



Sheet Steel Building Institute

Suite 206, Crestview Plaza, South Service Road, Port Credit, Ontario

code of standard
practices
pre engineered
metal buildings

This Code of Standard Practices Relates to the Design, Manufacture, Sale and Erection

PREFACE

Manufacturers, dealers, engineers, architects and contractors have developed and become accustomed to certain recognized practices and standards relating to the design, manufacture, sale and erection of metal buildings. These practices and standards are collected here as a "Code of Standard Practice" by the Canadian Sheet Steel Building Institute as a service to the industry. Since contracts for the sale and erection of metal buildings must necessarily cover many subjects, it is hoped that this compilation may serve a useful purpose either by being incorporated in whole or in part in such contracts, or by serving as a check list of subjects to be covered in such contracts, as the contracting parties may determine.

PART 1 — GENERAL

1. DEFINITIONS

- a. **Manufacturer**—means a company which fabricates a metal building.
- b. **Dealer**—means a company who buys a metal building from the manufacturer for the purpose of resale.
- c. **Erector**—means a company who erects a metal building.
- d. **Buyer**—means a company who purchases a metal building, whether as manufacturer, or dealer, or erector.
- e. **Seller**—means a company who sells a metal building, whether as manufacturer, or dealer, or erector.
- f. **Metal Buildings**—A metal building, as referred to herein includes the following:

- I —The steel framework.
- II —All necessary erection hardware, such as nuts, bolts rods and washers.
- III —Roof and wall coverings.
- IV —Fasteners required for complete installation of roof and wall coverings.
- V —All metal trim and flashing and the fasteners for its installation.

- VI —Valley gutters in case of multi-span buildings.
- VII —Exterior doors, windows and ventilators.
- VIII —Such other parts or components as the contract may provide

g. **Exclusions**—Unless otherwise provided by contract, a metal building consists of no other parts or components. To illustrate, and without limiting the generality of the foregoing, a metal building does not include:

- I —Foundations.
- II —Anchor bolts, anchor bolt templates and leveling plates.
- III —The setting or supervision of setting of anchor bolts.
- IV —Grouting or filler of any type in the recess around the base of wall sheets.
- V —Grouting under columns, door jambs, or and wall columns.
- VI —Electrical installations or wiring.
- VII —Plumbing, heating or air conditioning.
- VIII —Field painting.
- IX —Interior finishing, partitions, or carpenter work of any kind.
- X —Masonry of any kind.
- XI —Valley interior downspouts or drains (either underfloor or overhead).
- XII —Miscellaneous items such as overhead travelling cranes and hoists, exhaust fans, and insulation.
- XIII —Step flashing or flashing to existing buildings.

2. DELAYS IN PERFORMANCE

A seller is not liable for any direct or consequential damage which a buyer may suffer by reason of the seller's delays in performance when such delays are due to acts of God or the public enemy, fire, explosion, drought, war, riots, sabotage, accidents, embargo, government priority, requisition or allocation or other action of governmental authority, strikes, labor disputes or other differences with workmen, shortage, or failure of supply of materials or equipment from normal sources for the manufacture of products specified herein, or other circumstances or like or different character beyond the reasonable control of the seller.

PART II — DESIGN AND MANUFACTURE

1. DESIGN SPECIFICATIONS

- a. Metal buildings are designed in accordance with the latest published editions of C.S.A. Standard S-16, Steel Structures for Buildings, and C.S.A. Standard S-136, Specification for the Design of Light Gauge Steel Structural Members.

Unless specified otherwise in the contract, the design loads are those recommended by the National Building Code of Canada for the area concerned.

- b. Pre-Engineered Metal Buildings do not normally match dimensionally, any of the cases given in NBC, Supplement 3, and because of the desirability for standardization the wind load as recommended by NBC is applied in accordance with U.S. Navy Technical Publication TP-TE.

