

1.5 in. deck - 36 in. wide - 6 in. flute spacing

Thickness = 0.030 in.

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	373	342	318	299	280	264	251	240	231	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.3	8.4	9.4	10.3	11.2	12.1	12.9	13.7	14.4	
	24	Strength, (lbs/ft)	417	389	367	349	334	322	311	302	294	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.4	8.5	9.6	10.6	11.6	12.5	13.4	14.3	15.1	
	12	Strength, (lbs/ft)	524	504	488	474	463	454	446	439	433	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.6	8.7	9.9	11.0	12.0	13.1	14.1	15.1	16.1	
	9	Strength, (lbs/ft)	579	563	550	539	530	522	516	510	506	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.6	8.8	10.0	11.1	12.2	13.3	14.3	15.4	16.4	
	6	Strength, (lbs/ft)	657	647	639	632	626	621	617	614	611	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.7	8.9	10.1	11.2	12.4	13.5	14.6	15.6	16.7	
	36/7	36	Strength, (lbs/ft)	551	495	448	410	380	355	334	317	302
			Stiffness, G', (10 <sup>3</sup> lbs/in)	40.2	42.8	44.7	46.3	47.4	48.3	49.0	49.5	49.9
24		Strength, (lbs/ft)	603	549	507	474	444	419	398	381	366	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	41.5	44.6	47.1	49.2	50.9	52.3	53.5	54.5	55.3	
12		Strength, (lbs/ft)	749	701	664	634	610	590	573	558	545	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	44.2	48.2	51.7	54.8	57.5	59.9	62.0	63.9	65.7	
9		Strength, (lbs/ft)	837	793	759	731	709	690	674	661	649	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	45.3	49.7	53.7	57.1	60.2	63.0	65.5	67.8	69.9	
6		Strength, (lbs/ft)	987	951	923	901	882	867	854	842	833	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	46.8	51.8	56.2	60.2	63.8	67.1	70.1	72.9	75.4	
36/9		36	Strength, (lbs/ft)	860	771	700	640	584	539	501	470	442
			Stiffness, G', (10 <sup>3</sup> lbs/in)	43.5	46.8	49.5	51.6	53.2	54.5	55.5	56.2	56.8
	24	Strength, (lbs/ft)	906	820	751	696	648	603	565	533	506	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	44.2	47.9	50.9	53.4	55.4	57.1	58.5	59.7	60.7	
	12	Strength, (lbs/ft)	1031	955	894	844	803	768	738	712	690	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	45.8	50.1	53.9	57.2	60.1	62.6	64.8	66.8	68.6	
	9	Strength, (lbs/ft)	1106	1036	980	934	896	863	836	812	791	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	46.5	51.2	55.3	58.9	62.1	65.0	67.6	69.9	72.1	
	6	Strength, (lbs/ft)	1237	1179	1132	1093	1061	1034	1010	990	972	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	47.6	52.7	57.2	61.3	64.9	68.3	71.4	74.2	76.7	

1.5 in. deck - 36 in. wide - 6 in. flute spacing

Thickness = 0.036 in.

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	386	362	341	322	306	293	281	271	262	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	14.4	15.7	17.0	18.1	19.2	20.3	21.2	22.1	23.0	
	24	Strength, (lbs/ft)	444	422	404	389	376	366	356	347	338	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	14.8	16.3	17.7	19.0	20.2	21.4	22.6	23.7	24.7	
	12	Strength, (lbs/ft)	590	573	560	548	539	530	523	516	511	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	15.4	17.1	18.7	20.2	21.7	23.2	24.5	25.9	27.2	
	9	Strength, (lbs/ft)	664	651	640	631	623	616	610	605	601	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	15.7	17.4	19.0	20.6	22.2	23.7	25.2	26.6	28.0	
	6	Strength, (lbs/ft)	773	764	757	751	746	742	738	735	732	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	15.9	17.7	19.4	21.1	22.7	24.3	25.9	27.4	28.9	
	36/7	36	Strength, (lbs/ft)	546	500	463	432	407	386	368	352	338
			Stiffness, G', (10 <sup>3</sup> lbs/in)	59.9	61.1	61.8	62.3	62.6	62.7	62.8	62.7	62.6
24		Strength, (lbs/ft)	615	574	539	509	483	462	444	428	414	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	63.8	65.7	67.2	68.4	69.3	70.0	70.6	71.0	71.4	
12		Strength, (lbs/ft)	803	767	737	712	691	674	658	645	633	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	71.6	75.0	77.9	80.4	82.6	84.5	86.2	87.7	89.0	
9		Strength, (lbs/ft)	917	883	856	833	814	797	783	770	759	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	75.0	79.0	82.5	85.6	88.3	90.7	92.9	94.8	96.6	
6		Strength, (lbs/ft)	1115	1088	1065	1046	1030	1016	1004	993	984	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	79.5	84.3	88.6	92.4	95.9	99.0	101.8	104.4	106.7	
36/9		36	Strength, (lbs/ft)	850	780	713	658	612	573	540	511	486
			Stiffness, G', (10 <sup>3</sup> lbs/in)	67.8	69.6	70.9	71.7	72.3	72.6	72.7	72.7	72.6
	24	Strength, (lbs/ft)	911	843	787	734	688	649	616	587	562	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	70.2	72.6	74.5	75.9	77.0	77.9	78.6	79.0	79.4	
	12	Strength, (lbs/ft)	1082	1021	971	928	892	861	834	810	789	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	75.5	79.1	82.2	84.8	87.1	89.1	90.8	92.3	93.7	
	9	Strength, (lbs/ft)	1186	1130	1083	1043	1010	981	955	933	913	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	77.9	82.1	85.7	88.9	91.7	94.1	96.3	98.3	100.1	
	6	Strength, (lbs/ft)	1369	1322	1282	1249	1220	1195	1173	1154	1137	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	81.3	86.3	90.6	94.5	98.0	101.1	103.9	106.5	108.9	

1.5 in. deck - 36 in. wide - 6 in. flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.048 in.  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

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)	454	431	410	392	377	363	352	342	332	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	29.6	31.2	32.7	34.0	35.2	36.3	37.4	38.3	39.2	
	24	Strength, (lbs/ft)	536	516	499	485	472	461	452	443	434	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	31.5	33.4	35.3	37.0	38.6	40.0	41.4	42.7	44.0	
	12	Strength, (lbs/ft)	743	728	715	704	694	686	678	672	666	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	34.4	36.9	39.3	41.6	43.8	45.9	47.8	49.8	51.6	
	9	Strength, (lbs/ft)	850	838	827	818	810	804	798	792	787	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	35.4	38.1	40.7	43.2	45.6	47.9	50.1	52.2	54.2	
	6	Strength, (lbs/ft)	1004	996	990	984	979	975	971	967	964	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	36.5	39.5	42.3	45.0	47.7	50.2	52.7	55.1	57.4	
	36/7	36	Strength, (lbs/ft)	617	577	543	515	491	470	452	436	422
			Stiffness, G', (10 <sup>3</sup> lbs/in)	86.3	85.7	85.0	84.3	83.5	82.8	82.0	81.3	80.6
24		Strength, (lbs/ft)	717	678	645	617	593	572	554	538	523	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	95.6	95.9	96.0	95.9	95.8	95.6	95.4	95.2	94.9	
12		Strength, (lbs/ft)	978	945	918	894	874	856	841	827	814	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	115.3	117.4	119.2	120.7	121.9	123.0	124.0	124.8	125.6	
9		Strength, (lbs/ft)	1136	1106	1081	1059	1040	1024	1009	996	985	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	124.2	127.2	129.7	131.9	133.8	135.5	137.1	138.4	139.6	
6		Strength, (lbs/ft)	1414	1389	1368	1350	1334	1320	1308	1297	1287	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	136.6	140.7	144.4	147.6	150.4	153.0	155.3	157.4	159.3	
36/9		36	Strength, (lbs/ft)	952	879	818	767	723	685	652	622	596
			Stiffness, G', (10 <sup>3</sup> lbs/in)	102.2	101.7	101.0	100.2	99.3	98.3	97.3	96.3	95.3
	24	Strength, (lbs/ft)	1043	981	920	869	825	787	753	724	698	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	108.8	109.2	109.3	109.2	108.9	108.5	108.1	107.6	107.1	
	12	Strength, (lbs/ft)	1287	1231	1183	1142	1106	1075	1047	1022	1000	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	123.6	125.8	127.5	129.0	130.1	131.1	132.0	132.7	133.3	
	9	Strength, (lbs/ft)	1436	1384	1340	1301	1268	1238	1212	1189	1168	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	130.6	133.6	136.1	138.3	140.2	141.8	143.2	144.4	145.5	
	6	Strength, (lbs/ft)	1701	1657	1619	1586	1558	1532	1510	1490	1472	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	140.7	144.9	148.5	151.7	154.5	157.0	159.3	161.3	163.1	

1.5 in. deck - 36 in. wide - 6 in. flute spacing

Thickness = 0.060 in.

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	485	465	448	433	420	409	399	390	382	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	48.3	49.7	50.9	52.1	53.1	54.0	54.8	55.5	56.2	
	24	Strength, (lbs/ft)	590	575	561	549	538	529	521	513	506	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	53.4	55.4	57.3	59.0	60.5	62.0	63.3	64.5	65.7	
	12	Strength, (lbs/ft)	852	841	831	822	814	807	800	795	790	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	61.9	65.0	67.9	70.7	73.3	75.7	78.0	80.2	82.2	
	9	Strength, (lbs/ft)	985	976	968	961	955	949	944	939	935	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	65.0	68.5	71.9	75.0	78.0	80.8	83.5	86.0	88.5	
	6	Strength, (lbs/ft)	1172	1166	1161	1157	1153	1149	1146	1143	1141	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	68.8	72.8	76.6	80.2	83.7	87.0	90.2	93.2	96.2	
	36/7	36	Strength, (lbs/ft)	638	607	580	556	536	517	501	487	474
			Stiffness, G', (10 <sup>3</sup> lbs/in)	105.9	104.2	102.7	101.3	99.9	98.7	97.5	96.4	95.4
24		Strength, (lbs/ft)	765	734	707	683	663	644	628	614	601	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	121.1	120.2	119.4	118.5	117.8	117.0	116.3	115.6	115.0	
12		Strength, (lbs/ft)	1097	1071	1049	1029	1012	997	983	971	959	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	154.8	155.6	156.4	157.0	157.4	157.8	158.2	158.5	158.7	
9		Strength, (lbs/ft)	1297	1273	1252	1234	1218	1204	1192	1180	1170	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	170.7	172.5	173.9	175.2	176.3	177.3	178.2	179.0	179.7	
6		Strength, (lbs/ft)	1643	1624	1607	1592	1579	1567	1557	1547	1539	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	193.6	196.6	199.2	201.5	203.6	205.4	207.1	208.6	209.9	
36/9		36	Strength, (lbs/ft)	957	899	849	806	768	735	705	679	655
			Stiffness, G', (10 <sup>3</sup> lbs/in)	128.3	126.2	124.1	122.1	120.2	118.4	116.7	115.1	113.6
	24	Strength, (lbs/ft)	1084	1026	976	933	895	862	832	806	782	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	140.2	138.9	137.6	136.3	135.1	133.9	132.7	131.6	130.5	
	12	Strength, (lbs/ft)	1401	1355	1315	1279	1248	1221	1196	1173	1153	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	167.4	168.0	168.4	168.7	168.9	169.0	169.0	169.0	169.0	
	9	Strength, (lbs/ft)	1593	1550	1513	1480	1451	1426	1402	1381	1363	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	180.7	182.2	183.5	184.5	185.4	186.1	186.8	187.3	187.8	
	6	Strength, (lbs/ft)	1931	1895	1864	1837	1812	1790	1771	1753	1737	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	200.3	203.1	205.6	207.7	209.6	211.3	212.8	214.2	215.4	

1.5 in. deck - 36 in. wide - 6 in. flute spacing

Thickness = 0.030 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	229	215	205	196	190	184	179	174	170	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.3	8.4	9.4	10.3	11.2	12.1	12.9	13.7	14.4	
	24	Strength, (lbs/ft)	271	260	251	243	238	233	228	225	222	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.4	8.5	9.6	10.6	11.6	12.5	13.4	14.3	15.1	
	12	Strength, (lbs/ft)	363	356	351	346	343	340	337	335	333	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.6	8.7	9.9	11.0	12.0	13.1	14.1	15.1	16.1	
	9	Strength, (lbs/ft)	401	396	393	390	387	385	383	382	381	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.6	8.8	10.0	11.1	12.2	13.3	14.3	15.4	16.4	
	6	Strength, (lbs/ft)	447	445	443	441	440	439	438	437	437	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.7	8.9	10.1	11.2	12.4	13.5	14.6	15.6	16.7	
	36/7	36	Strength, (lbs/ft)	338	309	287	268	253	240	230	221	213
			Stiffness, G', (10 <sup>3</sup> lbs/in)	40.2	42.8	44.7	46.3	47.4	48.3	49.0	49.5	49.9
24		Strength, (lbs/ft)	390	363	343	326	313	302	293	284	277	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	41.5	44.6	47.1	49.2	50.9	52.3	53.5	54.5	55.3	
12		Strength, (lbs/ft)	526	505	488	475	464	455	447	441	435	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	44.2	48.2	51.7	54.8	57.5	59.9	62.0	63.9	65.7	
9		Strength, (lbs/ft)	601	583	569	557	548	540	534	528	523	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	45.3	49.7	53.7	57.1	60.2	63.0	65.5	67.8	69.9	
6		Strength, (lbs/ft)	716	703	693	685	679	673	669	665	661	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	46.8	51.8	56.2	60.2	63.8	67.1	70.1	72.9	75.4	
36/9		36	Strength, (lbs/ft)	528	478	439	408	378	353	332	314	299
			Stiffness, G', (10 <sup>3</sup> lbs/in)	43.5	46.8	49.5	51.6	53.2	54.5	55.5	56.2	56.8
	24	Strength, (lbs/ft)	572	526	489	460	435	414	396	378	363	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	44.2	47.9	50.9	53.4	55.4	57.1	58.5	59.7	60.7	
	12	Strength, (lbs/ft)	690	652	622	597	577	560	545	532	521	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	45.8	50.1	53.9	57.2	60.1	62.6	64.8	66.8	68.6	
	9	Strength, (lbs/ft)	755	722	696	675	657	642	630	618	609	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	46.5	51.2	55.3	58.9	62.1	65.0	67.6	69.9	72.1	
	6	Strength, (lbs/ft)	858	835	815	800	787	776	766	758	751	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	47.6	52.7	57.2	61.3	64.9	68.3	71.4	74.2	76.7	

1.5 in. deck - 36 in. wide - 6 in. flute spacing

Thickness = 0.036 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi : 0.50$

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)	246	236	228	221	215	210	205	200	196	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	14.4	15.7	17.0	18.1	19.2	20.3	21.2	22.1	23.0	
	24	Strength, (lbs/ft)	301	292	285	279	274	270	266	263	260	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	14.8	16.3	17.7	19.0	20.2	21.4	22.6	23.7	24.7	
	12	Strength, (lbs/ft)	421	416	411	408	405	402	400	398	396	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	15.4	17.1	18.7	20.2	21.7	23.2	24.5	25.9	27.2	
	9	Strength, (lbs/ft)	471	468	465	462	460	458	457	455	454	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	15.7	17.4	19.0	20.6	22.2	23.7	25.2	26.6	28.0	
	6	Strength, (lbs/ft)	531	529	528	527	526	525	524	523	523	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	15.9	17.7	19.4	21.1	22.7	24.3	25.9	27.4	28.9	
	36/7	36	Strength, (lbs/ft)	345	323	305	289	277	266	257	249	242
			Stiffness, G', (10 <sup>3</sup> lbs/in)	59.9	61.1	61.8	62.3	62.6	62.7	62.8	62.7	62.6
24		Strength, (lbs/ft)	411	392	376	363	352	342	333	326	319	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	63.8	65.7	67.2	68.4	69.3	70.0	70.6	71.0	71.4	
12		Strength, (lbs/ft)	586	570	557	546	537	529	522	516	511	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	71.6	75.0	77.9	80.4	82.6	84.5	86.2	87.7	89.0	
9		Strength, (lbs/ft)	682	669	658	648	640	634	628	623	618	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	75.0	79.0	82.5	85.6	88.3	90.7	92.9	94.8	96.6	
6		Strength, (lbs/ft)	832	822	815	808	803	798	794	790	787	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	79.5	84.3	88.6	92.4	95.9	99.0	101.8	104.4	106.7	
36/9		36	Strength, (lbs/ft)	527	490	456	426	401	380	362	346	332
			Stiffness, G', (10 <sup>3</sup> lbs/in)	67.8	69.6	70.9	71.7	72.3	72.6	72.7	72.7	72.6
	24	Strength, (lbs/ft)	587	551	522	497	476	456	438	422	408	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	70.2	72.6	74.5	75.9	77.0	77.9	78.6	79.0	79.4	
	12	Strength, (lbs/ft)	746	717	692	672	654	639	626	614	604	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	75.5	79.1	82.2	84.8	87.1	89.1	90.8	92.3	93.7	
	9	Strength, (lbs/ft)	836	810	789	771	755	742	731	720	711	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	77.9	82.1	85.7	88.9	91.7	94.1	96.3	98.3	100.1	
	6	Strength, (lbs/ft)	979	960	944	931	919	909	901	893	886	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	81.3	86.3	90.6	94.5	98.0	101.1	103.9	106.5	108.9	

