



City of Whitehorse

2121 - 2nd Avenue, Whitehorse, Yukon Y1A 1C2 Bus: (867) 667-6401 Fax: (867) 668-8398

CONTRACTORS INFORMATION BULLETIN

January 20, 2025

For the information of owners, contractors and design professionals:

Effective for building permit applications made after **20-February-2025**, engineered truss designs are required to be sealed by a Yukon registered Professional Engineer in accordance with the 2020 National Building Code.

Background

City Building Officials enforce the requirements of the National Building Code (NBC 2020) as mandated by Yukon's *Building Standards Act*. Relevant sections of the NBC which lead to this requirement are as follows:

9.23.14.11. Roof Trusses

- 1) Wood roof trusses shall be designed in accordance with good engineering practice such as that described in TPIC 2019, "Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses."*
- 2) The joint connections used in trusses described in Sentence (1) shall be designed in conformance with the requirements in Subsection 4.3.1. (See NBC Note A-9.23.14.11.(2)).*
- 3) All member bracing shall be installed as per the truss design drawings, and continuous lateral bracing shall be adequately anchored to the roof and ceiling diaphragms at intervals no greater than 6.10 m o.c.*

A-9.23.14.11.(2) Wood Roof Truss Connections. *Sentence 9.23.14.11.(2) requires that the connections used in wood roof trusses be designed in conformance with Subsection 4.3.1. and Sentence 2.2.1.2.(1) of Division C, which applies to all of Part 4, requires that the designer be a professional engineer or architect skilled in the work concerned. This has the effect of requiring that the trusses themselves be designed by professional engineers or architects. Although this is a departure from the usual practice in Part 9, it is appropriate, since wood roof trusses are complex structures which depend on a number of components (chord members, web members, cross-bracing, connectors) working together to function safely. This complexity precludes the standardization of truss design into tables comprehensive enough to satisfy the variety of roof designs required by the housing industry.*

2.2.1.2. Structural Design

1) For design carried out in accordance with Part 4 of Division B, the designer shall be a professional engineer or architect skilled in the work concerned. (See NBC Note A-2.2.1.2.(1)).

A-2.2.1.2.(1) Structural Design. Part 4 of Division B is written on the assumption that structural design will be carried out by a professional who is qualified to perform such design. Sentence 2.2.1.2.(1) is not intended to imply that a professional may not also be required in the application of requirements in other Parts of the NBC.

2.2.4.2. Professional Seal and Signature of Designer 1) Structural drawings and related documents submitted with the application to build shall be dated and shall bear the authorized professional seal and signature of the designer as defined in Sentence 2.2.1.2.(1).

Based on the forgoing, the City requirements will be as follows:

- 1) Roof and floor trusses (parallel chord trusses) plans and plans for using I-Joists (like TJI's) or other engineered framing systems are required to be submitted in support of any permit application (i.e. application requirement).
- 2) Roof and parallel chord truss individual designs sealed by an Yukon Engineer are required to be submitted prior to booking a framing inspection.
- 3) For I-joist and other engineered framing systems, the requirements for seals will depend on the complexity of the build. As such, requirements for seals will be determined and communicated as a condition of the issuance of a building permit (i.e. determined during the plan review process).

This has been present in many previous NBC code cycles. This modification to past practice will serve to ensure compliance with relevant requirements of the NBC in future.

Should you see benefit in further clarification or discussion, please let me know and we can meet in person.

Sincerely,

CITY OF WHITEHORSE



Richard Diamond, RBO
Supervisor Building Inspections
Land and Building Services