^3 N/mm)	21.3	21.4	21.5	21.5	21.6	21.6	21.7	21.7	21.8
610/7	900	Strength, (kN/m)	10.0	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.6
		Stiffeness, G', (10^3 N/mm)	11.5	11.3	11.1	10.9	10.8	10.6	10.5	10.4	10.2
	600	Strength, (kN/m)	12.5	12.3	12.1	11.9	11.7	11.5	11.4	11.2	11.1
		Stiffeness, G', (10^3 N/mm)	13.1	13.0	12.8	12.7	12.6	12.4	12.3	12.2	12.1
	300	Strength, (kN/m)	20.0	19.7	19.5	19.3	19.1	19.0	18.8	18.7	18.5
		Stiffeness, G', (10^3 N/mm)	17.1	17.0	16.9	16.9	16.8	16.8	16.7	16.7	16.6
	230	Strength, (kN/m)	23.7	23.5	23.3	23.1	22.9	22.8	22.6	22.5	22.4
		Stiffeness, G', (10^3 N/mm)	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.7
	150	Strength, (kN/m)	31.2	31.0	30.9	30.7	30.6	28.2	26.1	24.2	22.5
		Stiffeness, G', (10^3 N/mm)	22.2	22.3	22.3	22.4	22.4	22.4	22.5	22.5	22.5

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	900	Strength, (kN/m)	7.6	7.6	7.5	7.5	7.4	7.4	7.3	7.3	7.3
		Stiffeness, G', (10^3 N/mm)	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.3	6.4
	600	Strength, (kN/m)	10.6	10.5	10.4	10.4	10.3	10.3	10.2	10.2	10.1
		Stiffeness, G', (10^3 N/mm)	7.3	7.4	7.5	7.5	7.6	7.7	7.7	7.8	7.9
	300	Strength, (kN/m)	17.0	16.9	16.9	16.8	16.8	16.8	16.7	16.7	16.7
		Stiffeness, G', (10^3 N/mm)	9.5	9.7	9.9	10.1	10.2	10.4	10.5	10.7	10.8
	230	Strength, (kN/m)	19.7	19.7	19.7	19.6	19.6	19.6	19.6	19.5	19.5
		Stiffeness, G', (10^3 N/mm)	10.3	10.6	10.8	11.0	11.2	11.4	11.6	11.8	11.9
	150	Strength, (kN/m)	23.8	23.8	23.7	23.7	23.7	23.7	23.7	23.7	23.7
		Stiffeness, G', (10^3 N/mm)	11.6	11.8	12.1	12.4	12.7	12.9	13.2	13.4	13.6
610/5	900	Strength, (kN/m)	8.6	8.5	8.4	8.3	8.2	8.1	8.1	8.0	7.9
		Stiffeness, G', (10^3 N/mm)	10.2	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.4
	600	Strength, (kN/m)	11.7	11.6	11.5	11.4	11.3	11.2	11.2	11.1	11.0
		Stiffeness, G', (10^3 N/mm)	12.6	12.5	12.4	12.3	12.2	12.1	12.0	12.0	11.9
	300	Strength, (kN/m)	20.3	20.2	20.1	20.0	19.9	19.8	19.8	19.7	19.6
		Stiffeness, G', (10^3 N/mm)	18.4	18.4	18.3	18.3	18.2	18.2	18.2	18.1	18.1
	230	Strength, (kN/m)	24.8	24.7	24.6	24.5	24.4	24.4	24.3	24.2	24.2
		Stiffeness, G', (10^3 N/mm)	21.2	21.2	21.2	21.2	21.1	21.1	21.1	21.1	21.1
	150	Strength, (kN/m)	33.4	33.3	33.2	33.2	33.1	33.0	31.3	29.1	27.2
		Stiffeness, G', (10^3 N/mm)	26.2	26.2	26.3	26.3	26.3	26.3	26.4	26.4	26.4
610/7	900	Strength, (kN/m)	11.7	11.5	11.2	11.0	10.9	10.7	10.5	10.4	10.2
		Stiffeness, G', (10^3 N/mm)	13.0	12.8	12.6	12.4	12.2	12.0	11.9	11.7	11.6
	600	Strength, (kN/m)	14.8	14.6	14.3	14.1	14.0	13.8	13.6	13.5	13.3
		Stiffeness, G', (10^3 N/mm)	15.1	14.9	14.7	14.6	14.4	14.3	14.1	14.0	13.9
	300	Strength, (kN/m)	23.9	23.7	23.4	23.2	23.0	22.9	22.7	22.5	22.4
		Stiffeness, G', (10^3 N/mm)	20.3	20.2	20.1	20.0	19.9	19.8	19.7	19.6	19.6
	230	Strength, (kN/m)	28.6	28.3	28.1	27.9	27.8	27.6	27.4	27.3	27.2
		Stiffeness, G', (10^3 N/mm)	22.8	22.7	22.7	22.6	22.5	22.5	22.4	22.4	22.3
	150	Strength, (kN/m)	37.8	37.6	37.5	37.3	36.3	33.6	31.3	29.1	27.2
		Stiffeness, G', (10^3 N/mm)	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	900	Strength, (kN/m)	3.3	3.2	3.1	3.0	2.9	2.9	2.8	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	1.7	1.7	1.8	1.8	1.9	1.9	1.9	2.0	2.0
	600	Strength, (kN/m)	4.1	4.0	3.9	3.8	3.7	3.7	3.6	3.6	3.5
		Stiffeness, G', (10^3 N/mm)	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.2
	300	Strength, (kN/m)	6.3	6.2	6.1	6.1	6.0	5.9	5.9	5.8	5.8
		Stiffeness, G', (10^3 N/mm)	1.9	2.0	2.1	2.2	2.2	2.3	2.4	2.4	2.5
	230	Strength, (kN/m)	7.4	7.3	7.2	7.2	7.1	7.0	7.0	6.9	6.9
		Stiffeness, G', (10^3 N/mm)	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.6
	150	Strength, (kN/m)	9.4	9.3	9.3	9.2	9.2	9.1	9.1	9.1	9.0
		Stiffeness, G', (10^3 N/mm)	2.1	2.2	2.3	2.4	2.5	2.6	2.6	2.7	2.8
610/5	900	Strength, (kN/m)	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.2
		Stiffeness, G', (10^3 N/mm)	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8
	600	Strength, (kN/m)	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0	4.0
		Stiffeness, G', (10^3 N/mm)	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.5	5.5
	300	Strength, (kN/m)	7.2	7.0	6.9	6.8	6.7	6.6	6.5	6.5	6.4
		Stiffeness, G', (10^3 N/mm)	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.2	7.2
	230	Strength, (kN/m)	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.9
		Stiffeness, G', (10^3 N/mm)	8.2	8.2	8.2	8.1	8.1	8.1	8.1	8.1	8.0
	150	Strength, (kN/m)	11.5	11.4	11.3	11.2	11.1	11.0	10.9	10.9	10.8
		Stiffeness, G', (10^3 N/mm)	9.5	9.5	9.6	9.6	9.6	9.6	9.6	9.7	9.7
610/7	900	Strength, (kN/m)	6.2	5.9	5.7	5.4	5.3	5.1	4.9	4.8	4.6
		Stiffeness, G', (10^3 N/mm)	7.5	7.3	7.2	7.1	6.9	6.8	6.7	6.5	6.4
	600	Strength, (kN/m)	7.0	6.7	6.5	6.3	6.1	5.9	5.7	5.6	5.5
		Stiffeness, G', (10^3 N/mm)	7.9	7.8	7.6	7.5	7.4	7.3	7.2	7.1	7.0
	300	Strength, (kN/m)	9.4	9.1	8.9	8.7	8.5	8.3	8.2	8.0	7.9
		Stiffeness, G', (10^3 N/mm)	8.9	8.8	8.8	8.7	8.6	8.6	8.5	8.4	8.4
	230	Strength, (kN/m)	10.9	10.6	10.4	10.2	10.0	9.8	9.6	9.5	9.4
		Stiffeness, G', (10^3 N/mm)	9.4	9.4	9.4	9.3	9.3	9.2	9.2	9.1	9.1
	150	Strength, (kN/m)	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.7	12.6
		Stiffeness, G', (10^3 N/mm)	10.4	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	900	Strength, (kN/m)	3.7	3.6	3.5	3.4	3.4	3.3	3.2	3.2	3.1
		Stiffeness, G', (10^3 N/mm)	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6
	600	Strength, (kN/m)	4.6	4.6	4.5	4.4	4.3	4.3	4.2	4.2	4.1
		Stiffeness, G', (10^3 N/mm)	2.6	2.7	2.7	2.8	2.8	2.8	2.9	2.9	2.9
	300	Strength, (kN/m)	7.3	7.2	7.2	7.1	7.0	7.0	6.9	6.9	6.8
		Stiffeness, G', (10^3 N/mm)	3.0	3.1	3.1	3.2	3.3	3.4	3.4	3.5	3.6
	230	Strength, (kN/m)	8.6	8.6	8.5	8.4	8.4	8.3	8.3	8.2	8.2
		Stiffeness, G', (10^3 N/mm)	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.8
	150	Strength, (kN/m)	11.1	11.0	11.0	10.9	10.9	10.8	10.8	10.8	10.7
		Stiffeness, G', (10^3 N/mm)	3.3	3.4	3.6	3.7	3.8	3.9	4.0	4.1	4.2
610/5	900	Strength, (kN/m)	4.4	4.2	4.1	4.0	3.9	3.8	3.8	3.7	3.6
		Stiffeness, G', (10^3 N/mm)	6.2	6.1	5.9	5.8	5.7	5.6	5.4	5.3	5.3
	600	Strength, (kN/m)	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.7	4.6
		Stiffeness, G', (10^3 N/mm)	6.9	6.8	6.6	6.5	6.4	6.3	6.2	6.1	6.1
	300	Strength, (kN/m)	8.3	8.1	8.0	7.9	7.8	7.7	7.6	7.6	7.5
		Stiffeness, G', (10^3 N/mm)	8.7	8.6	8.6	8.5	8.4	8.3	8.3	8.2	8.2
	230	Strength, (kN/m)	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.3
		Stiffeness, G', (10^3 N/mm)	9.7	9.6	9.5	9.5	9.4	9.4	9.3	9.3	9.3
	150	Strength, (kN/m)	13.5	13.4	13.3	13.2	13.1	13.0	12.9	12.9	12.8
		Stiffeness, G', (10^3 N/mm)	11.5	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
610/7	900	Strength, (kN/m)	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.4	5.3
		Stiffeness, G', (10^3 N/mm)	8.4	8.2	8.0	7.9	7.7	7.5	7.4	7.2	7.1
	600	Strength, (kN/m)	7.7	7.5	7.2	7.0	6.8	6.7	6.5	6.4	6.2
		Stiffeness, G', (10^3 N/mm)	9.0	8.8	8.6	8.5	8.3	8.2	8.0	7.9	7.8
	300	Strength, (kN/m)	10.6	10.4	10.1	9.9	9.8	9.6	9.4	9.3	9.2
		Stiffeness, G', (10^3 N/mm)	10.4	10.3	10.2	10.1	10.0	9.9	9.8	9.7	9.6
	230	Strength, (kN/m)	12.4	12.2	11.9	11.7	11.5	11.4	11.2	11.1	10.9
		Stiffeness, G', (10^3 N/mm)	11.2	11.1	11.0	10.9	10.8	10.8	10.7	10.6	10.5
	150	Strength, (kN/m)	16.2	16.0	15.7	15.5	15.4	15.2	15.0	14.9	14.8
		Stiffeness, G', (10^3 N/mm)	12.7	12.6	12.6	12.6	12.5	12.5	12.5	12.4	12.4

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 1.21 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	900	Strength, (kN/m)	4.6	4.5	4.4	4.4	4.3	4.2	4.1	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	600	Strength, (kN/m)	5.9	5.8	5.7	5.6	5.6	5.5	5.4	5.4	5.3
		Stiffeness, G', (10^3 N/mm)	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.3
	300	Strength, (kN/m)	9.5	9.4	9.3	9.2	9.1	9.1	9.0	9.0	8.9
		Stiffeness, G', (10^3 N/mm)	5.1	5.1	5.2	5.3	5.4	5.4	5.5	5.6	5.6
	230	Strength, (kN/m)	11.2	11.1	11.1	11.0	10.9	10.9	10.8	10.8	10.7
		Stiffeness, G', (10^3 N/mm)	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.1	6.2
	150	Strength, (kN/m)	14.5	14.4	14.4	14.3	14.3	14.2	14.2	14.2	14.1
		Stiffeness, G', (10^3 N/mm)	6.1	6.3	6.4	6.5	6.7	6.8	7.0	7.1	7.2
610/5	900	Strength, (kN/m)	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6
		Stiffeness, G', (10^3 N/mm)	7.2	7.0	6.9	6.7	6.6	6.4	6.3	6.2	6.1
	600	Strength, (kN/m)	6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0	5.9
		Stiffeness, G', (10^3 N/mm)	8.1	8.0	7.8	7.7	7.6	7.4	7.3	7.2	7.1
	300	Strength, (kN/m)	10.6	10.5	10.4	10.3	10.1	10.1	10.0	9.9	9.8
		Stiffeness, G', (10^3 N/mm)	10.7	10.5	10.4	10.3	10.2	10.1	10.0	9.9	9.9
	230	Strength, (kN/m)	13.0	12.9	12.7	12.6	12.5	12.4	12.3	12.2	12.1
		Stiffeness, G', (10^3 N/mm)	12.0	11.9	11.8	11.7	11.6	11.6	11.5	11.4	11.3
	150	Strength, (kN/m)	17.6	17.5	17.4	17.3	17.2	17.1	17.0	16.9	16.8
		Stiffeness, G', (10^3 N/mm)	14.6	14.6	14.5	14.5	14.4	14.4	14.3	14.3	14.3
610/7	900	Strength, (kN/m)	8.2	8.0	7.7	7.5	7.3	7.1	6.9	6.8	6.6
		Stiffeness, G', (10^3 N/mm)	10.0	9.7	9.5	9.2	9.0	8.8	8.6	8.5	8.3
	600	Strength, (kN/m)	9.5	9.3	9.0	8.8	8.6	8.4	8.2	8.1	7.9
		Stiffeness, G', (10^3 N/mm)	10.8	10.5	10.3	10.1	9.9	9.7	9.5	9.4	9.2
	300	Strength, (kN/m)	13.4	13.2	12.9	12.7	12.5	12.3	12.1	12.0	11.8
		Stiffeness, G', (10^3 N/mm)	12.9	12.7	12.5	12.4	12.2	12.1	11.9	11.8	11.7
	230	Strength, (kN/m)	15.8	15.5	15.3	15.1	14.8	14.7	14.5	14.3	14.2
		Stiffeness, G', (10^3 N/mm)	14.0	13.9	13.7	13.6	13.4	13.3	13.2	13.1	13.0
	150	Strength, (kN/m)	20.8	20.6	20.3	20.1	19.9	19.7	19.6	19.4	19.2
		Stiffeness, G', (10^3 N/mm)	16.3	16.2	16.1	16.0	15.9	15.8	15.8	15.7	15.6

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 1.52 mm**

Support connection: 19 mm Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	900	Strength, (kN/m)	5.5	5.4	5.3	5.2	5.1	5.1	5.0	4.9	4.9
		Stiffeness, G', (10^3 N/mm)	4.8	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.5
	600	Strength, (kN/m)	7.1	7.0	6.9	6.8	6.8	6.7	6.6	6.6	6.5
		Stiffeness, G', (10^3 N/mm)	5.5	5.5	5.5	5.5	5.4	5.4	5.4	5.4	5.4
	300	Strength, (kN/m)	11.5	11.4	11.4	11.3	11.2	11.1	11.1	11.0	11.0
		Stiffeness, G', (10^3 N/mm)	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5
	230	Strength, (kN/m)	13.7	13.7	13.6	13.5	13.4	13.4	13.3	13.3	13.2
		Stiffeness, G', (10^3 N/mm)	7.9	8.0	8.0	8.1	8.2	8.3	8.4	8.4	8.5
	150	Strength, (kN/m)	17.8	17.8	17.7	17.7	17.6	17.6	17.5	17.5	17.4
		Stiffeness, G', (10^3 N/mm)	9.1	9.3	9.4	9.6	9.7	9.9	10.0	10.1	10.2
610/5	900	Strength, (kN/m)	6.4	6.3	6.1	6.0	5.9	5.8	5.7	5.6	5.6
		Stiffeness, G', (10^3 N/mm)	7.9	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7
	600	Strength, (kN/m)	8.0	7.9	7.8	7.6	7.5	7.4	7.3	7.3	7.2
		Stiffeness, G', (10^3 N/mm)	9.0	8.9	8.7	8.5	8.4	8.3	8.2	8.0	7.9
	300	Strength, (kN/m)	12.9	12.7	12.6	12.5	12.4	12.3	12.2	12.1	12.0
		Stiffeness, G', (10^3 N/mm)	12.1	12.0	11.9	11.8	11.6	11.5	11.4	11.3	11.3
	230	Strength, (kN/m)	15.8	15.7	15.5	15.4	15.3	15.2	15.1	15.0	14.9
		Stiffeness, G', (10^3 N/mm)	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1	13.1
	150	Strength, (kN/m)	21.6	21.5	21.3	21.2	21.1	21.0	20.9	20.9	20.8
		Stiffeness, G', (10^3 N/mm)	17.2	17.1	17.1	17.0	16.9	16.9	16.8	16.7	16.7
610/7	900	Strength, (kN/m)	9.5	9.3	9.0	8.8	8.6	8.4	8.2	8.0	7.9
		Stiffeness, G', (10^3 N/mm)	11.0	10.7	10.5	10.2	10.0	9.8	9.6	9.4	9.2
	600	Strength, (kN/m)	11.2	10.9	10.6	10.4	10.2	10.0	9.8	9.6	9.5
		Stiffeness, G', (10^3 N/mm)	12.0	11.7	11.5	11.3	11.0	10.8	10.6	10.5	10.3
	300	Strength, (kN/m)	16.0	15.7	15.5	15.3	15.0	14.8	14.7	14.5	14.3
		Stiffeness, G', (10^3 N/mm)	14.7	14.5	14.3	14.1	13.9	13.8	13.6	13.4	13.3
	230	Strength, (kN/m)	19.0	18.7	18.4	18.2	18.0	17.8	17.6	17.5	17.3
		Stiffeness, G', (10^3 N/mm)	16.2	16.0	15.8	15.7	15.5	15.4	15.2	15.1	15.0
	150	Strength, (kN/m)	25.3	25.0	24.7	24.5	24.3	24.1	23.9	23.8	23.6
		Stiffeness, G', (10^3 N/mm)	19.2	19.1	18.9	18.8	18.7	18.6	18.5	18.4	18.3

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	900	Strength, (kN/m)	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1
		Stiffeness, G', (10^3 N/mm)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	600	Strength, (kN/m)	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4
		Stiffeness, G', (10^3 N/mm)	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	300	Strength, (kN/m)	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.2
		Stiffeness, G', (10^3 N/mm)	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7
	230	Strength, (kN/m)	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.7	2.7
		Stiffeness, G', (10^3 N/mm)	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7
	150	Strength, (kN/m)	3.8	3.7	3.7	3.6	3.6	3.6	3.6	3.5	3.5
		Stiffeness, G', (10^3 N/mm)	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8
610/5	900	Strength, (kN/m)	1.8	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.3
		Stiffeness, G', (10^3 N/mm)	4.6	4.4	4.2	4.1	3.9	3.8	3.7	3.6	3.5
	600	Strength, (kN/m)	2.0	2.0	1.9	1.8	1.8	1.7	1.7	1.7	1.6
		Stiffeness, G', (10^3 N/mm)	4.6	4.5	4.3	4.2	4.0	3.9	3.8	3.6	3.5
	300	Strength, (kN/m)	2.8	2.8	2.7	2.6	2.6	2.5	2.5	2.5	2.4
		Stiffeness, G', (10^3 N/mm)	4.8	4.7	4.5	4.4	4.2	4.1	4.0	3.9	3.8
	230	Strength, (kN/m)	3.3	3.3	3.2	3.1	3.1	3.0	3.0	3.0	2.9
		Stiffeness, G', (10^3 N/mm)	4.9	4.8	4.6	4.5	4.4	4.2	4.1	4.0	3.9
	150	Strength, (kN/m)	4.4	4.4	4.3	4.2	4.2	4.1	4.1	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	5.2	5.0	4.9	4.8	4.6	4.5	4.4	4.3	4.2
610/7	900	Strength, (kN/m)	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.1
		Stiffeness, G', (10^3 N/mm)	6.5	6.3	6.1	5.9	5.8	5.6	5.4	5.3	5.1
	600	Strength, (kN/m)	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3
		Stiffeness, G', (10^3 N/mm)	6.5	6.4	6.2	6.0	5.8	5.7	5.5	5.3	5.2
	300	Strength, (kN/m)	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.2
		Stiffeness, G', (10^3 N/mm)	6.7	6.5	6.3	6.2	6.0	5.8	5.7	5.5	5.4
	230	Strength, (kN/m)	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6
		Stiffeness, G', (10^3 N/mm)	6.8	6.6	6.4	6.3	6.1	5.9	5.8	5.6	5.5
	150	Strength, (kN/m)	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.8
		Stiffeness, G', (10^3 N/mm)	7.0	6.8	6.6	6.5	6.3	6.2	6.0	5.9	5.8

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	900	Strength, (kN/m)	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4
		Stiffeness, G', (10^3 N/mm)	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9
	600	Strength, (kN/m)	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8
		Stiffeness, G', (10^3 N/mm)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9
	300	Strength, (kN/m)	3.2	3.2	3.1	3.1	3.1	3.0	3.0	3.0	2.9
		Stiffeness, G', (10^3 N/mm)	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	230	Strength, (kN/m)	3.8	3.7	3.7	3.7	3.6	3.6	3.6	3.5	3.5
		Stiffeness, G', (10^3 N/mm)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	150	Strength, (kN/m)	4.9	4.8	4.8	4.8	4.8	4.7	4.7	4.7	4.7
		Stiffeness, G', (10^3 N/mm)	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4
610/5	900	Strength, (kN/m)	2.0	2.0	1.9	1.8	1.8	1.8	1.7	1.7	1.6
		Stiffeness, G', (10^3 N/mm)	4.8	4.6	4.5	4.3	4.2	4.0	3.9	3.8	3.7
	600	Strength, (kN/m)	2.4	2.4	2.3	2.2	2.2	2.1	2.1	2.1	2.0
		Stiffeness, G', (10^3 N/mm)	4.9	4.7	4.6	4.4	4.2	4.1	4.0	3.9	3.7
	300	Strength, (kN/m)	3.6	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.2
		Stiffeness, G', (10^3 N/mm)	5.1	5.0	4.8	4.7	4.5	4.4	4.3	4.1	4.0
	230	Strength, (kN/m)	4.3	4.2	4.2	4.1	4.1	4.0	4.0	3.9	3.9
		Stiffeness, G', (10^3 N/mm)	5.3	5.1	5.0	4.8	4.7	4.5	4.4	4.3	4.2
	150	Strength, (kN/m)	5.8	5.7	5.7	5.6	5.6	5.5	5.5	5.4	5.4
		Stiffeness, G', (10^3 N/mm)	5.6	5.4	5.3	5.2	5.0	4.9	4.8	4.7	4.6
610/7	900	Strength, (kN/m)	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5
		Stiffeness, G', (10^3 N/mm)	7.1	6.8	6.6	6.4	6.2	6.0	5.9	5.7	5.5
	600	Strength, (kN/m)	3.6	3.5	3.3	3.2	3.1	3.1	3.0	2.9	2.8
		Stiffeness, G', (10^3 N/mm)	7.1	6.9	6.7	6.5	6.3	6.1	5.9	5.8	5.6
	300	Strength, (kN/m)	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	7.3	7.1	6.9	6.7	6.5	6.3	6.2	6.0	5.8
	230	Strength, (kN/m)	5.5	5.3	5.2	5.1	5.0	4.9	4.9	4.8	4.7
		Stiffeness, G', (10^3 N/mm)	7.5	7.2	7.0	6.8	6.6	6.5	6.3	6.1	6.0
	150	Strength, (kN/m)	7.1	6.9	6.8	6.7	6.6	6.5	6.5	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	7.7	7.5	7.3	7.1	6.9	6.8	6.6	6.5	6.3

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 1.21 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	900	Strength, (kN/m)	2.4	2.3	2.3	2.2	2.2	2.2	2.1	2.1	2.1
		Stiffeness, G', (10^3 N/mm)	2.8	2.8	2.7	2.7	2.6	2.6	2.5	2.5	2.4
	600	Strength, (kN/m)	3.1	3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.8
		Stiffeness, G', (10^3 N/mm)	2.9	2.8	2.8	2.7	2.7	2.6	2.6	2.6	2.5
	300	Strength, (kN/m)	4.9	4.9	4.8	4.8	4.8	4.7	4.7	4.7	4.6
		Stiffeness, G', (10^3 N/mm)	3.1	3.0	3.0	3.0	2.9	2.9	2.8	2.8	2.8
	230	Strength, (kN/m)	5.8	5.8	5.7	5.7	5.7	5.7	5.6	5.6	5.6
		Stiffeness, G', (10^3 N/mm)	3.2	3.1	3.1	3.1	3.0	3.0	3.0	2.9	2.9
	150	Strength, (kN/m)	7.5	7.5	7.4	7.4	7.4	7.4	7.4	7.3	7.3
		Stiffeness, G', (10^3 N/mm)	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.2
610/5	900	Strength, (kN/m)	2.8	2.7	2.7	2.6	2.5	2.5	2.5	2.4	2.4
		Stiffeness, G', (10^3 N/mm)	5.4	5.2	5.0	4.8	4.6	4.5	4.3	4.2	4.1
	600	Strength, (kN/m)	3.5	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.1
		Stiffeness, G', (10^3 N/mm)	5.5	5.3	5.1	4.9	4.7	4.6	4.4	4.3	4.2
	300	Strength, (kN/m)	5.5	5.5	5.4	5.4	5.3	5.3	5.2	5.2	5.1
		Stiffeness, G', (10^3 N/mm)	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.7	4.5
	230	Strength, (kN/m)	6.8	6.7	6.6	6.6	6.5	6.5	6.4	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	6.0	5.8	5.6	5.4	5.3	5.1	5.0	4.9	4.7
	150	Strength, (kN/m)	9.2	9.1	9.1	9.0	9.0	8.9	8.9	8.8	8.8
		Stiffeness, G', (10^3 N/mm)	6.4	6.2	6.0	5.9	5.7	5.6	5.5	5.3	5.2
610/7	900	Strength, (kN/m)	4.2	4.0	3.9	3.8	3.7	3.6	3.5	3.5	3.4
		Stiffeness, G', (10^3 N/mm)	8.1	7.8	7.6	7.3	7.1	6.9	6.6	6.5	6.3
	600	Strength, (kN/m)	4.9	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.1
		Stiffeness, G', (10^3 N/mm)	8.2	7.9	7.7	7.4	7.2	7.0	6.8	6.6	6.4
	300	Strength, (kN/m)	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1
		Stiffeness, G', (10^3 N/mm)	8.5	8.2	7.9	7.7	7.5	7.3	7.1	6.9	6.7
	230	Strength, (kN/m)	8.2	8.1	7.9	7.8	7.7	7.6	7.6	7.5	7.4
		Stiffeness, G', (10^3 N/mm)	8.6	8.4	8.1	7.9	7.6	7.4	7.2	7.0	6.9
	150	Strength, (kN/m)	10.8	10.7	10.6	10.5	10.4	10.3	10.2	10.1	10.0
		Stiffeness, G', (10^3 N/mm)	9.0	8.7	8.5	8.3	8.0	7.8	7.6	7.5	7.3

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 1.52 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	900	Strength, (kN/m)	3.2	3.1	3.1	3.0	3.0	3.0	2.9	2.9	2.9
		Stiffeness, G', (10^3 N/mm)	3.3	3.3	3.2	3.1	3.0	3.0	2.9	2.8	2.8
	600	Strength, (kN/m)	4.2	4.2	4.2	4.1	4.1	4.1	4.0	4.0	4.0
		Stiffeness, G', (10^3 N/mm)	3.4	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.9
	300	Strength, (kN/m)	6.9	6.9	6.8	6.8	6.8	6.7	6.7	6.7	6.7
		Stiffeness, G', (10^3 N/mm)	3.7	3.7	3.6	3.5	3.5	3.4	3.3	3.3	3.2
	230	Strength, (kN/m)	8.2	8.2	8.1	8.1	8.1	8.0	8.0	8.0	8.0
		Stiffeness, G', (10^3 N/mm)	3.9	3.8	3.8	3.7	3.6	3.6	3.5	3.5	3.4
	150	Strength, (kN/m)	10.4	10.4	10.3	10.3	10.3	10.3	10.3	10.3	10.2
		Stiffeness, G', (10^3 N/mm)	4.3	4.2	4.1	4.1	4.0	4.0	4.0	3.9	3.9
610/5	900	Strength, (kN/m)	3.6	3.6	3.5	3.5	3.4	3.4	3.3	3.3	3.2
		Stiffeness, G', (10^3 N/mm)	5.7	5.5	5.3	5.1	4.9	4.8	4.6	4.5	4.4
	600	Strength, (kN/m)	4.7	4.6	4.6	4.5	4.5	4.4	4.4	4.3	4.3
		Stiffeness, G', (10^3 N/mm)	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.6	4.5
	300	Strength, (kN/m)	7.9	7.9	7.8	7.7	7.7	7.6	7.6	7.6	7.5
		Stiffeness, G', (10^3 N/mm)	6.2	6.0	5.8	5.6	5.5	5.3	5.2	5.0	4.9
	230	Strength, (kN/m)	9.7	9.6	9.5	9.5	9.4	9.4	9.3	9.3	9.3
		Stiffeness, G', (10^3 N/mm)	6.4	6.2	6.0	5.8	5.7	5.5	5.4	5.3	5.1
	150	Strength, (kN/m)	13.2	13.2	13.1	13.1	13.0	13.0	12.9	12.9	12.9
		Stiffeness, G', (10^3 N/mm)	6.9	6.7	6.5	6.4	6.2	6.1	5.9	5.8	5.7
610/7	900	Strength, (kN/m)	5.2	5.1	5.0	4.9	4.7	4.7	4.6	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	8.7	8.4	8.1	7.9	7.6	7.4	7.2	7.0	6.8
	600	Strength, (kN/m)	6.3	6.2	6.0	5.9	5.8	5.7	5.6	5.6	5.5
		Stiffeness, G', (10^3 N/mm)	8.8	8.5	8.2	8.0	7.7	7.5	7.3	7.1	6.9
	300	Strength, (kN/m)	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.8	8.7
		Stiffeness, G', (10^3 N/mm)	9.2	8.9	8.6	8.3	8.1	7.9	7.7	7.5	7.3
	230	Strength, (kN/m)	11.5	11.4	11.2	11.1	11.0	10.9	10.8	10.7	10.6
		Stiffeness, G', (10^3 N/mm)	9.4	9.1	8.8	8.5	8.3	8.1	7.9	7.7	7.5
	150	Strength, (kN/m)	15.2	15.1	14.9	14.8	14.7	14.7	14.6	14.5	14.4
		Stiffeness, G', (10^3 N/mm)	9.8	9.5	9.3	9.0	8.8	8.6	8.4	8.2	8.0

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 0.76 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	900	Strength, (kN/m)	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9
		Stiffeness, G', (10^3 N/mm)	1.6	1.7	1.7	1.8	1.8	1.8	1.9	1.9	1.9
	600	Strength, (kN/m)	2.9	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.7
		Stiffeness, G', (10^3 N/mm)	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.1
	300	Strength, (kN/m)	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.4
		Stiffeness, G', (10^3 N/mm)	1.9	2.0	2.1	2.1	2.2	2.3	2.3	2.4	2.5
	230	Strength, (kN/m)	5.2	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
		Stiffeness, G', (10^3 N/mm)	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.5	2.6
	150	Strength, (kN/m)	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
		Stiffeness, G', (10^3 N/mm)	2.1	2.2	2.3	2.4	2.5	2.5	2.6	2.7	2.8
610/5	900	Strength, (kN/m)	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.2
		Stiffeness, G', (10^3 N/mm)	5.3	5.1	5.0	4.9	4.8	4.7	4.6	4.6	4.5
	600	Strength, (kN/m)	3.2	3.2	3.1	3.1	3.1	3.0	3.0	3.0	3.0
		Stiffeness, G', (10^3 N/mm)	5.8	5.7	5.6	5.5	5.5	5.4	5.3	5.2	5.2
	300	Strength, (kN/m)	5.5	5.4	5.4	5.3	5.3	5.3	5.2	5.2	5.2
		Stiffeness, G', (10^3 N/mm)	7.2	7.2	7.2	7.1	7.1	7.0	7.0	7.0	6.9
	230	Strength, (kN/m)	6.6	6.6	6.5	6.5	6.5	6.4	6.4	6.4	6.4
		Stiffeness, G', (10^3 N/mm)	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.8	7.8
	150	Strength, (kN/m)	8.8	8.7	8.7	8.7	8.7	8.6	8.6	8.6	8.6
		Stiffeness, G', (10^3 N/mm)	9.3	9.4	9.4	9.4	9.4	9.5	9.5	9.5	9.5
610/7	900	Strength, (kN/m)	3.5	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.9
		Stiffeness, G', (10^3 N/mm)	7.0	6.9	6.7	6.6	6.5	6.3	6.2	6.1	6.0
	600	Strength, (kN/m)	4.3	4.2	4.1	4.0	4.0	3.9	3.8	3.8	3.7
		Stiffeness, G', (10^3 N/mm)	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.6
	300	Strength, (kN/m)	6.7	6.6	6.5	6.4	6.3	6.2	6.2	6.1	6.1
		Stiffeness, G', (10^3 N/mm)	8.5	8.5	8.4	8.3	8.3	8.2	8.2	8.1	8.0
	230	Strength, (kN/m)	7.9	7.8	7.7	7.6	7.5	7.4	7.4	7.3	7.3
		Stiffeness, G', (10^3 N/mm)	9.1	9.1	9.0	9.0	9.0	8.9	8.9	8.9	8.8
	150	Strength, (kN/m)	10.2	10.1	10.0	9.9	9.9	9.8	9.8	9.7	9.7
		Stiffeness, G', (10^3 N/mm)	10.2	10.2	10.2	10.3	10.3	10.3	10.3	10.3	10.3

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 0.91 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	900	Strength, (kN/m)	2.5	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3
		Stiffeness, G', (10^3 N/mm)	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
	600	Strength, (kN/m)	3.4	3.4	3.3	3.3	3.3	3.3	3.2	3.2	3.2
		Stiffeness, G', (10^3 N/mm)	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.8	2.9
	300	Strength, (kN/m)	5.3	5.3	5.3	5.3	5.3	5.2	5.2	5.2	5.2
		Stiffeness, G', (10^3 N/mm)	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.5	3.5
	230	Strength, (kN/m)	6.2	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
		Stiffeness, G', (10^3 N/mm)	3.1	3.2	3.3	3.4	3.5	3.6	3.6	3.7	3.8
	150	Strength, (kN/m)	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
		Stiffeness, G', (10^3 N/mm)	3.3	3.4	3.6	3.7	3.8	3.9	4.0	4.1	4.2
610/5	900	Strength, (kN/m)	2.8	2.8	2.7	2.7	2.7	2.6	2.6	2.6	2.5
		Stiffeness, G', (10^3 N/mm)	5.8	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9
	600	Strength, (kN/m)	3.8	3.7	3.7	3.7	3.6	3.6	3.6	3.5	3.5
		Stiffeness, G', (10^3 N/mm)	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.7
	300	Strength, (kN/m)	6.5	6.4	6.4	6.3	6.3	6.3	6.2	6.2	6.2
		Stiffeness, G', (10^3 N/mm)	8.4	8.3	8.2	8.2	8.1	8.1	8.0	7.9	7.9
	230	Strength, (kN/m)	7.8	7.8	7.8	7.7	7.7	7.7	7.6	7.6	7.6
		Stiffeness, G', (10^3 N/mm)	9.4	9.3	9.3	9.2	9.2	9.1	9.1	9.1	9.0
	150	Strength, (kN/m)	10.4	10.4	10.4	10.4	10.3	10.3	10.3	10.3	10.3
		Stiffeness, G', (10^3 N/mm)	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
610/7	900	Strength, (kN/m)	4.0	3.9	3.8	3.7	3.6	3.5	3.5	3.4	3.3
		Stiffeness, G', (10^3 N/mm)	7.8	7.6	7.5	7.3	7.1	7.0	6.9	6.7	6.6
	600	Strength, (kN/m)	4.9	4.8	4.7	4.7	4.6	4.5	4.4	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	8.4	8.3	8.1	7.9	7.8	7.7	7.5	7.4	7.3
	300	Strength, (kN/m)	7.8	7.7	7.6	7.5	7.4	7.3	7.3	7.2	7.1
		Stiffeness, G', (10^3 N/mm)	10.0	9.8	9.7	9.6	9.5	9.5	9.4	9.3	9.2
	230	Strength, (kN/m)	9.2	9.1	9.0	8.9	8.9	8.8	8.7	8.7	8.6
		Stiffeness, G', (10^3 N/mm)	10.8	10.7	10.6	10.5	10.5	10.4	10.3	10.3	10.2
	150	Strength, (kN/m)	12.0	11.9	11.8	11.8	11.7	11.7	11.6	11.6	11.5
		Stiffeness, G', (10^3 N/mm)	12.3	12.3	12.3	12.3	12.2	12.2	12.2	12.1	12.1

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.21 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	900	Strength, (kN/m)	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.0
		Stiffeness, G', (10^3 N/mm)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	600	Strength, (kN/m)	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.2	4.2
		Stiffeness, G', (10^3 N/mm)	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1
	300	Strength, (kN/m)	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.9	6.9
		Stiffeness, G', (10^3 N/mm)	5.0	5.1	5.1	5.2	5.3	5.4	5.4	5.5	5.5
	230	Strength, (kN/m)	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
		Stiffeness, G', (10^3 N/mm)	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.1
	150	Strength, (kN/m)	9.8	9.8	9.8	9.8	9.7	9.7	9.7	9.7	9.7
		Stiffeness, G', (10^3 N/mm)	6.0	6.2	6.4	6.5	6.6	6.8	6.9	7.0	7.1
610/5	900	Strength, (kN/m)	3.6	3.6	3.5	3.5	3.5	3.4	3.4	3.4	3.3
		Stiffeness, G', (10^3 N/mm)	6.7	6.5	6.4	6.2	6.1	6.0	5.9	5.8	5.7
	600	Strength, (kN/m)	4.9	4.9	4.8	4.8	4.8	4.7	4.7	4.7	4.6
		Stiffeness, G', (10^3 N/mm)	7.6	7.5	7.4	7.2	7.1	7.0	6.9	6.8	6.7
	300	Strength, (kN/m)	8.5	8.4	8.4	8.4	8.3	8.3	8.2	8.2	8.2
		Stiffeness, G', (10^3 N/mm)	10.2	10.1	10.0	9.9	9.8	9.8	9.7	9.6	9.5
	230	Strength, (kN/m)	10.3	10.3	10.3	10.2	10.2	10.2	10.1	10.1	10.1
		Stiffeness, G', (10^3 N/mm)	11.6	11.5	11.4	11.4	11.3	11.2	11.2	11.1	11.0
	150	Strength, (kN/m)	13.8	13.8	13.8	13.8	13.7	13.7	13.7	13.7	13.6
		Stiffeness, G', (10^3 N/mm)	14.3	14.3	14.2	14.2	14.2	14.1	14.1	14.1	14.0
610/7	900	Strength, (kN/m)	5.0	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	9.2	9.0	8.8	8.6	8.4	8.2	8.0	7.8	7.7
	600	Strength, (kN/m)	6.3	6.2	6.1	6.0	5.9	5.8	5.8	5.7	5.6
		Stiffeness, G', (10^3 N/mm)	10.0	9.8	9.6	9.4	9.2	9.1	8.9	8.8	8.6
	300	Strength, (kN/m)	10.1	10.0	9.9	9.8	9.7	9.6	9.5	9.5	9.4
		Stiffeness, G', (10^3 N/mm)	12.3	12.1	11.9	11.8	11.7	11.5	11.4	11.3	11.2
	230	Strength, (kN/m)	12.0	11.9	11.8	11.7	11.6	11.6	11.5	11.4	11.4
		Stiffeness, G', (10^3 N/mm)	13.5	13.3	13.2	13.1	12.9	12.8	12.7	12.6	12.5
	150	Strength, (kN/m)	15.8	15.7	15.6	15.6	15.5	15.4	15.4	15.3	15.3
		Stiffeness, G', (10^3 N/mm)	15.9	15.8	15.7	15.6	15.5	15.4	15.4	15.3	15.2

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.52 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	900	Strength, (kN/m)	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.8
		Stiffeness, G', (10^3 N/mm)	4.5	4.5	4.5	4.4	4.4	4.4	4.3	4.3	4.3
	600	Strength, (kN/m)	5.5	5.4	5.4	5.4	5.3	5.3	5.3	5.3	5.2
		Stiffeness, G', (10^3 N/mm)	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	300	Strength, (kN/m)	8.8	8.7	8.7	8.7	8.7	8.7	8.6	8.6	8.6
		Stiffeness, G', (10^3 N/mm)	7.0	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4
	230	Strength, (kN/m)	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
		Stiffeness, G', (10^3 N/mm)	7.7	7.8	7.9	8.0	8.1	8.2	8.2	8.3	8.4
	150	Strength, (kN/m)	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.1	12.1
		Stiffeness, G', (10^3 N/mm)	9.1	9.2	9.4	9.5	9.6	9.8	9.9	10.0	10.1
610/5	900	Strength, (kN/m)	4.4	4.4	4.3	4.3	4.2	4.2	4.2	4.1	4.1
		Stiffeness, G', (10^3 N/mm)	7.3	7.1	7.0	6.8	6.7	6.6	6.5	6.4	6.3
	600	Strength, (kN/m)	6.0	6.0	5.9	5.9	5.9	5.8	5.8	5.8	5.7
		Stiffeness, G', (10^3 N/mm)	8.5	8.3	8.2	8.0	7.9	7.8	7.7	7.6	7.5
	300	Strength, (kN/m)	10.5	10.4	10.4	10.3	10.3	10.3	10.2	10.2	10.2
		Stiffeness, G', (10^3 N/mm)	11.7	11.5	11.4	11.3	11.2	11.1	11.0	11.0	10.9
	230	Strength, (kN/m)	12.8	12.8	12.7	12.7	12.7	12.6	12.6	12.6	12.5
		Stiffeness, G', (10^3 N/mm)	13.4	13.3	13.2	13.1	13.0	12.9	12.9	12.8	12.7
	150	Strength, (kN/m)	17.2	17.2	17.2	17.1	17.1	17.1	17.0	17.0	17.0
		Stiffeness, G', (10^3 N/mm)	16.9	16.8	16.7	16.7	16.6	16.5	16.5	16.4	16.4
610/7	900	Strength, (kN/m)	6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.3	5.3
		Stiffeness, G', (10^3 N/mm)	10.1	9.9	9.6	9.4	9.2	9.0	8.8	8.7	8.5
	600	Strength, (kN/m)	7.6	7.5	7.4	7.3	7.2	7.1	7.0	7.0	6.9
		Stiffeness, G', (10^3 N/mm)	11.2	10.9	10.7	10.5	10.3	10.1	10.0	9.8	9.6
	300	Strength, (kN/m)	12.3	12.2	12.1	12.0	11.9	11.8	11.7	11.7	11.6
		Stiffeness, G', (10^3 N/mm)	14.0	13.8	13.6	13.5	13.3	13.1	13.0	12.9	12.7
	230	Strength, (kN/m)	14.8	14.6	14.5	14.4	14.4	14.3	14.2	14.1	14.1
		Stiffeness, G', (10^3 N/mm)	15.6	15.4	15.2	15.1	14.9	14.8	14.7	14.5	14.4
	150	Strength, (kN/m)	19.5	19.4	19.4	19.3	19.2	19.1	19.1	19.0	19.0
		Stiffeness, G', (10^3 N/mm)	18.7	18.5	18.4	18.3	18.2	18.1	18.0	17.9	17.8

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	900	Strength, (kN/m)	1.9	1.8	1.8	1.7	1.6	1.6	1.5	1.5	1.5
		Stiffeness, G', (10^3 N/mm)	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	600	Strength, (kN/m)	2.2	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.7
		Stiffeness, G', (10^3 N/mm)	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	300	Strength, (kN/m)	3.0	2.9	2.8	2.8	2.7	2.7	2.6	2.6	2.5
		Stiffeness, G', (10^3 N/mm)	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7
	230	Strength, (kN/m)	3.5	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.0
		Stiffeness, G', (10^3 N/mm)	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	150	Strength, (kN/m)	4.5	4.4	4.3	4.3	4.2	4.2	4.1	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.9
610/5	900	Strength, (kN/m)	2.4	2.3	2.2	2.1	2.0	2.0	1.9	1.8	1.8
		Stiffeness, G', (10^3 N/mm)	4.7	4.5	4.4	4.2	4.1	3.9	3.8	3.7	3.6
	600	Strength, (kN/m)	2.7	2.6	2.5	2.4	2.3	2.2	2.2	2.1	2.0
		Stiffeness, G', (10^3 N/mm)	4.8	4.6	4.4	4.3	4.1	4.0	3.9	3.8	3.6
	300	Strength, (kN/m)	3.5	3.4	3.3	3.2	3.1	3.0	3.0	2.9	2.9
		Stiffeness, G', (10^3 N/mm)	5.0	4.8	4.6	4.5	4.4	4.2	4.1	4.0	3.9
	230	Strength, (kN/m)	4.0	3.9	3.8	3.7	3.6	3.5	3.5	3.4	3.3
		Stiffeness, G', (10^3 N/mm)	5.1	4.9	4.8	4.6	4.5	4.4	4.2	4.1	4.0
	150	Strength, (kN/m)	5.1	5.0	4.9	4.8	4.7	4.6	4.6	4.5	4.5
		Stiffeness, G', (10^3 N/mm)	5.3	5.2	5.0	4.9	4.8	4.6	4.5	4.4	4.3
610/7	900	Strength, (kN/m)	4.0	3.8	3.6	3.4	3.3	3.2	3.0	2.9	2.8
		Stiffeness, G', (10^3 N/mm)	6.7	6.5	6.3	6.1	5.9	5.8	5.6	5.4	5.3
	600	Strength, (kN/m)	4.3	4.0	3.9	3.7	3.6	3.4	3.3	3.2	3.1
		Stiffeness, G', (10^3 N/mm)	6.7	6.5	6.3	6.1	6.0	5.8	5.7	5.5	5.4
	300	Strength, (kN/m)	5.1	4.9	4.7	4.5	4.4	4.2	4.1	4.0	3.9
		Stiffeness, G', (10^3 N/mm)	6.8	6.7	6.5	6.3	6.1	6.0	5.8	5.7	5.5
	230	Strength, (kN/m)	5.6	5.3	5.2	5.0	4.9	4.7	4.6	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	6.9	6.7	6.6	6.4	6.2	6.1	5.9	5.8	5.7
	150	Strength, (kN/m)	6.7	6.5	6.3	6.1	6.0	5.9	5.7	5.6	5.5
		Stiffeness, G', (10^3 N/mm)	7.1	6.9	6.8	6.6	6.5	6.3	6.2	6.0	5.9

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	900	Strength, (kN/m)	2.2	2.1	2.1	2.0	1.9	1.9	1.8	1.8	1.8
		Stiffeness, G', (10^3 N/mm)	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9
	600	Strength, (kN/m)	2.6	2.5	2.4	2.4	2.3	2.3	2.2	2.2	2.2
		Stiffeness, G', (10^3 N/mm)	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0
	300	Strength, (kN/m)	3.8	3.7	3.6	3.5	3.5	3.4	3.4	3.4	3.3
		Stiffeness, G', (10^3 N/mm)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1
	230	Strength, (kN/m)	4.5	4.4	4.3	4.3	4.2	4.2	4.1	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	150	Strength, (kN/m)	5.7	5.7	5.6	5.6	5.5	5.5	5.4	5.4	5.3
		Stiffeness, G', (10^3 N/mm)	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4
610/5	900	Strength, (kN/m)	2.7	2.6	2.5	2.4	2.3	2.3	2.2	2.2	2.1
		Stiffeness, G', (10^3 N/mm)	5.0	4.8	4.6	4.4	4.3	4.1	4.0	3.9	3.8
	600	Strength, (kN/m)	3.1	3.0	2.9	2.8	2.7	2.7	2.6	2.5	2.5
		Stiffeness, G', (10^3 N/mm)	5.1	4.9	4.7	4.5	4.4	4.2	4.1	4.0	3.9
	300	Strength, (kN/m)	4.2	4.1	4.1	4.0	3.9	3.8	3.8	3.7	3.7
		Stiffeness, G', (10^3 N/mm)	5.3	5.1	4.9	4.8	4.6	4.5	4.4	4.3	4.1
	230	Strength, (kN/m)	5.0	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.4
		Stiffeness, G', (10^3 N/mm)	5.4	5.3	5.1	4.9	4.8	4.7	4.5	4.4	4.3
	150	Strength, (kN/m)	6.6	6.5	6.4	6.3	6.2	6.2	6.1	6.0	6.0
		Stiffeness, G', (10^3 N/mm)	5.8	5.6	5.4	5.3	5.1	5.0	4.9	4.8	4.7
610/7	900	Strength, (kN/m)	4.4	4.2	4.0	3.9	3.7	3.6	3.5	3.4	3.3
		Stiffeness, G', (10^3 N/mm)	7.3	7.0	6.8	6.6	6.4	6.2	6.0	5.9	5.7
	600	Strength, (kN/m)	4.8	4.6	4.4	4.3	4.1	4.0	3.9	3.8	3.7
		Stiffeness, G', (10^3 N/mm)	7.3	7.1	6.9	6.7	6.5	6.3	6.1	5.9	5.8
	300	Strength, (kN/m)	5.9	5.7	5.6	5.4	5.3	5.1	5.0	4.9	4.8
		Stiffeness, G', (10^3 N/mm)	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.2	6.0
	230	Strength, (kN/m)	6.6	6.5	6.3	6.1	6.0	5.9	5.7	5.6	5.5
		Stiffeness, G', (10^3 N/mm)	7.6	7.4	7.2	7.0	6.8	6.6	6.5	6.3	6.2
	150	Strength, (kN/m)	8.3	8.1	7.9	7.7	7.6	7.5	7.4	7.3	7.2
		Stiffeness, G', (10^3 N/mm)	7.9	7.7	7.5	7.3	7.1	6.9	6.8	6.6	6.5

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 1.21 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	900	Strength, (kN/m)	3.0	2.9	2.8	2.8	2.7	2.6	2.6	2.6	2.5
		Stiffeness, G', (10^3 N/mm)	2.9	2.8	2.8	2.7	2.7	2.6	2.6	2.5	2.5
	600	Strength, (kN/m)	3.7	3.6	3.5	3.4	3.4	3.3	3.3	3.2	3.2
		Stiffeness, G', (10^3 N/mm)	3.0	2.9	2.9	2.8	2.8	2.7	2.7	2.6	2.6
	300	Strength, (kN/m)	5.7	5.6	5.6	5.5	5.5	5.4	5.4	5.3	5.3
		Stiffeness, G', (10^3 N/mm)	3.1	3.1	3.1	3.0	3.0	2.9	2.9	2.9	2.8
	230	Strength, (kN/m)	6.8	6.7	6.6	6.6	6.5	6.4	6.4	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	3.2	3.2	3.2	3.1	3.1	3.1	3.0	3.0	3.0
	150	Strength, (kN/m)	8.8	8.7	8.7	8.6	8.6	8.5	8.5	8.5	8.4
		Stiffeness, G', (10^3 N/mm)	3.5	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.3
610/5	900	Strength, (kN/m)	3.5	3.4	3.4	3.3	3.2	3.1	3.0	3.0	2.9
		Stiffeness, G', (10^3 N/mm)	5.5	5.3	5.1	5.0	4.8	4.6	4.5	4.3	4.2
	600	Strength, (kN/m)	4.2	4.1	4.0	4.0	3.9	3.8	3.7	3.7	3.6
		Stiffeness, G', (10^3 N/mm)	5.6	5.4	5.2	5.1	4.9	4.7	4.6	4.5	4.3
	300	Strength, (kN/m)	6.3	6.2	6.1	6.0	5.9	5.9	5.8	5.7	5.7
		Stiffeness, G', (10^3 N/mm)	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.7
	230	Strength, (kN/m)	7.6	7.5	7.4	7.3	7.2	7.1	7.1	7.0	6.9
		Stiffeness, G', (10^3 N/mm)	6.1	5.9	5.8	5.6	5.4	5.3	5.1	5.0	4.9
	150	Strength, (kN/m)	10.3	10.2	10.1	10.0	9.9	9.9	9.8	9.7	9.7
		Stiffeness, G', (10^3 N/mm)	6.6	6.4	6.2	6.0	5.9	5.7	5.6	5.5	5.3
610/7	900	Strength, (kN/m)	5.5	5.3	5.2	5.0	4.9	4.7	4.6	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	8.4	8.1	7.8	7.5	7.3	7.1	6.9	6.7	6.5
	600	Strength, (kN/m)	6.2	6.0	5.9	5.7	5.5	5.4	5.3	5.2	5.0
		Stiffeness, G', (10^3 N/mm)	8.4	8.2	7.9	7.6	7.4	7.2	7.0	6.8	6.6
	300	Strength, (kN/m)	8.3	8.1	7.9	7.8	7.6	7.5	7.3	7.2	7.1
		Stiffeness, G', (10^3 N/mm)	8.7	8.4	8.2	7.9	7.7	7.5	7.3	7.1	6.9
	230	Strength, (kN/m)	9.6	9.4	9.2	9.0	8.9	8.7	8.6	8.5	8.4
		Stiffeness, G', (10^3 N/mm)	8.9	8.6	8.3	8.1	7.9	7.6	7.4	7.3	7.1
	150	Strength, (kN/m)	12.4	12.2	12.1	11.9	11.7	11.6	11.5	11.4	11.3
		Stiffeness, G', (10^3 N/mm)	9.2	9.0	8.7	8.5	8.2	8.0	7.8	7.7	7.5

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 1.52 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	900	Strength, (kN/m)	3.8	3.7	3.7	3.6	3.6	3.5	3.5	3.4	3.4
		Stiffeness, G', (10^3 N/mm)	3.4	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.9
	600	Strength, (kN/m)	4.9	4.8	4.7	4.7	4.6	4.6	4.5	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	3.5	3.5	3.4	3.3	3.2	3.2	3.1	3.0	3.0
	300	Strength, (kN/m)	7.9	7.8	7.8	7.7	7.7	7.6	7.6	7.5	7.5
		Stiffeness, G', (10^3 N/mm)	3.8	3.7	3.7	3.6	3.5	3.5	3.4	3.4	3.3
	230	Strength, (kN/m)	9.4	9.3	9.3	9.2	9.2	9.1	9.1	9.0	9.0
		Stiffeness, G', (10^3 N/mm)	4.0	3.9	3.9	3.8	3.7	3.7	3.6	3.6	3.5
	150	Strength, (kN/m)	12.3	12.2	12.2	12.1	12.1	12.1	12.0	12.0	12.0
		Stiffeness, G', (10^3 N/mm)	4.3	4.3	4.2	4.2	4.1	4.1	4.0	4.0	3.9
610/5	900	Strength, (kN/m)	4.5	4.4	4.3	4.2	4.1	4.0	4.0	3.9	3.8
		Stiffeness, G', (10^3 N/mm)	5.9	5.6	5.4	5.3	5.1	4.9	4.8	4.6	4.5
	600	Strength, (kN/m)	5.5	5.4	5.4	5.3	5.2	5.1	5.0	5.0	4.9
		Stiffeness, G', (10^3 N/mm)	6.0	5.8	5.6	5.4	5.2	5.1	4.9	4.8	4.6
	300	Strength, (kN/m)	8.8	8.7	8.6	8.5	8.4	8.3	8.3	8.2	8.2
		Stiffeness, G', (10^3 N/mm)	6.4	6.2	6.0	5.8	5.6	5.5	5.3	5.2	5.1
	230	Strength, (kN/m)	10.7	10.6	10.6	10.5	10.4	10.3	10.2	10.2	10.1
		Stiffeness, G', (10^3 N/mm)	6.6	6.4	6.2	6.0	5.9	5.7	5.6	5.4	5.3
	150	Strength, (kN/m)	14.7	14.6	14.5	14.4	14.3	14.3	14.2	14.1	14.1
		Stiffeness, G', (10^3 N/mm)	7.1	6.9	6.7	6.5	6.4	6.2	6.1	6.0	5.8
610/7	900	Strength, (kN/m)	6.7	6.5	6.3	6.2	6.0	5.9	5.7	5.6	5.5
		Stiffeness, G', (10^3 N/mm)	9.0	8.7	8.4	8.1	7.9	7.6	7.4	7.2	7.0
	600	Strength, (kN/m)	7.8	7.6	7.4	7.2	7.1	6.9	6.8	6.7	6.6
		Stiffeness, G', (10^3 N/mm)	9.1	8.8	8.5	8.2	8.0	7.8	7.5	7.3	7.1
	300	Strength, (kN/m)	11.0	10.8	10.6	10.5	10.3	10.2	10.0	9.9	9.8
		Stiffeness, G', (10^3 N/mm)	9.4	9.1	8.8	8.6	8.3	8.1	7.9	7.7	7.5
	230	Strength, (kN/m)	13.0	12.8	12.6	12.4	12.3	12.1	12.0	11.9	11.8
		Stiffeness, G', (10^3 N/mm)	9.6	9.3	9.1	8.8	8.6	8.3	8.1	7.9	7.7
	150	Strength, (kN/m)	17.3	17.1	16.9	16.7	16.6	16.4	16.3	16.2	16.1
		Stiffeness, G', (10^3 N/mm)	10.1	9.8	9.5	9.3	9.0	8.8	8.6	8.4	8.2

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.76 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	900	Strength, (kN/m)	2.6	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.3
		Stiffeness, G', (10^3 N/mm)	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.9	1.9
	600	Strength, (kN/m)	3.4	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.1
		Stiffeness, G', (10^3 N/mm)	1.7	1.8	1.9	1.9	2.0	2.0	2.0	2.1	2.1
	300	Strength, (kN/m)	5.4	5.3	5.3	5.2	5.2	5.1	5.1	5.1	5.1
		Stiffeness, G', (10^3 N/mm)	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.4	2.5
	230	Strength, (kN/m)	6.3	6.2	6.2	6.1	6.1	6.1	6.1	6.0	6.0
		Stiffeness, G', (10^3 N/mm)	2.0	2.1	2.2	2.2	2.3	2.4	2.5	2.5	2.6
	150	Strength, (kN/m)	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.6	7.6
		Stiffeness, G', (10^3 N/mm)	2.1	2.2	2.3	2.4	2.5	2.6	2.6	2.7	2.8
610/5	900	Strength, (kN/m)	3.1	3.0	2.9	2.8	2.8	2.7	2.7	2.6	2.6
		Stiffeness, G', (10^3 N/mm)	5.4	5.3	5.1	5.0	4.9	4.8	4.7	4.7	4.6
	600	Strength, (kN/m)	3.9	3.8	3.7	3.7	3.6	3.5	3.5	3.4	3.4
		Stiffeness, G', (10^3 N/mm)	5.9	5.8	5.7	5.6	5.6	5.5	5.4	5.3	5.3
	300	Strength, (kN/m)	6.3	6.2	6.1	6.1	6.0	5.9	5.9	5.8	5.8
		Stiffeness, G', (10^3 N/mm)	7.3	7.3	7.2	7.2	7.2	7.1	7.1	7.0	7.0
	230	Strength, (kN/m)	7.6	7.5	7.4	7.4	7.3	7.2	7.2	7.1	7.1
		Stiffeness, G', (10^3 N/mm)	8.0	8.0	8.0	8.0	8.0	7.9	7.9	7.9	7.9
	150	Strength, (kN/m)	10.2	10.1	10.0	10.0	9.9	9.9	9.8	9.8	9.8
		Stiffeness, G', (10^3 N/mm)	9.4	9.4	9.4	9.5	9.5	9.5	9.5	9.5	9.6
610/7	900	Strength, (kN/m)	4.7	4.5	4.3	4.2	4.1	3.9	3.8	3.7	3.6
		Stiffeness, G', (10^3 N/mm)	7.2	7.0	6.9	6.7	6.6	6.5	6.4	6.2	6.1
	600	Strength, (kN/m)	5.5	5.3	5.1	5.0	4.9	4.7	4.6	4.5	4.5
		Stiffeness, G', (10^3 N/mm)	7.6	7.5	7.3	7.2	7.1	7.0	6.9	6.8	6.7
	300	Strength, (kN/m)	7.9	7.7	7.6	7.4	7.3	7.2	7.1	7.0	6.9
		Stiffeness, G', (10^3 N/mm)	8.7	8.6	8.5	8.5	8.4	8.3	8.3	8.2	8.1
	230	Strength, (kN/m)	9.4	9.2	9.0	8.9	8.7	8.6	8.5	8.4	8.3
		Stiffeness, G', (10^3 N/mm)	9.2	9.2	9.1	9.1	9.1	9.0	9.0	8.9	8.9
	150	Strength, (kN/m)	12.0	11.8	11.7	11.6	11.5	11.4	11.3	11.2	11.1
		Stiffeness, G', (10^3 N/mm)	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3

76 mm deck - 610 mm wide - 152 mm flute spacing | **Thickness = 0.91 mm**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	900	Strength, (kN/m)	3.0	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.7
		Stiffeness, G', (10^3 N/mm)	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
	600	Strength, (kN/m)	4.0	3.9	3.8	3.8	3.8	3.7	3.7	3.7	3.6
		Stiffeness, G', (10^3 N/mm)	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.9
	300	Strength, (kN/m)	6.3	6.2	6.2	6.2	6.1	6.1	6.1	6.0	6.0
		Stiffeness, G', (10^3 N/mm)	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.5	3.5
	230	Strength, (kN/m)	7.4	7.4	7.3	7.3	7.3	7.2	7.2	7.2	7.2
		Stiffeness, G', (10^3 N/mm)	3.1	3.2	3.3	3.4	3.5	3.6	3.6	3.7	3.8
	150	Strength, (kN/m)	9.3	9.2	9.2	9.2	9.2	9.1	9.1	9.1	9.1
		Stiffeness, G', (10^3 N/mm)	3.3	3.4	3.6	3.7	3.8	3.9	4.0	4.1	4.2
610/5	900	Strength, (kN/m)	3.5	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0
		Stiffeness, G', (10^3 N/mm)	5.9	5.8	5.6	5.5	5.4	5.3	5.2	5.1	5.0
	600	Strength, (kN/m)	4.4	4.4	4.3	4.2	4.2	4.1	4.1	4.0	4.0
		Stiffeness, G', (10^3 N/mm)	6.6	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8
	300	Strength, (kN/m)	7.4	7.3	7.2	7.1	7.1	7.0	6.9	6.9	6.9
		Stiffeness, G', (10^3 N/mm)	8.5	8.4	8.3	8.3	8.2	8.1	8.1	8.0	8.0
	230	Strength, (kN/m)	8.9	8.8	8.7	8.7	8.6	8.5	8.5	8.5	8.4
		Stiffeness, G', (10^3 N/mm)	9.4	9.4	9.3	9.3	9.3	9.2	9.2	9.1	9.1
	150	Strength, (kN/m)	12.0	11.9	11.9	11.8	11.8	11.7	11.7	11.6	11.6
		Stiffeness, G', (10^3 N/mm)	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.2
610/7	900	Strength, (kN/m)	5.2	5.0	4.8	4.7	4.6	4.5	4.4	4.3	4.2
		Stiffeness, G', (10^3 N/mm)	8.0	7.8	7.6	7.5	7.3	7.2	7.0	6.9	6.8
	600	Strength, (kN/m)	6.1	6.0	5.8	5.7	5.5	5.4	5.3	5.2	5.1
		Stiffeness, G', (10^3 N/mm)	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.6	7.5
	300	Strength, (kN/m)	9.0	8.9	8.7	8.6	8.5	8.3	8.2	8.1	8.1
		Stiffeness, G', (10^3 N/mm)	10.1	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3
	230	Strength, (kN/m)	10.8	10.6	10.5	10.3	10.2	10.1	10.0	9.9	9.8
		Stiffeness, G', (10^3 N/mm)	10.9	10.8	10.7	10.7	10.6	10.5	10.4	10.4	10.3
	150	Strength, (kN/m)	14.0	13.9	13.7	13.6	13.5	13.4	13.3	13.2	13.1
		Stiffeness, G', (10^3 N/mm)	12.4	12.4	12.4	12.4	12.3	12.3	12.3	12.2	12.2

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.21 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	900	Strength, (kN/m)	3.8	3.8	3.7	3.7	3.6	3.6	3.5	3.5	3.5
		Stiffeness, G', (10^3 N/mm)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	600	Strength, (kN/m)	5.1	5.0	5.0	4.9	4.9	4.9	4.8	4.8	4.8
		Stiffeness, G', (10^3 N/mm)	4.0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2
	300	Strength, (kN/m)	8.2	8.2	8.1	8.1	8.0	8.0	8.0	7.9	7.9
		Stiffeness, G', (10^3 N/mm)	5.0	5.1	5.2	5.2	5.3	5.4	5.4	5.5	5.6
	230	Strength, (kN/m)	9.7	9.7	9.6	9.6	9.6	9.5	9.5	9.5	9.4
		Stiffeness, G', (10^3 N/mm)	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2
	150	Strength, (kN/m)	12.2	12.2	12.1	12.1	12.1	12.1	12.1	12.0	12.0
		Stiffeness, G', (10^3 N/mm)	6.1	6.2	6.4	6.5	6.7	6.8	6.9	7.0	7.2
610/5	900	Strength, (kN/m)	4.4	4.3	4.2	4.2	4.1	4.0	4.0	3.9	3.9
		Stiffeness, G', (10^3 N/mm)	6.8	6.7	6.5	6.4	6.2	6.1	6.0	5.9	5.8
	600	Strength, (kN/m)	5.7	5.6	5.5	5.5	5.4	5.3	5.3	5.2	5.2
		Stiffeness, G', (10^3 N/mm)	7.8	7.6	7.5	7.4	7.3	7.1	7.0	6.9	6.8
	300	Strength, (kN/m)	9.5	9.5	9.4	9.3	9.2	9.2	9.1	9.0	9.0
		Stiffeness, G', (10^3 N/mm)	10.4	10.2	10.1	10.0	10.0	9.9	9.8	9.7	9.6
	230	Strength, (kN/m)	11.6	11.5	11.4	11.4	11.3	11.2	11.2	11.1	11.1
		Stiffeness, G', (10^3 N/mm)	11.7	11.6	11.6	11.5	11.4	11.3	11.3	11.2	11.1
	150	Strength, (kN/m)	15.8	15.7	15.6	15.6	15.5	15.5	15.4	15.4	15.3
		Stiffeness, G', (10^3 N/mm)	14.4	14.4	14.3	14.3	14.2	14.2	14.2	14.1	14.1
610/7	900	Strength, (kN/m)	6.4	6.2	6.0	5.9	5.8	5.6	5.5	5.4	5.3
		Stiffeness, G', (10^3 N/mm)	9.5	9.2	9.0	8.8	8.6	8.4	8.2	8.0	7.9
	600	Strength, (kN/m)	7.7	7.5	7.3	7.2	7.1	6.9	6.8	6.7	6.6
		Stiffeness, G', (10^3 N/mm)	10.3	10.0	9.8	9.6	9.4	9.3	9.1	9.0	8.8
	300	Strength, (kN/m)	11.6	11.4	11.2	11.1	10.9	10.8	10.7	10.6	10.5
		Stiffeness, G', (10^3 N/mm)	12.5	12.3	12.1	12.0	11.8	11.7	11.6	11.4	11.3
	230	Strength, (kN/m)	13.9	13.7	13.5	13.4	13.2	13.1	13.0	12.9	12.8
		Stiffeness, G', (10^3 N/mm)	13.6	13.5	13.4	13.2	13.1	13.0	12.9	12.8	12.7
	150	Strength, (kN/m)	18.2	18.0	17.9	17.8	17.6	17.5	17.4	17.3	17.2
		Stiffeness, G', (10^3 N/mm)	16.0	15.9	15.8	15.7	15.6	15.6	15.5	15.4	15.4