1.5 in. deck - 36 in. wide - 6 in. flute spacing

Thickness = 0.048 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	303	294	287	280	275	270	264	260	256	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	29.6	31.2	32.7	34.0	35.2	36.3	37.4	38.3	39.2	
	24	Strength, (lbs/ft)	380	372	365	360	355	350	347	343	340	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	31.5	33.4	35.3	37.0	38.6	40.0	41.4	42.7	44.0	
	12	Strength, (lbs/ft)	548	544	540	536	533	531	528	526	524	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	34.4	36.9	39.3	41.6	43.8	45.9	47.8	49.8	51.6	
	9	Strength, (lbs/ft)	620	616	614	611	609	607	606	604	603	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	35.4	38.1	40.7	43.2	45.6	47.9	50.1	52.2	54.2	
	6	Strength, (lbs/ft)	704	702	701	700	699	698	697	696	696	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	36.5	39.5	42.3	45.0	47.7	50.2	52.7	55.1	57.4	
	36/7	36	Strength, (lbs/ft)	409	388	372	358	345	335	326	318	310
			Stiffness, G', (10 <sup>3</sup> lbs/in)	86.3	85.7	85.0	84.3	83.5	82.8	82.0	81.3	80.6
24		Strength, (lbs/ft)	501	484	469	456	446	436	427	419	412	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	95.6	95.9	96.0	95.9	95.8	95.6	95.4	95.2	94.9	
12		Strength, (lbs/ft)	742	728	716	705	696	688	681	675	670	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	115.3	117.4	119.2	120.7	121.9	123.0	124.0	124.8	125.6	
9		Strength, (lbs/ft)	877	864	854	845	837	831	825	819	814	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	124.2	127.2	129.7	131.9	133.8	135.5	137.1	138.4	139.6	
6		Strength, (lbs/ft)	1086	1078	1070	1064	1058	1054	1049	1046	1042	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	136.6	140.7	144.4	147.6	150.4	153.0	155.3	157.4	159.3	
36/9		36	Strength, (lbs/ft)	611	573	540	511	487	466	448	431	417
			Stiffness, G', (10 <sup>3</sup> lbs/in)	102.2	101.7	101.0	100.2	99.3	98.3	97.3	96.3	95.3
	24	Strength, (lbs/ft)	696	663	635	611	589	568	549	533	519	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	108.8	109.2	109.3	109.2	108.9	108.5	108.1	107.6	107.1	
	12	Strength, (lbs/ft)	923	896	872	852	834	819	805	793	782	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	123.6	125.8	127.5	129.0	130.1	131.1	132.0	132.7	133.3	
	9	Strength, (lbs/ft)	1052	1028	1007	989	974	960	948	938	928	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	130.6	133.6	136.1	138.3	140.2	141.8	143.2	144.4	145.5	
	6	Strength, (lbs/ft)	1259	1241	1226	1213	1201	1191	1182	1174	1167	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	140.7	144.9	148.5	151.7	154.5	157.0	159.3	161.3	163.1	

1.5 in. deck - 36 in. wide - 6 in. flute spacing

Thickness = 0.060 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	358	350	343	337	332	327	322	317	313	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	48.3	49.7	50.9	52.1	53.1	54.0	54.8	55.5	56.2	
	24	Strength, (lbs/ft)	457	450	443	438	433	429	425	422	419	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	53.4	55.4	57.3	59.0	60.5	62.0	63.3	64.5	65.7	
	12	Strength, (lbs/ft)	675	670	666	663	660	658	655	653	651	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	61.9	65.0	67.9	70.7	73.3	75.7	78.0	80.2	82.2	
	9	Strength, (lbs/ft)	767	764	761	759	757	755	754	752	751	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	65.0	68.5	71.9	75.0	78.0	80.8	83.5	86.0	88.5	
	6	Strength, (lbs/ft)	876	875	873	872	871	870	870	869	868	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	68.8	72.8	76.6	80.2	83.7	87.0	90.2	93.2	96.2	
	36/7	36	Strength, (lbs/ft)	467	449	434	421	409	399	390	382	375
			Stiffness, G', (10 <sup>3</sup> lbs/in)	105.9	104.2	102.7	101.3	99.9	98.7	97.5	96.4	95.4
24		Strength, (lbs/ft)	586	571	557	545	535	526	517	509	502	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	121.1	120.2	119.4	118.5	117.8	117.0	116.3	115.6	115.0	
12		Strength, (lbs/ft)	895	882	870	861	852	844	837	831	826	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	154.8	155.6	156.4	157.0	157.4	157.8	158.2	158.5	158.7	
9		Strength, (lbs/ft)	1067	1056	1047	1038	1031	1024	1018	1013	1008	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	170.7	172.5	173.9	175.2	176.3	177.3	178.2	179.0	179.7	
6		Strength, (lbs/ft)	1338	1330	1323	1317	1312	1307	1303	1299	1296	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	193.6	196.6	199.2	201.5	203.6	205.4	207.1	208.6	209.9	
36/9		36	Strength, (lbs/ft)	679	643	613	587	564	544	525	509	495
			Stiffness, G', (10 <sup>3</sup> lbs/in)	128.3	126.2	124.1	122.1	120.2	118.4	116.7	115.1	113.6
	24	Strength, (lbs/ft)	794	764	738	714	691	671	653	636	622	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	140.2	138.9	137.6	136.3	135.1	133.9	132.7	131.6	130.5	
	12	Strength, (lbs/ft)	1090	1065	1043	1023	1006	991	977	965	954	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	167.4	168.0	168.4	168.7	168.9	169.0	169.0	169.0	169.0	
	9	Strength, (lbs/ft)	1259	1237	1218	1201	1185	1172	1160	1149	1139	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	180.7	182.2	183.5	184.5	185.4	186.1	186.8	187.3	187.8	
	6	Strength, (lbs/ft)	1532	1516	1501	1489	1477	1467	1458	1450	1443	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	200.3	203.1	205.6	207.7	209.6	211.3	212.8	214.2	215.4	



3.0 in. deck - 24 in. wide - 6 in. flute spacing

Thickness = 0.030 in.

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	199	195	191	187	184	182	179	177	175
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.2	7.5	7.9	8.2	8.5	8.8	9.1	9.4	9.7
	24	Strength, (lbs/ft)	262	258	254	251	248	245	243	240	238
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.5	7.9	8.3	8.7	9.1	9.4	9.8	10.1	10.4
	12	Strength, (lbs/ft)	413	409	406	403	401	398	396	394	392
		Stiffness, G', (10 <sup>3</sup> lbs/in)	8.0	8.4	8.9	9.3	9.7	10.1	10.5	11.0	11.4
	9	Strength, (lbs/ft)	489	486	484	481	479	477	475	474	472
		Stiffness, G', (10 <sup>3</sup> lbs/in)	8.1	8.6	9.0	9.5	9.9	10.3	10.8	11.2	11.6
	6	Strength, (lbs/ft)	600	598	597	595	594	592	591	590	589
		Stiffness, G', (10 <sup>3</sup> lbs/in)	8.2	8.7	9.2	9.7	10.1	10.6	11.0	11.5	11.9
24/5	36	Strength, (lbs/ft)	234	228	222	217	213	208	205	201	198
		Stiffness, G', (10 <sup>3</sup> lbs/in)	26.9	27.2	27.6	27.9	28.1	28.4	28.6	28.8	28.9
	24	Strength, (lbs/ft)	297	291	286	281	276	272	268	265	262
		Stiffness, G', (10 <sup>3</sup> lbs/in)	30.5	31.2	31.7	32.3	32.7	33.2	33.6	34.0	34.4
	12	Strength, (lbs/ft)	487	481	475	470	465	460	456	453	450
		Stiffness, G', (10 <sup>3</sup> lbs/in)	37.0	38.1	39.1	40.1	41.0	41.9	42.7	43.5	44.3
	9	Strength, (lbs/ft)	595	589	583	579	574	570	566	563	560
		Stiffness, G', (10 <sup>3</sup> lbs/in)	39.4	40.7	42.0	43.1	44.3	45.3	46.3	47.3	48.2
	6	Strength, (lbs/ft)	787	782	777	773	769	766	763	760	757
		Stiffness, G', (10 <sup>3</sup> lbs/in)	42.5	44.0	45.5	46.9	48.3	49.6	50.8	52.0	53.1
24/7	36	Strength, (lbs/ft)	353	340	328	318	308	299	292	284	278
		Stiffness, G', (10 <sup>3</sup> lbs/in)	31.0	31.4	31.8	32.1	32.4	32.7	32.9	33.1	33.2
	24	Strength, (lbs/ft)	417	403	392	381	372	363	355	348	341
		Stiffness, G', (10 <sup>3</sup> lbs/in)	33.6	34.3	34.9	35.5	36.0	36.4	36.9	37.3	37.6
	12	Strength, (lbs/ft)	607	594	582	572	562	554	546	539	532
		Stiffness, G', (10 <sup>3</sup> lbs/in)	38.5	39.6	40.7	41.7	42.7	43.6	44.4	45.2	46.0
	9	Strength, (lbs/ft)	729	716	704	693	684	675	667	660	653
		Stiffness, G', (10 <sup>3</sup> lbs/in)	40.5	41.8	43.1	44.3	45.4	46.5	47.5	48.5	49.4
	6	Strength, (lbs/ft)	926	914	904	895	886	879	872	865	859
		Stiffness, G', (10 <sup>3</sup> lbs/in)	43.1	44.6	46.1	47.6	48.9	50.3	51.5	52.7	53.8

3.0 in. deck - 24 in. wide - 6 in. flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.036 in.  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

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)	230	226	223	219	216	213	211	209	206	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.4	14.8	
	24	Strength, (lbs/ft)	307	303	299	296	292	290	287	285	283	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	12.6	13.1	13.6	14.1	14.5	15.0	15.5	15.9	16.3	
	12	Strength, (lbs/ft)	490	486	483	480	477	475	473	470	469	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	13.7	14.3	15.0	15.6	16.2	16.8	17.3	17.9	18.5	
	9	Strength, (lbs/ft)	584	581	578	575	573	571	569	568	566	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	14.1	14.7	15.4	16.0	16.7	17.3	17.9	18.5	19.1	
	6	Strength, (lbs/ft)	721	719	717	715	714	713	711	710	709	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	14.4	15.1	15.8	16.5	17.2	17.9	18.5	19.2	19.8	
	24/5	36	Strength, (lbs/ft)	268	262	257	252	247	243	239	236	233
			Stiffness, G', (10 <sup>3</sup> lbs/in)	34.9	35.1	35.2	35.4	35.5	35.6	35.7	35.8	35.8
24		Strength, (lbs/ft)	345	338	333	328	323	319	316	312	309	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	41.1	41.5	41.9	42.3	42.7	43.0	43.3	43.6	43.8	
12		Strength, (lbs/ft)	572	566	560	555	550	545	541	538	534	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	52.7	53.7	54.7	55.6	56.5	57.3	58.1	58.8	59.5	
9		Strength, (lbs/ft)	703	697	691	686	682	678	674	670	667	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	57.4	58.7	60.0	61.2	62.2	63.3	64.3	65.2	66.1	
6		Strength, (lbs/ft)	936	931	927	922	919	915	912	909	906	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	63.5	65.2	66.8	68.3	69.7	71.1	72.4	73.6	74.8	
24/7		36	Strength, (lbs/ft)	397	384	373	362	353	344	336	329	322
			Stiffness, G', (10 <sup>3</sup> lbs/in)	41.2	41.4	41.5	41.6	41.6	41.7	41.7	41.7	41.7
	24	Strength, (lbs/ft)	473	460	449	438	429	420	412	405	398	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	45.9	46.4	46.8	47.1	47.5	47.7	48.0	48.2	48.4	
	12	Strength, (lbs/ft)	702	689	678	667	658	649	641	634	627	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	55.3	56.4	57.4	58.3	59.2	60.0	60.7	61.4	62.1	
	9	Strength, (lbs/ft)	849	836	824	814	804	795	787	780	773	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	59.3	60.7	61.9	63.1	64.2	65.2	66.2	67.1	68.0	
	6	Strength, (lbs/ft)	1090	1079	1068	1059	1050	1043	1035	1029	1023	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	64.6	66.3	67.9	69.4	70.9	72.2	73.5	74.8	75.9	

3.0 in. deck - 24 in. wide - 6 in. flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.048 in.  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

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)	296	291	287	284	280	277	274	272	269	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	20.7	21.2	21.7	22.2	22.6	23.0	23.4	23.8	24.2	
	24	Strength, (lbs/ft)	397	393	389	385	382	379	376	373	371	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	23.3	24.0	24.6	25.3	25.9	26.5	27.1	27.6	28.2	
	12	Strength, (lbs/ft)	642	638	634	631	628	625	623	620	618	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	27.0	28.0	28.9	29.8	30.7	31.6	32.5	33.3	34.1	
	9	Strength, (lbs/ft)	768	765	762	759	757	754	752	750	748	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	28.2	29.3	30.3	31.3	32.3	33.3	34.3	35.2	36.1	
	6	Strength, (lbs/ft)	952	950	948	946	944	943	942	940	939	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	29.5	30.7	31.9	33.0	34.1	35.2	36.3	37.4	38.4	
	24/5	36	Strength, (lbs/ft)	341	334	328	323	318	313	309	305	301
			Stiffness, G', (10 <sup>3</sup> lbs/in)	46.4	46.3	46.2	46.1	46.1	46.0	45.9	45.8	45.7
24		Strength, (lbs/ft)	442	436	430	424	419	415	411	407	403	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	56.8	57.0	57.1	57.3	57.4	57.5	57.6	57.7	57.8	
12		Strength, (lbs/ft)	744	737	731	725	720	715	711	706	702	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	78.4	79.2	80.0	80.7	81.4	82.0	82.6	83.1	83.7	
9		Strength, (lbs/ft)	919	913	907	902	897	892	888	884	880	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	88.0	89.2	90.3	91.3	92.2	93.1	94.0	94.7	95.5	
6		Strength, (lbs/ft)	1232	1227	1222	1217	1213	1209	1205	1202	1199	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	101.2	102.9	104.4	105.9	107.3	108.6	109.8	111.0	112.0	
24/7		36	Strength, (lbs/ft)	494	480	468	456	446	436	427	419	411
			Stiffness, G', (10 <sup>3</sup> lbs/in)	56.0	55.8	55.5	55.2	55.0	54.7	54.5	54.2	54.0
	24	Strength, (lbs/ft)	596	582	569	558	547	537	529	520	513	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	64.7	64.7	64.8	64.8	64.8	64.7	64.7	64.7	64.6	
	12	Strength, (lbs/ft)	901	887	874	863	852	842	833	825	818	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	83.2	84.0	84.7	85.3	85.9	86.5	87.0	87.5	87.9	
	9	Strength, (lbs/ft)	1096	1082	1069	1057	1046	1037	1027	1019	1011	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	91.7	92.8	93.8	94.8	95.7	96.5	97.3	98.1	98.8	
	6	Strength, (lbs/ft)	1420	1408	1396	1386	1377	1368	1360	1352	1345	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	103.5	105.2	106.7	108.1	109.5	110.8	112.0	113.1	114.2	

3.0 in. deck - 24 in. wide - 6 in. flute spacing

Thickness = 0.060 in.