2. PLANS AND BLUEPRINTS

Erection drawings are prepared by the seller for the buyer's approval. Manufacturing detail part drawings are not furnished. Design drawings, if specified in the contract, are furnished by the seller, and consist of sections showing sizes of all members and the seal of a registered engineer. Design data, if specified in the contract, are furnished by the seller, and consist of sections showing sizes of all members of the seal of a registered engineer.

3. ANCHOR BOLT SETTING PLANS

Anchor bolt setting plans are furnished to the buyer after architectural floor plans and elevations have been approved or waived by the buyer. Such anchor bolt setting plans show the size and location of all anchor bolts, the overall length and width of the foundation, the column reactions (showing magnitude and direction) and the seal of a registered engineer. In this connection, it is the buyer's responsibility to assure himself that he has made adequate provision for the column reactions shown on the above mentioned plans, as the seller assumes no responsibility for the adequacy of design of the quality of workmanship in the construction of the foundation unless specifically otherwise provided in the contract.

4. CHANGE IN PLANS

Should the buyer wish to make changes in the plans he has approved, he must embody the changes in a written request to the seller, and should the requested changes result in added costs of engineering, drafting, fabricating, blueprinting or shipping, an adjustment in the price of the building and completion time is agreed to between the seller and buyer before proceeding with the work.

5. MATERIALS

- a. All materials used in the fabrication of a metal building are new, and of a quality at least equal to that required by the specifications, if any, of the American Society for Testing Materials and/or Canadian Standards Association applicable to the classification covering the intended use.
- b. The manufacturer orders all his inventory of stock material under the foregoing specifications and all metal buildings are fabricated from such stock. Accordingly, furnishing the buyer with mill test reports or records of heat numbers covering the materials in any specific metal building is unnecessary.

6. WELDED FABRICATION

Welding conforms to the requirements of Canadian Standards Association W-59, Standard Specification for Welding of Bridges, Buildings and Machinery; and W-55-3, Resistance Welding Practice.

It is undertaken by fabricators fully approved by the Canadian Welding Bureau to the requirements of C.S.A. W-47, Welding Qualification Code for Application to Fabricating, and Contracting Firms, their welding personnel, and equipment.

7. SHOP PAINTING

Prior to painting, the manufacturer cleans the steel of loose mill scale, dirt, and other foreign matter. Unless specified in the contract, the manufacturer does not sandblast, flame-clean or pickle the steel prior to painting.

The shop coat of paint is a priming coat intended to protect the steel for a temporary period of weathering only. The manufacturer does not assume responsibility for deterioration that may result from extended exposure to the elements after shipment.

8. INSPECTION

All material is inspected by the manufacturer's inspection department. The cost of any additional inspection is borne by the buyer.

9. MARKING AND IDENTIFICATION OF PARTS

Erection part numbers are clearly shown on all members or bundles of identical pieces. Bolts and nuts are in separate packages according to length and diameter. Loose nuts and washers are in separate packages according to size. In the shipment is a master shipping list containing a description of the material including erection part numbers.

PART III — SALE OF METAL BUILDINGS

1. SCOPE

The sale of a metal building includes its design, fabrication, and preparation for shipment, unless otherwise provided in the contract.

2. TAXES

The buyer pays all taxes which may be imposed on or by reason of the sale or erection of the metal building unless otherwise agreed in the contract. Such taxes include taxes imposed by federal, provincial, local or other governmental authority.

3. DELIVERY

- a. The seller delivers materials in the order of sequence most convenient to him unless the buyer specifies in writing the order or sequence of delivery at the time the order is placed.
- b. The quantities of material shown on the shipping statement in all cases govern settlements unless notice of shortage is immediately reported to the delivering carrier or its agent, and a signified verification obtained; and like notice is sent to the seller within seven (7) days after receipt of this shipment, in order that the alleged shortage may be investigated by the seller.

c. If the seller is required to store the metal building after the agreed upon shipment date, and the contract of sales does not provide for such storage, the seller may immediately invoice the buyer for the metal building and such invoice is due and payable the same as if the material had been delivered to specified destination. The manufacturer may also charge the buyer for storage, handling, and other costs resulting from the delay in accepting delivery.