76 mm deck - 610 mm wide - 152 mm flute spacing **Thickness = 1.52 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	900	Strength, (kN/m)	4.6	4.5	4.5	4.4	4.4	4.3	4.3	4.3	4.2
		Stiffeness, G', (10^3 N/mm)	4.6	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.4
	600	Strength, (kN/m)	6.2	6.2	6.1	6.1	6.0	6.0	5.9	5.9	5.9
		Stiffeness, G', (10^3 N/mm)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
	300	Strength, (kN/m)	10.1	10.1	10.0	10.0	9.9	9.9	9.9	9.8	9.8
		Stiffeness, G', (10^3 N/mm)	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4	7.4
	230	Strength, (kN/m)	12.0	11.9	11.9	11.8	11.8	11.8	11.7	11.7	11.7
		Stiffeness, G', (10^3 N/mm)	7.8	7.9	8.0	8.0	8.1	8.2	8.3	8.3	8.4
	150	Strength, (kN/m)	15.1	15.0	15.0	15.0	15.0	14.9	14.9	14.9	14.9
		Stiffeness, G', (10^3 N/mm)	9.1	9.2	9.4	9.5	9.7	9.8	9.9	10.0	10.1
610/5	900	Strength, (kN/m)	5.3	5.2	5.1	5.0	4.9	4.9	4.8	4.8	4.7
		Stiffeness, G', (10^3 N/mm)	7.5	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4
	600	Strength, (kN/m)	6.9	6.8	6.7	6.6	6.6	6.5	6.4	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	8.6	8.5	8.3	8.2	8.1	8.0	7.8	7.7	7.6
	300	Strength, (kN/m)	11.7	11.6	11.5	11.4	11.3	11.3	11.2	11.1	11.1
		Stiffeness, G', (10^3 N/mm)	11.8	11.7	11.6	11.5	11.3	11.3	11.2	11.1	11.0
	230	Strength, (kN/m)	14.2	14.1	14.1	14.0	13.9	13.9	13.8	13.7	13.7
		Stiffeness, G', (10^3 N/mm)	13.5	13.4	13.3	13.2	13.1	13.0	13.0	12.9	12.8
	150	Strength, (kN/m)	19.5	19.4	19.3	19.3	19.2	19.1	19.1	19.0	19.0
		Stiffeness, G', (10^3 N/mm)	17.0	16.9	16.8	16.8	16.7	16.6	16.6	16.5	16.5
610/7	900	Strength, (kN/m)	7.5	7.3	7.1	7.0	6.8	6.7	6.6	6.5	6.4
		Stiffeness, G', (10^3 N/mm)	10.4	10.1	9.9	9.7	9.5	9.3	9.1	8.9	8.7
	600	Strength, (kN/m)	9.1	8.9	8.8	8.6	8.5	8.3	8.2	8.1	8.0
		Stiffeness, G', (10^3 N/mm)	11.4	11.2	11.0	10.7	10.5	10.3	10.2	10.0	9.8
	300	Strength, (kN/m)	14.0	13.8	13.6	13.5	13.3	13.2	13.1	12.9	12.8
		Stiffeness, G', (10^3 N/mm)	14.2	14.0	13.8	13.7	13.5	13.3	13.2	13.0	12.9
	230	Strength, (kN/m)	16.8	16.6	16.5	16.3	16.2	16.0	15.9	15.8	15.7
		Stiffeness, G', (10^3 N/mm)	15.8	15.6	15.4	15.2	15.1	15.0	14.8	14.7	14.6
	150	Strength, (kN/m)	22.3	22.1	21.9	21.8	21.7	21.6	21.4	21.3	21.2
		Stiffeness, G', (10^3 N/mm)	18.8	18.7	18.6	18.5	18.4	18.2	18.1	18.1	18.0

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.76 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	900	Strength, (kN/m)	2.9	2.7	2.6	2.5	2.4	2.3	2.2	2.2	2.1
		Stiffeness, G', (10^3 N/mm)	3.0	3.0	3.0	2.9	2.9	2.9	2.8	2.8	2.7
	600	Strength, (kN/m)	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.4
		Stiffeness, G', (10^3 N/mm)	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.8	2.8
	300	Strength, (kN/m)	4.0	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.2
		Stiffeness, G', (10^3 N/mm)	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0	2.9
	230	Strength, (kN/m)	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.7
		Stiffeness, G', (10^3 N/mm)	3.1	3.2	3.1	3.1	3.1	3.1	3.1	3.0	3.0
	150	Strength, (kN/m)	5.6	5.4	5.3	5.2	5.1	5.0	4.9	4.9	4.8
		Stiffeness, G', (10^3 N/mm)	3.2	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2
610/6	900	Strength, (kN/m)	5.1	4.8	4.6	4.4	4.2	4.0	3.9	3.7	3.6
		Stiffeness, G', (10^3 N/mm)	3.8	3.8	3.8	3.9	3.9	3.9	3.8	3.8	3.8
	600	Strength, (kN/m)	5.4	5.1	4.9	4.7	4.5	4.3	4.1	4.0	3.9
		Stiffeness, G', (10^3 N/mm)	3.8	3.8	3.9	3.9	3.9	3.9	3.9	3.9	3.8
	300	Strength, (kN/m)	6.2	5.9	5.7	5.5	5.3	5.1	4.9	4.8	4.7
		Stiffeness, G', (10^3 N/mm)	3.8	3.9	3.9	3.9	3.9	4.0	3.9	3.9	3.9
	230	Strength, (kN/m)	6.7	6.4	6.2	6.0	5.8	5.6	5.4	5.3	5.2
		Stiffeness, G', (10^3 N/mm)	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.0	4.0
	150	Strength, (kN/m)	7.8	7.5	7.3	7.1	6.9	6.7	6.6	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	3.9	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	900	Strength, (kN/m)	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5
		Stiffeness, G', (10^3 N/mm)	3.7	3.6	3.6	3.5	3.4	3.4	3.3	3.2	3.2
	600	Strength, (kN/m)	3.6	3.5	3.3	3.2	3.1	3.1	3.0	2.9	2.8
		Stiffeness, G', (10^3 N/mm)	3.7	3.7	3.6	3.5	3.5	3.4	3.4	3.3	3.2
	300	Strength, (kN/m)	4.8	4.6	4.5	4.4	4.3	4.2	4.1	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	3.9	3.8	3.8	3.7	3.7	3.6	3.5	3.5	3.4
	230	Strength, (kN/m)	5.5	5.3	5.2	5.1	5.0	4.9	4.9	4.8	4.7
		Stiffeness, G', (10^3 N/mm)	4.0	3.9	3.9	3.8	3.8	3.7	3.7	3.6	3.5
	150	Strength, (kN/m)	7.1	7.0	6.8	6.7	6.6	6.6	6.5	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	4.1	4.1	4.1	4.0	4.0	3.9	3.9	3.9	3.8
610/6	900	Strength, (kN/m)	5.6	5.3	5.1	4.9	4.7	4.5	4.4	4.2	4.1
		Stiffeness, G', (10^3 N/mm)	5.0	5.0	4.9	4.9	4.8	4.8	4.7	4.7	4.6
	600	Strength, (kN/m)	6.0	5.7	5.5	5.3	5.1	4.9	4.8	4.6	4.5
		Stiffeness, G', (10^3 N/mm)	5.0	5.0	5.0	4.9	4.9	4.8	4.8	4.7	4.6
	300	Strength, (kN/m)	7.1	6.9	6.6	6.4	6.3	6.1	5.9	5.8	5.6
		Stiffeness, G', (10^3 N/mm)	5.1	5.1	5.1	5.0	5.0	4.9	4.9	4.8	4.8
	230	Strength, (kN/m)	7.8	7.6	7.4	7.1	7.0	6.8	6.6	6.5	6.4
		Stiffeness, G', (10^3 N/mm)	5.2	5.1	5.1	5.1	5.1	5.0	5.0	4.9	4.9
	150	Strength, (kN/m)	9.5	9.2	9.0	8.8	8.6	8.4	8.3	8.1	8.0
		Stiffeness, G', (10^3 N/mm)	5.3	5.3	5.3	5.2	5.2	5.2	5.1	5.1	5.1

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.21 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	900	Strength, (kN/m)	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3
		Stiffeness, G', (10^3 N/mm)	4.7	4.6	4.4	4.3	4.2	4.1	4.0	3.9	3.8
	600	Strength, (kN/m)	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	4.8	4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9
	300	Strength, (kN/m)	6.9	6.8	6.6	6.5	6.4	6.3	6.3	6.2	6.1
		Stiffeness, G', (10^3 N/mm)	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2
	230	Strength, (kN/m)	8.1	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.4
		Stiffeness, G', (10^3 N/mm)	5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.4
	150	Strength, (kN/m)	11.0	10.9	10.7	10.6	10.5	10.4	10.3	10.2	10.2
		Stiffeness, G', (10^3 N/mm)	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.8
610/6	900	Strength, (kN/m)	6.9	6.7	6.4	6.2	6.0	5.8	5.7	5.5	5.3
		Stiffeness, G', (10^3 N/mm)	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8
	600	Strength, (kN/m)	7.6	7.4	7.1	6.9	6.7	6.5	6.3	6.2	6.0
		Stiffeness, G', (10^3 N/mm)	6.9	6.8	6.6	6.5	6.4	6.3	6.1	6.0	5.9
	300	Strength, (kN/m)	9.7	9.4	9.2	9.0	8.8	8.6	8.4	8.3	8.1
		Stiffeness, G', (10^3 N/mm)	7.1	7.0	6.8	6.7	6.6	6.5	6.4	6.2	6.1
	230	Strength, (kN/m)	10.9	10.7	10.4	10.2	10.0	9.8	9.7	9.5	9.4
		Stiffeness, G', (10^3 N/mm)	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.4	6.3
	150	Strength, (kN/m)	13.8	13.6	13.3	13.1	12.9	12.7	12.5	12.4	12.2
		Stiffeness, G', (10^3 N/mm)	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.6

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	900	Strength, (kN/m)	5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	5.3	5.1	5.0	4.8	4.7	4.5	4.4	4.3	4.2
	600	Strength, (kN/m)	6.2	6.1	5.9	5.8	5.7	5.6	5.5	5.5	5.4
		Stiffeness, G', (10^3 N/mm)	5.4	5.2	5.1	4.9	4.8	4.7	4.5	4.4	4.3
	300	Strength, (kN/m)	9.4	9.3	9.2	9.1	9.0	8.9	8.8	8.7	8.6
		Stiffeness, G', (10^3 N/mm)	5.7	5.5	5.4	5.3	5.1	5.0	4.9	4.8	4.7
	230	Strength, (kN/m)	11.4	11.3	11.1	11.0	10.9	10.8	10.7	10.7	10.6
		Stiffeness, G', (10^3 N/mm)	5.9	5.7	5.6	5.5	5.4	5.2	5.1	5.0	4.9
	150	Strength, (kN/m)	15.4	15.3	15.2	15.1	15.0	14.9	14.8	14.7	14.6
		Stiffeness, G', (10^3 N/mm)	6.3	6.2	6.1	5.9	5.8	5.7	5.6	5.5	5.4
610/6	900	Strength, (kN/m)	8.2	8.0	7.7	7.5	7.3	7.1	6.9	6.8	6.6
		Stiffeness, G', (10^3 N/mm)	8.1	7.9	7.7	7.5	7.3	7.1	6.9	6.8	6.6
	600	Strength, (kN/m)	9.3	9.0	8.8	8.6	8.4	8.2	8.0	7.8	7.7
		Stiffeness, G', (10^3 N/mm)	8.1	7.9	7.8	7.6	7.4	7.2	7.0	6.9	6.7
	300	Strength, (kN/m)	12.5	12.3	12.0	11.8	11.6	11.4	11.2	11.1	10.9
		Stiffeness, G', (10^3 N/mm)	8.4	8.2	8.0	7.8	7.7	7.5	7.3	7.2	7.0
	230	Strength, (kN/m)	14.5	14.2	14.0	13.8	13.6	13.4	13.2	13.0	12.9
		Stiffeness, G', (10^3 N/mm)	8.6	8.4	8.2	8.0	7.8	7.7	7.5	7.4	7.2
	150	Strength, (kN/m)	19.0	18.7	18.5	18.3	18.1	17.9	17.7	17.5	17.4
		Stiffeness, G', (10^3 N/mm)	8.9	8.7	8.6	8.4	8.2	8.1	7.9	7.8	7.7

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	900	Strength, (kN/m)	5.3	5.2	5.1	5.1	5.0	5.0	4.9	4.9	4.8
		Stiffeness, G', (10^3 N/mm)	4.9	4.9	5.0	5.0	5.0	5.1	5.1	5.1	5.1
	600	Strength, (kN/m)	7.2	7.1	7.1	7.0	7.0	6.9	6.9	6.8	6.8
		Stiffeness, G', (10^3 N/mm)	5.5	5.6	5.7	5.8	5.8	5.9	5.9	6.0	6.1
	300	Strength, (kN/m)	12.1	12.1	12.0	11.9	11.9	11.8	11.8	11.8	11.7
		Stiffeness, G', (10^3 N/mm)	6.7	6.9	7.0	7.2	7.3	7.5	7.6	7.7	7.8
	230	Strength, (kN/m)	14.5	14.5	14.4	14.4	14.3	14.3	14.2	14.2	14.2
		Stiffeness, G', (10^3 N/mm)	7.1	7.3	7.5	7.7	7.9	8.1	8.2	8.4	8.5
	150	Strength, (kN/m)	18.7	18.6	18.6	18.5	18.5	18.5	17.3	15.9	14.7
		Stiffeness, G', (10^3 N/mm)	7.8	8.0	8.3	8.5	8.7	8.9	9.1	9.3	9.5
610/6	900	Strength, (kN/m)	7.6	7.5	7.3	7.1	7.0	6.8	6.7	6.6	6.5
		Stiffeness, G', (10^3 N/mm)	5.7	5.8	5.9	5.9	5.9	6.0	6.0	6.0	6.1
	600	Strength, (kN/m)	9.6	9.4	9.2	9.1	8.9	8.8	8.7	8.5	8.4
		Stiffeness, G', (10^3 N/mm)	6.2	6.3	6.4	6.5	6.5	6.6	6.7	6.7	6.8
	300	Strength, (kN/m)	14.9	14.7	14.5	14.4	14.2	14.1	14.0	13.9	13.8
		Stiffeness, G', (10^3 N/mm)	7.1	7.2	7.4	7.6	7.7	7.9	8.0	8.1	8.2
	230	Strength, (kN/m)	17.5	17.3	17.2	17.0	16.9	16.8	16.7	15.9	14.7
		Stiffeness, G', (10^3 N/mm)	7.4	7.6	7.8	8.0	8.2	8.3	8.5	8.7	8.8
	150	Strength, (kN/m)	22.3	22.2	22.1	22.0	20.6	18.8	17.3	15.9	14.7
		Stiffeness, G', (10^3 N/mm)	7.9	8.2	8.4	8.7	8.9	9.1	9.3	9.5	9.7

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.21 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	900	Strength, (kN/m)	6.7	6.6	6.6	6.5	6.4	6.4	6.3	6.3	6.3
		Stiffeness, G', (10^3 N/mm)	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
	600	Strength, (kN/m)	9.3	9.2	9.1	9.0	9.0	8.9	8.9	8.8	8.8
		Stiffeness, G', (10^3 N/mm)	8.1	8.2	8.2	8.3	8.3	8.3	8.4	8.4	8.4
	300	Strength, (kN/m)	15.7	15.6	15.5	15.5	15.4	15.4	15.3	15.3	15.2
		Stiffeness, G', (10^3 N/mm)	10.7	10.9	11.0	11.1	11.3	11.4	11.5	11.6	11.7
	230	Strength, (kN/m)	18.8	18.8	18.7	18.7	18.6	18.6	18.5	18.5	18.5
		Stiffeness, G', (10^3 N/mm)	11.7	11.9	12.1	12.3	12.5	12.6	12.8	12.9	13.1
	150	Strength, (kN/m)	24.3	24.3	24.2	24.2	24.2	24.1	22.8	21.2	19.7
		Stiffeness, G', (10^3 N/mm)	13.3	13.6	13.9	14.1	14.4	14.6	14.8	15.0	15.2
610/6	900	Strength, (kN/m)	9.5	9.3	9.1	8.9	8.8	8.6	8.5	8.4	8.3
		Stiffeness, G', (10^3 N/mm)	8.5	8.5	8.5	8.4	8.4	8.4	8.4	8.3	8.3
	600	Strength, (kN/m)	12.1	11.8	11.7	11.5	11.3	11.2	11.0	10.9	10.8
		Stiffeness, G', (10^3 N/mm)	9.4	9.5	9.5	9.5	9.6	9.6	9.6	9.6	9.6
	300	Strength, (kN/m)	19.0	18.8	18.6	18.5	18.3	18.2	18.0	17.9	17.8
		Stiffeness, G', (10^3 N/mm)	11.5	11.6	11.8	11.9	12.0	12.1	12.2	12.3	12.4
	230	Strength, (kN/m)	22.4	22.3	22.1	21.9	21.8	21.7	21.6	21.2	19.7
		Stiffeness, G', (10^3 N/mm)	12.3	12.5	12.7	12.9	13.1	13.2	13.4	13.5	13.6
	150	Strength, (kN/m)	28.9	28.7	28.6	28.5	26.8	24.7	22.8	21.2	19.7
		Stiffeness, G', (10^3 N/mm)	13.7	14.0	14.3	14.5	14.7	15.0	15.2	15.4	15.6

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 38 mm Seam Weld **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	900	Strength, (kN/m)	8.1	8.0	7.9	7.8	7.8	7.7	7.7	7.6	7.6
		Stiffeness, G', (10^3 N/mm)	8.5	8.5	8.4	8.4	8.4	8.3	8.3	8.3	8.2
	600	Strength, (kN/m)	11.2	11.1	11.0	10.9	10.9	10.8	10.8	10.7	10.7
		Stiffeness, G', (10^3 N/mm)	10.3	10.3	10.4	10.4	10.4	10.4	10.4	10.4	10.4
	300	Strength, (kN/m)	19.0	19.0	18.9	18.8	18.8	18.7	18.7	18.6	18.6
		Stiffeness, G', (10^3 N/mm)	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.1
	230	Strength, (kN/m)	22.9	22.9	22.8	22.8	22.7	22.7	22.6	22.6	22.5
		Stiffeness, G', (10^3 N/mm)	16.2	16.3	16.5	16.6	16.8	16.9	17.0	17.1	17.2
	150	Strength, (kN/m)	29.7	29.7	29.6	29.6	29.6	29.5	27.4	25.5	23.9
		Stiffeness, G', (10^3 N/mm)	19.0	19.3	19.5	19.8	20.0	20.2	20.4	20.6	20.8
610/6	900	Strength, (kN/m)	11.2	11.0	10.8	10.6	10.4	10.3	10.1	10.0	9.9
		Stiffeness, G', (10^3 N/mm)	10.7	10.6	10.5	10.4	10.4	10.3	10.2	10.2	10.1
	600	Strength, (kN/m)	14.3	14.1	13.9	13.7	13.5	13.4	13.2	13.1	13.0
		Stiffeness, G', (10^3 N/mm)	12.2	12.1	12.1	12.1	12.1	12.0	12.0	12.0	11.9
	300	Strength, (kN/m)	22.8	22.6	22.4	22.3	22.1	21.9	21.8	21.7	21.5
		Stiffeness, G', (10^3 N/mm)	15.6	15.7	15.8	15.9	15.9	16.0	16.1	16.1	16.2
	230	Strength, (kN/m)	27.1	26.9	26.7	26.6	26.4	26.3	26.2	25.5	23.9
		Stiffeness, G', (10^3 N/mm)	17.1	17.3	17.4	17.6	17.7	17.8	17.9	18.0	18.1
	150	Strength, (kN/m)	35.1	35.0	34.8	34.4	31.8	29.5	27.4	25.5	23.9
		Stiffeness, G', (10^3 N/mm)	19.7	19.9	20.2	20.4	20.6	20.8	21.0	21.2	21.3

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.76 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	900	Strength, (kN/m)	3.5	3.4	3.3	3.2	3.2	3.1	3.0	3.0	2.9
		Stiffeness, G', (10^3 N/mm)	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.3
	600	Strength, (kN/m)	4.4	4.2	4.1	4.1	4.0	3.9	3.8	3.8	3.7
		Stiffeness, G', (10^3 N/mm)	3.5	3.5	3.6	3.6	3.6	3.7	3.7	3.7	3.7
	300	Strength, (kN/m)	6.8	6.7	6.6	6.5	6.4	6.3	6.3	6.2	6.1
		Stiffeness, G', (10^3 N/mm)	3.9	4.0	4.1	4.2	4.3	4.4	4.4	4.5	4.5
	230	Strength, (kN/m)	8.1	8.0	7.9	7.8	7.7	7.7	7.6	7.5	7.5
		Stiffeness, G', (10^3 N/mm)	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.8	4.9
	150	Strength, (kN/m)	10.7	10.6	10.5	10.4	10.4	10.3	10.3	10.2	10.2
		Stiffeness, G', (10^3 N/mm)	4.5	4.6	4.8	4.9	5.1	5.2	5.3	5.4	5.5
610/6	900	Strength, (kN/m)	5.8	5.5	5.3	5.1	5.0	4.8	4.7	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	3.9	4.0	4.1	4.1	4.1	4.2	4.2	4.2	4.2
	600	Strength, (kN/m)	6.6	6.4	6.1	5.9	5.8	5.6	5.5	5.3	5.2
		Stiffeness, G', (10^3 N/mm)	4.1	4.1	4.2	4.3	4.3	4.4	4.4	4.4	4.4
	300	Strength, (kN/m)	9.0	8.8	8.6	8.4	8.2	8.0	7.9	7.8	7.6
		Stiffeness, G', (10^3 N/mm)	4.3	4.5	4.6	4.7	4.7	4.8	4.9	5.0	5.0
	230	Strength, (kN/m)	10.5	10.3	10.0	9.9	9.7	9.5	9.4	9.2	9.1
		Stiffeness, G', (10^3 N/mm)	4.5	4.6	4.7	4.8	5.0	5.1	5.1	5.2	5.3
	150	Strength, (kN/m)	13.3	13.1	12.9	12.7	12.5	12.4	12.3	12.1	12.0
		Stiffeness, G', (10^3 N/mm)	4.7	4.9	5.0	5.2	5.3	5.4	5.6	5.7	5.8

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.91 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	900	Strength, (kN/m)	4.0	3.9	3.8	3.7	3.6	3.5	3.5	3.4	3.4
		Stiffeness, G', (10^3 N/mm)	4.2	4.2	4.2	4.2	4.1	4.1	4.1	4.1	4.0
	600	Strength, (kN/m)	5.0	4.8	4.7	4.7	4.6	4.5	4.4	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
	300	Strength, (kN/m)	7.9	7.8	7.7	7.6	7.5	7.4	7.4	7.3	7.2
		Stiffeness, G', (10^3 N/mm)	5.4	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.9
	230	Strength, (kN/m)	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.9	8.8
		Stiffeness, G', (10^3 N/mm)	5.8	5.9	6.0	6.1	6.2	6.3	6.3	6.4	6.5
	150	Strength, (kN/m)	12.6	12.5	12.4	12.3	12.3	12.2	12.1	12.1	12.0
		Stiffeness, G', (10^3 N/mm)	6.5	6.7	6.8	6.9	7.1	7.2	7.3	7.4	7.5
610/6	900	Strength, (kN/m)	6.4	6.1	5.9	5.7	5.6	5.4	5.3	5.1	5.0
		Stiffeness, G', (10^3 N/mm)	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.2
	600	Strength, (kN/m)	7.3	7.1	6.9	6.7	6.5	6.4	6.2	6.1	6.0
		Stiffeness, G', (10^3 N/mm)	5.6	5.6	5.6	5.6	5.6	5.7	5.7	5.6	5.6
	300	Strength, (kN/m)	10.2	10.0	9.8	9.6	9.4	9.3	9.1	9.0	8.9
		Stiffeness, G', (10^3 N/mm)	6.1	6.2	6.3	6.4	6.4	6.5	6.5	6.6	6.6
	230	Strength, (kN/m)	12.0	11.8	11.6	11.4	11.2	11.1	10.9	10.8	10.7
		Stiffeness, G', (10^3 N/mm)	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.0	7.1
	150	Strength, (kN/m)	15.4	15.2	15.0	14.8	14.7	14.5	14.4	14.3	14.1
		Stiffeness, G', (10^3 N/mm)	6.9	7.1	7.2	7.4	7.5	7.6	7.7	7.8	7.9

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.21 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	900	Strength, (kN/m)	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	5.6	5.6	5.5	5.4	5.4	5.3	5.2	5.2	5.1
	600	Strength, (kN/m)	6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.7	5.6
		Stiffeness, G', (10^3 N/mm)	6.3	6.3	6.2	6.2	6.1	6.1	6.0	6.0	6.0
	300	Strength, (kN/m)	10.2	10.1	9.9	9.9	9.8	9.7	9.6	9.5	9.5
		Stiffeness, G', (10^3 N/mm)	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.1	8.1
	230	Strength, (kN/m)	12.3	12.2	12.0	12.0	11.9	11.8	11.7	11.6	11.6
		Stiffeness, G', (10^3 N/mm)	8.8	8.8	8.9	8.9	9.0	9.0	9.0	9.1	9.1
	150	Strength, (kN/m)	16.5	16.4	16.3	16.2	16.1	16.0	16.0	15.9	15.9
		Stiffeness, G', (10^3 N/mm)	10.3	10.4	10.5	10.6	10.7	10.8	10.9	10.9	11.0
610/6	900	Strength, (kN/m)	7.8	7.5	7.3	7.1	6.9	6.7	6.6	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	7.5	7.5	7.4	7.3	7.2	7.1	7.1	7.0	6.9
	600	Strength, (kN/m)	9.1	8.8	8.6	8.4	8.2	8.0	7.9	7.7	7.6
		Stiffeness, G', (10^3 N/mm)	8.0	8.0	7.9	7.9	7.8	7.8	7.7	7.6	7.6
	300	Strength, (kN/m)	13.0	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.5
		Stiffeness, G', (10^3 N/mm)	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
	230	Strength, (kN/m)	15.3	15.1	14.9	14.7	14.5	14.3	14.1	14.0	13.8
		Stiffeness, G', (10^3 N/mm)	9.9	10.0	10.0	10.1	10.1	10.1	10.2	10.2	10.2
	150	Strength, (kN/m)	19.8	19.6	19.4	19.2	19.0	18.9	18.7	18.6	18.5
		Stiffeness, G', (10^3 N/mm)	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.52 mm**

Support connection: 19 mm Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	900	Strength, (kN/m)	5.9	5.8	5.7	5.6	5.5	5.4	5.3	5.3	5.2
		Stiffeness, G', (10^3 N/mm)	6.6	6.5	6.4	6.3	6.2	6.1	6.1	6.0	5.9
	600	Strength, (kN/m)	7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.9	6.8
		Stiffeness, G', (10^3 N/mm)	7.6	7.5	7.4	7.3	7.3	7.2	7.1	7.1	7.0
	300	Strength, (kN/m)	12.4	12.3	12.2	12.1	12.0	11.9	11.8	11.7	11.7
		Stiffeness, G', (10^3 N/mm)	10.0	10.0	10.0	10.0	9.9	9.9	9.9	9.8	9.8
	230	Strength, (kN/m)	15.0	14.9	14.7	14.6	14.6	14.5	14.4	14.3	14.2
		Stiffeness, G', (10^3 N/mm)	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
	150	Strength, (kN/m)	20.2	20.1	20.0	19.9	19.9	19.8	19.7	19.7	19.6
		Stiffeness, G', (10^3 N/mm)	13.6	13.7	13.8	13.8	13.9	13.9	14.0	14.0	14.1
610/6	900	Strength, (kN/m)	9.0	8.8	8.5	8.3	8.1	8.0	7.8	7.6	7.5
		Stiffeness, G', (10^3 N/mm)	9.2	9.0	8.9	8.7	8.6	8.5	8.3	8.2	8.1
	600	Strength, (kN/m)	10.6	10.4	10.2	9.9	9.8	9.6	9.4	9.2	9.1
		Stiffeness, G', (10^3 N/mm)	9.9	9.8	9.7	9.6	9.4	9.3	9.2	9.1	9.0
	300	Strength, (kN/m)	15.5	15.2	15.0	14.8	14.6	14.4	14.3	14.1	14.0
		Stiffeness, G', (10^3 N/mm)	11.9	11.9	11.8	11.8	11.7	11.6	11.6	11.5	11.5
	230	Strength, (kN/m)	18.5	18.2	18.0	17.8	17.6	17.4	17.2	17.1	16.9
		Stiffeness, G', (10^3 N/mm)	12.9	12.9	12.9	12.9	12.9	12.8	12.8	12.8	12.8
	150	Strength, (kN/m)	24.1	23.9	23.6	23.5	23.3	23.1	22.9	22.8	22.7
		Stiffeness, G', (10^3 N/mm)	14.9	15.0	15.0	15.1	15.1	15.2	15.2	15.2	15.3

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.76 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	900	Strength, (kN/m)	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2
		Stiffeness, G', (10^3 N/mm)	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6	2.5
	600	Strength, (kN/m)	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.5
		Stiffeness, G', (10^3 N/mm)	2.9	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6
	300	Strength, (kN/m)	2.7	2.6	2.5	2.5	2.4	2.4	2.4	2.3	2.3
		Stiffeness, G', (10^3 N/mm)	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.7
	230	Strength, (kN/m)	3.1	3.1	3.0	3.0	2.9	2.9	2.9	2.8	2.8
		Stiffeness, G', (10^3 N/mm)	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.8
	150	Strength, (kN/m)	4.2	4.1	4.0	4.0	4.0	3.9	3.9	3.8	3.8
		Stiffeness, G', (10^3 N/mm)	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	3.0
610/6	900	Strength, (kN/m)	2.7	2.5	2.4	2.3	2.2	2.2	2.1	2.0	2.0
		Stiffeness, G', (10^3 N/mm)	3.6	3.6	3.7	3.7	3.6	3.6	3.6	3.6	3.6
	600	Strength, (kN/m)	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.2
		Stiffeness, G', (10^3 N/mm)	3.6	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6
	300	Strength, (kN/m)	3.7	3.6	3.5	3.4	3.3	3.2	3.2	3.1	3.0
		Stiffeness, G', (10^3 N/mm)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	230	Strength, (kN/m)	4.2	4.1	4.0	3.9	3.8	3.7	3.7	3.6	3.5
		Stiffeness, G', (10^3 N/mm)	3.7	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	150	Strength, (kN/m)	5.4	5.2	5.1	5.0	4.9	4.9	4.8	4.7	4.7
		Stiffeness, G', (10^3 N/mm)	3.8	3.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9

76 mm deck - 610 mm wide - 203 mm flute spacing | **Thickness = 0.91 mm**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	900	Strength, (kN/m)	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.5	1.5
		Stiffeness, G', (10^3 N/mm)	3.4	3.4	3.3	3.2	3.1	3.1	3.0	3.0	2.9
	600	Strength, (kN/m)	2.2	2.2	2.1	2.1	2.0	2.0	2.0	1.9	1.9
		Stiffeness, G', (10^3 N/mm)	3.5	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0
	300	Strength, (kN/m)	3.4	3.3	3.3	3.2	3.2	3.2	3.1	3.1	3.1
		Stiffeness, G', (10^3 N/mm)	3.6	3.6	3.5	3.5	3.4	3.3	3.3	3.2	3.2
	230	Strength, (kN/m)	4.1	4.0	4.0	3.9	3.9	3.9	3.8	3.8	3.8
		Stiffeness, G', (10^3 N/mm)	3.7	3.7	3.6	3.6	3.5	3.5	3.4	3.4	3.3
	150	Strength, (kN/m)	5.4	5.4	5.3	5.3	5.3	5.2	5.2	5.2	5.1
		Stiffeness, G', (10^3 N/mm)	3.9	3.9	3.8	3.8	3.7	3.7	3.7	3.6	3.6
610/6	900	Strength, (kN/m)	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3
		Stiffeness, G', (10^3 N/mm)	4.7	4.7	4.6	4.6	4.5	4.4	4.4	4.3	4.3
	600	Strength, (kN/m)	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	4.7	4.7	4.7	4.6	4.5	4.5	4.4	4.4	4.3
	300	Strength, (kN/m)	4.6	4.4	4.3	4.2	4.2	4.1	4.0	3.9	3.9
		Stiffeness, G', (10^3 N/mm)	4.8	4.8	4.8	4.7	4.7	4.6	4.6	4.5	4.5
	230	Strength, (kN/m)	5.3	5.1	5.0	4.9	4.9	4.8	4.7	4.6	4.6
		Stiffeness, G', (10^3 N/mm)	4.9	4.9	4.8	4.8	4.8	4.7	4.7	4.6	4.6
	150	Strength, (kN/m)	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.2	6.1
		Stiffeness, G', (10^3 N/mm)	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.8	4.8

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.21 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	900	Strength, (kN/m)	2.5	2.5	2.4	2.4	2.4	2.3	2.3	2.2	2.2
		Stiffeness, G', (10^3 N/mm)	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.5	3.4
	600	Strength, (kN/m)	3.2	3.2	3.1	3.1	3.0	3.0	3.0	2.9	2.9
		Stiffeness, G', (10^3 N/mm)	4.4	4.2	4.1	4.0	3.9	3.8	3.7	3.6	3.5
	300	Strength, (kN/m)	5.3	5.3	5.2	5.2	5.1	5.1	5.0	5.0	5.0
		Stiffeness, G', (10^3 N/mm)	4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.8
	230	Strength, (kN/m)	6.4	6.3	6.3	6.2	6.2	6.1	6.1	6.1	6.0
		Stiffeness, G', (10^3 N/mm)	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0
	150	Strength, (kN/m)	8.6	8.5	8.5	8.4	8.4	8.4	8.3	8.3	8.3
		Stiffeness, G', (10^3 N/mm)	5.1	5.0	4.9	4.8	4.7	4.7	4.6	4.5	4.4
610/6	900	Strength, (kN/m)	4.0	3.8	3.7	3.6	3.5	3.4	3.4	3.3	3.2
		Stiffeness, G', (10^3 N/mm)	6.3	6.2	6.1	5.9	5.8	5.7	5.5	5.4	5.3
	600	Strength, (kN/m)	4.6	4.5	4.4	4.3	4.2	4.1	4.0	4.0	3.9
		Stiffeness, G', (10^3 N/mm)	6.4	6.3	6.1	6.0	5.9	5.8	5.6	5.5	5.4
	300	Strength, (kN/m)	6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0	6.0
		Stiffeness, G', (10^3 N/mm)	6.6	6.5	6.3	6.2	6.1	6.0	5.9	5.8	5.6
	230	Strength, (kN/m)	8.0	7.8	7.7	7.6	7.5	7.5	7.4	7.3	7.2
		Stiffeness, G', (10^3 N/mm)	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.9	5.8
	150	Strength, (kN/m)	10.3	10.2	10.1	10.0	9.9	9.8	9.7	9.7	9.6
		Stiffeness, G', (10^3 N/mm)	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.52 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	900	Strength, (kN/m)	3.4	3.3	3.3	3.2	3.2	3.1	3.1	3.1	3.0
		Stiffeness, G', (10^3 N/mm)	4.8	4.6	4.5	4.3	4.2	4.1	4.0	3.9	3.8
	600	Strength, (kN/m)	4.4	4.4	4.3	4.3	4.3	4.2	4.2	4.2	4.1
		Stiffeness, G', (10^3 N/mm)	4.9	4.7	4.6	4.5	4.3	4.2	4.1	4.0	3.9
	300	Strength, (kN/m)	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.2	7.2
		Stiffeness, G', (10^3 N/mm)	5.2	5.1	4.9	4.8	4.7	4.6	4.5	4.4	4.3
	230	Strength, (kN/m)	9.1	9.1	9.0	9.0	8.9	8.9	8.9	8.8	8.8
		Stiffeness, G', (10^3 N/mm)	5.4	5.3	5.2	5.0	4.9	4.8	4.7	4.6	4.5
	150	Strength, (kN/m)	12.2	12.2	12.1	12.1	12.1	12.0	12.0	12.0	11.9
		Stiffeness, G', (10^3 N/mm)	5.9	5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.0
610/6	900	Strength, (kN/m)	5.0	4.8	4.7	4.6	4.5	4.4	4.4	4.3	4.2
		Stiffeness, G', (10^3 N/mm)	7.4	7.2	7.0	6.8	6.6	6.5	6.3	6.1	6.0
	600	Strength, (kN/m)	6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.4	5.3
		Stiffeness, G', (10^3 N/mm)	7.5	7.3	7.1	6.9	6.7	6.6	6.4	6.3	6.1
	300	Strength, (kN/m)	9.3	9.1	9.0	8.9	8.8	8.8	8.7	8.6	8.5
		Stiffeness, G', (10^3 N/mm)	7.7	7.6	7.4	7.2	7.0	6.9	6.7	6.6	6.4
	230	Strength, (kN/m)	11.0	10.9	10.8	10.7	10.6	10.5	10.4	10.3	10.3
		Stiffeness, G', (10^3 N/mm)	7.9	7.7	7.5	7.4	7.2	7.1	6.9	6.8	6.6
	150	Strength, (kN/m)	14.4	14.3	14.2	14.1	14.0	13.9	13.9	13.8	13.7
		Stiffeness, G', (10^3 N/mm)	8.3	8.1	7.9	7.8	7.6	7.5	7.3	7.2	7.1

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.76 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	900	Strength, (kN/m)	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0
		Stiffeness, G', (10^3 N/mm)	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
	600	Strength, (kN/m)	3.1	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9
		Stiffeness, G', (10^3 N/mm)	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.6	3.6
	300	Strength, (kN/m)	5.1	5.1	5.0	5.0	5.0	4.9	4.9	4.9	4.9
		Stiffeness, G', (10^3 N/mm)	3.9	4.0	4.1	4.1	4.2	4.3	4.3	4.4	4.4
	230	Strength, (kN/m)	6.1	6.0	6.0	6.0	6.0	5.9	5.9	5.9	5.9
		Stiffeness, G', (10^3 N/mm)	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.8
	150	Strength, (kN/m)	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.6	7.6
		Stiffeness, G', (10^3 N/mm)	4.4	4.6	4.7	4.9	5.0	5.1	5.2	5.4	5.5
610/6	900	Strength, (kN/m)	3.3	3.2	3.2	3.1	3.0	2.9	2.9	2.8	2.8
		Stiffeness, G', (10^3 N/mm)	3.8	3.8	3.9	3.9	4.0	4.0	4.0	4.0	4.0
	600	Strength, (kN/m)	4.2	4.1	4.0	3.9	3.8	3.7	3.7	3.6	3.6
		Stiffeness, G', (10^3 N/mm)	3.9	4.0	4.1	4.1	4.2	4.2	4.2	4.3	4.3
	300	Strength, (kN/m)	6.3	6.2	6.2	6.1	6.0	6.0	5.9	5.8	5.8
		Stiffeness, G', (10^3 N/mm)	4.2	4.4	4.5	4.6	4.6	4.7	4.8	4.9	4.9
	230	Strength, (kN/m)	7.4	7.3	7.2	7.2	7.1	7.0	7.0	6.9	6.9
		Stiffeness, G', (10^3 N/mm)	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.1	5.2
	150	Strength, (kN/m)	9.3	9.3	9.2	9.2	9.1	9.1	9.0	9.0	9.0
		Stiffeness, G', (10^3 N/mm)	4.7	4.8	5.0	5.1	5.2	5.4	5.5	5.6	5.7

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.91 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	900	Strength, (kN/m)	2.6	2.6	2.5	2.5	2.5	2.5	2.4	2.4	2.4
		Stiffeness, G', (10^3 N/mm)	4.0	4.0	4.0	3.9	3.9	3.9	3.9	3.8	3.8
	600	Strength, (kN/m)	3.6	3.6	3.5	3.5	3.5	3.4	3.4	3.4	3.4
		Stiffeness, G', (10^3 N/mm)	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	300	Strength, (kN/m)	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.8	5.8
		Stiffeness, G', (10^3 N/mm)	5.3	5.4	5.4	5.5	5.6	5.6	5.6	5.7	5.7
	230	Strength, (kN/m)	7.2	7.2	7.2	7.1	7.1	7.1	7.1	7.1	7.0
		Stiffeness, G', (10^3 N/mm)	5.7	5.8	5.9	6.0	6.1	6.2	6.2	6.3	6.3
	150	Strength, (kN/m)	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.1	9.1
		Stiffeness, G', (10^3 N/mm)	6.4	6.6	6.7	6.9	7.0	7.1	7.2	7.3	7.4
610/6	900	Strength, (kN/m)	3.8	3.7	3.6	3.5	3.4	3.4	3.3	3.3	3.2
		Stiffeness, G', (10^3 N/mm)	5.1	5.1	5.1	5.1	5.0	5.0	5.0	5.0	4.9
	600	Strength, (kN/m)	4.8	4.7	4.6	4.5	4.4	4.4	4.3	4.2	4.2
		Stiffeness, G', (10^3 N/mm)	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
	300	Strength, (kN/m)	7.4	7.3	7.2	7.1	7.1	7.0	7.0	6.9	6.9
		Stiffeness, G', (10^3 N/mm)	6.0	6.1	6.1	6.2	6.3	6.3	6.4	6.4	6.4
	230	Strength, (kN/m)	8.7	8.6	8.5	8.5	8.4	8.3	8.3	8.2	8.2
		Stiffeness, G', (10^3 N/mm)	6.3	6.4	6.5	6.6	6.7	6.7	6.8	6.9	6.9
	150	Strength, (kN/m)	11.1	11.0	11.0	10.9	10.9	10.8	10.8	10.7	10.7
		Stiffeness, G', (10^3 N/mm)	6.8	7.0	7.1	7.3	7.4	7.5	7.6	7.7	7.8

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.21 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	900	Strength, (kN/m)	3.4	3.4	3.3	3.3	3.3	3.2	3.2	3.2	3.2
		Stiffeness, G', (10^3 N/mm)	5.3	5.2	5.2	5.1	5.0	5.0	4.9	4.9	4.8
	600	Strength, (kN/m)	4.7	4.7	4.6	4.6	4.6	4.5	4.5	4.5	4.5
		Stiffeness, G', (10^3 N/mm)	6.0	6.0	5.9	5.9	5.8	5.8	5.8	5.7	5.7
	300	Strength, (kN/m)	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7
		Stiffeness, G', (10^3 N/mm)	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
	230	Strength, (kN/m)	9.5	9.5	9.5	9.5	9.4	9.4	9.4	9.4	9.4
		Stiffeness, G', (10^3 N/mm)	8.6	8.6	8.7	8.7	8.8	8.8	8.9	8.9	8.9
	150	Strength, (kN/m)	12.3	12.3	12.2	12.2	12.2	12.2	12.2	12.2	12.2
		Stiffeness, G', (10^3 N/mm)	10.1	10.2	10.3	10.5	10.6	10.6	10.7	10.8	10.9
610/6	900	Strength, (kN/m)	4.8	4.7	4.6	4.5	4.4	4.4	4.3	4.2	4.2
		Stiffeness, G', (10^3 N/mm)	7.1	7.0	6.9	6.8	6.8	6.7	6.6	6.5	6.4
	600	Strength, (kN/m)	6.1	6.0	5.9	5.8	5.7	5.7	5.6	5.5	5.5
		Stiffeness, G', (10^3 N/mm)	7.6	7.6	7.5	7.5	7.4	7.3	7.3	7.2	7.2
	300	Strength, (kN/m)	9.6	9.5	9.4	9.3	9.3	9.2	9.1	9.1	9.0
		Stiffeness, G', (10^3 N/mm)	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	230	Strength, (kN/m)	11.4	11.3	11.2	11.1	11.0	11.0	10.9	10.9	10.8
		Stiffeness, G', (10^3 N/mm)	9.6	9.7	9.8	9.8	9.8	9.9	9.9	9.9	9.9
	150	Strength, (kN/m)	14.6	14.5	14.5	14.4	14.4	14.3	14.3	14.2	14.2
		Stiffeness, G', (10^3 N/mm)	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.6

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.52 mm**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	900	Strength, (kN/m)	4.2	4.1	4.1	4.0	4.0	4.0	4.0	3.9	3.9
		Stiffeness, G', (10^3 N/mm)	6.2	6.1	6.0	5.9	5.8	5.8	5.7	5.6	5.5
	600	Strength, (kN/m)	5.8	5.7	5.7	5.7	5.6	5.6	5.6	5.6	5.5
		Stiffeness, G', (10^3 N/mm)	7.2	7.1	7.0	7.0	6.9	6.8	6.8	6.7	6.7
	300	Strength, (kN/m)	9.8	9.8	9.8	9.7	9.7	9.7	9.7	9.6	9.6
		Stiffeness, G', (10^3 N/mm)	9.7	9.7	9.7	9.6	9.6	9.6	9.6	9.6	9.5
	230	Strength, (kN/m)	11.9	11.8	11.8	11.8	11.7	11.7	11.7	11.7	11.7
		Stiffeness, G', (10^3 N/mm)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
	150	Strength, (kN/m)	15.3	15.3	15.3	15.2	15.2	15.2	15.2	15.2	15.2
		Stiffeness, G', (10^3 N/mm)	13.4	13.5	13.6	13.6	13.7	13.7	13.8	13.8	13.9
610/6	900	Strength, (kN/m)	5.7	5.6	5.5	5.4	5.4	5.3	5.2	5.1	5.1
		Stiffeness, G', (10^3 N/mm)	8.5	8.4	8.2	8.1	8.0	7.9	7.8	7.6	7.5
	600	Strength, (kN/m)	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.8	6.7
		Stiffeness, G', (10^3 N/mm)	9.3	9.2	9.1	9.0	8.9	8.8	8.7	8.6	8.5
	300	Strength, (kN/m)	11.8	11.7	11.6	11.5	11.4	11.3	11.3	11.2	11.1
		Stiffeness, G', (10^3 N/mm)	11.4	11.4	11.3	11.3	11.2	11.2	11.1	11.1	11.1
	230	Strength, (kN/m)	14.0	13.9	13.8	13.7	13.7	13.6	13.5	13.5	13.4
		Stiffeness, G', (10^3 N/mm)	12.5	12.5	12.5	12.5	12.5	12.5	12.4	12.4	12.4
	150	Strength, (kN/m)	18.1	18.0	18.0	17.9	17.8	17.8	17.7	17.7	17.7
		Stiffeness, G', (10^3 N/mm)	14.6	14.7	14.7	14.8	14.8	14.9	14.9	14.9	15.0

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.76 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	900	Strength, (kN/m)	2.1	2.0	2.0	1.9	1.8	1.8	1.7	1.6	1.6
		Stiffeness, G', (10^3 N/mm)	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.6	2.6
	600	Strength, (kN/m)	2.4	2.3	2.2	2.2	2.1	2.0	2.0	1.9	1.9
		Stiffeness, G', (10^3 N/mm)	2.9	2.9	2.9	2.8	2.8	2.8	2.7	2.7	2.7
	300	Strength, (kN/m)	3.2	3.1	3.0	3.0	2.9	2.8	2.8	2.7	2.7
		Stiffeness, G', (10^3 N/mm)	3.0	3.0	3.0	3.0	2.9	2.9	2.9	2.8	2.8
	230	Strength, (kN/m)	3.7	3.6	3.5	3.5	3.4	3.3	3.3	3.2	3.2
		Stiffeness, G', (10^3 N/mm)	3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9
	150	Strength, (kN/m)	4.8	4.7	4.7	4.6	4.5	4.4	4.4	4.3	4.3
		Stiffeness, G', (10^3 N/mm)	3.1	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1
610/6	900	Strength, (kN/m)	3.7	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.7
		Stiffeness, G', (10^3 N/mm)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.6
	600	Strength, (kN/m)	4.0	3.8	3.6	3.5	3.4	3.2	3.1	3.0	2.9
		Stiffeness, G', (10^3 N/mm)	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	300	Strength, (kN/m)	4.8	4.6	4.4	4.3	4.2	4.0	3.9	3.8	3.7
		Stiffeness, G', (10^3 N/mm)	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	230	Strength, (kN/m)	5.3	5.1	4.9	4.8	4.7	4.5	4.4	4.3	4.2
		Stiffeness, G', (10^3 N/mm)	3.8	3.8	3.8	3.8	3.9	3.9	3.9	3.8	3.8
	150	Strength, (kN/m)	6.4	6.2	6.1	5.9	5.8	5.7	5.5	5.4	5.4
		Stiffeness, G', (10^3 N/mm)	3.8	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.0

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.91 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	900	Strength, (kN/m)	2.4	2.3	2.3	2.2	2.1	2.1	2.0	2.0	1.9
		Stiffeness, G', (10^3 N/mm)	3.5	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.0
	600	Strength, (kN/m)	2.8	2.7	2.6	2.6	2.5	2.5	2.4	2.3	2.3
		Stiffeness, G', (10^3 N/mm)	3.6	3.5	3.4	3.4	3.3	3.2	3.2	3.1	3.0
	300	Strength, (kN/m)	4.0	3.9	3.8	3.7	3.7	3.6	3.6	3.5	3.5
		Stiffeness, G', (10^3 N/mm)	3.7	3.6	3.6	3.5	3.5	3.4	3.4	3.3	3.3
	230	Strength, (kN/m)	4.7	4.6	4.5	4.4	4.4	4.3	4.3	4.2	4.2
		Stiffeness, G', (10^3 N/mm)	3.8	3.7	3.7	3.6	3.6	3.5	3.5	3.4	3.4
	150	Strength, (kN/m)	6.3	6.2	6.1	6.0	6.0	5.9	5.8	5.8	5.7
		Stiffeness, G', (10^3 N/mm)	4.0	3.9	3.9	3.9	3.8	3.8	3.7	3.7	3.7
610/6	900	Strength, (kN/m)	4.1	3.9	3.8	3.6	3.5	3.4	3.3	3.2	3.1
		Stiffeness, G', (10^3 N/mm)	4.8	4.8	4.7	4.7	4.6	4.5	4.5	4.4	4.4
	600	Strength, (kN/m)	4.5	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.5
		Stiffeness, G', (10^3 N/mm)	4.8	4.8	4.7	4.7	4.7	4.6	4.5	4.5	4.4
	300	Strength, (kN/m)	5.7	5.5	5.3	5.2	5.1	4.9	4.8	4.7	4.6
		Stiffeness, G', (10^3 N/mm)	4.9	4.9	4.9	4.8	4.8	4.7	4.7	4.6	4.6
	230	Strength, (kN/m)	6.4	6.2	6.0	5.9	5.8	5.6	5.5	5.4	5.3
		Stiffeness, G', (10^3 N/mm)	5.0	5.0	4.9	4.9	4.9	4.8	4.8	4.7	4.7
	150	Strength, (kN/m)	8.0	7.8	7.7	7.5	7.4	7.3	7.2	7.1	7.0
		Stiffeness, G', (10^3 N/mm)	5.1	5.1	5.1	5.0	5.0	5.0	4.9	4.9	4.9

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.21 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	900	Strength, (kN/m)	3.2	3.1	3.1	3.0	2.9	2.9	2.8	2.7	2.7
		Stiffeness, G', (10^3 N/mm)	4.4	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.5
	600	Strength, (kN/m)	3.9	3.8	3.7	3.7	3.6	3.5	3.5	3.4	3.4
		Stiffeness, G', (10^3 N/mm)	4.5	4.4	4.3	4.1	4.0	3.9	3.8	3.7	3.6
	300	Strength, (kN/m)	6.0	5.9	5.8	5.7	5.7	5.6	5.6	5.5	5.5
		Stiffeness, G', (10^3 N/mm)	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0	4.0
	230	Strength, (kN/m)	7.2	7.2	7.1	7.0	6.9	6.9	6.8	6.8	6.7
		Stiffeness, G', (10^3 N/mm)	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1
	150	Strength, (kN/m)	9.7	9.6	9.6	9.5	9.4	9.4	9.3	9.3	9.2
		Stiffeness, G', (10^3 N/mm)	5.2	5.1	5.0	4.9	4.8	4.8	4.7	4.6	4.5
610/6	900	Strength, (kN/m)	5.2	5.0	4.9	4.7	4.6	4.5	4.3	4.2	4.1
		Stiffeness, G', (10^3 N/mm)	6.5	6.4	6.2	6.1	6.0	5.8	5.7	5.6	5.5
	600	Strength, (kN/m)	5.9	5.7	5.6	5.4	5.3	5.1	5.0	4.9	4.8
		Stiffeness, G', (10^3 N/mm)	6.6	6.4	6.3	6.2	6.0	5.9	5.8	5.7	5.6
	300	Strength, (kN/m)	8.0	7.8	7.6	7.5	7.3	7.2	7.1	7.0	6.9
		Stiffeness, G', (10^3 N/mm)	6.7	6.6	6.5	6.4	6.3	6.1	6.0	5.9	5.8
	230	Strength, (kN/m)	9.2	9.1	8.9	8.7	8.6	8.5	8.4	8.2	8.1
		Stiffeness, G', (10^3 N/mm)	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1	5.9
	150	Strength, (kN/m)	12.0	11.8	11.7	11.5	11.4	11.3	11.1	11.0	10.9
		Stiffeness, G', (10^3 N/mm)	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.3

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.52 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	900	Strength, (kN/m)	4.1	4.0	3.9	3.9	3.8	3.7	3.7	3.6	3.6
		Stiffeness, G', (10^3 N/mm)	4.9	4.8	4.6	4.5	4.4	4.2	4.1	4.0	3.9
	600	Strength, (kN/m)	5.2	5.1	5.0	4.9	4.9	4.8	4.8	4.7	4.7
		Stiffeness, G', (10^3 N/mm)	5.0	4.9	4.7	4.6	4.5	4.4	4.2	4.1	4.0
	300	Strength, (kN/m)	8.4	8.3	8.2	8.2	8.1	8.0	8.0	7.9	7.9
		Stiffeness, G', (10^3 N/mm)	5.4	5.2	5.1	5.0	4.8	4.7	4.6	4.5	4.4
	230	Strength, (kN/m)	10.2	10.1	10.0	10.0	9.9	9.8	9.8	9.7	9.7
		Stiffeness, G', (10^3 N/mm)	5.6	5.4	5.3	5.2	5.1	4.9	4.8	4.7	4.6
	150	Strength, (kN/m)	13.8	13.7	13.6	13.6	13.5	13.5	13.4	13.4	13.3
		Stiffeness, G', (10^3 N/mm)	6.0	5.9	5.8	5.6	5.5	5.4	5.3	5.2	5.1
610/6	900	Strength, (kN/m)	6.3	6.2	6.0	5.8	5.7	5.6	5.4	5.3	5.2
		Stiffeness, G', (10^3 N/mm)	7.6	7.4	7.2	7.0	6.8	6.7	6.5	6.3	6.2
	600	Strength, (kN/m)	7.4	7.2	7.1	6.9	6.8	6.6	6.5	6.4	6.3
		Stiffeness, G', (10^3 N/mm)	7.7	7.5	7.3	7.1	6.9	6.8	6.6	6.5	6.3
	300	Strength, (kN/m)	10.7	10.5	10.3	10.1	10.0	9.9	9.8	9.6	9.5
		Stiffeness, G', (10^3 N/mm)	7.9	7.8	7.6	7.4	7.2	7.1	6.9	6.8	6.6
	230	Strength, (kN/m)	12.6	12.4	12.3	12.1	12.0	11.8	11.7	11.6	11.5
		Stiffeness, G', (10^3 N/mm)	8.1	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8
	150	Strength, (kN/m)	16.5	16.3	16.2	16.0	15.9	15.8	15.7	15.6	15.5
		Stiffeness, G', (10^3 N/mm)	8.5	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.3

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.76 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	900	Strength, (kN/m)	2.8	2.7	2.7	2.6	2.6	2.5	2.5	2.4	2.4
		Stiffeness, G', (10^3 N/mm)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
	600	Strength, (kN/m)	3.6	3.5	3.5	3.4	3.4	3.3	3.3	3.3	3.2
		Stiffeness, G', (10^3 N/mm)	3.4	3.4	3.5	3.5	3.5	3.6	3.6	3.6	3.6
	300	Strength, (kN/m)	5.9	5.8	5.8	5.7	5.7	5.6	5.6	5.5	5.5
		Stiffeness, G', (10^3 N/mm)	3.9	4.0	4.1	4.2	4.2	4.3	4.4	4.4	4.5
	230	Strength, (kN/m)	7.1	7.0	6.9	6.9	6.8	6.8	6.8	6.7	6.7
		Stiffeness, G', (10^3 N/mm)	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9
	150	Strength, (kN/m)	9.3	9.2	9.2	9.1	9.1	9.1	9.0	9.0	9.0
		Stiffeness, G', (10^3 N/mm)	4.5	4.6	4.8	4.9	5.0	5.1	5.3	5.4	5.5
610/6	900	Strength, (kN/m)	4.4	4.2	4.1	4.0	3.8	3.7	3.6	3.6	3.5
		Stiffeness, G', (10^3 N/mm)	3.8	3.9	3.9	4.0	4.0	4.0	4.0	4.1	4.1
	600	Strength, (kN/m)	5.2	5.0	4.9	4.8	4.7	4.5	4.5	4.4	4.3
		Stiffeness, G', (10^3 N/mm)	4.0	4.0	4.1	4.2	4.2	4.2	4.3	4.3	4.3
	300	Strength, (kN/m)	7.6	7.5	7.3	7.2	7.1	7.0	6.9	6.8	6.7
		Stiffeness, G', (10^3 N/mm)	4.3	4.4	4.5	4.6	4.7	4.8	4.8	4.9	5.0
	230	Strength, (kN/m)	8.9	8.7	8.6	8.5	8.3	8.2	8.1	8.1	8.0
		Stiffeness, G', (10^3 N/mm)	4.4	4.6	4.7	4.8	4.9	5.0	5.1	5.2	5.2
	150	Strength, (kN/m)	11.2	11.1	11.0	10.9	10.8	10.7	10.6	10.6	10.5
		Stiffeness, G', (10^3 N/mm)	4.7	4.8	5.0	5.1	5.3	5.4	5.5	5.6	5.7

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 0.91 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	900	Strength, (kN/m)	3.2	3.1	3.1	3.0	3.0	2.9	2.9	2.8	2.8
		Stiffeness, G', (10^3 N/mm)	4.1	4.0	4.0	4.0	4.0	4.0	3.9	3.9	3.9
	600	Strength, (kN/m)	4.2	4.1	4.0	4.0	3.9	3.9	3.9	3.8	3.8
		Stiffeness, G', (10^3 N/mm)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4
	300	Strength, (kN/m)	6.9	6.9	6.8	6.7	6.7	6.6	6.6	6.6	6.5
		Stiffeness, G', (10^3 N/mm)	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.7	5.8
	230	Strength, (kN/m)	8.3	8.2	8.2	8.1	8.1	8.1	8.0	8.0	7.9
		Stiffeness, G', (10^3 N/mm)	5.8	5.9	6.0	6.0	6.1	6.2	6.3	6.3	6.4
	150	Strength, (kN/m)	11.0	10.9	10.9	10.9	10.8	10.8	10.8	10.7	10.7
		Stiffeness, G', (10^3 N/mm)	6.5	6.6	6.8	6.9	7.0	7.1	7.2	7.3	7.4
610/6	900	Strength, (kN/m)	4.9	4.7	4.6	4.5	4.4	4.2	4.2	4.1	4.0
		Stiffeness, G', (10^3 N/mm)	5.1	5.2	5.2	5.1	5.1	5.1	5.1	5.1	5.0
	600	Strength, (kN/m)	5.9	5.7	5.6	5.4	5.3	5.2	5.1	5.0	5.0
		Stiffeness, G', (10^3 N/mm)	5.4	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5
	300	Strength, (kN/m)	8.8	8.6	8.5	8.4	8.2	8.1	8.0	7.9	7.9
		Stiffeness, G', (10^3 N/mm)	6.0	6.1	6.2	6.3	6.3	6.4	6.4	6.5	6.5
	230	Strength, (kN/m)	10.3	10.1	10.0	9.9	9.8	9.7	9.6	9.5	9.4
		Stiffeness, G', (10^3 N/mm)	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.9	7.0
	150	Strength, (kN/m)	13.2	13.0	12.9	12.8	12.7	12.7	12.6	12.5	12.4
		Stiffeness, G', (10^3 N/mm)	6.8	7.0	7.2	7.3	7.4	7.5	7.7	7.8	7.9

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.21 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	900	Strength, (kN/m)	4.1	4.0	3.9	3.9	3.8	3.8	3.7	3.7	3.6
		Stiffeness, G', (10^3 N/mm)	5.4	5.3	5.3	5.2	5.1	5.1	5.0	5.0	4.9
	600	Strength, (kN/m)	5.4	5.3	5.2	5.2	5.1	5.1	5.0	5.0	4.9
		Stiffeness, G', (10^3 N/mm)	6.1	6.1	6.0	6.0	5.9	5.9	5.8	5.8	5.8
	300	Strength, (kN/m)	9.0	8.9	8.9	8.8	8.8	8.7	8.7	8.6	8.6
		Stiffeness, G', (10^3 N/mm)	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9
	230	Strength, (kN/m)	10.9	10.8	10.8	10.7	10.6	10.6	10.6	10.5	10.5
		Stiffeness, G', (10^3 N/mm)	8.6	8.7	8.8	8.8	8.8	8.9	8.9	8.9	9.0
	150	Strength, (kN/m)	14.5	14.4	14.4	14.3	14.3	14.2	14.2	14.2	14.1
		Stiffeness, G', (10^3 N/mm)	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	10.9
610/6	900	Strength, (kN/m)	6.1	5.9	5.8	5.6	5.5	5.4	5.3	5.2	5.1
		Stiffeness, G', (10^3 N/mm)	7.2	7.2	7.1	7.0	6.9	6.8	6.7	6.7	6.6
	600	Strength, (kN/m)	7.4	7.2	7.0	6.9	6.8	6.7	6.6	6.5	6.4
		Stiffeness, G', (10^3 N/mm)	7.8	7.7	7.6	7.6	7.5	7.5	7.4	7.4	7.3
	300	Strength, (kN/m)	11.3	11.1	10.9	10.8	10.7	10.6	10.4	10.4	10.3
		Stiffeness, G', (10^3 N/mm)	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
	230	Strength, (kN/m)	13.2	13.1	12.9	12.8	12.7	12.6	12.5	12.4	12.3
		Stiffeness, G', (10^3 N/mm)	9.7	9.8	9.8	9.9	9.9	9.9	10.0	10.0	10.0
	150	Strength, (kN/m)	17.2	17.0	16.9	16.8	16.7	16.6	16.5	16.4	16.3
		Stiffeness, G', (10^3 N/mm)	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.6	11.7

76 mm deck - 610 mm wide - 203 mm flute spacing **Thickness = 1.52 mm**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – METRIC

Support Connection Pattern	Side Lap Spacing (mm)		Span (mm)								
			3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	900	Strength, (kN/m)	4.9	4.8	4.8	4.7	4.6	4.6	4.5	4.5	4.4
		Stiffeness, G', (10^3 N/mm)	6.3	6.2	6.1	6.0	6.0	5.9	5.8	5.7	5.7
	600	Strength, (kN/m)	6.5	6.4	6.4	6.3	6.3	6.2	6.2	6.1	6.1
		Stiffeness, G', (10^3 N/mm)	7.3	7.2	7.1	7.1	7.0	6.9	6.9	6.8	6.8
	300	Strength, (kN/m)	11.0	11.0	10.9	10.8	10.8	10.7	10.7	10.6	10.6
		Stiffeness, G', (10^3 N/mm)	9.8	9.8	9.8	9.7	9.7	9.7	9.7	9.7	9.6
	230	Strength, (kN/m)	13.4	13.3	13.3	13.2	13.1	13.1	13.1	13.0	13.0
		Stiffeness, G', (10^3 N/mm)	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
	150	Strength, (kN/m)	17.9	17.8	17.8	17.7	17.7	17.6	17.6	17.6	17.5
		Stiffeness, G', (10^3 N/mm)	13.5	13.6	13.6	13.7	13.8	13.8	13.9	13.9	14.0
610/6	900	Strength, (kN/m)	7.1	7.0	6.8	6.7	6.5	6.4	6.3	6.2	6.1
		Stiffeness, G', (10^3 N/mm)	8.7	8.6	8.4	8.3	8.2	8.1	7.9	7.8	7.7
	600	Strength, (kN/m)	8.7	8.6	8.4	8.3	8.2	8.0	7.9	7.8	7.7
		Stiffeness, G', (10^3 N/mm)	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.8	8.7
	300	Strength, (kN/m)	13.6	13.4	13.3	13.1	13.0	12.9	12.8	12.7	12.6
		Stiffeness, G', (10^3 N/mm)	11.6	11.5	11.5	11.4	11.4	11.3	11.3	11.2	11.2
	230	Strength, (kN/m)	16.1	15.9	15.8	15.6	15.5	15.4	15.3	15.2	15.1
		Stiffeness, G', (10^3 N/mm)	12.7	12.6	12.6	12.6	12.6	12.6	12.6	12.5	12.5
	150	Strength, (kN/m)	21.0	20.9	20.8	20.6	20.5	20.4	20.3	20.3	20.2
		Stiffeness, G', (10^3 N/mm)	14.7	14.8	14.8	14.9	14.9	15.0	15.0	15.0	15.0