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	345	341	337	334	331	328	326	323	321	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	30.8	31.3	31.8	32.2	32.7	33.0	33.4	33.8	34.1	
	24	Strength, (lbs/ft)	472	468	465	461	458	455	453	450	448	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	36.3	37.0	37.8	38.4	39.1	39.7	40.3	40.9	41.5	
	12	Strength, (lbs/ft)	767	763	760	757	755	752	750	748	746	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	45.0	46.2	47.4	48.6	49.7	50.8	51.8	52.8	53.8	
	9	Strength, (lbs/ft)	917	914	912	910	907	905	904	902	900	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	48.0	49.5	50.8	52.2	53.5	54.7	56.0	57.2	58.3	
	6	Strength, (lbs/ft)	1130	1128	1126	1125	1124	1122	1121	1120	1119	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	51.6	53.3	54.9	56.5	58.0	59.5	61.0	62.4	63.8	
	24/5	36	Strength, (lbs/ft)	392	386	381	376	371	367	363	359	355
			Stiffness, G', (10 <sup>3</sup> lbs/in)	56.1	55.8	55.6	55.4	55.1	54.9	54.8	54.6	54.4
24		Strength, (lbs/ft)	519	513	508	503	498	494	490	486	482	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	70.5	70.5	70.5	70.4	70.4	70.4	70.3	70.3	70.3	
12		Strength, (lbs/ft)	890	883	878	872	867	863	858	854	851	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	102.6	103.2	103.7	104.2	104.6	105.1	105.4	105.8	106.1	
9		Strength, (lbs/ft)	1106	1100	1094	1089	1085	1080	1076	1073	1069	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	117.9	118.8	119.6	120.4	121.1	121.8	122.4	123.0	123.5	
6		Strength, (lbs/ft)	1486	1481	1476	1472	1468	1465	1461	1458	1455	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	139.8	141.2	142.6	143.8	144.9	146.0	147.1	148.0	148.9	
24/7		36	Strength, (lbs/ft)	552	539	528	517	506	497	488	480	473
			Stiffness, G', (10 <sup>3</sup> lbs/in)	68.4	67.8	67.2	66.7	66.2	65.8	65.3	64.9	64.4
	24	Strength, (lbs/ft)	679	666	655	644	634	624	616	607	600	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	81.0	80.7	80.4	80.1	79.9	79.6	79.4	79.1	78.9	
	12	Strength, (lbs/ft)	1061	1048	1036	1025	1015	1005	997	989	981	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	109.5	109.9	110.3	110.6	110.9	111.2	111.5	111.7	111.9	
	9	Strength, (lbs/ft)	1293	1280	1268	1257	1247	1238	1229	1221	1213	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	123.3	124.1	124.8	125.4	126.1	126.6	127.2	127.7	128.1	
	6	Strength, (lbs/ft)	1692	1681	1670	1661	1652	1644	1636	1629	1622	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	143.4	144.8	146.0	147.2	148.3	149.3	150.3	151.2	152.1	

3.0 in. deck - 24 in. wide - 6 in. flute spacing

Thickness = 0.030 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	153	151	150	149	147	147	146	145	144	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.2	7.5	7.9	8.2	8.5	8.8	9.1	9.4	9.7	
	24	Strength, (lbs/ft)	209	208	206	205	203	202	201	200	199	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	7.5	7.9	8.3	8.7	9.1	9.4	9.8	10.1	10.4	
	12	Strength, (lbs/ft)	326	325	324	323	322	321	321	320	320	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	8.0	8.4	8.9	9.3	9.7	10.1	10.5	11.0	11.4	
	9	Strength, (lbs/ft)	376	375	374	374	373	373	372	372	371	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	8.1	8.6	9.0	9.5	9.9	10.3	10.8	11.2	11.6	
	6	Strength, (lbs/ft)	434	434	433	433	433	433	432	432	432	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	8.2	8.7	9.2	9.7	10.1	10.6	11.0	11.5	11.9	
	24/5	36	Strength, (lbs/ft)	174	171	169	167	165	163	161	160	158
			Stiffness, G', (10 <sup>3</sup> lbs/in)	26.9	27.2	27.6	27.9	28.1	28.4	28.6	28.8	28.9
24		Strength, (lbs/ft)	238	235	232	230	228	226	225	223	222	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	30.5	31.2	31.7	32.3	32.7	33.2	33.6	34.0	34.4	
12		Strength, (lbs/ft)	406	403	401	398	396	395	393	391	390	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	37.0	38.1	39.1	40.1	41.0	41.9	42.7	43.5	44.3	
9		Strength, (lbs/ft)	498	496	493	492	490	488	487	486	484	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	39.4	40.7	42.0	43.1	44.3	45.3	46.3	47.3	48.2	
6		Strength, (lbs/ft)	643	642	640	639	638	637	636	635	634	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	42.5	44.0	45.5	46.9	48.3	49.6	50.8	52.0	53.1	
24/7		36	Strength, (lbs/ft)	247	240	234	228	223	219	215	211	207
			Stiffness, G', (10 <sup>3</sup> lbs/in)	31.0	31.4	31.8	32.1	32.4	32.7	32.9	33.1	33.2
	24	Strength, (lbs/ft)	311	304	297	292	287	282	278	274	271	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	33.6	34.3	34.9	35.5	36.0	36.4	36.9	37.3	37.6	
	12	Strength, (lbs/ft)	488	481	475	470	465	460	456	452	449	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	38.5	39.6	40.7	41.7	42.7	43.6	44.4	45.2	46.0	
	9	Strength, (lbs/ft)	584	578	572	567	563	559	555	552	548	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	40.5	41.8	43.1	44.3	45.4	46.5	47.5	48.5	49.4	
	6	Strength, (lbs/ft)	743	738	734	730	727	724	721	718	716	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	43.1	44.6	46.1	47.6	48.9	50.3	51.5	52.7	53.8	

3.0 in. deck - 24 in. wide - 6 in. flute spacing

Thickness = 0.036 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	180	178	177	176	175	174	173	172	171	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	11.7	12.1	12.5	12.9	13.3	13.7	14.1	14.4	14.8	
	24	Strength, (lbs/ft)	247	246	244	243	242	240	239	238	238	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	12.6	13.1	13.6	14.1	14.5	15.0	15.5	15.9	16.3	
	12	Strength, (lbs/ft)	388	387	387	386	385	384	384	383	382	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	13.7	14.3	15.0	15.6	16.2	16.8	17.3	17.9	18.5	
	9	Strength, (lbs/ft)	449	448	448	447	446	446	446	445	445	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	14.1	14.7	15.4	16.0	16.7	17.3	17.9	18.5	19.1	
	6	Strength, (lbs/ft)	520	520	519	519	519	519	518	518	518	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	14.4	15.1	15.8	16.5	17.2	17.9	18.5	19.2	19.8	
	24/5	36	Strength, (lbs/ft)	203	200	198	196	194	192	190	189	187
			Stiffness, G', (10 <sup>3</sup> lbs/in)	34.9	35.1	35.2	35.4	35.5	35.6	35.7	35.8	35.8
24		Strength, (lbs/ft)	279	276	274	272	270	268	266	265	263	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	41.1	41.5	41.9	42.3	42.7	43.0	43.3	43.6	43.8	
12		Strength, (lbs/ft)	481	478	476	473	471	470	468	467	465	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	52.7	53.7	54.7	55.6	56.5	57.3	58.1	58.8	59.5	
9		Strength, (lbs/ft)	592	590	588	586	584	583	581	580	579	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	57.4	58.7	60.0	61.2	62.2	63.3	64.3	65.2	66.1	
6		Strength, (lbs/ft)	768	767	765	764	763	762	760	760	759	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	63.5	65.2	66.8	68.3	69.7	71.1	72.4	73.6	74.8	
24/7		36	Strength, (lbs/ft)	281	274	268	262	257	253	249	245	241
			Stiffness, G', (10 <sup>3</sup> lbs/in)	41.2	41.4	41.5	41.6	41.6	41.7	41.7	41.7	41.7
	24	Strength, (lbs/ft)	357	350	344	339	334	329	325	321	318	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	45.9	46.4	46.8	47.1	47.5	47.7	48.0	48.2	48.4	
	12	Strength, (lbs/ft)	570	564	558	552	547	543	539	535	531	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	55.3	56.4	57.4	58.3	59.2	60.0	60.7	61.4	62.1	
	9	Strength, (lbs/ft)	687	681	675	670	666	662	658	655	651	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	59.3	60.7	61.9	63.1	64.2	65.2	66.2	67.1	68.0	
	6	Strength, (lbs/ft)	881	876	872	868	865	862	859	856	854	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	64.6	66.3	67.9	69.4	70.9	72.2	73.5	74.8	75.9	

3.0 in. deck - 24 in. wide - 6 in. flute spacing

Thickness = 0.048 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	236	234	233	232	231	229	228	228	227	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	20.7	21.2	21.7	22.2	22.6	23.0	23.4	23.8	24.2	
	24	Strength, (lbs/ft)	326	324	322	321	319	318	317	316	315	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	23.3	24.0	24.6	25.3	25.9	26.5	27.1	27.6	28.2	
	12	Strength, (lbs/ft)	515	514	513	512	511	511	510	509	509	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	27.0	28.0	28.9	29.8	30.7	31.6	32.5	33.3	34.1	
	9	Strength, (lbs/ft)	597	596	595	595	594	593	593	593	592	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	28.2	29.3	30.3	31.3	32.3	33.3	34.3	35.2	36.1	
	6	Strength, (lbs/ft)	693	692	692	692	691	691	691	691	690	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	29.5	30.7	31.9	33.0	34.1	35.2	36.3	37.4	38.4	
	24/5	36	Strength, (lbs/ft)	264	261	258	256	254	252	250	248	246
			Stiffness, G', (10 <sup>3</sup> lbs/in)	46.4	46.3	46.2	46.1	46.1	46.0	45.9	45.8	45.7
24		Strength, (lbs/ft)	365	362	360	357	355	353	351	350	348	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	56.8	57.0	57.1	57.3	57.4	57.5	57.6	57.7	57.8	
12		Strength, (lbs/ft)	634	631	629	626	624	622	620	618	617	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	78.4	79.2	80.0	80.7	81.4	82.0	82.6	83.1	83.7	
9		Strength, (lbs/ft)	784	781	779	777	775	773	771	770	769	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	88.0	89.2	90.3	91.3	92.2	93.1	94.0	94.7	95.5	
6		Strength, (lbs/ft)	1020	1018	1017	1015	1014	1013	1012	1010	1009	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	101.2	102.9	104.4	105.9	107.3	108.6	109.8	111.0	112.0	
24/7		36	Strength, (lbs/ft)	357	350	343	337	332	326	322	317	313
			Stiffness, G', (10 <sup>3</sup> lbs/in)	56.0	55.8	55.5	55.2	55.0	54.7	54.5	54.2	54.0
	24	Strength, (lbs/ft)	459	452	445	439	433	428	423	419	415	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	64.7	64.7	64.8	64.8	64.8	64.7	64.7	64.7	64.6	
	12	Strength, (lbs/ft)	744	736	730	724	718	713	708	704	700	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	83.2	84.0	84.7	85.3	85.9	86.5	87.0	87.5	87.9	
	9	Strength, (lbs/ft)	900	894	888	882	877	873	868	864	861	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	91.7	92.8	93.8	94.8	95.7	96.5	97.3	98.1	98.8	
	6	Strength, (lbs/ft)	1163	1158	1153	1149	1145	1142	1138	1135	1132	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	103.5	105.2	106.7	108.1	109.5	110.8	112.0	113.1	114.2	

3.0 in. deck - 24 in. wide - 6 in. flute spacing

Thickness = 0.060 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	291	290	288	287	286	284	283	282	281	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	30.8	31.3	31.8	32.2	32.7	33.0	33.4	33.8	34.1	
	24	Strength, (lbs/ft)	403	401	399	397	396	394	393	392	391	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	36.3	37.0	37.8	38.4	39.1	39.7	40.3	40.9	41.5	
	12	Strength, (lbs/ft)	642	640	639	638	637	636	636	635	634	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	45.0	46.2	47.4	48.6	49.7	50.8	51.8	52.8	53.8	
	9	Strength, (lbs/ft)	744	743	743	742	741	741	740	740	739	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	48.0	49.5	50.8	52.2	53.5	54.7	56.0	57.2	58.3	
	6	Strength, (lbs/ft)	865	865	864	864	863	863	863	863	862	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	51.6	53.3	54.9	56.5	58.0	59.5	61.0	62.4	63.8	
	24/5	36	Strength, (lbs/ft)	323	320	317	314	312	310	308	306	304
			Stiffness, G', (10 <sup>3</sup> lbs/in)	56.1	55.8	55.6	55.4	55.1	54.9	54.8	54.6	54.4
24		Strength, (lbs/ft)	450	447	444	441	439	437	435	433	431	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	70.5	70.5	70.5	70.4	70.4	70.4	70.3	70.3	70.3	
12		Strength, (lbs/ft)	786	783	780	778	775	773	771	769	767	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	102.6	103.2	103.7	104.2	104.6	105.1	105.4	105.8	106.1	
9		Strength, (lbs/ft)	974	971	969	966	964	962	961	959	958	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	117.9	118.8	119.6	120.4	121.1	121.8	122.4	123.0	123.5	
6		Strength, (lbs/ft)	1271	1269	1267	1266	1264	1263	1262	1261	1260	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	139.8	141.2	142.6	143.8	144.9	146.0	147.1	148.0	148.9	
24/7		36	Strength, (lbs/ft)	429	421	414	408	402	397	392	387	382
			Stiffness, G', (10 <sup>3</sup> lbs/in)	68.4	67.8	67.2	66.7	66.2	65.8	65.3	64.9	64.4
	24	Strength, (lbs/ft)	556	549	542	535	529	524	519	514	509	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	81.0	80.7	80.4	80.1	79.9	79.6	79.4	79.1	78.9	
	12	Strength, (lbs/ft)	912	905	898	891	885	880	874	870	865	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	109.5	109.9	110.3	110.6	110.9	111.2	111.5	111.7	111.9	
	9	Strength, (lbs/ft)	1110	1103	1097	1091	1086	1081	1076	1072	1068	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	123.3	124.1	124.8	125.4	126.1	126.6	127.2	127.7	128.1	
	6	Strength, (lbs/ft)	1442	1436	1431	1427	1423	1419	1415	1412	1409	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	143.4	144.8	146.0	147.2	148.3	149.3	150.3	151.2	152.1	



3.0 in. deck - 24 in. wide - 8 in. flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.030 in.  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

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)	214	209	205	201	197	194	191	188	185	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	19.2	19.7	20.2	20.6	21.0	21.4	21.8	22.1	22.4	
	24	Strength, (lbs/ft)	278	273	268	264	260	257	254	251	249	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	21.3	21.9	22.6	23.2	23.8	24.3	24.9	25.4	25.8	
	12	Strength, (lbs/ft)	457	451	447	443	439	435	432	429	427	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	24.5	25.5	26.4	27.3	28.2	29.1	29.9	30.7	31.4	
	9	Strength, (lbs/ft)	554	550	545	542	538	535	532	530	528	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	25.6	26.7	27.7	28.8	29.8	30.7	31.7	32.6	33.4	
	6	Strength, (lbs/ft)	717	713	710	707	705	702	700	698	696	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	26.9	28.1	29.3	30.5	31.6	32.7	33.8	34.8	35.8	
	24/6	36	Strength, (lbs/ft)	334	322	311	301	292	285	277	271	265
			Stiffness, G', (10 <sup>3</sup> lbs/in)	21.5	22.1	22.6	23.2	23.6	24.0	24.4	24.8	25.2
24		Strength, (lbs/ft)	397	385	374	365	356	348	341	334	328	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	22.8	23.6	24.3	25.0	25.6	26.2	26.7	27.3	27.8	
12		Strength, (lbs/ft)	588	576	565	555	547	539	531	525	519	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	25.2	26.2	27.2	28.1	29.0	29.9	30.7	31.5	32.3	
9		Strength, (lbs/ft)	691	679	669	660	652	645	638	632	626	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	26.0	27.2	28.2	29.3	30.3	31.3	32.2	33.1	34.0	
6		Strength, (lbs/ft)	867	858	849	842	835	829	823	818	813	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	27.1	28.4	29.6	30.7	31.9	33.0	34.1	35.1	36.1	

3.0 in. deck - 24 in. wide - 8 in. flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.036 in.  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

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)	247	242	238	234	230	227	224	221	218
		Stiffness, G', (10 <sup>3</sup> lbs/in)	26.9	27.3	27.7	28.1	28.4	28.7	29.0	29.2	29.5
	24	Strength, (lbs/ft)	323	318	314	310	306	303	300	297	294
		Stiffness, G', (10 <sup>3</sup> lbs/in)	30.9	31.6	32.2	32.8	33.3	33.8	34.3	34.7	35.2
	12	Strength, (lbs/ft)	538	533	529	524	521	517	514	511	508
		Stiffness, G', (10 <sup>3</sup> lbs/in)	37.6	38.7	39.8	40.8	41.8	42.7	43.6	44.4	45.2
	9	Strength, (lbs/ft)	657	653	649	645	641	638	635	633	630
		Stiffness, G', (10 <sup>3</sup> lbs/in)	40.1	41.4	42.6	43.8	44.9	46.0	47.1	48.1	49.1
	6	Strength, (lbs/ft)	856	853	850	847	844	842	839	837	835
		Stiffness, G', (10 <sup>3</sup> lbs/in)	43.0	44.6	46.0	47.5	48.8	50.2	51.4	52.7	53.9
24/6	36	Strength, (lbs/ft)	376	364	354	344	335	327	320	313	307
		Stiffness, G', (10 <sup>3</sup> lbs/in)	31.0	31.5	31.9	32.3	32.6	32.9	33.2	33.5	33.7
	24	Strength, (lbs/ft)	452	440	430	420	412	404	396	390	383
		Stiffness, G', (10 <sup>3</sup> lbs/in)	33.8	34.5	35.2	35.8	36.4	36.9	37.4	37.9	38.3
	12	Strength, (lbs/ft)	681	669	659	649	640	632	625	618	612
		Stiffness, G', (10 <sup>3</sup> lbs/in)	39.0	40.1	41.2	42.3	43.3	44.2	45.1	46.0	46.8
	9	Strength, (lbs/ft)	807	796	786	777	769	761	754	748	742
		Stiffness, G', (10 <sup>3</sup> lbs/in)	41.0	42.3	43.6	44.8	46.0	47.1	48.2	49.2	50.2
	6	Strength, (lbs/ft)	1025	1015	1007	999	992	986	980	975	969
		Stiffness, G', (10 <sup>3</sup> lbs/in)	43.6	45.1	46.6	48.0	49.4	50.7	52.0	53.3	54.5

3.0 in. deck - 24 in. wide - 8 in. flute spacing

Thickness = 0.048 in.