4. TERMS & CONDITIONS REGARDING PAYMENT

- a. **Credit Approval:**—Terms of payment are subject to seller's credit department approval.
- b. **Invoices for Material:**—All invoices for material including freight to destination are due and payable at time of shipment subject to seller's terms of payment.

5. FABRICATION WARRANTY

Products fabricated by the manufacturer are warranted only against failure due to defective material or workmanship for a period of one (1) year from date of delivery of such products unless otherwise specified by provincial statute, and includes no other warranties, express or implied. Manufacturer's liability for breach of the warranty is limited to furnishing (but not dismantling and installing) necessary replacement materials f.o.b. manufacturer's plant with freight allowed, and manufacturer is not liable for any other damages, direct or consequential, which buyer may suffer. This warranty does not cover products, accessories, parts, or attachments which are not manufactured by the manufacturer, except to the extent of the warranty given by the manufacturer of such parts.

6. ERECTION

Unless expressly provided for in the contract, the sale of metal building does not include its erection.

PARTS IV — ERECTION OF METAL BUILDINGS

1. PLANS

Erection Plans and written instructions are furnished the buyer by the seller if the seller does not erect the building. These plans identify all members in sufficient detail to indicate the proper installation of all parts furnished, accessories, metal trim and flashing.

2. BUILDING PERMITS

All necessary building permits required by law for the construction of the metal building are secured by the buyer at his expense. Buyer provides at his expense all plans or blueprints necessary to secure a building permit, except those plans hereinbefore referred to as being furnished by the seller.

3. COSTS OF ERECTION

The erection price is computed on the basis of a normal forty hour (five eight hour days) work week (excluding Saturdays, Sundays, and holidays). Any additional cost incurred through interruptions or delay caused by the buyer or buyer's contractors, and any overtime wages incurred through work performed on Saturdays, Sundays, and holidays or by working more than eight hours in any one day are paid by the buyer.

4. ACCESSIBILITY TO JOBSITE

The buyer furnishes the jobsite clean, level, compact, and hard enough to support the erection equipment. Buyer furnishes the erector a usable passageway at least fifteen feet (15') wide and twenty feet (20') high to the building site; and, further, the building site, together with an area of at least five feet (5') on each side and each end thereof, is to be free and clear of all obstacles and readily available for the erector's employees and equipment to work, store, and layout materials unless otherwise specified in the contract.

5. UNLOADING

The unloading of the building component parts from cars or trucks is the responsibility of the erector unless otherwise provided in the contract.

6. STORAGE OF MATERIALS

The erection price contemplates that the buyer will provide a place for storage of all materials within one hundred feet of the jobsite. Should such a storage facility be unavailable or inadequate, the buyer pays any extra costs incurred by the erector thereby.

7. ELECTRIC POWER

The erector furnishes electric power if power is not readily available at the jobsite.

8. SAFETY

- a. If use of standard electrical motors, normal tools or exposed arcs will be hazardous, the erector is entitled to an extra charge to his contract, unless he has been notified in writing prior to bidding. Weather creating a hazard to the erection work, and necessitating work stoppage automatically extends the erection contract time by the number of days such delays have occurred.
- b. There shall be no overhead electrical power transmission lines which would cause a hazard to human life if accidentally touched by cranes or other erection equipment during erection of said buildings. During the working hours of the erection crew, any power lines close enough to cause such hazard will be disconnected and made inoperative at the buyer's expense.

9. SLAB OR FOUNDATION

Unless specified in the contract, it is assumed that the building is to be erected on a slab or foundation slightly higher than ground level. In the event the building is to be erected on a dock height slab or foundation, the buyer reimburses the erector for any additional erection costs and provides ramps at the buyer's expense from the ground level to the top of the slab or foundation for the use of the erector's rigging equipment and crews. Buyer is responsible for the erection and removal of said ramps. All slabs, foundations and ramps are to be of sufficient design, strength, and hardness to support the erection and rigging equipment; and seller is not liable or responsible for any damage to such slabs, foundations, and ramps, including but not limited to, cracking, chipping, or breaking. The slab or floor area is to be clear and free from obstructions which would hamper the erection crew in pursuance of their work, unless otherwise specified in the contract. All expenses incurred by the erector because of inaccurate foundations are to be paid by the buyer unless otherwise specified in the contract.

