



BUILDING BULLETIN

Building Services

Subject: Engineered Truss Drawings
Building Bulletin No: BD.BB.19.14
Date Issued: May 13, 2019
Date Revised:
Reference: s. 8(1) *Building Code Act*

A. Purpose

The purpose of this Building Bulletin is to clarify building permit submittal requirements where an engineered roof truss system is to be constructed on a house or small building.

B. Background and Definitions

With respect to engineered truss systems and components, the Ontario Building Code requires the following:

9.23.13.11. (6): Where the ability of a truss design to satisfy the requirements of Sentence (1) is demonstrated by analysis, it shall be carried out in accordance with good engineering practice such as described in TPIC, “Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses (Limit States Design)”.

The TPIC standard referenced in the Building Code includes responsibilities for the truss designer/engineer and overall building designer/engineer, specified loads, member and joint design procedures, and guidance on issues ranging from cantilevers to truss-to-truss connection and corrosion protection.

BCIN means Building Code Identification Number as required under section 3.2, Div. C of the Ontario Building Code.

TPIC means the Truss Plate Institute of Canada.

Truss Designer means a design professional, individual or organization having responsibility for the design of individual metal plate connected wood truss components, including lateral bracing requirements to prevent buckling of individual truss members due to specified loads.

Truss Placement Diagram means a drawing prepared by the truss manufacturer identifying the location of each truss, which references each individually designated truss design. The Truss placement diagram shall be provided as part of the truss submittal package

Truss Submittal Package consists of each individual truss design drawing, the truss placement diagram, the truss member temporary and permanent bracing details, hanger and other hardware details and installation instructions prepared by the truss manufacturer.

C. General Interpretation and Requirements

1. The *truss placement diagram* is a document that is prepared by the *truss designer* and compliments the truss designs that is intended to assist contractors in correctly locating and placing each individual truss for the building. The *truss placement diagram* is not an engineered drawing and is a guide for installation. *Truss placement diagrams* are not required to be sealed by the designer or a professional engineer.
2. The *truss designer* is exempt from the registration and qualification for design activities required by the building code relating to pre-engineered wood element of a building as described in the Ministry's Branch Opinion dated January 18, 2011. The *truss designer* is not required to have a BCIN.
3. The *truss placement diagram* is required to be submitted to the Chief Building Official Division prior to issuance of the building permit. Truss drawings are not required to be sealed by a professional engineer at the application stage.
4. The final truss design drawings shall bear the stamp of a qualified professional engineer registered in the province of Ontario.
5. The final truss submittal package including the sealed truss design drawings shall be provided to Building Services prior to the framing inspection. Additional administration fees may be applicable where the truss submittal package was not provided at the permit application stage and prior to permit issuance.

Truss Designs and Components required to be sealed by Professional Engineer

- Trusses to be constructed on a Large or Complex building as defined in the building code.
- Truss spans that exceed 40'-0" (12.2m) clear span between bearing points
- Four-ply (4-ply) and five-ply (5-ply) girder trusses
- Attic trusses
- Custom hangers
- Special bearing conditions
- Attic trusses
- Repair details and site instructions

D. Reference Information

Building Code Act

E. Attached

N/A

F. Review Cycle

This building bulletin will be reviewed annually by the Chief Building Official.

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