



## Guidelines for HANDLING, INSTALLING AND BRACING WOOD TRUSSES



### GUIDE TO CREATING A WORK SAFETY ZONE

Keeping construction workers away from the path of equipment and building components as they are unloaded and delivered will go a long way in maintaining a safe project site. The *Guide to Creating a Work Safety Zone* provides basic steps for roll off delivery, boom/crane delivery and forklift delivery.

### HOW TO READ A TRUSS DESIGN DRAWING

Truss design drawings from different suppliers are often laid out in different formats, but all contain the same basic information. *How to Read a Truss Design Drawing* explains information included on a truss design drawing.

### JOB SITE PACKAGE

The *Job Site Package* includes important documents that offer minimum guidelines regarding handling, storing, installing, restraining and bracing of structural building components including roof trusses.

### GUIDE FOR HANDLING, RESTRAINING AND BRACING TRUSSES

Trusses are not marked in any way to identify the frequency or location of temporary lateral restraint and diagonal bracing. However, truss design drawings may specify locations of permanent lateral restraint or reinforcement for individual truss members. The *Guide for Handling, Restraining and Bracing of Trusses* provides a basic overview of handling, temporary restraint and bracing, steps to setting trusses, installing, construction loading and alterations.

### TRUSS INSTALLATION AND TEMPORARY RESTRAINT / BRACING

For trusses up to 2 feet on-centre and 80 feet in length, the spacing for the top chord temporary restraint is based the truss span. The *Guide for Handling, Restraining and Bracing of Trusses* contains a checklist that provides a step-by-step guide that should be reviewed before constructing and installing trusses.

### USING TOE-NAILED CONNECTIONS TO ATTACH TRUSSES AT BEARING LOCATIONS

There are many factors affecting the strength of a toe-nailed connection. The *Using Toe-Nailed Connections to Attach Trusses at Bearing Locations* document provides information on proper installation, grade and wood species, length of penetration and types of nails. Uplift and lateral resistance capacities used under various applications are also covered.

### LONG SPAN TRUSS INSTALLATION

Installing long span trusses 60 feet or greater is extremely dangerous. They require a complex, temporary and permanent restraint or bracing plan. Tips for safe and efficient installation are outlined in the *Long Span Truss Installation* document.

### STRATEGY FOR INSTALLING LONG SPAN TRUSSES

Many methods are possible for the installation of long span trusses at 24 in on-centre. The *Strategy for Installing Long Span Trusses* document describes one method for installing such trusses. For other safe methods, consult a professional engineer with wood truss experience for the best option for your project.

### POST-FRAME TRUSS INSTALLATION, RESTRAINT AND BRACING

For trusses spaced greater than 2 feet on-centre and up to 81 feet in length, the *Post-Frame Truss Installation, Restraint & Bracing* document provides commentary and recommendations for truss unloading, job site handling and storage as well as hoisting and lifting.

### MULTI-PLY GIRDERS

Girders are trusses designed to carry extra loads from framing and equipment. Each girder is made of similar trusses built and fastened together to act as one unit. The *Multi-Ply Girders* document provides guidance on ply-to-ply requirements, including fastener guidelines.

### PERMANENT RESTRAINT / BRACING OF CHORDS AND WEB MEMBERS

Disregarding permanent restraint or bracing of roof truss assemblies can contribute to collapses. The *Permanent Restraint / Bracing of Chords & Web Members* summary sheet offers guidance with respect to materials and fasteners requirements, top and bottom cord bracing, web member bracing for buckling and lateral loads, and gable end restraint and bracing.

### CONSTRUCTION LOADING

Construction loads are those imposed on an unfinished building as a result of the construction process. Construction loads should only be applied to properly restrained and braced truss assemblies. See *Construction Loading* for do's and don'ts.

### TRUSS DAMAGE, JOBSITE MODIFICATIONS AND INSTALLATION ERRORS

Damage, job site modifications or improper installation will reduce the strength of trusses. The *Truss Damage, Job Site Modifications & Installation Errors* document outlines steps to follow to correct damage, modifications and errors. Common repair techniques are provided as well as means to report damage, modifications and errors.

### HANDLING AND INSTALLING TRUSSES

Property damage, injury or death can result from improperly handling, installing, restraining or bracing trusses. The *Checklist for Handling and Installing Trusses* can be used as a guide to the safe handling and construction of trusses.

### FALL PROTECTION AND TRUSSES

Constructing roof trusses requires workers to work at heights. Scaffolding, use of roof peak anchors and ground assembly are acceptable methods of ensuring employee safety when installing roof trusses. The *Fall Protection & Trusses* document provides additional information on fall protection during roof truss installation.

For more health and safety information, call WorkSafeNB at 1 800 222-9775, or visit us online at [worksafenb.ca](http://worksafenb.ca).

Text courtesy of the Structural Building Components Association (SBCA). For more information, visit [sbcindustry.com](http://sbcindustry.com).