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	316	310	305	301	297	293	290	287	284
		Stiffness, G', (10 <sup>3</sup> lbs/in)	38.8	39.0	39.2	39.4	39.5	39.7	39.8	39.9	40.0
	24	Strength, (lbs/ft)	417	412	407	403	399	395	391	388	385
		Stiffness, G', (10 <sup>3</sup> lbs/in)	46.7	47.2	47.6	48.1	48.5	48.9	49.2	49.5	49.8
	12	Strength, (lbs/ft)	703	697	692	688	684	680	676	673	670
		Stiffness, G', (10 <sup>3</sup> lbs/in)	61.6	62.7	63.8	64.8	65.8	66.7	67.6	68.4	69.2
	9	Strength, (lbs/ft)	862	857	853	849	845	841	838	835	832
		Stiffness, G', (10 <sup>3</sup> lbs/in)	67.6	69.1	70.4	71.7	73.0	74.1	75.3	76.3	77.4
	6	Strength, (lbs/ft)	1129	1125	1122	1119	1116	1113	1111	1108	1106
		Stiffness, G', (10 <sup>3</sup> lbs/in)	75.4	77.2	79.0	80.7	82.3	83.9	85.4	86.8	88.1
24/6	36	Strength, (lbs/ft)	469	456	445	434	425	416	408	400	393
		Stiffness, G', (10 <sup>3</sup> lbs/in)	46.1	46.3	46.4	46.5	46.6	46.7	46.7	46.8	46.8
	24	Strength, (lbs/ft)	571	558	546	536	526	517	509	502	495
		Stiffness, G', (10 <sup>3</sup> lbs/in)	52.3	52.8	53.3	53.7	54.0	54.3	54.6	54.9	55.2
	12	Strength, (lbs/ft)	876	863	851	841	831	822	814	807	800
		Stiffness, G', (10 <sup>3</sup> lbs/in)	64.6	65.8	66.9	67.9	68.8	69.7	70.6	71.4	72.2
	9	Strength, (lbs/ft)	1045	1033	1022	1012	1003	994	986	979	972
		Stiffness, G', (10 <sup>3</sup> lbs/in)	69.8	71.3	72.6	74.0	75.2	76.4	77.5	78.5	79.6
	6	Strength, (lbs/ft)	1338	1328	1319	1310	1303	1295	1289	1283	1277
		Stiffness, G', (10 <sup>3</sup> lbs/in)	76.7	78.6	80.3	82.0	83.7	85.2	86.7	88.1	89.5

3.0 in. deck - 24 in. wide - 8 in. flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.060 in.  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

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)	366	361	357	353	349	345	342	339	336
		Stiffness, G', (10 <sup>3</sup> lbs/in)	49.3	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4
	24	Strength, (lbs/ft)	493	488	484	480	476	472	469	466	463
		Stiffness, G', (10 <sup>3</sup> lbs/in)	61.5	61.8	62.1	62.3	62.6	62.8	63.0	63.2	63.4
	12	Strength, (lbs/ft)	842	837	832	828	824	821	817	814	811
		Stiffness, G', (10 <sup>3</sup> lbs/in)	86.6	87.6	88.5	89.4	90.2	91.0	91.7	92.4	93.0
	9	Strength, (lbs/ft)	1036	1032	1028	1024	1021	1017	1014	1012	1009
		Stiffness, G', (10 <sup>3</sup> lbs/in)	97.7	99.0	100.3	101.5	102.6	103.7	104.7	105.7	106.6
	6	Strength, (lbs/ft)	1355	1352	1349	1346	1343	1341	1339	1337	1335
		Stiffness, G', (10 <sup>3</sup> lbs/in)	112.7	114.6	116.4	118.1	119.7	121.2	122.7	124.1	125.4
24/6	36	Strength, (lbs/ft)	526	514	504	494	484	476	468	461	454
		Stiffness, G', (10 <sup>3</sup> lbs/in)	59.7	59.6	59.4	59.2	59.0	58.9	58.7	58.5	58.3
	24	Strength, (lbs/ft)	653	641	631	621	611	603	595	588	581
		Stiffness, G', (10 <sup>3</sup> lbs/in)	70.0	70.1	70.3	70.4	70.5	70.6	70.6	70.7	70.7
	12	Strength, (lbs/ft)	1029	1017	1006	996	987	978	970	962	955
		Stiffness, G', (10 <sup>3</sup> lbs/in)	91.7	92.6	93.5	94.3	95.0	95.7	96.4	97.0	97.6
	9	Strength, (lbs/ft)	1235	1224	1213	1204	1195	1187	1179	1172	1166
		Stiffness, G', (10 <sup>3</sup> lbs/in)	101.5	102.8	104.0	105.2	106.3	107.3	108.3	109.2	110.1
	6	Strength, (lbs/ft)	1592	1583	1575	1567	1560	1553	1547	1541	1536
		Stiffness, G', (10 <sup>3</sup> lbs/in)	115.1	117.0	118.8	120.5	122.0	123.6	125.0	126.4	127.7

3.0 in. deck - 24 in. wide - 8 in. flute spacing

Thickness = 0.030 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	162	160	158	157	155	154	153	151	150	
		Stiffness, G', ( $10^3$ lbs/in)	19.2	19.7	20.2	20.6	21.0	21.4	21.8	22.1	22.4	
	24	Strength, (lbs/ft)	226	224	222	220	219	217	216	215	214	
		Stiffness, G', ( $10^3$ lbs/in)	21.3	21.9	22.6	23.2	23.8	24.3	24.9	25.4	25.8	
	12	Strength, (lbs/ft)	375	374	372	370	369	368	367	366	365	
		Stiffness, G', ( $10^3$ lbs/in)	24.5	25.5	26.4	27.3	28.2	29.1	29.9	30.7	31.4	
	9	Strength, (lbs/ft)	452	450	449	448	447	446	445	444	443	
		Stiffness, G', ( $10^3$ lbs/in)	25.6	26.7	27.7	28.8	29.8	30.7	31.7	32.6	33.4	
	6	Strength, (lbs/ft)	560	559	558	558	557	556	556	555	555	
		Stiffness, G', ( $10^3$ lbs/in)	26.9	28.1	29.3	30.5	31.6	32.7	33.8	34.8	35.8	
	24/6	36	Strength, (lbs/ft)	235	229	223	218	214	210	206	202	199
			Stiffness, G', ( $10^3$ lbs/in)	21.5	22.1	22.6	23.2	23.6	24.0	24.4	24.8	25.2
24		Strength, (lbs/ft)	299	293	287	282	277	273	269	266	263	
		Stiffness, G', ( $10^3$ lbs/in)	22.8	23.6	24.3	25.0	25.6	26.2	26.7	27.3	27.8	
12		Strength, (lbs/ft)	461	455	450	446	442	438	434	431	428	
		Stiffness, G', ( $10^3$ lbs/in)	25.2	26.2	27.2	28.1	29.0	29.9	30.7	31.5	32.3	
9		Strength, (lbs/ft)	546	541	536	532	529	526	523	520	517	
		Stiffness, G', ( $10^3$ lbs/in)	26.0	27.2	28.2	29.3	30.3	31.3	32.2	33.1	34.0	
6		Strength, (lbs/ft)	677	674	671	668	665	663	661	659	657	
		Stiffness, G', ( $10^3$ lbs/in)	27.1	28.4	29.6	30.7	31.9	33.0	34.1	35.1	36.1	

3.0 in. deck - 24 in. wide - 8 in. flute spacing

Thickness = 0.036 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	190	188	186	185	183	182	181	179	178	
		Stiffness, G', ( $10^3$ lbs/in)	26.9	27.3	27.7	28.1	28.4	28.7	29.0	29.2	29.5	
	24	Strength, (lbs/ft)	266	264	262	261	259	258	257	255	254	
		Stiffness, G', ( $10^3$ lbs/in)	30.9	31.6	32.2	32.8	33.3	33.8	34.3	34.7	35.2	
	12	Strength, (lbs/ft)	446	444	443	441	440	439	438	436	436	
		Stiffness, G', ( $10^3$ lbs/in)	37.6	38.7	39.8	40.8	41.8	42.7	43.6	44.4	45.2	
	9	Strength, (lbs/ft)	539	537	536	535	534	533	532	531	530	
		Stiffness, G', ( $10^3$ lbs/in)	40.1	41.4	42.6	43.8	44.9	46.0	47.1	48.1	49.1	
	6	Strength, (lbs/ft)	670	669	668	668	667	666	666	665	665	
		Stiffness, G', ( $10^3$ lbs/in)	43.0	44.6	46.0	47.5	48.8	50.2	51.4	52.7	53.9	
	24/6	36	Strength, (lbs/ft)	268	262	256	251	247	243	239	236	232
			Stiffness, G', ( $10^3$ lbs/in)	31.0	31.5	31.9	32.3	32.6	32.9	33.2	33.5	33.7
24		Strength, (lbs/ft)	344	338	333	328	323	319	315	312	309	
		Stiffness, G', ( $10^3$ lbs/in)	33.8	34.5	35.2	35.8	36.4	36.9	37.4	37.9	38.3	
12		Strength, (lbs/ft)	540	535	530	525	521	517	514	511	508	
		Stiffness, G', ( $10^3$ lbs/in)	39.0	40.1	41.2	42.3	43.3	44.2	45.1	46.0	46.8	
9		Strength, (lbs/ft)	644	639	635	631	627	624	621	618	615	
		Stiffness, G', ( $10^3$ lbs/in)	41.0	42.3	43.6	44.8	46.0	47.1	48.2	49.2	50.2	
6		Strength, (lbs/ft)	805	801	798	796	793	791	789	787	785	
		Stiffness, G', ( $10^3$ lbs/in)	43.6	45.1	46.6	48.0	49.4	50.7	52.0	53.3	54.5	

3.0 in. deck - 24 in. wide - 8 in. flute spacing

Thickness = 0.048 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 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)	248	246	244	242	241	239	238	237	235	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	38.8	39.0	39.2	39.4	39.5	39.7	39.8	39.9	40.0	
	24	Strength, (lbs/ft)	350	348	346	344	342	341	339	337	336	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	46.7	47.2	47.6	48.1	48.5	48.9	49.2	49.5	49.8	
	12	Strength, (lbs/ft)	590	588	587	585	583	582	581	579	578	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	61.6	62.7	63.8	64.8	65.8	66.7	67.6	68.4	69.2	
	9	Strength, (lbs/ft)	715	713	712	710	709	708	707	706	705	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	67.6	69.1	70.4	71.7	73.0	74.1	75.3	76.3	77.4	
	6	Strength, (lbs/ft)	891	890	889	888	888	887	886	886	885	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	75.4	77.2	79.0	80.7	82.3	83.9	85.4	86.8	88.1	
	24/6	36	Strength, (lbs/ft)	342	335	329	324	319	314	310	306	302
			Stiffness, G', (10 <sup>3</sup> lbs/in)	46.1	46.3	46.4	46.5	46.6	46.7	46.7	46.8	46.8
24		Strength, (lbs/ft)	444	437	431	426	420	416	412	408	404	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	52.3	52.8	53.3	53.7	54.0	54.3	54.6	54.9	55.2	
12		Strength, (lbs/ft)	707	701	695	690	685	681	677	673	670	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	64.6	65.8	66.9	67.9	68.8	69.7	70.6	71.4	72.2	
9		Strength, (lbs/ft)	846	841	836	832	828	824	821	817	814	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	69.8	71.3	72.6	74.0	75.2	76.4	77.5	78.5	79.6	
6		Strength, (lbs/ft)	1065	1061	1058	1054	1052	1049	1047	1044	1042	
		Stiffness, G', (10 <sup>3</sup> lbs/in)	76.7	78.6	80.3	82.0	83.7	85.2	86.7	88.1	89.5	

3.0 in. deck - 24 in. wide - 8 in. flute spacing

Thickness = 0.060 in.

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi : 0.50$

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)	305	303	301	299	297	296	294	293	292
		Stiffness, G', (10 <sup>3</sup> lbs/in)	49.3	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4
	24	Strength, (lbs/ft)	432	430	428	426	424	422	420	418	417
		Stiffness, G', (10 <sup>3</sup> lbs/in)	61.5	61.8	62.1	62.3	62.6	62.8	63.0	63.2	63.4
	12	Strength, (lbs/ft)	733	731	729	727	726	724	723	722	720
		Stiffness, G', (10 <sup>3</sup> lbs/in)	86.6	87.6	88.5	89.4	90.2	91.0	91.7	92.4	93.0
	9	Strength, (lbs/ft)	890	888	886	885	884	882	881	880	879
		Stiffness, G', (10 <sup>3</sup> lbs/in)	97.7	99.0	100.3	101.5	102.6	103.7	104.7	105.7	106.6
	6	Strength, (lbs/ft)	1111	1110	1109	1109	1108	1107	1106	1106	1105
		Stiffness, G', (10 <sup>3</sup> lbs/in)	112.7	114.6	116.4	118.1	119.7	121.2	122.7	124.1	125.4
24/6	36	Strength, (lbs/ft)	412	405	399	393	387	382	378	374	370
		Stiffness, G', (10 <sup>3</sup> lbs/in)	59.7	59.6	59.4	59.2	59.0	58.9	58.7	58.5	58.3
	24	Strength, (lbs/ft)	539	532	526	520	514	510	505	501	497
		Stiffness, G', (10 <sup>3</sup> lbs/in)	70.0	70.1	70.3	70.4	70.5	70.6	70.6	70.7	70.7
	12	Strength, (lbs/ft)	869	862	857	851	846	842	837	833	829
		Stiffness, G', (10 <sup>3</sup> lbs/in)	91.7	92.6	93.5	94.3	95.0	95.7	96.4	97.0	97.6
	9	Strength, (lbs/ft)	1045	1040	1035	1030	1026	1022	1018	1015	1011
		Stiffness, G', (10 <sup>3</sup> lbs/in)	101.5	102.8	104.0	105.2	106.3	107.3	108.3	109.2	110.1
	6	Strength, (lbs/ft)	1322	1318	1315	1311	1308	1305	1303	1300	1298
		Stiffness, G', (10 <sup>3</sup> lbs/in)	115.1	117.0	118.8	120.5	122.0	123.6	125.0	126.4	127.7