38 mm deck - 914 mm wide - 152 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	Strength, (kN/m)	43.6	42.5	41.7	41.1	40.6	40.3	39.9	39.6	39.4
	Stiffeness, G', (10^3 N/mm)	432	430	429	428	427	426	426	425	425
914/7	Strength, (kN/m)	46.7	45.2	44.1	43.2	42.5	42.0	41.5	41.1	40.7
	Stiffeness, G', (10^3 N/mm)	436	434	433	432	431	430	429	428	428
914/9	Strength, (kN/m)	53.7	51.2	49.4	47.9	46.7	45.8	45.0	44.3	43.8
	Stiffeness, G', (10^3 N/mm)	440	439	437	436	435	434	433	432	431

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	Strength, (kN/m)	43.0	42.3	41.8	41.3	40.9	40.6	40.3	40.0	39.8
	Stiffeness, G', (10^3 N/mm)	430	429	428	427	427	426	425	425	425
914/7	Strength, (kN/m)	45.8	44.8	44.0	43.3	42.8	42.3	41.9	41.5	41.2
	Stiffeness, G', (10^3 N/mm)	435	434	432	431	430	430	429	428	428
914/9	Strength, (kN/m)	52.1	50.4	49.0	47.9	46.9	46.2	45.5	44.9	44.4
	Stiffeness, G', (10^3 N/mm)	440	439	437	436	435	434	433	432	432

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	Strength, (kN/m)	44.0	43.4	42.9	42.5	42.2	41.9	41.6	41.4	41.1
	Stiffeness, G', (10^3 N/mm)	431	430	429	428	427	427	426	426	425
914/7	Strength, (kN/m)	47.0	46.1	45.4	44.8	44.3	43.8	43.4	43.1	42.8
	Stiffeness, G', (10^3 N/mm)	436	435	433	432	431	431	430	429	429
914/9	Strength, (kN/m)	53.6	52.1	50.9	49.9	49.0	48.2	47.5	47.0	46.4
	Stiffeness, G', (10^3 N/mm)	442	441	439	438	437	436	435	434	433

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	Strength, (kN/m)	45.1	44.6	44.2	43.8	43.5	43.2	43.0	42.8	42.6
	Stiffeness, G', (10^3 N/mm)	430	430	429	428	427	427	426	426	426
914/7	Strength, (kN/m)	48.1	47.4	46.8	46.2	45.8	45.3	45.0	44.6	44.4
	Stiffeness, G', (10^3 N/mm)	436	435	434	433	432	431	431	430	429
914/9	Strength, (kN/m)	54.9	53.6	52.6	51.6	50.8	50.1	49.5	48.9	48.4
	Stiffeness, G', (10^3 N/mm)	443	441	440	439	438	437	436	435	434

38 mm deck - 914 mm wide - 152 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	Strength, (kN/m)	44.1	43.2	42.6	42.0	41.6	41.3	41.0	40.8	40.6
	Stiffeness, G', (10^3 N/mm)	432	431	430	429	428	428	427	427	427
914/7	Strength, (kN/m)	47.2	45.9	44.9	44.1	43.5	43.0	42.6	42.2	41.9
	Stiffeness, G', (10^3 N/mm)	436	435	434	433	432	431	430	430	429
914/9	Strength, (kN/m)	54.3	51.9	50.2	48.8	47.7	46.8	46.1	45.5	44.9
	Stiffeness, G', (10^3 N/mm)	441	439	438	437	436	435	434	433	433

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	Strength, (kN/m)	43.9	43.3	42.8	42.4	42.1	41.8	41.5	41.3	41.1
	Stiffeness, G', (10^3 N/mm)	432	431	430	429	429	428	428	427	427
914/7	Strength, (kN/m)	46.7	45.8	45.0	44.4	43.9	43.5	43.1	42.8	42.5
	Stiffeness, G', (10^3 N/mm)	436	435	434	433	432	432	431	430	430
914/9	Strength, (kN/m)	53.0	51.4	50.1	49.0	48.1	47.4	46.7	46.2	45.7
	Stiffeness, G', (10^3 N/mm)	441	440	438	437	436	436	435	434	434

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	Strength, (kN/m)	45.1	44.6	44.2	43.8	43.5	43.2	43.0	42.7	42.6
	Stiffeness, G', (10^3 N/mm)	433	432	431	431	430	430	429	429	428
914/7	Strength, (kN/m)	48.1	47.3	46.6	46.0	45.6	45.2	44.8	44.5	44.2
	Stiffeness, G', (10^3 N/mm)	438	436	436	435	434	433	433	432	432
914/9	Strength, (kN/m)	54.6	53.3	52.1	51.1	50.3	49.5	48.9	48.3	47.8
	Stiffeness, G', (10^3 N/mm)	443	442	441	440	439	438	437	437	436

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	Strength, (kN/m)	46.2	45.8	45.4	45.0	44.7	44.5	44.2	44.0	43.9
	Stiffeness, G', (10^3 N/mm)	433	433	432	431	431	431	430	430	429
914/7	Strength, (kN/m)	49.2	48.5	47.9	47.4	47.0	46.6	46.2	45.9	45.7
	Stiffeness, G', (10^3 N/mm)	438	437	437	436	435	434	434	433	433
914/9	Strength, (kN/m)	56.0	54.7	53.7	52.8	52.0	51.4	50.7	50.2	49.7
	Stiffeness, G', (10^3 N/mm)	445	444	442	441	441	440	439	438	438

38 mm deck - 914 mm wide - 152 mm flute spacing
Support connection: #12 Screws
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	Strength, (kN/m)	39.6	39.1	38.7	38.5	38.2	38.1	37.9	37.8	37.7
	Stiffeness, G', (10^3 N/mm)	430	429	428	427	426	425	425	424	424
914/7	Strength, (kN/m)	41.1	40.4	39.9	39.5	39.2	38.9	38.7	38.5	38.3
	Stiffeness, G', (10^3 N/mm)	435	433	432	430	429	429	428	427	427
914/9	Strength, (kN/m)	44.5	43.3	42.5	41.8	41.2	40.8	40.4	40.1	39.8
	Stiffeness, G', (10^3 N/mm)	439	437	436	435	433	432	432	431	430

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	Strength, (kN/m)	39.5	39.2	38.9	38.7	38.5	38.4	38.3	38.2	38.1
	Stiffeness, G', (10^3 N/mm)	429	428	427	426	426	425	425	424	424
914/7	Strength, (kN/m)	40.9	40.4	40.0	39.7	39.5	39.2	39.0	38.9	38.7
	Stiffeness, G', (10^3 N/mm)	434	432	431	430	429	429	428	427	427
914/9	Strength, (kN/m)	44.0	43.1	42.5	42.0	41.5	41.1	40.8	40.5	40.3
	Stiffeness, G', (10^3 N/mm)	439	437	436	435	434	433	432	431	430

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	Strength, (kN/m)	40.4	40.1	39.9	39.7	39.6	39.4	39.3	39.2	39.1
	Stiffeness, G', (10^3 N/mm)	429	428	428	427	426	426	425	425	424
914/7	Strength, (kN/m)	41.8	41.4	41.1	40.8	40.6	40.4	40.2	40.1	39.9
	Stiffeness, G', (10^3 N/mm)	434	433	432	431	430	429	429	428	428
914/9	Strength, (kN/m)	45.1	44.4	43.9	43.4	43.0	42.6	42.3	42.0	41.8
	Stiffeness, G', (10^3 N/mm)	440	439	437	436	435	434	433	433	432

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	Strength, (kN/m)	41.4	41.2	41.0	40.9	40.8	40.6	40.5	40.4	40.3
	Stiffeness, G', (10^3 N/mm)	429	428	428	427	426	426	425	425	425
914/7	Strength, (kN/m)	43.0	42.6	42.4	42.1	41.9	41.7	41.5	41.4	41.3
	Stiffeness, G', (10^3 N/mm)	434	433	432	431	430	430	429	429	428
914/9	Strength, (kN/m)	46.4	45.8	45.3	44.9	44.5	44.1	43.8	43.6	43.3
	Stiffeness, G', (10^3 N/mm)	441	439	438	437	436	435	434	433	433

38 mm deck - 914 mm wide - 152 mm flute spacing
Support connection: #12 Screws
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	Strength, (kN/m)	40.1	39.8	39.5	39.4	39.2	39.1	39.0	38.9	38.8
	Stiffeness, G', (10^3 N/mm)	431	430	429	428	428	427	427	426	426
914/7	Strength, (kN/m)	41.6	41.1	40.7	40.4	40.1	39.9	39.8	39.6	39.5
	Stiffeness, G', (10^3 N/mm)	435	434	433	432	431	430	429	429	428
914/9	Strength, (kN/m)	45.1	44.0	43.3	42.7	42.2	41.8	41.5	41.2	41.0
	Stiffeness, G', (10^3 N/mm)	439	438	437	435	434	434	433	432	432

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	Strength, (kN/m)	40.4	40.1	40.0	39.8	39.7	39.6	39.5	39.4	39.4
	Stiffeness, G', (10^3 N/mm)	431	430	429	428	428	427	427	427	426
914/7	Strength, (kN/m)	41.7	41.4	41.1	40.8	40.6	40.4	40.3	40.2	40.1
	Stiffeness, G', (10^3 N/mm)	435	434	433	432	431	430	430	429	429
914/9	Strength, (kN/m)	44.8	44.1	43.5	43.1	42.7	42.3	42.1	41.8	41.6
	Stiffeness, G', (10^3 N/mm)	439	438	437	436	435	434	434	433	432

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	Strength, (kN/m)	41.5	41.3	41.1	41.0	40.9	40.8	40.7	40.6	40.5
	Stiffeness, G', (10^3 N/mm)	432	431	430	430	429	429	428	428	428
914/7	Strength, (kN/m)	42.9	42.6	42.3	42.1	41.9	41.7	41.6	41.5	41.3
	Stiffeness, G', (10^3 N/mm)	436	435	434	433	433	432	432	431	431
914/9	Strength, (kN/m)	46.2	45.6	45.1	44.6	44.3	43.9	43.7	43.4	43.2
	Stiffeness, G', (10^3 N/mm)	442	440	439	438	437	436	436	435	435

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	Strength, (kN/m)	42.5	42.4	42.2	42.1	42.0	41.9	41.8	41.7	41.6
	Stiffeness, G', (10^3 N/mm)	432	431	431	430	430	430	429	429	429
914/7	Strength, (kN/m)	44.1	43.8	43.5	43.3	43.1	43.0	42.8	42.7	42.6
	Stiffeness, G', (10^3 N/mm)	437	436	435	434	434	433	433	432	432
914/9	Strength, (kN/m)	47.5	46.9	46.5	46.1	45.7	45.4	45.1	44.8	44.6
	Stiffeness, G', (10^3 N/mm)	443	442	441	440	439	438	437	437	436

38 mm deck - 914 mm wide - 152 mm flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	Strength, (kN/m)	41.3	40.6	40.0	39.6	39.3	39.0	38.8	38.6	38.4
	Stiffeness, G', (10^3 N/mm)	431	429	428	427	426	426	425	424	424
914/7	Strength, (kN/m)	43.5	42.5	41.7	41.1	40.6	40.2	39.9	39.6	39.4
	Stiffeness, G', (10^3 N/mm)	435	433	432	431	430	429	428	427	427
914/9	Strength, (kN/m)	48.5	46.7	45.4	44.4	43.6	42.9	42.4	41.9	41.5
	Stiffeness, G', (10^3 N/mm)	439	438	436	435	434	433	432	431	430

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	Strength, (kN/m)	41.0	40.5	40.1	39.8	39.5	39.3	39.1	39.0	38.8
	Stiffeness, G', (10^3 N/mm)	430	428	428	427	426	425	425	424	424
914/7	Strength, (kN/m)	43.0	42.3	41.7	41.3	40.9	40.5	40.3	40.0	39.8
	Stiffeness, G', (10^3 N/mm)	434	433	432	431	430	429	428	428	427
914/9	Strength, (kN/m)	47.4	46.2	45.3	44.5	43.8	43.3	42.8	42.4	42.0
	Stiffeness, G', (10^3 N/mm)	439	438	436	435	434	433	432	432	431

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	Strength, (kN/m)	41.9	41.5	41.2	40.9	40.7	40.5	40.3	40.1	40.0
	Stiffeness, G', (10^3 N/mm)	430	429	428	427	426	426	425	425	425
914/7	Strength, (kN/m)	44.0	43.4	42.9	42.5	42.2	41.9	41.6	41.3	41.1
	Stiffeness, G', (10^3 N/mm)	435	433	432	431	431	430	429	428	428
914/9	Strength, (kN/m)	48.7	47.7	46.9	46.1	45.5	45.0	44.5	44.1	43.7
	Stiffeness, G', (10^3 N/mm)	441	439	438	437	436	435	434	433	432

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	Strength, (kN/m)	43.0	42.7	42.4	42.1	41.9	41.7	41.6	41.4	41.3
	Stiffeness, G', (10^3 N/mm)	430	429	428	427	427	426	426	425	425
914/7	Strength, (kN/m)	45.1	44.6	44.2	43.9	43.5	43.2	43.0	42.8	42.6
	Stiffeness, G', (10^3 N/mm)	435	434	433	432	431	430	430	429	428
914/9	Strength, (kN/m)	50.0	49.1	48.4	47.7	47.2	46.7	46.2	45.8	45.5
	Stiffeness, G', (10^3 N/mm)	441	440	439	438	437	436	435	434	433

38 mm deck - 914 mm wide - 152 mm flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		900	1 050	1 200	1 350	1 500	1 650	1 800	1 950	2 100
914/4	Strength, (kN/m)	41.8	41.3	40.8	40.5	40.3	40.0	39.9	39.7	39.6
	Stiffeness, G', (10^3 N/mm)	431	430	429	429	428	427	427	426	426
914/7	Strength, (kN/m)	44.0	43.2	42.5	42.0	41.6	41.2	41.0	40.7	40.5
	Stiffeness, G', (10^3 N/mm)	435	434	433	432	431	430	430	429	429
914/9	Strength, (kN/m)	49.0	47.4	46.2	45.3	44.6	44.0	43.5	43.0	42.7
	Stiffeness, G', (10^3 N/mm)	440	438	437	436	435	434	433	433	432

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		1 200	1 350	1 500	1 650	1 800	1 950	2 100	2 250	2 400
914/4	Strength, (kN/m)	41.9	41.5	41.2	40.9	40.7	40.5	40.4	40.3	40.1
	Stiffeness, G', (10^3 N/mm)	431	430	429	429	428	428	427	427	427
914/7	Strength, (kN/m)	43.9	43.3	42.8	42.4	42.0	41.8	41.5	41.3	41.1
	Stiffeness, G', (10^3 N/mm)	435	434	433	432	431	431	430	430	429
914/9	Strength, (kN/m)	48.3	47.2	46.3	45.6	45.0	44.5	44.1	43.7	43.4
	Stiffeness, G', (10^3 N/mm)	440	439	437	436	436	435	434	433	433

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		1 500	1 650	1 800	1 950	2 100	2 250	2 400	2 550	2 700
914/4	Strength, (kN/m)	43.0	42.7	42.4	42.2	42.0	41.8	41.6	41.5	41.4
	Stiffeness, G', (10^3 N/mm)	432	431	430	430	429	429	429	428	428
914/7	Strength, (kN/m)	45.1	44.6	44.2	43.8	43.5	43.2	43.0	42.7	42.6
	Stiffeness, G', (10^3 N/mm)	437	435	435	434	433	432	432	431	431
914/9	Strength, (kN/m)	49.8	48.9	48.1	47.4	46.8	46.3	45.9	45.5	45.2
	Stiffeness, G', (10^3 N/mm)	442	441	440	439	438	437	436	436	435

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		1 800	1 950	2 100	2 250	2 400	2 550	2 700	2 850	3 000
914/4	Strength, (kN/m)	44.1	43.8	43.5	43.3	43.1	43.0	42.8	42.7	42.6
	Stiffeness, G', (10^3 N/mm)	433	432	431	431	430	430	430	429	429
914/7	Strength, (kN/m)	46.2	45.8	45.4	45.0	44.8	44.5	44.3	44.1	43.9
	Stiffeness, G', (10^3 N/mm)	437	436	436	435	434	434	433	433	432
914/9	Strength, (kN/m)	51.1	50.2	49.5	48.9	48.4	47.9	47.5	47.1	46.8
	Stiffeness, G', (10^3 N/mm)	443	442	441	440	439	439	438	437	437

76 mm deck - 610 mm wide - 152 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	Strength, (kN/m)	38.7	38.6	38.4	38.3	38.2	38.1	38.1	38.0	37.9
	Stiffeness, G', (10^3 N/mm)	420	420	420	420	419	419	419	419	419
610/5	Strength, (kN/m)	39.4	39.2	39.0	38.9	38.8	38.6	38.5	38.4	38.3
	Stiffeness, G', (10^3 N/mm)	422	421	421	421	421	421	420	420	420
610/7	Strength, (kN/m)	42.0	41.7	41.4	41.1	40.9	40.6	40.5	40.3	40.1
	Stiffeness, G', (10^3 N/mm)	424	424	424	423	423	423	423	422	422

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	Strength, (kN/m)	39.2	39.0	38.9	38.8	38.7	38.6	38.5	38.5	38.4
	Stiffeness, G', (10^3 N/mm)	420	420	420	420	419	419	419	419	419
610/5	Strength, (kN/m)	39.9	39.7	39.5	39.4	39.3	39.2	39.1	39.0	38.9
	Stiffeness, G', (10^3 N/mm)	422	422	421	421	421	421	421	420	420
610/7	Strength, (kN/m)	42.7	42.3	42.1	41.8	41.6	41.3	41.2	41.0	40.8
	Stiffeness, G', (10^3 N/mm)	425	424	424	424	423	423	423	423	422

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	Strength, (kN/m)	40.4	40.3	40.2	40.0	39.9	39.8	39.8	39.7	39.6
	Stiffeness, G', (10^3 N/mm)	420	420	420	420	420	420	420	419	419
610/5	Strength, (kN/m)	41.2	41.1	40.9	40.8	40.6	40.5	40.4	40.3	40.2
	Stiffeness, G', (10^3 N/mm)	422	422	422	422	421	421	421	421	421
610/7	Strength, (kN/m)	44.5	44.2	43.9	43.6	43.4	43.1	42.9	42.7	42.5
	Stiffeness, G', (10^3 N/mm)	425	425	425	424	424	424	424	423	423

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	Strength, (kN/m)	41.8	41.7	41.5	41.4	41.3	41.2	41.1	41.0	41.0
	Stiffeness, G', (10^3 N/mm)	421	420	420	420	420	420	420	420	420
610/5	Strength, (kN/m)	42.7	42.5	42.4	42.2	42.1	42.0	41.9	41.7	41.6
	Stiffeness, G', (10^3 N/mm)	423	422	422	422	422	421	421	421	421
610/7	Strength, (kN/m)	46.4	46.1	45.8	45.5	45.2	45.0	44.7	44.5	44.3
	Stiffeness, G', (10^3 N/mm)	426	426	425	425	425	424	424	424	424

76 mm deck - 610 mm wide - 152 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	Strength, (kN/m)	39.9	39.8	39.7	39.6	39.5	39.4	39.4	39.3	39.3
	Stiffeness, G', (10^3 N/mm)	422	422	421	421	421	421	421	421	421
610/5	Strength, (kN/m)	40.6	40.4	40.3	40.2	40.1	40.0	39.9	39.8	39.7
	Stiffeness, G', (10^3 N/mm)	423	423	423	423	422	422	422	422	422
610/7	Strength, (kN/m)	43.2	42.9	42.6	42.4	42.2	42.0	41.8	41.6	41.5
	Stiffeness, G', (10^3 N/mm)	426	425	425	425	424	424	424	424	424

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	Strength, (kN/m)	40.5	40.4	40.3	40.2	40.1	40.1	40.0	39.9	39.9
	Stiffeness, G', (10^3 N/mm)	422	422	422	422	422	422	421	421	421
610/5	Strength, (kN/m)	41.2	41.1	40.9	40.8	40.7	40.6	40.5	40.4	40.4
	Stiffeness, G', (10^3 N/mm)	424	423	423	423	423	423	423	422	422
610/7	Strength, (kN/m)	44.0	43.7	43.5	43.2	43.0	42.8	42.6	42.4	42.3
	Stiffeness, G', (10^3 N/mm)	426	426	426	425	425	425	425	424	424

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	Strength, (kN/m)	41.9	41.8	41.6	41.5	41.5	41.4	41.3	41.2	41.2
	Stiffeness, G', (10^3 N/mm)	423	423	423	423	422	422	422	422	422
610/5	Strength, (kN/m)	42.7	42.5	42.4	42.3	42.1	42.0	41.9	41.8	41.7
	Stiffeness, G', (10^3 N/mm)	424	424	424	424	424	424	424	423	423
610/7	Strength, (kN/m)	46.0	45.7	45.4	45.1	44.9	44.7	44.5	44.3	44.1
	Stiffeness, G', (10^3 N/mm)	427	427	427	427	426	426	426	426	426

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	Strength, (kN/m)	43.1	43.0	42.9	42.8	42.7	42.6	42.5	42.5	42.4
	Stiffeness, G', (10^3 N/mm)	424	423	423	423	423	423	423	423	423
610/5	Strength, (kN/m)	44.0	43.9	43.7	43.6	43.5	43.4	43.2	43.1	43.1
	Stiffeness, G', (10^3 N/mm)	425	425	425	425	425	424	424	424	424
610/7	Strength, (kN/m)	47.7	47.4	47.1	46.8	46.6	46.4	46.1	45.9	45.8
	Stiffeness, G', (10^3 N/mm)	428	428	428	428	427	427	427	427	426

76 mm deck - 610 mm wide - 152 mm flute spacing
Support connection: #12 Screws
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	Strength, (kN/m)	37.4	37.3	37.2	37.2	37.1	37.1	37.1	37.0	37.0
	Stiffeness, G', (10^3 N/mm)	420	420	419	419	419	419	419	419	419
610/5	Strength, (kN/m)	37.7	37.6	37.5	37.5	37.4	37.3	37.3	37.3	37.2
	Stiffeness, G', (10^3 N/mm)	421	421	421	420	420	420	420	420	420
610/7	Strength, (kN/m)	39.0	38.8	38.7	38.5	38.4	38.3	38.2	38.2	38.1
	Stiffeness, G', (10^3 N/mm)	424	423	423	423	422	422	422	422	422

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	Strength, (kN/m)	37.7	37.7	37.6	37.6	37.5	37.5	37.5	37.4	37.4
	Stiffeness, G', (10^3 N/mm)	420	420	419	419	419	419	419	419	419
610/5	Strength, (kN/m)	38.1	38.0	37.9	37.9	37.8	37.8	37.7	37.7	37.6
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	420	420	420	420	420
610/7	Strength, (kN/m)	39.5	39.3	39.2	39.1	39.0	38.8	38.8	38.7	38.6
	Stiffeness, G', (10^3 N/mm)	424	424	423	423	423	422	422	422	422

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	Strength, (kN/m)	38.8	38.7	38.7	38.6	38.6	38.5	38.5	38.5	38.4
	Stiffeness, G', (10^3 N/mm)	420	420	420	420	419	419	419	419	419
610/5	Strength, (kN/m)	39.2	39.1	39.0	39.0	38.9	38.9	38.8	38.8	38.7
	Stiffeness, G', (10^3 N/mm)	422	421	421	421	421	421	421	420	420
610/7	Strength, (kN/m)	40.8	40.7	40.5	40.4	40.3	40.2	40.1	40.0	39.9
	Stiffeness, G', (10^3 N/mm)	425	424	424	424	423	423	423	423	423

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	Strength, (kN/m)	40.0	39.9	39.9	39.8	39.8	39.7	39.7	39.7	39.6
	Stiffeness, G', (10^3 N/mm)	420	420	420	420	420	419	419	419	419
610/5	Strength, (kN/m)	40.5	40.4	40.3	40.2	40.2	40.1	40.1	40.0	40.0
	Stiffeness, G', (10^3 N/mm)	422	422	421	421	421	421	421	421	421
610/7	Strength, (kN/m)	42.3	42.2	42.0	41.9	41.8	41.7	41.6	41.5	41.4
	Stiffeness, G', (10^3 N/mm)	425	425	424	424	424	424	423	423	423

76 mm deck - 610 mm wide - 152 mm flute spacing
Support connection: #12 Screws
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	Strength, (kN/m)	38.6	38.5	38.5	38.5	38.4	38.4	38.4	38.4	38.4
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	421	421	421	421	421
610/5	Strength, (kN/m)	38.9	38.8	38.8	38.7	38.7	38.7	38.6	38.6	38.6
	Stiffeness, G', (10^3 N/mm)	423	422	422	422	422	422	422	422	422
610/7	Strength, (kN/m)	40.2	40.1	39.9	39.8	39.7	39.6	39.6	39.5	39.4
	Stiffeness, G', (10^3 N/mm)	425	425	424	424	424	424	424	423	423

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	Strength, (kN/m)	39.1	39.1	39.0	39.0	39.0	39.0	38.9	38.9	38.9
	Stiffeness, G', (10^3 N/mm)	422	422	421	421	421	421	421	421	421
610/5	Strength, (kN/m)	39.5	39.4	39.3	39.3	39.3	39.2	39.2	39.2	39.1
	Stiffeness, G', (10^3 N/mm)	423	423	423	423	422	422	422	422	422
610/7	Strength, (kN/m)	40.8	40.7	40.6	40.5	40.4	40.3	40.2	40.1	40.1
	Stiffeness, G', (10^3 N/mm)	425	425	425	425	424	424	424	424	424

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	Strength, (kN/m)	40.2	40.2	40.1	40.1	40.1	40.1	40.0	40.0	40.0
	Stiffeness, G', (10^3 N/mm)	422	422	422	422	422	422	422	422	422
610/5	Strength, (kN/m)	40.6	40.6	40.5	40.5	40.4	40.4	40.3	40.3	40.3
	Stiffeness, G', (10^3 N/mm)	424	424	424	423	423	423	423	423	423
610/7	Strength, (kN/m)	42.3	42.1	42.0	41.9	41.8	41.7	41.6	41.5	41.5
	Stiffeness, G', (10^3 N/mm)	427	426	426	426	426	425	425	425	425

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	Strength, (kN/m)	41.3	41.3	41.2	41.2	41.2	41.1	41.1	41.1	41.1
	Stiffeness, G', (10^3 N/mm)	423	423	423	423	423	423	423	422	422
610/5	Strength, (kN/m)	41.8	41.7	41.7	41.6	41.6	41.5	41.5	41.4	41.4
	Stiffeness, G', (10^3 N/mm)	425	424	424	424	424	424	424	424	424
610/7	Strength, (kN/m)	43.7	43.5	43.4	43.3	43.1	43.0	42.9	42.9	42.8
	Stiffeness, G', (10^3 N/mm)	428	427	427	427	427	426	426	426	426

76 mm deck - 610 mm wide - 152 mm flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	Strength, (kN/m)	37.9	37.8	37.8	37.7	37.6	37.5	37.5	37.4	37.4
	Stiffeness, G', (10^3 N/mm)	420	420	419	419	419	419	419	419	419
610/5	Strength, (kN/m)	38.4	38.3	38.2	38.1	38.0	37.9	37.8	37.8	37.7
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	420	420	420	420	420
610/7	Strength, (kN/m)	40.3	40.0	39.8	39.6	39.5	39.3	39.2	39.1	38.9
	Stiffeness, G', (10^3 N/mm)	424	424	423	423	423	422	422	422	422

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	Strength, (kN/m)	38.4	38.3	38.2	38.1	38.0	38.0	37.9	37.9	37.8
	Stiffeness, G', (10^3 N/mm)	420	420	420	419	419	419	419	419	419
610/5	Strength, (kN/m)	38.9	38.7	38.6	38.5	38.4	38.4	38.3	38.2	38.2
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	421	420	420	420	420
610/7	Strength, (kN/m)	40.8	40.6	40.4	40.2	40.1	39.9	39.8	39.7	39.5
	Stiffeness, G', (10^3 N/mm)	424	424	423	423	423	423	422	422	422

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	Strength, (kN/m)	39.5	39.4	39.3	39.2	39.2	39.1	39.0	39.0	38.9
	Stiffeness, G', (10^3 N/mm)	420	420	420	420	420	419	419	419	419
610/5	Strength, (kN/m)	40.1	39.9	39.8	39.7	39.6	39.6	39.5	39.4	39.3
	Stiffeness, G', (10^3 N/mm)	422	422	421	421	421	421	421	421	420
610/7	Strength, (kN/m)	42.4	42.2	42.0	41.8	41.6	41.4	41.3	41.1	41.0
	Stiffeness, G', (10^3 N/mm)	425	424	424	424	424	423	423	423	423

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	Strength, (kN/m)	40.7	40.7	40.6	40.5	40.4	40.4	40.3	40.3	40.2
	Stiffeness, G', (10^3 N/mm)	420	420	420	420	420	420	419	419	419
610/5	Strength, (kN/m)	41.4	41.3	41.2	41.1	41.0	40.9	40.8	40.8	40.7
	Stiffeness, G', (10^3 N/mm)	422	422	422	421	421	421	421	421	421
610/7	Strength, (kN/m)	44.0	43.8	43.6	43.4	43.2	43.1	42.9	42.8	42.6
	Stiffeness, G', (10^3 N/mm)	425	425	425	424	424	424	424	423	423

76 mm deck - 610 mm wide - 203 mm flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/3	Strength, (kN/m)	39.2	39.1	39.0	39.0	38.9	38.9	38.8	38.8	38.7
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	421	421	421	421	421
610/5	Strength, (kN/m)	39.6	39.5	39.4	39.4	39.3	39.2	39.2	39.1	39.1
	Stiffeness, G', (10^3 N/mm)	423	423	422	422	422	422	422	422	422
610/7	Strength, (kN/m)	41.5	41.3	41.1	40.9	40.8	40.6	40.5	40.4	40.3
	Stiffeness, G', (10^3 N/mm)	425	425	425	424	424	424	424	424	423

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/3	Strength, (kN/m)	39.7	39.6	39.6	39.5	39.5	39.4	39.4	39.3	39.3
	Stiffeness, G', (10^3 N/mm)	422	422	422	421	421	421	421	421	421
610/5	Strength, (kN/m)	40.2	40.1	40.0	40.0	39.9	39.8	39.8	39.7	39.7
	Stiffeness, G', (10^3 N/mm)	423	423	423	423	423	422	422	422	422
610/7	Strength, (kN/m)	42.2	42.0	41.8	41.7	41.5	41.4	41.2	41.1	41.0
	Stiffeness, G', (10^3 N/mm)	426	425	425	425	425	424	424	424	424

Thickness = 1.21 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/3	Strength, (kN/m)	40.9	40.9	40.8	40.7	40.7	40.6	40.6	40.5	40.5
	Stiffeness, G', (10^3 N/mm)	423	422	422	422	422	422	422	422	422
610/5	Strength, (kN/m)	41.5	41.4	41.3	41.2	41.2	41.1	41.0	41.0	40.9
	Stiffeness, G', (10^3 N/mm)	424	424	424	424	423	423	423	423	423
610/7	Strength, (kN/m)	43.9	43.6	43.5	43.3	43.1	43.0	42.8	42.7	42.6
	Stiffeness, G', (10^3 N/mm)	427	427	426	426	426	426	425	425	425

Thickness = 1.52 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/3	Strength, (kN/m)	42.1	42.0	41.9	41.9	41.8	41.8	41.7	41.7	41.6
	Stiffeness, G', (10^3 N/mm)	423	423	423	423	423	423	423	423	423
610/5	Strength, (kN/m)	42.7	42.6	42.5	42.5	42.4	42.3	42.2	42.2	42.1
	Stiffeness, G', (10^3 N/mm)	425	425	424	424	424	424	424	424	424
610/7	Strength, (kN/m)	45.4	45.2	45.0	44.8	44.6	44.4	44.3	44.2	44.0
	Stiffeness, G', (10^3 N/mm)	428	428	427	427	427	427	426	426	426

76 mm deck - 610 mm wide - 203 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	Strength, (kN/m)	39.0	38.8	38.7	38.6	38.5	38.4	38.3	38.2	38.1
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	420	420	420	420	420
610/6	Strength, (kN/m)	41.6	41.3	41.1	40.8	40.6	40.4	40.2	40.0	39.9
	Stiffeness, G', (10^3 N/mm)	424	424	423	423	423	423	422	422	422

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	Strength, (kN/m)	39.5	39.3	39.2	39.1	39.0	38.9	38.8	38.7	38.6
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	420	420	420	420	420
610/6	Strength, (kN/m)	42.3	42.0	41.7	41.5	41.2	41.0	40.9	40.7	40.5
	Stiffeness, G', (10^3 N/mm)	424	424	424	423	423	423	423	422	422

Thickness = 0.121 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	Strength, (kN/m)	40.8	40.6	40.5	40.4	40.2	40.1	40.0	39.9	39.9
	Stiffeness, G', (10^3 N/mm)	422	421	421	421	421	421	421	420	420
610/6	Strength, (kN/m)	44.1	43.8	43.5	43.2	43.0	42.8	42.6	42.4	42.2
	Stiffeness, G', (10^3 N/mm)	425	425	424	424	424	424	423	423	423

Thickness = 0.152 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	Strength, (kN/m)	42.2	42.1	41.9	41.8	41.7	41.6	41.5	41.4	41.3
	Stiffeness, G', (10^3 N/mm)	422	422	421	421	421	421	421	421	421
610/6	Strength, (kN/m)	45.9	45.6	45.3	45.0	44.8	44.6	44.3	44.1	44.0
	Stiffeness, G', (10^3 N/mm)	426	425	425	425	424	424	424	424	423

76 mm deck - 610 mm wide - 203 mm flute spacing
Support connection: 19 mm Welds
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	Strength, (kN/m)	40.2	40.1	40.0	39.9	39.8	39.7	39.6	39.5	39.4
	Stiffeness, G', (10^3 N/mm)	423	423	422	422	422	422	422	422	422
610/6	Strength, (kN/m)	42.9	42.6	42.3	42.1	41.9	41.7	41.5	41.4	41.2
	Stiffeness, G', (10^3 N/mm)	425	425	425	425	424	424	424	424	424

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	Strength, (kN/m)	40.8	40.7	40.6	40.5	40.4	40.3	40.2	40.2	40.1
	Stiffeness, G', (10^3 N/mm)	423	423	423	423	423	422	422	422	422
610/6	Strength, (kN/m)	43.6	43.4	43.1	42.9	42.7	42.5	42.3	42.2	42.0
	Stiffeness, G', (10^3 N/mm)	426	426	425	425	425	425	424	424	424

Thickness = 0.121 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	Strength, (kN/m)	42.2	42.1	42.0	41.9	41.8	41.7	41.6	41.5	41.4
	Stiffeness, G', (10^3 N/mm)	424	424	424	424	423	423	423	423	423
610/6	Strength, (kN/m)	45.5	45.2	45.0	44.7	44.5	44.3	44.1	43.9	43.8
	Stiffeness, G', (10^3 N/mm)	427	427	427	426	426	426	426	425	425

Thickness = 0.152 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	Strength, (kN/m)	43.5	43.4	43.3	43.1	43.0	42.9	42.8	42.8	42.7
	Stiffeness, G', (10^3 N/mm)	425	425	424	424	424	424	424	424	424
610/6	Strength, (kN/m)	47.2	46.9	46.6	46.4	46.2	45.9	45.7	45.6	45.4
	Stiffeness, G', (10^3 N/mm)	428	428	427	427	427	427	427	426	426

76 mm deck - 610 mm wide - 203 mm flute spacing
Support connection: #12 Screws
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	Strength, (kN/m)	37.5	37.4	37.4	37.3	37.3	37.2	37.2	37.1	37.1
	Stiffeness, G', (10^3 N/mm)	421	420	420	420	420	420	420	420	419
610/6	Strength, (kN/m)	38.8	38.6	38.5	38.4	38.3	38.2	38.1	38.0	38.0
	Stiffeness, G', (10^3 N/mm)	423	423	423	422	422	422	422	422	421

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	Strength, (kN/m)	37.9	37.8	37.8	37.7	37.7	37.6	37.6	37.5	37.5
	Stiffeness, G', (10^3 N/mm)	421	421	420	420	420	420	420	420	419
610/6	Strength, (kN/m)	39.3	39.1	39.0	38.9	38.8	38.7	38.6	38.5	38.5
	Stiffeness, G', (10^3 N/mm)	424	423	423	423	422	422	422	422	422

Thickness = 0.121 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	Strength, (kN/m)	39.0	38.9	38.8	38.8	38.7	38.7	38.6	38.6	38.6
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	420	420	420	420	420
610/6	Strength, (kN/m)	40.6	40.5	40.3	40.2	40.1	40.0	39.9	39.8	39.7
	Stiffeness, G', (10^3 N/mm)	424	424	424	423	423	423	423	422	422

Thickness = 0.152 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	Strength, (kN/m)	40.2	40.1	40.1	40.0	40.0	39.9	39.9	39.8	39.8
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	421	420	420	420	420
610/6	Strength, (kN/m)	42.1	41.9	41.8	41.7	41.6	41.4	41.3	41.3	41.2
	Stiffeness, G', (10^3 N/mm)	425	424	424	424	423	423	423	423	423

76 mm deck - 610 mm wide - 203 mm flute spacing
Support connection: #12 Screws
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	Strength, (kN/m)	38.7	38.7	38.6	38.6	38.6	38.5	38.5	38.5	38.4
	Stiffeness, G', (10^3 N/mm)	422	422	422	422	422	422	422	421	421
610/6	Strength, (kN/m)	40.0	39.9	39.8	39.7	39.6	39.5	39.4	39.4	39.3
	Stiffeness, G', (10^3 N/mm)	425	424	424	424	424	424	423	423	423

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	Strength, (kN/m)	39.3	39.2	39.2	39.1	39.1	39.1	39.0	39.0	39.0
	Stiffeness, G', (10^3 N/mm)	423	423	422	422	422	422	422	422	422
610/6	Strength, (kN/m)	40.6	40.5	40.4	40.3	40.2	40.1	40.1	40.0	39.9
	Stiffeness, G', (10^3 N/mm)	425	425	425	424	424	424	424	424	424

Thickness = 0.121 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	Strength, (kN/m)	40.4	40.4	40.3	40.3	40.2	40.2	40.2	40.1	40.1
	Stiffeness, G', (10^3 N/mm)	424	423	423	423	423	423	423	423	423
610/6	Strength, (kN/m)	42.1	41.9	41.8	41.7	41.6	41.5	41.4	41.4	41.3
	Stiffeness, G', (10^3 N/mm)	426	426	426	426	425	425	425	425	425

Thickness = 0.152 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	Strength, (kN/m)	41.5	41.5	41.4	41.4	41.3	41.3	41.3	41.2	41.2
	Stiffeness, G', (10^3 N/mm)	424	424	424	424	424	424	423	423	423
610/6	Strength, (kN/m)	43.4	43.3	43.1	43.0	42.9	42.8	42.7	42.7	42.6
	Stiffeness, G', (10^3 N/mm)	427	427	427	426	426	426	426	426	426

76 mm deck - 610 mm wide - 203 mm flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: Button Punch @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	Strength, (kN/m)	38.2	38.0	37.9	37.9	37.8	37.7	37.6	37.6	37.5
	Stiffeness, G', (10^3 N/mm)	421	421	420	420	420	420	420	420	419
610/6	Strength, (kN/m)	40.0	39.8	39.6	39.4	39.3	39.1	39.0	38.9	38.8
	Stiffeness, G', (10^3 N/mm)	424	423	423	423	422	422	422	422	422

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	Strength, (kN/m)	38.6	38.5	38.4	38.3	38.2	38.2	38.1	38.0	38.0
	Stiffeness, G', (10^3 N/mm)	421	421	420	420	420	420	420	420	420
610/6	Strength, (kN/m)	40.6	40.4	40.2	40.0	39.8	39.7	39.6	39.5	39.4
	Stiffeness, G', (10^3 N/mm)	424	423	423	423	423	422	422	422	422

Thickness = 0.121 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	Strength, (kN/m)	39.7	39.6	39.5	39.4	39.4	39.3	39.2	39.2	39.1
	Stiffeness, G', (10^3 N/mm)	421	421	421	421	421	420	420	420	420
610/6	Strength, (kN/m)	42.1	41.9	41.7	41.5	41.3	41.2	41.0	40.9	40.8
	Stiffeness, G', (10^3 N/mm)	424	424	424	424	423	423	423	423	422

Thickness = 0.152 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	Strength, (kN/m)	41.0	40.9	40.8	40.8	40.7	40.6	40.5	40.5	40.4
	Stiffeness, G', (10^3 N/mm)	422	421	421	421	421	421	420	420	420
610/6	Strength, (kN/m)	43.7	43.5	43.3	43.1	42.9	42.8	42.6	42.5	42.4
	Stiffeness, G', (10^3 N/mm)	425	425	424	424	424	423	423	423	423

76 mm deck - 610 mm wide - 203 mm flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: #10 Screws @ 600 mm o.c.
Concrete resistance: 20 MPa Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
65 mm thick. concrete over deck
Concrete density: 2300 kg/m^3 Minimum

SDI METHOD – METRIC

Thickness = 0.76 mm

Support Connection Pattern		Span (mm)								
		2 400	2 550	2 700	2 850	3 000	3 150	3 300	3 450	3 600
610/4	Strength, (kN/m)	39.4	39.3	39.2	39.1	39.1	39.0	39.0	38.9	38.9
	Stiffeness, G', (10^3 N/mm)	422	422	422	422	422	422	422	422	421
610/6	Strength, (kN/m)	41.2	41.0	40.9	40.7	40.6	40.4	40.3	40.2	40.1
	Stiffeness, G', (10^3 N/mm)	425	425	424	424	424	424	424	423	423

Thickness = 0.91 mm

Support Connection Pattern		Span (mm)								
		2 700	2 850	3 000	3 150	3 300	3 450	3 600	3 750	3 900
610/4	Strength, (kN/m)	39.9	39.9	39.8	39.7	39.7	39.6	39.6	39.5	39.5
	Stiffeness, G', (10^3 N/mm)	423	423	423	422	422	422	422	422	422
610/6	Strength, (kN/m)	41.9	41.7	41.6	41.4	41.3	41.2	41.0	40.9	40.8
	Stiffeness, G', (10^3 N/mm)	425	425	425	425	424	424	424	424	424

Thickness = 0.121 mm

Support Connection Pattern		Span (mm)								
		3 000	3 150	3 300	3 450	3 600	3 750	3 900	4 050	4 200
610/4	Strength, (kN/m)	41.2	41.1	41.0	41.0	40.9	40.8	40.8	40.7	40.7
	Stiffeness, G', (10^3 N/mm)	424	424	423	423	423	423	423	423	423
610/6	Strength, (kN/m)	43.5	43.3	43.2	43.0	42.8	42.7	42.6	42.5	42.3
	Stiffeness, G', (10^3 N/mm)	427	426	426	426	426	425	425	425	425

Thickness = 0.152 mm

Support Connection Pattern		Span (mm)								
		3 300	3 450	3 600	3 750	3 900	4 050	4 200	4 350	4 500
610/4	Strength, (kN/m)	42.4	42.3	42.2	42.1	42.1	42.0	41.9	41.9	41.8
	Stiffeness, G', (10^3 N/mm)	424	424	424	424	424	424	424	423	423
610/6	Strength, (kN/m)	45.0	44.8	44.6	44.4	44.3	44.1	44.0	43.9	43.8
	Stiffeness, G', (10^3 N/mm)	427	427	427	427	426	426	426	426	426

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	36	Strength, (lbs/ft)	480	417	370	334	305	281	261	245	230
		Flexibility, F, (inx10^{-6}/lb)	133	116	104	95	88	82	78	74	71
	24	Strength, (lbs/ft)	500	437	390	354	325	301	282	265	251
		Flexibility, F, (inx10^{-6}/lb)	133	116	104	95	87	81	77	73	70
	12	Strength, (lbs/ft)	559	497	451	415	386	363	344	327	314
		Flexibility, F, (inx10^{-6}/lb)	132	115	103	93	86	80	75	70	67
	9	Strength, (lbs/ft)	599	537	491	455	427	404	385	369	355
		Flexibility, F, (inx10^{-6}/lb)	132	115	102	92	85	79	73	69	66
	6	Strength, (lbs/ft)	679	617	571	536	508	486	467	452	439
		Flexibility, F, (inx10^{-6}/lb)	131	114	101	91	84	77	72	68	64
36/7	36	Strength, (lbs/ft)	768	665	588	528	480	439	403	373	347
		Flexibility, F, (inx10^{-6}/lb)	39	35	33	31	30	29	29	28	28
	24	Strength, (lbs/ft)	790	687	610	550	502	461	425	395	370
		Flexibility, F, (inx10^{-6}/lb)	39	35	32	31	29	29	28	28	27
	12	Strength, (lbs/ft)	855	753	676	617	570	529	493	463	437
		Flexibility, F, (inx10^{-6}/lb)	38	34	32	30	29	27	27	26	26
	9	Strength, (lbs/ft)	899	796	720	661	614	574	538	508	482
		Flexibility, F, (inx10^{-6}/lb)	38	34	32	30	28	27	26	25	25
	6	Strength, (lbs/ft)	985	884	808	750	704	664	628	598	572
		Flexibility, F, (inx10^{-6}/lb)	38	34	31	29	27	26	25	24	23
36/9	36	Strength, (lbs/ft)	996	860	758	679	616	564	521	485	454
		Flexibility, F, (inx10^{-6}/lb)	37	33	31	29	27	26	26	25	25
	24	Strength, (lbs/ft)	1017	881	779	700	637	586	543	507	476
		Flexibility, F, (inx10^{-6}/lb)	37	33	30	29	27	26	25	25	24
	12	Strength, (lbs/ft)	1077	942	841	763	701	650	608	573	543
		Flexibility, F, (inx10^{-6}/lb)	37	33	30	28	27	25	25	24	23
	9	Strength, (lbs/ft)	1117	983	882	805	743	693	651	617	587
		Flexibility, F, (inx10^{-6}/lb)	37	33	30	28	26	25	24	23	23
	6	Strength, (lbs/ft)	1198	1064	965	889	828	779	738	704	676
		Flexibility, F, (inx10^{-6}/lb)	37	33	30	27	26	25	23	23	22

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	583	524	476	438	406	378	355	335	318
		Flexibility, F, (inx10^{-6}/lb)	62	57	53	50	48	46	44	43	42
	24	Strength, (lbs/ft)	606	547	500	462	430	403	380	360	343
		Flexibility, F, (inx10^{-6}/lb)	62	57	53	50	47	45	44	42	41
	12	Strength, (lbs/ft)	677	619	572	534	503	476	454	434	417
		Flexibility, F, (inx10^{-6}/lb)	62	56	52	49	46	44	42	40	39
	9	Strength, (lbs/ft)	724	666	620	582	551	525	503	484	467
		Flexibility, F, (inx10^{-6}/lb)	61	56	51	48	45	43	41	39	38
	6	Strength, (lbs/ft)	819	761	716	679	648	623	601	583	567
		Flexibility, F, (inx10^{-6}/lb)	61	55	51	47	44	42	40	38	37
36/7	36	Strength, (lbs/ft)	917	821	745	682	630	586	545	508	476
		Flexibility, F, (inx10^{-6}/lb)	21	20	19	19	19	19	19	19	20
	24	Strength, (lbs/ft)	942	847	771	709	657	613	572	535	503
		Flexibility, F, (inx10^{-6}/lb)	21	20	19	19	19	19	19	19	19
	12	Strength, (lbs/ft)	1020	925	849	788	737	694	653	616	584
		Flexibility, F, (inx10^{-6}/lb)	20	19	19	18	18	18	18	18	18
	9	Strength, (lbs/ft)	1071	977	902	841	790	748	707	670	638
		Flexibility, F, (inx10^{-6}/lb)	20	19	18	18	17	17	17	17	17
	6	Strength, (lbs/ft)	1174	1081	1007	947	897	856	815	778	746
		Flexibility, F, (inx10^{-6}/lb)	20	19	18	17	17	16	16	16	16
36/9	36	Strength, (lbs/ft)	1221	1092	988	904	833	774	723	679	634
		Flexibility, F, (inx10^{-6}/lb)	19	18	17	17	17	17	17	17	17
	24	Strength, (lbs/ft)	1246	1117	1013	929	859	800	750	706	661
		Flexibility, F, (inx10^{-6}/lb)	19	18	17	17	17	16	16	16	17
	12	Strength, (lbs/ft)	1319	1191	1089	1006	937	879	829	787	742
		Flexibility, F, (inx10^{-6}/lb)	19	18	17	17	16	16	16	16	16
	9	Strength, (lbs/ft)	1369	1241	1140	1057	989	932	883	841	796
		Flexibility, F, (inx10^{-6}/lb)	19	18	17	16	16	16	15	15	15
	6	Strength, (lbs/ft)	1467	1341	1241	1160	1093	1037	989	949	904
		Flexibility, F, (inx10^{-6}/lb)	19	17	17	16	16	15	15	15	15

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	890	815	752	700	654	615	581	551	525
		Flexibility, F, (inx10^{-6}/lb)	25	24	23	22	22	22	21	21	21
	24	Strength, (lbs/ft)	919	845	782	730	685	646	612	583	556
		Flexibility, F, (inx10^{-6}/lb)	25	24	23	22	22	21	21	21	21
	12	Strength, (lbs/ft)	1008	934	873	821	777	739	706	677	651
		Flexibility, F, (inx10^{-6}/lb)	24	23	22	21	21	20	20	20	20
	9	Strength, (lbs/ft)	1067	994	933	881	838	800	768	739	714
		Flexibility, F, (inx10^{-6}/lb)	24	23	22	21	20	20	19	19	19
	6	Strength, (lbs/ft)	1185	1113	1053	1003	960	924	892	864	840
		Flexibility, F, (inx10^{-6}/lb)	24	22	21	20	20	19	19	18	18
36/7	36	Strength, (lbs/ft)	1347	1231	1134	1053	983	923	870	823	782
		Flexibility, F, (inx10^{-6}/lb)	10	10	10	10	11	11	11	12	12
	24	Strength, (lbs/ft)	1378	1263	1167	1086	1016	956	904	858	817
		Flexibility, F, (inx10^{-6}/lb)	10	10	10	10	11	11	11	11	12
	12	Strength, (lbs/ft)	1474	1360	1265	1185	1116	1057	1006	961	921
		Flexibility, F, (inx10^{-6}/lb)	10	10	10	10	10	10	10	11	11
	9	Strength, (lbs/ft)	1538	1424	1330	1251	1183	1125	1074	1030	991
		Flexibility, F, (inx10^{-6}/lb)	10	10	10	10	10	10	10	10	10
	6	Strength, (lbs/ft)	1665	1553	1460	1383	1316	1260	1210	1167	1129
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	9	9	9	9	10	10
36/9	36	Strength, (lbs/ft)	1916	1749	1609	1492	1391	1304	1228	1161	1096
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	9	9	9	10	10	10
	24	Strength, (lbs/ft)	1948	1781	1643	1525	1425	1339	1263	1196	1132
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	9	9	9	10	10	10
	12	Strength, (lbs/ft)	2045	1879	1742	1627	1528	1443	1369	1303	1240
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	9	9	9	9	9	10
	9	Strength, (lbs/ft)	2109	1945	1809	1694	1596	1512	1439	1375	1312
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	9	9	9	9	9	9
	6	Strength, (lbs/ft)	2237	2076	1941	1829	1733	1651	1580	1518	1456
		Flexibility, F, (inx10^{-6}/lb)	9	9	8	8	8	9	9	9	9

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	1105	1026	958	900	849	803	763	728	695
		Flexibility, F, (inx10^{-6}/lb)	13	13	13	13	13	13	13	14	14
	24	Strength, (lbs/ft)	1139	1060	993	934	884	839	799	764	732
		Flexibility, F, (inx10^{-6}/lb)	13	13	13	13	13	13	13	13	13
	12	Strength, (lbs/ft)	1240	1162	1096	1039	989	945	906	872	841
		Flexibility, F, (inx10^{-6}/lb)	13	13	12	12	12	12	12	12	12
	9	Strength, (lbs/ft)	1308	1231	1165	1108	1059	1016	978	944	914
		Flexibility, F, (inx10^{-6}/lb)	13	12	12	12	12	12	12	12	12
	6	Strength, (lbs/ft)	1443	1367	1303	1247	1200	1158	1121	1088	1059
		Flexibility, F, (inx10^{-6}/lb)	12	12	12	12	11	11	11	11	11
36/7	36	Strength, (lbs/ft)	1621	1502	1401	1314	1237	1170	1110	1057	1009
		Flexibility, F, (inx10^{-6}/lb)	7	7	7	7	8	8	8	9	9
	24	Strength, (lbs/ft)	1657	1539	1439	1351	1275	1208	1149	1096	1049
		Flexibility, F, (inx10^{-6}/lb)	7	7	7	7	7	8	8	8	9
	12	Strength, (lbs/ft)	1766	1649	1550	1465	1390	1324	1266	1215	1168
		Flexibility, F, (inx10^{-6}/lb)	6	7	7	7	7	7	8	8	8
	9	Strength, (lbs/ft)	1838	1723	1625	1540	1466	1401	1344	1294	1248
		Flexibility, F, (inx10^{-6}/lb)	6	6	7	7	7	7	7	8	8
	6	Strength, (lbs/ft)	1983	1870	1774	1691	1619	1556	1500	1451	1408
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	7	7	7	7	7
36/9	36	Strength, (lbs/ft)	2427	2247	2094	1961	1845	1742	1651	1570	1497
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	7	7	7	7	8
	24	Strength, (lbs/ft)	2465	2286	2133	2001	1886	1784	1693	1613	1540
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	6	7	7	7	8
	12	Strength, (lbs/ft)	2580	2403	2253	2122	2009	1909	1820	1741	1671
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	6	6	7	7	7
	9	Strength, (lbs/ft)	2657	2482	2332	2203	2091	1992	1905	1827	1758
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	6	6	7	7	7
	6	Strength, (lbs/ft)	2810	2638	2491	2364	2254	2158	2074	1999	1932
		Flexibility, F, (inx10^{-6}/lb)	5	6	6	6	6	6	6	6	7

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	567	516	475	442	414	390	370	353	338
		Flexibility, F, (inx10^{-6}/lb)	64	58	53	49	46	43	40	38	36
	24	Strength, (lbs/ft)	633	581	541	507	479	456	436	418	403
		Flexibility, F, (inx10^{-6}/lb)	63	57	52	48	45	42	39	37	35
	12	Strength, (lbs/ft)	829	778	737	704	676	653	633	615	600
		Flexibility, F, (inx10^{-6}/lb)	62	55	50	46	43	40	37	35	33
	9	Strength, (lbs/ft)	961	909	869	835	807	784	764	746	731
		Flexibility, F, (inx10^{-6}/lb)	61	55	50	45	42	39	37	34	33
	6	Strength, (lbs/ft)	1223	1172	1131	1098	1070	1046	1026	1009	994
		Flexibility, F, (inx10^{-6}/lb)	60	54	49	44	41	38	36	34	32
36/7	36	Strength, (lbs/ft)	777	700	638	588	546	511	480	454	432
		Flexibility, F, (inx10^{-6}/lb)	22	21	19	18	18	17	16	16	15
	24	Strength, (lbs/ft)	842	765	704	653	611	576	546	520	497
		Flexibility, F, (inx10^{-6}/lb)	22	20	19	18	17	16	16	15	15
	12	Strength, (lbs/ft)	1039	962	900	850	808	773	743	717	694
		Flexibility, F, (inx10^{-6}/lb)	21	19	18	17	16	15	14	14	13
	9	Strength, (lbs/ft)	1170	1093	1032	981	940	904	874	848	825
		Flexibility, F, (inx10^{-6}/lb)	20	18	17	16	15	14	14	13	12
	6	Strength, (lbs/ft)	1433	1356	1294	1244	1202	1167	1137	1110	1088
		Flexibility, F, (inx10^{-6}/lb)	19	18	16	15	14	13	13	12	12
36/9	36	Strength, (lbs/ft)	1046	933	843	770	709	658	614	577	544
		Flexibility, F, (inx10^{-6}/lb)	20	19	18	17	16	15	15	14	14
	24	Strength, (lbs/ft)	1112	999	909	835	775	723	680	642	609
		Flexibility, F, (inx10^{-6}/lb)	20	19	17	16	16	15	14	14	13
	12	Strength, (lbs/ft)	1309	1196	1106	1032	971	920	877	839	806
		Flexibility, F, (inx10^{-6}/lb)	19	18	17	16	15	14	13	13	12
	9	Strength, (lbs/ft)	1440	1327	1237	1163	1103	1051	1008	970	937
		Flexibility, F, (inx10^{-6}/lb)	19	18	16	15	14	14	13	12	12
	6	Strength, (lbs/ft)	1702	1589	1499	1426	1365	1314	1270	1233	1200
		Flexibility, F, (inx10^{-6}/lb)	19	17	16	15	14	13	12	12	11

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	1064	983	915	857	808	765	728	695	666
		Flexibility, F, (inx10^{-6}/lb)	25	23	22	21	20	19	18	17	17
	24	Strength, (lbs/ft)	1180	1100	1031	974	924	882	844	812	783
		Flexibility, F, (inx10^{-6}/lb)	24	23	21	20	19	18	17	17	16
	12	Strength, (lbs/ft)	1530	1449	1381	1323	1274	1231	1194	1161	1132
		Flexibility, F, (inx10^{-6}/lb)	23	22	20	19	18	17	16	15	15
	9	Strength, (lbs/ft)	1763	1683	1614	1557	1507	1465	1428	1395	1366
		Flexibility, F, (inx10^{-6}/lb)	23	21	20	18	17	16	16	15	14
	6	Strength, (lbs/ft)	2228	2149	2081	2023	1974	1931	1894	1861	1832
		Flexibility, F, (inx10^{-6}/lb)	22	21	19	18	17	16	15	14	14
36/7	36	Strength, (lbs/ft)	1423	1303	1203	1118	1046	984	930	882	840
		Flexibility, F, (inx10^{-6}/lb)	10	10	10	9	9	9	9	9	8
	24	Strength, (lbs/ft)	1540	1419	1319	1235	1163	1101	1046	999	957
		Flexibility, F, (inx10^{-6}/lb)	10	10	9	9	9	8	8	8	8
	12	Strength, (lbs/ft)	1890	1769	1669	1585	1513	1451	1396	1349	1307
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	8	8	8	7	7	7
	9	Strength, (lbs/ft)	2123	2003	1903	1818	1746	1684	1630	1582	1540
		Flexibility, F, (inx10^{-6}/lb)	9	9	8	8	7	7	7	7	7
	6	Strength, (lbs/ft)	2590	2469	2369	2285	2213	2150	2096	2049	2007
		Flexibility, F, (inx10^{-6}/lb)	9	8	8	7	7	7	6	6	6
36/9	36	Strength, (lbs/ft)	1937	1757	1608	1483	1376	1285	1205	1136	1074
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	8	8	8	8	8	8
	24	Strength, (lbs/ft)	2053	1873	1724	1599	1493	1402	1322	1252	1191
		Flexibility, F, (inx10^{-6}/lb)	9	9	8	8	8	8	8	7	7
	12	Strength, (lbs/ft)	2403	2223	2074	1949	1843	1751	1672	1602	1541
		Flexibility, F, (inx10^{-6}/lb)	9	8	8	8	7	7	7	7	7
	9	Strength, (lbs/ft)	2636	2457	2308	2183	2076	1985	1905	1836	1774
		Flexibility, F, (inx10^{-6}/lb)	9	8	8	7	7	7	7	7	6
	6	Strength, (lbs/ft)	3103	2923	2774	2649	2543	2451	2372	2302	2241
		Flexibility, F, (inx10^{-6}/lb)	8	8	7	7	7	7	6	6	6

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	1335	1259	1193	1137	1088	1045	1007	974	944
		Flexibility, F, (inx10^{-6}/lb)	13	12	11	11	11	10	10	10	9
	24	Strength, (lbs/ft)	1484	1409	1345	1290	1243	1201	1165	1133	1104
		Flexibility, F, (inx10^{-6}/lb)	12	12	11	11	10	10	10	9	9
	12	Strength, (lbs/ft)	1931	1860	1800	1750	1707	1670	1638	1610	1586
		Flexibility, F, (inx10^{-6}/lb)	12	11	10	10	9	9	9	8	8
	9	Strength, (lbs/ft)	2228	2161	2104	2057	2016	1982	1953	1928	1907
		Flexibility, F, (inx10^{-6}/lb)	11	11	10	10	9	9	8	8	8
	6	Strength, (lbs/ft)	2824	2762	2711	2670	2636	2607	2584	2564	2548
		Flexibility, F, (inx10^{-6}/lb)	11	10	10	9	9	8	8	8	7
36/7	36	Strength, (lbs/ft)	1868	1753	1655	1571	1497	1433	1376	1326	1281
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	6	6	6	6	6
	24	Strength, (lbs/ft)	2028	1915	1819	1737	1666	1603	1548	1500	1457
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	6	5	5	5	5
	12	Strength, (lbs/ft)	2508	2401	2312	2235	2170	2114	2065	2022	1985
		Flexibility, F, (inx10^{-6}/lb)	6	5	5	5	5	5	5	5	5
	9	Strength, (lbs/ft)	2828	2725	2640	2568	2506	2454	2409	2370	2337
		Flexibility, F, (inx10^{-6}/lb)	5	5	5	5	5	5	4	4	4
	6	Strength, (lbs/ft)	3468	3374	3296	3232	3179	3135	3097	3066	3041
		Flexibility, F, (inx10^{-6}/lb)	5	5	5	4	4	4	4	4	4
36/9	36	Strength, (lbs/ft)	2688	2513	2364	2236	2124	2012	1897	1796	1705
		Flexibility, F, (inx10^{-6}/lb)	6	5	5	5	5	5	5	5	5
	24	Strength, (lbs/ft)	2857	2686	2539	2414	2305	2194	2079	1978	1887
		Flexibility, F, (inx10^{-6}/lb)	5	5	5	5	5	5	5	5	5
	12	Strength, (lbs/ft)	3365	3202	3064	2948	2847	2741	2626	2525	2434
		Flexibility, F, (inx10^{-6}/lb)	5	5	5	5	5	5	5	4	4
	9	Strength, (lbs/ft)	3703	3546	3415	3303	3209	3105	2991	2889	2798
		Flexibility, F, (inx10^{-6}/lb)	5	5	5	5	4	4	4	4	4
	6	Strength, (lbs/ft)	4379	4234	4115	4015	3932	3834	3720	3618	3527
		Flexibility, F, (inx10^{-6}/lb)	5	5	4	4	4	4	4	4	4

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	36	Strength, (lbs/ft)	176	168	162	156	150	145	141	137	133
		Flexibility, F, (inx10^{-6}/lb)	124	120	117	114	112	110	109	107	106
	24	Strength, (lbs/ft)	197	189	182	176	171	166	162	158	154
		Flexibility, F, (inx10^{-6}/lb)	121	117	114	110	108	106	104	102	100
	12	Strength, (lbs/ft)	258	251	245	239	234	229	225	222	218
		Flexibility, F, (inx10^{-6}/lb)	115	110	106	103	100	97	94	92	90
	9	Strength, (lbs/ft)	299	292	286	281	276	271	268	264	261
		Flexibility, F, (inx10^{-6}/lb)	112	108	103	99	96	93	90	88	86
	6	Strength, (lbs/ft)	381	375	369	364	360	356	352	349	347
		Flexibility, F, (inx10^{-6}/lb)	109	104	99	95	92	88	86	83	81
24/5	36	Strength, (lbs/ft)	249	236	224	213	204	195	188	181	174
		Flexibility, F, (inx10^{-6}/lb)	51	51	52	52	53	54	54	55	56
	24	Strength, (lbs/ft)	271	258	246	236	226	218	210	203	197
		Flexibility, F, (inx10^{-6}/lb)	49	49	49	49	50	50	51	51	52
	12	Strength, (lbs/ft)	339	326	314	303	294	285	278	271	264
		Flexibility, F, (inx10^{-6}/lb)	45	44	44	43	43	43	43	43	43
	9	Strength, (lbs/ft)	384	371	359	348	339	330	323	316	309
		Flexibility, F, (inx10^{-6}/lb)	42	42	41	41	40	40	40	40	40
	6	Strength, (lbs/ft)	474	461	449	438	429	420	413	406	399
		Flexibility, F, (inx10^{-6}/lb)	39	38	38	37	36	36	36	35	35
24/7	36	Strength, (lbs/ft)	335	318	303	287	273	260	249	238	228
		Flexibility, F, (inx10^{-6}/lb)	44	43	44	44	44	45	45	46	46
	24	Strength, (lbs/ft)	357	340	326	310	296	283	271	260	251
		Flexibility, F, (inx10^{-6}/lb)	42	42	42	42	42	43	43	43	44
	12	Strength, (lbs/ft)	423	407	393	377	363	350	339	328	318
		Flexibility, F, (inx10^{-6}/lb)	40	39	39	39	39	38	38	38	39
	9	Strength, (lbs/ft)	467	451	438	422	408	395	384	373	363
		Flexibility, F, (inx10^{-6}/lb)	39	38	37	37	37	36	36	36	36
	6	Strength, (lbs/ft)	555	540	528	512	498	485	474	463	453
		Flexibility, F, (inx10^{-6}/lb)	37	36	35	34	34	33	33	33	33