10. ANCHOR BOLTS

All expenses incurred by erector in correcting the setting and location of anchor bolts, and altering the building to fit same, including lost or wasted time of erection crew, are paid by the buyer, unless otherwise specified in the contract.

11. PAINTING

- a. The erector touches up all major abrasions in the shop coat of paint, but he is not responsible otherwise for the condition of the shop coat of paint. He does not paint field bolt heads and nuts but does paint all field welds.
- b. Field painting is not included unless specifically provided for in the erection contract.

12. GLASS

The erector installs the glass in doors, sash or other places indicated in the plans, such glass to be furnished by the dealer or erector, if not furnished by manufacturer. The buyer is responsible for cleaning the glass after installation.

13. PLUMBING UP

- a. All temporary guys and braces are the property of the erector. Any guys or temporary braces which must be left by the erector after the building is plumbed and level are removed by the buyer and returned to the erector in good condition.
- b. Immediately upon completion by the erector, the buyer assures himself by whatever means he may elect that the erector's work has been satisfactorily completed. If contract conditions have not been complied with he should immediately notify the erector and direct him to perfect his work. Once these conditions have been complied with, the erector's responsibility ceases. Any further work is performed entirely at the buyer's expense.
- c. In the setting or erection of structural steel work for metal buildings, the individual pieces are considered plumb, or level, where the error does not exceed 1 to 500.

14. CORRECTION OF ERRORS

Correction of minor misfits and reasonable amount of reaming or cutting are considered a normal part of erection. Any error in shop work which prevents the proper assembling and fitting up of parts by the moderate use of drift pins or a moderate amount of reaming and slight chipping or cutting is the responsibility of the seller. It should be immediately reported to the seller, and his approval of the method of correction must be obtained before such work is done.

15. TERMS AND CONDITIONS REGARDING PAYMENT

- a. **Invoice for Erection:**—Invoices for erection are due on presentation of invoice, subject to seller's terms of payment and if necessary, subject to progress payments.
- b. **Invoices for Subcontract Work:**—Invoices for labor and material involving subcontract work will be due on completion of the said subcontract and if any length of time is involved will be subject to progress payments.

16. DELAYS BY BUYER

If the contract provides for erection by the seller and the buyer delays agreed erection date by more than sixty days, the erection price will be subject to adjustment for any increased costs incurred by the seller or the erector. The seller is not responsible for the deterioration of material in storage, either in plant or at site.

17. INSURANCE

- a. Until completion and acceptance of his work, the erector maintains Workmen's Compensation Insurance as may be required by law as well as the standard form of public liability insurance in such limits as may be agreed upon between buyer and the erector, protecting the erector against claims for damages resulting from death of or injury to persons or destruction of property arising out of the erector's negligent acts or omissions.
- b. All other forms of insurance coverage such as fire, lightning, flood, earthquake, or windstorm, are provided by the buyer, protecting the erector against loss or damage to the work performed and materials delivered at the site. All insurance covering such loss or damage shall be payable to the parties as their interest may appear.
- c. The erector does not indemnify the buyer against loss or expense other than by reason of and to the extent of the liability imposed by law upon the erector for damages resulting from death of or injury to persons or destruction of property occasioned by the prosecution of the work.

18. ERECTION WARRANTY

In the event the contract includes the erection of a building by seller, seller warrants that the erection shall be in a workman-like manner and extends no other warranties, express or implied, with respect to the erection. Seller will correct any defects due to faulty workmanship in erection which may develop within one (1) year from the date of completion of such buildings, but shall not be liable for any other damages, direct or consequential, which buyer may suffer.