38 mm deck - 914 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.76 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			900	1050	1200	1350	1500	1650	1800	1950	2100	
914/4	900	Strength, (kN/m)	5.4	5.0	4.6	4.4	4.1	3.9	3.7	3.5	3.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.5	1.6	1.8	2.0	2.1	2.3	2.4	2.5	
	600	Strength, (kN/m)	6.1	5.7	5.4	5.1	4.9	4.7	4.5	4.4	4.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.5	1.7	1.9	2.0	2.2	2.3	2.5	2.6	
	300	Strength, (kN/m)	7.7	7.4	7.1	6.9	6.8	6.6	6.5	6.4	6.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.6	2.8	
	230	Strength, (kN/m)	8.5	8.2	8.0	7.9	7.7	7.6	7.5	7.4	7.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	
	150	Strength, (kN/m)	9.6	9.4	9.3	9.2	9.1	9.1	9.0	9.0	8.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.6	1.8	2.0	2.2	2.4	2.6	2.7	2.9	
	914/7	900	Strength, (kN/m)	8.0	7.2	6.5	6.0	5.5	5.2	4.9	4.6	4.4
			Stiffness, G', (10 <sup>3</sup> N/mm)	7.0	7.5	7.8	8.1	8.3	8.5	8.6	8.7	8.8
600		Strength, (kN/m)	8.8	8.0	7.4	6.9	6.5	6.1	5.8	5.6	5.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.3	7.8	8.3	8.6	8.9	9.2	9.4	9.5	9.7	
300		Strength, (kN/m)	10.9	10.2	9.7	9.3	8.9	8.6	8.4	8.1	8.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.7	8.4	9.1	9.6	10.1	10.5	10.9	11.2	11.5	
230		Strength, (kN/m)	12.2	11.6	11.1	10.7	10.3	10.1	9.8	9.6	9.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.9	8.7	9.4	10.0	10.6	11.0	11.5	11.9	12.3	
150		Strength, (kN/m)	14.4	13.9	13.5	13.1	12.9	12.6	12.5	12.3	12.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.2	9.1	9.8	10.5	11.2	11.8	12.3	12.8	13.2	
914/9		900	Strength, (kN/m)	12.6	11.3	10.2	9.3	8.5	7.9	7.3	6.9	6.5
			Stiffness, G', (10 <sup>3</sup> N/mm)	7.6	8.2	8.7	9.0	9.3	9.5	9.7	9.9	10.0
	600	Strength, (kN/m)	13.2	12.0	11.0	10.2	9.5	8.8	8.2	7.8	7.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.7	8.4	8.9	9.4	9.7	10.0	10.3	10.5	10.6	
	300	Strength, (kN/m)	15.0	13.9	13.0	12.3	11.7	11.2	10.8	10.4	10.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.0	8.8	9.4	10.0	10.5	11.0	11.4	11.7	12.0	
	230	Strength, (kN/m)	16.1	15.1	14.3	13.6	13.1	12.6	12.2	11.8	11.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.2	9.0	9.7	10.3	10.9	11.4	11.8	12.3	12.6	
	150	Strength, (kN/m)	18.1	17.2	16.5	16.0	15.5	15.1	14.7	14.4	14.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.3	9.2	10.0	10.7	11.4	12.0	12.5	13.0	13.4	

38 mm deck - 914 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.91 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)								
			1200	1350	1500	1650	1800	1950	2100	2250	2400
914/4	900	Strength, (kN/m)	5.6	5.3	5.0	4.7	4.5	4.3	4.1	4.0	3.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.5	2.8	3.0	3.2	3.4	3.6	3.7	3.9	4.0
	600	Strength, (kN/m)	6.5	6.2	5.9	5.7	5.5	5.3	5.2	5.1	4.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.6	2.9	3.1	3.3	3.5	3.8	4.0	4.1	4.3
	300	Strength, (kN/m)	8.6	8.4	8.2	8.0	7.9	7.7	7.6	7.5	7.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.7	3.0	3.3	3.5	3.8	4.1	4.3	4.5	4.8
	230	Strength, (kN/m)	9.7	9.5	9.3	9.2	9.1	9.0	8.9	8.8	8.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.7	3.0	3.3	3.6	3.9	4.2	4.4	4.7	4.9
	150	Strength, (kN/m)	11.3	11.2	11.0	11.0	10.9	10.8	10.8	10.7	10.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.8	3.1	3.4	3.7	4.0	4.3	4.5	4.8	5.1
914/7	900	Strength, (kN/m)	8.0	7.3	6.8	6.3	5.9	5.6	5.4	5.1	4.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.5	10.7	10.8	10.9	11.0	11.0	11.0	11.0	11.0
	600	Strength, (kN/m)	9.0	8.4	7.9	7.4	7.1	6.7	6.5	6.2	6.0
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.2	11.5	11.8	12.0	12.1	12.3	12.4	12.5	12.5
	300	Strength, (kN/m)	11.7	11.2	10.8	10.4	10.1	9.8	9.6	9.4	9.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.6	13.1	13.7	14.1	14.5	14.8	15.1	15.4	15.6
	230	Strength, (kN/m)	13.4	12.9	12.5	12.2	11.9	11.6	11.4	11.2	11.1
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.1	13.8	14.5	15.0	15.5	15.9	16.3	16.6	16.9
	150	Strength, (kN/m)	16.3	15.9	15.5	15.3	15.0	14.8	14.7	14.5	14.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.9	14.8	15.5	16.2	16.8	17.3	17.8	18.3	18.7
914/9	900	Strength, (kN/m)	12.4	11.4	10.4	9.6	8.9	8.4	7.9	7.5	7.1
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.9	12.2	12.4	12.6	12.7	12.7	12.7	12.7	12.7
	600	Strength, (kN/m)	13.3	12.3	11.5	10.7	10.0	9.5	9.0	8.6	8.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.3	12.7	13.1	13.3	13.5	13.7	13.8	13.9	13.9
	300	Strength, (kN/m)	15.8	14.9	14.2	13.5	13.0	12.6	12.2	11.8	11.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.2	13.9	14.4	14.9	15.3	15.6	15.9	16.2	16.4
	230	Strength, (kN/m)	17.3	16.5	15.8	15.2	14.7	14.3	13.9	13.6	13.3
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.7	14.4	15.0	15.6	16.1	16.5	16.9	17.2	17.5
	150	Strength, (kN/m)	20.0	19.3	18.7	18.2	17.8	17.4	17.1	16.8	16.6
		Stiffness, G', (10 <sup>3</sup> N/mm)	14.3	15.1	15.9	16.6	17.2	17.7	18.2	18.7	19.1

38 mm deck - 914 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 1.21 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)								
			1500	1650	1800	1950	2100	2250	2400	2550	2700
914/4	900	Strength, (kN/m)	6.6	6.3	6.0	5.7	5.5	5.3	5.1	5.0	4.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.2	5.5	5.7	6.0	6.2	6.4	6.5	6.7	6.9
	600	Strength, (kN/m)	7.8	7.5	7.3	7.1	6.9	6.7	6.6	6.5	6.3
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.5	5.9	6.2	6.5	6.8	7.0	7.3	7.5	7.7
	300	Strength, (kN/m)	10.8	10.6	10.4	10.3	10.1	10.0	9.9	9.8	9.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.0	6.5	6.9	7.3	7.7	8.0	8.4	8.7	9.0
	230	Strength, (kN/m)	12.4	12.2	12.1	11.9	11.8	11.7	11.6	11.6	11.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.2	6.7	7.1	7.6	8.0	8.4	8.8	9.1	9.5
	150	Strength, (kN/m)	14.7	14.5	14.4	14.4	14.3	14.2	14.2	14.1	14.1
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.4	6.9	7.4	7.9	8.4	8.8	9.2	9.7	10.1
914/7	900	Strength, (kN/m)	9.0	8.4	7.9	7.5	7.2	6.9	6.6	6.4	6.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	15.1	15.0	14.9	14.8	14.6	14.5	14.4	14.3	14.1
	600	Strength, (kN/m)	10.5	9.9	9.4	9.0	8.7	8.3	8.1	7.8	7.6
		Stiffness, G', (10 <sup>3</sup> N/mm)	16.8	16.8	16.8	16.8	16.8	16.8	16.7	16.7	16.6
	300	Strength, (kN/m)	14.3	13.8	13.4	13.1	12.8	12.5	12.3	12.1	11.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	20.2	20.6	20.9	21.1	21.4	21.6	21.7	21.9	22.0
	230	Strength, (kN/m)	16.6	16.1	15.8	15.5	15.2	14.9	14.7	14.5	14.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	21.8	22.3	22.7	23.1	23.5	23.8	24.0	24.3	24.5
	150	Strength, (kN/m)	20.6	20.3	20.0	19.7	19.5	19.3	19.1	18.9	18.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	23.9	24.7	25.3	25.9	26.4	26.8	27.2	27.6	27.9
914/9	900	Strength, (kN/m)	13.9	12.8	11.9	11.2	10.6	10.0	9.5	9.1	8.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	17.9	17.8	17.7	17.6	17.4	17.2	17.0	16.9	16.7
	600	Strength, (kN/m)	15.2	14.3	13.4	12.7	12.0	11.5	11.0	10.6	10.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	19.1	19.1	19.2	19.1	19.1	19.0	18.9	18.9	18.8
	300	Strength, (kN/m)	18.8	18.0	17.3	16.7	16.1	15.7	15.3	14.9	14.6
		Stiffness, G', (10 <sup>3</sup> N/mm)	21.7	22.0	22.3	22.6	22.8	23.0	23.1	23.2	23.4
	230	Strength, (kN/m)	21.0	20.2	19.6	19.0	18.5	18.1	17.7	17.4	17.0
		Stiffness, G', (10 <sup>3</sup> N/mm)	22.9	23.4	23.9	24.2	24.6	24.8	25.1	25.3	25.5
	150	Strength, (kN/m)	24.8	24.2	23.6	23.2	22.7	22.4	22.0	21.7	21.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	24.7	25.4	26.0	26.6	27.1	27.5	27.9	28.3	28.6

38 mm deck - 914 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 1.52 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			1800	1950	2100	2250	2400	2550	2700	2850	3000	
914/4	900	Strength, (kN/m)	7.1	6.8	6.5	6.3	6.1	6.0	5.8	5.7	5.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.5	8.7	8.9	9.1	9.3	9.5	9.6	9.7	9.8	
	600	Strength, (kN/m)	8.6	8.4	8.2	8.0	7.9	7.7	7.6	7.5	7.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.4	9.7	10.0	10.3	10.6	10.9	11.1	11.3	11.5	
	300	Strength, (kN/m)	12.4	12.3	12.1	12.0	11.9	11.8	11.7	11.6	11.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.9	11.4	11.9	12.4	12.8	13.3	13.7	14.1	14.4	
	230	Strength, (kN/m)	14.4	14.2	14.1	14.0	13.9	13.8	13.8	13.7	13.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.4	12.0	12.6	13.1	13.7	14.2	14.6	15.1	15.5	
	150	Strength, (kN/m)	17.1	17.0	16.9	16.9	16.8	16.8	16.7	16.7	16.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.1	12.8	13.4	14.1	14.7	15.2	15.8	16.3	16.9	
	914/7	900	Strength, (kN/m)	9.3	8.9	8.5	8.1	7.8	7.6	7.3	7.1	6.9
			Stiffness, G', (10 <sup>3</sup> N/mm)	18.6	18.3	18.0	17.7	17.5	17.3	17.1	16.9	16.7
600		Strength, (kN/m)	11.2	10.7	10.3	10.0	9.7	9.4	9.2	9.0	8.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	21.2	21.1	20.9	20.8	20.6	20.5	20.4	20.3	20.2	
300		Strength, (kN/m)	16.0	15.6	15.3	15.0	14.8	14.5	14.3	14.2	14.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	27.1	27.3	27.4	27.5	27.6	27.7	27.7	27.8	27.8	
230		Strength, (kN/m)	18.9	18.6	18.3	18.0	17.8	17.6	17.4	17.2	17.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	29.9	30.2	30.5	30.7	30.9	31.1	31.2	31.4	31.5	
150		Strength, (kN/m)	24.0	23.7	23.4	23.2	23.0	22.9	22.7	22.6	22.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	33.9	34.5	34.9	35.3	35.7	36.0	36.3	36.6	36.8	
914/9		900	Strength, (kN/m)	14.0	13.1	12.4	11.8	11.2	10.7	10.3	9.9	9.6
			Stiffness, G', (10 <sup>3</sup> N/mm)	22.5	22.1	21.8	21.4	21.1	20.8	20.5	20.2	19.9
	600	Strength, (kN/m)	15.8	15.0	14.2	13.6	13.1	12.6	12.1	11.8	11.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	24.6	24.3	24.1	23.9	23.7	23.5	23.3	23.1	22.9	
	300	Strength, (kN/m)	20.4	19.8	19.2	18.7	18.2	17.8	17.4	17.1	16.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	29.3	29.4	29.5	29.6	29.6	29.6	29.6	29.6	29.6	
	230	Strength, (kN/m)	23.2	22.6	22.1	21.6	21.2	20.8	20.5	20.2	19.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	31.7	31.9	32.2	32.3	32.5	32.6	32.7	32.8	32.9	
	150	Strength, (kN/m)	28.2	27.7	27.2	26.8	26.4	26.1	25.8	25.6	25.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	35.1	35.6	36.0	36.4	36.7	37.0	37.3	37.5	37.7	

38 mm deck - 914 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.76 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			900	1050	1200	1350	1500	1650	1800	1950	2100	
914/4	900	Strength, (kN/m)	3.3	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.5	1.6	1.8	2.0	2.1	2.3	2.4	2.5	
	600	Strength, (kN/m)	4.0	3.8	3.7	3.6	3.5	3.4	3.3	3.3	3.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.5	1.7	1.9	2.0	2.2	2.3	2.5	2.6	
	300	Strength, (kN/m)	5.3	5.2	5.1	5.1	5.0	5.0	4.9	4.9	4.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.6	2.8	
	230	Strength, (kN/m)	5.9	5.8	5.7	5.7	5.7	5.6	5.6	5.6	5.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	
	150	Strength, (kN/m)	6.5	6.5	6.5	6.4	6.4	6.4	6.4	6.4	6.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.6	1.8	2.0	2.2	2.4	2.6	2.7	2.9	
	914/7	900	Strength, (kN/m)	4.9	4.5	4.2	3.9	3.7	3.5	3.4	3.2	3.1
			Stiffness, G', (10 <sup>3</sup> N/mm)	7.0	7.5	7.8	8.1	8.3	8.5	8.6	8.7	8.8
600		Strength, (kN/m)	5.7	5.3	5.0	4.8	4.6	4.4	4.3	4.2	4.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.3	7.8	8.3	8.6	8.9	9.2	9.4	9.5	9.7	
300		Strength, (kN/m)	7.7	7.4	7.1	6.9	6.8	6.6	6.5	6.4	6.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.7	8.4	9.1	9.6	10.1	10.5	10.9	11.2	11.5	
230		Strength, (kN/m)	8.8	8.5	8.3	8.1	8.0	7.9	7.8	7.7	7.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.9	8.7	9.4	10.0	10.6	11.0	11.5	11.9	12.3	
150		Strength, (kN/m)	10.4	10.3	10.1	10.0	9.9	9.8	9.8	9.7	9.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.2	9.1	9.8	10.5	11.2	11.8	12.3	12.8	13.2	
914/9		900	Strength, (kN/m)	7.7	7.0	6.4	6.0	5.5	5.2	4.8	4.6	4.4
			Stiffness, G', (10 <sup>3</sup> N/mm)	7.6	8.2	8.7	9.0	9.3	9.5	9.7	9.9	10.0
	600	Strength, (kN/m)	8.4	7.7	7.1	6.7	6.3	6.0	5.8	5.5	5.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.7	8.4	8.9	9.4	9.7	10.0	10.3	10.5	10.6	
	300	Strength, (kN/m)	10.1	9.5	9.1	8.7	8.4	8.2	8.0	7.8	7.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.0	8.8	9.4	10.0	10.5	11.0	11.4	11.7	12.0	
	230	Strength, (kN/m)	11.0	10.5	10.2	9.9	9.6	9.4	9.2	9.0	8.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.2	9.0	9.7	10.3	10.9	11.4	11.8	12.3	12.6	
	150	Strength, (kN/m)	12.5	12.2	11.9	11.7	11.5	11.3	11.2	11.1	11.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.3	9.2	10.0	10.7	11.4	12.0	12.5	13.0	13.4	