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	246	236	227	219	211	205	198	193	188
		Flexibility, F, (inx10^{-6}/lb)	75	74	73	72	72	71	71	71	71
	24	Strength, (lbs/ft)	270	261	252	244	237	230	224	219	214
		Flexibility, F, (inx10^{-6}/lb)	73	71	70	69	68	68	67	67	67
	12	Strength, (lbs/ft)	344	335	327	319	312	306	301	296	291
		Flexibility, F, (inx10^{-6}/lb)	68	66	64	63	62	61	60	59	58
	9	Strength, (lbs/ft)	394	385	377	369	363	357	352	347	343
		Flexibility, F, (inx10^{-6}/lb)	66	64	62	60	59	58	57	56	55
	6	Strength, (lbs/ft)	492	484	476	470	464	459	454	450	446
		Flexibility, F, (inx10^{-6}/lb)	62	60	58	57	55	54	53	51	50
24/5	36	Strength, (lbs/ft)	344	327	311	297	285	273	263	253	244
		Flexibility, F, (inx10^{-6}/lb)	36	37	38	38	39	40	41	42	43
	24	Strength, (lbs/ft)	371	354	338	324	312	300	290	280	271
		Flexibility, F, (inx10^{-6}/lb)	34	35	36	36	37	38	38	39	40
	12	Strength, (lbs/ft)	452	435	419	405	393	381	371	361	352
		Flexibility, F, (inx10^{-6}/lb)	31	31	31	31	32	32	32	33	33
	9	Strength, (lbs/ft)	506	489	473	459	447	435	425	415	406
		Flexibility, F, (inx10^{-6}/lb)	29	29	29	29	29	30	30	30	30
	6	Strength, (lbs/ft)	614	597	581	567	555	543	533	523	514
		Flexibility, F, (inx10^{-6}/lb)	27	26	26	26	26	26	26	26	26
24/7	36	Strength, (lbs/ft)	475	449	425	404	384	367	351	336	323
		Flexibility, F, (inx10^{-6}/lb)	30	30	31	31	32	33	34	35	35
	24	Strength, (lbs/ft)	502	476	452	431	411	394	378	363	350
		Flexibility, F, (inx10^{-6}/lb)	29	29	30	30	31	31	32	33	33
	12	Strength, (lbs/ft)	583	557	533	512	492	475	459	444	431
		Flexibility, F, (inx10^{-6}/lb)	27	27	27	27	28	28	28	29	29
	9	Strength, (lbs/ft)	637	611	587	566	546	529	513	498	485
		Flexibility, F, (inx10^{-6}/lb)	26	26	26	26	26	26	27	27	27
	6	Strength, (lbs/ft)	745	719	695	674	654	637	621	606	593
		Flexibility, F, (inx10^{-6}/lb)	24	24	24	24	24	24	24	24	24

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	413	397	382	369	356	345	335	325	317
		Flexibility, F, (inx10^{-6}/lb)	38	38	38	39	39	40	40	41	41
	24	Strength, (lbs/ft)	445	429	414	401	389	378	368	359	350
		Flexibility, F, (inx10^{-6}/lb)	37	37	37	37	37	38	38	38	39
	12	Strength, (lbs/ft)	539	524	510	498	487	476	467	458	450
		Flexibility, F, (inx10^{-6}/lb)	34	34	33	33	33	33	33	33	33
	9	Strength, (lbs/ft)	603	588	574	563	552	542	533	525	517
		Flexibility, F, (inx10^{-6}/lb)	32	32	32	31	31	31	31	31	31
	6	Strength, (lbs/ft)	729	715	703	692	682	673	665	658	651
		Flexibility, F, (inx10^{-6}/lb)	30	30	29	29	29	28	28	28	28
24/5	36	Strength, (lbs/ft)	569	546	525	506	488	469	450	433	418
		Flexibility, F, (inx10^{-6}/lb)	22	23	24	25	25	26	27	28	29
	24	Strength, (lbs/ft)	604	581	560	541	524	505	486	469	454
		Flexibility, F, (inx10^{-6}/lb)	21	22	23	23	24	25	26	26	27
	12	Strength, (lbs/ft)	708	686	666	648	632	613	594	577	562
		Flexibility, F, (inx10^{-6}/lb)	19	20	20	21	21	21	22	22	23
	9	Strength, (lbs/ft)	778	756	737	720	704	685	666	649	634
		Flexibility, F, (inx10^{-6}/lb)	18	18	19	19	19	20	20	21	21
	6	Strength, (lbs/ft)	917	897	879	863	848	829	810	793	778
		Flexibility, F, (inx10^{-6}/lb)	16	16	17	17	17	17	18	18	18
24/7	36	Strength, (lbs/ft)	830	785	744	708	674	644	616	590	567
		Flexibility, F, (inx10^{-6}/lb)	18	19	19	20	21	22	22	23	24
	24	Strength, (lbs/ft)	866	821	780	744	710	680	652	626	603
		Flexibility, F, (inx10^{-6}/lb)	18	18	19	19	20	21	21	22	23
	12	Strength, (lbs/ft)	974	929	888	852	818	788	760	734	711
		Flexibility, F, (inx10^{-6}/lb)	16	17	17	18	18	19	19	20	20
	9	Strength, (lbs/ft)	1046	1001	960	924	890	860	832	806	783
		Flexibility, F, (inx10^{-6}/lb)	16	16	16	17	17	18	18	18	19
	6	Strength, (lbs/ft)	1190	1145	1104	1068	1034	1004	976	950	927
		Flexibility, F, (inx10^{-6}/lb)	15	15	15	15	16	16	16	16	17

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	558	538	519	502	486	472	458	446	434
		Flexibility, F, (inx10^{-6}/lb)	24	25	25	26	26	27	28	28	29
	24	Strength, (lbs/ft)	595	575	557	540	524	510	497	484	473
		Flexibility, F, (inx10^{-6}/lb)	24	24	24	25	25	26	26	27	27
	12	Strength, (lbs/ft)	706	686	669	653	638	625	612	601	591
		Flexibility, F, (inx10^{-6}/lb)	21	22	22	22	22	22	23	23	23
	9	Strength, (lbs/ft)	779	761	744	728	714	701	690	679	669
		Flexibility, F, (inx10^{-6}/lb)	20	20	20	21	21	21	21	21	21
	6	Strength, (lbs/ft)	926	909	893	879	866	855	844	835	826
		Flexibility, F, (inx10^{-6}/lb)	19	19	19	19	19	19	19	19	19
24/5	36	Strength, (lbs/ft)	741	713	687	664	642	622	603	586	570
		Flexibility, F, (inx10^{-6}/lb)	16	17	18	19	19	20	21	22	22
	24	Strength, (lbs/ft)	780	753	728	705	683	664	646	629	613
		Flexibility, F, (inx10^{-6}/lb)	16	16	17	18	18	19	20	20	21
	12	Strength, (lbs/ft)	900	874	850	828	808	789	772	756	742
		Flexibility, F, (inx10^{-6}/lb)	14	15	15	16	16	16	17	17	18
	9	Strength, (lbs/ft)	980	954	931	910	891	873	857	842	828
		Flexibility, F, (inx10^{-6}/lb)	13	14	14	14	15	15	16	16	16
	6	Strength, (lbs/ft)	1140	1116	1094	1074	1056	1040	1025	1012	999
		Flexibility, F, (inx10^{-6}/lb)	12	12	12	13	13	13	14	14	14
24/7	36	Strength, (lbs/ft)	1167	1121	1073	1022	976	933	894	858	824
		Flexibility, F, (inx10^{-6}/lb)	14	14	15	15	16	17	17	18	19
	24	Strength, (lbs/ft)	1211	1166	1118	1067	1021	978	939	903	869
		Flexibility, F, (inx10^{-6}/lb)	13	14	14	15	16	16	17	17	18
	12	Strength, (lbs/ft)	1343	1300	1253	1202	1156	1113	1074	1038	1004
		Flexibility, F, (inx10^{-6}/lb)	12	13	13	14	14	15	15	16	16
	9	Strength, (lbs/ft)	1432	1389	1343	1292	1246	1203	1164	1128	1094
		Flexibility, F, (inx10^{-6}/lb)	12	12	13	13	13	14	14	15	15
	6	Strength, (lbs/ft)	1608	1568	1523	1472	1426	1383	1344	1308	1274
		Flexibility, F, (inx10^{-6}/lb)	11	11	11	12	12	12	13	13	13

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	284	275	267	260	253	247	242	237	232
		Flexibility, F, (inx10^{-6}/lb)	61	59	56	54	52	50	48	47	45
	24	Strength, (lbs/ft)	350	341	333	326	319	313	308	303	298
		Flexibility, F, (inx10^{-6}/lb)	59	56	54	52	50	48	46	45	43
	12	Strength, (lbs/ft)	547	538	530	523	516	510	504	499	495
		Flexibility, F, (inx10^{-6}/lb)	56	53	51	49	47	45	43	41	40
	9	Strength, (lbs/ft)	678	669	661	654	647	641	636	631	626
		Flexibility, F, (inx10^{-6}/lb)	55	52	50	48	46	44	42	41	39
	6	Strength, (lbs/ft)	940	931	923	916	910	904	898	893	888
		Flexibility, F, (inx10^{-6}/lb)	53	51	48	46	44	43	41	39	38
24/5	36	Strength, (lbs/ft)	338	325	314	304	295	287	280	273	266
		Flexibility, F, (inx10^{-6}/lb)	25	24	23	23	22	22	21	21	20
	24	Strength, (lbs/ft)	403	391	380	370	361	353	345	338	332
		Flexibility, F, (inx10^{-6}/lb)	23	22	22	21	20	20	19	19	19
	12	Strength, (lbs/ft)	600	588	577	567	558	550	542	535	529
		Flexibility, F, (inx10^{-6}/lb)	20	19	19	18	18	17	17	16	16
	9	Strength, (lbs/ft)	731	719	708	698	689	681	673	666	660
		Flexibility, F, (inx10^{-6}/lb)	19	18	18	17	17	16	16	15	15
	6	Strength, (lbs/ft)	994	982	971	961	952	943	936	929	923
		Flexibility, F, (inx10^{-6}/lb)	18	17	17	16	15	15	14	14	14
24/7	36	Strength, (lbs/ft)	431	412	395	380	366	354	342	332	323
		Flexibility, F, (inx10^{-6}/lb)	22	22	21	21	20	20	20	19	19
	24	Strength, (lbs/ft)	496	478	461	446	432	419	408	398	388
		Flexibility, F, (inx10^{-6}/lb)	21	21	20	20	19	19	18	18	17
	12	Strength, (lbs/ft)	693	674	658	642	629	616	605	594	585
		Flexibility, F, (inx10^{-6}/lb)	19	19	18	17	17	16	16	16	15
	9	Strength, (lbs/ft)	824	806	789	774	760	747	736	726	716
		Flexibility, F, (inx10^{-6}/lb)	19	18	17	17	16	16	15	15	14
	6	Strength, (lbs/ft)	1087	1068	1051	1036	1022	1010	999	988	979
		Flexibility, F, (inx10^{-6}/lb)	18	17	16	16	15	15	14	14	13

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	561	543	526	512	498	486	474	464	454
		Flexibility, F, (inx10^{-6}/lb)	27	27	26	25	24	23	23	22	22
	24	Strength, (lbs/ft)	677	659	643	628	615	603	591	581	571
		Flexibility, F, (inx10^{-6}/lb)	26	25	24	24	23	22	21	21	20
	12	Strength, (lbs/ft)	1027	1009	993	978	965	952	941	931	921
		Flexibility, F, (inx10^{-6}/lb)	24	23	22	21	21	20	19	19	18
	9	Strength, (lbs/ft)	1260	1243	1226	1212	1198	1186	1174	1164	1154
		Flexibility, F, (inx10^{-6}/lb)	23	22	21	21	20	19	19	18	18
	6	Strength, (lbs/ft)	1727	1709	1693	1678	1665	1652	1641	1630	1621
		Flexibility, F, (inx10^{-6}/lb)	22	21	21	20	19	18	18	17	17
24/5	36	Strength, (lbs/ft)	658	634	613	593	575	559	544	530	517
		Flexibility, F, (inx10^{-6}/lb)	13	13	13	13	13	12	12	12	12
	24	Strength, (lbs/ft)	775	751	730	710	692	676	661	647	634
		Flexibility, F, (inx10^{-6}/lb)	12	12	12	12	11	11	11	11	11
	12	Strength, (lbs/ft)	1125	1101	1079	1060	1042	1026	1011	997	984
		Flexibility, F, (inx10^{-6}/lb)	10	10	10	10	9	9	9	9	9
	9	Strength, (lbs/ft)	1358	1334	1313	1293	1275	1259	1244	1230	1217
		Flexibility, F, (inx10^{-6}/lb)	10	9	9	9	9	9	8	8	8
	6	Strength, (lbs/ft)	1825	1801	1779	1760	1742	1726	1710	1697	1684
		Flexibility, F, (inx10^{-6}/lb)	9	9	8	8	8	8	8	7	7
24/7	36	Strength, (lbs/ft)	856	819	786	756	728	703	680	659	640
		Flexibility, F, (inx10^{-6}/lb)	12	12	12	12	11	11	11	11	11
	24	Strength, (lbs/ft)	972	936	902	872	845	820	797	776	756
		Flexibility, F, (inx10^{-6}/lb)	11	11	11	11	11	10	10	10	10
	12	Strength, (lbs/ft)	1322	1286	1252	1222	1195	1170	1147	1126	1106
		Flexibility, F, (inx10^{-6}/lb)	10	10	10	9	9	9	9	9	9
	9	Strength, (lbs/ft)	1556	1519	1486	1456	1428	1403	1380	1359	1340
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	9	9	8	8	8	8
	6	Strength, (lbs/ft)	2022	1985	1952	1922	1895	1870	1847	1826	1806
		Flexibility, F, (inx10^{-6}/lb)	9	9	8	8	8	8	7	7	7

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	809	791	774	759	745	733	721	711	701
		Flexibility, F, (inx10^{-6}/lb)	15	15	15	14	14	14	13	13	13
	24	Strength, (lbs/ft)	971	954	939	925	913	902	892	882	874
		Flexibility, F, (inx10^{-6}/lb)	14	14	14	13	13	13	12	12	12
	12	Strength, (lbs/ft)	1458	1445	1434	1424	1416	1408	1402	1397	1392
		Flexibility, F, (inx10^{-6}/lb)	13	13	12	12	11	11	11	11	10
	9	Strength, (lbs/ft)	1783	1773	1764	1757	1751	1746	1743	1740	1738
		Flexibility, F, (inx10^{-6}/lb)	12	12	12	11	11	11	10	10	10
	6	Strength, (lbs/ft)	2432	2427	2424	2422	2421	2422	2424	2426	2429
		Flexibility, F, (inx10^{-6}/lb)	12	11	11	11	10	10	10	9	9
24/5	36	Strength, (lbs/ft)	1013	987	964	944	922	897	873	851	831
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	8	8	8	8	8	8
	24	Strength, (lbs/ft)	1189	1165	1144	1125	1104	1079	1056	1034	1014
		Flexibility, F, (inx10^{-6}/lb)	8	8	8	8	8	7	7	7	7
	12	Strength, (lbs/ft)	1717	1698	1682	1668	1651	1626	1602	1580	1560
		Flexibility, F, (inx10^{-6}/lb)	7	6	6	6	6	6	6	6	6
	9	Strength, (lbs/ft)	2069	2054	2041	2030	2016	1990	1967	1945	1925
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	6	6	5	5	5
	6	Strength, (lbs/ft)	2773	2764	2758	2754	2745	2719	2696	2674	2654
		Flexibility, F, (inx10^{-6}/lb)	5	5	5	5	5	5	5	5	5
24/7	36	Strength, (lbs/ft)	1375	1319	1268	1221	1178	1139	1103	1070	1039
		Flexibility, F, (inx10^{-6}/lb)	8	8	8	8	8	8	8	8	8
	24	Strength, (lbs/ft)	1557	1501	1450	1403	1361	1321	1285	1252	1221
		Flexibility, F, (inx10^{-6}/lb)	7	7	7	7	7	7	7	7	7
	12	Strength, (lbs/ft)	2104	2048	1997	1950	1907	1868	1832	1799	1768
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	6	6	6	6	6
	9	Strength, (lbs/ft)	2468	2412	2361	2315	2272	2233	2197	2163	2132
		Flexibility, F, (inx10^{-6}/lb)	6	6	6	6	6	6	5	5	5
	6	Strength, (lbs/ft)	3197	3141	3090	3044	3001	2962	2926	2892	2861
		Flexibility, F, (inx10^{-6}/lb)	5	5	5	5	5	5	5	5	5

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.030 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	36	Strength, (lbs/ft)	216	206	197	189	182	176	170	164	158
		Flexibility, F, (inx10^{-6}/lb)	71	70	69	69	69	69	69	69	69
	24	Strength, (lbs/ft)	238	228	219	211	205	198	193	187	181
		Flexibility, F, (inx10^{-6}/lb)	68	67	66	66	65	65	64	64	64
	12	Strength, (lbs/ft)	303	294	285	278	271	266	260	254	248
		Flexibility, F, (inx10^{-6}/lb)	63	61	60	59	58	57	56	56	55
	9	Strength, (lbs/ft)	347	338	330	322	316	310	305	299	293
		Flexibility, F, (inx10^{-6}/lb)	61	59	57	56	55	54	53	52	51
	6	Strength, (lbs/ft)	434	425	418	411	405	400	395	389	383
		Flexibility, F, (inx10^{-6}/lb)	57	55	54	52	51	49	48	47	46
24/6	36	Strength, (lbs/ft)	286	272	259	248	238	229	221	214	207
		Flexibility, F, (inx10^{-6}/lb)	61	60	59	59	58	58	58	58	58
	24	Strength, (lbs/ft)	306	292	280	269	259	250	242	235	229
		Flexibility, F, (inx10^{-6}/lb)	60	59	58	57	56	56	56	55	55
	12	Strength, (lbs/ft)	367	354	342	332	322	314	307	300	294
		Flexibility, F, (inx10^{-6}/lb)	58	56	55	53	52	52	51	50	50
	9	Strength, (lbs/ft)	408	395	383	373	364	357	349	343	337
		Flexibility, F, (inx10^{-6}/lb)	56	54	53	52	50	49	49	48	47
	6	Strength, (lbs/ft)	489	477	466	457	449	441	435	429	424
		Flexibility, F, (inx10^{-6}/lb)	54	52	51	49	48	47	46	45	44

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	299	286	275	264	255	247	239	231	223
		Flexibility, F, (inx10^{-6}/lb)	46	47	47	47	48	48	49	49	50
	24	Strength, (lbs/ft)	325	312	301	291	282	273	266	258	250
		Flexibility, F, (inx10^{-6}/lb)	45	45	45	45	45	45	46	46	47
	12	Strength, (lbs/ft)	403	391	380	370	362	354	347	339	331
		Flexibility, F, (inx10^{-6}/lb)	40	40	40	40	39	39	39	39	39
	9	Strength, (lbs/ft)	455	443	433	423	415	408	401	393	385
		Flexibility, F, (inx10^{-6}/lb)	39	38	38	37	37	37	37	36	36
	6	Strength, (lbs/ft)	559	548	538	529	522	515	509	501	493
		Flexibility, F, (inx10^{-6}/lb)	36	35	34	34	33	33	33	32	32
24/6	36	Strength, (lbs/ft)	411	393	376	361	348	335	324	314	304
		Flexibility, F, (inx10^{-6}/lb)	39	39	39	39	39	40	40	40	41
	24	Strength, (lbs/ft)	437	418	402	387	374	362	350	340	331
		Flexibility, F, (inx10^{-6}/lb)	38	38	38	38	38	38	38	39	39
	12	Strength, (lbs/ft)	512	494	479	464	452	440	430	420	412
		Flexibility, F, (inx10^{-6}/lb)	36	35	35	35	35	35	35	35	35
	9	Strength, (lbs/ft)	562	545	530	516	504	493	483	474	466
		Flexibility, F, (inx10^{-6}/lb)	35	34	34	33	33	33	33	33	33
	6	Strength, (lbs/ft)	662	646	632	619	608	598	589	581	573
		Flexibility, F, (inx10^{-6}/lb)	33	32	32	31	31	31	30	30	30

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	488	469	451	434	420	406	393	382	371
		Flexibility, F, (inx10^{-6}/lb)	26	27	28	28	29	30	30	31	32
	24	Strength, (lbs/ft)	521	502	484	468	453	440	428	416	406
		Flexibility, F, (inx10^{-6}/lb)	25	26	26	27	27	28	28	29	30
	12	Strength, (lbs/ft)	619	600	584	568	554	542	530	519	510
		Flexibility, F, (inx10^{-6}/lb)	23	23	23	24	24	24	25	25	25
	9	Strength, (lbs/ft)	685	666	650	635	622	610	598	588	579
		Flexibility, F, (inx10^{-6}/lb)	22	22	22	22	22	22	23	23	23
	6	Strength, (lbs/ft)	816	798	783	769	757	745	735	726	717
		Flexibility, F, (inx10^{-6}/lb)	20	20	20	20	20	20	20	20	20
24/6	36	Strength, (lbs/ft)	736	705	677	651	628	606	586	565	543
		Flexibility, F, (inx10^{-6}/lb)	21	22	22	23	23	24	24	25	26
	24	Strength, (lbs/ft)	770	739	711	686	663	641	622	601	579
		Flexibility, F, (inx10^{-6}/lb)	21	21	22	22	22	23	23	24	25
	12	Strength, (lbs/ft)	871	841	814	790	768	748	729	709	687
		Flexibility, F, (inx10^{-6}/lb)	20	20	20	20	21	21	21	22	22
	9	Strength, (lbs/ft)	938	909	883	859	838	819	801	781	759
		Flexibility, F, (inx10^{-6}/lb)	19	19	19	19	20	20	20	20	21
	6	Strength, (lbs/ft)	1073	1045	1021	998	979	961	944	925	903
		Flexibility, F, (inx10^{-6}/lb)	18	18	18	18	18	18	18	18	18

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	643	619	597	577	558	541	525	510	496
		Flexibility, F, (inx10^{-6}/lb)	18	19	20	20	21	21	22	23	23
	24	Strength, (lbs/ft)	681	657	635	615	597	580	564	550	536
		Flexibility, F, (inx10^{-6}/lb)	18	18	19	19	20	20	21	21	22
	12	Strength, (lbs/ft)	793	770	750	731	713	697	682	669	656
		Flexibility, F, (inx10^{-6}/lb)	16	16	17	17	17	18	18	18	19
	9	Strength, (lbs/ft)	868	846	826	807	791	775	761	748	736
		Flexibility, F, (inx10^{-6}/lb)	15	15	15	16	16	16	17	17	17
	6	Strength, (lbs/ft)	1018	997	978	961	946	931	919	907	896
		Flexibility, F, (inx10^{-6}/lb)	14	14	14	14	14	14	15	15	15
24/6	36	Strength, (lbs/ft)	1045	1004	966	932	900	871	844	819	795
		Flexibility, F, (inx10^{-6}/lb)	15	15	16	16	17	17	18	19	19
	24	Strength, (lbs/ft)	1085	1045	1008	974	943	914	888	863	840
		Flexibility, F, (inx10^{-6}/lb)	14	15	15	16	16	17	17	18	18
	12	Strength, (lbs/ft)	1208	1169	1134	1101	1071	1044	1019	995	974
		Flexibility, F, (inx10^{-6}/lb)	14	14	14	15	15	15	16	16	16
	9	Strength, (lbs/ft)	1290	1252	1217	1186	1157	1130	1106	1084	1063
		Flexibility, F, (inx10^{-6}/lb)	13	13	14	14	14	14	15	15	15
	6	Strength, (lbs/ft)	1453	1417	1385	1355	1328	1303	1281	1260	1241
		Flexibility, F, (inx10^{-6}/lb)	12	12	12	13	13	13	13	14	14

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	313	302	293	284	276	269	263	257	251
		Flexibility, F, (inx10^{-6}/lb)	34	33	32	31	30	29	28	27	27
	24	Strength, (lbs/ft)	379	368	358	350	342	335	328	322	317
		Flexibility, F, (inx10^{-6}/lb)	32	31	30	29	28	27	26	25	25
	12	Strength, (lbs/ft)	575	565	555	547	539	532	525	519	514
		Flexibility, F, (inx10^{-6}/lb)	29	28	27	26	25	24	23	23	22
	9	Strength, (lbs/ft)	707	696	687	678	670	663	656	651	645
		Flexibility, F, (inx10^{-6}/lb)	28	27	26	25	24	23	22	22	21
	6	Strength, (lbs/ft)	969	959	949	940	933	925	919	913	907
		Flexibility, F, (inx10^{-6}/lb)	27	26	25	24	23	22	21	20	20
24/6	36	Strength, (lbs/ft)	408	391	376	362	349	338	328	318	310
		Flexibility, F, (inx10^{-6}/lb)	31	30	29	28	28	27	26	25	25
	24	Strength, (lbs/ft)	474	457	441	427	415	404	393	384	375
		Flexibility, F, (inx10^{-6}/lb)	30	29	28	27	26	26	25	24	23
	12	Strength, (lbs/ft)	670	653	638	624	612	601	590	581	572
		Flexibility, F, (inx10^{-6}/lb)	28	27	26	25	24	23	23	22	21
	9	Strength, (lbs/ft)	802	785	769	756	743	732	721	712	703
		Flexibility, F, (inx10^{-6}/lb)	28	26	25	24	23	23	22	21	21
	6	Strength, (lbs/ft)	1064	1047	1032	1018	1006	994	984	974	966
		Flexibility, F, (inx10^{-6}/lb)	27	25	24	23	22	22	21	20	20

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	615	594	575	558	542	528	515	503	491
		Flexibility, F, (inx10^{-6}/lb)	17	17	16	16	15	15	15	15	14
	24	Strength, (lbs/ft)	732	711	692	675	659	645	631	619	608
		Flexibility, F, (inx10^{-6}/lb)	16	15	15	15	14	14	14	13	13
	12	Strength, (lbs/ft)	1082	1061	1042	1025	1009	995	981	969	958
		Flexibility, F, (inx10^{-6}/lb)	14	13	13	13	12	12	12	11	11
	9	Strength, (lbs/ft)	1315	1294	1275	1258	1242	1228	1215	1202	1191
		Flexibility, F, (inx10^{-6}/lb)	13	13	12	12	12	11	11	11	10
	6	Strength, (lbs/ft)	1782	1761	1742	1725	1709	1694	1681	1669	1658
		Flexibility, F, (inx10^{-6}/lb)	12	12	11	11	11	10	10	10	10
24/6	36	Strength, (lbs/ft)	821	787	756	728	703	680	658	639	620
		Flexibility, F, (inx10^{-6}/lb)	15	15	15	14	14	14	14	13	13
	24	Strength, (lbs/ft)	938	904	873	845	819	796	775	755	737
		Flexibility, F, (inx10^{-6}/lb)	15	14	14	14	13	13	13	13	12
	12	Strength, (lbs/ft)	1288	1254	1223	1195	1169	1146	1125	1105	1087
		Flexibility, F, (inx10^{-6}/lb)	13	13	13	12	12	12	11	11	11
	9	Strength, (lbs/ft)	1521	1487	1456	1428	1403	1379	1358	1338	1320
		Flexibility, F, (inx10^{-6}/lb)	13	12	12	12	11	11	11	10	10
	6	Strength, (lbs/ft)	1988	1953	1923	1895	1869	1846	1825	1805	1787
		Flexibility, F, (inx10^{-6}/lb)	12	12	11	11	11	10	10	10	10

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1-1/2" Seam Weld **ϕ = 0.50**

TRI-SERVICES METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	899	877	857	839	822	807	793	781	769
		Flexibility, F, (inx10^{-6}/lb)	10	10	10	10	10	10	9	9	9
	24	Strength, (lbs/ft)	1064	1044	1025	1008	993	979	967	955	945
		Flexibility, F, (inx10^{-6}/lb)	10	9	9	9	9	9	9	8	8
	12	Strength, (lbs/ft)	1561	1544	1530	1517	1506	1496	1487	1480	1473
		Flexibility, F, (inx10^{-6}/lb)	8	8	8	8	7	7	7	7	7
	9	Strength, (lbs/ft)	1892	1878	1866	1856	1848	1840	1834	1829	1825
		Flexibility, F, (inx10^{-6}/lb)	8	7	7	7	7	7	7	6	6
	6	Strength, (lbs/ft)	2554	2545	2539	2534	2531	2529	2528	2529	2530
		Flexibility, F, (inx10^{-6}/lb)	7	7	7	6	6	6	6	6	6
24/6	36	Strength, (lbs/ft)	1323	1284	1236	1192	1151	1114	1080	1048	1019
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	9	9	9	9	9	9
	24	Strength, (lbs/ft)	1504	1467	1418	1374	1334	1297	1262	1230	1201
		Flexibility, F, (inx10^{-6}/lb)	9	9	9	8	8	8	8	8	8
	12	Strength, (lbs/ft)	2045	2013	1965	1921	1880	1843	1809	1777	1748
		Flexibility, F, (inx10^{-6}/lb)	8	8	8	7	7	7	7	7	7
	9	Strength, (lbs/ft)	2405	2378	2330	2285	2245	2208	2173	2142	2112
		Flexibility, F, (inx10^{-6}/lb)	7	7	7	7	7	7	7	6	6
	6	Strength, (lbs/ft)	3126	3107	3059	3014	2974	2937	2902	2871	2841
		Flexibility, F, (inx10^{-6}/lb)	7	7	7	6	6	6	6	6	6

1.5 in. deck - 36 in. wide - 6 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

TRI-SERVICES METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	Strength, (lbs/ft)	3202	3025	2891	2788	2705	2637	2580	2533	2492
	Flexibility, F, (inx10^{-6}/lb)	0.32	0.34	0.36	0.37	0.38	0.39	0.40	0.41	0.41
36/7	Strength, (lbs/ft)	3731	3478	3288	3140	3022	2925	2845	2777	2718
	Flexibility, F, (inx10^{-6}/lb)	0.28	0.30	0.31	0.33	0.34	0.35	0.36	0.37	0.38
36/9	Strength, (lbs/ft)	4843	4431	4122	3881	3689	3532	3401	3290	3195
	Flexibility, F, (inx10^{-6}/lb)	0.21	0.23	0.25	0.27	0.28	0.29	0.30	0.31	0.32

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	Strength, (lbs/ft)	3038	2913	2814	2732	2664	2607	2558	2515	2478
	Flexibility, F, (inx10^{-6}/lb)	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.37	0.38
36/7	Strength, (lbs/ft)	3513	3336	3194	3078	2982	2900	2830	2769	2716
	Flexibility, F, (inx10^{-6}/lb)	0.27	0.28	0.29	0.31	0.32	0.32	0.33	0.34	0.35
36/9	Strength, (lbs/ft)	4514	4225	3995	3806	3649	3516	3401	3303	3216
	Flexibility, F, (inx10^{-6}/lb)	0.21	0.22	0.24	0.25	0.26	0.27	0.28	0.29	0.29

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	Strength, (lbs/ft)	3055	2947	2856	2780	2714	2657	2608	2564	2525
	Flexibility, F, (inx10^{-6}/lb)	0.27	0.28	0.29	0.29	0.30	0.31	0.31	0.32	0.32
36/7	Strength, (lbs/ft)	3563	3408	3279	3170	3077	2996	2925	2862	2807
	Flexibility, F, (inx10^{-6}/lb)	0.23	0.24	0.25	0.26	0.27	0.27	0.28	0.28	0.29
36/9	Strength, (lbs/ft)	4630	4378	4169	3991	3839	3707	3592	3490	3400
	Flexibility, F, (inx10^{-6}/lb)	0.18	0.19	0.20	0.20	0.21	0.22	0.23	0.23	0.24

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	Strength, (lbs/ft)	3066	2971	2889	2818	2755	2701	2652	2608	2569
	Flexibility, F, (inx10^{-6}/lb)	0.24	0.25	0.25	0.26	0.26	0.27	0.28	0.28	0.28
36/7	Strength, (lbs/ft)	3595	3459	3342	3241	3152	3074	3004	2942	2886
	Flexibility, F, (inx10^{-6}/lb)	0.20	0.21	0.22	0.23	0.23	0.24	0.24	0.25	0.25
36/9	Strength, (lbs/ft)	4707	4485	4295	4130	3986	3858	3745	3644	3553
	Flexibility, F, (inx10^{-6}/lb)	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.21

3.0 in. deck - 24 in. wide - 6 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

TRI-SERVICES METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	Strength, (lbs/ft)	2372	2348	2327	2308	2290	2275	2261	2248	2236
	Flexibility, F, (inx10^{-6}/lb)	0.99	1.00	1.01	1.01	1.02	1.03	1.04	1.04	1.05
24/5	Strength, (lbs/ft)	2486	2455	2428	2403	2381	2361	2343	2327	2311
	Flexibility, F, (inx10^{-6}/lb)	0.94	0.95	0.96	0.97	0.98	0.99	1.00	1.01	1.01
24/7	Strength, (lbs/ft)	2895	2841	2792	2748	2709	2673	2641	2612	2584
	Flexibility, F, (inx10^{-6}/lb)	0.81	0.82	0.84	0.85	0.86	0.88	0.89	0.90	0.91

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	Strength, (lbs/ft)	2359	2336	2315	2296	2279	2264	2250	2236	2224
	Flexibility, F, (inx10^{-6}/lb)	0.91	0.92	0.92	0.93	0.94	0.94	0.95	0.96	0.96
24/5	Strength, (lbs/ft)	2480	2450	2424	2400	2378	2359	2340	2324	2308
	Flexibility, F, (inx10^{-6}/lb)	0.86	0.87	0.88	0.89	0.90	0.91	0.91	0.92	0.93
24/7	Strength, (lbs/ft)	2917	2864	2817	2775	2736	2701	2668	2638	2611
	Flexibility, F, (inx10^{-6}/lb)	0.73	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.82

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	Strength, (lbs/ft)	2389	2364	2341	2321	2302	2284	2268	2253	2239
	Flexibility, F, (inx10^{-6}/lb)	0.77	0.78	0.79	0.80	0.80	0.81	0.82	0.82	0.83
24/5	Strength, (lbs/ft)	2534	2502	2473	2447	2423	2400	2380	2361	2343
	Flexibility, F, (inx10^{-6}/lb)	0.73	0.74	0.75	0.76	0.76	0.77	0.78	0.78	0.79
24/7	Strength, (lbs/ft)	3059	3002	2950	2903	2860	2820	2783	2749	2717
	Flexibility, F, (inx10^{-6}/lb)	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.67	0.68

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	Strength, (lbs/ft)	2421	2395	2372	2350	2330	2311	2294	2277	2262
	Flexibility, F, (inx10^{-6}/lb)	0.68	0.69	0.70	0.70	0.71	0.72	0.72	0.73	0.73
24/5	Strength, (lbs/ft)	2586	2553	2523	2495	2469	2445	2423	2403	2383
	Flexibility, F, (inx10^{-6}/lb)	0.64	0.65	0.66	0.66	0.67	0.68	0.68	0.69	0.69
24/7	Strength, (lbs/ft)	3182	3123	3069	3019	2974	2931	2892	2855	2820
	Flexibility, F, (inx10^{-6}/lb)	0.52	0.53	0.54	0.55	0.56	0.56	0.57	0.58	0.59

3.0 in. deck - 24 in. wide - 8 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

TRI-SERVICES METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	Strength, (lbs/ft)	2422	2395	2371	2349	2330	2312	2296	2282	2269
	Flexibility, F, (inx10^{-6}/lb)	0.97	0.98	0.99	1.00	1.00	1.01	1.02	1.03	1.03
24/6	Strength, (lbs/ft)	2831	2780	2735	2694	2658	2625	2594	2567	2542
	Flexibility, F, (inx10^{-6}/lb)	0.83	0.84	0.86	0.87	0.88	0.89	0.90	0.91	0.92

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	Strength, (lbs/ft)	2412	2386	2363	2342	2322	2305	2289	2274	2261
	Flexibility, F, (inx10^{-6}/lb)	0.89	0.90	0.90	0.91	0.92	0.93	0.93	0.94	0.95
24/6	Strength, (lbs/ft)	2849	2800	2756	2716	2680	2647	2617	2589	2563
	Flexibility, F, (inx10^{-6}/lb)	0.75	0.76	0.78	0.79	0.80	0.81	0.82	0.83	0.83

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	Strength, (lbs/ft)	2452	2424	2399	2376	2354	2335	2317	2300	2284
	Flexibility, F, (inx10^{-6}/lb)	0.75	0.76	0.77	0.78	0.79	0.79	0.80	0.80	0.81
24/6	Strength, (lbs/ft)	2977	2924	2875	2832	2791	2754	2720	2688	2659
	Flexibility, F, (inx10^{-6}/lb)	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	Strength, (lbs/ft)	2493	2464	2438	2413	2390	2370	2350	2332	2315
	Flexibility, F, (inx10^{-6}/lb)	0.66	0.67	0.68	0.69	0.69	0.70	0.70	0.71	0.72
24/6	Strength, (lbs/ft)	3089	3034	2984	2937	2895	2855	2818	2784	2752
	Flexibility, F, (inx10^{-6}/lb)	0.54	0.55	0.55	0.56	0.57	0.58	0.59	0.59	0.60

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	36	Strength, (lbs/ft)	473	420	378	338	305	278	256	237	221
		Stiffeness, G', (10^3 lbs/in)	9.6	10.8	12.0	13.0	13.9	14.7	15.4	16.0	16.4
	24	Strength, (lbs/ft)	485	434	393	356	323	296	274	255	239
		Stiffeness, G', (10^3 lbs/in)	9.6	10.9	12.0	13.0	13.9	14.7	15.4	16.0	16.5
	12	Strength, (lbs/ft)	523	474	435	404	377	351	328	310	293
		Stiffeness, G', (10^3 lbs/in)	9.6	10.9	12.0	13.1	14.0	14.8	15.6	16.2	16.7
	9	Strength, (lbs/ft)	546	500	462	432	406	385	365	346	330
		Stiffeness, G', (10^3 lbs/in)	9.6	10.9	12.1	13.1	14.1	14.9	15.6	16.3	16.9
	6	Strength, (lbs/ft)	590	548	514	485	462	442	425	410	397
		Stiffeness, G', (10^3 lbs/in)	9.6	10.9	12.1	13.2	14.2	15.0	15.8	16.5	17.1
36/7	36	Strength, (lbs/ft)	698	611	537	478	431	393	361	334	311
		Stiffeness, G', (10^3 lbs/in)	50.3	52.3	53.3	53.5	53.3	52.7	51.9	50.9	49.7
	24	Strength, (lbs/ft)	713	627	555	496	450	411	379	352	329
		Stiffeness, G', (10^3 lbs/in)	50.4	52.4	53.4	53.7	53.5	52.9	52.1	51.1	50.1
	12	Strength, (lbs/ft)	758	674	609	551	504	466	434	407	384
		Stiffeness, G', (10^3 lbs/in)	50.5	52.6	53.7	54.1	54.0	53.6	52.9	52.0	51.0
	9	Strength, (lbs/ft)	787	705	641	587	540	502	470	443	420
		Stiffeness, G', (10^3 lbs/in)	50.7	52.8	54.0	54.4	54.4	54.0	53.3	52.5	51.6
	6	Strength, (lbs/ft)	845	765	703	653	612	575	543	516	493
		Stiffeness, G', (10^3 lbs/in)	50.9	53.1	54.4	55.0	55.1	54.8	54.3	53.6	52.7
36/9	36	Strength, (lbs/ft)	1 090	963	862	769	691	626	573	528	489
		Stiffeness, G', (10^3 lbs/in)	54.9	58.1	60.3	61.7	62.4	62.6	62.5	62.0	61.3
	24	Strength, (lbs/ft)	1 104	978	877	787	709	645	591	546	507
		Stiffeness, G', (10^3 lbs/in)	54.9	58.2	60.4	61.8	62.5	62.8	62.6	62.2	61.5
	12	Strength, (lbs/ft)	1 142	1 020	921	841	763	699	646	600	562
		Stiffeness, G', (10^3 lbs/in)	55.0	58.3	60.6	62.1	62.9	63.2	63.1	62.7	62.2
	9	Strength, (lbs/ft)	1 168	1 047	950	871	800	735	682	637	598
		Stiffeness, G', (10^3 lbs/in)	55.1	58.4	60.7	62.2	63.1	63.4	63.4	63.1	62.6
	6	Strength, (lbs/ft)	1 217	1 100	1 006	930	866	808	755	709	671
		Stiffeness, G', (10^3 lbs/in)	55.2	58.6	61.0	62.6	63.5	64.0	64.0	63.8	63.4

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	452	408	369	338	312	290	271	254	240
		Stiffeness, G', (10^3 lbs/in)	17.7	19.0	20.1	21.0	21.7	22.2	22.7	23.0	23.2
	24	Strength, (lbs/ft)	473	434	395	364	338	316	297	280	266
		Stiffeness, G', (10^3 lbs/in)	17.7	19.0	20.1	21.0	21.8	22.4	22.8	23.1	23.4
	12	Strength, (lbs/ft)	534	497	467	441	416	394	375	359	344
		Stiffeness, G', (10^3 lbs/in)	17.8	19.1	20.3	21.2	22.0	22.7	23.2	23.6	23.9
	9	Strength, (lbs/ft)	572	537	508	483	462	444	428	411	397
		Stiffeness, G', (10^3 lbs/in)	17.9	19.2	20.4	21.4	22.2	22.9	23.4	23.9	24.2
	6	Strength, (lbs/ft)	643	611	585	562	543	527	512	500	488
		Stiffeness, G', (10^3 lbs/in)	18.0	19.4	20.6	21.6	22.5	23.2	23.9	24.4	24.8
36/7	36	Strength, (lbs/ft)	644	575	520	475	437	405	378	355	334
		Stiffeness, G', (10^3 lbs/in)	68.8	68.0	66.8	65.2	63.5	61.6	59.8	57.9	56.1
	24	Strength, (lbs/ft)	670	601	546	501	463	432	404	381	360
		Stiffeness, G', (10^3 lbs/in)	69.0	68.3	67.1	65.5	63.8	62.0	60.2	58.4	56.6
	12	Strength, (lbs/ft)	742	680	625	579	542	510	483	459	439
		Stiffeness, G', (10^3 lbs/in)	69.5	68.9	67.8	66.4	64.8	63.1	61.4	59.7	58.0
	9	Strength, (lbs/ft)	788	728	677	632	594	562	535	512	491
		Stiffeness, G', (10^3 lbs/in)	69.9	69.4	68.3	67.0	65.5	63.9	62.2	60.5	58.9
	6	Strength, (lbs/ft)	876	818	771	732	699	667	640	616	595
		Stiffeness, G', (10^3 lbs/in)	70.6	70.2	69.3	68.2	66.8	65.3	63.8	62.2	60.7
36/9	36	Strength, (lbs/ft)	1 028	924	831	755	692	638	592	553	518
		Stiffeness, G', (10^3 lbs/in)	79.9	80.4	80.2	79.4	78.3	76.9	75.4	73.8	72.1
	24	Strength, (lbs/ft)	1 049	950	857	781	718	664	619	579	544
		Stiffeness, G', (10^3 lbs/in)	80.0	80.5	80.3	79.6	78.5	77.2	75.7	74.1	72.4
	12	Strength, (lbs/ft)	1 112	1 018	936	860	796	743	697	657	623
		Stiffeness, G', (10^3 lbs/in)	80.3	80.9	80.8	80.2	79.2	78.0	76.6	75.0	73.4
	9	Strength, (lbs/ft)	1 154	1 061	984	912	849	795	749	710	675
		Stiffeness, G', (10^3 lbs/in)	80.5	81.2	81.2	80.6	79.7	78.5	77.1	75.7	74.1
	6	Strength, (lbs/ft)	1 234	1 145	1 071	1 008	953	900	854	814	779
		Stiffeness, G', (10^3 lbs/in)	80.9	81.7	81.8	81.4	80.6	79.5	78.2	76.9	75.4

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	499	459	426	398	374	353	335	318	304
		Stiffeness, G', (10^3 lbs/in)	34.0	34.7	35.2	35.4	35.4	35.2	35.0	34.6	34.2
	24	Strength, (lbs/ft)	545	506	472	444	420	399	381	365	351
		Stiffeness, G', (10^3 lbs/in)	34.1	34.9	35.4	35.6	35.7	35.6	35.3	35.0	34.6
	12	Strength, (lbs/ft)	658	627	600	577	557	539	521	504	490
		Stiffeness, G', (10^3 lbs/in)	34.5	35.4	36.0	36.3	36.5	36.5	36.4	36.1	35.8
	9	Strength, (lbs/ft)	728	699	674	652	633	616	602	589	577
		Stiffeness, G', (10^3 lbs/in)	34.8	35.7	36.3	36.8	37.0	37.1	37.0	36.8	36.6
	6	Strength, (lbs/ft)	854	829	807	788	771	757	744	732	722
		Stiffeness, G', (10^3 lbs/in)	35.3	36.3	37.1	37.6	38.0	38.2	38.2	38.2	38.1
36/7	36	Strength, (lbs/ft)	696	639	590	550	515	485	458	435	414
		Stiffeness, G', (10^3 lbs/in)	90.9	87.2	83.7	80.3	77.1	74.0	71.1	68.4	65.9
	24	Strength, (lbs/ft)	743	685	637	596	561	531	505	481	460
		Stiffeness, G', (10^3 lbs/in)	91.3	87.7	84.2	80.9	77.7	74.6	71.8	69.1	66.6
	12	Strength, (lbs/ft)	881	825	776	736	701	671	644	621	600
		Stiffeness, G', (10^3 lbs/in)	92.5	89.1	85.8	82.5	79.4	76.5	73.7	71.1	68.7
	9	Strength, (lbs/ft)	964	913	869	829	794	764	737	714	693
		Stiffeness, G', (10^3 lbs/in)	93.4	90.0	86.8	83.6	80.6	77.7	75.0	72.5	70.1
	6	Strength, (lbs/ft)	1 123	1 075	1 033	998	968	941	918	897	878
		Stiffeness, G', (10^3 lbs/in)	95.0	91.8	88.7	85.7	82.8	80.1	77.5	75.1	72.8
36/9	36	Strength, (lbs/ft)	1 109	1 011	929	860	801	749	704	664	629
		Stiffeness, G', (10^3 lbs/in)	113.1	110.0	106.8	103.5	100.2	97.0	93.9	90.9	88.1
	24	Strength, (lbs/ft)	1 156	1 057	976	906	847	796	751	711	676
		Stiffeness, G', (10^3 lbs/in)	113.4	110.4	107.2	103.9	100.7	97.5	94.4	91.5	88.6
	12	Strength, (lbs/ft)	1 282	1 197	1 115	1 046	987	935	890	850	815
		Stiffeness, G', (10^3 lbs/in)	114.3	111.4	108.3	105.1	102.0	98.9	95.9	93.1	90.3
	9	Strength, (lbs/ft)	1 360	1 278	1 208	1 139	1 080	1 028	983	943	908
		Stiffeness, G', (10^3 lbs/in)	114.8	112.0	109.0	106.0	102.9	99.9	96.9	94.1	91.4
	6	Strength, (lbs/ft)	1 509	1 431	1 365	1 307	1 257	1 214	1 169	1 129	1 079
		Stiffeness, G', (10^3 lbs/in)	116.0	113.3	110.5	107.5	104.6	101.7	98.9	96.2	93.6

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	543	510	481	456	435	416	399	383	370
		Stiffeness, G', (10^3 lbs/in)	48.6	48.1	47.4	46.6	45.7	44.8	43.8	42.8	41.8
	24	Strength, (lbs/ft)	616	582	554	529	507	488	471	456	442
		Stiffeness, G', (10^3 lbs/in)	48.9	48.5	47.9	47.1	46.3	45.4	44.4	43.5	42.5
	12	Strength, (lbs/ft)	799	773	750	730	713	697	683	670	658
		Stiffeness, G', (10^3 lbs/in)	49.9	49.7	49.2	48.5	47.8	47.0	46.2	45.4	44.5
	9	Strength, (lbs/ft)	908	884	863	844	828	813	800	788	777
		Stiffeness, G', (10^3 lbs/in)	50.6	50.4	50.0	49.5	48.8	48.1	47.4	46.6	45.8
	6	Strength, (lbs/ft)	1 100	1 080	1 062	1 046	1 033	1 020	1 009	999	990
		Stiffeness, G', (10^3 lbs/in)	51.8	51.8	51.6	51.2	50.8	50.2	49.6	48.9	48.3
36/7	36	Strength, (lbs/ft)	745	696	654	618	586	558	533	511	491
		Stiffeness, G', (10^3 lbs/in)	100.9	96.1	91.7	87.6	83.8	80.3	77.1	74.1	71.3
	24	Strength, (lbs/ft)	818	769	727	691	659	631	606	584	564
		Stiffeness, G', (10^3 lbs/in)	101.6	96.8	92.4	88.4	84.6	81.2	77.9	75.0	72.2
	12	Strength, (lbs/ft)	1 036	987	945	909	877	849	824	802	782
		Stiffeness, G', (10^3 lbs/in)	103.6	99.0	94.7	90.7	87.0	83.6	80.5	77.6	74.9
	9	Strength, (lbs/ft)	1 166	1 122	1 085	1 052	1 022	994	969	947	927
		Stiffeness, G', (10^3 lbs/in)	104.9	100.4	96.1	92.2	88.6	85.3	82.2	79.3	76.7
	6	Strength, (lbs/ft)	1 414	1 373	1 338	1 307	1 280	1 256	1 235	1 215	1 198
		Stiffeness, G', (10^3 lbs/in)	107.5	103.1	99.0	95.2	91.7	88.5	85.5	82.7	80.2
36/9	36	Strength, (lbs/ft)	1 165	1 082	1 010	947	893	845	802	764	729
		Stiffeness, G', (10^3 lbs/in)	131.6	126.5	121.6	116.9	112.6	108.4	104.6	100.9	97.5
	24	Strength, (lbs/ft)	1 238	1 154	1 082	1 020	966	917	875	836	802
		Stiffeness, G', (10^3 lbs/in)	132.1	127.0	122.2	117.6	113.2	109.1	105.3	101.7	98.3
	12	Strength, (lbs/ft)	1 453	1 372	1 300	1 238	1 183	1 135	1 093	1 054	1 020
		Stiffeness, G', (10^3 lbs/in)	133.7	128.7	123.9	119.4	115.2	111.2	107.4	103.9	100.6
	9	Strength, (lbs/ft)	1 577	1 506	1 444	1 383	1 329	1 281	1 238	1 200	1 165
		Stiffeness, G', (10^3 lbs/in)	134.7	129.8	125.1	120.7	116.5	112.5	108.8	105.3	102.1
	6	Strength, (lbs/ft)	1 815	1 748	1 689	1 638	1 592	1 552	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	136.6	131.9	127.4	123.1	119.0	115.2	111.6	108.2	105.0

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	494	470	450	433	417	403	390	380	371
		Stiffeness, G', (10^3 lbs/in)	18.0	19.5	20.9	22.2	23.3	24.4	25.4	26.3	27.1
	24	Strength, (lbs/ft)	590	569	551	537	524	514	504	496	489
		Stiffeness, G', (10^3 lbs/in)	18.5	20.1	21.7	23.2	24.5	25.8	27.0	28.1	29.2
	12	Strength, (lbs/ft)	814	800	788	779	770	763	757	752	747
		Stiffeness, G', (10^3 lbs/in)	19.3	21.2	23.1	24.8	26.5	28.1	29.7	31.2	32.6
	9	Strength, (lbs/ft)	916	906	897	890	884	879	874	870	867
		Stiffeness, G', (10^3 lbs/in)	19.6	21.6	23.6	25.5	27.3	29.0	30.7	32.3	33.9
	6	Strength, (lbs/ft)	1 047	1 041	1 036	1 033	1 029	1 026	1 024	1 006	884
		Stiffeness, G', (10^3 lbs/in)	20.0	22.1	24.2	26.2	28.1	30.0	31.9	33.6	35.4
36/7	36	Strength, (lbs/ft)	696	645	604	570	542	518	498	480	465
		Stiffeness, G', (10^3 lbs/in)	70.8	71.3	71.4	71.1	70.7	70.2	69.6	69.0	68.3
	24	Strength, (lbs/ft)	811	766	731	701	673	650	629	612	596
		Stiffeness, G', (10^3 lbs/in)	74.5	75.7	76.5	76.9	77.1	77.1	77.0	76.8	76.6
	12	Strength, (lbs/ft)	1 121	1 083	1 052	1 027	1 005	987	971	957	884
		Stiffeness, G', (10^3 lbs/in)	82.8	85.6	87.8	89.6	91.1	92.3	93.4	94.3	95.0
	9	Strength, (lbs/ft)	1 299	1 266	1 238	1 216	1 197	1 180	1 155	1 006	884
		Stiffeness, G', (10^3 lbs/in)	86.8	90.2	93.2	95.6	97.7	99.5	101.1	102.5	103.7
	6	Strength, (lbs/ft)	1 589	1 564	1 543	1 526	1 512	1 339	1 155	1 006	884
		Stiffeness, G', (10^3 lbs/in)	92.5	97.0	100.9	104.3	107.2	109.9	112.2	114.3	116.2
36/9	36	Strength, (lbs/ft)	1 071	989	915	850	797	751	712	679	649
		Stiffeness, G', (10^3 lbs/in)	81.1	82.4	83.1	83.4	83.3	83.0	82.5	81.9	81.2
	24	Strength, (lbs/ft)	1 174	1 097	1 033	979	928	882	843	810	780
		Stiffeness, G', (10^3 lbs/in)	83.4	85.3	86.6	87.4	87.8	88.0	88.0	87.9	87.6
	12	Strength, (lbs/ft)	1 457	1 390	1 335	1 288	1 249	1 215	1 155	1 006	884
		Stiffeness, G', (10^3 lbs/in)	88.8	92.0	94.6	96.6	98.2	99.6	100.7	101.5	102.3
	9	Strength, (lbs/ft)	1 620	1 561	1 512	1 470	1 434	1 339	1 155	1 006	884
		Stiffeness, G', (10^3 lbs/in)	91.6	95.4	98.5	101.2	103.4	105.3	106.9	108.3	109.5
	6	Strength, (lbs/ft)	1 893	1 847	1 808	1 776	1 572	1 339	1 155	1 006	884
		Stiffeness, G', (10^3 lbs/in)	95.8	100.5	104.5	108.0	111.0	113.7	116.1	118.2	120.1

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	589	568	550	532	516	502	490	480	470
		Stiffeness, G', (10^3 lbs/in)	36.2	37.7	39.1	40.3	41.4	42.3	43.1	43.8	44.5
	24	Strength, (lbs/ft)	722	703	686	672	660	649	640	632	624
		Stiffeness, G', (10^3 lbs/in)	38.3	40.3	42.1	43.7	45.2	46.5	47.8	48.9	49.9
	12	Strength, (lbs/ft)	1 032	1 019	1 008	999	991	984	977	972	967
		Stiffeness, G', (10^3 lbs/in)	42.0	44.8	47.4	49.8	52.0	54.1	56.1	58.0	59.8
	9	Strength, (lbs/ft)	1 175	1 165	1 157	1 150	1 144	1 139	1 134	1 130	1 079
		Stiffeness, G', (10^3 lbs/in)	43.5	46.5	49.4	52.1	54.7	57.1	59.4	61.6	63.7
	6	Strength, (lbs/ft)	1 358	1 352	1 348	1 344	1 341	1 338	1 335	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	45.4	48.7	52.0	55.0	58.0	60.8	63.5	66.1	68.5
36/7	36	Strength, (lbs/ft)	796	752	715	684	657	634	614	596	580
		Stiffeness, G', (10^3 lbs/in)	98.3	96.5	94.8	93.1	91.4	89.9	88.4	87.0	85.7
	24	Strength, (lbs/ft)	957	918	885	855	829	805	785	767	751
		Stiffeness, G', (10^3 lbs/in)	106.8	105.8	104.8	103.8	102.7	101.7	100.6	99.7	98.8
	12	Strength, (lbs/ft)	1 377	1 344	1 315	1 291	1 270	1 252	1 236	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	126.5	127.4	128.0	128.5	128.8	129.0	129.1	129.2	129.2
	9	Strength, (lbs/ft)	1 621	1 591	1 566	1 544	1 526	1 509	1 366	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	136.3	138.1	139.6	140.8	141.7	142.6	143.2	143.8	144.3
	6	Strength, (lbs/ft)	2 020	1 998	1 979	1 962	1 784	1 554	1 366	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	151.0	154.1	156.8	159.1	161.1	162.8	164.4	165.8	167.0
36/9	36	Strength, (lbs/ft)	1 209	1 124	1 054	994	943	899	860	826	795
		Stiffeness, G', (10^3 lbs/in)	118.3	116.7	115.0	113.1	111.2	109.4	107.5	105.8	104.1
	24	Strength, (lbs/ft)	1 353	1 283	1 223	1 165	1 114	1 070	1 031	997	967
		Stiffeness, G', (10^3 lbs/in)	124.3	123.5	122.5	121.3	120.0	118.7	117.4	116.1	114.9
	12	Strength, (lbs/ft)	1 748	1 687	1 635	1 590	1 551	1 516	1 366	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	138.9	139.9	140.5	140.8	140.9	140.9	140.9	140.7	140.5
	9	Strength, (lbs/ft)	1 979	1 924	1 878	1 837	1 784	1 554	1 366	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	146.5	148.3	149.7	150.8	151.7	152.3	152.8	153.2	153.5
	6	Strength, (lbs/ft)	2 367	2 324	2 288	2 069	1 784	1 554	1 366	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	158.1	161.3	163.9	166.1	168.0	169.7	171.1	172.3	173.4

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	675	655	638	621	606	593	581	571	561
		Stiffeness, G', (10^3 lbs/in)	55.5	56.5	57.4	58.0	58.6	59.1	59.5	59.8	60.1
	24	Strength, (lbs/ft)	842	825	810	797	785	775	766	757	750
		Stiffeness, G', (10^3 lbs/in)	60.9	62.6	64.1	65.4	66.5	67.5	68.4	69.3	70.0
	12	Strength, (lbs/ft)	1 237	1 225	1 215	1 207	1 199	1 192	1 185	1 180	1 175
		Stiffeness, G', (10^3 lbs/in)	71.2	74.2	76.9	79.4	81.7	83.9	85.9	87.7	89.5
	9	Strength, (lbs/ft)	1 420	1 412	1 404	1 398	1 392	1 387	1 382	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	75.4	78.9	82.1	85.2	88.0	90.6	93.1	95.5	97.7
	6	Strength, (lbs/ft)	1 655	1 650	1 646	1 642	1 639	1 636	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	80.8	85.0	89.0	92.7	96.2	99.5	102.7	105.7	108.5
36/7	36	Strength, (lbs/ft)	882	844	811	782	758	736	716	699	683
		Stiffeness, G', (10^3 lbs/in)	115.5	112.7	110.1	107.7	105.5	103.5	101.6	99.8	98.2
	24	Strength, (lbs/ft)	1 086	1 052	1 020	992	967	945	926	908	892
		Stiffeness, G', (10^3 lbs/in)	128.9	126.8	124.8	123.0	121.3	119.7	118.2	116.8	115.5
	12	Strength, (lbs/ft)	1 613	1 583	1 557	1 535	1 515	1 497	1 481	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	161.1	160.6	160.1	159.6	159.0	158.5	158.0	157.5	157.0
	9	Strength, (lbs/ft)	1 920	1 894	1 871	1 851	1 833	1 683	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	177.6	178.0	178.2	178.4	178.5	178.5	178.5	178.5	178.5
	6	Strength, (lbs/ft)	2 426	2 406	2 389	2 162	1 900	1 683	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	202.9	204.6	206.1	207.3	208.3	209.3	210.1	210.8	211.4
36/9	36	Strength, (lbs/ft)	1 302	1 229	1 166	1 112	1 064	1 022	985	951	921
		Stiffeness, G', (10^3 lbs/in)	142.8	139.4	136.2	133.2	130.3	127.6	125.0	122.6	120.4
	24	Strength, (lbs/ft)	1 501	1 438	1 376	1 321	1 274	1 232	1 194	1 161	1 131
		Stiffeness, G', (10^3 lbs/in)	153.2	150.6	148.1	145.6	143.3	141.1	139.0	137.1	135.2
	12	Strength, (lbs/ft)	2 006	1 951	1 902	1 860	1 823	1 683	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	178.9	178.0	177.1	176.1	175.2	174.2	173.3	172.3	171.5
	9	Strength, (lbs/ft)	2 303	2 254	2 210	2 162	1 900	1 683	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	192.4	192.5	192.4	192.2	191.9	191.5	191.2	190.8	190.4
	6	Strength, (lbs/ft)	2 806	2 767	2 482	2 162	1 900	1 683	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	213.7	215.1	216.3	217.2	218.0	218.7	219.2	219.7	220.1

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	36	Strength, (lbs/ft)	473	428	393	362	334	311	292	276	262
		Stiffeness, G', (10^3 lbs/in)	9.6	10.9	12.0	13.1	14.1	15.0	15.8	16.5	17.1
	24	Strength, (lbs/ft)	511	469	436	409	386	366	347	331	317
		Stiffeness, G', (10^3 lbs/in)	9.6	10.9	12.2	13.3	14.3	15.3	16.1	17.0	17.7
	12	Strength, (lbs/ft)	611	577	549	527	508	493	479	468	458
		Stiffeness, G', (10^3 lbs/in)	9.8	11.1	12.4	13.7	14.8	15.9	16.9	17.9	18.8
	9	Strength, (lbs/ft)	667	638	614	594	578	564	552	542	533
		Stiffeness, G', (10^3 lbs/in)	9.8	11.2	12.6	13.8	15.0	16.2	17.3	18.4	19.4
	6	Strength, (lbs/ft)	757	735	717	703	691	680	672	664	657
		Stiffeness, G', (10^3 lbs/in)	9.9	11.3	12.7	14.1	15.4	16.6	17.8	19.0	20.1
36/7	36	Strength, (lbs/ft)	698	620	555	503	461	426	398	374	353
		Stiffeness, G', (10^3 lbs/in)	50.3	52.5	53.8	54.4	54.6	54.5	54.1	53.5	52.8
	24	Strength, (lbs/ft)	743	668	609	557	515	481	452	428	407
		Stiffeness, G', (10^3 lbs/in)	50.9	53.3	54.9	55.8	56.3	56.4	56.3	56.0	55.6
	12	Strength, (lbs/ft)	873	803	748	705	669	640	615	592	571
		Stiffeness, G', (10^3 lbs/in)	52.4	55.5	57.8	59.4	60.6	61.4	61.9	62.3	62.5
	9	Strength, (lbs/ft)	954	888	836	795	761	732	709	688	670
		Stiffeness, G', (10^3 lbs/in)	53.3	56.7	59.4	61.4	62.9	64.1	65.0	65.7	66.3
	6	Strength, (lbs/ft)	1 101	1 042	997	960	930	904	883	864	849
		Stiffeness, G', (10^3 lbs/in)	54.7	58.8	62.0	64.6	66.8	68.6	70.1	71.4	72.5
36/9	36	Strength, (lbs/ft)	1 090	972	877	793	720	660	609	567	531
		Stiffeness, G', (10^3 lbs/in)	54.9	58.3	60.6	62.2	63.2	63.7	63.9	63.8	63.4
	24	Strength, (lbs/ft)	1 130	1 014	921	846	774	714	664	622	585
		Stiffeness, G', (10^3 lbs/in)	55.2	58.7	61.3	63.1	64.3	65.0	65.4	65.4	65.3
	12	Strength, (lbs/ft)	1 241	1 134	1 048	978	920	871	828	785	749
		Stiffeness, G', (10^3 lbs/in)	56.0	60.0	63.0	65.3	67.0	68.3	69.2	69.9	70.3
	9	Strength, (lbs/ft)	1 310	1 209	1 128	1 061	1 005	959	919	884	854
		Stiffeness, G', (10^3 lbs/in)	56.5	60.7	64.0	66.6	68.6	70.2	71.4	72.4	73.1
	6	Strength, (lbs/ft)	1 437	1 347	1 274	1 215	1 165	1 122	1 086	1 021	880
		Stiffeness, G', (10^3 lbs/in)	57.4	62.0	65.7	68.8	71.3	73.4	75.1	76.6	77.8

1.5 in. deck - 36 in. wide - 6 in. flute spacing | **Thickness = 0.036 in.**

Support connection: 3/4" Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	468	434	401	374	351	332	316	301	289
		Stiffeness, G', (10^3 lbs/in)	17.8	19.2	20.4	21.5	22.4	23.2	23.9	24.5	25.0
	24	Strength, (lbs/ft)	519	487	460	438	417	397	381	367	355
		Stiffeness, G', (10^3 lbs/in)	18.1	19.5	20.9	22.0	23.1	24.0	24.9	25.6	26.3
	12	Strength, (lbs/ft)	655	629	607	588	572	559	547	536	527
		Stiffeness, G', (10^3 lbs/in)	18.6	20.3	21.8	23.3	24.6	25.9	27.0	28.1	29.1
	9	Strength, (lbs/ft)	732	709	690	674	660	648	637	628	620
		Stiffeness, G', (10^3 lbs/in)	18.9	20.6	22.3	23.9	25.3	26.7	28.0	29.2	30.4
	6	Strength, (lbs/ft)	856	839	825	812	802	793	785	778	772
		Stiffeness, G', (10^3 lbs/in)	19.3	21.2	23.0	24.7	26.3	27.9	29.4	30.8	32.2
36/7	36	Strength, (lbs/ft)	664	601	551	511	477	448	423	402	383
		Stiffeness, G', (10^3 lbs/in)	69.6	69.4	68.7	67.6	66.5	65.2	63.9	62.5	61.2
	24	Strength, (lbs/ft)	725	667	617	576	542	513	489	467	449
		Stiffeness, G', (10^3 lbs/in)	71.3	71.4	71.1	70.4	69.5	68.6	67.5	66.5	65.4
	12	Strength, (lbs/ft)	893	841	799	764	734	709	685	664	645
		Stiffeness, G', (10^3 lbs/in)	75.8	76.8	77.4	77.6	77.5	77.3	77.0	76.6	76.1
	9	Strength, (lbs/ft)	998	949	908	875	846	822	801	783	767
		Stiffeness, G', (10^3 lbs/in)	78.3	79.9	80.9	81.6	82.0	82.2	82.3	82.3	82.2
	6	Strength, (lbs/ft)	1 190	1 146	1 111	1 081	1 055	1 033	1 015	998	884
		Stiffeness, G', (10^3 lbs/in)	82.5	85.0	86.9	88.3	89.5	90.4	91.1	91.7	92.1
36/9	36	Strength, (lbs/ft)	1 044	950	862	791	731	681	637	600	567
		Stiffeness, G', (10^3 lbs/in)	80.4	81.2	81.4	81.0	80.3	79.4	78.3	77.1	75.9
	24	Strength, (lbs/ft)	1 097	1 008	928	856	797	746	703	665	633
		Stiffeness, G', (10^3 lbs/in)	81.4	82.5	83.0	82.9	82.5	81.8	81.0	80.0	79.0
	12	Strength, (lbs/ft)	1 249	1 166	1 097	1 039	989	943	900	862	829
		Stiffeness, G', (10^3 lbs/in)	84.2	86.0	87.2	87.9	88.2	88.2	88.0	87.7	87.2
	9	Strength, (lbs/ft)	1 344	1 265	1 199	1 144	1 097	1 056	1 020	989	884
		Stiffeness, G', (10^3 lbs/in)	85.8	88.1	89.7	90.7	91.4	91.8	92.0	92.0	91.9
	6	Strength, (lbs/ft)	1 520	1 449	1 390	1 340	1 297	1 260	1 155	1 006	884
		Stiffeness, G', (10^3 lbs/in)	88.6	91.6	93.9	95.6	97.0	98.1	98.9	99.5	99.9

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	532	496	467	442	420	402	386	371	359
		Stiffeness, G', (10^3 lbs/in)	34.9	36.0	36.9	37.5	38.0	38.4	38.6	38.7	38.8
	24	Strength, (lbs/ft)	606	577	553	529	508	489	473	459	446
		Stiffeness, G', (10^3 lbs/in)	36.0	37.4	38.5	39.4	40.2	40.8	41.3	41.7	42.0
	12	Strength, (lbs/ft)	800	776	756	738	722	709	697	686	676
		Stiffeness, G', (10^3 lbs/in)	38.6	40.5	42.3	43.8	45.2	46.4	47.5	48.5	49.4
	9	Strength, (lbs/ft)	911	890	872	856	842	830	820	810	802
		Stiffeness, G', (10^3 lbs/in)	39.9	42.1	44.1	45.9	47.6	49.1	50.5	51.8	53.0
	6	Strength, (lbs/ft)	1 088	1 073	1 059	1 048	1 037	1 028	1 021	1 013	1 007
		Stiffeness, G', (10^3 lbs/in)	41.8	44.4	46.8	49.1	51.2	53.1	55.0	56.7	58.3
36/7	36	Strength, (lbs/ft)	729	676	631	594	562	534	509	488	468
		Stiffeness, G', (10^3 lbs/in)	93.9	91.0	88.2	85.5	83.0	80.6	78.3	76.1	74.1
	24	Strength, (lbs/ft)	816	763	719	681	649	621	597	575	556
		Stiffeness, G', (10^3 lbs/in)	97.8	95.4	93.0	90.6	88.4	86.2	84.2	82.3	80.5
	12	Strength, (lbs/ft)	1 053	1 007	969	936	907	882	859	837	818
		Stiffeness, G', (10^3 lbs/in)	108.3	107.0	105.6	104.1	102.7	101.3	99.9	98.6	97.4
	9	Strength, (lbs/ft)	1 199	1 155	1 118	1 087	1 060	1 036	1 015	996	979
		Stiffeness, G', (10^3 lbs/in)	114.4	113.7	112.9	111.9	111.0	110.0	109.0	108.1	107.2
	6	Strength, (lbs/ft)	1 468	1 429	1 396	1 367	1 343	1 321	1 302	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	124.9	125.2	125.3	125.2	125.1	124.8	124.5	124.2	123.8
36/9	36	Strength, (lbs/ft)	1 142	1 048	970	904	847	798	755	717	684
		Stiffeness, G', (10^3 lbs/in)	115.2	112.7	110.1	107.4	104.7	102.1	99.5	97.0	94.7
	24	Strength, (lbs/ft)	1 226	1 135	1 057	991	935	886	843	805	771
		Stiffeness, G', (10^3 lbs/in)	117.9	115.9	113.6	111.2	108.9	106.5	104.2	102.0	99.8
	12	Strength, (lbs/ft)	1 444	1 368	1 303	1 247	1 197	1 148	1 105	1 067	1 033
		Stiffeness, G', (10^3 lbs/in)	125.5	124.4	123.1	121.6	120.0	118.4	116.8	115.3	113.7
	9	Strength, (lbs/ft)	1 580	1 508	1 446	1 393	1 346	1 305	1 269	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	129.9	129.4	128.6	127.6	126.6	125.4	124.2	123.0	121.9
	6	Strength, (lbs/ft)	1 833	1 768	1 712	1 664	1 622	1 554	1 366	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	137.7	138.2	138.3	138.2	137.9	137.5	137.0	136.5	135.9

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	580	549	523	500	480	463	447	434	421
		Stiffeness, G', (10^3 lbs/in)	51.5	51.7	51.7	51.6	51.3	51.0	50.7	50.3	49.8
	24	Strength, (lbs/ft)	682	656	632	610	590	572	557	543	530
		Stiffeness, G', (10^3 lbs/in)	54.4	55.0	55.4	55.6	55.7	55.7	55.6	55.5	55.4
	12	Strength, (lbs/ft)	935	913	895	878	863	850	838	828	818
		Stiffeness, G', (10^3 lbs/in)	61.3	62.8	64.1	65.1	66.1	66.9	67.6	68.2	68.7
	9	Strength, (lbs/ft)	1 079	1 060	1 044	1 029	1 016	1 005	994	985	977
		Stiffeness, G', (10^3 lbs/in)	64.8	66.8	68.5	70.0	71.4	72.6	73.7	74.7	75.6
	6	Strength, (lbs/ft)	1 311	1 297	1 285	1 274	1 264	1 256	1 248	1 241	1 216
		Stiffeness, G', (10^3 lbs/in)	70.1	72.8	75.2	77.5	79.5	81.4	83.1	84.7	86.2
36/7	36	Strength, (lbs/ft)	782	736	696	662	632	606	582	561	542
		Stiffeness, G', (10^3 lbs/in)	106.9	102.9	99.2	95.8	92.7	89.8	87.2	84.7	82.4
	24	Strength, (lbs/ft)	891	845	805	771	741	715	691	670	652
		Stiffeness, G', (10^3 lbs/in)	113.1	109.5	106.1	103.0	100.2	97.5	95.1	92.8	90.7
	12	Strength, (lbs/ft)	1 199	1 158	1 123	1 093	1 066	1 042	1 019	998	979
		Stiffeness, G', (10^3 lbs/in)	130.0	127.3	124.8	122.5	120.3	118.3	116.4	114.7	113.0
	9	Strength, (lbs/ft)	1 385	1 347	1 313	1 284	1 258	1 236	1 215	1 197	1 180
		Stiffeness, G', (10^3 lbs/in)	139.9	137.8	135.8	134.0	132.2	130.6	129.0	127.6	126.2
	6	Strength, (lbs/ft)	1 730	1 696	1 666	1 640	1 616	1 596	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	157.2	156.1	155.0	153.9	152.9	151.9	150.9	150.0	149.1
36/9	36	Strength, (lbs/ft)	1 202	1 121	1 051	991	939	892	851	814	781
		Stiffeness, G', (10^3 lbs/in)	136.1	131.7	127.5	123.6	119.8	116.3	112.9	109.8	106.9
	24	Strength, (lbs/ft)	1 311	1 230	1 161	1 100	1 048	1 001	960	923	890
		Stiffeness, G', (10^3 lbs/in)	140.9	136.9	133.0	129.4	125.9	122.6	119.6	116.7	113.9
	12	Strength, (lbs/ft)	1 609	1 541	1 481	1 428	1 376	1 329	1 288	1 251	1 216
		Stiffeness, G', (10^3 lbs/in)	154.1	151.0	148.1	145.2	142.5	140.0	137.6	135.3	133.1
	9	Strength, (lbs/ft)	1 787	1 722	1 665	1 615	1 571	1 532	1 496	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	161.9	159.4	157.0	154.7	152.4	150.3	148.3	146.3	144.5
	6	Strength, (lbs/ft)	2 119	2 060	2 008	1 963	1 900	1 683	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	175.8	174.3	172.8	171.3	169.9	168.5	167.1	165.8	164.5

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	36	Strength, (lbs/ft)	230	207	188	171	156	144	134	125	118
		Stiffeness, G', (10^3 lbs/in)	9.5	10.7	11.8	12.8	13.6	14.3	14.9	15.5	15.9
	24	Strength, (lbs/ft)	243	220	202	188	174	162	152	143	136
		Stiffeness, G', (10^3 lbs/in)	9.5	10.7	11.8	12.8	13.6	14.4	15.0	15.5	16.0
	12	Strength, (lbs/ft)	278	258	243	230	219	210	202	195	189
		Stiffeness, G', (10^3 lbs/in)	9.5	10.8	11.9	12.9	13.7	14.5	15.2	15.7	16.2
	9	Strength, (lbs/ft)	299	281	267	255	245	236	229	223	218
		Stiffeness, G', (10^3 lbs/in)	9.5	10.8	11.9	12.9	13.8	14.6	15.3	15.9	16.4
	6	Strength, (lbs/ft)	335	320	309	299	290	283	277	272	268
		Stiffeness, G', (10^3 lbs/in)	9.6	10.8	12.0	13.0	13.9	14.7	15.5	16.1	16.7
36/7	36	Strength, (lbs/ft)	340	300	266	239	218	200	185	173	162
		Stiffeness, G', (10^3 lbs/in)	48.7	50.3	50.9	50.9	50.4	49.7	48.7	47.5	46.3
	24	Strength, (lbs/ft)	355	316	284	257	236	218	203	191	180
		Stiffeness, G', (10^3 lbs/in)	48.8	50.4	51.1	51.1	50.7	49.9	48.9	47.9	46.7
	12	Strength, (lbs/ft)	399	362	333	310	290	273	258	245	235
		Stiffeness, G', (10^3 lbs/in)	49.0	50.7	51.5	51.6	51.3	50.6	49.8	48.8	47.7
	9	Strength, (lbs/ft)	427	391	363	341	322	307	294	282	271
		Stiffeness, G', (10^3 lbs/in)	49.1	50.9	51.7	51.9	51.7	51.1	50.3	49.4	48.4
	6	Strength, (lbs/ft)	480	447	421	400	383	369	356	346	337
		Stiffeness, G', (10^3 lbs/in)	49.4	51.3	52.3	52.6	52.5	52.0	51.4	50.5	49.6
36/9	36	Strength, (lbs/ft)	532	472	424	381	344	314	289	267	249
		Stiffeness, G', (10^3 lbs/in)	53.6	56.5	58.3	59.3	59.8	59.7	59.3	58.6	57.8
	24	Strength, (lbs/ft)	545	486	439	399	362	332	307	285	267
		Stiffeness, G', (10^3 lbs/in)	53.7	56.5	58.4	59.5	59.9	59.9	59.5	58.9	58.0
	12	Strength, (lbs/ft)	583	527	482	445	415	386	361	340	322
		Stiffeness, G', (10^3 lbs/in)	53.8	56.7	58.6	59.8	60.3	60.3	60.0	59.5	58.8
	9	Strength, (lbs/ft)	607	553	510	474	445	420	398	376	358
		Stiffeness, G', (10^3 lbs/in)	53.8	56.8	58.8	60.0	60.5	60.6	60.4	59.9	59.2
	6	Strength, (lbs/ft)	652	602	562	529	502	478	459	441	427
		Stiffeness, G', (10^3 lbs/in)	54.0	57.1	59.1	60.4	61.0	61.2	61.1	60.7	60.1

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	227	209	192	178	166	156	148	141	134
		Stiffeness, G', (10^3 lbs/in)	17.4	18.5	19.5	20.3	20.9	21.4	21.7	21.9	22.1
	24	Strength, (lbs/ft)	248	231	217	204	193	183	174	167	160
		Stiffeness, G', (10^3 lbs/in)	17.4	18.6	19.6	20.4	21.0	21.5	21.8	22.1	22.3
	12	Strength, (lbs/ft)	304	290	278	268	259	252	245	239	234
		Stiffeness, G', (10^3 lbs/in)	17.5	18.7	19.7	20.6	21.3	21.9	22.3	22.6	22.8
	9	Strength, (lbs/ft)	337	324	314	304	297	290	284	279	274
		Stiffeness, G', (10^3 lbs/in)	17.5	18.8	19.9	20.8	21.5	22.1	22.6	22.9	23.2
	6	Strength, (lbs/ft)	393	383	374	367	361	355	350	346	342
		Stiffeness, G', (10^3 lbs/in)	17.7	19.0	20.1	21.0	21.8	22.5	23.1	23.5	23.9
36/7	36	Strength, (lbs/ft)	323	291	266	245	228	214	201	190	181
		Stiffeness, G', (10^3 lbs/in)	65.3	64.2	62.7	61.0	59.1	57.2	55.3	53.5	51.7
	24	Strength, (lbs/ft)	349	318	292	272	254	240	227	216	207
		Stiffeness, G', (10^3 lbs/in)	65.5	64.5	63.0	61.3	59.5	57.6	55.8	54.0	52.2
	12	Strength, (lbs/ft)	416	389	367	349	333	318	306	295	285
		Stiffeness, G', (10^3 lbs/in)	66.1	65.2	63.9	62.3	60.6	58.9	57.1	55.4	53.7
	9	Strength, (lbs/ft)	459	433	412	395	380	367	356	347	338
		Stiffeness, G', (10^3 lbs/in)	66.5	65.7	64.5	63.0	61.3	59.7	58.0	56.3	54.7
	6	Strength, (lbs/ft)	540	516	497	481	467	455	445	436	428
		Stiffeness, G', (10^3 lbs/in)	67.3	66.7	65.6	64.2	62.8	61.2	59.7	58.1	56.6
36/9	36	Strength, (lbs/ft)	511	463	419	383	353	328	306	288	271
		Stiffeness, G', (10^3 lbs/in)	76.7	76.8	76.2	75.1	73.8	72.2	70.6	68.8	67.1
	24	Strength, (lbs/ft)	532	487	445	409	380	354	333	314	297
		Stiffeness, G', (10^3 lbs/in)	76.8	76.9	76.4	75.4	74.1	72.5	70.9	69.2	67.5
	12	Strength, (lbs/ft)	594	551	516	486	458	433	411	392	376
		Stiffeness, G', (10^3 lbs/in)	77.2	77.4	77.0	76.1	74.8	73.4	71.9	70.3	68.6
	9	Strength, (lbs/ft)	633	592	558	529	505	483	463	445	428
		Stiffeness, G', (10^3 lbs/in)	77.4	77.7	77.3	76.5	75.4	74.0	72.5	70.9	69.4
	6	Strength, (lbs/ft)	706	668	637	610	588	568	551	536	523
		Stiffeness, G', (10^3 lbs/in)	77.9	78.3	78.1	77.4	76.4	75.1	73.7	72.3	70.8

1.5 in. deck - 36 in. wide - 6 in. flute spacing | **Thickness = 0.048 in.**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	268	251	236	224	213	204	196	189	183
		Stiffeness, G', (10^3 lbs/in)	32.6	33.2	33.4	33.5	33.4	33.1	32.8	32.3	31.8
	24	Strength, (lbs/ft)	307	293	281	270	260	251	243	236	229
		Stiffeness, G', (10^3 lbs/in)	32.8	33.3	33.7	33.7	33.7	33.5	33.1	32.7	32.3
	12	Strength, (lbs/ft)	409	397	388	379	371	365	359	354	349
		Stiffeness, G', (10^3 lbs/in)	33.2	33.9	34.3	34.5	34.6	34.5	34.3	34.0	33.6
	9	Strength, (lbs/ft)	466	456	448	440	434	428	423	418	414
		Stiffeness, G', (10^3 lbs/in)	33.5	34.3	34.8	35.0	35.1	35.1	35.0	34.8	34.5
	6	Strength, (lbs/ft)	557	550	543	538	533	529	525	522	519
		Stiffeness, G', (10^3 lbs/in)	34.1	34.9	35.6	36.0	36.2	36.3	36.3	36.3	36.1
36/7	36	Strength, (lbs/ft)	367	340	318	300	284	270	258	247	238
		Stiffeness, G', (10^3 lbs/in)	84.4	80.7	77.2	73.9	70.7	67.8	65.0	62.5	60.1
	24	Strength, (lbs/ft)	413	387	365	346	330	317	304	294	284
		Stiffeness, G', (10^3 lbs/in)	84.9	81.2	77.8	74.5	71.3	68.4	65.7	63.2	60.8
	12	Strength, (lbs/ft)	538	516	497	480	466	454	443	433	424
		Stiffeness, G', (10^3 lbs/in)	86.2	82.8	79.4	76.2	73.2	70.4	67.8	65.3	63.0
	9	Strength, (lbs/ft)	615	594	576	560	547	535	525	516	507
		Stiffeness, G', (10^3 lbs/in)	87.1	83.8	80.5	77.4	74.5	71.7	69.1	66.7	64.5
	6	Strength, (lbs/ft)	755	737	721	707	695	685	675	667	660
		Stiffeness, G', (10^3 lbs/in)	88.9	85.7	82.6	79.7	76.9	74.2	71.8	69.5	67.3
36/9	36	Strength, (lbs/ft)	573	527	488	455	427	402	381	362	346
		Stiffeness, G', (10^3 lbs/in)	106.3	103.0	99.6	96.2	92.9	89.7	86.6	83.7	80.9
	24	Strength, (lbs/ft)	618	573	534	502	473	449	428	409	392
		Stiffeness, G', (10^3 lbs/in)	106.6	103.4	100.0	96.7	93.4	90.2	87.2	84.3	81.5
	12	Strength, (lbs/ft)	733	695	663	636	612	588	567	548	532
		Stiffeness, G', (10^3 lbs/in)	107.6	104.5	101.3	98.0	94.9	91.8	88.9	86.0	83.4
	9	Strength, (lbs/ft)	805	769	739	712	690	670	652	636	622
		Stiffeness, G', (10^3 lbs/in)	108.3	105.2	102.1	98.9	95.8	92.8	89.9	87.2	84.5
	6	Strength, (lbs/ft)	937	906	878	855	834	816	800	786	773
		Stiffeness, G', (10^3 lbs/in)	109.5	106.7	103.7	100.7	97.7	94.8	92.1	89.4	86.9

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	312	298	285	275	266	257	250	244	238
		Stiffeness, G', (10^3 lbs/in)	45.6	45.0	44.2	43.3	42.3	41.4	40.4	39.4	38.4
	24	Strength, (lbs/ft)	375	364	353	345	337	330	323	316	311
		Stiffeness, G', (10^3 lbs/in)	46.0	45.4	44.7	43.8	42.9	42.0	41.0	40.1	39.1
	12	Strength, (lbs/ft)	533	524	516	509	503	497	492	488	484
		Stiffeness, G', (10^3 lbs/in)	47.1	46.7	46.1	45.4	44.6	43.8	42.9	42.1	41.2
	9	Strength, (lbs/ft)	617	609	603	597	592	587	583	579	576
		Stiffeness, G', (10^3 lbs/in)	47.9	47.5	47.0	46.4	45.7	45.0	44.2	43.4	42.6
	6	Strength, (lbs/ft)	742	737	732	728	725	722	719	717	715
		Stiffeness, G', (10^3 lbs/in)	49.3	49.1	48.8	48.3	47.8	47.2	46.6	45.9	45.3
36/7	36	Strength, (lbs/ft)	415	393	374	357	343	330	319	309	300
		Stiffeness, G', (10^3 lbs/in)	92.5	87.9	83.7	79.8	76.2	73.0	69.9	67.2	64.6
	24	Strength, (lbs/ft)	487	465	446	430	416	403	392	381	372
		Stiffeness, G', (10^3 lbs/in)	93.2	88.7	84.5	80.6	77.1	73.8	70.9	68.1	65.5
	12	Strength, (lbs/ft)	683	664	648	634	622	610	601	592	584
		Stiffeness, G', (10^3 lbs/in)	95.4	90.9	86.8	83.1	79.6	76.5	73.5	70.8	68.3
	9	Strength, (lbs/ft)	802	784	769	756	744	734	724	716	708
		Stiffeness, G', (10^3 lbs/in)	96.8	92.4	88.4	84.7	81.3	78.2	75.3	72.6	70.2
	6	Strength, (lbs/ft)	1 013	998	985	974	964	955	947	940	933
		Stiffeness, G', (10^3 lbs/in)	99.5	95.3	91.4	87.9	84.6	81.6	78.8	76.2	73.8
36/9	36	Strength, (lbs/ft)	629	589	554	525	499	476	456	437	421
		Stiffeness, G', (10^3 lbs/in)	121.9	116.8	112.0	107.5	103.3	99.3	95.6	92.2	88.9
	24	Strength, (lbs/ft)	701	661	627	597	572	549	528	510	494
		Stiffeness, G', (10^3 lbs/in)	122.5	117.4	112.7	108.2	104.0	100.1	96.4	93.0	89.8
	12	Strength, (lbs/ft)	889	856	828	803	781	762	744	728	712
		Stiffeness, G', (10^3 lbs/in)	124.2	119.2	114.6	110.2	106.1	102.3	98.7	95.3	92.2
	9	Strength, (lbs/ft)	1 002	972	945	922	901	883	866	851	838
		Stiffeness, G', (10^3 lbs/in)	125.2	120.4	115.8	111.5	107.5	103.7	100.2	96.9	93.8
	6	Strength, (lbs/ft)	1 207	1 181	1 158	1 137	1 119	1 103	1 089	1 076	1 064
		Stiffeness, G', (10^3 lbs/in)	127.4	122.7	118.3	114.1	110.2	106.5	103.1	99.9	96.9

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	36	Strength, (lbs/ft)	230	215	202	193	185	177	170	165	160
		Stiffeness, G', (10^3 lbs/in)	9.5	10.7	11.9	12.9	13.8	14.7	15.4	16.1	16.7
	24	Strength, (lbs/ft)	267	253	243	234	227	221	216	212	208
		Stiffeness, G', (10^3 lbs/in)	9.6	10.8	12.0	13.1	14.1	15.0	15.9	16.6	17.3
	12	Strength, (lbs/ft)	351	342	335	330	325	321	318	315	312
		Stiffeness, G', (10^3 lbs/in)	9.7	11.1	12.3	13.5	14.7	15.7	16.8	17.7	18.6
	9	Strength, (lbs/ft)	389	382	377	373	370	367	364	362	360
		Stiffeness, G', (10^3 lbs/in)	9.8	11.2	12.5	13.7	14.9	16.1	17.2	18.2	19.2
	6	Strength, (lbs/ft)	437	433	430	428	426	425	424	422	421
		Stiffeness, G', (10^3 lbs/in)	9.9	11.3	12.7	14.0	15.3	16.5	17.7	18.9	20.0
36/7	36	Strength, (lbs/ft)	340	309	285	264	247	233	222	212	204
		Stiffeness, G', (10^3 lbs/in)	48.7	50.5	51.5	51.9	51.9	51.6	51.1	50.5	49.7
	24	Strength, (lbs/ft)	385	356	333	315	301	288	276	267	258
		Stiffeness, G', (10^3 lbs/in)	49.4	51.5	52.8	53.5	53.8	53.8	53.6	53.2	52.7
	12	Strength, (lbs/ft)	506	481	462	447	434	424	415	408	401
		Stiffeness, G', (10^3 lbs/in)	51.2	54.1	56.1	57.6	58.6	59.4	59.8	60.1	60.3
	9	Strength, (lbs/ft)	574	552	536	522	511	502	495	488	482
		Stiffeness, G', (10^3 lbs/in)	52.2	55.5	57.9	59.8	61.3	62.4	63.2	63.9	64.4
	6	Strength, (lbs/ft)	684	668	655	645	637	630	625	620	615
		Stiffeness, G', (10^3 lbs/in)	53.9	57.8	60.9	63.4	65.5	67.3	68.7	70.0	71.0
36/9	36	Strength, (lbs/ft)	532	480	439	405	373	347	325	306	291
		Stiffeness, G', (10^3 lbs/in)	53.6	56.6	58.7	60.0	60.7	61.0	60.9	60.6	60.2
	24	Strength, (lbs/ft)	570	521	482	451	424	402	380	361	345
		Stiffeness, G', (10^3 lbs/in)	54.0	57.2	59.4	61.0	61.9	62.4	62.6	62.6	62.3
	12	Strength, (lbs/ft)	674	633	599	572	550	531	515	501	489
		Stiffeness, G', (10^3 lbs/in)	55.0	58.7	61.5	63.6	65.1	66.2	67.0	67.5	67.9
	9	Strength, (lbs/ft)	733	697	667	643	623	606	592	579	569
		Stiffeness, G', (10^3 lbs/in)	55.6	59.5	62.6	65.0	66.9	68.3	69.5	70.3	70.9
	6	Strength, (lbs/ft)	830	802	780	761	746	733	721	711	703
		Stiffeness, G', (10^3 lbs/in)	56.6	61.0	64.6	67.5	69.9	71.9	73.6	74.9	76.1

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	243	231	222	214	206	199	193	188	184
		Stiffeness, G', (10^3 lbs/in)	17.5	18.8	19.9	20.9	21.8	22.5	23.1	23.6	24.1
	24	Strength, (lbs/ft)	291	281	272	265	259	254	250	246	242
		Stiffeness, G', (10^3 lbs/in)	17.8	19.2	20.4	21.6	22.6	23.4	24.2	24.9	25.5
	12	Strength, (lbs/ft)	402	396	390	385	381	378	375	372	370
		Stiffeness, G', (10^3 lbs/in)	18.4	20.1	21.6	23.0	24.3	25.5	26.6	27.6	28.6
	9	Strength, (lbs/ft)	453	448	444	440	437	435	433	431	429
		Stiffeness, G', (10^3 lbs/in)	18.7	20.5	22.1	23.6	25.1	26.4	27.7	28.9	30.0
	6	Strength, (lbs/ft)	517	514	512	510	508	507	506	505	504
		Stiffeness, G', (10^3 lbs/in)	19.2	21.0	22.8	24.5	26.2	27.7	29.2	30.6	31.9
36/7	36	Strength, (lbs/ft)	343	318	298	281	268	256	246	237	230
		Stiffeness, G', (10^3 lbs/in)	66.2	65.7	64.8	63.7	62.4	61.1	59.8	58.5	57.2
	24	Strength, (lbs/ft)	400	378	361	346	333	321	312	303	295
		Stiffeness, G', (10^3 lbs/in)	68.2	68.0	67.5	66.7	65.8	64.8	63.7	62.7	61.6
	12	Strength, (lbs/ft)	554	536	521	509	498	489	482	475	469
		Stiffeness, G', (10^3 lbs/in)	73.2	74.1	74.5	74.6	74.5	74.3	74.0	73.6	73.1
	9	Strength, (lbs/ft)	643	627	614	603	594	586	579	573	567
		Stiffeness, G', (10^3 lbs/in)	76.0	77.5	78.4	79.0	79.4	79.6	79.7	79.6	79.5
	6	Strength, (lbs/ft)	786	775	765	756	750	744	738	734	730
		Stiffeness, G', (10^3 lbs/in)	80.7	83.1	84.9	86.3	87.4	88.3	89.0	89.6	90.1
36/9	36	Strength, (lbs/ft)	527	487	451	419	393	370	351	335	320
		Stiffeness, G', (10^3 lbs/in)	77.2	77.7	77.6	77.0	76.1	75.0	73.8	72.6	71.3
	24	Strength, (lbs/ft)	579	541	509	483	458	436	417	400	386
		Stiffeness, G', (10^3 lbs/in)	78.4	79.2	79.4	79.1	78.5	77.7	76.8	75.8	74.7
	12	Strength, (lbs/ft)	719	687	660	637	618	601	587	574	563
		Stiffeness, G', (10^3 lbs/in)	81.7	83.3	84.2	84.7	84.9	84.8	84.5	84.2	83.7
	9	Strength, (lbs/ft)	801	772	748	728	710	695	682	671	661
		Stiffeness, G', (10^3 lbs/in)	83.6	85.6	87.0	87.9	88.5	88.8	88.9	88.9	88.8
	6	Strength, (lbs/ft)	936	914	895	879	866	854	844	835	827
		Stiffeness, G', (10^3 lbs/in)	86.8	89.6	91.7	93.3	94.6	95.6	96.4	97.0	97.4

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	296	285	276	268	260	253	247	242	237
		Stiffeness, G', (10^3 lbs/in)	33.7	34.6	35.4	35.9	36.3	36.6	36.8	36.8	36.9
	24	Strength, (lbs/ft)	363	354	346	339	333	328	323	319	315
		Stiffeness, G', (10^3 lbs/in)	35.0	36.2	37.2	38.1	38.7	39.3	39.7	40.1	40.4
	12	Strength, (lbs/ft)	520	514	509	504	500	497	494	491	488
		Stiffeness, G', (10^3 lbs/in)	37.9	39.8	41.4	42.9	44.2	45.4	46.4	47.4	48.3
	9	Strength, (lbs/ft)	592	587	583	580	577	575	572	570	568
		Stiffeness, G', (10^3 lbs/in)	39.3	41.5	43.4	45.2	46.8	48.3	49.7	50.9	52.1
	6	Strength, (lbs/ft)	683	680	678	676	675	673	672	671	670
		Stiffeness, G', (10^3 lbs/in)	41.4	44.0	46.4	48.6	50.7	52.6	54.4	56.1	57.7
36/7	36	Strength, (lbs/ft)	399	378	359	344	331	319	309	300	292
		Stiffeness, G', (10^3 lbs/in)	87.7	84.9	82.1	79.5	77.0	74.7	72.6	70.6	68.7
	24	Strength, (lbs/ft)	481	462	446	431	418	407	396	388	380
		Stiffeness, G', (10^3 lbs/in)	92.0	89.6	87.2	85.0	82.8	80.8	78.9	77.1	75.4
	12	Strength, (lbs/ft)	695	679	665	653	642	633	625	618	612
		Stiffeness, G', (10^3 lbs/in)	103.5	102.2	100.8	99.4	98.1	96.7	95.5	94.3	93.2
	9	Strength, (lbs/ft)	819	804	792	781	772	764	757	750	745
		Stiffeness, G', (10^3 lbs/in)	110.1	109.4	108.6	107.7	106.8	105.9	105.0	104.2	103.4
	6	Strength, (lbs/ft)	1 020	1 009	1 000	992	985	979	973	968	964
		Stiffeness, G', (10^3 lbs/in)	121.3	121.7	121.8	121.8	121.7	121.5	121.3	121.0	120.8
36/9	36	Strength, (lbs/ft)	606	564	529	499	474	452	432	415	400
		Stiffeness, G', (10^3 lbs/in)	108.6	106.0	103.3	100.5	97.8	95.2	92.7	90.3	88.0
	24	Strength, (lbs/ft)	679	644	615	586	561	539	520	503	487
		Stiffeness, G', (10^3 lbs/in)	111.8	109.5	107.2	104.7	102.4	100.0	97.8	95.6	93.6
	12	Strength, (lbs/ft)	880	850	824	802	783	766	750	737	725
		Stiffeness, G', (10^3 lbs/in)	120.1	119.0	117.5	116.0	114.5	112.9	111.4	109.9	108.4
	9	Strength, (lbs/ft)	997	970	947	927	910	895	881	869	858
		Stiffeness, G', (10^3 lbs/in)	125.1	124.5	123.6	122.6	121.5	120.4	119.3	118.2	117.1
	6	Strength, (lbs/ft)	1 193	1 172	1 154	1 139	1 125	1 113	1 102	1 093	1 079
		Stiffeness, G', (10^3 lbs/in)	133.6	134.0	134.2	134.0	133.8	133.4	133.0	132.5	132.0

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	345	336	327	319	311	305	299	294	289
		Stiffeness, G', (10^3 lbs/in)	48.9	49.0	48.9	48.7	48.4	48.1	47.7	47.3	46.9
	24	Strength, (lbs/ft)	432	424	416	410	404	399	394	390	386
		Stiffeness, G', (10^3 lbs/in)	52.1	52.6	52.9	53.1	53.1	53.1	53.1	52.9	52.8
	12	Strength, (lbs/ft)	636	630	625	621	617	614	611	608	605
		Stiffeness, G', (10^3 lbs/in)	59.7	61.1	62.3	63.4	64.2	65.0	65.7	66.3	66.8
	9	Strength, (lbs/ft)	729	725	721	718	715	713	711	709	707
		Stiffeness, G', (10^3 lbs/in)	63.5	65.4	67.1	68.6	69.9	71.1	72.2	73.1	74.0
	6	Strength, (lbs/ft)	848	845	843	842	840	839	838	837	836
		Stiffeness, G', (10^3 lbs/in)	69.2	71.8	74.2	76.4	78.4	80.3	82.0	83.6	85.1
36/7	36	Strength, (lbs/ft)	451	432	415	401	389	377	368	359	351
		Stiffeness, G', (10^3 lbs/in)	98.9	95.1	91.7	88.5	85.6	82.9	80.5	78.2	76.1
	24	Strength, (lbs/ft)	557	540	525	510	498	487	477	468	460
		Stiffeness, G', (10^3 lbs/in)	105.5	102.1	99.0	96.1	93.5	91.0	88.8	86.7	84.7
	12	Strength, (lbs/ft)	831	816	803	792	782	773	765	758	751
		Stiffeness, G', (10^3 lbs/in)	123.5	121.0	118.7	116.6	114.6	112.7	111.0	109.4	108.0
	9	Strength, (lbs/ft)	990	976	965	955	946	938	931	925	919
		Stiffeness, G', (10^3 lbs/in)	134.0	132.1	130.3	128.6	127.0	125.5	124.1	122.8	121.6
	6	Strength, (lbs/ft)	1 250	1 240	1 231	1 223	1 217	1 211	1 205	1 201	1 196
		Stiffeness, G', (10^3 lbs/in)	152.3	151.3	150.4	149.4	148.5	147.6	146.8	146.0	145.3
36/9	36	Strength, (lbs/ft)	665	628	596	569	545	523	504	487	472
		Stiffeness, G', (10^3 lbs/in)	126.9	122.5	118.5	114.6	111.0	107.7	104.5	101.6	98.9
	24	Strength, (lbs/ft)	768	736	706	678	654	633	614	597	581
		Stiffeness, G', (10^3 lbs/in)	132.1	128.1	124.4	120.9	117.6	114.5	111.6	108.8	106.3
	12	Strength, (lbs/ft)	1 030	1 003	978	957	938	921	906	893	880
		Stiffeness, G', (10^3 lbs/in)	146.4	143.4	140.6	137.9	135.3	132.9	130.6	128.5	126.5
	9	Strength, (lbs/ft)	1 184	1 159	1 138	1 118	1 101	1 086	1 073	1 060	1 049
		Stiffeness, G', (10^3 lbs/in)	154.9	152.5	150.2	147.9	145.8	143.8	141.9	140.1	138.5
	6	Strength, (lbs/ft)	1 443	1 423	1 406	1 391	1 378	1 366	1 355	1 345	1 216
		Stiffeness, G', (10^3 lbs/in)	169.8	168.4	167.0	165.6	164.3	163.0	161.7	160.6	159.4

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	36	Strength, (lbs/ft)	335	298	270	243	220	202	186	173	162
		Stiffeness, G', (10^3 lbs/in)	9.5	10.8	11.9	12.8	13.7	14.4	15.1	15.6	16.1
	24	Strength, (lbs/ft)	347	312	284	261	238	220	204	191	180
		Stiffeness, G', (10^3 lbs/in)	9.5	10.8	11.9	12.9	13.7	14.5	15.1	15.7	16.1
	12	Strength, (lbs/ft)	384	352	326	305	287	273	259	246	235
		Stiffeness, G', (10^3 lbs/in)	9.6	10.8	11.9	12.9	13.8	14.6	15.3	15.9	16.4
	9	Strength, (lbs/ft)	406	376	352	332	315	301	289	279	270
		Stiffeness, G', (10^3 lbs/in)	9.6	10.8	12.0	13.0	13.9	14.7	15.4	16.0	16.5
	6	Strength, (lbs/ft)	447	421	399	382	367	354	344	335	326
		Stiffeness, G', (10^3 lbs/in)	9.6	10.9	12.0	13.0	14.0	14.8	15.6	16.2	16.8
36/7	36	Strength, (lbs/ft)	494	434	383	342	310	283	261	242	226
		Stiffeness, G', (10^3 lbs/in)	49.2	50.9	51.7	51.8	51.4	50.6	49.7	48.6	47.4
	24	Strength, (lbs/ft)	509	450	401	360	328	301	279	260	244
		Stiffeness, G', (10^3 lbs/in)	49.3	51.0	51.8	51.9	51.6	50.9	50.0	48.9	47.8
	12	Strength, (lbs/ft)	554	497	452	415	382	356	334	315	299
		Stiffeness, G', (10^3 lbs/in)	49.5	51.3	52.2	52.4	52.2	51.6	50.8	49.8	48.7
	9	Strength, (lbs/ft)	583	527	483	448	419	392	370	351	335
		Stiffeness, G', (10^3 lbs/in)	49.6	51.5	52.5	52.7	52.6	52.0	51.3	50.4	49.4
	6	Strength, (lbs/ft)	638	585	544	510	483	460	441	424	408
		Stiffeness, G', (10^3 lbs/in)	49.9	51.9	53.0	53.4	53.3	52.9	52.3	51.5	50.6
36/9	36	Strength, (lbs/ft)	772	683	612	548	493	448	411	379	352
		Stiffeness, G', (10^3 lbs/in)	54.0	57.0	59.0	60.1	60.6	60.6	60.3	59.7	58.9
	24	Strength, (lbs/ft)	785	698	627	566	511	467	429	397	370
		Stiffeness, G', (10^3 lbs/in)	54.1	57.1	59.1	60.2	60.7	60.8	60.5	59.9	59.2
	12	Strength, (lbs/ft)	824	739	671	616	566	521	484	452	425
		Stiffeness, G', (10^3 lbs/in)	54.2	57.2	59.3	60.5	61.1	61.3	61.0	60.5	59.8
	9	Strength, (lbs/ft)	849	766	700	645	600	557	520	488	461
		Stiffeness, G', (10^3 lbs/in)	54.2	57.3	59.4	60.7	61.4	61.5	61.4	60.9	60.3
	6	Strength, (lbs/ft)	896	818	755	703	660	623	592	561	534
		Stiffeness, G', (10^3 lbs/in)	54.4	57.6	59.7	61.1	61.8	62.1	62.0	61.7	61.2

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	324	294	268	247	229	214	201	189	179
		Stiffeness, G', (10^3 lbs/in)	17.5	18.7	19.7	20.5	21.1	21.6	22.0	22.3	22.4
	24	Strength, (lbs/ft)	345	318	294	273	255	240	227	215	206
		Stiffeness, G', (10^3 lbs/in)	17.5	18.7	19.7	20.6	21.2	21.8	22.2	22.4	22.6
	12	Strength, (lbs/ft)	404	380	360	343	329	316	305	294	284
		Stiffeness, G', (10^3 lbs/in)	17.6	18.9	19.9	20.8	21.5	22.1	22.6	22.9	23.2
	9	Strength, (lbs/ft)	440	417	399	383	370	358	348	339	331
		Stiffeness, G', (10^3 lbs/in)	17.6	18.9	20.0	21.0	21.7	22.3	22.8	23.2	23.5
	6	Strength, (lbs/ft)	504	485	469	455	444	434	425	417	410
		Stiffeness, G', (10^3 lbs/in)	17.8	19.1	20.2	21.2	22.1	22.8	23.3	23.8	24.2
36/7	36	Strength, (lbs/ft)	461	413	375	344	318	296	277	261	246
		Stiffeness, G', (10^3 lbs/in)	66.4	65.4	64.0	62.3	60.5	58.6	56.7	54.9	53.1
	24	Strength, (lbs/ft)	487	439	401	370	344	322	303	287	272
		Stiffeness, G', (10^3 lbs/in)	66.6	65.7	64.3	62.6	60.9	59.0	57.2	55.4	53.6
	12	Strength, (lbs/ft)	556	515	480	448	422	400	382	365	351
		Stiffeness, G', (10^3 lbs/in)	67.2	66.4	65.1	63.6	61.9	60.2	58.5	56.7	55.1
	9	Strength, (lbs/ft)	601	561	528	500	475	453	434	418	403
		Stiffeness, G', (10^3 lbs/in)	67.6	66.9	65.7	64.3	62.7	61.0	59.3	57.6	56.0
	6	Strength, (lbs/ft)	686	648	617	591	569	550	533	519	506
		Stiffeness, G', (10^3 lbs/in)	68.4	67.8	66.8	65.5	64.0	62.5	61.0	59.4	57.9
36/9	36	Strength, (lbs/ft)	732	661	596	543	498	461	429	401	377
		Stiffeness, G', (10^3 lbs/in)	77.7	77.9	77.5	76.5	75.2	73.7	72.1	70.4	68.7
	24	Strength, (lbs/ft)	754	687	622	569	525	487	455	427	403
		Stiffeness, G', (10^3 lbs/in)	77.8	78.1	77.6	76.7	75.5	74.0	72.4	70.7	69.0
	12	Strength, (lbs/ft)	816	752	698	647	603	566	534	506	482
		Stiffeness, G', (10^3 lbs/in)	78.2	78.5	78.2	77.4	76.2	74.9	73.4	71.8	70.1
	9	Strength, (lbs/ft)	857	794	741	697	655	618	586	558	534
		Stiffeness, G', (10^3 lbs/in)	78.4	78.8	78.6	77.8	76.7	75.4	74.0	72.4	70.9
	6	Strength, (lbs/ft)	934	875	825	783	747	717	690	663	639
		Stiffeness, G', (10^3 lbs/in)	78.9	79.4	79.3	78.7	77.7	76.5	75.2	73.8	72.3

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	366	339	317	298	282	267	255	244	235
		Stiffeness, G', (10^3 lbs/in)	33.1	33.7	34.0	34.1	34.0	33.8	33.5	33.1	32.6
	24	Strength, (lbs/ft)	409	386	363	344	328	314	302	291	281
		Stiffeness, G', (10^3 lbs/in)	33.2	33.8	34.2	34.3	34.3	34.1	33.8	33.5	33.0
	12	Strength, (lbs/ft)	517	497	480	466	453	442	432	423	415
		Stiffeness, G', (10^3 lbs/in)	33.6	34.4	34.9	35.1	35.2	35.1	34.9	34.7	34.3
	9	Strength, (lbs/ft)	582	564	548	535	523	513	504	496	489
		Stiffeness, G', (10^3 lbs/in)	33.9	34.7	35.3	35.6	35.7	35.7	35.6	35.4	35.2
	6	Strength, (lbs/ft)	693	678	666	655	645	637	630	623	617
		Stiffeness, G', (10^3 lbs/in)	34.4	35.4	36.0	36.5	36.8	36.9	36.9	36.9	36.7
36/7	36	Strength, (lbs/ft)	507	467	434	406	382	361	343	327	313
		Stiffeness, G', (10^3 lbs/in)	86.4	82.8	79.3	75.9	72.7	69.7	66.9	64.3	61.9
	24	Strength, (lbs/ft)	553	514	481	453	429	408	390	374	359
		Stiffeness, G', (10^3 lbs/in)	86.9	83.3	79.8	76.5	73.3	70.4	67.6	65.0	62.6
	12	Strength, (lbs/ft)	685	650	620	592	568	547	529	513	499
		Stiffeness, G', (10^3 lbs/in)	88.2	84.8	81.4	78.2	75.2	72.3	69.6	67.1	64.8
	9	Strength, (lbs/ft)	765	731	703	678	657	638	622	606	592
		Stiffeness, G', (10^3 lbs/in)	89.1	85.8	82.5	79.3	76.4	73.6	71.0	68.5	66.2
	6	Strength, (lbs/ft)	917	886	859	836	817	799	784	771	758
		Stiffeness, G', (10^3 lbs/in)	90.9	87.7	84.6	81.6	78.7	76.1	73.6	71.2	69.0
36/9	36	Strength, (lbs/ft)	801	733	676	627	586	550	519	491	466
		Stiffeness, G', (10^3 lbs/in)	108.5	105.2	101.9	98.5	95.2	92.0	88.9	86.0	83.2
	24	Strength, (lbs/ft)	848	779	722	674	632	596	565	537	513
		Stiffeness, G', (10^3 lbs/in)	108.8	105.6	102.3	99.0	95.7	92.5	89.5	86.6	83.8
	12	Strength, (lbs/ft)	967	910	862	813	772	736	705	677	652
		Stiffeness, G', (10^3 lbs/in)	109.7	106.7	103.5	100.3	97.1	94.1	91.1	88.2	85.5
	9	Strength, (lbs/ft)	1 043	987	940	900	865	829	798	770	745
		Stiffeness, G', (10^3 lbs/in)	110.4	107.4	104.3	101.2	98.1	95.0	92.1	89.4	86.7
	6	Strength, (lbs/ft)	1 185	1 134	1 090	1 052	1 019	990	964	941	921
		Stiffeness, G', (10^3 lbs/in)	111.6	108.8	105.8	102.9	99.9	97.0	94.2	91.5	89.0

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	409	387	368	351	337	324	313	303	294
		Stiffeness, G', (10^3 lbs/in)	46.6	46.0	45.2	44.3	43.4	42.4	41.4	40.4	39.5
	24	Strength, (lbs/ft)	479	460	441	424	410	397	386	375	366
		Stiffeness, G', (10^3 lbs/in)	46.9	46.4	45.7	44.9	44.0	43.0	42.1	41.1	40.2
	12	Strength, (lbs/ft)	650	634	619	607	596	586	578	570	562
		Stiffeness, G', (10^3 lbs/in)	48.0	47.6	47.1	46.4	45.6	44.8	44.0	43.1	42.3
	9	Strength, (lbs/ft)	748	734	721	710	701	692	684	677	671
		Stiffeness, G', (10^3 lbs/in)	48.7	48.4	48.0	47.4	46.7	46.0	45.2	44.4	43.6
	6	Strength, (lbs/ft)	910	899	890	881	874	867	861	856	851
		Stiffeness, G', (10^3 lbs/in)	50.1	50.0	49.7	49.3	48.7	48.2	47.5	46.9	46.2
36/7	36	Strength, (lbs/ft)	554	521	492	467	446	426	409	394	380
		Stiffeness, G', (10^3 lbs/in)	95.2	90.5	86.2	82.2	78.6	75.3	72.2	69.3	66.7
	24	Strength, (lbs/ft)	627	593	565	540	518	499	482	467	453
		Stiffeness, G', (10^3 lbs/in)	95.9	91.2	87.0	83.1	79.4	76.1	73.1	70.2	67.6
	12	Strength, (lbs/ft)	834	804	779	756	736	717	700	685	671
		Stiffeness, G', (10^3 lbs/in)	98.0	93.4	89.3	85.5	82.0	78.7	75.7	72.9	70.4
	9	Strength, (lbs/ft)	959	931	906	885	866	849	834	821	809
		Stiffeness, G', (10^3 lbs/in)	99.3	94.9	90.8	87.1	83.6	80.4	77.5	74.7	72.2
	6	Strength, (lbs/ft)	1 193	1 167	1 145	1 125	1 108	1 093	1 079	1 067	1 056
		Stiffeness, G', (10^3 lbs/in)	102.0	97.8	93.8	90.2	86.8	83.7	80.9	78.2	75.8
36/9	36	Strength, (lbs/ft)	855	797	747	703	665	632	602	575	551
		Stiffeness, G', (10^3 lbs/in)	125.0	119.9	115.0	110.5	106.2	102.2	98.4	94.9	91.6
	24	Strength, (lbs/ft)	928	869	819	776	738	704	674	648	624
		Stiffeness, G', (10^3 lbs/in)	125.5	120.5	115.7	111.1	106.9	102.9	99.2	95.7	92.4
	12	Strength, (lbs/ft)	1 129	1 079	1 036	994	956	922	892	866	842
		Stiffeness, G', (10^3 lbs/in)	127.2	122.2	117.5	113.1	108.9	105.1	101.4	98.0	94.8
	9	Strength, (lbs/ft)	1 248	1 201	1 159	1 123	1 091	1 062	1 036	1 011	987
		Stiffeness, G', (10^3 lbs/in)	128.2	123.4	118.7	114.4	110.3	106.5	102.9	99.5	96.4
	6	Strength, (lbs/ft)	1 473	1 429	1 391	1 358	1 328	1 302	1 278	1 257	1 216
		Stiffeness, G', (10^3 lbs/in)	130.3	125.6	121.1	116.9	113.0	109.2	105.8	102.5	99.4

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	36	Strength, (lbs/ft)	335	306	284	267	249	235	223	213	204
		Stiffeness, G', (10^3 lbs/in)	9.5	10.8	11.9	13.0	13.9	14.8	15.5	16.2	16.8
	24	Strength, (lbs/ft)	372	346	326	310	296	285	275	267	258
		Stiffeness, G', (10^3 lbs/in)	9.6	10.9	12.1	13.2	14.2	15.1	15.9	16.7	17.4
	12	Strength, (lbs/ft)	466	447	431	419	409	400	393	386	381
		Stiffeness, G', (10^3 lbs/in)	9.7	11.1	12.4	13.6	14.7	15.8	16.8	17.8	18.7
	9	Strength, (lbs/ft)	514	498	486	476	468	460	454	449	445
		Stiffeness, G', (10^3 lbs/in)	9.8	11.2	12.5	13.8	15.0	16.1	17.2	18.3	19.3
	6	Strength, (lbs/ft)	584	574	566	559	554	549	545	542	539
		Stiffeness, G', (10^3 lbs/in)	9.9	11.3	12.7	14.0	15.3	16.6	17.8	18.9	20.0
36/7	36	Strength, (lbs/ft)	494	443	401	366	339	316	297	282	268
		Stiffeness, G', (10^3 lbs/in)	49.2	51.2	52.3	52.7	52.8	52.5	52.0	51.4	50.7
	24	Strength, (lbs/ft)	539	490	452	421	393	371	352	336	323
		Stiffeness, G', (10^3 lbs/in)	49.9	52.1	53.5	54.3	54.6	54.6	54.4	54.1	53.6
	12	Strength, (lbs/ft)	665	622	587	560	538	519	504	490	479
		Stiffeness, G', (10^3 lbs/in)	51.6	54.5	56.6	58.2	59.3	60.0	60.5	60.8	61.0
	9	Strength, (lbs/ft)	741	701	670	644	624	607	592	580	569
		Stiffeness, G', (10^3 lbs/in)	52.6	55.9	58.4	60.3	61.8	62.9	63.8	64.5	65.0
	6	Strength, (lbs/ft)	873	840	814	793	775	761	749	738	729
		Stiffeness, G', (10^3 lbs/in)	54.2	58.1	61.2	63.8	65.9	67.7	69.2	70.4	71.5
36/9	36	Strength, (lbs/ft)	772	691	627	572	522	482	447	419	394
		Stiffeness, G', (10^3 lbs/in)	54.0	57.2	59.3	60.7	61.5	61.9	61.9	61.6	61.2
	24	Strength, (lbs/ft)	811	733	671	621	577	536	502	473	448
		Stiffeness, G', (10^3 lbs/in)	54.4	57.7	60.0	61.6	62.7	63.3	63.5	63.5	63.3
	12	Strength, (lbs/ft)	919	850	794	749	711	680	652	629	609
		Stiffeness, G', (10^3 lbs/in)	55.3	59.1	62.0	64.1	65.7	66.9	67.7	68.3	68.6
	9	Strength, (lbs/ft)	985	921	869	827	792	763	737	715	696
		Stiffeness, G', (10^3 lbs/in)	55.9	59.9	63.1	65.5	67.5	68.9	70.1	71.0	71.6
	6	Strength, (lbs/ft)	1 099	1 045	1 002	966	936	911	890	871	854
		Stiffeness, G', (10^3 lbs/in)	56.9	61.3	65.0	67.9	70.4	72.4	74.1	75.4	76.6

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	36	Strength, (lbs/ft)	339	318	299	282	268	256	246	237	229
		Stiffeness, G', (10^3 lbs/in)	17.6	18.9	20.1	21.1	22.0	22.7	23.4	23.9	24.4
	24	Strength, (lbs/ft)	390	370	354	340	329	319	311	302	294
		Stiffeness, G', (10^3 lbs/in)	17.9	19.3	20.6	21.7	22.7	23.6	24.4	25.1	25.8
	12	Strength, (lbs/ft)	516	501	489	478	469	462	455	449	444
		Stiffeness, G', (10^3 lbs/in)	18.5	20.1	21.7	23.1	24.4	25.6	26.7	27.8	28.8
	9	Strength, (lbs/ft)	581	569	559	551	543	537	532	527	523
		Stiffeness, G', (10^3 lbs/in)	18.8	20.5	22.2	23.7	25.1	26.5	27.8	29.0	30.1
	6	Strength, (lbs/ft)	676	668	662	656	652	648	644	641	638
		Stiffeness, G', (10^3 lbs/in)	19.2	21.1	22.9	24.6	26.2	27.8	29.2	30.7	32.0
36/7	36	Strength, (lbs/ft)	480	439	406	380	357	338	322	308	296
		Stiffeness, G', (10^3 lbs/in)	67.3	66.9	66.0	64.9	63.7	62.4	61.1	59.7	58.5
	24	Strength, (lbs/ft)	540	504	472	445	423	404	388	373	361
		Stiffeness, G', (10^3 lbs/in)	69.2	69.1	68.6	67.9	67.0	66.0	64.9	63.9	62.8
	12	Strength, (lbs/ft)	702	670	643	621	602	586	573	561	550
		Stiffeness, G', (10^3 lbs/in)	74.0	75.0	75.4	75.6	75.5	75.3	74.9	74.5	74.1
	9	Strength, (lbs/ft)	801	771	746	726	708	693	681	669	660
		Stiffeness, G', (10^3 lbs/in)	76.8	78.2	79.2	79.8	80.2	80.4	80.5	80.5	80.4
	6	Strength, (lbs/ft)	973	948	928	911	896	884	873	863	855
		Stiffeness, G', (10^3 lbs/in)	81.3	83.7	85.5	86.9	88.1	89.0	89.7	90.3	90.7
36/9	36	Strength, (lbs/ft)	748	687	627	578	538	504	474	449	426
		Stiffeness, G', (10^3 lbs/in)	78.2	78.8	78.8	78.3	77.5	76.4	75.3	74.0	72.7
	24	Strength, (lbs/ft)	801	741	692	644	603	569	540	514	492
		Stiffeness, G', (10^3 lbs/in)	79.4	80.3	80.5	80.3	79.8	79.0	78.1	77.1	76.0
	12	Strength, (lbs/ft)	949	895	850	812	780	752	728	707	688
		Stiffeness, G', (10^3 lbs/in)	82.5	84.1	85.2	85.7	85.9	85.9	85.6	85.3	84.8
	9	Strength, (lbs/ft)	1 039	988	947	912	881	855	833	813	795
		Stiffeness, G', (10^3 lbs/in)	84.3	86.4	87.8	88.8	89.4	89.8	89.9	89.9	89.8
	6	Strength, (lbs/ft)	1 198	1 155	1 120	1 090	1 064	1 041	1 022	1 005	884
		Stiffeness, G', (10^3 lbs/in)	87.4	90.2	92.4	94.1	95.4	96.4	97.2	97.8	98.2

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	36	Strength, (lbs/ft)	397	376	358	342	328	316	306	297	289
		Stiffeness, G', (10^3 lbs/in)	34.1	35.1	35.9	36.4	36.9	37.1	37.3	37.4	37.5
	24	Strength, (lbs/ft)	468	450	435	422	411	401	393	385	376
		Stiffeness, G', (10^3 lbs/in)	35.3	36.6	37.6	38.5	39.2	39.8	40.2	40.6	40.9
	12	Strength, (lbs/ft)	647	633	622	612	603	596	589	583	578
		Stiffeness, G', (10^3 lbs/in)	38.1	40.0	41.7	43.2	44.5	45.7	46.8	47.7	48.6
	9	Strength, (lbs/ft)	740	729	720	711	704	698	693	688	683
		Stiffeness, G', (10^3 lbs/in)	39.5	41.7	43.6	45.4	47.1	48.6	49.9	51.2	52.4
	6	Strength, (lbs/ft)	875	868	862	857	852	848	845	842	839
		Stiffeness, G', (10^3 lbs/in)	41.5	44.1	46.5	48.7	50.8	52.8	54.6	56.3	57.9
36/7	36	Strength, (lbs/ft)	540	504	475	450	429	410	394	380	367
		Stiffeness, G', (10^3 lbs/in)	89.6	86.8	84.0	81.4	78.9	76.6	74.4	72.3	70.4
	24	Strength, (lbs/ft)	627	592	562	538	516	498	482	467	455
		Stiffeness, G', (10^3 lbs/in)	93.9	91.4	89.0	86.7	84.6	82.5	80.5	78.7	77.0
	12	Strength, (lbs/ft)	851	822	798	777	759	743	729	717	706
		Stiffeness, G', (10^3 lbs/in)	105.0	103.7	102.3	100.9	99.5	98.2	96.9	95.6	94.5
	9	Strength, (lbs/ft)	988	961	939	919	903	888	875	863	853
		Stiffeness, G', (10^3 lbs/in)	111.5	110.8	109.9	109.0	108.1	107.2	106.3	105.4	104.5
	6	Strength, (lbs/ft)	1 229	1 207	1 188	1 171	1 157	1 145	1 134	1 124	1 079
		Stiffeness, G', (10^3 lbs/in)	122.4	122.8	122.9	122.9	122.7	122.5	122.3	122.0	121.7
36/9	36	Strength, (lbs/ft)	834	770	716	671	633	599	570	544	521
		Stiffeness, G', (10^3 lbs/in)	110.7	108.2	105.5	102.7	100.0	97.4	94.9	92.4	90.1
	24	Strength, (lbs/ft)	913	857	804	759	720	686	657	631	608
		Stiffeness, G', (10^3 lbs/in)	113.7	111.5	109.2	106.8	104.4	102.1	99.8	97.6	95.5
	12	Strength, (lbs/ft)	1 123	1 074	1 031	995	963	935	911	889	869
		Stiffeness, G', (10^3 lbs/in)	121.8	120.7	119.3	117.8	116.2	114.6	113.1	111.6	110.1
	9	Strength, (lbs/ft)	1 252	1 206	1 166	1 132	1 103	1 077	1 054	1 033	1 015
		Stiffeness, G', (10^3 lbs/in)	126.6	126.0	125.2	124.2	123.1	122.0	120.8	119.7	118.6
	6	Strength, (lbs/ft)	1 481	1 442	1 409	1 379	1 354	1 331	1 311	1 210	1 079
		Stiffeness, G', (10^3 lbs/in)	134.9	135.4	135.5	135.3	135.1	134.7	134.2	133.7	133.2

1.5 in. deck - 36 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	36	Strength, (lbs/ft)	446	426	410	395	383	372	362	353	345
		Stiffeness, G', (10^3 lbs/in)	49.8	49.9	49.8	49.6	49.4	49.0	48.7	48.2	47.8
	24	Strength, (lbs/ft)	539	524	510	498	487	478	470	462	454
		Stiffeness, G', (10^3 lbs/in)	52.9	53.4	53.7	53.9	53.9	53.9	53.9	53.7	53.6
	12	Strength, (lbs/ft)	772	760	749	740	732	724	718	712	707
		Stiffeness, G', (10^3 lbs/in)	60.2	61.6	62.9	63.9	64.8	65.6	66.3	66.9	67.4
	9	Strength, (lbs/ft)	893	883	875	867	860	855	849	844	840
		Stiffeness, G', (10^3 lbs/in)	63.9	65.8	67.5	69.0	70.4	71.6	72.6	73.6	74.5
	6	Strength, (lbs/ft)	1 069	1 063	1 057	1 053	1 048	1 044	1 041	1 038	1 035
		Stiffeness, G', (10^3 lbs/in)	69.5	72.1	74.6	76.8	78.8	80.6	82.4	83.9	85.4
36/7	36	Strength, (lbs/ft)	591	560	534	511	491	474	458	444	432
		Stiffeness, G', (10^3 lbs/in)	101.4	97.5	94.0	90.8	87.8	85.1	82.6	80.2	78.1
	24	Strength, (lbs/ft)	700	669	643	620	601	583	567	553	541
		Stiffeness, G', (10^3 lbs/in)	107.9	104.4	101.2	98.3	95.5	93.0	90.7	88.6	86.6
	12	Strength, (lbs/ft)	991	965	943	924	906	891	878	866	855
		Stiffeness, G', (10^3 lbs/in)	125.5	123.0	120.6	118.4	116.4	114.5	112.7	111.1	109.5
	9	Strength, (lbs/ft)	1 166	1 142	1 122	1 104	1 088	1 074	1 061	1 050	1 040
		Stiffeness, G', (10^3 lbs/in)	135.9	133.9	132.0	130.3	128.6	127.1	125.6	124.3	123.0
	6	Strength, (lbs/ft)	1 476	1 456	1 439	1 424	1 410	1 398	1 388	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	153.9	152.8	151.8	150.8	149.9	148.9	148.1	147.3	146.5
36/9	36	Strength, (lbs/ft)	892	836	788	747	711	679	651	625	602
		Stiffeness, G', (10^3 lbs/in)	129.8	125.4	121.3	117.4	113.8	110.4	107.2	104.2	101.4
	24	Strength, (lbs/ft)	1 001	945	898	856	820	788	760	734	712
		Stiffeness, G', (10^3 lbs/in)	134.9	130.9	127.1	123.5	120.2	117.0	114.1	111.3	108.7
	12	Strength, (lbs/ft)	1 279	1 234	1 195	1 161	1 130	1 103	1 079	1 057	1 038
		Stiffeness, G', (10^3 lbs/in)	148.8	145.8	142.9	140.2	137.6	135.1	132.8	130.6	128.6
	9	Strength, (lbs/ft)	1 447	1 405	1 369	1 337	1 308	1 283	1 260	1 240	1 216
		Stiffeness, G', (10^3 lbs/in)	157.1	154.7	152.3	150.1	147.9	145.9	143.9	142.1	140.3
	6	Strength, (lbs/ft)	1 748	1 713	1 681	1 654	1 629	1 608	1 501	1 347	1 216
		Stiffeness, G', (10^3 lbs/in)	171.7	170.3	168.8	167.4	166.0	164.7	163.4	162.2	161.0

3.0 in. deck - 24 in. wide - 6 in. flute spacing | **Thickness = 0.030 in.**

Support connection: 3/4" Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	36	Strength, (lbs/ft)	174	165	158	152	146	141	136	132	128
		Stiffeness, G', (10^3 lbs/in)	9.0	9.1	9.2	9.3	9.3	9.4	9.4	9.4	9.3
	24	Strength, (lbs/ft)	192	184	176	170	164	159	154	150	146
		Stiffeness, G', (10^3 lbs/in)	9.0	9.2	9.3	9.4	9.4	9.5	9.5	9.5	9.5
	12	Strength, (lbs/ft)	246	238	231	224	219	213	209	204	200
		Stiffeness, G', (10^3 lbs/in)	9.2	9.4	9.6	9.7	9.8	9.9	9.9	10.0	10.0
	9	Strength, (lbs/ft)	283	274	267	261	255	250	245	241	237
		Stiffeness, G', (10^3 lbs/in)	9.4	9.6	9.7	9.9	10.0	10.1	10.2	10.3	10.3
	6	Strength, (lbs/ft)	355	347	340	333	328	322	318	313	309
		Stiffeness, G', (10^3 lbs/in)	9.6	9.9	10.1	10.2	10.4	10.5	10.7	10.8	10.9
24/5	36	Strength, (lbs/ft)	218	207	198	189	182	175	168	163	157
		Stiffeness, G', (10^3 lbs/in)	28.2	27.2	26.2	25.3	24.5	23.7	22.9	22.2	21.5
	24	Strength, (lbs/ft)	236	226	216	207	200	193	187	181	175
		Stiffeness, G', (10^3 lbs/in)	28.6	27.6	26.6	25.7	24.9	24.1	23.3	22.6	21.9
	12	Strength, (lbs/ft)	291	280	270	262	254	247	241	235	230
		Stiffeness, G', (10^3 lbs/in)	29.6	28.6	27.7	26.8	26.0	25.3	24.6	23.9	23.2
	9	Strength, (lbs/ft)	327	316	307	298	291	284	277	272	266
		Stiffeness, G', (10^3 lbs/in)	30.3	29.3	28.4	27.6	26.8	26.1	25.4	24.7	24.1
	6	Strength, (lbs/ft)	400	389	379	371	363	356	350	344	339
		Stiffeness, G', (10^3 lbs/in)	31.5	30.7	29.8	29.0	28.3	27.6	26.9	26.3	25.7
24/7	36	Strength, (lbs/ft)	369	350	332	317	303	290	278	268	258
		Stiffeness, G', (10^3 lbs/in)	39.8	38.6	37.5	36.5	35.5	34.5	33.5	32.6	31.8
	24	Strength, (lbs/ft)	388	368	351	335	321	308	297	286	276
		Stiffeness, G', (10^3 lbs/in)	40.0	38.9	37.8	36.8	35.8	34.8	33.9	33.0	32.1
	12	Strength, (lbs/ft)	442	422	405	389	375	363	351	341	331
		Stiffeness, G', (10^3 lbs/in)	40.8	39.7	38.6	37.6	36.7	35.7	34.8	34.0	33.2
	9	Strength, (lbs/ft)	478	459	441	426	412	399	387	377	367
		Stiffeness, G', (10^3 lbs/in)	41.2	40.2	39.2	38.2	37.3	36.4	35.5	34.6	33.8
	6	Strength, (lbs/ft)	551	531	514	498	484	472	460	450	440
		Stiffeness, G', (10^3 lbs/in)	42.2	41.2	40.3	39.3	38.4	37.6	36.7	35.9	35.2

3.0 in. deck - 24 in. wide - 6 in. flute spacing | **Thickness = 0.036 in.**

Support connection: 3/4" Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	194	187	180	174	169	163	159	155	151
		Stiffeness, G', (10^3 lbs/in)	12.2	12.2	12.1	12.1	12.0	11.9	11.8	11.7	11.6
	24	Strength, (lbs/ft)	221	213	206	200	195	190	185	181	177
		Stiffeness, G', (10^3 lbs/in)	12.3	12.4	12.3	12.3	12.2	12.1	12.1	12.0	11.8
	12	Strength, (lbs/ft)	299	292	285	279	273	268	263	259	255
		Stiffeness, G', (10^3 lbs/in)	12.8	12.9	12.9	12.9	12.9	12.8	12.8	12.7	12.7
	9	Strength, (lbs/ft)	351	344	337	331	325	320	316	311	308
		Stiffeness, G', (10^3 lbs/in)	13.1	13.2	13.2	13.3	13.3	13.3	13.2	13.2	13.2
	6	Strength, (lbs/ft)	452	445	438	432	427	422	417	413	409
		Stiffeness, G', (10^3 lbs/in)	13.6	13.7	13.9	13.9	14.0	14.1	14.1	14.1	14.1
24/5	36	Strength, (lbs/ft)	242	232	223	214	207	200	194	188	183
		Stiffeness, G', (10^3 lbs/in)	29.9	28.8	27.8	26.8	25.9	25.0	24.2	23.5	22.8
	24	Strength, (lbs/ft)	268	258	249	241	233	226	220	215	209
		Stiffeness, G', (10^3 lbs/in)	30.4	29.3	28.2	27.3	26.4	25.5	24.7	24.0	23.3
	12	Strength, (lbs/ft)	346	336	327	319	312	305	299	293	288
		Stiffeness, G', (10^3 lbs/in)	31.7	30.6	29.6	28.7	27.8	27.0	26.2	25.5	24.8
	9	Strength, (lbs/ft)	399	389	380	371	364	357	351	345	340
		Stiffeness, G', (10^3 lbs/in)	32.6	31.5	30.5	29.6	28.8	28.0	27.2	26.5	25.8
	6	Strength, (lbs/ft)	503	493	484	476	469	462	456	450	445
		Stiffeness, G', (10^3 lbs/in)	34.2	33.2	32.3	31.4	30.6	29.8	29.1	28.4	27.8
24/7	36	Strength, (lbs/ft)	402	383	367	352	338	326	314	304	294
		Stiffeness, G', (10^3 lbs/in)	43.6	42.2	40.9	39.7	38.5	37.3	36.3	35.2	34.3
	24	Strength, (lbs/ft)	428	409	393	378	364	352	340	330	320
		Stiffeness, G', (10^3 lbs/in)	44.0	42.6	41.3	40.0	38.9	37.7	36.7	35.7	34.7
	12	Strength, (lbs/ft)	506	488	471	456	443	430	419	408	399
		Stiffeness, G', (10^3 lbs/in)	45.0	43.7	42.4	41.2	40.0	39.0	37.9	36.9	36.0
	9	Strength, (lbs/ft)	559	540	524	509	495	483	471	461	451
		Stiffeness, G', (10^3 lbs/in)	45.7	44.4	43.1	41.9	40.8	39.7	38.7	37.8	36.9
	6	Strength, (lbs/ft)	663	645	628	613	600	587	576	565	556
		Stiffeness, G', (10^3 lbs/in)	47.0	45.7	44.6	43.4	42.3	41.3	40.3	39.4	38.5