38 mm deck - 914 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.91 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			1200	1350	1500	1650	1800	1950	2100	2250	2400	
914/4	900	Strength, (kN/m)	3.6	3.4	3.3	3.2	3.1	3.1	3.0	2.9	2.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.5	2.8	3.0	3.2	3.4	3.6	3.7	3.9	4.0	
	600	Strength, (kN/m)	4.4	4.3	4.2	4.1	4.0	3.9	3.9	3.8	3.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.6	2.9	3.1	3.3	3.5	3.8	4.0	4.1	4.3	
	300	Strength, (kN/m)	6.1	6.1	6.0	6.0	5.9	5.9	5.8	5.8	5.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.7	3.0	3.3	3.5	3.8	4.1	4.3	4.5	4.8	
	230	Strength, (kN/m)	6.9	6.8	6.8	6.7	6.7	6.7	6.7	6.6	6.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.7	3.0	3.3	3.6	3.9	4.2	4.4	4.7	4.9	
	150	Strength, (kN/m)	7.8	7.7	7.7	7.7	7.7	7.7	7.6	7.6	7.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.8	3.1	3.4	3.7	4.0	4.3	4.5	4.8	5.1	
	914/7	900	Strength, (kN/m)	5.0	4.7	4.4	4.2	4.0	3.9	3.8	3.6	3.5
			Stiffness, G', (10 <sup>3</sup> N/mm)	10.5	10.7	10.8	10.9	11.0	11.0	11.0	11.0	11.0
600		Strength, (kN/m)	6.0	5.7	5.5	5.3	5.1	5.0	4.9	4.8	4.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.2	11.5	11.8	12.0	12.1	12.3	12.4	12.5	12.5	
300		Strength, (kN/m)	8.5	8.3	8.1	8.0	7.8	7.7	7.6	7.5	7.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.6	13.1	13.7	14.1	14.5	14.8	15.1	15.4	15.6	
230		Strength, (kN/m)	10.0	9.8	9.6	9.5	9.3	9.2	9.2	9.1	9.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.1	13.8	14.5	15.0	15.5	15.9	16.3	16.6	16.9	
150		Strength, (kN/m)	12.1	12.0	11.9	11.8	11.7	11.6	11.6	11.5	11.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.9	14.8	15.5	16.2	16.8	17.3	17.8	18.3	18.7	
914/9		900	Strength, (kN/m)	7.7	7.1	6.7	6.2	5.9	5.5	5.3	5.0	4.8
			Stiffness, G', (10 <sup>3</sup> N/mm)	11.9	12.2	12.4	12.6	12.7	12.7	12.7	12.7	12.7
	600	Strength, (kN/m)	8.6	8.0	7.6	7.3	7.0	6.7	6.4	6.2	6.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.3	12.7	13.1	13.3	13.5	13.7	13.8	13.9	13.9	
	300	Strength, (kN/m)	10.9	10.5	10.1	9.8	9.5	9.3	9.1	9.0	8.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.2	13.9	14.4	14.9	15.3	15.6	15.9	16.2	16.4	
	230	Strength, (kN/m)	12.2	11.8	11.5	11.2	11.0	10.8	10.7	10.5	10.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.7	14.4	15.0	15.6	16.1	16.5	16.9	17.2	17.5	
	150	Strength, (kN/m)	14.3	14.0	13.8	13.6	13.4	13.3	13.1	13.0	12.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	14.3	15.1	15.9	16.6	17.2	17.7	18.2	18.7	19.1	

38 mm deck - 914 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 1.21 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			1500	1650	1800	1950	2100	2250	2400	2550	2700	
914/4	900	Strength, (kN/m)	4.4	4.3	4.2	4.1	4.0	3.9	3.9	3.8	3.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.2	5.5	5.7	6.0	6.2	6.4	6.5	6.7	6.9	
	600	Strength, (kN/m)	5.5	5.4	5.3	5.2	5.2	5.1	5.1	5.0	5.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.5	5.9	6.2	6.5	6.8	7.0	7.3	7.5	7.7	
	300	Strength, (kN/m)	8.0	7.9	7.9	7.8	7.8	7.7	7.7	7.7	7.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.0	6.5	6.9	7.3	7.7	8.0	8.4	8.7	9.0	
	230	Strength, (kN/m)	9.0	9.0	9.0	8.9	8.9	8.9	8.8	8.8	8.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.2	6.7	7.1	7.6	8.0	8.4	8.8	9.1	9.5	
	150	Strength, (kN/m)	10.3	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.4	6.9	7.4	7.9	8.4	8.8	9.2	9.7	10.1	
	914/7	900	Strength, (kN/m)	6.0	5.7	5.4	5.2	5.0	4.9	4.8	4.6	4.5
			Stiffness, G', (10 <sup>3</sup> N/mm)	15.1	15.0	14.9	14.8	14.6	14.5	14.4	14.3	14.1
600		Strength, (kN/m)	7.3	7.1	6.8	6.7	6.5	6.4	6.2	6.1	6.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	16.8	16.8	16.8	16.8	16.8	16.8	16.7	16.7	16.6	
300		Strength, (kN/m)	10.8	10.6	10.4	10.3	10.2	10.0	9.9	9.9	9.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	20.2	20.6	20.9	21.1	21.4	21.6	21.7	21.9	22.0	
230		Strength, (kN/m)	12.8	12.6	12.5	12.3	12.2	12.1	12.0	12.0	11.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	21.8	22.3	22.7	23.1	23.5	23.8	24.0	24.3	24.5	
150		Strength, (kN/m)	15.9	15.7	15.6	15.5	15.4	15.4	15.3	15.3	15.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	23.9	24.7	25.3	25.9	26.4	26.8	27.2	27.6	27.9	
914/9		900	Strength, (kN/m)	8.9	8.4	7.9	7.5	7.1	6.8	6.5	6.3	6.1
			Stiffness, G', (10 <sup>3</sup> N/mm)	17.9	17.8	17.7	17.6	17.4	17.2	17.0	16.9	16.7
	600	Strength, (kN/m)	10.2	9.7	9.3	8.9	8.6	8.3	8.0	7.8	7.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	19.1	19.1	19.2	19.1	19.1	19.0	18.9	18.9	18.8	
	300	Strength, (kN/m)	13.5	13.1	12.7	12.4	12.2	11.9	11.7	11.6	11.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	21.7	22.0	22.3	22.6	22.8	23.0	23.1	23.2	23.4	
	230	Strength, (kN/m)	15.3	15.0	14.7	14.4	14.2	14.0	13.8	13.7	13.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	22.9	23.4	23.9	24.2	24.6	24.8	25.1	25.3	25.5	
	150	Strength, (kN/m)	18.4	18.1	17.9	17.7	17.5	17.4	17.2	17.1	17.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	24.7	25.4	26.0	26.6	27.1	27.5	27.9	28.3	28.6	

38 mm deck - 914 mm wide - 152 mm flute spacing

Thickness = 1.52 mm

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			1800	1950	2100	2250	2400	2550	2700	2850	3000	
914/4	900	Strength, (kN/m)	5.2	5.1	5.0	4.9	4.8	4.8	4.7	4.6	4.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.5	8.7	8.9	9.1	9.3	9.5	9.6	9.7	9.8	
	600	Strength, (kN/m)	6.7	6.6	6.5	6.4	6.3	6.3	6.2	6.2	6.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.4	9.7	10.0	10.3	10.6	10.9	11.1	11.3	11.5	
	300	Strength, (kN/m)	9.8	9.8	9.7	9.7	9.6	9.6	9.6	9.5	9.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.9	11.4	11.9	12.4	12.8	13.3	13.7	14.1	14.4	
	230	Strength, (kN/m)	11.2	11.1	11.1	11.1	11.0	11.0	11.0	11.0	11.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.4	12.0	12.6	13.1	13.7	14.2	14.6	15.1	15.5	
	150	Strength, (kN/m)	12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.1	12.8	13.4	14.1	14.7	15.2	15.8	16.3	16.9	
	914/7	900	Strength, (kN/m)	6.8	6.6	6.3	6.1	6.0	5.8	5.7	5.6	5.5
			Stiffness, G', (10 <sup>3</sup> N/mm)	18.6	18.3	18.0	17.7	17.5	17.3	17.1	16.9	16.7
600		Strength, (kN/m)	8.6	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	21.2	21.1	20.9	20.8	20.6	20.5	20.4	20.3	20.2	
300		Strength, (kN/m)	13.1	12.9	12.7	12.6	12.4	12.3	12.2	12.1	12.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	27.1	27.3	27.4	27.5	27.6	27.7	27.7	27.8	27.8	
230		Strength, (kN/m)	15.6	15.4	15.3	15.2	15.0	14.9	14.9	14.8	14.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	29.9	30.2	30.5	30.7	30.9	31.1	31.2	31.4	31.5	
150		Strength, (kN/m)	19.5	19.4	19.3	19.2	19.1	19.1	19.0	19.0	18.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	33.9	34.5	34.9	35.3	35.7	36.0	36.3	36.6	36.8	
914/9		900	Strength, (kN/m)	9.9	9.4	8.9	8.6	8.2	7.9	7.7	7.4	7.2
			Stiffness, G', (10 <sup>3</sup> N/mm)	22.5	22.1	21.8	21.4	21.1	20.8	20.5	20.2	19.9
	600	Strength, (kN/m)	11.6	11.2	10.8	10.4	10.1	9.8	9.5	9.3	9.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	24.6	24.3	24.1	23.9	23.7	23.5	23.3	23.1	22.9	
	300	Strength, (kN/m)	15.9	15.5	15.2	14.9	14.7	14.5	14.3	14.1	13.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	29.3	29.4	29.5	29.6	29.6	29.6	29.6	29.6	29.6	
	230	Strength, (kN/m)	18.4	18.1	17.8	17.5	17.3	17.1	16.9	16.8	16.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	31.7	31.9	32.2	32.3	32.5	32.6	32.7	32.8	32.9	
	150	Strength, (kN/m)	22.4	22.1	21.9	21.7	21.6	21.4	21.3	21.2	21.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	35.1	35.6	36.0	36.4	36.7	37.0	37.3	37.5	37.7	



76 mm deck - 610 mm wide - 152 mm flute spacing

Thickness = 0.76 mm

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			2400	2550	2700	2850	3000	3150	3300	3450	3600	
610/3	900	Strength, (kN/m)	2.9	2.8	2.8	2.7	2.7	2.7	2.6	2.6	2.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.7	1.7	
	600	Strength, (kN/m)	3.8	3.8	3.7	3.7	3.6	3.6	3.5	3.5	3.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	
	300	Strength, (kN/m)	6.0	6.0	5.9	5.9	5.8	5.8	5.8	5.7	5.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.4	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	
	230	Strength, (kN/m)	7.1	7.1	7.1	7.0	7.0	7.0	6.9	6.9	6.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.4	1.5	1.6	1.7	1.7	1.8	1.9	2.0	2.0	
	150	Strength, (kN/m)	8.8	8.7	8.7	8.7	8.7	8.6	8.6	8.6	8.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.4	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.1	
	610/5	900	Strength, (kN/m)	3.4	3.3	3.2	3.2	3.1	3.0	3.0	2.9	2.9
			Stiffness, G', (10 <sup>3</sup> N/mm)	4.7	4.8	4.8	4.9	4.9	5.0	5.0	5.0	5.1
600		Strength, (kN/m)	4.3	4.2	4.2	4.1	4.0	4.0	3.9	3.9	3.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.3	5.5	5.6	5.7	5.7	5.8	5.9	6.0	6.0	
300		Strength, (kN/m)	7.1	7.0	6.9	6.9	6.8	6.7	6.7	6.6	6.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.5	6.7	6.9	7.0	7.2	7.3	7.5	7.6	7.8	
230		Strength, (kN/m)	8.7	8.6	8.5	8.4	8.4	8.3	8.3	8.2	8.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.9	7.1	7.4	7.6	7.8	7.9	8.1	8.3	8.4	
150		Strength, (kN/m)	11.5	11.4	11.3	11.3	11.2	11.2	11.1	11.1	11.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.4	7.7	8.0	8.2	8.5	8.7	8.9	9.1	9.3	
610/7		900	Strength, (kN/m)	5.2	5.0	4.8	4.6	4.5	4.4	4.3	4.2	4.1
			Stiffness, G', (10 <sup>3</sup> N/mm)	5.4	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.8
	600	Strength, (kN/m)	6.1	5.9	5.7	5.6	5.4	5.3	5.2	5.1	5.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.6	
	300	Strength, (kN/m)	8.9	8.7	8.5	8.3	8.2	8.1	8.0	7.9	7.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.7	6.9	7.1	7.3	7.5	7.6	7.8	7.9	8.1	
	230	Strength, (kN/m)	10.6	10.4	10.3	10.1	10.0	9.9	9.7	9.6	9.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.1	7.3	7.6	7.8	8.0	8.1	8.3	8.5	8.7	
	150	Strength, (kN/m)	13.5	13.3	13.2	13.1	12.9	12.8	12.7	12.6	12.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.5	7.8	8.1	8.3	8.6	8.8	9.0	9.2	9.4	

76 mm deck - 610 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.91 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			2700	2850	3000	3150	3300	3450	3600	3750	3900	
610/3	900	Strength, (kN/m)	3.4	3.3	3.2	3.2	3.2	3.1	3.1	3.0	3.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.5	2.6	
	600	Strength, (kN/m)	4.5	4.4	4.4	4.3	4.3	4.2	4.2	4.2	4.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.2	2.3	2.4	2.5	2.5	2.6	2.7	2.8	2.9	
	300	Strength, (kN/m)	7.1	7.1	7.0	7.0	7.0	6.9	6.9	6.9	6.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	
	230	Strength, (kN/m)	8.5	8.5	8.4	8.4	8.4	8.3	8.3	8.3	8.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	
	150	Strength, (kN/m)	10.5	10.5	10.5	10.4	10.4	10.4	10.4	10.4	10.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.5	
	610/5	900	Strength, (kN/m)	3.9	3.8	3.7	3.7	3.6	3.5	3.5	3.4	3.4
			Stiffness, G', (10 <sup>3</sup> N/mm)	6.1	6.1	6.2	6.2	6.2	6.2	6.3	6.3	6.3
600		Strength, (kN/m)	5.0	4.9	4.9	4.8	4.7	4.7	4.6	4.6	4.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.2	7.3	7.3	7.4	7.5	7.5	7.6	7.6	7.7	
300		Strength, (kN/m)	8.4	8.3	8.2	8.1	8.0	8.0	7.9	7.8	7.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.2	9.4	9.6	9.8	9.9	10.0	10.2	10.3	10.4	
230		Strength, (kN/m)	10.3	10.2	10.1	10.0	10.0	9.9	9.8	9.8	9.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.1	10.3	10.5	10.7	10.9	11.1	11.3	11.4	11.6	
150		Strength, (kN/m)	13.7	13.6	13.5	13.5	13.4	13.4	13.3	13.3	13.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.1	11.4	11.7	12.0	12.2	12.5	12.7	12.9	13.1	
610/7		900	Strength, (kN/m)	5.8	5.6	5.4	5.3	5.1	5.0	4.9	4.8	4.7
			Stiffness, G', (10 <sup>3</sup> N/mm)	7.2	7.2	7.3	7.3	7.3	7.3	7.3	7.3	7.3
	600	Strength, (kN/m)	6.9	6.7	6.6	6.4	6.3	6.1	6.0	5.9	5.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.0	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5	
	300	Strength, (kN/m)	10.2	10.1	9.9	9.7	9.6	9.5	9.4	9.2	9.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.7	9.9	10.1	10.2	10.4	10.5	10.6	10.8	10.9	
	230	Strength, (kN/m)	12.4	12.2	12.0	11.9	11.7	11.6	11.5	11.4	11.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.4	10.6	10.8	11.1	11.2	11.4	11.6	11.8	11.9	
	150	Strength, (kN/m)	15.9	15.7	15.6	15.5	15.3	15.2	15.1	15.0	14.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.3	11.6	11.9	12.2	12.4	12.7	12.9	13.1	13.3	

76 mm deck - 610 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 1.21 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)								
			3000	3150	3300	3450	3600	3750	3900	4050	4200
610/3	900	Strength, (kN/m)	4.3	4.2	4.2	4.1	4.1	4.0	4.0	4.0	3.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	3.6	3.7	3.8	3.9	4.0	4.0	4.1	4.2	4.2
	600	Strength, (kN/m)	5.8	5.7	5.7	5.6	5.6	5.5	5.5	5.4	5.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9
	300	Strength, (kN/m)	9.4	9.3	9.3	9.2	9.2	9.1	9.1	9.1	9.0
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.7	4.9	5.1	5.2	5.4	5.5	5.7	5.8	6.0
	230	Strength, (kN/m)	11.2	11.2	11.1	11.1	11.0	11.0	11.0	10.9	10.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.9	5.1	5.3	5.5	5.7	5.8	6.0	6.2	6.3
150	Strength, (kN/m)	13.9	13.9	13.8	13.8	13.8	13.8	13.7	13.7	13.7	
	Stiffness, G', (10 <sup>3</sup> N/mm)	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.5	6.7	
610/5	900	Strength, (kN/m)	5.0	4.9	4.8	4.7	4.6	4.6	4.5	4.5	4.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.1	8.1	8.1	8.1	8.1	8.1	8.0	8.0	8.0
	600	Strength, (kN/m)	6.5	6.4	6.3	6.2	6.1	6.1	6.0	5.9	5.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.9	10.0	10.0	10.0	10.1	10.1	10.1	10.1	10.1
	300	Strength, (kN/m)	10.9	10.8	10.7	10.6	10.5	10.4	10.4	10.3	10.3
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.7	13.9	14.0	14.1	14.3	14.4	14.5	14.6	14.7
	230	Strength, (kN/m)	13.4	13.3	13.2	13.2	13.1	13.0	13.0	12.9	12.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	15.4	15.6	15.8	16.0	16.2	16.3	16.5	16.6	16.7
150	Strength, (kN/m)	18.0	17.9	17.8	17.8	17.7	17.6	17.6	17.5	17.5	
	Stiffness, G', (10 <sup>3</sup> N/mm)	17.7	18.0	18.3	18.6	18.8	19.0	19.2	19.4	19.6	
610/7	900	Strength, (kN/m)	7.2	7.0	6.8	6.7	6.5	6.4	6.2	6.1	6.0
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.8	9.8	9.7	9.7	9.6	9.6	9.5	9.5	9.5
	600	Strength, (kN/m)	8.7	8.5	8.3	8.1	8.0	7.8	7.7	7.6	7.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.3	11.3	11.3	11.4	11.3	11.3	11.3	11.3	11.3
	300	Strength, (kN/m)	13.1	12.9	12.8	12.6	12.4	12.3	12.2	12.0	11.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	14.6	14.7	14.8	15.0	15.1	15.2	15.2	15.3	15.4
	230	Strength, (kN/m)	16.0	15.8	15.6	15.4	15.3	15.1	15.0	14.9	14.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	16.1	16.3	16.4	16.6	16.8	16.9	17.1	17.2	17.3
150	Strength, (kN/m)	20.7	20.5	20.4	20.2	20.1	20.0	19.8	19.7	19.6	
	Stiffness, G', (10 <sup>3</sup> N/mm)	18.1	18.4	18.7	19.0	19.2	19.4	19.6	19.8	20.0	

76 mm deck - 610 mm wide - 152 mm flute spacing

Thickness = 1.52 mm

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			3300	3450	3600	3750	3900	4050	4200	4350	4500	
610/3	900	Strength, (kN/m)	5.0	5.0	4.9	4.9	4.8	4.8	4.8	4.7	4.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.4	5.5	5.6	5.6	5.7	5.8	5.9	5.9	6.0	
	600	Strength, (kN/m)	6.9	6.8	6.8	6.7	6.7	6.6	6.6	6.6	6.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.4	6.5	6.6	6.7	6.9	7.0	7.1	7.2	7.3	
	300	Strength, (kN/m)	11.2	11.1	11.1	11.1	11.0	11.0	10.9	10.9	10.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.4	
	230	Strength, (kN/m)	13.4	13.3	13.3	13.3	13.2	13.2	13.2	13.2	13.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.4	8.7	8.9	9.1	9.4	9.6	9.8	10.0	10.2	
	150	Strength, (kN/m)	16.5	16.5	16.4	16.4	16.4	16.4	16.4	16.3	16.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.0	9.3	9.6	9.9	10.2	10.4	10.7	10.9	11.2	
	610/5	900	Strength, (kN/m)	5.7	5.6	5.6	5.5	5.4	5.4	5.3	5.2	5.2
			Stiffness, G', (10 <sup>3</sup> N/mm)	9.8	9.8	9.7	9.7	9.7	9.6	9.6	9.6	9.5
600		Strength, (kN/m)	7.6	7.5	7.4	7.3	7.3	7.2	7.1	7.1	7.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.4	12.4	12.3	12.3	12.3	12.3	12.3	12.3	12.3	
300		Strength, (kN/m)	13.0	12.9	12.8	12.7	12.7	12.6	12.5	12.5	12.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	18.0	18.1	18.2	18.3	18.3	18.4	18.5	18.5	18.6	
230		Strength, (kN/m)	16.1	16.0	16.0	15.9	15.8	15.8	15.7	15.7	15.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	20.7	20.8	21.0	21.1	21.2	21.3	21.4	21.6	21.6	
150		Strength, (kN/m)	21.7	21.6	21.5	21.5	21.4	21.4	21.3	21.3	21.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	24.5	24.8	25.0	25.2	25.4	25.6	25.8	25.9	26.1	
610/7		900	Strength, (kN/m)	8.1	7.9	7.7	7.5	7.4	7.3	7.1	7.0	6.9
			Stiffness, G', (10 <sup>3</sup> N/mm)	12.0	11.9	11.8	11.7	11.6	11.5	11.4	11.4	11.3
	600	Strength, (kN/m)	9.9	9.7	9.6	9.4	9.2	9.1	9.0	8.9	8.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	14.2	14.1	14.1	14.0	14.0	14.0	13.9	13.9	13.8	
	300	Strength, (kN/m)	15.5	15.3	15.1	15.0	14.8	14.7	14.5	14.4	14.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	19.2	19.3	19.3	19.4	19.4	19.5	19.5	19.6	19.6	
	230	Strength, (kN/m)	18.9	18.7	18.5	18.3	18.2	18.1	17.9	17.8	17.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	21.6	21.7	21.9	22.0	22.1	22.2	22.3	22.4	22.5	
	150	Strength, (kN/m)	24.7	24.5	24.4	24.2	24.1	24.0	23.9	23.8	23.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	25.1	25.4	25.6	25.8	26.0	26.2	26.3	26.5	26.7	

76 mm deck - 610 mm wide - 152 mm flute spacing

Thickness = 0.76 mm

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			2400	2550	2700	2850	3000	3150	3300	3450	3600	
610/3	900	Strength, (kN/m)	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.3	1.4	1.4	1.5	1.5	1.6	1.7	1.7	
	600	Strength, (kN/m)	3.1	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.3	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.8	
	300	Strength, (kN/m)	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.4	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	
	230	Strength, (kN/m)	5.5	5.5	5.5	5.5	5.4	5.4	5.4	5.4	5.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.4	1.5	1.6	1.7	1.7	1.8	1.9	2.0	2.0	
	150	Strength, (kN/m)	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	1.4	1.5	1.6	1.7	1.8	1.9	1.9	2.0	2.1	
	610/5	900	Strength, (kN/m)	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.3	2.3
			Stiffness, G', (10 <sup>3</sup> N/mm)	4.7	4.8	4.8	4.9	4.9	5.0	5.0	5.0	5.1
600		Strength, (kN/m)	3.5	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.3	5.5	5.6	5.7	5.7	5.8	5.9	6.0	6.0	
300		Strength, (kN/m)	5.9	5.9	5.8	5.8	5.8	5.8	5.7	5.7	5.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.5	6.7	6.9	7.0	7.2	7.3	7.5	7.6	7.8	
230		Strength, (kN/m)	7.3	7.2	7.2	7.2	7.1	7.1	7.1	7.1	7.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.9	7.1	7.4	7.6	7.8	7.9	8.1	8.3	8.4	
150		Strength, (kN/m)	9.4	9.4	9.3	9.3	9.3	9.3	9.3	9.3	9.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.4	7.7	8.0	8.2	8.5	8.7	8.9	9.1	9.3	
610/7		900	Strength, (kN/m)	3.6	3.5	3.4	3.3	3.3	3.2	3.1	3.1	3.0
			Stiffness, G', (10 <sup>3</sup> N/mm)	5.4	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.8
	600	Strength, (kN/m)	4.5	4.4	4.3	4.3	4.2	4.1	4.1	4.0	4.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.6	
	300	Strength, (kN/m)	7.1	7.0	6.9	6.9	6.8	6.7	6.7	6.6	6.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.7	6.9	7.1	7.3	7.5	7.6	7.8	7.9	8.1	
	230	Strength, (kN/m)	8.5	8.4	8.3	8.3	8.2	8.2	8.1	8.0	8.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.1	7.3	7.6	7.8	8.0	8.1	8.3	8.5	8.7	
	150	Strength, (kN/m)	10.8	10.8	10.7	10.7	10.6	10.6	10.5	10.5	10.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.5	7.8	8.1	8.3	8.6	8.8	9.0	9.2	9.4	

76 mm deck - 610 mm wide - 152 mm flute spacing

Thickness = 0.91 mm

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			2700	2850	3000	3150	3300	3450	3600	3750	3900	
610/3	900	Strength, (kN/m)	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.5	2.6	
	600	Strength, (kN/m)	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.2	2.3	2.4	2.5	2.5	2.6	2.7	2.8	2.9	
	300	Strength, (kN/m)	5.7	5.7	5.6	5.6	5.6	5.6	5.6	5.6	5.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	
	230	Strength, (kN/m)	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	
	150	Strength, (kN/m)	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	2.5	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.5	
	610/5	900	Strength, (kN/m)	3.0	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.7
			Stiffness, G', (10 <sup>3</sup> N/mm)	6.1	6.1	6.2	6.2	6.2	6.2	6.3	6.3	6.3
600		Strength, (kN/m)	4.1	4.0	4.0	4.0	3.9	3.9	3.9	3.9	3.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.2	7.3	7.3	7.4	7.5	7.5	7.6	7.6	7.7	
300		Strength, (kN/m)	7.0	7.0	6.9	6.9	6.9	6.9	6.8	6.8	6.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.2	9.4	9.6	9.8	9.9	10.0	10.2	10.3	10.4	
230		Strength, (kN/m)	8.6	8.6	8.6	8.6	8.5	8.5	8.5	8.5	8.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.1	10.3	10.5	10.7	10.9	11.1	11.3	11.4	11.6	
150		Strength, (kN/m)	11.2	11.2	11.2	11.1	11.1	11.1	11.1	11.1	11.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.1	11.4	11.7	12.0	12.2	12.5	12.7	12.9	13.1	
610/7		900	Strength, (kN/m)	4.1	4.0	3.9	3.8	3.8	3.7	3.6	3.6	3.5
			Stiffness, G', (10 <sup>3</sup> N/mm)	7.2	7.2	7.3	7.3	7.3	7.3	7.3	7.3	7.3
	600	Strength, (kN/m)	5.2	5.1	5.0	4.9	4.9	4.8	4.7	4.7	4.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.0	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5	
	300	Strength, (kN/m)	8.3	8.2	8.1	8.1	8.0	7.9	7.9	7.8	7.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.7	9.9	10.1	10.2	10.4	10.5	10.6	10.8	10.9	
	230	Strength, (kN/m)	10.0	9.9	9.9	9.8	9.7	9.7	9.6	9.6	9.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.4	10.6	10.8	11.1	11.2	11.4	11.6	11.8	11.9	
	150	Strength, (kN/m)	12.9	12.8	12.7	12.7	12.6	12.6	12.5	12.5	12.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.3	11.6	11.9	12.2	12.4	12.7	12.9	13.1	13.3	

76 mm deck - 610 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 1.21 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			3000	3150	3300	3450	3600	3750	3900	4050	4200	
610/3	900	Strength, (kN/m)	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	3.6	3.7	3.8	3.9	4.0	4.0	4.1	4.2	4.2	
	600	Strength, (kN/m)	4.8	4.7	4.7	4.7	4.7	4.6	4.6	4.6	4.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	
	300	Strength, (kN/m)	7.5	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.7	4.9	5.1	5.2	5.4	5.5	5.7	5.8	6.0	
	230	Strength, (kN/m)	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.6	8.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.9	5.1	5.3	5.5	5.7	5.8	6.0	6.2	6.3	
	150	Strength, (kN/m)	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.5	6.7	
	610/5	900	Strength, (kN/m)	3.8	3.8	3.8	3.7	3.7	3.7	3.6	3.6	3.6
			Stiffness, G', (10 <sup>3</sup> N/mm)	8.1	8.1	8.1	8.1	8.1	8.1	8.0	8.0	8.0
600		Strength, (kN/m)	5.3	5.3	5.2	5.2	5.2	5.2	5.1	5.1	5.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.9	10.0	10.0	10.0	10.1	10.1	10.1	10.1	10.1	
300		Strength, (kN/m)	9.3	9.2	9.2	9.1	9.1	9.1	9.1	9.0	9.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.7	13.9	14.0	14.1	14.3	14.4	14.5	14.6	14.7	
230		Strength, (kN/m)	11.4	11.4	11.4	11.3	11.3	11.3	11.3	11.2	11.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	15.4	15.6	15.8	16.0	16.2	16.3	16.5	16.6	16.7	
150		Strength, (kN/m)	14.9	14.9	14.8	14.8	14.8	14.8	14.8	14.7	14.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	17.7	18.0	18.3	18.6	18.8	19.0	19.2	19.4	19.6	
610/7		900	Strength, (kN/m)	5.2	5.1	5.0	4.9	4.8	4.8	4.7	4.6	4.6
			Stiffness, G', (10 <sup>3</sup> N/mm)	9.8	9.8	9.7	9.7	9.6	9.6	9.5	9.5	9.5
	600	Strength, (kN/m)	6.7	6.6	6.5	6.4	6.3	6.2	6.2	6.1	6.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.3	11.3	11.3	11.4	11.3	11.3	11.3	11.3	11.3	
	300	Strength, (kN/m)	10.9	10.7	10.6	10.6	10.5	10.4	10.3	10.3	10.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	14.6	14.7	14.8	15.0	15.1	15.2	15.2	15.3	15.4	
	230	Strength, (kN/m)	13.1	13.0	13.0	12.9	12.8	12.7	12.7	12.6	12.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	16.1	16.3	16.4	16.6	16.8	16.9	17.1	17.2	17.3	
	150	Strength, (kN/m)	17.0	16.9	16.8	16.8	16.7	16.7	16.6	16.6	16.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	18.1	18.4	18.7	19.0	19.2	19.4	19.6	19.8	20.0	

76 mm deck - 610 mm wide - 152 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 1.52 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			3300	3450	3600	3750	3900	4050	4200	4350	4500	
610/3	900	Strength, (kN/m)	4.3	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.4	5.5	5.6	5.6	5.7	5.8	5.9	5.9	6.0	
	600	Strength, (kN/m)	5.9	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.4	6.5	6.6	6.7	6.9	7.0	7.1	7.2	7.3	
	300	Strength, (kN/m)	9.4	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.4	
	230	Strength, (kN/m)	10.9	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.4	8.7	8.9	9.1	9.4	9.6	9.8	10.0	10.2	
	150	Strength, (kN/m)	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.0	9.3	9.6	9.9	10.2	10.4	10.7	10.9	11.2	
	610/5	900	Strength, (kN/m)	4.7	4.7	4.6	4.6	4.6	4.5	4.5	4.5	4.4
			Stiffness, G', (10 <sup>3</sup> N/mm)	9.8	9.8	9.7	9.7	9.7	9.6	9.6	9.6	9.5
600		Strength, (kN/m)	6.6	6.5	6.5	6.4	6.4	6.4	6.3	6.3	6.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.4	12.4	12.3	12.3	12.3	12.3	12.3	12.3	12.3	
300		Strength, (kN/m)	11.5	11.4	11.4	11.3	11.3	11.3	11.3	11.2	11.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	18.0	18.1	18.2	18.3	18.3	18.4	18.5	18.5	18.6	
230		Strength, (kN/m)	14.2	14.2	14.1	14.1	14.1	14.0	14.0	14.0	14.0	
		Stiffness, G', (10 <sup>3</sup> N/mm)	20.7	20.8	21.0	21.1	21.2	21.3	21.4	21.6	21.6	
150		Strength, (kN/m)	18.6	18.5	18.5	18.5	18.5	18.4	18.4	18.4	18.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	24.5	24.8	25.0	25.2	25.4	25.6	25.8	25.9	26.1	
610/7		900	Strength, (kN/m)	6.3	6.2	6.0	6.0	5.9	5.8	5.7	5.6	5.6
			Stiffness, G', (10 <sup>3</sup> N/mm)	12.0	11.9	11.8	11.7	11.6	11.5	11.4	11.4	11.3
	600	Strength, (kN/m)	8.1	8.0	7.9	7.8	7.7	7.6	7.6	7.5	7.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	14.2	14.1	14.1	14.0	14.0	14.0	13.9	13.9	13.8	
	300	Strength, (kN/m)	13.3	13.2	13.1	13.0	12.9	12.8	12.8	12.7	12.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	19.2	19.3	19.3	19.4	19.4	19.5	19.5	19.6	19.6	
	230	Strength, (kN/m)	16.2	16.1	16.0	15.9	15.8	15.8	15.7	15.6	15.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	21.6	21.7	21.9	22.0	22.1	22.2	22.3	22.4	22.5	
	150	Strength, (kN/m)	21.0	21.0	20.9	20.8	20.8	20.7	20.7	20.6	20.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	25.1	25.4	25.6	25.8	26.0	26.2	26.3	26.5	26.7	