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	253	246	239	232	227	221	216	212	207
		Stiffeness, G', (10^3 lbs/in)	17.3	17.0	16.7	16.4	16.1	15.8	15.5	15.2	15.0
	24	Strength, (lbs/ft)	300	292	285	279	273	268	263	258	254
		Stiffeness, G', (10^3 lbs/in)	17.6	17.4	17.1	16.8	16.5	16.3	16.0	15.7	15.4
	12	Strength, (lbs/ft)	440	432	425	419	413	407	402	398	394
		Stiffeness, G', (10^3 lbs/in)	18.6	18.4	18.2	18.0	17.7	17.5	17.3	17.0	16.8
	9	Strength, (lbs/ft)	533	525	518	512	506	500	495	491	487
		Stiffeness, G', (10^3 lbs/in)	19.2	19.1	18.9	18.7	18.5	18.3	18.1	17.9	17.7
	6	Strength, (lbs/ft)	685	678	672	666	660	655	651	646	642
		Stiffeness, G', (10^3 lbs/in)	20.4	20.3	20.2	20.1	19.9	19.8	19.7	19.5	19.3
24/5	36	Strength, (lbs/ft)	309	299	289	281	273	266	259	253	247
		Stiffeness, G', (10^3 lbs/in)	33.4	32.2	31.0	29.9	28.9	28.0	27.1	26.3	25.5
	24	Strength, (lbs/ft)	356	345	336	327	319	312	306	299	294
		Stiffeness, G', (10^3 lbs/in)	34.0	32.8	31.6	30.5	29.5	28.6	27.7	26.9	26.1
	12	Strength, (lbs/ft)	495	485	475	467	459	452	445	439	433
		Stiffeness, G', (10^3 lbs/in)	35.8	34.6	33.4	32.4	31.4	30.5	29.6	28.8	28.1
	9	Strength, (lbs/ft)	588	578	568	560	552	545	538	532	526
		Stiffeness, G', (10^3 lbs/in)	36.9	35.7	34.6	33.6	32.6	31.7	30.8	30.1	29.3
	6	Strength, (lbs/ft)	774	764	754	746	738	731	724	718	712
		Stiffeness, G', (10^3 lbs/in)	39.2	38.0	36.9	35.9	35.0	34.1	33.3	32.5	31.8
24/7	36	Strength, (lbs/ft)	498	479	461	445	430	417	404	393	382
		Stiffeness, G', (10^3 lbs/in)	50.3	48.6	46.9	45.4	44.0	42.7	41.4	40.2	39.1
	24	Strength, (lbs/ft)	544	525	508	492	477	463	451	439	429
		Stiffeness, G', (10^3 lbs/in)	50.8	49.1	47.5	46.0	44.5	43.2	42.0	40.8	39.7
	12	Strength, (lbs/ft)	684	665	647	631	616	603	590	579	568
		Stiffeness, G', (10^3 lbs/in)	52.2	50.6	49.0	47.5	46.1	44.8	43.6	42.4	41.3
	9	Strength, (lbs/ft)	777	758	740	724	709	696	683	672	661
		Stiffeness, G', (10^3 lbs/in)	53.2	51.5	50.0	48.5	47.2	45.9	44.7	43.5	42.5
	6	Strength, (lbs/ft)	963	944	926	910	895	882	869	858	847
		Stiffeness, G', (10^3 lbs/in)	55.1	53.5	52.0	50.6	49.2	48.0	46.8	45.7	44.6

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	316	309	302	296	290	284	279	275	270
		Stiffeness, G', (10^3 lbs/in)	20.7	20.2	19.7	19.3	18.8	18.4	18.0	17.6	17.2
	24	Strength, (lbs/ft)	389	381	375	368	362	357	352	347	343
		Stiffeness, G', (10^3 lbs/in)	21.2	20.8	20.3	19.8	19.4	19.0	18.6	18.2	17.8
	12	Strength, (lbs/ft)	607	599	593	586	580	575	570	565	561
		Stiffeness, G', (10^3 lbs/in)	22.8	22.3	21.9	21.5	21.1	20.8	20.4	20.0	19.7
	9	Strength, (lbs/ft)	736	729	722	716	710	705	700	695	691
		Stiffeness, G', (10^3 lbs/in)	23.7	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9
	6	Strength, (lbs/ft)	955	949	943	938	933	928	924	920	916
		Stiffeness, G', (10^3 lbs/in)	25.6	25.3	25.0	24.7	24.4	24.1	23.8	23.5	23.2
24/5	36	Strength, (lbs/ft)	378	368	359	350	342	335	328	322	316
		Stiffeness, G', (10^3 lbs/in)	35.4	34.1	33.0	31.8	30.8	29.8	28.9	28.1	27.3
	24	Strength, (lbs/ft)	451	441	431	423	415	408	401	395	389
		Stiffeness, G', (10^3 lbs/in)	36.1	34.9	33.7	32.6	31.5	30.6	29.7	28.9	28.1
	12	Strength, (lbs/ft)	669	659	649	641	633	626	619	613	607
		Stiffeness, G', (10^3 lbs/in)	38.2	37.0	35.8	34.7	33.7	32.8	31.9	31.1	30.3
	9	Strength, (lbs/ft)	814	804	795	786	778	771	764	758	752
		Stiffeness, G', (10^3 lbs/in)	39.6	38.4	37.2	36.2	35.2	34.2	33.4	32.6	31.8
	6	Strength, (lbs/ft)	1 100	1 090	1 080	1 071	1 063	1 055	1 048	1 041	1 035
		Stiffeness, G', (10^3 lbs/in)	42.3	41.1	40.0	39.0	38.0	37.1	36.2	35.5	34.7
24/7	36	Strength, (lbs/ft)	589	570	552	536	521	507	494	482	471
		Stiffeness, G', (10^3 lbs/in)	54.2	52.4	50.7	49.0	47.5	46.1	44.8	43.5	42.3
	24	Strength, (lbs/ft)	662	643	625	609	593	580	567	555	543
		Stiffeness, G', (10^3 lbs/in)	54.8	53.0	51.3	49.7	48.2	46.8	45.4	44.2	43.0
	12	Strength, (lbs/ft)	880	860	843	826	811	798	785	773	761
		Stiffeness, G', (10^3 lbs/in)	56.7	54.9	53.2	51.6	50.1	48.7	47.4	46.2	45.0
	9	Strength, (lbs/ft)	1 025	1 006	988	972	957	943	930	918	907
		Stiffeness, G', (10^3 lbs/in)	57.9	56.1	54.4	52.9	51.4	50.0	48.7	47.5	46.4
	6	Strength, (lbs/ft)	1 316	1 296	1 279	1 262	1 247	1 234	1 221	1 209	1 197
		Stiffeness, G', (10^3 lbs/in)	60.2	58.5	56.9	55.3	53.9	52.6	51.3	50.1	49.0

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	334	331	327	324	321	319	316	314	312
		Stiffeness, G', (10^3 lbs/in)	15.6	16.1	16.4	16.8	17.2	17.5	17.8	18.1	18.4
	24	Strength, (lbs/ft)	460	456	452	448	445	442	439	437	435
		Stiffeness, G', (10^3 lbs/in)	17.1	17.7	18.2	18.7	19.2	19.7	20.1	20.6	21.0
	12	Strength, (lbs/ft)	727	724	722	719	717	715	713	711	710
		Stiffeness, G', (10^3 lbs/in)	19.4	20.2	21.0	21.7	22.4	23.1	23.7	24.4	25.0
	9	Strength, (lbs/ft)	852	850	848	846	845	843	842	840	839
		Stiffeness, G', (10^3 lbs/in)	20.2	21.1	21.9	22.7	23.5	24.2	25.0	25.7	26.4
	6	Strength, (lbs/ft)	1 012	1 011	1 010	1 009	1 008	1 007	1 006	1 006	1 005
		Stiffeness, G', (10^3 lbs/in)	21.1	22.1	23.0	23.9	24.7	25.6	26.4	27.2	28.0
24/5	36	Strength, (lbs/ft)	381	375	369	364	360	355	352	348	345
		Stiffeness, G', (10^3 lbs/in)	42.2	41.7	41.3	40.8	40.4	40.1	39.7	39.4	39.1
	24	Strength, (lbs/ft)	513	506	501	495	491	487	483	479	476
		Stiffeness, G', (10^3 lbs/in)	50.1	49.8	49.5	49.3	49.0	48.8	48.5	48.3	48.1
	12	Strength, (lbs/ft)	877	870	864	859	854	850	846	842	839
		Stiffeness, G', (10^3 lbs/in)	68.1	68.2	68.3	68.4	68.5	68.6	68.7	68.7	68.8
	9	Strength, (lbs/ft)	1 082	1 077	1 071	1 067	1 062	1 058	1 055	1 051	1 048
		Stiffeness, G', (10^3 lbs/in)	76.7	77.1	77.4	77.7	78.0	78.3	78.5	78.7	78.9
	6	Strength, (lbs/ft)	1 425	1 420	1 416	1 413	1 409	1 406	1 315	1 212	1 120
		Stiffeness, G', (10^3 lbs/in)	89.4	90.1	90.8	91.4	91.9	92.5	92.9	93.4	93.8
24/7	36	Strength, (lbs/ft)	542	527	514	502	491	481	472	463	455
		Stiffeness, G', (10^3 lbs/in)	53.3	52.5	51.8	51.1	50.5	49.8	49.2	48.7	48.1
	24	Strength, (lbs/ft)	673	658	645	633	622	612	603	594	587
		Stiffeness, G', (10^3 lbs/in)	59.7	59.2	58.7	58.2	57.7	57.2	56.8	56.4	56.0
	12	Strength, (lbs/ft)	1 058	1 043	1 030	1 018	1 007	996	987	978	970
		Stiffeness, G', (10^3 lbs/in)	74.5	74.5	74.5	74.5	74.4	74.4	74.3	74.2	74.1
	9	Strength, (lbs/ft)	1 269	1 256	1 243	1 232	1 222	1 212	1 204	1 195	1 120
		Stiffeness, G', (10^3 lbs/in)	81.9	82.2	82.4	82.6	82.7	82.9	83.0	83.1	83.2
	6	Strength, (lbs/ft)	1 636	1 625	1 615	1 606	1 565	1 432	1 315	1 212	1 120
		Stiffeness, G', (10^3 lbs/in)	92.9	93.6	94.2	94.7	95.2	95.6	96.0	96.4	96.7

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	428	424	420	417	414	411	408	406	403
		Stiffeness, G', (10^3 lbs/in)	25.6	25.9	26.3	26.6	26.9	27.1	27.4	27.6	27.9
	24	Strength, (lbs/ft)	591	587	582	579	575	572	569	566	563
		Stiffeness, G', (10^3 lbs/in)	29.4	30.0	30.6	31.1	31.6	32.0	32.5	32.9	33.3
	12	Strength, (lbs/ft)	944	941	938	935	933	931	929	927	925
		Stiffeness, G', (10^3 lbs/in)	36.0	37.0	37.9	38.9	39.8	40.6	41.4	42.2	43.0
	9	Strength, (lbs/ft)	1 110	1 108	1 105	1 103	1 102	1 100	1 098	1 097	1 096
		Stiffeness, G', (10^3 lbs/in)	38.4	39.6	40.7	41.8	42.8	43.9	44.8	45.8	46.7
	6	Strength, (lbs/ft)	1 322	1 321	1 320	1 319	1 318	1 317	1 316	1 315	1 314
		Stiffeness, G', (10^3 lbs/in)	41.3	42.7	44.1	45.4	46.6	47.9	49.1	50.2	51.3
24/5	36	Strength, (lbs/ft)	484	477	471	465	460	455	451	447	443
		Stiffeness, G', (10^3 lbs/in)	50.7	50.1	49.5	48.9	48.4	47.9	47.5	47.1	46.7
	24	Strength, (lbs/ft)	655	648	642	636	631	627	622	618	614
		Stiffeness, G', (10^3 lbs/in)	61.7	61.2	60.8	60.3	59.9	59.6	59.2	58.9	58.6
	12	Strength, (lbs/ft)	1 131	1 124	1 117	1 111	1 106	1 101	1 097	1 093	1 089
		Stiffeness, G', (10^3 lbs/in)	87.8	87.7	87.5	87.4	87.3	87.2	87.1	87.0	86.9
	9	Strength, (lbs/ft)	1 401	1 395	1 389	1 384	1 379	1 375	1 371	1 367	1 363
		Stiffeness, G', (10^3 lbs/in)	101.0	101.1	101.2	101.2	101.3	101.3	101.3	101.4	101.4
	6	Strength, (lbs/ft)	1 853	1 848	1 844	1 840	1 836	1 833	1 729	1 603	1 491
		Stiffeness, G', (10^3 lbs/in)	121.1	121.5	121.9	122.2	122.5	122.8	123.1	123.3	123.5
24/7	36	Strength, (lbs/ft)	673	657	642	629	617	606	596	587	578
		Stiffeness, G', (10^3 lbs/in)	64.8	63.7	62.7	61.8	60.9	60.0	59.2	58.5	57.8
	24	Strength, (lbs/ft)	844	828	814	801	789	778	767	758	749
		Stiffeness, G', (10^3 lbs/in)	74.2	73.3	72.5	71.7	71.0	70.3	69.6	69.0	68.4
	12	Strength, (lbs/ft)	1 347	1 331	1 317	1 303	1 291	1 280	1 269	1 259	1 250
		Stiffeness, G', (10^3 lbs/in)	96.7	96.3	95.9	95.6	95.2	94.9	94.6	94.3	94.0
	9	Strength, (lbs/ft)	1 626	1 611	1 598	1 586	1 574	1 564	1 554	1 545	1 491
		Stiffeness, G', (10^3 lbs/in)	108.4	108.2	108.1	107.9	107.8	107.7	107.5	107.4	107.3
	6	Strength, (lbs/ft)	2 113	2 100	2 089	2 079	2 029	1 870	1 729	1 603	1 491
		Stiffeness, G', (10^3 lbs/in)	126.3	126.6	126.8	127.0	127.2	127.3	127.5	127.6	127.7

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	515	511	507	504	500	497	495	492	490
		Stiffeness, G', (10^3 lbs/in)	34.7	34.9	35.1	35.3	35.5	35.6	35.8	35.9	36.1
	24	Strength, (lbs/ft)	714	709	705	701	697	694	690	687	685
		Stiffeness, G', (10^3 lbs/in)	41.6	42.0	42.5	42.9	43.3	43.7	44.1	44.4	44.7
	12	Strength, (lbs/ft)	1 150	1 147	1 144	1 141	1 139	1 136	1 134	1 132	1 130
		Stiffeness, G', (10^3 lbs/in)	54.5	55.5	56.5	57.5	58.4	59.2	60.1	60.9	61.6
	9	Strength, (lbs/ft)	1 356	1 353	1 351	1 349	1 347	1 345	1 344	1 342	1 341
		Stiffeness, G', (10^3 lbs/in)	59.7	61.0	62.2	63.4	64.6	65.7	66.7	67.7	68.7
	6	Strength, (lbs/ft)	1 619	1 618	1 617	1 616	1 615	1 614	1 613	1 612	1 611
		Stiffeness, G', (10^3 lbs/in)	66.3	68.0	69.6	71.1	72.6	74.0	75.4	76.8	78.0
24/5	36	Strength, (lbs/ft)	577	570	564	558	553	548	543	539	535
		Stiffeness, G', (10^3 lbs/in)	57.3	56.6	55.9	55.3	54.7	54.2	53.7	53.2	52.8
	24	Strength, (lbs/ft)	787	780	774	768	763	758	753	749	745
		Stiffeness, G', (10^3 lbs/in)	70.9	70.3	69.7	69.2	68.8	68.3	67.9	67.5	67.2
	12	Strength, (lbs/ft)	1 369	1 362	1 355	1 349	1 344	1 339	1 334	1 329	1 325
		Stiffeness, G', (10^3 lbs/in)	104.1	103.8	103.5	103.3	103.0	102.8	102.6	102.4	102.3
	9	Strength, (lbs/ft)	1 702	1 696	1 690	1 685	1 680	1 675	1 671	1 667	1 663
		Stiffeness, G', (10^3 lbs/in)	121.4	121.3	121.2	121.1	121.0	120.9	120.9	120.8	120.7
	6	Strength, (lbs/ft)	2 260	2 255	2 250	2 246	2 242	2 231	2 075	1 934	1 807
		Stiffeness, G', (10^3 lbs/in)	148.6	148.7	148.9	149.0	149.2	149.3	149.4	149.5	149.6
24/7	36	Strength, (lbs/ft)	788	772	758	744	731	720	709	699	690
		Stiffeness, G', (10^3 lbs/in)	73.2	72.0	70.9	69.8	68.8	67.9	67.0	66.2	65.4
	24	Strength, (lbs/ft)	998	982	967	954	941	929	919	909	899
		Stiffeness, G', (10^3 lbs/in)	85.2	84.2	83.2	82.3	81.4	80.6	79.8	79.1	78.4
	12	Strength, (lbs/ft)	1 614	1 598	1 582	1 568	1 555	1 543	1 532	1 522	1 512
		Stiffeness, G', (10^3 lbs/in)	114.7	114.1	113.5	113.0	112.5	112.0	111.5	111.1	110.7
	9	Strength, (lbs/ft)	1 959	1 943	1 929	1 916	1 904	1 893	1 883	1 873	1 807
		Stiffeness, G', (10^3 lbs/in)	130.4	130.0	129.6	129.3	129.0	128.6	128.3	128.1	127.8
	6	Strength, (lbs/ft)	2 561	2 549	2 537	2 526	2 406	2 231	2 075	1 934	1 807
		Stiffeness, G', (10^3 lbs/in)	155.1	155.1	155.1	155.0	155.0	154.9	154.9	154.8	154.8

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	36	Strength, (lbs/ft)	219	213	207	202	197	193	189	186	182
		Stiffeness, G', (10^3 lbs/in)	9.7	10.0	10.2	10.4	10.6	10.8	11.0	11.2	11.3
	24	Strength, (lbs/ft)	274	267	261	256	252	247	244	240	237
		Stiffeness, G', (10^3 lbs/in)	10.2	10.5	10.8	11.1	11.4	11.7	11.9	12.1	12.3
	12	Strength, (lbs/ft)	426	419	414	409	404	400	396	393	390
		Stiffeness, G', (10^3 lbs/in)	11.1	11.6	12.0	12.4	12.8	13.2	13.6	14.0	14.3
	9	Strength, (lbs/ft)	505	500	495	490	486	482	479	476	473
		Stiffeness, G', (10^3 lbs/in)	11.5	12.0	12.5	13.0	13.4	13.9	14.3	14.7	15.2
	6	Strength, (lbs/ft)	636	632	628	625	622	619	616	614	612
		Stiffeness, G', (10^3 lbs/in)	12.0	12.6	13.1	13.7	14.2	14.7	15.3	15.7	16.2
24/5	36	Strength, (lbs/ft)	264	255	246	239	233	227	221	216	212
		Stiffeness, G', (10^3 lbs/in)	31.9	31.2	30.5	29.9	29.2	28.6	28.1	27.6	27.1
	24	Strength, (lbs/ft)	318	309	301	294	287	281	276	271	267
		Stiffeness, G', (10^3 lbs/in)	34.9	34.3	33.8	33.2	32.7	32.2	31.7	31.3	30.8
	12	Strength, (lbs/ft)	482	473	465	458	451	445	440	435	431
		Stiffeness, G', (10^3 lbs/in)	42.7	42.4	42.1	41.8	41.5	41.3	41.0	40.8	40.5
	9	Strength, (lbs/ft)	591	582	574	567	560	555	549	544	539
		Stiffeness, G', (10^3 lbs/in)	47.0	46.8	46.7	46.6	46.5	46.3	46.2	46.1	45.9
	6	Strength, (lbs/ft)	779	770	763	756	749	744	738	734	729
		Stiffeness, G', (10^3 lbs/in)	54.0	54.2	54.3	54.5	54.6	54.7	54.7	54.8	54.9
24/7	36	Strength, (lbs/ft)	415	397	381	367	354	342	331	322	313
		Stiffeness, G', (10^3 lbs/in)	42.5	41.6	40.8	40.0	39.2	38.4	37.7	37.0	36.3
	24	Strength, (lbs/ft)	470	452	436	421	408	397	386	376	368
		Stiffeness, G', (10^3 lbs/in)	44.7	44.0	43.3	42.6	41.9	41.2	40.6	40.0	39.4
	12	Strength, (lbs/ft)	633	615	599	585	572	561	550	540	531
		Stiffeness, G', (10^3 lbs/in)	50.5	50.2	49.8	49.4	49.0	48.6	48.2	47.8	47.4
	9	Strength, (lbs/ft)	743	725	709	694	681	670	659	650	641
		Stiffeness, G', (10^3 lbs/in)	53.9	53.7	53.5	53.2	53.0	52.7	52.5	52.2	52.0
	6	Strength, (lbs/ft)	948	931	916	902	889	877	867	857	848
		Stiffeness, G', (10^3 lbs/in)	59.4	59.6	59.6	59.7	59.7	59.7	59.7	59.7	59.6

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	247	241	235	230	226	222	218	214	211
		Stiffeness, G', (10^3 lbs/in)	13.8	14.0	14.2	14.4	14.5	14.6	14.8	14.8	14.9
	24	Strength, (lbs/ft)	313	306	301	296	291	287	283	280	277
		Stiffeness, G', (10^3 lbs/in)	14.9	15.2	15.5	15.7	16.0	16.2	16.4	16.6	16.7
	12	Strength, (lbs/ft)	495	489	484	479	474	470	466	463	459
		Stiffeness, G', (10^3 lbs/in)	17.0	17.5	18.0	18.5	18.9	19.3	19.7	20.1	20.5
	9	Strength, (lbs/ft)	592	586	581	577	573	569	566	563	560
		Stiffeness, G', (10^3 lbs/in)	17.9	18.5	19.1	19.6	20.2	20.7	21.2	21.6	22.1
	6	Strength, (lbs/ft)	751	747	743	740	737	734	731	729	727
		Stiffeness, G', (10^3 lbs/in)	19.1	19.9	20.6	21.2	21.9	22.5	23.1	23.7	24.3
24/5	36	Strength, (lbs/ft)	294	285	278	271	264	259	253	248	244
		Stiffeness, G', (10^3 lbs/in)	35.1	34.2	33.4	32.7	32.0	31.3	30.7	30.2	29.6
	24	Strength, (lbs/ft)	360	351	343	336	330	324	319	314	309
		Stiffeness, G', (10^3 lbs/in)	39.0	38.3	37.6	36.9	36.3	35.7	35.2	34.7	34.2
	12	Strength, (lbs/ft)	556	548	540	533	527	521	515	510	506
		Stiffeness, G', (10^3 lbs/in)	49.3	48.8	48.4	48.0	47.5	47.2	46.8	46.5	46.1
	9	Strength, (lbs/ft)	687	679	671	664	658	651	646	641	636
		Stiffeness, G', (10^3 lbs/in)	55.1	54.8	54.5	54.2	54.0	53.7	53.4	53.2	53.0
	6	Strength, (lbs/ft)	913	904	897	890	884	878	873	868	864
		Stiffeness, G', (10^3 lbs/in)	65.0	64.9	64.9	64.8	64.7	64.7	64.6	64.5	64.5
24/7	36	Strength, (lbs/ft)	454	437	422	408	395	384	373	364	355
		Stiffeness, G', (10^3 lbs/in)	47.7	46.5	45.5	44.4	43.5	42.6	41.7	40.9	40.1
	24	Strength, (lbs/ft)	520	503	487	473	461	449	439	429	420
		Stiffeness, G', (10^3 lbs/in)	50.8	49.8	48.8	47.9	47.0	46.2	45.4	44.7	44.0
	12	Strength, (lbs/ft)	716	699	684	670	658	646	635	626	617
		Stiffeness, G', (10^3 lbs/in)	59.0	58.4	57.7	57.1	56.4	55.9	55.3	54.8	54.3
	9	Strength, (lbs/ft)	847	830	815	801	789	777	767	757	748
		Stiffeness, G', (10^3 lbs/in)	63.8	63.3	62.8	62.3	61.9	61.4	61.0	60.6	60.2
	6	Strength, (lbs/ft)	1 095	1 078	1 063	1 049	1 037	1 025	1 015	1 005	996
		Stiffeness, G', (10^3 lbs/in)	71.9	71.7	71.5	71.3	71.1	70.9	70.7	70.5	70.3

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	311	304	298	293	288	283	279	275	272
		Stiffeness, G', (10^3 lbs/in)	21.1	21.1	21.1	21.1	21.1	21.1	21.0	21.0	20.9
	24	Strength, (lbs/ft)	398	392	386	380	375	371	367	363	359
		Stiffeness, G', (10^3 lbs/in)	23.6	23.7	23.9	24.0	24.1	24.2	24.3	24.3	24.4
	12	Strength, (lbs/ft)	640	634	628	623	618	613	609	605	602
		Stiffeness, G', (10^3 lbs/in)	28.9	29.4	29.9	30.3	30.7	31.1	31.4	31.8	32.1
	9	Strength, (lbs/ft)	770	764	759	754	750	746	742	739	736
		Stiffeness, G', (10^3 lbs/in)	31.4	32.1	32.7	33.3	33.8	34.4	34.9	35.3	35.8
	6	Strength, (lbs/ft)	983	979	975	971	968	965	962	960	957
		Stiffeness, G', (10^3 lbs/in)	34.9	35.8	36.7	37.5	38.3	39.1	39.8	40.5	41.2
24/5	36	Strength, (lbs/ft)	366	357	349	341	334	328	322	317	311
		Stiffeness, G', (10^3 lbs/in)	40.6	39.6	38.7	37.8	37.0	36.3	35.6	34.9	34.3
	24	Strength, (lbs/ft)	454	445	436	429	422	415	409	404	399
		Stiffeness, G', (10^3 lbs/in)	45.9	45.0	44.1	43.3	42.6	41.9	41.3	40.7	40.1
	12	Strength, (lbs/ft)	716	707	698	691	684	677	672	666	661
		Stiffeness, G', (10^3 lbs/in)	60.2	59.5	58.8	58.2	57.7	57.1	56.6	56.2	55.7
	9	Strength, (lbs/ft)	890	881	872	864	857	850	844	838	832
		Stiffeness, G', (10^3 lbs/in)	68.5	67.9	67.4	66.9	66.4	66.0	65.6	65.2	64.9
	6	Strength, (lbs/ft)	1 190	1 181	1 173	1 166	1 159	1 153	1 147	1 142	1 137
		Stiffeness, G', (10^3 lbs/in)	82.9	82.5	82.2	81.9	81.7	81.4	81.1	80.9	80.7
24/7	36	Strength, (lbs/ft)	555	537	521	505	492	479	467	456	446
		Stiffeness, G', (10^3 lbs/in)	56.3	54.8	53.5	52.2	51.0	49.9	48.8	47.8	46.8
	24	Strength, (lbs/ft)	643	624	608	593	579	566	555	544	534
		Stiffeness, G', (10^3 lbs/in)	60.7	59.4	58.1	56.9	55.8	54.8	53.8	52.9	52.0
	12	Strength, (lbs/ft)	905	887	870	855	841	829	817	806	796
		Stiffeness, G', (10^3 lbs/in)	72.8	71.8	70.8	69.8	69.0	68.1	67.3	66.6	65.9
	9	Strength, (lbs/ft)	1 080	1 061	1 045	1 030	1 016	1 003	992	981	971
		Stiffeness, G', (10^3 lbs/in)	80.0	79.1	78.2	77.4	76.7	76.0	75.3	74.7	74.1
	6	Strength, (lbs/ft)	1 408	1 390	1 374	1 359	1 345	1 332	1 321	1 310	1 300
		Stiffeness, G', (10^3 lbs/in)	92.4	91.8	91.2	90.7	90.2	89.7	89.2	88.8	88.4

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	369	363	357	351	346	341	337	333	329
		Stiffeness, G', (10^3 lbs/in)	27.0	26.8	26.6	26.5	26.3	26.1	26.0	25.8	25.6
	24	Strength, (lbs/ft)	479	472	466	460	455	451	446	442	438
		Stiffeness, G', (10^3 lbs/in)	31.0	31.0	31.0	30.9	30.9	30.8	30.8	30.7	30.6
	12	Strength, (lbs/ft)	780	773	767	762	757	752	748	743	740
		Stiffeness, G', (10^3 lbs/in)	40.4	40.8	41.1	41.4	41.7	42.0	42.2	42.4	42.6
	9	Strength, (lbs/ft)	943	937	932	927	922	918	914	910	907
		Stiffeness, G', (10^3 lbs/in)	45.2	45.7	46.2	46.7	47.2	47.6	48.0	48.4	48.8
	6	Strength, (lbs/ft)	1 209	1 205	1 201	1 197	1 194	1 191	1 188	1 185	1 182
		Stiffeness, G', (10^3 lbs/in)	52.2	53.1	54.0	54.8	55.5	56.2	56.9	57.6	58.2
24/5	36	Strength, (lbs/ft)	431	422	414	406	399	392	386	380	375
		Stiffeness, G', (10^3 lbs/in)	44.4	43.4	42.4	41.5	40.7	39.9	39.2	38.5	37.8
	24	Strength, (lbs/ft)	541	531	523	515	508	501	495	489	484
		Stiffeness, G', (10^3 lbs/in)	50.9	49.9	49.0	48.2	47.4	46.7	46.0	45.3	44.7
	12	Strength, (lbs/ft)	868	859	851	843	836	829	823	817	812
		Stiffeness, G', (10^3 lbs/in)	68.5	67.7	67.0	66.3	65.7	65.1	64.5	64.0	63.5
	9	Strength, (lbs/ft)	1 084	1 074	1 065	1 057	1 049	1 042	1 036	1 029	1 024
		Stiffeness, G', (10^3 lbs/in)	79.0	78.3	77.7	77.1	76.5	76.0	75.5	75.1	74.6
	6	Strength, (lbs/ft)	1 459	1 450	1 442	1 434	1 427	1 421	1 415	1 409	1 404
		Stiffeness, G', (10^3 lbs/in)	97.4	96.9	96.4	96.0	95.6	95.2	94.9	94.6	94.3
24/7	36	Strength, (lbs/ft)	642	624	607	591	577	564	551	540	529
		Stiffeness, G', (10^3 lbs/in)	62.0	60.4	59.0	57.6	56.3	55.1	53.9	52.8	51.8
	24	Strength, (lbs/ft)	752	733	716	701	686	673	661	649	638
		Stiffeness, G', (10^3 lbs/in)	67.7	66.2	64.8	63.5	62.3	61.1	60.0	59.0	58.0
	12	Strength, (lbs/ft)	1 079	1 061	1 044	1 028	1 014	1 001	988	977	966
		Stiffeness, G', (10^3 lbs/in)	83.1	81.9	80.7	79.6	78.6	77.7	76.8	75.9	75.1
	9	Strength, (lbs/ft)	1 298	1 279	1 263	1 247	1 233	1 219	1 207	1 195	1 185
		Stiffeness, G', (10^3 lbs/in)	92.4	91.3	90.3	89.3	88.4	87.5	86.7	86.0	85.3
	6	Strength, (lbs/ft)	1 706	1 688	1 671	1 655	1 641	1 628	1 615	1 604	1 593
		Stiffeness, G', (10^3 lbs/in)	108.7	107.9	107.1	106.4	105.7	105.0	104.4	103.8	103.3

3.0 in. deck - 24 in. wide - 6 in. flute spacing | **Thickness = 0.030 in.**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	36	Strength, (lbs/ft)	96	92	89	87	84	82	80	78	76
		Stiffeness, G', (10^3 lbs/in)	8.6	8.7	8.8	8.8	8.8	8.8	8.8	8.8	8.8
	24	Strength, (lbs/ft)	114	111	108	105	102	100	98	96	94
		Stiffeness, G', (10^3 lbs/in)	8.7	8.8	8.9	8.9	9.0	9.0	9.0	9.0	9.0
	12	Strength, (lbs/ft)	169	165	162	159	157	154	152	150	149
		Stiffeness, G', (10^3 lbs/in)	8.9	9.1	9.2	9.3	9.4	9.4	9.5	9.5	9.5
	9	Strength, (lbs/ft)	201	198	195	192	189	187	185	183	181
		Stiffeness, G', (10^3 lbs/in)	9.1	9.2	9.4	9.5	9.6	9.7	9.8	9.8	9.8
	6	Strength, (lbs/ft)	254	251	248	246	244	242	240	238	237
		Stiffeness, G', (10^3 lbs/in)	9.3	9.6	9.7	9.9	10.1	10.2	10.3	10.4	10.5
24/5	36	Strength, (lbs/ft)	118	113	109	105	101	98	95	93	90
		Stiffeness, G', (10^3 lbs/in)	25.8	24.8	23.9	23.1	22.3	21.5	20.8	20.1	19.5
	24	Strength, (lbs/ft)	136	131	127	123	120	116	114	111	109
		Stiffeness, G', (10^3 lbs/in)	26.2	25.2	24.3	23.5	22.7	21.9	21.2	20.6	20.0
	12	Strength, (lbs/ft)	190	186	181	177	174	171	168	165	163
		Stiffeness, G', (10^3 lbs/in)	27.3	26.3	25.5	24.7	23.9	23.2	22.5	21.9	21.3
	9	Strength, (lbs/ft)	227	222	218	214	210	207	204	202	199
		Stiffeness, G', (10^3 lbs/in)	28.0	27.1	26.2	25.4	24.7	24.0	23.3	22.7	22.2
	6	Strength, (lbs/ft)	299	294	290	286	282	279	276	274	271
		Stiffeness, G', (10^3 lbs/in)	29.3	28.5	27.7	27.0	26.3	25.6	25.0	24.4	23.9
24/7	36	Strength, (lbs/ft)	192	182	174	167	160	154	149	144	140
		Stiffeness, G', (10^3 lbs/in)	36.8	35.7	34.6	33.6	32.6	31.6	30.7	29.8	29.0
	24	Strength, (lbs/ft)	210	201	192	185	179	173	167	162	158
		Stiffeness, G', (10^3 lbs/in)	37.1	36.0	34.9	33.9	32.9	32.0	31.1	30.2	29.4
	12	Strength, (lbs/ft)	264	255	247	240	233	227	222	217	212
		Stiffeness, G', (10^3 lbs/in)	37.9	36.8	35.8	34.8	33.9	33.0	32.1	31.3	30.5
	9	Strength, (lbs/ft)	301	291	283	276	269	263	258	253	249
		Stiffeness, G', (10^3 lbs/in)	38.4	37.4	36.4	35.4	34.5	33.6	32.8	32.0	31.2
	6	Strength, (lbs/ft)	373	364	356	349	342	336	331	326	321
		Stiffeness, G', (10^3 lbs/in)	39.4	38.5	37.5	36.6	35.8	34.9	34.1	33.4	32.6

3.0 in. deck - 24 in. wide - 6 in. flute spacing | **Thickness = 0.036 in.**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	113	110	107	104	102	100	98	96	94
		Stiffeness, G', (10^3 lbs/in)	11.5	11.5	11.4	11.3	11.2	11.1	11.0	10.9	10.7
	24	Strength, (lbs/ft)	139	136	133	131	128	126	124	122	120
		Stiffeness, G', (10^3 lbs/in)	11.7	11.7	11.6	11.5	11.5	11.4	11.3	11.1	11.0
	12	Strength, (lbs/ft)	217	214	211	208	206	204	201	200	198
		Stiffeness, G', (10^3 lbs/in)	12.2	12.2	12.2	12.2	12.2	12.1	12.1	12.0	11.9
	9	Strength, (lbs/ft)	258	255	253	250	248	246	244	242	241
		Stiffeness, G', (10^3 lbs/in)	12.5	12.6	12.6	12.6	12.6	12.6	12.5	12.5	12.5
	6	Strength, (lbs/ft)	330	327	325	323	321	320	318	317	315
		Stiffeness, G', (10^3 lbs/in)	13.1	13.2	13.3	13.4	13.4	13.4	13.5	13.5	13.5
24/5	36	Strength, (lbs/ft)	136	132	128	124	121	118	115	113	110
		Stiffeness, G', (10^3 lbs/in)	27.2	26.2	25.2	24.3	23.4	22.6	21.9	21.2	20.6
	24	Strength, (lbs/ft)	162	158	154	150	147	144	141	139	136
		Stiffeness, G', (10^3 lbs/in)	27.7	26.6	25.7	24.8	23.9	23.2	22.4	21.7	21.1
	12	Strength, (lbs/ft)	241	236	232	229	226	223	220	217	215
		Stiffeness, G', (10^3 lbs/in)	29.0	28.0	27.1	26.2	25.4	24.7	24.0	23.3	22.7
	9	Strength, (lbs/ft)	293	289	285	281	278	275	272	270	267
		Stiffeness, G', (10^3 lbs/in)	29.9	29.0	28.0	27.2	26.4	25.7	25.0	24.3	23.7
	6	Strength, (lbs/ft)	391	387	383	379	376	373	370	367	365
		Stiffeness, G', (10^3 lbs/in)	31.7	30.8	29.9	29.1	28.3	27.6	27.0	26.3	25.7
24/7	36	Strength, (lbs/ft)	215	206	199	192	185	180	174	169	165
		Stiffeness, G', (10^3 lbs/in)	40.0	38.7	37.4	36.2	35.1	34.0	33.0	32.1	31.2
	24	Strength, (lbs/ft)	241	233	225	218	212	206	200	195	191
		Stiffeness, G', (10^3 lbs/in)	40.4	39.1	37.8	36.6	35.5	34.5	33.5	32.5	31.6
	12	Strength, (lbs/ft)	320	311	303	296	290	284	279	274	269
		Stiffeness, G', (10^3 lbs/in)	41.5	40.2	39.0	37.8	36.8	35.7	34.8	33.8	33.0
	9	Strength, (lbs/ft)	372	363	356	349	342	337	331	326	322
		Stiffeness, G', (10^3 lbs/in)	42.2	41.0	39.8	38.6	37.6	36.6	35.6	34.7	33.9
	6	Strength, (lbs/ft)	477	468	460	453	447	441	436	431	426
		Stiffeness, G', (10^3 lbs/in)	43.6	42.4	41.3	40.2	39.2	38.2	37.3	36.4	35.6

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	159	156	153	150	148	146	144	142	140
		Stiffeness, G', (10^3 lbs/in)	16.0	15.7	15.4	15.1	14.8	14.5	14.2	14.0	13.7
	24	Strength, (lbs/ft)	206	202	200	197	195	192	190	188	187
		Stiffeness, G', (10^3 lbs/in)	16.4	16.1	15.8	15.5	15.3	15.0	14.7	14.4	14.2
	12	Strength, (lbs/ft)	332	329	326	323	321	319	317	315	313
		Stiffeness, G', (10^3 lbs/in)	17.4	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.6
	9	Strength, (lbs/ft)	399	396	394	392	390	388	386	384	383
		Stiffeness, G', (10^3 lbs/in)	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5
	6	Strength, (lbs/ft)	508	506	504	502	501	499	498	497	496
		Stiffeness, G', (10^3 lbs/in)	19.4	19.2	19.1	19.0	18.9	18.7	18.6	18.4	18.3
24/5	36	Strength, (lbs/ft)	187	182	178	175	171	168	165	162	160
		Stiffeness, G', (10^3 lbs/in)	30.2	29.0	28.0	27.0	26.1	25.2	24.4	23.6	22.9
	24	Strength, (lbs/ft)	233	229	225	221	218	215	212	209	206
		Stiffeness, G', (10^3 lbs/in)	30.8	29.7	28.6	27.6	26.7	25.8	25.0	24.3	23.6
	12	Strength, (lbs/ft)	373	368	364	361	357	354	351	348	346
		Stiffeness, G', (10^3 lbs/in)	32.6	31.5	30.4	29.5	28.6	27.8	27.0	26.3	25.6
	9	Strength, (lbs/ft)	464	459	455	451	447	444	441	438	435
		Stiffeness, G', (10^3 lbs/in)	33.8	32.7	31.7	30.7	29.8	29.0	28.3	27.5	26.9
	6	Strength, (lbs/ft)	621	616	612	609	606	603	600	597	595
		Stiffeness, G', (10^3 lbs/in)	36.1	35.0	34.1	33.1	32.3	31.5	30.7	30.0	29.4
24/7	36	Strength, (lbs/ft)	281	272	264	257	250	244	238	232	227
		Stiffeness, G', (10^3 lbs/in)	45.7	44.1	42.6	41.2	39.9	38.6	37.5	36.4	35.3
	24	Strength, (lbs/ft)	328	319	311	303	296	290	284	279	274
		Stiffeness, G', (10^3 lbs/in)	46.3	44.7	43.2	41.8	40.4	39.2	38.1	37.0	35.9
	12	Strength, (lbs/ft)	467	458	450	443	436	430	424	418	413
		Stiffeness, G', (10^3 lbs/in)	47.8	46.2	44.8	43.4	42.1	40.9	39.8	38.7	37.7
	9	Strength, (lbs/ft)	560	551	543	536	529	523	517	511	506
		Stiffeness, G', (10^3 lbs/in)	48.8	47.2	45.8	44.5	43.2	42.0	40.9	39.8	38.8
	6	Strength, (lbs/ft)	730	722	714	706	700	693	688	682	677
		Stiffeness, G', (10^3 lbs/in)	50.8	49.3	47.9	46.6	45.3	44.2	43.1	42.1	41.1

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	213	210	207	204	202	200	198	196	195
		Stiffeness, G', (10^3 lbs/in)	18.9	18.5	18.0	17.6	17.1	16.7	16.3	16.0	15.6
	24	Strength, (lbs/ft)	285	282	280	277	275	273	271	269	267
		Stiffeness, G', (10^3 lbs/in)	19.5	19.0	18.6	18.2	17.7	17.4	17.0	16.6	16.3
	12	Strength, (lbs/ft)	467	464	462	459	457	455	453	452	450
		Stiffeness, G', (10^3 lbs/in)	21.1	20.7	20.3	19.9	19.5	19.2	18.8	18.5	18.2
	9	Strength, (lbs/ft)	562	560	558	556	554	552	551	549	548
		Stiffeness, G', (10^3 lbs/in)	22.1	21.7	21.4	21.0	20.7	20.4	20.0	19.7	19.4
	6	Strength, (lbs/ft)	705	704	702	701	700	699	698	697	696
		Stiffeness, G', (10^3 lbs/in)	24.1	23.8	23.5	23.2	22.9	22.6	22.3	22.1	21.8
24/5	36	Strength, (lbs/ft)	244	240	236	232	229	226	223	220	218
		Stiffeness, G', (10^3 lbs/in)	31.9	30.7	29.6	28.6	27.7	26.8	26.0	25.3	24.5
	24	Strength, (lbs/ft)	317	313	309	305	302	298	296	293	290
		Stiffeness, G', (10^3 lbs/in)	32.6	31.5	30.4	29.4	28.5	27.6	26.8	26.0	25.3
	12	Strength, (lbs/ft)	535	531	526	522	519	515	512	509	507
		Stiffeness, G', (10^3 lbs/in)	34.8	33.6	32.6	31.6	30.7	29.8	29.0	28.3	27.6
	9	Strength, (lbs/ft)	663	658	654	651	647	644	641	638	636
		Stiffeness, G', (10^3 lbs/in)	36.2	35.1	34.0	33.1	32.2	31.3	30.5	29.8	29.1
	6	Strength, (lbs/ft)	894	890	887	883	880	878	875	873	871
		Stiffeness, G', (10^3 lbs/in)	39.0	37.9	36.9	35.9	35.1	34.2	33.5	32.7	32.1
24/7	36	Strength, (lbs/ft)	352	343	334	327	320	313	307	302	296
		Stiffeness, G', (10^3 lbs/in)	49.1	47.4	45.8	44.3	42.9	41.6	40.4	39.2	38.2
	24	Strength, (lbs/ft)	424	415	407	399	392	386	380	374	369
		Stiffeness, G', (10^3 lbs/in)	49.7	48.0	46.4	45.0	43.6	42.3	41.1	39.9	38.9
	12	Strength, (lbs/ft)	642	633	625	617	610	604	598	592	587
		Stiffeness, G', (10^3 lbs/in)	51.6	49.9	48.4	47.0	45.6	44.3	43.1	42.0	40.9
	9	Strength, (lbs/ft)	787	778	769	761	754	747	741	735	730
		Stiffeness, G', (10^3 lbs/in)	52.9	51.2	49.7	48.3	46.9	45.7	44.5	43.4	42.3
	6	Strength, (lbs/ft)	1 026	1 018	1 010	1 003	996	990	985	979	974
		Stiffeness, G', (10^3 lbs/in)	55.3	53.7	52.2	50.8	49.5	48.3	47.1	46.0	45.0

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	36	Strength, (lbs/ft)	142	140	138	136	135	134	133	132	131
		Stiffeness, G', (10^3 lbs/in)	9.4	9.7	9.9	10.1	10.3	10.5	10.6	10.8	10.9
	24	Strength, (lbs/ft)	194	192	190	188	187	185	184	183	182
		Stiffeness, G', (10^3 lbs/in)	10.0	10.3	10.6	10.9	11.1	11.4	11.6	11.8	12.0
	12	Strength, (lbs/ft)	303	302	300	299	298	297	296	296	295
		Stiffeness, G', (10^3 lbs/in)	11.0	11.4	11.9	12.3	12.7	13.1	13.5	13.8	14.2
	9	Strength, (lbs/ft)	354	353	352	351	350	349	349	348	348
		Stiffeness, G', (10^3 lbs/in)	11.4	11.9	12.4	12.9	13.4	13.8	14.2	14.6	15.0
	6	Strength, (lbs/ft)	418	417	417	416	416	415	415	415	415
		Stiffeness, G', (10^3 lbs/in)	11.9	12.5	13.1	13.6	14.2	14.7	15.2	15.7	16.2
24/5	36	Strength, (lbs/ft)	163	160	157	155	152	150	148	147	145
		Stiffeness, G', (10^3 lbs/in)	29.8	29.1	28.4	27.8	27.2	26.7	26.2	25.7	25.3
	24	Strength, (lbs/ft)	218	215	212	209	207	205	203	201	200
		Stiffeness, G', (10^3 lbs/in)	32.9	32.4	31.8	31.3	30.8	30.4	30.0	29.6	29.2
	12	Strength, (lbs/ft)	369	366	363	360	358	356	354	352	351
		Stiffeness, G', (10^3 lbs/in)	41.1	40.8	40.6	40.3	40.1	39.8	39.6	39.4	39.2
	9	Strength, (lbs/ft)	454	451	448	446	444	442	440	439	437
		Stiffeness, G', (10^3 lbs/in)	45.6	45.5	45.4	45.3	45.2	45.1	45.0	44.9	44.8
	6	Strength, (lbs/ft)	594	591	589	588	586	585	583	582	581
		Stiffeness, G', (10^3 lbs/in)	52.9	53.1	53.3	53.5	53.6	53.7	53.8	53.9	53.9
24/7	36	Strength, (lbs/ft)	237	230	223	217	211	207	202	198	194
		Stiffeness, G', (10^3 lbs/in)	39.8	38.9	38.1	37.3	36.5	35.8	35.1	34.5	33.8
	24	Strength, (lbs/ft)	292	284	278	272	266	261	257	253	249
		Stiffeness, G', (10^3 lbs/in)	42.2	41.5	40.8	40.1	39.4	38.8	38.2	37.6	37.1
	12	Strength, (lbs/ft)	452	444	437	431	426	421	416	412	408
		Stiffeness, G', (10^3 lbs/in)	48.5	48.1	47.7	47.4	47.0	46.6	46.2	45.9	45.6
	9	Strength, (lbs/ft)	538	531	525	519	514	510	506	502	498
		Stiffeness, G', (10^3 lbs/in)	52.0	51.9	51.7	51.4	51.2	51.0	50.8	50.6	50.3
	6	Strength, (lbs/ft)	687	682	677	672	668	664	661	658	655
		Stiffeness, G', (10^3 lbs/in)	58.0	58.1	58.2	58.3	58.3	58.4	58.4	58.3	58.3

3.0 in. deck - 24 in. wide - 6 in. flute spacing | **Thickness = 0.036 in.**

Support connection: #12 Screws | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	166	164	162	161	159	158	157	156	155
		Stiffeness, G', (10^3 lbs/in)	13.3	13.5	13.7	13.8	14.0	14.1	14.2	14.3	14.3
	24	Strength, (lbs/ft)	228	226	224	222	221	219	218	217	216
		Stiffeness, G', (10^3 lbs/in)	14.5	14.8	15.1	15.3	15.5	15.7	15.9	16.1	16.3
	12	Strength, (lbs/ft)	361	359	358	357	356	355	354	353	352
		Stiffeness, G', (10^3 lbs/in)	16.8	17.3	17.8	18.2	18.7	19.1	19.5	19.8	20.2
	9	Strength, (lbs/ft)	422	421	420	419	419	418	417	417	416
		Stiffeness, G', (10^3 lbs/in)	17.7	18.3	18.9	19.5	20.0	20.5	21.0	21.4	21.9
	6	Strength, (lbs/ft)	500	500	499	499	498	498	498	497	497
		Stiffeness, G', (10^3 lbs/in)	19.0	19.7	20.4	21.1	21.8	22.4	23.0	23.6	24.2
24/5	36	Strength, (lbs/ft)	189	186	183	180	178	176	174	173	171
		Stiffeness, G', (10^3 lbs/in)	32.6	31.8	31.1	30.4	29.8	29.2	28.6	28.1	27.6
	24	Strength, (lbs/ft)	254	251	249	246	244	242	240	238	236
		Stiffeness, G', (10^3 lbs/in)	36.7	36.0	35.4	34.8	34.2	33.7	33.2	32.8	32.3
	12	Strength, (lbs/ft)	436	433	430	427	425	423	421	419	417
		Stiffeness, G', (10^3 lbs/in)	47.4	47.0	46.6	46.2	45.8	45.5	45.2	44.9	44.6
	9	Strength, (lbs/ft)	538	535	533	530	528	526	525	523	521
		Stiffeness, G', (10^3 lbs/in)	53.5	53.2	52.9	52.7	52.4	52.2	52.0	51.8	51.6
	6	Strength, (lbs/ft)	707	705	703	702	700	699	697	696	695
		Stiffeness, G', (10^3 lbs/in)	63.6	63.6	63.6	63.6	63.5	63.5	63.5	63.4	63.4
24/7	36	Strength, (lbs/ft)	268	260	254	248	243	238	233	229	225
		Stiffeness, G', (10^3 lbs/in)	44.3	43.3	42.2	41.3	40.4	39.5	38.7	38.0	37.2
	24	Strength, (lbs/ft)	333	326	319	314	308	303	299	295	291
		Stiffeness, G', (10^3 lbs/in)	47.6	46.7	45.8	44.9	44.1	43.4	42.6	41.9	41.3
	12	Strength, (lbs/ft)	525	518	511	505	500	495	490	486	482
		Stiffeness, G', (10^3 lbs/in)	56.4	55.8	55.2	54.6	54.0	53.5	53.0	52.5	52.0
	9	Strength, (lbs/ft)	630	623	617	612	607	602	598	594	591
		Stiffeness, G', (10^3 lbs/in)	61.5	61.0	60.6	60.1	59.7	59.3	58.9	58.6	58.2
	6	Strength, (lbs/ft)	812	807	802	797	793	790	786	783	780
		Stiffeness, G', (10^3 lbs/in)	70.1	69.9	69.7	69.6	69.4	69.2	69.0	68.9	68.7

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	216	214	213	211	209	208	207	205	204
		Stiffeness, G', (10^3 lbs/in)	20.1	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0
	24	Strength, (lbs/ft)	299	297	295	293	291	289	288	287	285
		Stiffeness, G', (10^3 lbs/in)	22.7	22.9	23.0	23.2	23.3	23.3	23.4	23.5	23.6
	12	Strength, (lbs/ft)	477	476	474	473	472	471	470	469	468
		Stiffeness, G', (10^3 lbs/in)	28.4	28.9	29.3	29.8	30.2	30.5	30.9	31.2	31.5
	9	Strength, (lbs/ft)	560	559	558	557	556	556	555	554	553
		Stiffeness, G', (10^3 lbs/in)	31.0	31.7	32.3	32.9	33.4	33.9	34.4	34.9	35.4
	6	Strength, (lbs/ft)	666	665	664	664	664	663	663	662	662
		Stiffeness, G', (10^3 lbs/in)	34.7	35.6	36.4	37.3	38.0	38.8	39.5	40.2	40.9
24/5	36	Strength, (lbs/ft)	244	241	238	235	233	230	228	226	224
		Stiffeness, G', (10^3 lbs/in)	37.6	36.7	35.9	35.1	34.4	33.7	33.1	32.5	32.0
	24	Strength, (lbs/ft)	332	328	325	322	320	318	315	313	312
		Stiffeness, G', (10^3 lbs/in)	43.1	42.3	41.5	40.8	40.1	39.5	38.9	38.4	37.9
	12	Strength, (lbs/ft)	573	570	567	564	561	559	557	554	553
		Stiffeness, G', (10^3 lbs/in)	57.8	57.1	56.6	56.0	55.5	55.1	54.6	54.2	53.8
	9	Strength, (lbs/ft)	710	707	704	702	700	697	695	694	692
		Stiffeness, G', (10^3 lbs/in)	66.3	65.8	65.4	64.9	64.5	64.2	63.8	63.5	63.2
	6	Strength, (lbs/ft)	938	936	934	932	930	928	927	925	924
		Stiffeness, G', (10^3 lbs/in)	81.1	80.8	80.5	80.3	80.1	79.9	79.7	79.5	79.3
24/7	36	Strength, (lbs/ft)	339	331	324	317	311	306	301	296	292
		Stiffeness, G', (10^3 lbs/in)	52.0	50.7	49.4	48.3	47.2	46.1	45.2	44.2	43.4
	24	Strength, (lbs/ft)	426	418	411	405	399	393	388	383	379
		Stiffeness, G', (10^3 lbs/in)	56.7	55.5	54.3	53.2	52.2	51.2	50.3	49.5	48.7
	12	Strength, (lbs/ft)	682	674	667	660	654	648	643	638	634
		Stiffeness, G', (10^3 lbs/in)	69.4	68.4	67.5	66.6	65.8	65.1	64.4	63.7	63.1
	9	Strength, (lbs/ft)	823	816	809	803	798	792	788	783	779
		Stiffeness, G', (10^3 lbs/in)	76.8	76.0	75.3	74.5	73.9	73.2	72.6	72.1	71.5
	6	Strength, (lbs/ft)	1 069	1 063	1 058	1 053	1 048	1 044	1 040	1 036	1 033
		Stiffeness, G', (10^3 lbs/in)	89.8	89.3	88.7	88.3	87.8	87.4	87.0	86.6	86.2

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	266	264	262	260	258	257	256	254	253
		Stiffeness, G', (10^3 lbs/in)	25.5	25.4	25.2	25.1	24.9	24.8	24.6	24.5	24.3
	24	Strength, (lbs/ft)	368	366	364	362	360	358	357	355	354
		Stiffeness, G', (10^3 lbs/in)	29.7	29.7	29.7	29.7	29.7	29.6	29.6	29.5	29.5
	12	Strength, (lbs/ft)	593	592	590	589	587	586	585	584	583
		Stiffeness, G', (10^3 lbs/in)	39.6	39.9	40.3	40.6	40.8	41.1	41.3	41.6	41.8
	9	Strength, (lbs/ft)	698	697	696	695	694	693	692	691	690
		Stiffeness, G', (10^3 lbs/in)	44.4	45.0	45.5	46.0	46.5	46.9	47.3	47.7	48.1
	6	Strength, (lbs/ft)	831	830	830	829	828	828	828	827	827
		Stiffeness, G', (10^3 lbs/in)	51.7	52.6	53.5	54.3	55.0	55.7	56.4	57.1	57.7
24/5	36	Strength, (lbs/ft)	297	294	291	288	285	283	280	278	276
		Stiffeness, G', (10^3 lbs/in)	41.1	40.2	39.3	38.5	37.8	37.1	36.4	35.8	35.3
	24	Strength, (lbs/ft)	407	403	400	397	394	392	390	387	385
		Stiffeness, G', (10^3 lbs/in)	47.7	46.9	46.1	45.3	44.6	44.0	43.4	42.8	42.3
	12	Strength, (lbs/ft)	708	705	702	699	696	693	691	689	686
		Stiffeness, G', (10^3 lbs/in)	65.8	65.1	64.4	63.8	63.3	62.7	62.3	61.8	61.4
	9	Strength, (lbs/ft)	881	878	875	872	869	867	865	863	861
		Stiffeness, G', (10^3 lbs/in)	76.5	75.9	75.3	74.8	74.3	73.9	73.5	73.1	72.7
	6	Strength, (lbs/ft)	1 167	1 165	1 162	1 160	1 158	1 157	1 155	1 153	1 152
		Stiffeness, G', (10^3 lbs/in)	95.3	94.8	94.5	94.1	93.8	93.5	93.2	92.9	92.6
24/7	36	Strength, (lbs/ft)	405	397	389	382	376	370	365	360	355
		Stiffeness, G', (10^3 lbs/in)	57.2	55.7	54.4	53.1	52.0	50.9	49.8	48.9	47.9
	24	Strength, (lbs/ft)	514	506	498	492	485	479	474	469	464
		Stiffeness, G', (10^3 lbs/in)	63.0	61.7	60.4	59.2	58.1	57.1	56.1	55.2	54.3
	12	Strength, (lbs/ft)	833	825	817	810	804	798	792	787	782
		Stiffeness, G', (10^3 lbs/in)	79.1	78.0	76.9	75.9	75.0	74.2	73.3	72.6	71.9
	9	Strength, (lbs/ft)	1 012	1 004	997	991	985	979	974	969	964
		Stiffeness, G', (10^3 lbs/in)	88.7	87.7	86.8	85.9	85.1	84.3	83.6	82.9	82.3
	6	Strength, (lbs/ft)	1 323	1 316	1 310	1 305	1 300	1 296	1 291	1 287	1 284
		Stiffeness, G', (10^3 lbs/in)	105.6	104.8	104.1	103.5	102.9	102.3	101.8	101.2	100.8

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.030 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	36	Strength, (lbs/ft)	129	124	119	115	111	107	104	101	98
		Stiffeness, G', (10^3 lbs/in)	8.7	8.8	8.9	9.0	9.0	9.0	9.0	9.0	9.0
	24	Strength, (lbs/ft)	148	142	137	133	129	125	122	119	116
		Stiffeness, G', (10^3 lbs/in)	8.8	8.9	9.0	9.1	9.1	9.2	9.2	9.2	9.1
	12	Strength, (lbs/ft)	202	197	192	187	183	180	177	174	171
		Stiffeness, G', (10^3 lbs/in)	9.0	9.2	9.3	9.4	9.5	9.6	9.6	9.7	9.7
	9	Strength, (lbs/ft)	238	233	228	224	220	216	213	210	207
		Stiffeness, G', (10^3 lbs/in)	9.2	9.3	9.5	9.6	9.7	9.8	9.9	10.0	10.0
	6	Strength, (lbs/ft)	302	297	293	288	285	281	278	275	273
		Stiffeness, G', (10^3 lbs/in)	9.4	9.7	9.8	10.0	10.2	10.3	10.4	10.5	10.6
24/5	36	Strength, (lbs/ft)	161	154	147	141	136	131	127	123	119
		Stiffeness, G', (10^3 lbs/in)	26.6	25.6	24.6	23.8	22.9	22.2	21.4	20.8	20.1
	24	Strength, (lbs/ft)	179	172	165	159	154	149	145	141	137
		Stiffeness, G', (10^3 lbs/in)	26.9	26.0	25.0	24.2	23.4	22.6	21.9	21.2	20.6
	12	Strength, (lbs/ft)	234	226	220	214	209	204	199	196	192
		Stiffeness, G', (10^3 lbs/in)	28.0	27.1	26.2	25.3	24.6	23.8	23.1	22.5	21.9
	9	Strength, (lbs/ft)	270	263	256	250	245	240	236	232	228
		Stiffeness, G', (10^3 lbs/in)	28.7	27.8	26.9	26.1	25.4	24.6	24.0	23.3	22.8
	6	Strength, (lbs/ft)	343	335	329	323	318	313	308	305	301
		Stiffeness, G', (10^3 lbs/in)	30.0	29.2	28.4	27.6	26.9	26.2	25.6	25.0	24.4
24/7	36	Strength, (lbs/ft)	268	254	242	231	222	213	205	197	191
		Stiffeness, G', (10^3 lbs/in)	37.7	36.6	35.5	34.5	33.5	32.5	31.6	30.7	29.9
	24	Strength, (lbs/ft)	286	273	260	250	240	231	223	216	209
		Stiffeness, G', (10^3 lbs/in)	38.0	36.9	35.8	34.8	33.8	32.8	31.9	31.1	30.2
	12	Strength, (lbs/ft)	341	327	315	304	294	285	277	270	263
		Stiffeness, G', (10^3 lbs/in)	38.8	37.7	36.7	35.7	34.8	33.8	33.0	32.1	31.3
	9	Strength, (lbs/ft)	377	363	351	340	331	322	314	306	300
		Stiffeness, G', (10^3 lbs/in)	39.3	38.3	37.3	36.3	35.4	34.5	33.6	32.8	32.0
	6	Strength, (lbs/ft)	450	436	424	413	403	394	386	379	372
		Stiffeness, G', (10^3 lbs/in)	40.3	39.3	38.4	37.5	36.6	35.7	34.9	34.2	33.4

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	148	143	138	134	131	127	124	121	118
		Stiffeness, G', (10^3 lbs/in)	11.7	11.7	11.6	11.6	11.5	11.4	11.2	11.1	11.0
	24	Strength, (lbs/ft)	174	169	165	160	157	153	150	147	145
		Stiffeness, G', (10^3 lbs/in)	11.9	11.9	11.8	11.8	11.7	11.6	11.5	11.4	11.3
	12	Strength, (lbs/ft)	253	248	243	239	235	232	229	226	223
		Stiffeness, G', (10^3 lbs/in)	12.4	12.4	12.4	12.4	12.4	12.3	12.3	12.2	12.1
	9	Strength, (lbs/ft)	305	300	295	291	287	284	281	278	275
		Stiffeness, G', (10^3 lbs/in)	12.7	12.7	12.8	12.8	12.8	12.8	12.8	12.7	12.7
	6	Strength, (lbs/ft)	388	383	379	375	372	369	366	363	361
		Stiffeness, G', (10^3 lbs/in)	13.2	13.4	13.5	13.5	13.6	13.6	13.7	13.7	13.7
24/5	36	Strength, (lbs/ft)	181	175	168	163	158	153	149	145	142
		Stiffeness, G', (10^3 lbs/in)	28.1	27.0	26.0	25.1	24.2	23.4	22.6	21.9	21.3
	24	Strength, (lbs/ft)	208	201	195	189	184	179	175	171	168
		Stiffeness, G', (10^3 lbs/in)	28.5	27.5	26.5	25.5	24.7	23.9	23.1	22.4	21.8
	12	Strength, (lbs/ft)	286	279	273	268	262	258	254	250	246
		Stiffeness, G', (10^3 lbs/in)	29.9	28.8	27.9	27.0	26.2	25.4	24.7	24.0	23.4
	9	Strength, (lbs/ft)	338	332	325	320	315	310	306	302	298
		Stiffeness, G', (10^3 lbs/in)	30.8	29.8	28.8	27.9	27.1	26.4	25.7	25.0	24.4
	6	Strength, (lbs/ft)	443	436	430	424	419	415	411	407	403
		Stiffeness, G', (10^3 lbs/in)	32.5	31.5	30.6	29.8	29.0	28.3	27.6	27.0	26.4
24/7	36	Strength, (lbs/ft)	295	282	271	260	251	242	234	227	220
		Stiffeness, G', (10^3 lbs/in)	41.2	39.8	38.5	37.3	36.1	35.1	34.0	33.1	32.1
	24	Strength, (lbs/ft)	321	308	297	286	277	268	260	253	246
		Stiffeness, G', (10^3 lbs/in)	41.5	40.2	38.9	37.7	36.6	35.5	34.5	33.5	32.6
	12	Strength, (lbs/ft)	400	387	375	365	355	347	339	332	325
		Stiffeness, G', (10^3 lbs/in)	42.6	41.3	40.1	38.9	37.8	36.7	35.8	34.8	33.9
	9	Strength, (lbs/ft)	452	439	428	417	408	399	391	384	377
		Stiffeness, G', (10^3 lbs/in)	43.3	42.0	40.8	39.7	38.6	37.6	36.6	35.7	34.8
	6	Strength, (lbs/ft)	557	544	532	522	512	504	496	489	482
		Stiffeness, G', (10^3 lbs/in)	44.7	43.5	42.3	41.2	40.2	39.2	38.2	37.4	36.5

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	199	194	190	185	181	178	175	172	169
		Stiffeness, G', (10^3 lbs/in)	16.4	16.1	15.8	15.5	15.2	14.9	14.6	14.4	14.1
	24	Strength, (lbs/ft)	246	241	236	232	228	224	221	218	215
		Stiffeness, G', (10^3 lbs/in)	16.8	16.5	16.2	15.9	15.7	15.4	15.1	14.8	14.6
	12	Strength, (lbs/ft)	385	380	376	371	367	364	361	358	355
		Stiffeness, G', (10^3 lbs/in)	17.8	17.6	17.4	17.1	16.9	16.7	16.4	16.2	16.0
	9	Strength, (lbs/ft)	462	457	453	449	445	442	438	436	433
		Stiffeness, G', (10^3 lbs/in)	18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.1	16.9
	6	Strength, (lbs/ft)	595	591	588	584	581	578	575	573	571
		Stiffeness, G', (10^3 lbs/in)	19.7	19.6	19.5	19.3	19.2	19.1	18.9	18.8	18.6
24/5	36	Strength, (lbs/ft)	239	232	226	220	214	210	205	201	197
		Stiffeness, G', (10^3 lbs/in)	31.2	30.0	28.9	27.9	26.9	26.1	25.2	24.5	23.7
	24	Strength, (lbs/ft)	285	278	272	266	261	256	252	247	244
		Stiffeness, G', (10^3 lbs/in)	31.8	30.6	29.5	28.5	27.6	26.7	25.9	25.1	24.4
	12	Strength, (lbs/ft)	425	418	412	406	400	396	391	387	383
		Stiffeness, G', (10^3 lbs/in)	33.6	32.4	31.4	30.4	29.5	28.6	27.8	27.0	26.3
	9	Strength, (lbs/ft)	518	511	505	499	493	489	484	480	476
		Stiffeness, G', (10^3 lbs/in)	34.8	33.6	32.6	31.6	30.7	29.8	29.1	28.3	27.6
	6	Strength, (lbs/ft)	696	689	682	676	671	666	661	657	653
		Stiffeness, G', (10^3 lbs/in)	37.1	36.0	34.9	34.0	33.1	32.3	31.5	30.8	30.1
24/7	36	Strength, (lbs/ft)	374	360	348	337	327	317	309	301	293
		Stiffeness, G', (10^3 lbs/in)	47.2	45.5	44.0	42.5	41.2	39.9	38.7	37.6	36.5
	24	Strength, (lbs/ft)	420	407	394	383	373	364	355	347	340
		Stiffeness, G', (10^3 lbs/in)	47.7	46.0	44.5	43.1	41.7	40.5	39.3	38.1	37.1
	12	Strength, (lbs/ft)	560	546	534	523	513	503	495	487	479
		Stiffeness, G', (10^3 lbs/in)	49.2	47.6	46.1	44.7	43.4	42.1	41.0	39.9	38.8
	9	Strength, (lbs/ft)	653	639	627	616	606	596	588	580	572
		Stiffeness, G', (10^3 lbs/in)	50.2	48.6	47.1	45.7	44.4	43.2	42.1	41.0	40.0
	6	Strength, (lbs/ft)	839	825	813	802	792	782	774	766	758
		Stiffeness, G', (10^3 lbs/in)	52.1	50.6	49.1	47.8	46.5	45.4	44.2	43.2	42.2

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	256	251	247	243	239	236	232	229	227
		Stiffeness, G', (10^3 lbs/in)	19.5	19.0	18.5	18.1	17.7	17.2	16.8	16.5	16.1
	24	Strength, (lbs/ft)	329	324	320	316	312	308	305	302	299
		Stiffeness, G', (10^3 lbs/in)	20.0	19.6	19.1	18.7	18.3	17.9	17.5	17.1	16.8
	12	Strength, (lbs/ft)	534	529	525	521	517	513	510	507	504
		Stiffeness, G', (10^3 lbs/in)	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0	18.7
	9	Strength, (lbs/ft)	645	641	637	633	630	627	624	621	618
		Stiffeness, G', (10^3 lbs/in)	22.6	22.2	21.9	21.5	21.2	20.8	20.5	20.2	19.9
	6	Strength, (lbs/ft)	831	828	825	822	819	817	815	812	810
		Stiffeness, G', (10^3 lbs/in)	24.5	24.2	23.9	23.6	23.4	23.1	22.8	22.5	22.3
24/5	36	Strength, (lbs/ft)	301	294	288	282	277	272	267	263	259
		Stiffeness, G', (10^3 lbs/in)	33.0	31.8	30.7	29.6	28.7	27.8	26.9	26.1	25.4
	24	Strength, (lbs/ft)	373	367	360	355	349	345	340	336	332
		Stiffeness, G', (10^3 lbs/in)	33.7	32.5	31.4	30.4	29.4	28.5	27.7	26.9	26.2
	12	Strength, (lbs/ft)	591	585	578	573	567	563	558	554	550
		Stiffeness, G', (10^3 lbs/in)	35.8	34.7	33.6	32.6	31.6	30.8	29.9	29.2	28.4
	9	Strength, (lbs/ft)	737	730	724	718	713	708	703	699	694
		Stiffeness, G', (10^3 lbs/in)	37.2	36.1	35.0	34.0	33.1	32.2	31.4	30.6	29.9
	6	Strength, (lbs/ft)	992	985	979	973	968	963	959	955	951
		Stiffeness, G', (10^3 lbs/in)	40.0	38.9	37.8	36.9	36.0	35.1	34.3	33.6	32.9
24/7	36	Strength, (lbs/ft)	452	438	426	415	405	395	386	378	370
		Stiffeness, G', (10^3 lbs/in)	50.7	48.9	47.3	45.8	44.4	43.0	41.8	40.6	39.4
	24	Strength, (lbs/ft)	524	511	499	488	477	468	459	450	443
		Stiffeness, G', (10^3 lbs/in)	51.3	49.6	47.9	46.4	45.0	43.7	42.4	41.3	40.1
	12	Strength, (lbs/ft)	742	729	717	706	695	686	677	668	661
		Stiffeness, G', (10^3 lbs/in)	53.2	51.5	49.9	48.4	47.0	45.7	44.5	43.3	42.2
	9	Strength, (lbs/ft)	888	874	862	851	841	831	822	814	806
		Stiffeness, G', (10^3 lbs/in)	54.4	52.7	51.2	49.7	48.3	47.0	45.8	44.7	43.6
	6	Strength, (lbs/ft)	1 168	1 154	1 142	1 131	1 120	1 110	1 101	1 093	1 085
		Stiffeness, G', (10^3 lbs/in)	56.8	55.2	53.7	52.2	50.9	49.6	48.4	47.3	46.3

3.0 in. deck - 24 in. wide - 6 in. flute spacing | **Thickness = 0.030 in.**

Support connection: Hilti ENP2K, X-EDNK22 | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	36	Strength, (lbs/ft)	175	171	168	165	162	159	157	155	153
		Stiffeness, G', (10^3 lbs/in)	9.5	9.8	10.0	10.2	10.4	10.6	10.8	10.9	11.0
	24	Strength, (lbs/ft)	230	226	222	219	216	214	212	209	208
		Stiffeness, G', (10^3 lbs/in)	10.0	10.4	10.7	11.0	11.2	11.5	11.7	11.9	12.1
	12	Strength, (lbs/ft)	362	359	355	353	350	348	346	344	342
		Stiffeness, G', (10^3 lbs/in)	11.0	11.5	11.9	12.3	12.8	13.1	13.5	13.9	14.2
	9	Strength, (lbs/ft)	429	426	424	422	420	418	416	414	413
		Stiffeness, G', (10^3 lbs/in)	11.4	11.9	12.4	12.9	13.4	13.8	14.3	14.7	15.1
	6	Strength, (lbs/ft)	529	527	525	524	522	521	520	519	518
		Stiffeness, G', (10^3 lbs/in)	12.0	12.5	13.1	13.7	14.2	14.7	15.2	15.7	16.2
24/5	36	Strength, (lbs/ft)	206	201	196	191	187	183	180	177	174
		Stiffeness, G', (10^3 lbs/in)	30.4	29.7	29.1	28.4	27.9	27.3	26.8	26.3	25.9
	24	Strength, (lbs/ft)	261	255	250	246	242	238	234	231	229
		Stiffeness, G', (10^3 lbs/in)	33.6	33.0	32.4	31.9	31.4	30.9	30.5	30.1	29.7
	12	Strength, (lbs/ft)	425	419	414	410	405	401	398	394	391
		Stiffeness, G', (10^3 lbs/in)	41.6	41.3	41.0	40.8	40.5	40.3	40.1	39.8	39.6
	9	Strength, (lbs/ft)	519	514	509	504	500	496	493	490	487
		Stiffeness, G', (10^3 lbs/in)	46.0	45.9	45.8	45.7	45.6	45.5	45.4	45.2	45.1
	6	Strength, (lbs/ft)	687	682	678	674	671	667	665	662	659
		Stiffeness, G', (10^3 lbs/in)	53.3	53.5	53.6	53.8	53.9	54.0	54.1	54.2	54.2
24/7	36	Strength, (lbs/ft)	314	302	291	281	273	265	258	251	245
		Stiffeness, G', (10^3 lbs/in)	40.6	39.8	38.9	38.1	37.4	36.6	35.9	35.2	34.6
	24	Strength, (lbs/ft)	368	356	346	336	327	320	312	306	300
		Stiffeness, G', (10^3 lbs/in)	43.0	42.3	41.5	40.9	40.2	39.6	39.0	38.4	37.8
	12	Strength, (lbs/ft)	532	520	509	500	491	483	476	470	464
		Stiffeness, G', (10^3 lbs/in)	49.1	48.8	48.4	48.0	47.6	47.2	46.9	46.5	46.1
	9	Strength, (lbs/ft)	639	627	617	607	598	590	583	576	570
		Stiffeness, G', (10^3 lbs/in)	52.6	52.4	52.2	52.0	51.8	51.5	51.3	51.1	50.9
	6	Strength, (lbs/ft)	811	800	791	782	775	768	761	755	750
		Stiffeness, G', (10^3 lbs/in)	58.4	58.6	58.7	58.7	58.8	58.8	58.8	58.8	58.7

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.036 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	36	Strength, (lbs/ft)	201	197	194	191	188	185	183	181	179
		Stiffeness, G', (10^3 lbs/in)	13.5	13.7	13.9	14.0	14.1	14.3	14.4	14.4	14.5
	24	Strength, (lbs/ft)	266	262	259	256	253	251	249	246	245
		Stiffeness, G', (10^3 lbs/in)	14.6	14.9	15.2	15.4	15.7	15.9	16.1	16.3	16.4
	12	Strength, (lbs/ft)	426	422	419	417	414	412	410	408	406
		Stiffeness, G', (10^3 lbs/in)	16.8	17.4	17.8	18.3	18.7	19.1	19.5	19.9	20.3
	9	Strength, (lbs/ft)	507	505	502	500	498	496	494	493	491
		Stiffeness, G', (10^3 lbs/in)	17.8	18.4	19.0	19.5	20.0	20.6	21.0	21.5	22.0
	6	Strength, (lbs/ft)	628	626	625	623	622	621	620	619	618
		Stiffeness, G', (10^3 lbs/in)	19.1	19.8	20.5	21.2	21.8	22.4	23.0	23.6	24.2
24/5	36	Strength, (lbs/ft)	234	229	224	219	215	211	208	205	202
		Stiffeness, G', (10^3 lbs/in)	33.3	32.5	31.8	31.1	30.5	29.8	29.3	28.8	28.3
	24	Strength, (lbs/ft)	299	294	289	285	281	277	274	271	268
		Stiffeness, G', (10^3 lbs/in)	37.4	36.7	36.0	35.4	34.9	34.3	33.8	33.3	32.9
	12	Strength, (lbs/ft)	496	490	485	481	476	472	469	465	462
		Stiffeness, G', (10^3 lbs/in)	48.0	47.6	47.1	46.7	46.4	46.0	45.7	45.4	45.1
	9	Strength, (lbs/ft)	609	604	599	594	590	587	583	580	577
		Stiffeness, G', (10^3 lbs/in)	54.0	53.7	53.4	53.2	52.9	52.7	52.4	52.2	52.0
	6	Strength, (lbs/ft)	812	807	803	799	796	793	790	787	785
		Stiffeness, G', (10^3 lbs/in)	64.0	64.0	64.0	64.0	63.9	63.9	63.8	63.8	63.7
24/7	36	Strength, (lbs/ft)	348	336	326	317	308	300	293	287	281
		Stiffeness, G', (10^3 lbs/in)	45.4	44.3	43.2	42.3	41.4	40.5	39.7	38.9	38.1
	24	Strength, (lbs/ft)	413	402	391	382	374	366	359	352	346
		Stiffeness, G', (10^3 lbs/in)	48.6	47.7	46.7	45.9	45.0	44.2	43.5	42.8	42.1
	12	Strength, (lbs/ft)	610	598	588	579	570	563	556	549	543
		Stiffeness, G', (10^3 lbs/in)	57.2	56.6	56.0	55.4	54.8	54.2	53.7	53.2	52.7
	9	Strength, (lbs/ft)	738	726	716	707	698	690	683	676	670
		Stiffeness, G', (10^3 lbs/in)	62.2	61.7	61.3	60.8	60.4	60.0	59.6	59.2	58.8
	6	Strength, (lbs/ft)	947	937	927	919	911	904	898	892	886
		Stiffeness, G', (10^3 lbs/in)	70.6	70.5	70.3	70.1	69.9	69.7	69.6	69.4	69.2

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.048 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	36	Strength, (lbs/ft)	257	253	249	246	243	240	238	235	233
		Stiffeness, G', (10^3 lbs/in)	20.4	20.5	20.5	20.4	20.4	20.4	20.4	20.3	20.3
	24	Strength, (lbs/ft)	344	340	336	333	330	327	325	323	320
		Stiffeness, G', (10^3 lbs/in)	23.0	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.8
	12	Strength, (lbs/ft)	556	553	550	547	544	542	539	537	535
		Stiffeness, G', (10^3 lbs/in)	28.5	29.0	29.5	29.9	30.3	30.7	31.1	31.4	31.7
	9	Strength, (lbs/ft)	666	663	661	658	656	654	652	650	649
		Stiffeness, G', (10^3 lbs/in)	31.1	31.8	32.4	33.0	33.5	34.1	34.6	35.0	35.5
	6	Strength, (lbs/ft)	828	826	824	822	821	820	818	817	816
		Stiffeness, G', (10^3 lbs/in)	34.8	35.7	36.5	37.3	38.1	38.9	39.6	40.3	41.0
24/5	36	Strength, (lbs/ft)	296	290	285	280	276	272	268	265	261
		Stiffeness, G', (10^3 lbs/in)	38.5	37.6	36.7	35.9	35.2	34.5	33.9	33.2	32.7
	24	Strength, (lbs/ft)	384	378	372	368	363	359	355	352	349
		Stiffeness, G', (10^3 lbs/in)	44.0	43.1	42.3	41.6	40.9	40.3	39.7	39.1	38.6
	12	Strength, (lbs/ft)	644	638	633	627	623	618	614	610	607
		Stiffeness, G', (10^3 lbs/in)	58.5	57.9	57.3	56.7	56.2	55.7	55.3	54.8	54.4
	9	Strength, (lbs/ft)	795	790	784	780	775	771	767	764	760
		Stiffeness, G', (10^3 lbs/in)	67.0	66.5	66.0	65.5	65.1	64.7	64.4	64.0	63.7
	6	Strength, (lbs/ft)	1 067	1 062	1 057	1 053	1 049	1 046	1 042	1 039	1 037
		Stiffeness, G', (10^3 lbs/in)	81.6	81.3	81.1	80.8	80.6	80.3	80.1	79.9	79.7
24/7	36	Strength, (lbs/ft)	431	419	407	397	388	379	372	364	357
		Stiffeness, G', (10^3 lbs/in)	53.4	52.0	50.7	49.5	48.3	47.3	46.3	45.3	44.5
	24	Strength, (lbs/ft)	518	506	495	485	475	467	459	452	445
		Stiffeness, G', (10^3 lbs/in)	58.0	56.7	55.5	54.4	53.3	52.3	51.4	50.5	49.7
	12	Strength, (lbs/ft)	780	768	757	747	738	729	721	714	707
		Stiffeness, G', (10^3 lbs/in)	70.5	69.5	68.5	67.6	66.8	66.0	65.3	64.6	63.9
	9	Strength, (lbs/ft)	950	938	926	916	907	898	890	882	875
		Stiffeness, G', (10^3 lbs/in)	77.8	77.0	76.2	75.4	74.7	74.1	73.5	72.9	72.3
	6	Strength, (lbs/ft)	1 231	1 220	1 210	1 201	1 192	1 184	1 177	1 170	1 164
		Stiffeness, G', (10^3 lbs/in)	90.6	90.0	89.5	89.0	88.5	88.1	87.7	87.3	86.9

3.0 in. deck - 24 in. wide - 6 in. flute spacing **Thickness = 0.060 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	36	Strength, (lbs/ft)	309	306	302	299	295	293	290	287	285
		Stiffeness, G', (10^3 lbs/in)	26.0	25.8	25.7	25.5	25.3	25.2	25.0	24.9	24.7
	24	Strength, (lbs/ft)	419	415	411	408	405	402	399	397	394
		Stiffeness, G', (10^3 lbs/in)	30.1	30.1	30.1	30.1	30.0	30.0	29.9	29.9	29.8
	12	Strength, (lbs/ft)	684	680	677	674	671	668	666	664	662
		Stiffeness, G', (10^3 lbs/in)	39.8	40.2	40.5	40.8	41.1	41.4	41.6	41.8	42.0
	9	Strength, (lbs/ft)	821	818	816	813	811	809	807	805	803
		Stiffeness, G', (10^3 lbs/in)	44.7	45.2	45.8	46.2	46.7	47.1	47.5	47.9	48.3
	6	Strength, (lbs/ft)	1 023	1 021	1 019	1 018	1 016	1 015	1 014	1 012	1 011
		Stiffeness, G', (10^3 lbs/in)	51.9	52.8	53.6	54.4	55.2	55.9	56.6	57.2	57.9
24/5	36	Strength, (lbs/ft)	354	348	343	338	333	329	325	321	318
		Stiffeness, G', (10^3 lbs/in)	42.1	41.2	40.3	39.4	38.7	38.0	37.3	36.7	36.1
	24	Strength, (lbs/ft)	463	457	452	447	442	438	434	430	427
		Stiffeness, G', (10^3 lbs/in)	48.7	47.8	47.0	46.2	45.5	44.8	44.2	43.6	43.0
	12	Strength, (lbs/ft)	788	781	775	770	765	760	756	752	749
		Stiffeness, G', (10^3 lbs/in)	66.6	65.9	65.2	64.6	64.0	63.5	62.9	62.5	62.0
	9	Strength, (lbs/ft)	977	971	965	960	956	951	947	944	940
		Stiffeness, G', (10^3 lbs/in)	77.2	76.6	76.1	75.5	75.0	74.5	74.1	73.7	73.3
	6	Strength, (lbs/ft)	1 316	1 311	1 307	1 302	1 298	1 295	1 291	1 288	1 285
		Stiffeness, G', (10^3 lbs/in)	95.9	95.5	95.1	94.7	94.3	94.0	93.7	93.4	93.1
24/7	36	Strength, (lbs/ft)	505	493	481	471	461	452	444	436	428
		Stiffeness, G', (10^3 lbs/in)	58.7	57.2	55.8	54.5	53.3	52.2	51.1	50.1	49.1
	24	Strength, (lbs/ft)	614	602	590	580	570	561	553	545	538
		Stiffeness, G', (10^3 lbs/in)	64.5	63.1	61.8	60.6	59.4	58.3	57.3	56.4	55.5
	12	Strength, (lbs/ft)	942	930	918	908	898	889	881	873	865
		Stiffeness, G', (10^3 lbs/in)	80.3	79.2	78.1	77.1	76.1	75.2	74.4	73.6	72.9
	9	Strength, (lbs/ft)	1 152	1 140	1 128	1 117	1 107	1 098	1 089	1 081	1 074
		Stiffeness, G', (10^3 lbs/in)	89.8	88.8	87.8	87.0	86.1	85.3	84.6	83.9	83.2
	6	Strength, (lbs/ft)	1 505	1 494	1 484	1 474	1 465	1 457	1 449	1 442	1 435
		Stiffeness, G', (10^3 lbs/in)	106.6	105.8	105.1	104.4	103.8	103.2	102.6	102.0	101.5

3.0 in. deck - 24 in. wide - 8 in. flute spacing | **Thickness = 0.030 in.**

Support connection: 3/4" Welds | **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch | **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	36	Strength, (lbs/ft)	193	184	176	168	162	156	150	145	141
		Stiffeness, G', (10^3 lbs/in)	17.1	17.0	16.9	16.7	16.5	16.3	16.1	15.8	15.6
	24	Strength, (lbs/ft)	211	202	194	187	180	174	169	164	159
		Stiffeness, G', (10^3 lbs/in)	17.3	17.2	17.1	16.9	16.7	16.5	16.3	16.1	15.9
	12	Strength, (lbs/ft)	266	257	248	241	234	228	223	218	213
		Stiffeness, G', (10^3 lbs/in)	17.7	17.7	17.6	17.5	17.4	17.2	17.1	16.9	16.7
	9	Strength, (lbs/ft)	302	293	285	277	271	265	259	254	250
		Stiffeness, G', (10^3 lbs/in)	18.0	18.0	18.0	17.9	17.8	17.7	17.5	17.4	17.2
	6	Strength, (lbs/ft)	375	366	357	350	343	337	332	327	322
		Stiffeness, G', (10^3 lbs/in)	18.6	18.6	18.6	18.6	18.6	18.5	18.4	18.3	18.2
24/6	36	Strength, (lbs/ft)	345	327	310	296	283	271	260	251	242
		Stiffeness, G', (10^3 lbs/in)	21.7	21.8	22.0	22.0	22.0	22.0	21.9	21.8	21.6
	24	Strength, (lbs/ft)	363	345	329	314	301	289	279	269	260
		Stiffeness, G', (10^3 lbs/in)	21.7	21.9	22.1	22.1	22.1	22.1	22.0	21.9	21.8
	12	Strength, (lbs/ft)	417	399	383	369	356	344	333	323	314
		Stiffeness, G', (10^3 lbs/in)	22.0	22.2	22.4	22.5	22.5	22.5	22.5	22.4	22.3
	9	Strength, (lbs/ft)	454	436	419	405	392	380	369	360	351
		Stiffeness, G', (10^3 lbs/in)	22.2	22.4	22.6	22.7	22.8	22.8	22.8	22.8	22.7
	6	Strength, (lbs/ft)	526	508	492	478	465	453	442	432	423
		Stiffeness, G', (10^3 lbs/in)	22.5	22.8	23.0	23.2	23.3	23.4	23.4	23.4	23.4

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	215	207	199	192	186	180	174	170	165
		Stiffeness, G', (10^3 lbs/in)	20.9	20.6	20.2	19.8	19.4	19.0	18.6	18.2	17.9
	24	Strength, (lbs/ft)	242	233	225	218	212	206	201	196	191
		Stiffeness, G', (10^3 lbs/in)	21.2	20.9	20.5	20.1	19.7	19.4	19.0	18.6	18.2
	12	Strength, (lbs/ft)	320	311	304	297	290	284	279	274	270
		Stiffeness, G', (10^3 lbs/in)	22.0	21.7	21.4	21.1	20.7	20.4	20.1	19.7	19.4
	9	Strength, (lbs/ft)	372	364	356	349	343	337	331	327	322
		Stiffeness, G', (10^3 lbs/in)	22.5	22.3	22.0	21.7	21.4	21.1	20.8	20.5	20.2
	6	Strength, (lbs/ft)	477	468	461	454	447	441	436	431	427
		Stiffeness, G', (10^3 lbs/in)	23.5	23.3	23.1	22.8	22.6	22.4	22.1	21.8	21.6
24/6	36	Strength, (lbs/ft)	375	358	343	329	317	305	295	285	276
		Stiffeness, G', (10^3 lbs/in)	28.4	28.3	28.0	27.8	27.5	27.1	26.8	26.4	26.1
	24	Strength, (lbs/ft)	402	385	369	355	343	331	321	311	302
		Stiffeness, G', (10^3 lbs/in)	28.6	28.4	28.2	28.0	27.7	27.4	27.1	26.7	26.3
	12	Strength, (lbs/ft)	480	463	448	434	421	410	399	389	381
		Stiffeness, G', (10^3 lbs/in)	29.1	29.0	28.8	28.6	28.4	28.1	27.8	27.5	27.2
	9	Strength, (lbs/ft)	532	515	500	486	474	462	452	442	433
		Stiffeness, G', (10^3 lbs/in)	29.4	29.3	29.2	29.0	28.8	28.6	28.3	28.0	27.7
	6	Strength, (lbs/ft)	637	620	605	591	578	567	556	546	537
		Stiffeness, G', (10^3 lbs/in)	30.0	30.0	29.9	29.8	29.7	29.5	29.3	29.0	28.8

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	278	269	261	254	247	241	235	230	225
		Stiffeness, G', (10^3 lbs/in)	26.5	25.8	25.0	24.4	23.7	23.1	22.5	21.9	21.4
	24	Strength, (lbs/ft)	325	316	308	300	294	288	282	277	272
		Stiffeness, G', (10^3 lbs/in)	26.9	26.2	25.5	24.9	24.2	23.6	23.0	22.5	22.0
	12	Strength, (lbs/ft)	464	455	447	440	433	427	421	416	411
		Stiffeness, G', (10^3 lbs/in)	28.3	27.6	27.0	26.4	25.8	25.2	24.7	24.1	23.6
	9	Strength, (lbs/ft)	557	548	540	533	526	520	514	509	504
		Stiffeness, G', (10^3 lbs/in)	29.2	28.5	27.9	27.3	26.8	26.2	25.7	25.2	24.7
	6	Strength, (lbs/ft)	742	732	724	717	710	703	697	692	686
		Stiffeness, G', (10^3 lbs/in)	30.9	30.3	29.8	29.2	28.7	28.2	27.7	27.3	26.8
24/6	36	Strength, (lbs/ft)	467	449	433	418	405	392	381	370	360
		Stiffeness, G', (10^3 lbs/in)	38.8	38.1	37.3	36.5	35.8	35.0	34.3	33.6	32.9
	24	Strength, (lbs/ft)	514	496	479	465	451	439	427	416	407
		Stiffeness, G', (10^3 lbs/in)	39.2	38.4	37.7	36.9	36.2	35.4	34.7	34.0	33.3
	12	Strength, (lbs/ft)	653	635	619	604	591	578	567	556	546
		Stiffeness, G', (10^3 lbs/in)	40.2	39.5	38.8	38.1	37.4	36.7	36.0	35.3	34.7
	9	Strength, (lbs/ft)	746	728	712	697	684	671	660	649	639
		Stiffeness, G', (10^3 lbs/in)	40.8	40.1	39.5	38.8	38.1	37.5	36.8	36.2	35.6
	6	Strength, (lbs/ft)	932	914	898	883	870	857	846	835	825
		Stiffeness, G', (10^3 lbs/in)	42.0	41.5	40.9	40.2	39.6	39.0	38.4	37.9	37.3

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	344	335	327	320	313	307	301	296	291
		Stiffeness, G', (10^3 lbs/in)	29.7	28.8	27.9	27.1	26.3	25.6	24.9	24.3	23.6
	24	Strength, (lbs/ft)	416	408	400	393	386	380	374	368	363
		Stiffeness, G', (10^3 lbs/in)	30.3	29.4	28.6	27.8	27.0	26.3	25.6	25.0	24.3
	12	Strength, (lbs/ft)	634	626	618	611	604	598	592	586	581
		Stiffeness, G', (10^3 lbs/in)	32.2	31.3	30.5	29.7	29.0	28.3	27.6	27.0	26.4
	9	Strength, (lbs/ft)	780	771	763	756	749	743	737	732	727
		Stiffeness, G', (10^3 lbs/in)	33.4	32.5	31.8	31.0	30.3	29.6	29.0	28.4	27.8
	6	Strength, (lbs/ft)	1 042	1 033	1 025	1 018	1 011	1 005	999	994	989
		Stiffeness, G', (10^3 lbs/in)	35.7	34.9	34.2	33.5	32.8	32.2	31.6	31.0	30.5
24/6	36	Strength, (lbs/ft)	555	537	521	506	492	479	467	456	445
		Stiffeness, G', (10^3 lbs/in)	45.6	44.4	43.3	42.2	41.2	40.1	39.2	38.2	37.4
	24	Strength, (lbs/ft)	627	610	593	578	564	551	540	528	518
		Stiffeness, G', (10^3 lbs/in)	46.1	44.9	43.8	42.7	41.7	40.7	39.8	38.8	38.0
	12	Strength, (lbs/ft)	845	828	811	796	782	769	758	746	736
		Stiffeness, G', (10^3 lbs/in)	47.6	46.5	45.4	44.4	43.4	42.4	41.5	40.6	39.8
	9	Strength, (lbs/ft)	991	973	957	941	928	915	903	892	881
		Stiffeness, G', (10^3 lbs/in)	48.5	47.5	46.4	45.4	44.4	43.5	42.6	41.8	40.9
	6	Strength, (lbs/ft)	1 281	1 264	1 247	1 232	1 218	1 205	1 194	1 182	1 172
		Stiffeness, G', (10^3 lbs/in)	50.4	49.4	48.4	47.5	46.6	45.7	44.8	44.0	43.2

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	355	350	346	342	338	335	332	329	326
		Stiffeness, G', (10^3 lbs/in)	27.7	28.0	28.2	28.4	28.6	28.8	28.9	29.0	29.1
	24	Strength, (lbs/ft)	486	481	477	473	469	466	463	460	458
		Stiffeness, G', (10^3 lbs/in)	31.4	31.9	32.4	32.8	33.2	33.5	33.9	34.2	34.5
	12	Strength, (lbs/ft)	820	815	811	807	803	800	797	794	792
		Stiffeness, G', (10^3 lbs/in)	38.4	39.3	40.2	41.1	41.9	42.7	43.4	44.1	44.8
	9	Strength, (lbs/ft)	997	993	990	986	983	981	978	976	974
		Stiffeness, G', (10^3 lbs/in)	41.1	42.3	43.4	44.5	45.5	46.4	47.3	48.2	49.0
	6	Strength, (lbs/ft)	1 266	1 264	1 261	1 259	1 257	1 250	1 148	1 058	978
		Stiffeness, G', (10^3 lbs/in)	44.7	46.1	47.5	48.8	50.0	51.2	52.4	53.5	54.6
24/6	36	Strength, (lbs/ft)	515	502	490	479	469	460	452	444	437
		Stiffeness, G', (10^3 lbs/in)	32.8	33.2	33.5	33.7	33.9	34.1	34.2	34.4	34.5
	24	Strength, (lbs/ft)	646	633	621	610	600	591	583	575	568
		Stiffeness, G', (10^3 lbs/in)	35.4	35.9	36.4	36.9	37.3	37.7	38.1	38.4	38.6
	12	Strength, (lbs/ft)	1 007	994	982	972	962	954	946	938	931
		Stiffeness, G', (10^3 lbs/in)	40.5	41.5	42.4	43.3	44.2	44.9	45.7	46.4	47.1
	9	Strength, (lbs/ft)	1 198	1 187	1 177	1 167	1 159	1 151	1 144	1 058	978
		Stiffeness, G', (10^3 lbs/in)	42.6	43.9	45.0	46.1	47.1	48.1	49.0	49.9	50.7
	6	Strength, (lbs/ft)	1 513	1 504	1 497	1 490	1 366	1 250	1 148	1 058	978
		Stiffeness, G', (10^3 lbs/in)	45.6	47.0	48.4	49.7	51.0	52.2	53.4	54.5	55.6

3.0 in. deck - 24 in. wide - 8 in. flute spacing — **Thickness = 0.048 in.**

Support connection: 3/4" Welds — **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld — **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	453	447	443	438	434	431	427	424	421
		Stiffeness, G', (10^3 lbs/in)	39.1	39.1	39.1	39.1	39.1	39.0	39.0	38.9	38.9
	24	Strength, (lbs/ft)	624	619	614	610	606	602	598	595	592
		Stiffeness, G', (10^3 lbs/in)	46.3	46.6	46.8	47.0	47.2	47.3	47.5	47.6	47.7
	12	Strength, (lbs/ft)	1 060	1 055	1 051	1 046	1 042	1 039	1 035	1 032	1 029
		Stiffeness, G', (10^3 lbs/in)	61.0	61.9	62.7	63.5	64.2	64.8	65.4	66.0	66.6
	9	Strength, (lbs/ft)	1 294	1 290	1 286	1 283	1 279	1 276	1 273	1 271	1 268
		Stiffeness, G', (10^3 lbs/in)	67.5	68.7	69.8	70.8	71.8	72.7	73.5	74.4	75.1
	6	Strength, (lbs/ft)	1 651	1 648	1 645	1 643	1 640	1 638	1 514	1 404	1 306
		Stiffeness, G', (10^3 lbs/in)	76.3	77.9	79.4	80.9	82.2	83.5	84.7	85.9	87.0
24/6	36	Strength, (lbs/ft)	642	627	614	603	592	582	572	564	556
		Stiffeness, G', (10^3 lbs/in)	48.2	48.1	48.0	47.9	47.8	47.7	47.5	47.3	47.2
	24	Strength, (lbs/ft)	813	799	786	774	763	753	744	735	727
		Stiffeness, G', (10^3 lbs/in)	53.7	53.9	54.1	54.3	54.4	54.5	54.5	54.6	54.6
	12	Strength, (lbs/ft)	1 285	1 272	1 259	1 248	1 237	1 227	1 218	1 210	1 202
		Stiffeness, G', (10^3 lbs/in)	65.5	66.3	67.1	67.9	68.6	69.2	69.8	70.3	70.8
	9	Strength, (lbs/ft)	1 539	1 527	1 516	1 506	1 496	1 487	1 479	1 404	1 306
		Stiffeness, G', (10^3 lbs/in)	70.9	72.1	73.1	74.2	75.1	76.0	76.9	77.7	78.4
	6	Strength, (lbs/ft)	1 958	1 949	1 941	1 933	1 777	1 638	1 514	1 404	1 306
		Stiffeness, G', (10^3 lbs/in)	78.5	80.1	81.6	83.0	84.4	85.6	86.9	88.0	89.1

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: 1 1/2" Seam Weld **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	543	537	533	528	524	520	516	513	510
		Stiffeness, G', (10^3 lbs/in)	48.0	47.8	47.6	47.4	47.2	47.0	46.9	46.7	46.5
	24	Strength, (lbs/ft)	752	747	742	738	733	729	726	722	719
		Stiffeness, G', (10^3 lbs/in)	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
	12	Strength, (lbs/ft)	1 288	1 282	1 278	1 273	1 269	1 265	1 262	1 258	1 255
		Stiffeness, G', (10^3 lbs/in)	81.9	82.5	83.1	83.6	84.1	84.6	85.0	85.5	85.8
	9	Strength, (lbs/ft)	1 577	1 572	1 568	1 564	1 561	1 558	1 555	1 552	1 549
		Stiffeness, G', (10^3 lbs/in)	92.9	93.8	94.7	95.6	96.3	97.1	97.8	98.4	99.0
	6	Strength, (lbs/ft)	2 017	2 014	2 011	2 009	2 007	1 956	1 819	1 695	1 584
		Stiffeness, G', (10^3 lbs/in)	108.6	110.1	111.5	112.8	114.0	115.2	116.3	117.3	118.3
24/6	36	Strength, (lbs/ft)	754	739	726	714	702	692	682	673	664
		Stiffeness, G', (10^3 lbs/in)	60.4	59.9	59.5	59.1	58.7	58.3	57.9	57.5	57.1
	24	Strength, (lbs/ft)	963	949	935	923	912	901	892	883	874
		Stiffeness, G', (10^3 lbs/in)	69.1	68.9	68.8	68.6	68.4	68.2	68.0	67.9	67.7
	12	Strength, (lbs/ft)	1 544	1 529	1 516	1 504	1 493	1 483	1 473	1 464	1 456
		Stiffeness, G', (10^3 lbs/in)	88.7	89.3	89.8	90.2	90.6	91.0	91.3	91.7	92.0
	9	Strength, (lbs/ft)	1 858	1 846	1 834	1 823	1 813	1 804	1 796	1 695	1 584
		Stiffeness, G', (10^3 lbs/in)	98.3	99.2	100.0	100.8	101.5	102.2	102.8	103.4	103.9
	6	Strength, (lbs/ft)	2 379	2 370	2 361	2 281	2 109	1 956	1 819	1 695	1 584
		Stiffeness, G', (10^3 lbs/in)	112.2	113.6	115.0	116.3	117.5	118.6	119.6	120.6	121.6

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.030 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	36	Strength, (lbs/ft)	239	231	224	218	213	208	203	199	196
		Stiffeness, G', (10^3 lbs/in)	18.7	18.9	19.0	19.0	19.1	19.1	19.1	19.1	19.0
	24	Strength, (lbs/ft)	294	286	279	273	267	263	258	254	250
		Stiffeness, G', (10^3 lbs/in)	19.9	20.2	20.4	20.6	20.7	20.9	21.0	21.1	21.1
	12	Strength, (lbs/ft)	457	450	443	437	431	426	422	418	414
		Stiffeness, G', (10^3 lbs/in)	22.6	23.2	23.7	24.1	24.5	24.9	25.3	25.6	25.9
	9	Strength, (lbs/ft)	556	549	542	536	530	525	521	516	513
		Stiffeness, G', (10^3 lbs/in)	23.9	24.6	25.2	25.8	26.3	26.9	27.3	27.8	28.2
	6	Strength, (lbs/ft)	724	718	712	706	702	697	693	690	686
		Stiffeness, G', (10^3 lbs/in)	25.8	26.7	27.5	28.3	29.0	29.7	30.3	31.0	31.6
24/6	36	Strength, (lbs/ft)	390	374	359	346	334	323	313	305	296
		Stiffeness, G', (10^3 lbs/in)	22.6	22.9	23.2	23.4	23.6	23.7	23.8	23.9	23.9
	24	Strength, (lbs/ft)	445	428	414	400	389	378	368	359	351
		Stiffeness, G', (10^3 lbs/in)	23.2	23.7	24.1	24.4	24.7	24.9	25.1	25.2	25.4
	12	Strength, (lbs/ft)	609	592	577	564	552	542	532	523	515
		Stiffeness, G', (10^3 lbs/in)	24.9	25.6	26.2	26.7	27.2	27.7	28.1	28.5	28.8
	9	Strength, (lbs/ft)	718	701	687	674	662	651	641	632	624
		Stiffeness, G', (10^3 lbs/in)	25.7	26.5	27.2	27.9	28.5	29.1	29.6	30.1	30.5
	6	Strength, (lbs/ft)	898	883	870	858	847	837	828	820	812
		Stiffeness, G', (10^3 lbs/in)	27.0	28.0	28.9	29.7	30.5	31.2	31.9	32.6	33.2

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	268	261	254	248	243	238	234	229	226
		Stiffeness, G', (10^3 lbs/in)	24.0	23.9	23.8	23.6	23.5	23.4	23.2	23.0	22.9
	24	Strength, (lbs/ft)	333	326	320	314	308	304	299	295	291
		Stiffeness, G', (10^3 lbs/in)	26.1	26.2	26.2	26.2	26.2	26.1	26.1	26.1	26.0
	12	Strength, (lbs/ft)	530	523	516	510	505	500	496	492	488
		Stiffeness, G', (10^3 lbs/in)	31.1	31.5	31.8	32.2	32.4	32.7	32.9	33.2	33.3
	9	Strength, (lbs/ft)	648	641	634	629	623	618	614	609	605
		Stiffeness, G', (10^3 lbs/in)	33.6	34.1	34.7	35.2	35.6	36.0	36.4	36.8	37.1
	6	Strength, (lbs/ft)	851	845	839	834	830	825	821	818	814
		Stiffeness, G', (10^3 lbs/in)	37.3	38.1	38.9	39.7	40.4	41.0	41.7	42.2	42.8
24/6	36	Strength, (lbs/ft)	428	412	398	386	374	363	354	345	336
		Stiffeness, G', (10^3 lbs/in)	30.3	30.4	30.4	30.4	30.3	30.2	30.1	29.9	29.8
	24	Strength, (lbs/ft)	494	478	464	451	439	429	419	410	402
		Stiffeness, G', (10^3 lbs/in)	31.7	31.9	32.0	32.1	32.2	32.2	32.2	32.1	32.1
	12	Strength, (lbs/ft)	690	675	660	648	636	626	616	607	599
		Stiffeness, G', (10^3 lbs/in)	35.1	35.6	36.0	36.4	36.8	37.1	37.3	37.6	37.8
	9	Strength, (lbs/ft)	821	806	792	779	767	757	747	738	730
		Stiffeness, G', (10^3 lbs/in)	36.9	37.5	38.1	38.7	39.2	39.6	40.0	40.4	40.8
	6	Strength, (lbs/ft)	1 040	1 026	1 013	1 001	991	981	972	963	955
		Stiffeness, G', (10^3 lbs/in)	39.6	40.5	41.4	42.2	42.9	43.6	44.2	44.9	45.4

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.048 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	335	328	321	314	309	303	298	294	289
		Stiffeness, G', (10^3 lbs/in)	31.9	31.5	31.1	30.7	30.3	30.0	29.6	29.3	28.9
	24	Strength, (lbs/ft)	423	415	408	402	396	391	386	381	377
		Stiffeness, G', (10^3 lbs/in)	35.8	35.5	35.2	35.0	34.7	34.4	34.2	33.9	33.7
	12	Strength, (lbs/ft)	685	677	670	664	658	653	648	643	639
		Stiffeness, G', (10^3 lbs/in)	45.3	45.4	45.5	45.6	45.6	45.6	45.7	45.7	45.7
	9	Strength, (lbs/ft)	841	833	826	820	814	808	803	799	794
		Stiffeness, G', (10^3 lbs/in)	50.4	50.7	51.0	51.3	51.5	51.7	51.9	52.0	52.2
	6	Strength, (lbs/ft)	1 113	1 106	1 100	1 094	1 089	1 085	1 080	1 076	1 072
		Stiffeness, G', (10^3 lbs/in)	58.5	59.1	59.8	60.4	60.9	61.4	61.8	62.3	62.7
24/6	36	Strength, (lbs/ft)	524	508	492	479	466	454	444	434	424
		Stiffeness, G', (10^3 lbs/in)	42.8	42.4	41.9	41.4	40.9	40.4	39.9	39.5	39.0
	24	Strength, (lbs/ft)	612	595	580	566	553	542	531	521	512
		Stiffeness, G', (10^3 lbs/in)	45.7	45.4	45.0	44.7	44.4	44.0	43.6	43.3	42.9
	12	Strength, (lbs/ft)	874	857	842	828	816	804	793	783	774
		Stiffeness, G', (10^3 lbs/in)	52.9	53.0	53.1	53.1	53.1	53.1	53.0	53.0	52.9
	9	Strength, (lbs/ft)	1 049	1 032	1 017	1 003	990	979	968	958	949
		Stiffeness, G', (10^3 lbs/in)	56.9	57.2	57.5	57.7	57.9	58.1	58.2	58.3	58.4
	6	Strength, (lbs/ft)	1 341	1 326	1 312	1 299	1 287	1 276	1 266	1 257	1 248
		Stiffeness, G', (10^3 lbs/in)	63.4	64.1	64.7	65.3	65.8	66.3	66.7	67.1	67.5

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: 3/4" Welds **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	397	389	382	375	369	364	359	354	349
		Stiffeness, G', (10^3 lbs/in)	37.5	36.9	36.3	35.7	35.2	34.7	34.2	33.8	33.3
	24	Strength, (lbs/ft)	506	498	491	485	479	473	468	463	458
		Stiffeness, G', (10^3 lbs/in)	42.9	42.4	41.9	41.5	41.0	40.6	40.2	39.8	39.5
	12	Strength, (lbs/ft)	834	826	819	812	806	801	796	791	786
		Stiffeness, G', (10^3 lbs/in)	56.8	56.7	56.5	56.3	56.2	56.0	55.9	55.7	55.5
	9	Strength, (lbs/ft)	1 027	1 019	1 012	1 005	999	993	988	983	978
		Stiffeness, G', (10^3 lbs/in)	64.6	64.6	64.7	64.7	64.7	64.7	64.7	64.7	64.6
	6	Strength, (lbs/ft)	1 367	1 360	1 354	1 348	1 343	1 338	1 333	1 329	1 325
		Stiffeness, G', (10^3 lbs/in)	77.4	77.9	78.2	78.6	78.9	79.2	79.4	79.7	79.9
24/6	36	Strength, (lbs/ft)	608	591	575	561	548	536	524	514	504
		Stiffeness, G', (10^3 lbs/in)	51.8	51.0	50.1	49.3	48.5	47.8	47.1	46.4	45.7
	24	Strength, (lbs/ft)	717	700	685	670	657	645	634	623	613
		Stiffeness, G', (10^3 lbs/in)	56.2	55.5	54.8	54.1	53.4	52.8	52.2	51.6	51.0
	12	Strength, (lbs/ft)	1 045	1 028	1 012	998	985	973	961	951	941
		Stiffeness, G', (10^3 lbs/in)	67.6	67.3	66.9	66.6	66.3	66.0	65.6	65.3	65.0
	9	Strength, (lbs/ft)	1 263	1 246	1 231	1 217	1 203	1 191	1 180	1 169	1 159
		Stiffeness, G', (10^3 lbs/in)	74.1	74.0	73.9	73.8	73.6	73.5	73.3	73.2	73.0
	6	Strength, (lbs/ft)	1 628	1 613	1 598	1 585	1 573	1 561	1 551	1 541	1 531
		Stiffeness, G', (10^3 lbs/in)	84.9	85.3	85.5	85.8	86.0	86.2	86.3	86.5	86.6

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.030 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	36	Strength, (lbs/ft)	106	102	98	95	92	89	87	84	82
		Stiffeness, G', (10^3 lbs/in)	16.1	15.9	15.8	15.6	15.3	15.1	14.9	14.6	14.4
	24	Strength, (lbs/ft)	124	120	116	113	110	107	105	103	101
		Stiffeness, G', (10^3 lbs/in)	16.3	16.1	16.0	15.8	15.6	15.4	15.2	14.9	14.7
	12	Strength, (lbs/ft)	178	174	171	167	164	162	159	157	155
		Stiffeness, G', (10^3 lbs/in)	16.8	16.7	16.6	16.5	16.3	16.1	16.0	15.8	15.6
	9	Strength, (lbs/ft)	215	211	207	204	201	198	196	193	191
		Stiffeness, G', (10^3 lbs/in)	17.1	17.1	17.0	16.9	16.8	16.6	16.5	16.3	16.1
	6	Strength, (lbs/ft)	280	276	273	270	267	264	262	259	257
		Stiffeness, G', (10^3 lbs/in)	17.7	17.7	17.7	17.7	17.6	17.5	17.4	17.3	17.2
24/6	36	Strength, (lbs/ft)	180	171	164	157	151	145	140	136	132
		Stiffeness, G', (10^3 lbs/in)	20.7	20.8	20.9	20.8	20.8	20.7	20.6	20.4	20.2
	24	Strength, (lbs/ft)	198	189	182	175	169	163	158	154	150
		Stiffeness, G', (10^3 lbs/in)	20.8	20.9	21.0	21.0	20.9	20.9	20.7	20.6	20.4
	12	Strength, (lbs/ft)	252	244	236	229	223	218	213	208	204
		Stiffeness, G', (10^3 lbs/in)	21.1	21.2	21.3	21.4	21.4	21.3	21.3	21.2	21.0
	9	Strength, (lbs/ft)	289	280	273	266	260	254	249	245	241
		Stiffeness, G', (10^3 lbs/in)	21.3	21.5	21.6	21.7	21.7	21.7	21.6	21.5	21.4
	6	Strength, (lbs/ft)	361	353	345	338	332	327	322	317	313
		Stiffeness, G', (10^3 lbs/in)	21.6	21.9	22.0	22.2	22.2	22.3	22.3	22.2	22.2

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	123	120	116	113	110	108	106	103	101
		Stiffeness, G', (10^3 lbs/in)	19.4	19.0	18.6	18.2	17.8	17.4	17.1	16.7	16.3
	24	Strength, (lbs/ft)	150	146	142	139	137	134	132	130	128
		Stiffeness, G', (10^3 lbs/in)	19.7	19.3	19.0	18.6	18.2	17.8	17.5	17.1	16.7
	12	Strength, (lbs/ft)	228	224	221	218	215	212	210	208	206
		Stiffeness, G', (10^3 lbs/in)	20.6	20.3	19.9	19.6	19.3	18.9	18.6	18.3	18.0
	9	Strength, (lbs/ft)	280	277	273	270	267	264	262	260	258
		Stiffeness, G', (10^3 lbs/in)	21.1	20.8	20.6	20.3	19.9	19.6	19.3	19.0	18.8
	6	Strength, (lbs/ft)	367	363	360	357	355	352	350	348	346
		Stiffeness, G', (10^3 lbs/in)	22.2	22.0	21.7	21.5	21.3	21.0	20.8	20.5	20.3
24/6	36	Strength, (lbs/ft)	202	194	187	181	175	169	165	160	156
		Stiffeness, G', (10^3 lbs/in)	26.8	26.5	26.2	25.9	25.6	25.2	24.9	24.5	24.1
	24	Strength, (lbs/ft)	228	220	213	207	201	196	191	186	182
		Stiffeness, G', (10^3 lbs/in)	26.9	26.7	26.5	26.2	25.8	25.5	25.1	24.8	24.4
	12	Strength, (lbs/ft)	307	299	292	285	279	274	269	265	261
		Stiffeness, G', (10^3 lbs/in)	27.5	27.3	27.1	26.9	26.6	26.3	26.0	25.7	25.3
	9	Strength, (lbs/ft)	359	351	344	338	332	326	322	317	313
		Stiffeness, G', (10^3 lbs/in)	27.9	27.7	27.5	27.3	27.1	26.8	26.5	26.2	25.9
	6	Strength, (lbs/ft)	457	450	443	437	431	426	421	416	412
		Stiffeness, G', (10^3 lbs/in)	28.5	28.5	28.4	28.2	28.0	27.8	27.6	27.3	27.1

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.048 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	171	168	164	161	158	156	153	151	149
		Stiffeness, G', (10^3 lbs/in)	24.2	23.5	22.8	22.2	21.6	21.0	20.4	19.9	19.4
	24	Strength, (lbs/ft)	218	214	211	208	205	202	200	197	195
		Stiffeness, G', (10^3 lbs/in)	24.7	24.0	23.3	22.7	22.1	21.5	21.0	20.5	20.0
	12	Strength, (lbs/ft)	357	354	350	347	344	341	339	336	334
		Stiffeness, G', (10^3 lbs/in)	26.1	25.5	24.9	24.3	23.7	23.2	22.7	22.2	21.7
	9	Strength, (lbs/ft)	438	434	430	427	424	422	419	417	415
		Stiffeness, G', (10^3 lbs/in)	27.0	26.4	25.8	25.3	24.8	24.2	23.8	23.3	22.8
	6	Strength, (lbs/ft)	579	576	573	570	568	565	563	561	560
		Stiffeness, G', (10^3 lbs/in)	28.8	28.3	27.8	27.3	26.8	26.3	25.9	25.4	25.0
24/6	36	Strength, (lbs/ft)	266	258	250	243	237	231	226	221	216
		Stiffeness, G', (10^3 lbs/in)	35.9	35.1	34.3	33.6	32.8	32.1	31.4	30.7	30.0
	24	Strength, (lbs/ft)	312	304	297	290	284	278	272	267	263
		Stiffeness, G', (10^3 lbs/in)	36.3	35.5	34.7	34.0	33.3	32.5	31.8	31.2	30.5
	12	Strength, (lbs/ft)	452	444	436	429	423	417	412	407	402
		Stiffeness, G', (10^3 lbs/in)	37.3	36.6	35.9	35.2	34.5	33.9	33.2	32.6	31.9
	9	Strength, (lbs/ft)	545	537	529	522	516	510	505	500	495
		Stiffeness, G', (10^3 lbs/in)	38.0	37.3	36.7	36.0	35.4	34.7	34.1	33.5	32.9
	6	Strength, (lbs/ft)	695	687	681	674	669	663	658	654	649
		Stiffeness, G', (10^3 lbs/in)	39.4	38.8	38.2	37.6	37.0	36.4	35.8	35.2	34.7

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	227	223	220	217	214	211	209	207	205
		Stiffeness, G', (10^3 lbs/in)	26.9	26.1	25.3	24.5	23.8	23.1	22.5	21.9	21.3
	24	Strength, (lbs/ft)	299	296	292	289	287	284	282	280	277
		Stiffeness, G', (10^3 lbs/in)	27.6	26.7	25.9	25.2	24.5	23.8	23.2	22.6	22.0
	12	Strength, (lbs/ft)	507	503	500	497	494	491	489	486	484
		Stiffeness, G', (10^3 lbs/in)	29.5	28.7	27.9	27.2	26.5	25.9	25.3	24.7	24.2
	9	Strength, (lbs/ft)	625	621	618	615	613	610	608	606	604
		Stiffeness, G', (10^3 lbs/in)	30.7	29.9	29.2	28.5	27.9	27.3	26.7	26.1	25.6
	6	Strength, (lbs/ft)	825	823	820	818	816	814	812	810	809
		Stiffeness, G', (10^3 lbs/in)	33.1	32.4	31.7	31.1	30.5	29.9	29.4	28.8	28.3
24/6	36	Strength, (lbs/ft)	334	326	318	311	305	299	293	288	284
		Stiffeness, G', (10^3 lbs/in)	41.7	40.5	39.5	38.4	37.4	36.5	35.6	34.7	33.9
	24	Strength, (lbs/ft)	407	398	391	384	378	372	366	361	356
		Stiffeness, G', (10^3 lbs/in)	42.2	41.1	40.0	39.0	38.0	37.1	36.2	35.3	34.5
	12	Strength, (lbs/ft)	625	616	609	602	596	590	584	579	574
		Stiffeness, G', (10^3 lbs/in)	43.8	42.7	41.7	40.7	39.7	38.8	38.0	37.2	36.4
	9	Strength, (lbs/ft)	753	745	738	731	725	719	713	708	703
		Stiffeness, G', (10^3 lbs/in)	44.8	43.7	42.7	41.8	40.9	40.0	39.2	38.4	37.6
	6	Strength, (lbs/ft)	972	965	959	953	947	942	938	933	929
		Stiffeness, G', (10^3 lbs/in)	46.8	45.8	44.9	44.0	43.1	42.3	41.5	40.7	40.0

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.030 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	36	Strength, (lbs/ft)	151	149	147	145	143	141	140	138	137
		Stiffeness, G', (10^3 lbs/in)	17.9	18.0	18.1	18.1	18.1	18.2	18.1	18.1	18.1
	24	Strength, (lbs/ft)	206	203	201	199	197	196	194	193	192
		Stiffeness, G', (10^3 lbs/in)	19.2	19.5	19.7	19.8	20.0	20.1	20.2	20.3	20.3
	12	Strength, (lbs/ft)	344	341	339	337	336	334	333	331	330
		Stiffeness, G', (10^3 lbs/in)	22.2	22.7	23.2	23.6	24.0	24.4	24.7	25.1	25.4
	9	Strength, (lbs/ft)	416	414	412	411	409	408	407	406	405
		Stiffeness, G', (10^3 lbs/in)	23.6	24.2	24.8	25.4	25.9	26.4	26.9	27.4	27.8
	6	Strength, (lbs/ft)	525	524	523	522	521	520	519	519	518
		Stiffeness, G', (10^3 lbs/in)	25.5	26.4	27.2	28.0	28.7	29.4	30.1	30.7	31.3
24/6	36	Strength, (lbs/ft)	225	218	212	207	202	197	193	190	186
		Stiffeness, G', (10^3 lbs/in)	21.7	22.0	22.2	22.4	22.6	22.7	22.7	22.8	22.8
	24	Strength, (lbs/ft)	280	273	267	261	256	252	248	244	241
		Stiffeness, G', (10^3 lbs/in)	22.5	22.9	23.2	23.5	23.8	24.0	24.1	24.3	24.4
	12	Strength, (lbs/ft)	428	422	416	411	406	402	398	394	391
		Stiffeness, G', (10^3 lbs/in)	24.4	25.0	25.6	26.1	26.6	27.0	27.4	27.8	28.1
	9	Strength, (lbs/ft)	506	500	495	491	487	483	479	476	473
		Stiffeness, G', (10^3 lbs/in)	25.3	26.1	26.8	27.4	28.0	28.5	29.0	29.5	30.0
	6	Strength, (lbs/ft)	633	629	625	622	619	616	613	611	609
		Stiffeness, G', (10^3 lbs/in)	26.7	27.7	28.5	29.3	30.1	30.8	31.5	32.2	32.8

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	176	174	171	169	168	166	165	163	162
		Stiffeness, G', (10^3 lbs/in)	22.7	22.6	22.5	22.3	22.2	22.1	21.9	21.8	21.6
	24	Strength, (lbs/ft)	241	239	237	235	233	232	230	229	228
		Stiffeness, G', (10^3 lbs/in)	25.0	25.0	25.1	25.1	25.0	25.0	25.0	24.9	24.9
	12	Strength, (lbs/ft)	407	405	403	401	399	398	396	395	394
		Stiffeness, G', (10^3 lbs/in)	30.3	30.7	31.1	31.4	31.7	31.9	32.2	32.4	32.6
	9	Strength, (lbs/ft)	495	493	491	490	488	487	486	485	484
		Stiffeness, G', (10^3 lbs/in)	32.9	33.5	34.0	34.5	35.0	35.4	35.8	36.1	36.5
	6	Strength, (lbs/ft)	628	626	625	624	623	622	622	621	620
		Stiffeness, G', (10^3 lbs/in)	36.9	37.7	38.5	39.2	39.9	40.6	41.2	41.8	42.3
24/6	36	Strength, (lbs/ft)	255	248	242	237	232	228	224	220	217
		Stiffeness, G', (10^3 lbs/in)	28.9	28.9	28.9	28.8	28.7	28.6	28.4	28.3	28.1
	24	Strength, (lbs/ft)	320	314	308	303	298	293	289	286	282
		Stiffeness, G', (10^3 lbs/in)	30.4	30.6	30.7	30.7	30.7	30.7	30.7	30.7	30.6
	12	Strength, (lbs/ft)	499	493	487	482	478	473	470	466	463
		Stiffeness, G', (10^3 lbs/in)	34.1	34.6	35.0	35.4	35.7	36.0	36.3	36.5	36.7
	9	Strength, (lbs/ft)	594	589	584	579	575	572	568	565	562
		Stiffeness, G', (10^3 lbs/in)	36.1	36.7	37.3	37.8	38.3	38.7	39.1	39.5	39.8
	6	Strength, (lbs/ft)	750	746	742	739	736	733	730	728	726
		Stiffeness, G', (10^3 lbs/in)	39.1	40.0	40.8	41.6	42.3	43.0	43.6	44.2	44.8

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.048 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	229	226	224	222	220	218	216	215	213
		Stiffeness, G', (10^3 lbs/in)	29.9	29.6	29.2	28.8	28.5	28.1	27.8	27.5	27.2
	24	Strength, (lbs/ft)	316	314	311	309	307	305	304	302	301
		Stiffeness, G', (10^3 lbs/in)	34.0	33.7	33.5	33.3	33.0	32.8	32.5	32.3	32.1
	12	Strength, (lbs/ft)	537	535	532	530	528	527	525	523	522
		Stiffeness, G', (10^3 lbs/in)	44.0	44.1	44.2	44.3	44.3	44.4	44.4	44.4	44.4
	9	Strength, (lbs/ft)	655	653	651	650	648	647	645	644	643
		Stiffeness, G', (10^3 lbs/in)	49.3	49.6	49.9	50.1	50.4	50.6	50.8	51.0	51.1
	6	Strength, (lbs/ft)	834	832	831	830	829	828	827	826	825
		Stiffeness, G', (10^3 lbs/in)	57.6	58.3	58.9	59.5	60.1	60.6	61.0	61.5	61.9
24/6	36	Strength, (lbs/ft)	323	316	310	304	298	293	289	285	281
		Stiffeness, G', (10^3 lbs/in)	40.2	39.7	39.3	38.8	38.3	37.9	37.4	36.9	36.5
	24	Strength, (lbs/ft)	411	404	397	391	386	381	376	372	368
		Stiffeness, G', (10^3 lbs/in)	43.3	43.0	42.7	42.3	42.0	41.6	41.3	40.9	40.6
	12	Strength, (lbs/ft)	650	643	637	631	626	621	617	613	609
		Stiffeness, G', (10^3 lbs/in)	51.1	51.2	51.2	51.2	51.2	51.2	51.2	51.1	51.1
	9	Strength, (lbs/ft)	779	773	767	762	758	753	749	746	742
		Stiffeness, G', (10^3 lbs/in)	55.3	55.6	55.9	56.1	56.3	56.5	56.6	56.7	56.8
	6	Strength, (lbs/ft)	990	985	981	977	974	971	968	965	962
		Stiffeness, G', (10^3 lbs/in)	62.1	62.8	63.5	64.0	64.5	65.0	65.5	65.9	66.2

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: #12 Screws **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	280	277	275	272	270	268	267	265	263
		Stiffeness, G', (10^3 lbs/in)	35.0	34.4	33.9	33.4	32.9	32.5	32.0	31.6	31.3
	24	Strength, (lbs/ft)	389	386	384	382	380	378	376	374	373
		Stiffeness, G', (10^3 lbs/in)	40.6	40.1	39.7	39.3	38.9	38.5	38.2	37.9	37.5
	12	Strength, (lbs/ft)	666	663	661	658	656	654	653	651	650
		Stiffeness, G', (10^3 lbs/in)	55.0	54.8	54.7	54.6	54.5	54.3	54.2	54.1	54.0
	9	Strength, (lbs/ft)	814	812	810	808	807	805	804	802	801
		Stiffeness, G', (10^3 lbs/in)	63.0	63.1	63.1	63.2	63.2	63.2	63.2	63.2	63.3
	6	Strength, (lbs/ft)	1 039	1 038	1 036	1 035	1 034	1 033	1 032	1 031	1 030
		Stiffeness, G', (10^3 lbs/in)	76.2	76.6	77.0	77.4	77.7	78.0	78.3	78.5	78.8
24/6	36	Strength, (lbs/ft)	387	380	373	367	361	356	351	346	342
		Stiffeness, G', (10^3 lbs/in)	48.3	47.4	46.7	45.9	45.2	44.5	43.8	43.1	42.5
	24	Strength, (lbs/ft)	496	489	482	476	470	465	460	456	451
		Stiffeness, G', (10^3 lbs/in)	52.9	52.2	51.5	50.9	50.3	49.7	49.1	48.6	48.1
	12	Strength, (lbs/ft)	797	789	783	777	771	766	761	757	752
		Stiffeness, G', (10^3 lbs/in)	64.9	64.6	64.3	64.0	63.7	63.4	63.1	62.9	62.6
	9	Strength, (lbs/ft)	959	953	947	942	937	932	928	924	920
		Stiffeness, G', (10^3 lbs/in)	71.7	71.6	71.5	71.4	71.3	71.2	71.1	71.0	70.9
	6	Strength, (lbs/ft)	1 227	1 222	1 218	1 213	1 210	1 206	1 203	1 200	1 197
		Stiffeness, G', (10^3 lbs/in)	83.0	83.4	83.7	83.9	84.2	84.4	84.6	84.7	84.9

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.030 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	36	Strength, (lbs/ft)	143	137	131	126	122	118	114	111	108
		Stiffeness, G', (10^3 lbs/in)	16.4	16.3	16.1	15.9	15.7	15.5	15.2	15.0	14.7
	24	Strength, (lbs/ft)	162	155	150	145	140	136	132	129	126
		Stiffeness, G', (10^3 lbs/in)	16.6	16.5	16.3	16.1	16.0	15.7	15.5	15.3	15.0
	12	Strength, (lbs/ft)	216	210	204	199	195	190	187	183	180
		Stiffeness, G', (10^3 lbs/in)	17.1	17.0	16.9	16.8	16.6	16.5	16.3	16.1	15.9
	9	Strength, (lbs/ft)	252	246	240	235	231	227	223	220	217
		Stiffeness, G', (10^3 lbs/in)	17.4	17.4	17.3	17.2	17.1	17.0	16.8	16.6	16.5
	6	Strength, (lbs/ft)	325	319	313	308	304	299	296	292	289
		Stiffeness, G', (10^3 lbs/in)	18.0	18.0	18.0	18.0	17.9	17.8	17.7	17.6	17.5
24/6	36	Strength, (lbs/ft)	251	238	227	217	208	199	192	185	179
		Stiffeness, G', (10^3 lbs/in)	21.0	21.1	21.2	21.2	21.2	21.1	21.0	20.8	20.7
	24	Strength, (lbs/ft)	269	256	245	235	226	218	210	203	197
		Stiffeness, G', (10^3 lbs/in)	21.1	21.2	21.3	21.4	21.3	21.3	21.2	21.0	20.9
	12	Strength, (lbs/ft)	323	311	299	289	280	272	265	258	252
		Stiffeness, G', (10^3 lbs/in)	21.4	21.6	21.7	21.7	21.8	21.7	21.7	21.6	21.5
	9	Strength, (lbs/ft)	360	347	336	326	317	308	301	294	288
		Stiffeness, G', (10^3 lbs/in)	21.5	21.8	21.9	22.0	22.0	22.0	22.0	21.9	21.8
	6	Strength, (lbs/ft)	432	420	408	398	389	381	374	367	361
		Stiffeness, G', (10^3 lbs/in)	21.9	22.1	22.3	22.5	22.6	22.6	22.6	22.6	22.5

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	163	157	152	147	143	139	135	132	129
		Stiffeness, G', (10^3 lbs/in)	19.9	19.5	19.1	18.7	18.3	17.9	17.5	17.2	16.8
	24	Strength, (lbs/ft)	189	183	178	173	169	165	161	158	155
		Stiffeness, G', (10^3 lbs/in)	20.2	19.8	19.4	19.1	18.7	18.3	17.9	17.6	17.2
	12	Strength, (lbs/ft)	267	262	256	252	247	243	240	236	233
		Stiffeness, G', (10^3 lbs/in)	21.0	20.7	20.4	20.1	19.7	19.4	19.1	18.7	18.4
	9	Strength, (lbs/ft)	320	314	309	304	300	296	292	289	286
		Stiffeness, G', (10^3 lbs/in)	21.6	21.3	21.0	20.7	20.4	20.1	19.8	19.5	19.2
	6	Strength, (lbs/ft)	422	416	411	406	402	398	394	390	387
		Stiffeness, G', (10^3 lbs/in)	22.6	22.4	22.2	21.9	21.7	21.4	21.2	20.9	20.7
24/6	36	Strength, (lbs/ft)	276	265	254	244	236	228	220	214	207
		Stiffeness, G', (10^3 lbs/in)	27.3	27.1	26.8	26.5	26.2	25.8	25.5	25.1	24.7
	24	Strength, (lbs/ft)	303	291	280	271	262	254	246	240	234
		Stiffeness, G', (10^3 lbs/in)	27.5	27.3	27.0	26.7	26.4	26.1	25.8	25.4	25.0
	12	Strength, (lbs/ft)	381	369	359	349	340	332	325	318	312
		Stiffeness, G', (10^3 lbs/in)	28.0	27.9	27.7	27.4	27.2	26.9	26.6	26.2	25.9
	9	Strength, (lbs/ft)	433	422	411	401	393	385	377	371	364
		Stiffeness, G', (10^3 lbs/in)	28.4	28.2	28.1	27.9	27.6	27.4	27.1	26.8	26.5
	6	Strength, (lbs/ft)	538	526	516	506	497	489	482	475	469
		Stiffeness, G', (10^3 lbs/in)	29.0	29.0	28.9	28.7	28.5	28.3	28.1	27.9	27.6