76 mm deck - 610 mm wide - 203 mm flute spacing

Thickness = 0.76 mm

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			2400	2550	2700	2850	3000	3150	3300	3450	3600	
610/4	900	Strength, (kN/m)	3.1	3.1	3.0	2.9	2.9	2.8	2.8	2.7	2.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	3.4	3.5	3.5	3.6	3.7	3.8	3.8	3.9	3.9	
	600	Strength, (kN/m)	4.1	4.0	3.9	3.9	3.8	3.8	3.7	3.7	3.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	3.7	3.8	4.0	4.1	4.2	4.3	4.4	4.4	4.5	
	300	Strength, (kN/m)	6.7	6.6	6.5	6.5	6.4	6.4	6.3	6.3	6.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.3	4.5	4.6	4.8	4.9	5.1	5.2	5.4	5.5	
	230	Strength, (kN/m)	8.1	8.0	8.0	7.9	7.9	7.8	7.8	7.7	7.7	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.5	4.7	4.9	5.0	5.2	5.4	5.5	5.7	5.9	
	150	Strength, (kN/m)	10.5	10.4	10.4	10.3	10.3	10.3	10.2	10.2	10.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	
	610/6	900	Strength, (kN/m)	4.9	4.7	4.5	4.4	4.3	4.2	4.0	4.0	3.9
			Stiffness, G', (10 <sup>3</sup> N/mm)	3.8	3.9	4.0	4.1	4.1	4.2	4.3	4.3	4.4
600		Strength, (kN/m)	5.8	5.6	5.5	5.3	5.2	5.1	5.0	4.9	4.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.0	4.1	4.3	4.4	4.5	4.6	4.7	4.8	4.9	
300		Strength, (kN/m)	8.6	8.4	8.2	8.1	8.0	7.9	7.8	7.7	7.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.4	4.6	4.8	4.9	5.1	5.2	5.4	5.5	5.7	
230		Strength, (kN/m)	10.1	9.9	9.8	9.6	9.5	9.4	9.3	9.2	9.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.6	4.8	4.9	5.1	5.3	5.5	5.6	5.8	6.0	
150		Strength, (kN/m)	12.7	12.5	12.4	12.3	12.2	12.1	12.0	11.9	11.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.3	

76 mm deck - 610 mm wide - 203 mm flute spacing  
 Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224  
 Side-Lap Fasteners: XU34B1016, XU34S1016

Thickness = 0.91 mm  
 Limit States Design - FACTORED RESISTANCE  
 $\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)								
			2700	2850	3000	3150	3300	3450	3600	3750	3900
610/4	900	Strength, (kN/m)	3.6	3.5	3.5	3.4	3.4	3.3	3.3	3.2	3.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.7	4.8	4.9	4.9	5.0	5.0	5.1	5.1	5.2
	600	Strength, (kN/m)	4.7	4.6	4.6	4.5	4.5	4.4	4.4	4.3	4.3
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2
	300	Strength, (kN/m)	7.9	7.8	7.7	7.7	7.6	7.5	7.5	7.5	7.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.6	6.8	7.0	7.1	7.3	7.5	7.6	7.8	7.9
	230	Strength, (kN/m)	9.6	9.5	9.5	9.4	9.4	9.3	9.3	9.2	9.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.0	7.2	7.5	7.7	7.9	8.1	8.3	8.4	8.6
	150	Strength, (kN/m)	12.5	12.4	12.4	12.4	12.3	12.3	12.3	12.2	12.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.5	7.8	8.1	8.3	8.6	8.8	9.0	9.2	9.4
610/6	900	Strength, (kN/m)	5.5	5.3	5.2	5.0	4.9	4.8	4.7	4.6	4.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.4	5.5	5.6	5.7	5.7	5.8	5.8	5.9	5.9
	600	Strength, (kN/m)	6.6	6.4	6.3	6.1	6.0	5.9	5.8	5.7	5.6
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.9	6.1	6.2	6.3	6.4	6.5	6.6	6.6	6.7
	300	Strength, (kN/m)	9.9	9.8	9.6	9.5	9.3	9.2	9.1	9.0	8.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.8	7.0	7.2	7.4	7.6	7.7	7.9	8.1	8.2
	230	Strength, (kN/m)	11.8	11.6	11.5	11.3	11.2	11.1	11.0	10.9	10.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.2	7.4	7.6	7.9	8.1	8.3	8.4	8.6	8.8
	150	Strength, (kN/m)	15.0	14.8	14.7	14.6	14.5	14.4	14.3	14.2	14.1
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.6	7.9	8.2	8.4	8.7	8.9	9.1	9.3	9.5

76 mm deck - 610 mm wide - 203 mm flute spacing

Thickness = 1.21 mm

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)								
			3000	3150	3300	3450	3600	3750	3900	4050	4200
610/4	900	Strength, (kN/m)	4.6	4.5	4.5	4.4	4.3	4.3	4.2	4.2	4.1
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0
	600	Strength, (kN/m)	6.1	6.0	5.9	5.9	5.8	5.8	5.7	5.7	5.6
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.2	8.3	8.3	8.4	8.5	8.6	8.6	8.7	8.7
	300	Strength, (kN/m)	10.3	10.2	10.1	10.0	10.0	9.9	9.9	9.8	9.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.8	11.0	11.2	11.4	11.5	11.7	11.8	12.0	12.1
	230	Strength, (kN/m)	12.6	12.5	12.4	12.4	12.3	12.3	12.2	12.2	12.1
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.8	12.1	12.3	12.6	12.8	13.0	13.2	13.4	13.6
	150	Strength, (kN/m)	16.5	16.4	16.4	16.3	16.3	16.2	16.2	16.2	16.1
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.2	15.4
610/6	900	Strength, (kN/m)	6.8	6.7	6.5	6.3	6.2	6.1	5.9	5.8	5.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2
	600	Strength, (kN/m)	8.3	8.1	8.0	7.8	7.7	7.6	7.4	7.3	7.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.6	9.7
	300	Strength, (kN/m)	12.8	12.6	12.4	12.3	12.1	12.0	11.9	11.8	11.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.3	11.5	11.7	11.9	12.1	12.2	12.4	12.5	12.6
	230	Strength, (kN/m)	15.3	15.1	14.9	14.8	14.6	14.5	14.4	14.3	14.2
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.2	12.5	12.7	13.0	13.2	13.4	13.6	13.8	13.9
	150	Strength, (kN/m)	19.5	19.4	19.2	19.1	19.0	18.9	18.8	18.7	18.6
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.4	13.8	14.1	14.4	14.7	14.9	15.2	15.4	15.7

76 mm deck - 610 mm wide - 203 mm flute spacing

Thickness = 1.52 mm

Support Fasteners: Simpson Strong-Tie XLQ114T1224, XLQ114B1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi : 0.50$

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)								
			3300	3450	3600	3750	3900	4050	4200	4350	4500
610/4	900	Strength, (kN/m)	5.3	5.3	5.2	5.1	5.1	5.0	5.0	4.9	4.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.6	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
	600	Strength, (kN/m)	7.2	7.1	7.1	7.0	6.9	6.9	6.8	6.8	6.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.8	10.8	10.9	10.9	11.0	11.0	11.0	11.1	11.1
	300	Strength, (kN/m)	12.3	12.2	12.1	12.1	12.0	12.0	11.9	11.9	11.8
		Stiffness, G', (10 <sup>3</sup> N/mm)	15.2	15.4	15.5	15.7	15.8	15.9	16.1	16.2	16.3
	230	Strength, (kN/m)	15.1	15.1	15.0	14.9	14.9	14.8	14.8	14.8	14.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	17.1	17.4	17.6	17.8	18.0	18.2	18.3	18.5	18.7
	150	Strength, (kN/m)	19.8	19.7	19.7	19.6	19.6	19.6	19.5	19.5	19.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	19.8	20.1	20.4	20.7	21.0	21.2	21.5	21.7	22.0
610/6	900	Strength, (kN/m)	7.7	7.5	7.3	7.2	7.1	6.9	6.8	6.7	6.6
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.5	10.4	10.4	10.4	10.3	10.3	10.3	10.3	10.2
	600	Strength, (kN/m)	9.5	9.4	9.2	9.1	8.9	8.8	8.7	8.6	8.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.3	12.3	12.3	12.3	12.4	12.4	12.4	12.4	12.4
	300	Strength, (kN/m)	15.0	14.8	14.7	14.5	14.4	14.3	14.2	14.0	13.9
		Stiffness, G', (10 <sup>3</sup> N/mm)	16.1	16.2	16.4	16.5	16.7	16.8	16.9	17.0	17.1
	230	Strength, (kN/m)	18.0	17.9	17.7	17.6	17.4	17.3	17.2	17.1	17.0
		Stiffness, G', (10 <sup>3</sup> N/mm)	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.1	19.3
	150	Strength, (kN/m)	23.2	23.1	23.0	22.9	22.8	22.7	22.6	22.5	22.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	20.2	20.5	20.8	21.1	21.4	21.7	21.9	22.1	22.4

76 mm deck - 610 mm wide - 203 mm flute spacing

Thickness = 0.76 mm

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			2400	2550	2700	2850	3000	3150	3300	3450	3600	
610/4	900	Strength, (kN/m)	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	3.4	3.5	3.5	3.6	3.7	3.8	3.8	3.9	3.9	
	600	Strength, (kN/m)	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.1	3.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	3.7	3.8	4.0	4.1	4.2	4.3	4.4	4.4	4.5	
	300	Strength, (kN/m)	5.5	5.5	5.4	5.4	5.4	5.4	5.4	5.3	5.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.3	4.5	4.6	4.8	4.9	5.1	5.2	5.4	5.5	
	230	Strength, (kN/m)	6.6	6.6	6.6	6.5	6.5	6.5	6.5	6.5	6.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.5	4.7	4.9	5.0	5.2	5.4	5.5	5.7	5.9	
	150	Strength, (kN/m)	8.2	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	
	610/6	900	Strength, (kN/m)	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	2.9
			Stiffness, G', (10 <sup>3</sup> N/mm)	3.8	3.9	4.0	4.1	4.1	4.2	4.3	4.3	4.4
600		Strength, (kN/m)	4.4	4.3	4.2	4.1	4.0	4.0	3.9	3.9	3.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.0	4.1	4.3	4.4	4.5	4.6	4.7	4.8	4.9	
300		Strength, (kN/m)	6.7	6.6	6.6	6.5	6.4	6.4	6.3	6.3	6.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.4	4.6	4.8	4.9	5.1	5.2	5.4	5.5	5.7	
230		Strength, (kN/m)	8.0	7.9	7.8	7.8	7.7	7.7	7.6	7.6	7.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.6	4.8	4.9	5.1	5.3	5.5	5.6	5.8	6.0	
150		Strength, (kN/m)	9.9	9.8	9.8	9.7	9.7	9.7	9.6	9.6	9.6	
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.3	

76 mm deck - 610 mm wide - 203 mm flute spacing

Thickness = 0.91 mm

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)								
			2700	2850	3000	3150	3300	3450	3600	3750	3900
610/4	900	Strength, (kN/m)	2.8	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.6
		Stiffness, G', (10 <sup>3</sup> N/mm)	4.7	4.8	4.9	4.9	5.0	5.0	5.1	5.1	5.2
	600	Strength, (kN/m)	3.9	3.9	3.8	3.8	3.8	3.8	3.7	3.7	3.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2
	300	Strength, (kN/m)	6.5	6.5	6.5	6.4	6.4	6.4	6.4	6.4	6.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.6	6.8	7.0	7.1	7.3	7.5	7.6	7.8	7.9
	230	Strength, (kN/m)	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.0	7.2	7.5	7.7	7.9	8.1	8.3	8.4	8.6
	150	Strength, (kN/m)	9.8	9.8	9.8	9.7	9.7	9.7	9.7	9.7	9.7
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.5	7.8	8.1	8.3	8.6	8.8	9.0	9.2	9.4
610/6	900	Strength, (kN/m)	3.9	3.8	3.7	3.7	3.6	3.5	3.5	3.4	3.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.4	5.5	5.6	5.7	5.7	5.8	5.8	5.9	5.9
	600	Strength, (kN/m)	5.0	4.9	4.9	4.8	4.7	4.7	4.6	4.6	4.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	5.9	6.1	6.2	6.3	6.4	6.5	6.6	6.6	6.7
	300	Strength, (kN/m)	7.9	7.8	7.7	7.7	7.6	7.6	7.5	7.5	7.4
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.8	7.0	7.2	7.4	7.6	7.7	7.9	8.1	8.2
	230	Strength, (kN/m)	9.4	9.3	9.3	9.2	9.2	9.1	9.1	9.0	9.0
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.2	7.4	7.6	7.9	8.1	8.3	8.4	8.6	8.8
	150	Strength, (kN/m)	11.7	11.7	11.7	11.6	11.6	11.5	11.5	11.5	11.5
		Stiffness, G', (10 <sup>3</sup> N/mm)	7.6	7.9	8.2	8.4	8.7	8.9	9.1	9.3	9.5

76 mm deck - 610 mm wide - 203 mm flute spacing

Thickness = 1.21 mm

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			3000	3150	3300	3450	3600	3750	3900	4050	4200	
610/4	900	Strength, (kN/m)	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	
	600	Strength, (kN/m)	5.1	5.1	5.0	5.0	5.0	5.0	4.9	4.9	4.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.2	8.3	8.3	8.4	8.5	8.6	8.6	8.7	8.7	
	300	Strength, (kN/m)	8.6	8.6	8.6	8.5	8.5	8.5	8.5	8.5	8.4	
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.8	11.0	11.2	11.4	11.5	11.7	11.8	12.0	12.1	
	230	Strength, (kN/m)	10.4	10.4	10.4	10.4	10.3	10.3	10.3	10.3	10.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.8	12.1	12.3	12.6	12.8	13.0	13.2	13.4	13.6	
	150	Strength, (kN/m)	13.0	13.0	13.0	13.0	13.0	12.9	12.9	12.9	12.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.2	15.4	
	610/6	900	Strength, (kN/m)	5.0	4.9	4.8	4.7	4.7	4.6	4.5	4.5	4.4
			Stiffness, G', (10 <sup>3</sup> N/mm)	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2
600		Strength, (kN/m)	6.5	6.4	6.3	6.2	6.1	6.1	6.0	5.9	5.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.6	9.7	
300		Strength, (kN/m)	10.3	10.2	10.1	10.1	10.0	9.9	9.9	9.8	9.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	11.3	11.5	11.7	11.9	12.1	12.2	12.4	12.5	12.6	
230		Strength, (kN/m)	12.3	12.3	12.2	12.1	12.1	12.0	12.0	11.9	11.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.2	12.5	12.7	13.0	13.2	13.4	13.6	13.8	13.9	
150		Strength, (kN/m)	15.5	15.5	15.4	15.4	15.3	15.3	15.3	15.2	15.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	13.4	13.8	14.1	14.4	14.7	14.9	15.2	15.4	15.7	

76 mm deck - 610 mm wide - 203 mm flute spacing

Thickness = 1.52 mm

Support Fasteners: Simpson Strong-Tie XQ112S1224, XQ114S1224, XQ78S1224

Limit States Design - FACTORED RESISTANCE

Side-Lap Fasteners: XU34B1016, XU34S1016

$\phi$  : 0.50

SDI METHOD - METRIC

Support Connection Pattern	Side Lap Spacing (in.)		Span (mm)									
			3300	3450	3600	3750	3900	4050	4200	4350	4500	
610/4	900	Strength, (kN/m)	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.3	
		Stiffness, G', (10 <sup>3</sup> N/mm)	8.6	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	
	600	Strength, (kN/m)	6.3	6.3	6.2	6.2	6.2	6.2	6.1	6.1	6.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	10.8	10.8	10.9	10.9	11.0	11.0	11.0	11.1	11.1	
	300	Strength, (kN/m)	10.7	10.7	10.6	10.6	10.6	10.6	10.6	10.5	10.5	
		Stiffness, G', (10 <sup>3</sup> N/mm)	15.2	15.4	15.5	15.7	15.8	15.9	16.1	16.2	16.3	
	230	Strength, (kN/m)	13.0	13.0	12.9	12.9	12.9	12.9	12.9	12.8	12.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	17.1	17.4	17.6	17.8	18.0	18.2	18.3	18.5	18.7	
	150	Strength, (kN/m)	16.2	16.2	16.2	16.2	16.2	16.2	16.1	16.1	16.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	19.8	20.1	20.4	20.7	21.0	21.2	21.5	21.7	22.0	
	610/6	900	Strength, (kN/m)	6.0	5.9	5.8	5.7	5.7	5.6	5.5	5.5	5.4
			Stiffness, G', (10 <sup>3</sup> N/mm)	10.5	10.4	10.4	10.4	10.3	10.3	10.3	10.3	10.2
600		Strength, (kN/m)	7.9	7.8	7.7	7.6	7.5	7.4	7.4	7.3	7.2	
		Stiffness, G', (10 <sup>3</sup> N/mm)	12.3	12.3	12.3	12.3	12.4	12.4	12.4	12.4	12.4	
300		Strength, (kN/m)	12.7	12.6	12.5	12.4	12.3	12.3	12.2	12.2	12.1	
		Stiffness, G', (10 <sup>3</sup> N/mm)	16.1	16.2	16.4	16.5	16.7	16.8	16.9	17.0	17.1	
230		Strength, (kN/m)	15.3	15.2	15.1	15.0	15.0	14.9	14.9	14.8	14.8	
		Stiffness, G', (10 <sup>3</sup> N/mm)	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.1	19.3	
150		Strength, (kN/m)	19.3	19.2	19.2	19.1	19.1	19.1	19.0	19.0	18.9	
		Stiffness, G', (10 <sup>3</sup> N/mm)	20.2	20.5	20.8	21.1	21.4	21.7	21.9	22.1	22.4	