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.048 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	217	211	206	201	196	192	188	185	181
		Stiffeness, G', (10^3 lbs/in)	24.9	24.2	23.5	22.9	22.2	21.6	21.1	20.5	20.0
	24	Strength, (lbs/ft)	263	257	252	247	243	238	235	231	228
		Stiffeness, G', (10^3 lbs/in)	25.4	24.7	24.0	23.4	22.8	22.2	21.6	21.1	20.6
	12	Strength, (lbs/ft)	403	397	392	387	382	378	374	371	367
		Stiffeness, G', (10^3 lbs/in)	26.8	26.1	25.5	24.9	24.4	23.8	23.3	22.8	22.3
	9	Strength, (lbs/ft)	496	490	485	480	475	471	467	464	460
		Stiffeness, G', (10^3 lbs/in)	27.7	27.1	26.5	25.9	25.4	24.9	24.4	23.9	23.4
	6	Strength, (lbs/ft)	656	650	645	640	636	632	628	625	622
		Stiffeness, G', (10^3 lbs/in)	29.5	28.9	28.4	27.9	27.4	26.9	26.4	26.0	25.6
24/6	36	Strength, (lbs/ft)	352	339	328	318	308	300	292	284	278
		Stiffeness, G', (10^3 lbs/in)	36.8	36.0	35.3	34.5	33.8	33.0	32.3	31.6	30.9
	24	Strength, (lbs/ft)	398	386	374	364	355	346	338	331	324
		Stiffeness, G', (10^3 lbs/in)	37.2	36.4	35.7	34.9	34.2	33.5	32.7	32.1	31.4
	12	Strength, (lbs/ft)	538	525	514	504	494	486	478	470	464
		Stiffeness, G', (10^3 lbs/in)	38.2	37.5	36.8	36.1	35.4	34.7	34.1	33.4	32.8
	9	Strength, (lbs/ft)	631	618	607	597	587	579	571	563	557
		Stiffeness, G', (10^3 lbs/in)	38.9	38.2	37.6	36.9	36.2	35.6	34.9	34.3	33.7
	6	Strength, (lbs/ft)	812	800	789	779	769	760	752	745	738
		Stiffeness, G', (10^3 lbs/in)	40.2	39.6	39.0	38.4	37.8	37.2	36.6	36.1	35.5

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: Button Punch **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	276	270	265	260	256	252	248	244	241
		Stiffeness, G', (10^3 lbs/in)	27.8	26.9	26.1	25.3	24.6	23.9	23.2	22.6	22.0
	24	Strength, (lbs/ft)	349	343	338	333	329	324	321	317	314
		Stiffeness, G', (10^3 lbs/in)	28.4	27.6	26.8	26.0	25.3	24.6	23.9	23.3	22.8
	12	Strength, (lbs/ft)	567	561	556	551	546	542	539	535	532
		Stiffeness, G', (10^3 lbs/in)	30.3	29.5	28.7	28.0	27.3	26.6	26.0	25.4	24.9
	9	Strength, (lbs/ft)	700	694	689	684	679	675	671	667	664
		Stiffeness, G', (10^3 lbs/in)	31.5	30.8	30.0	29.3	28.6	28.0	27.4	26.8	26.3
	6	Strength, (lbs/ft)	932	927	922	918	914	910	907	904	901
		Stiffeness, G', (10^3 lbs/in)	33.9	33.2	32.5	31.8	31.2	30.6	30.0	29.5	29.0
24/6	36	Strength, (lbs/ft)	427	415	404	393	384	375	367	359	352
		Stiffeness, G', (10^3 lbs/in)	42.9	41.8	40.7	39.6	38.6	37.6	36.7	35.8	35.0
	24	Strength, (lbs/ft)	500	488	476	466	456	447	439	432	424
		Stiffeness, G', (10^3 lbs/in)	43.4	42.3	41.2	40.2	39.2	38.2	37.3	36.4	35.6
	12	Strength, (lbs/ft)	718	705	694	684	674	665	657	650	642
		Stiffeness, G', (10^3 lbs/in)	44.9	43.9	42.8	41.8	40.9	40.0	39.1	38.2	37.4
	9	Strength, (lbs/ft)	863	851	840	829	820	811	803	795	788
		Stiffeness, G', (10^3 lbs/in)	45.9	44.9	43.9	42.9	42.0	41.1	40.2	39.4	38.6
	6	Strength, (lbs/ft)	1 116	1 105	1 094	1 084	1 075	1 066	1 059	1 051	1 044
		Stiffeness, G', (10^3 lbs/in)	47.9	46.9	46.0	45.1	44.2	43.3	42.5	41.7	41.0

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.030 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	36	Strength, (lbs/ft)	189	184	180	176	173	170	167	165	162
		Stiffeness, G', (10^3 lbs/in)	18.2	18.3	18.4	18.4	18.4	18.4	18.4	18.4	18.4
	24	Strength, (lbs/ft)	244	239	235	231	228	225	222	219	217
		Stiffeness, G', (10^3 lbs/in)	19.4	19.7	19.9	20.1	20.2	20.3	20.4	20.5	20.6
	12	Strength, (lbs/ft)	399	394	390	386	383	380	377	374	372
		Stiffeness, G', (10^3 lbs/in)	22.3	22.8	23.3	23.8	24.2	24.6	24.9	25.2	25.5
	9	Strength, (lbs/ft)	484	480	476	473	469	467	464	462	459
		Stiffeness, G', (10^3 lbs/in)	23.7	24.3	25.0	25.5	26.1	26.6	27.0	27.5	27.9
	6	Strength, (lbs/ft)	628	625	621	619	616	614	612	610	608
		Stiffeness, G', (10^3 lbs/in)	25.6	26.5	27.3	28.1	28.8	29.5	30.2	30.8	31.4
24/6	36	Strength, (lbs/ft)	296	285	275	267	259	252	245	239	234
		Stiffeness, G', (10^3 lbs/in)	22.0	22.3	22.5	22.7	22.9	23.0	23.1	23.1	23.1
	24	Strength, (lbs/ft)	351	340	330	321	313	306	300	294	288
		Stiffeness, G', (10^3 lbs/in)	22.7	23.2	23.5	23.8	24.0	24.3	24.4	24.6	24.7
	12	Strength, (lbs/ft)	515	504	494	485	477	470	464	458	452
		Stiffeness, G', (10^3 lbs/in)	24.5	25.2	25.8	26.3	26.8	27.2	27.6	28.0	28.3
	9	Strength, (lbs/ft)	606	596	587	578	571	564	558	552	547
		Stiffeness, G', (10^3 lbs/in)	25.5	26.2	26.9	27.5	28.1	28.7	29.2	29.7	30.2
	6	Strength, (lbs/ft)	761	752	744	737	731	725	720	715	711
		Stiffeness, G', (10^3 lbs/in)	26.8	27.8	28.6	29.4	30.2	30.9	31.6	32.3	32.9

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.036 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	36	Strength, (lbs/ft)	215	211	207	203	200	197	194	192	189
		Stiffeness, G', (10^3 lbs/in)	23.1	23.0	22.9	22.8	22.6	22.5	22.3	22.2	22.0
	24	Strength, (lbs/ft)	281	276	272	269	266	262	260	257	255
		Stiffeness, G', (10^3 lbs/in)	25.3	25.4	25.4	25.4	25.4	25.4	25.3	25.3	25.2
	12	Strength, (lbs/ft)	467	462	458	455	451	448	445	442	440
		Stiffeness, G', (10^3 lbs/in)	30.5	30.9	31.3	31.6	31.9	32.2	32.4	32.6	32.8
	9	Strength, (lbs/ft)	570	566	562	559	556	553	550	548	546
		Stiffeness, G', (10^3 lbs/in)	33.1	33.7	34.2	34.7	35.2	35.6	36.0	36.3	36.7
	6	Strength, (lbs/ft)	744	741	738	735	733	731	728	727	725
		Stiffeness, G', (10^3 lbs/in)	37.0	37.8	38.6	39.4	40.1	40.7	41.3	41.9	42.5
24/6	36	Strength, (lbs/ft)	329	319	309	301	293	286	279	273	268
		Stiffeness, G', (10^3 lbs/in)	29.3	29.4	29.3	29.3	29.2	29.1	28.9	28.8	28.6
	24	Strength, (lbs/ft)	395	384	375	366	358	351	345	339	334
		Stiffeness, G', (10^3 lbs/in)	30.8	31.0	31.1	31.2	31.2	31.2	31.2	31.1	31.1
	12	Strength, (lbs/ft)	591	581	571	563	555	548	542	536	530
		Stiffeness, G', (10^3 lbs/in)	34.4	34.9	35.3	35.7	36.0	36.3	36.6	36.8	37.0
	9	Strength, (lbs/ft)	702	692	683	675	668	661	655	649	644
		Stiffeness, G', (10^3 lbs/in)	36.3	37.0	37.6	38.1	38.6	39.0	39.4	39.8	40.1
	6	Strength, (lbs/ft)	891	883	875	868	862	856	851	846	841
		Stiffeness, G', (10^3 lbs/in)	39.2	40.1	41.0	41.8	42.5	43.2	43.8	44.4	45.0

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.048 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	36	Strength, (lbs/ft)	274	269	265	261	257	254	251	248	246
		Stiffeness, G', (10^3 lbs/in)	30.6	30.2	29.8	29.4	29.1	28.7	28.4	28.0	27.7
	24	Strength, (lbs/ft)	362	357	352	348	345	342	338	336	333
		Stiffeness, G', (10^3 lbs/in)	34.6	34.3	34.0	33.8	33.5	33.3	33.1	32.8	32.6
	12	Strength, (lbs/ft)	608	604	599	595	591	588	585	582	579
		Stiffeness, G', (10^3 lbs/in)	44.4	44.5	44.6	44.7	44.7	44.8	44.8	44.8	44.8
	9	Strength, (lbs/ft)	747	742	738	734	731	728	725	722	720
		Stiffeness, G', (10^3 lbs/in)	49.6	49.9	50.2	50.5	50.7	50.9	51.1	51.3	51.5
	6	Strength, (lbs/ft)	979	976	972	969	967	964	962	960	958
		Stiffeness, G', (10^3 lbs/in)	57.9	58.6	59.2	59.8	60.3	60.8	61.3	61.7	62.1
24/6	36	Strength, (lbs/ft)	409	398	387	378	370	362	355	348	342
		Stiffeness, G', (10^3 lbs/in)	41.0	40.6	40.1	39.6	39.1	38.7	38.2	37.7	37.3
	24	Strength, (lbs/ft)	496	485	475	466	457	449	442	435	429
		Stiffeness, G', (10^3 lbs/in)	44.0	43.7	43.4	43.1	42.7	42.4	42.0	41.7	41.3
	12	Strength, (lbs/ft)	758	747	737	728	719	711	704	698	691
		Stiffeness, G', (10^3 lbs/in)	51.7	51.7	51.8	51.8	51.8	51.8	51.8	51.7	51.6
	9	Strength, (lbs/ft)	906	896	886	877	869	861	854	848	842
		Stiffeness, G', (10^3 lbs/in)	55.8	56.1	56.4	56.6	56.8	57.0	57.1	57.2	57.3
	6	Strength, (lbs/ft)	1 161	1 152	1 143	1 136	1 129	1 123	1 117	1 111	1 106
		Stiffeness, G', (10^3 lbs/in)	62.5	63.2	63.8	64.4	64.9	65.4	65.8	66.2	66.6

3.0 in. deck - 24 in. wide - 8 in. flute spacing **Thickness = 0.060 in.**

Support connection: Hilti ENP2K, X-EDNK22 **Limit States Design – FACTORED RESISTANCE**

Side-lap connection: #10 Screws **ϕ = 0.50**

SDI METHOD – IMPERIAL

Support Connection Pattern	Side Lap Spacing (in.)		Span (ft)								
			11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	36	Strength, (lbs/ft)	329	324	320	316	312	309	305	302	300
		Stiffeness, G', (10^3 lbs/in)	35.8	35.2	34.6	34.1	33.6	33.2	32.7	32.3	31.9
	24	Strength, (lbs/ft)	438	434	429	425	421	418	415	412	409
		Stiffeness, G', (10^3 lbs/in)	41.3	40.8	40.4	40.0	39.6	39.2	38.8	38.5	38.1
	12	Strength, (lbs/ft)	746	741	736	732	728	724	721	718	715
		Stiffeness, G', (10^3 lbs/in)	55.5	55.4	55.3	55.1	55.0	54.9	54.7	54.6	54.5
	9	Strength, (lbs/ft)	919	914	910	906	903	900	896	894	891
		Stiffeness, G', (10^3 lbs/in)	63.5	63.5	63.6	63.6	63.7	63.7	63.7	63.7	63.7
	6	Strength, (lbs/ft)	1 209	1 206	1 203	1 200	1 197	1 194	1 192	1 190	1 188
		Stiffeness, G', (10^3 lbs/in)	76.6	77.0	77.4	77.7	78.1	78.4	78.6	78.9	79.1
24/6	36	Strength, (lbs/ft)	480	469	458	449	440	432	424	417	410
		Stiffeness, G', (10^3 lbs/in)	49.4	48.5	47.7	47.0	46.2	45.5	44.8	44.1	43.5
	24	Strength, (lbs/ft)	590	578	568	558	549	541	533	526	520
		Stiffeness, G', (10^3 lbs/in)	53.9	53.2	52.5	51.9	51.3	50.7	50.1	49.5	49.0
	12	Strength, (lbs/ft)	917	906	895	886	877	869	861	854	847
		Stiffeness, G', (10^3 lbs/in)	65.7	65.4	65.1	64.8	64.5	64.2	63.9	63.6	63.3
	9	Strength, (lbs/ft)	1 102	1 091	1 081	1 072	1 063	1 055	1 047	1 040	1 034
		Stiffeness, G', (10^3 lbs/in)	72.4	72.3	72.3	72.2	72.1	71.9	71.8	71.7	71.5
	6	Strength, (lbs/ft)	1 422	1 413	1 404	1 396	1 389	1 382	1 376	1 370	1 365
		Stiffeness, G', (10^3 lbs/in)	83.6	84.0	84.2	84.5	84.7	84.9	85.1	85.3	85.4

1.5 in. deck - 36 in. wide - 6 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	Strength, (lbs/ft)	2 960	2 890	2 837	2 796	2 763	2 737	2 714	2 695	2 679
	Stiffeness, G', (10^3 lbs/in)	2 464	2 455	2 448	2 443	2 438	2 434	2 430	2 427	2 424
36/7	Strength, (lbs/ft)	3 171	3 071	2 995	2 937	2 890	2 852	2 820	2 793	2 770
	Stiffeness, G', (10^3 lbs/in)	2 488	2 479	2 471	2 464	2 458	2 453	2 449	2 445	2 441
36/9	Strength, (lbs/ft)	3 646	3 477	3 351	3 253	3 175	3 111	3 057	3 012	2 973
	Stiffeness, G', (10^3 lbs/in)	2 514	2 504	2 496	2 489	2 482	2 476	2 471	2 466	2 462

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	Strength, (lbs/ft)	2 924	2 876	2 838	2 806	2 780	2 758	2 739	2 723	2 708
	Stiffeness, G', (10^3 lbs/in)	2 457	2 451	2 445	2 440	2 436	2 433	2 429	2 427	2 424
36/7	Strength, (lbs/ft)	3 113	3 044	2 989	2 943	2 906	2 874	2 847	2 823	2 803
	Stiffeness, G', (10^3 lbs/in)	2 484	2 476	2 469	2 463	2 458	2 453	2 449	2 445	2 442
36/9	Strength, (lbs/ft)	3 536	3 420	3 328	3 252	3 188	3 135	3 089	3 049	3 014
	Stiffeness, G', (10^3 lbs/in)	2 513	2 504	2 497	2 490	2 484	2 478	2 473	2 469	2 465

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	Strength, (lbs/ft)	2 992	2 952	2 919	2 891	2 866	2 846	2 827	2 811	2 797
	Stiffeness, G', (10^3 lbs/in)	2 458	2 453	2 447	2 443	2 439	2 436	2 433	2 430	2 427
36/7	Strength, (lbs/ft)	3 189	3 131	3 083	3 042	3 008	2 977	2 951	2 927	2 907
	Stiffeness, G', (10^3 lbs/in)	2 488	2 480	2 474	2 468	2 463	2 459	2 455	2 451	2 448
36/9	Strength, (lbs/ft)	3 634	3 535	3 454	3 384	3 325	3 274	3 229	3 189	3 154
	Stiffeness, G', (10^3 lbs/in)	2 523	2 514	2 507	2 500	2 494	2 488	2 483	2 478	2 474

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	Strength, (lbs/ft)	3 065	3 032	3 003	2 978	2 957	2 938	2 921	2 906	2 892
	Stiffeness, G', (10^3 lbs/in)	2 457	2 452	2 448	2 444	2 440	2 437	2 434	2 432	2 429
36/7	Strength, (lbs/ft)	3 267	3 218	3 176	3 140	3 108	3 080	3 056	3 033	3 013
	Stiffeness, G', (10^3 lbs/in)	2 488	2 482	2 476	2 471	2 466	2 462	2 458	2 454	2 451
36/9	Strength, (lbs/ft)	3 722	3 638	3 567	3 504	3 450	3 402	3 359	3 321	3 286
	Stiffeness, G', (10^3 lbs/in)	2 527	2 519	2 512	2 505	2 499	2 494	2 489	2 484	2 480

1.5 in. deck - 36 in. wide - 6 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	Strength, (lbs/ft)	2 996	2 937	2 892	2 857	2 829	2 806	2 787	2 771	2 757
	Stiffeness, G', (10^3 lbs/in)	2 467	2 461	2 455	2 450	2 446	2 443	2 440	2 438	2 435
36/7	Strength, (lbs/ft)	3 207	3 117	3 050	2 998	2 956	2 921	2 893	2 868	2 848
	Stiffeness, G', (10^3 lbs/in)	2 491	2 483	2 476	2 470	2 465	2 461	2 457	2 454	2 451
36/9	Strength, (lbs/ft)	3 682	3 524	3 406	3 314	3 240	3 180	3 130	3 088	3 051
	Stiffeness, G', (10^3 lbs/in)	2 516	2 507	2 499	2 493	2 487	2 482	2 478	2 474	2 470

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	Strength, (lbs/ft)	2 983	2 942	2 909	2 882	2 859	2 840	2 824	2 809	2 797
	Stiffeness, G', (10^3 lbs/in)	2 465	2 459	2 455	2 451	2 448	2 445	2 442	2 440	2 438
36/7	Strength, (lbs/ft)	3 172	3 109	3 059	3 019	2 985	2 956	2 931	2 910	2 891
	Stiffeness, G', (10^3 lbs/in)	2 489	2 483	2 477	2 472	2 467	2 464	2 460	2 457	2 455
36/9	Strength, (lbs/ft)	3 595	3 486	3 398	3 327	3 267	3 217	3 173	3 136	3 103
	Stiffeness, G', (10^3 lbs/in)	2 517	2 509	2 503	2 497	2 491	2 487	2 482	2 479	2 475

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	Strength, (lbs/ft)	3 065	3 030	3 000	2 975	2 954	2 936	2 919	2 905	2 892
	Stiffeness, G', (10^3 lbs/in)	2 470	2 466	2 462	2 458	2 455	2 452	2 450	2 448	2 446
36/7	Strength, (lbs/ft)	3 263	3 209	3 165	3 127	3 095	3 067	3 043	3 021	3 002
	Stiffeness, G', (10^3 lbs/in)	2 498	2 492	2 486	2 481	2 477	2 473	2 470	2 467	2 464
36/9	Strength, (lbs/ft)	3 707	3 613	3 535	3 469	3 413	3 364	3 321	3 283	3 249
	Stiffeness, G', (10^3 lbs/in)	2 531	2 523	2 516	2 510	2 505	2 500	2 496	2 492	2 488

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	Strength, (lbs/ft)	3 138	3 108	3 082	3 059	3 039	3 022	3 006	2 992	2 980
	Stiffeness, G', (10^3 lbs/in)	2 474	2 470	2 466	2 463	2 460	2 458	2 456	2 454	2 452
36/7	Strength, (lbs/ft)	3 340	3 294	3 255	3 221	3 191	3 164	3 141	3 120	3 101
	Stiffeness, G', (10^3 lbs/in)	2 503	2 497	2 492	2 488	2 484	2 480	2 477	2 474	2 471
36/9	Strength, (lbs/ft)	3 795	3 714	3 645	3 585	3 532	3 486	3 444	3 407	3 374
	Stiffeness, G', (10^3 lbs/in)	2 539	2 532	2 525	2 520	2 514	2 510	2 505	2 501	2 498

1.5 in. deck - 36 in. wide - 6 in. flute spacing
Support connection: #12 Screws
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	Strength, (lbs/ft)	2 690	2 658	2 634	2 616	2 601	2 589	2 579	2 571	2 563
	Stiffeness, G', (10^3 lbs/in)	2 457	2 449	2 442	2 437	2 432	2 428	2 425	2 422	2 419
36/7	Strength, (lbs/ft)	2 793	2 746	2 712	2 685	2 663	2 645	2 631	2 618	2 607
	Stiffeness, G', (10^3 lbs/in)	2 481	2 471	2 464	2 457	2 452	2 447	2 443	2 439	2 436
36/9	Strength, (lbs/ft)	3 024	2 945	2 885	2 839	2 802	2 772	2 746	2 725	2 707
	Stiffeness, G', (10^3 lbs/in)	2 506	2 496	2 488	2 481	2 475	2 469	2 464	2 460	2 456

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	Strength, (lbs/ft)	2 685	2 664	2 646	2 632	2 621	2 611	2 603	2 595	2 589
	Stiffeness, G', (10^3 lbs/in)	2 450	2 444	2 439	2 434	2 431	2 427	2 424	2 422	2 419
36/7	Strength, (lbs/ft)	2 778	2 746	2 721	2 700	2 683	2 668	2 655	2 645	2 635
	Stiffeness, G', (10^3 lbs/in)	2 475	2 468	2 461	2 456	2 451	2 446	2 443	2 439	2 436
36/9	Strength, (lbs/ft)	2 986	2 931	2 887	2 851	2 822	2 796	2 775	2 756	2 739
	Stiffeness, G', (10^3 lbs/in)	2 504	2 495	2 488	2 481	2 475	2 470	2 466	2 461	2 458

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	Strength, (lbs/ft)	2 745	2 727	2 713	2 701	2 690	2 681	2 673	2 666	2 660
	Stiffeness, G', (10^3 lbs/in)	2 451	2 445	2 441	2 437	2 433	2 430	2 427	2 425	2 422
36/7	Strength, (lbs/ft)	2 844	2 817	2 795	2 777	2 761	2 747	2 735	2 724	2 715
	Stiffeness, G', (10^3 lbs/in)	2 478	2 471	2 465	2 460	2 455	2 451	2 447	2 444	2 441
36/9	Strength, (lbs/ft)	3 066	3 019	2 981	2 948	2 920	2 895	2 874	2 855	2 838
	Stiffeness, G', (10^3 lbs/in)	2 512	2 504	2 496	2 490	2 484	2 479	2 474	2 469	2 466

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	Strength, (lbs/ft)	2 817	2 803	2 790	2 780	2 771	2 762	2 755	2 749	2 743
	Stiffeness, G', (10^3 lbs/in)	2 450	2 445	2 441	2 437	2 434	2 431	2 429	2 426	2 424
36/7	Strength, (lbs/ft)	2 920	2 898	2 879	2 862	2 848	2 835	2 824	2 814	2 805
	Stiffeness, G', (10^3 lbs/in)	2 478	2 472	2 467	2 462	2 457	2 453	2 450	2 447	2 444
36/9	Strength, (lbs/ft)	3 151	3 111	3 077	3 048	3 022	2 999	2 978	2 960	2 944
	Stiffeness, G', (10^3 lbs/in)	2 515	2 507	2 500	2 494	2 488	2 483	2 479	2 474	2 470

1.5 in. deck - 36 in. wide - 6 in. flute spacing
Support connection: #12 Screws
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	Strength, (lbs/ft)	2 726	2 705	2 689	2 677	2 667	2 659	2 652	2 646	2 641
	Stiffeness, G', (10^3 lbs/in)	2 461	2 454	2 449	2 445	2 441	2 438	2 436	2 433	2 431
36/7	Strength, (lbs/ft)	2 829	2 793	2 766	2 745	2 729	2 715	2 704	2 694	2 686
	Stiffeness, G', (10^3 lbs/in)	2 484	2 476	2 469	2 464	2 459	2 455	2 452	2 449	2 446
36/9	Strength, (lbs/ft)	3 061	2 992	2 940	2 900	2 868	2 841	2 819	2 801	2 785
	Stiffeness, G', (10^3 lbs/in)	2 508	2 499	2 492	2 486	2 480	2 475	2 471	2 467	2 464

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	Strength, (lbs/ft)	2 744	2 729	2 717	2 708	2 700	2 693	2 687	2 682	2 677
	Stiffeness, G', (10^3 lbs/in)	2 458	2 453	2 449	2 446	2 443	2 440	2 438	2 436	2 434
36/7	Strength, (lbs/ft)	2 837	2 812	2 792	2 775	2 761	2 750	2 740	2 731	2 724
	Stiffeness, G', (10^3 lbs/in)	2 481	2 475	2 470	2 465	2 461	2 458	2 454	2 452	2 449
36/9	Strength, (lbs/ft)	3 045	2 997	2 958	2 927	2 900	2 878	2 859	2 842	2 828
	Stiffeness, G', (10^3 lbs/in)	2 508	2 501	2 494	2 489	2 484	2 479	2 475	2 472	2 468

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	Strength, (lbs/ft)	2 818	2 806	2 795	2 786	2 778	2 771	2 765	2 760	2 755
	Stiffeness, G', (10^3 lbs/in)	2 463	2 459	2 456	2 452	2 450	2 447	2 445	2 443	2 441
36/7	Strength, (lbs/ft)	2 917	2 895	2 877	2 862	2 848	2 837	2 827	2 818	2 810
	Stiffeness, G', (10^3 lbs/in)	2 489	2 483	2 478	2 474	2 470	2 466	2 463	2 461	2 458
36/9	Strength, (lbs/ft)	3 140	3 098	3 062	3 033	3 007	2 985	2 966	2 949	2 934
	Stiffeness, G', (10^3 lbs/in)	2 520	2 513	2 507	2 501	2 496	2 491	2 487	2 484	2 480

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	Strength, (lbs/ft)	2 890	2 879	2 869	2 860	2 853	2 846	2 841	2 835	2 831
	Stiffeness, G', (10^3 lbs/in)	2 467	2 463	2 460	2 457	2 455	2 452	2 450	2 449	2 447
36/7	Strength, (lbs/ft)	2 993	2 974	2 957	2 943	2 930	2 919	2 909	2 900	2 892
	Stiffeness, G', (10^3 lbs/in)	2 493	2 488	2 484	2 480	2 476	2 473	2 470	2 467	2 465
36/9	Strength, (lbs/ft)	3 225	3 187	3 156	3 128	3 104	3 083	3 064	3 047	3 031
	Stiffeness, G', (10^3 lbs/in)	2 527	2 520	2 514	2 509	2 504	2 500	2 496	2 492	2 489

1.5 in. deck - 36 in. wide - 6 in. flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	Strength, (lbs/ft)	2 806	2 758	2 722	2 693	2 671	2 653	2 637	2 624	2 613
	Stiffeness, G', (10^3 lbs/in)	2 459	2 451	2 444	2 439	2 434	2 430	2 427	2 424	2 421
36/7	Strength, (lbs/ft)	2 955	2 886	2 834	2 793	2 761	2 734	2 712	2 693	2 677
	Stiffeness, G', (10^3 lbs/in)	2 483	2 474	2 466	2 459	2 454	2 449	2 445	2 441	2 437
36/9	Strength, (lbs/ft)	3 292	3 174	3 086	3 017	2 962	2 918	2 880	2 848	2 821
	Stiffeness, G', (10^3 lbs/in)	2 509	2 499	2 491	2 483	2 477	2 471	2 466	2 462	2 458

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	Strength, (lbs/ft)	2 788	2 755	2 729	2 707	2 689	2 674	2 661	2 650	2 640
	Stiffeness, G', (10^3 lbs/in)	2 453	2 446	2 441	2 436	2 432	2 429	2 426	2 423	2 421
36/7	Strength, (lbs/ft)	2 921	2 874	2 835	2 804	2 778	2 756	2 738	2 721	2 707
	Stiffeness, G', (10^3 lbs/in)	2 478	2 470	2 464	2 458	2 453	2 449	2 445	2 441	2 438
36/9	Strength, (lbs/ft)	3 222	3 141	3 076	3 023	2 979	2 941	2 909	2 882	2 857
	Stiffeness, G', (10^3 lbs/in)	2 507	2 498	2 491	2 484	2 478	2 473	2 468	2 464	2 460

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	Strength, (lbs/ft)	2 850	2 823	2 800	2 781	2 765	2 751	2 739	2 728	2 718
	Stiffeness, G', (10^3 lbs/in)	2 453	2 448	2 443	2 439	2 435	2 432	2 429	2 426	2 424
36/7	Strength, (lbs/ft)	2 991	2 951	2 918	2 890	2 866	2 845	2 827	2 811	2 796
	Stiffeness, G', (10^3 lbs/in)	2 481	2 474	2 468	2 463	2 458	2 454	2 450	2 446	2 443
36/9	Strength, (lbs/ft)	3 307	3 239	3 182	3 134	3 092	3 056	3 025	2 997	2 972
	Stiffeness, G', (10^3 lbs/in)	2 515	2 507	2 499	2 493	2 487	2 482	2 477	2 472	2 468

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	Strength, (lbs/ft)	2 922	2 899	2 880	2 864	2 849	2 836	2 825	2 815	2 806
	Stiffeness, G', (10^3 lbs/in)	2 452	2 447	2 443	2 439	2 436	2 433	2 430	2 428	2 426
36/7	Strength, (lbs/ft)	3 066	3 033	3 004	2 979	2 958	2 939	2 922	2 906	2 893
	Stiffeness, G', (10^3 lbs/in)	2 481	2 475	2 469	2 464	2 460	2 456	2 452	2 449	2 446
36/9	Strength, (lbs/ft)	3 392	3 334	3 284	3 240	3 202	3 169	3 139	3 112	3 088
	Stiffeness, G', (10^3 lbs/in)	2 519	2 511	2 504	2 497	2 492	2 486	2 482	2 477	2 473

1.5 in. deck - 36 in. wide - 6 in. flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
36/4	Strength, (lbs/ft)	2 842	2 805	2 776	2 754	2 737	2 722	2 710	2 700	2 691
	Stiffeness, G', (10^3 lbs/in)	2 463	2 456	2 451	2 447	2 443	2 440	2 437	2 435	2 433
36/7	Strength, (lbs/ft)	2 992	2 933	2 888	2 854	2 826	2 804	2 785	2 769	2 755
	Stiffeness, G', (10^3 lbs/in)	2 486	2 478	2 471	2 466	2 461	2 457	2 453	2 450	2 447
36/9	Strength, (lbs/ft)	3 328	3 221	3 141	3 078	3 028	2 987	2 953	2 924	2 899
	Stiffeness, G', (10^3 lbs/in)	2 511	2 502	2 494	2 488	2 482	2 477	2 473	2 469	2 466

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
36/4	Strength, (lbs/ft)	2 847	2 820	2 799	2 782	2 768	2 756	2 746	2 737	2 729
	Stiffeness, G', (10^3 lbs/in)	2 460	2 455	2 451	2 447	2 444	2 442	2 439	2 437	2 435
36/7	Strength, (lbs/ft)	2 980	2 939	2 906	2 880	2 857	2 838	2 822	2 808	2 796
	Stiffeness, G', (10^3 lbs/in)	2 484	2 477	2 472	2 467	2 463	2 459	2 456	2 453	2 451
36/9	Strength, (lbs/ft)	3 281	3 207	3 147	3 098	3 058	3 023	2 994	2 968	2 946
	Stiffeness, G', (10^3 lbs/in)	2 511	2 504	2 497	2 491	2 486	2 482	2 478	2 474	2 471

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0
36/4	Strength, (lbs/ft)	2 923	2 901	2 882	2 866	2 853	2 841	2 831	2 822	2 814
	Stiffeness, G', (10^3 lbs/in)	2 466	2 461	2 457	2 454	2 451	2 449	2 447	2 445	2 443
36/7	Strength, (lbs/ft)	3 064	3 029	3 000	2 975	2 953	2 935	2 919	2 905	2 892
	Stiffeness, G', (10^3 lbs/in)	2 492	2 486	2 481	2 476	2 472	2 469	2 465	2 463	2 460
36/9	Strength, (lbs/ft)	3 381	3 317	3 264	3 218	3 180	3 146	3 117	3 091	3 068
	Stiffeness, G', (10^3 lbs/in)	2 524	2 516	2 510	2 504	2 499	2 494	2 490	2 486	2 483

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
36/4	Strength, (lbs/ft)	2 995	2 975	2 959	2 944	2 931	2 920	2 910	2 902	2 894
	Stiffeness, G', (10^3 lbs/in)	2 469	2 465	2 462	2 459	2 456	2 454	2 452	2 450	2 448
36/7	Strength, (lbs/ft)	3 140	3 109	3 083	3 060	3 040	3 023	3 007	2 993	2 980
	Stiffeness, G', (10^3 lbs/in)	2 496	2 491	2 486	2 482	2 478	2 475	2 472	2 469	2 467
36/9	Strength, (lbs/ft)	3 465	3 410	3 362	3 321	3 284	3 253	3 224	3 199	3 176
	Stiffeness, G', (10^3 lbs/in)	2 531	2 524	2 518	2 512	2 507	2 503	2 499	2 495	2 492

3.0 in. deck - 24 in. wide - 6 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	Strength, (lbs/ft)	2 633	2 623	2 615	2 607	2 600	2 594	2 588	2 583	2 578
	Stiffeness, G', (10^3 lbs/in)	2 399	2 398	2 397	2 396	2 395	2 394	2 394	2 393	2 392
24/5	Strength, (lbs/ft)	2 678	2 665	2 654	2 645	2 636	2 628	2 621	2 614	2 608
	Stiffeness, G', (10^3 lbs/in)	2 408	2 406	2 405	2 404	2 403	2 402	2 401	2 400	2 399
24/7	Strength, (lbs/ft)	2 856	2 833	2 813	2 794	2 778	2 763	2 750	2 738	2 727
	Stiffeness, G', (10^3 lbs/in)	2 423	2 421	2 419	2 418	2 416	2 414	2 413	2 412	2 411

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	Strength, (lbs/ft)	2 663	2 654	2 646	2 639	2 632	2 626	2 621	2 616	2 611
	Stiffeness, G', (10^3 lbs/in)	2 399	2 398	2 397	2 396	2 395	2 395	2 394	2 393	2 393
24/5	Strength, (lbs/ft)	2 711	2 699	2 689	2 679	2 671	2 663	2 656	2 650	2 643
	Stiffeness, G', (10^3 lbs/in)	2 408	2 407	2 406	2 404	2 403	2 402	2 401	2 401	2 400
24/7	Strength, (lbs/ft)	2 899	2 878	2 858	2 841	2 825	2 811	2 797	2 785	2 774
	Stiffeness, G', (10^3 lbs/in)	2 424	2 422	2 421	2 419	2 417	2 416	2 415	2 414	2 412

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	Strength, (lbs/ft)	2 748	2 739	2 730	2 723	2 716	2 709	2 703	2 698	2 692
	Stiffeness, G', (10^3 lbs/in)	2 401	2 400	2 399	2 398	2 397	2 396	2 396	2 395	2 395
24/5	Strength, (lbs/ft)	2 803	2 792	2 781	2 771	2 762	2 753	2 746	2 739	2 732
	Stiffeness, G', (10^3 lbs/in)	2 411	2 409	2 408	2 407	2 406	2 405	2 404	2 403	2 402
24/7	Strength, (lbs/ft)	3 026	3 003	2 983	2 964	2 947	2 931	2 917	2 903	2 891
	Stiffeness, G', (10^3 lbs/in)	2 429	2 427	2 425	2 423	2 422	2 420	2 419	2 418	2 416

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	Strength, (lbs/ft)	2 841	2 832	2 823	2 816	2 809	2 802	2 796	2 790	2 785
	Stiffeness, G', (10^3 lbs/in)	2 402	2 401	2 400	2 399	2 398	2 398	2 397	2 396	2 396
24/5	Strength, (lbs/ft)	2 903	2 891	2 880	2 870	2 861	2 853	2 845	2 837	2 831
	Stiffeness, G', (10^3 lbs/in)	2 412	2 411	2 410	2 409	2 408	2 407	2 406	2 405	2 404
24/7	Strength, (lbs/ft)	3 151	3 128	3 108	3 089	3 071	3 055	3 040	3 026	3 013
	Stiffeness, G', (10^3 lbs/in)	2 432	2 430	2 428	2 427	2 425	2 423	2 422	2 421	2 419

3.0 in. deck - 24 in. wide - 6 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	Strength, (lbs/ft)	2 715	2 707	2 700	2 693	2 688	2 682	2 678	2 673	2 669
	Stiffeness, G', (10^3 lbs/in)	2 408	2 407	2 407	2 406	2 405	2 405	2 404	2 404	2 403
24/5	Strength, (lbs/ft)	2 760	2 749	2 739	2 731	2 723	2 716	2 710	2 704	2 699
	Stiffeness, G', (10^3 lbs/in)	2 416	2 415	2 414	2 413	2 412	2 411	2 411	2 410	2 409
24/7	Strength, (lbs/ft)	2 938	2 916	2 898	2 881	2 866	2 852	2 840	2 828	2 818
	Stiffeness, G', (10^3 lbs/in)	2 430	2 428	2 427	2 425	2 424	2 423	2 422	2 421	2 420

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	Strength, (lbs/ft)	2 755	2 748	2 741	2 735	2 729	2 724	2 719	2 715	2 711
	Stiffeness, G', (10^3 lbs/in)	2 410	2 409	2 409	2 408	2 408	2 407	2 407	2 406	2 406
24/5	Strength, (lbs/ft)	2 802	2 792	2 783	2 775	2 768	2 761	2 755	2 749	2 743
	Stiffeness, G', (10^3 lbs/in)	2 418	2 417	2 416	2 415	2 415	2 414	2 413	2 412	2 412
24/7	Strength, (lbs/ft)	2 991	2 971	2 953	2 937	2 922	2 908	2 896	2 884	2 874
	Stiffeness, G', (10^3 lbs/in)	2 433	2 431	2 430	2 428	2 427	2 426	2 425	2 424	2 423

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	Strength, (lbs/ft)	2 846	2 838	2 831	2 824	2 818	2 812	2 807	2 802	2 798
	Stiffeness, G', (10^3 lbs/in)	2 415	2 414	2 413	2 413	2 412	2 411	2 411	2 411	2 410
24/5	Strength, (lbs/ft)	2 902	2 891	2 881	2 872	2 864	2 857	2 850	2 843	2 837
	Stiffeness, G', (10^3 lbs/in)	2 424	2 423	2 422	2 421	2 420	2 419	2 418	2 418	2 417
24/7	Strength, (lbs/ft)	3 124	3 103	3 083	3 065	3 049	3 034	3 021	3 008	2 996
	Stiffeness, G', (10^3 lbs/in)	2 440	2 439	2 437	2 435	2 434	2 433	2 432	2 431	2 430

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	Strength, (lbs/ft)	2 930	2 922	2 915	2 908	2 901	2 896	2 890	2 885	2 880
	Stiffeness, G', (10^3 lbs/in)	2 418	2 417	2 417	2 416	2 416	2 415	2 415	2 414	2 414
24/5	Strength, (lbs/ft)	2 992	2 982	2 972	2 962	2 954	2 946	2 939	2 932	2 926
	Stiffeness, G', (10^3 lbs/in)	2 428	2 427	2 426	2 425	2 424	2 423	2 423	2 422	2 421
24/7	Strength, (lbs/ft)	3 241	3 219	3 199	3 181	3 164	3 148	3 134	3 120	3 108
	Stiffeness, G', (10^3 lbs/in)	2 446	2 444	2 442	2 441	2 440	2 438	2 437	2 436	2 435

3.0 in. deck - 24 in. wide - 6 in. flute spacing
Support connection: #12 Screws
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	Strength, (lbs/ft)	2 542	2 538	2 534	2 530	2 527	2 524	2 522	2 520	2 517
	Stiffeness, G', (10^3 lbs/in)	2 397	2 396	2 395	2 394	2 393	2 392	2 392	2 391	2 391
24/5	Strength, (lbs/ft)	2 564	2 558	2 553	2 549	2 545	2 541	2 538	2 535	2 532
	Stiffeness, G', (10^3 lbs/in)	2 405	2 403	2 402	2 401	2 400	2 399	2 398	2 397	2 397
24/7	Strength, (lbs/ft)	2 650	2 640	2 630	2 622	2 614	2 607	2 601	2 595	2 590
	Stiffeness, G', (10^3 lbs/in)	2 419	2 417	2 415	2 414	2 412	2 411	2 410	2 409	2 408

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	Strength, (lbs/ft)	2 568	2 564	2 560	2 557	2 554	2 551	2 549	2 547	2 545
	Stiffeness, G', (10^3 lbs/in)	2 397	2 396	2 395	2 394	2 394	2 393	2 392	2 392	2 391
24/5	Strength, (lbs/ft)	2 591	2 586	2 581	2 577	2 573	2 570	2 566	2 563	2 561
	Stiffeness, G', (10^3 lbs/in)	2 405	2 404	2 403	2 402	2 401	2 400	2 399	2 398	2 398
24/7	Strength, (lbs/ft)	2 684	2 674	2 664	2 656	2 649	2 642	2 636	2 630	2 625
	Stiffeness, G', (10^3 lbs/in)	2 420	2 418	2 417	2 415	2 414	2 412	2 411	2 410	2 409

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	Strength, (lbs/ft)	2 637	2 633	2 629	2 626	2 623	2 620	2 618	2 615	2 613
	Stiffeness, G', (10^3 lbs/in)	2 398	2 397	2 397	2 396	2 395	2 394	2 394	2 393	2 393
24/5	Strength, (lbs/ft)	2 665	2 659	2 655	2 650	2 646	2 642	2 639	2 636	2 633
	Stiffeness, G', (10^3 lbs/in)	2 407	2 406	2 405	2 404	2 403	2 402	2 401	2 400	2 400
24/7	Strength, (lbs/ft)	2 776	2 765	2 756	2 747	2 739	2 731	2 725	2 718	2 712
	Stiffeness, G', (10^3 lbs/in)	2 424	2 422	2 421	2 419	2 418	2 416	2 415	2 414	2 413

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	Strength, (lbs/ft)	2 719	2 715	2 712	2 708	2 705	2 703	2 700	2 698	2 696
	Stiffeness, G', (10^3 lbs/in)	2 399	2 398	2 398	2 397	2 396	2 395	2 395	2 394	2 394
24/5	Strength, (lbs/ft)	2 750	2 745	2 741	2 736	2 732	2 728	2 725	2 722	2 719
	Stiffeness, G', (10^3 lbs/in)	2 409	2 408	2 407	2 405	2 405	2 404	2 403	2 402	2 401
24/7	Strength, (lbs/ft)	2 877	2 866	2 856	2 847	2 839	2 831	2 824	2 818	2 811
	Stiffeness, G', (10^3 lbs/in)	2 427	2 425	2 423	2 422	2 420	2 419	2 417	2 416	2 415

3.0 in. deck - 24 in. wide - 6 in. flute spacing
Support connection: #12 Screws
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	Strength, (lbs/ft)	2 624	2 621	2 619	2 617	2 615	2 613	2 611	2 610	2 609
	Stiffeness, G', (10^3 lbs/in)	2 406	2 405	2 405	2 404	2 404	2 403	2 403	2 402	2 402
24/5	Strength, (lbs/ft)	2 646	2 642	2 638	2 635	2 632	2 629	2 627	2 625	2 623
	Stiffeness, G', (10^3 lbs/in)	2 413	2 412	2 411	2 411	2 410	2 409	2 408	2 408	2 407
24/7	Strength, (lbs/ft)	2 732	2 723	2 715	2 708	2 702	2 696	2 690	2 685	2 681
	Stiffeness, G', (10^3 lbs/in)	2 426	2 425	2 423	2 422	2 421	2 420	2 419	2 418	2 417

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	Strength, (lbs/ft)	2 660	2 657	2 655	2 653	2 651	2 649	2 647	2 646	2 645
	Stiffeness, G', (10^3 lbs/in)	2 408	2 407	2 407	2 406	2 406	2 405	2 405	2 405	2 404
24/5	Strength, (lbs/ft)	2 683	2 679	2 676	2 673	2 670	2 667	2 665	2 663	2 661
	Stiffeness, G', (10^3 lbs/in)	2 416	2 415	2 414	2 413	2 412	2 411	2 411	2 410	2 410
24/7	Strength, (lbs/ft)	2 776	2 767	2 759	2 752	2 746	2 740	2 734	2 729	2 725
	Stiffeness, G', (10^3 lbs/in)	2 429	2 427	2 426	2 425	2 424	2 423	2 422	2 421	2 420

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	Strength, (lbs/ft)	2 735	2 732	2 730	2 727	2 725	2 723	2 721	2 720	2 718
	Stiffeness, G', (10^3 lbs/in)	2 412	2 412	2 411	2 411	2 410	2 410	2 409	2 409	2 408
24/5	Strength, (lbs/ft)	2 763	2 759	2 755	2 752	2 748	2 746	2 743	2 740	2 738
	Stiffeness, G', (10^3 lbs/in)	2 421	2 420	2 419	2 418	2 417	2 416	2 416	2 415	2 415
24/7	Strength, (lbs/ft)	2 874	2 865	2 856	2 848	2 841	2 834	2 828	2 823	2 818
	Stiffeness, G', (10^3 lbs/in)	2 436	2 434	2 433	2 431	2 430	2 429	2 428	2 427	2 426

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	Strength, (lbs/ft)	2 809	2 806	2 803	2 801	2 798	2 796	2 794	2 792	2 791
	Stiffeness, G', (10^3 lbs/in)	2 416	2 415	2 415	2 414	2 414	2 413	2 413	2 412	2 412
24/5	Strength, (lbs/ft)	2 840	2 836	2 832	2 828	2 825	2 822	2 819	2 816	2 814
	Stiffeness, G', (10^3 lbs/in)	2 425	2 424	2 423	2 422	2 421	2 420	2 420	2 419	2 419
24/7	Strength, (lbs/ft)	2 967	2 957	2 948	2 940	2 932	2 925	2 918	2 912	2 907
	Stiffeness, G', (10^3 lbs/in)	2 441	2 439	2 438	2 437	2 435	2 434	2 433	2 432	2 431

3.0 in. deck - 24 in. wide - 6 in. flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	Strength, (lbs/ft)	2 581	2 574	2 569	2 563	2 559	2 554	2 550	2 547	2 544
	Stiffeness, G', (10^3 lbs/in)	2 397	2 396	2 395	2 394	2 394	2 393	2 392	2 392	2 391
24/5	Strength, (lbs/ft)	2 613	2 604	2 597	2 590	2 584	2 578	2 573	2 569	2 565
	Stiffeness, G', (10^3 lbs/in)	2 406	2 404	2 403	2 402	2 401	2 400	2 399	2 398	2 397
24/7	Strength, (lbs/ft)	2 739	2 723	2 709	2 696	2 685	2 674	2 665	2 656	2 649
	Stiffeness, G', (10^3 lbs/in)	2 420	2 418	2 417	2 415	2 413	2 412	2 411	2 410	2 409

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	Strength, (lbs/ft)	2 609	2 603	2 597	2 592	2 588	2 584	2 580	2 576	2 573
	Stiffeness, G', (10^3 lbs/in)	2 397	2 396	2 396	2 395	2 394	2 393	2 393	2 392	2 392
24/5	Strength, (lbs/ft)	2 642	2 634	2 627	2 621	2 615	2 610	2 605	2 600	2 596
	Stiffeness, G', (10^3 lbs/in)	2 406	2 405	2 404	2 403	2 402	2 401	2 400	2 399	2 398
24/7	Strength, (lbs/ft)	2 776	2 761	2 748	2 735	2 724	2 714	2 705	2 697	2 689
	Stiffeness, G', (10^3 lbs/in)	2 421	2 420	2 418	2 416	2 415	2 413	2 412	2 411	2 410

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	Strength, (lbs/ft)	2 684	2 678	2 672	2 667	2 662	2 658	2 654	2 650	2 647
	Stiffeness, G', (10^3 lbs/in)	2 399	2 398	2 397	2 396	2 396	2 395	2 394	2 394	2 393
24/5	Strength, (lbs/ft)	2 724	2 716	2 708	2 702	2 695	2 690	2 684	2 680	2 675
	Stiffeness, G', (10^3 lbs/in)	2 409	2 407	2 406	2 405	2 404	2 403	2 402	2 401	2 401
24/7	Strength, (lbs/ft)	2 882	2 866	2 852	2 839	2 827	2 816	2 806	2 797	2 788
	Stiffeness, G', (10^3 lbs/in)	2 426	2 424	2 422	2 420	2 419	2 417	2 416	2 415	2 414

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	Strength, (lbs/ft)	2 770	2 764	2 759	2 754	2 749	2 745	2 741	2 737	2 733
	Stiffeness, G', (10^3 lbs/in)	2 400	2 399	2 398	2 397	2 397	2 396	2 396	2 395	2 394
24/5	Strength, (lbs/ft)	2 815	2 807	2 799	2 793	2 787	2 781	2 776	2 771	2 766
	Stiffeness, G', (10^3 lbs/in)	2 410	2 409	2 408	2 406	2 405	2 405	2 404	2 403	2 402
24/7	Strength, (lbs/ft)	2 992	2 977	2 962	2 949	2 937	2 926	2 915	2 905	2 896
	Stiffeness, G', (10^3 lbs/in)	2 428	2 426	2 425	2 423	2 422	2 420	2 419	2 418	2 416

3.0 in. deck - 24 in. wide - 6 in. flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/3	Strength, (lbs/ft)	2 663	2 658	2 654	2 650	2 646	2 643	2 640	2 637	2 635
	Stiffeness, G', (10^3 lbs/in)	2 407	2 406	2 405	2 405	2 404	2 404	2 403	2 403	2 402
24/5	Strength, (lbs/ft)	2 695	2 688	2 682	2 676	2 671	2 667	2 663	2 659	2 656
	Stiffeness, G', (10^3 lbs/in)	2 414	2 413	2 412	2 411	2 411	2 410	2 409	2 408	2 408
24/7	Strength, (lbs/ft)	2 821	2 806	2 794	2 782	2 772	2 763	2 755	2 747	2 740
	Stiffeness, G', (10^3 lbs/in)	2 427	2 426	2 424	2 423	2 422	2 421	2 419	2 419	2 418

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/3	Strength, (lbs/ft)	2 701	2 696	2 692	2 688	2 684	2 681	2 678	2 676	2 673
	Stiffeness, G', (10^3 lbs/in)	2 409	2 408	2 407	2 407	2 406	2 406	2 405	2 405	2 405
24/5	Strength, (lbs/ft)	2 734	2 728	2 722	2 717	2 712	2 707	2 703	2 700	2 696
	Stiffeness, G', (10^3 lbs/in)	2 416	2 415	2 414	2 414	2 413	2 412	2 412	2 411	2 410
24/7	Strength, (lbs/ft)	2 868	2 854	2 842	2 831	2 821	2 812	2 804	2 796	2 789
	Stiffeness, G', (10^3 lbs/in)	2 430	2 429	2 427	2 426	2 425	2 424	2 423	2 422	2 421

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/3	Strength, (lbs/ft)	2 782	2 777	2 773	2 768	2 765	2 761	2 758	2 755	2 752
	Stiffeness, G', (10^3 lbs/in)	2 413	2 412	2 412	2 411	2 411	2 410	2 410	2 409	2 409
24/5	Strength, (lbs/ft)	2 822	2 815	2 809	2 803	2 798	2 793	2 788	2 784	2 780
	Stiffeness, G', (10^3 lbs/in)	2 422	2 421	2 420	2 419	2 418	2 417	2 417	2 416	2 415
24/7	Strength, (lbs/ft)	2 980	2 966	2 953	2 941	2 930	2 919	2 910	2 901	2 893
	Stiffeness, G', (10^3 lbs/in)	2 437	2 436	2 434	2 433	2 431	2 430	2 429	2 428	2 427

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/3	Strength, (lbs/ft)	2 860	2 855	2 850	2 846	2 842	2 838	2 835	2 831	2 828
	Stiffeness, G', (10^3 lbs/in)	2 417	2 416	2 415	2 415	2 414	2 414	2 413	2 413	2 413
24/5	Strength, (lbs/ft)	2 904	2 897	2 891	2 885	2 879	2 874	2 870	2 865	2 861
	Stiffeness, G', (10^3 lbs/in)	2 426	2 425	2 424	2 423	2 422	2 421	2 421	2 420	2 419
24/7	Strength, (lbs/ft)	3 082	3 067	3 054	3 041	3 030	3 019	3 009	3 000	2 991
	Stiffeness, G', (10^3 lbs/in)	2 442	2 441	2 439	2 438	2 437	2 435	2 434	2 433	2 432

3.0 in. deck - 24 in. wide - 8 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	Strength, (lbs/ft)	2 653	2 642	2 632	2 624	2 616	2 609	2 603	2 597	2 591
	Stiffeness, G', (10^3 lbs/in)	2 405	2 404	2 403	2 401	2 400	2 399	2 399	2 398	2 397
24/6	Strength, (lbs/ft)	2 831	2 810	2 791	2 774	2 758	2 745	2 732	2 721	2 710
	Stiffeness, G', (10^3 lbs/in)	2 422	2 420	2 418	2 416	2 414	2 413	2 412	2 410	2 409

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	Strength, (lbs/ft)	2 684	2 674	2 665	2 657	2 650	2 643	2 636	2 631	2 625
	Stiffeness, G', (10^3 lbs/in)	2 406	2 404	2 403	2 402	2 401	2 400	2 399	2 398	2 398
24/6	Strength, (lbs/ft)	2 873	2 853	2 835	2 818	2 804	2 790	2 778	2 766	2 756
	Stiffeness, G', (10^3 lbs/in)	2 423	2 421	2 419	2 417	2 416	2 414	2 413	2 412	2 411

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	Strength, (lbs/ft)	2 773	2 762	2 753	2 744	2 736	2 729	2 722	2 716	2 710
	Stiffeness, G', (10^3 lbs/in)	2 408	2 407	2 405	2 404	2 403	2 402	2 401	2 401	2 400
24/6	Strength, (lbs/ft)	2 995	2 974	2 955	2 937	2 921	2 907	2 893	2 880	2 869
	Stiffeness, G', (10^3 lbs/in)	2 427	2 425	2 423	2 421	2 420	2 418	2 417	2 416	2 415

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	Strength, (lbs/ft)	2 868	2 858	2 849	2 840	2 832	2 824	2 818	2 811	2 805
	Stiffeness, G', (10^3 lbs/in)	2 409	2 408	2 407	2 406	2 405	2 404	2 403	2 402	2 401
24/6	Strength, (lbs/ft)	3 116	3 095	3 076	3 058	3 042	3 027	3 013	3 000	2 987
	Stiffeness, G', (10^3 lbs/in)	2 430	2 428	2 426	2 424	2 423	2 421	2 420	2 418	2 417

3.0 in. deck - 24 in. wide - 8 in. flute spacing
Support connection: 3/4" Welds
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	Strength, (lbs/ft)	2 735	2 726	2 717	2 710	2 703	2 697	2 692	2 687	2 683
	Stiffeness, G', (10^3 lbs/in)	2 414	2 413	2 412	2 411	2 410	2 410	2 409	2 408	2 408
24/6	Strength, (lbs/ft)	2 913	2 893	2 876	2 860	2 846	2 833	2 822	2 811	2 801
	Stiffeness, G', (10^3 lbs/in)	2 429	2 427	2 426	2 424	2 423	2 422	2 421	2 420	2 419

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	Strength, (lbs/ft)	2 776	2 768	2 760	2 753	2 746	2 740	2 735	2 730	2 725
	Stiffeness, G', (10^3 lbs/in)	2 416	2 415	2 414	2 413	2 413	2 412	2 411	2 411	2 410
24/6	Strength, (lbs/ft)	2 965	2 946	2 929	2 914	2 900	2 888	2 876	2 866	2 856
	Stiffeness, G', (10^3 lbs/in)	2 432	2 430	2 428	2 427	2 426	2 425	2 424	2 423	2 422

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	Strength, (lbs/ft)	2 871	2 861	2 853	2 845	2 838	2 832	2 826	2 820	2 815
	Stiffeness, G', (10^3 lbs/in)	2 421	2 420	2 419	2 418	2 418	2 417	2 416	2 416	2 415
24/6	Strength, (lbs/ft)	3 093	3 073	3 055	3 039	3 024	3 010	2 997	2 985	2 974
	Stiffeness, G', (10^3 lbs/in)	2 439	2 437	2 435	2 434	2 433	2 431	2 430	2 429	2 428

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	Strength, (lbs/ft)	2 958	2 949	2 940	2 932	2 925	2 918	2 912	2 906	2 900
	Stiffeness, G', (10^3 lbs/in)	2 425	2 424	2 423	2 422	2 422	2 421	2 420	2 420	2 419
24/6	Strength, (lbs/ft)	3 206	3 186	3 168	3 150	3 135	3 120	3 107	3 094	3 082
	Stiffeness, G', (10^3 lbs/in)	2 444	2 442	2 441	2 439	2 438	2 437	2 435	2 434	2 433

3.0 in. deck - 24 in. wide - 8 in. flute spacing
Support connection: #12 Screws
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
$\phi = 0.50$
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	Strength, (lbs/ft)	2 551	2 547	2 542	2 538	2 535	2 532	2 529	2 526	2 524
	Stiffeness, G', (10^3 lbs/in)	2 402	2 401	2 400	2 399	2 398	2 397	2 396	2 396	2 395
24/6	Strength, (lbs/ft)	2 638	2 628	2 619	2 612	2 604	2 598	2 592	2 587	2 582
	Stiffeness, G', (10^3 lbs/in)	2 417	2 416	2 414	2 412	2 411	2 410	2 408	2 407	2 406

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	Strength, (lbs/ft)	2 578	2 574	2 570	2 566	2 563	2 559	2 557	2 554	2 552
	Stiffeness, G', (10^3 lbs/in)	2 403	2 401	2 400	2 399	2 399	2 398	2 397	2 396	2 396
24/6	Strength, (lbs/ft)	2 671	2 661	2 653	2 645	2 638	2 632	2 626	2 621	2 616
	Stiffeness, G', (10^3 lbs/in)	2 418	2 416	2 415	2 413	2 412	2 411	2 410	2 408	2 407

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	Strength, (lbs/ft)	2 649	2 645	2 641	2 637	2 633	2 630	2 627	2 624	2 622
	Stiffeness, G', (10^3 lbs/in)	2 405	2 403	2 402	2 401	2 401	2 400	2 399	2 398	2 398
24/6	Strength, (lbs/ft)	2 760	2 751	2 742	2 733	2 726	2 719	2 713	2 707	2 701
	Stiffeness, G', (10^3 lbs/in)	2 422	2 420	2 419	2 417	2 416	2 414	2 413	2 412	2 411

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	Strength, (lbs/ft)	2 733	2 728	2 724	2 721	2 717	2 714	2 711	2 709	2 706
	Stiffeness, G', (10^3 lbs/in)	2 406	2 405	2 404	2 403	2 402	2 401	2 400	2 400	2 399
24/6	Strength, (lbs/ft)	2 859	2 849	2 840	2 832	2 824	2 817	2 811	2 804	2 799
	Stiffeness, G', (10^3 lbs/in)	2 424	2 423	2 421	2 419	2 418	2 417	2 415	2 414	2 413

3.0 in. deck - 24 in. wide - 8 in. flute spacing
Support connection: #12 Screws
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	Strength, (lbs/ft)	2 634	2 630	2 627	2 625	2 622	2 620	2 618	2 617	2 615
	Stiffeness, G', (10^3 lbs/in)	2 412	2 411	2 410	2 409	2 408	2 408	2 407	2 406	2 406
24/6	Strength, (lbs/ft)	2 720	2 712	2 705	2 698	2 692	2 686	2 682	2 677	2 673
	Stiffeness, G', (10^3 lbs/in)	2 425	2 424	2 422	2 421	2 420	2 419	2 418	2 417	2 416

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	Strength, (lbs/ft)	2 670	2 667	2 664	2 662	2 659	2 657	2 655	2 653	2 652
	Stiffeness, G', (10^3 lbs/in)	2 414	2 413	2 412	2 411	2 410	2 410	2 409	2 409	2 408
24/6	Strength, (lbs/ft)	2 763	2 755	2 747	2 741	2 735	2 730	2 725	2 720	2 716
	Stiffeness, G', (10^3 lbs/in)	2 428	2 426	2 425	2 424	2 422	2 421	2 420	2 420	2 419

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	Strength, (lbs/ft)	2 747	2 744	2 741	2 738	2 736	2 733	2 731	2 729	2 727
	Stiffeness, G', (10^3 lbs/in)	2 418	2 417	2 417	2 416	2 415	2 415	2 414	2 413	2 413
24/6	Strength, (lbs/ft)	2 859	2 850	2 842	2 835	2 828	2 822	2 817	2 811	2 806
	Stiffeness, G', (10^3 lbs/in)	2 434	2 433	2 431	2 430	2 429	2 428	2 427	2 426	2 425

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	Strength, (lbs/ft)	2 823	2 819	2 816	2 813	2 810	2 808	2 805	2 803	2 801
	Stiffeness, G', (10^3 lbs/in)	2 422	2 421	2 420	2 420	2 419	2 418	2 418	2 417	2 417
24/6	Strength, (lbs/ft)	2 949	2 940	2 932	2 924	2 917	2 911	2 905	2 899	2 894
	Stiffeness, G', (10^3 lbs/in)	2 439	2 437	2 436	2 435	2 434	2 433	2 432	2 431	2 430

3.0 in. deck - 24 in. wide - 8 in. flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: Button Punch @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	Strength, (lbs/ft)	2 595	2 588	2 581	2 575	2 570	2 565	2 561	2 557	2 553
	Stiffeness, G', (10^3 lbs/in)	2 403	2 402	2 401	2 400	2 399	2 398	2 397	2 396	2 396
24/6	Strength, (lbs/ft)	2 721	2 706	2 693	2 681	2 671	2 661	2 652	2 644	2 637
	Stiffeness, G', (10^3 lbs/in)	2 419	2 417	2 415	2 413	2 412	2 411	2 409	2 408	2 407

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	Strength, (lbs/ft)	2 624	2 617	2 611	2 605	2 600	2 595	2 591	2 587	2 583
	Stiffeness, G', (10^3 lbs/in)	2 404	2 402	2 401	2 400	2 399	2 398	2 398	2 397	2 396
24/6	Strength, (lbs/ft)	2 757	2 743	2 731	2 720	2 709	2 700	2 691	2 683	2 676
	Stiffeness, G', (10^3 lbs/in)	2 420	2 418	2 416	2 415	2 413	2 412	2 411	2 410	2 408

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	Strength, (lbs/ft)	2 702	2 695	2 688	2 682	2 677	2 672	2 668	2 663	2 659
	Stiffeness, G', (10^3 lbs/in)	2 406	2 404	2 403	2 402	2 401	2 401	2 400	2 399	2 398
24/6	Strength, (lbs/ft)	2 860	2 846	2 832	2 820	2 809	2 799	2 789	2 781	2 773
	Stiffeness, G', (10^3 lbs/in)	2 423	2 422	2 420	2 418	2 417	2 416	2 414	2 413	2 412

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	Strength, (lbs/ft)	2 790	2 783	2 777	2 771	2 766	2 761	2 756	2 752	2 748
	Stiffeness, G', (10^3 lbs/in)	2 407	2 406	2 405	2 404	2 403	2 402	2 401	2 400	2 400
24/6	Strength, (lbs/ft)	2 968	2 953	2 940	2 927	2 916	2 906	2 896	2 887	2 878
	Stiffeness, G', (10^3 lbs/in)	2 426	2 424	2 422	2 421	2 419	2 418	2 417	2 416	2 414

3.0 in. deck - 24 in. wide - 8 in. flute spacing
Support connection: Hilti ENP2K, X-EDNK22
Side-lap connection: #10 Screws @ 24 in. o.c.
Concrete resistance: 3000 psi Minimum

Limit States Design – FACTORED RESISTANCE
ϕ = 0.50
2.5 in. thick. concrete over deck
Concrete density: 145 pcf Minimum

SDI METHOD – IMPERIAL

Thickness = 0.030 in.

Support Connection Pattern		Span (ft)								
		8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
24/4	Strength, (lbs/ft)	2 677	2 671	2 666	2 661	2 657	2 654	2 650	2 647	2 644
	Stiffeness, G', (10^3 lbs/in)	2 412	2 411	2 410	2 410	2 409	2 408	2 408	2 407	2 406
24/6	Strength, (lbs/ft)	2 803	2 790	2 778	2 768	2 758	2 750	2 742	2 735	2 728
	Stiffeness, G', (10^3 lbs/in)	2 426	2 425	2 423	2 422	2 421	2 420	2 419	2 418	2 417

Thickness = 0.036 in.

Support Connection Pattern		Span (ft)								
		9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0
24/4	Strength, (lbs/ft)	2 716	2 710	2 705	2 701	2 697	2 693	2 689	2 686	2 683
	Stiffeness, G', (10^3 lbs/in)	2 414	2 413	2 413	2 412	2 411	2 410	2 410	2 409	2 409
24/6	Strength, (lbs/ft)	2 849	2 837	2 825	2 815	2 806	2 797	2 790	2 782	2 776
	Stiffeness, G', (10^3 lbs/in)	2 429	2 427	2 426	2 425	2 424	2 422	2 421	2 421	2 420

Thickness = 0.048 in.

Support Connection Pattern		Span (ft)								
		10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0
24/4	Strength, (lbs/ft)	2 800	2 794	2 789	2 784	2 779	2 775	2 771	2 768	2 765
	Stiffeness, G', (10^3 lbs/in)	2 419	2 418	2 417	2 417	2 416	2 415	2 415	2 414	2 414
24/6	Strength, (lbs/ft)	2 958	2 945	2 933	2 922	2 911	2 902	2 893	2 885	2 878
	Stiffeness, G', (10^3 lbs/in)	2 435	2 434	2 432	2 431	2 430	2 429	2 428	2 427	2 426

Thickness = 0.060 in.

Support Connection Pattern		Span (ft)								
		11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
24/4	Strength, (lbs/ft)	2 880	2 874	2 868	2 863	2 859	2 854	2 850	2 846	2 843
	Stiffeness, G', (10^3 lbs/in)	2 423	2 422	2 421	2 421	2 420	2 419	2 419	2 418	2 417
24/6	Strength, (lbs/ft)	3 058	3 044	3 031	3 020	3 009	2 999	2 990	2 981	2 973
	Stiffeness, G', (10^3 lbs/in)	2 440	2 439	2 437	2 436	2 435	2 434	2 433	2 432	2 431