

Hazard Alert – Truss Installation

Hazard Summary

Workers have been seriously injured after falling from buildings when the trusses they were installing collapsed. Common factors for these collapses include improper or incomplete bracing, overloading of truss frames, lack of appropriate fall protection and failure to follow installation procedures and manufacturer's instructions.

Contributing Factors

- Adverse weather conditions can lead to collapse and potential injury.
- Most designs do not allow for material storage or other types of loading on the bottom chords during construction.
- Wind gusts can cause the unexpected movement of materials.
- Improper bracing and/or not following bracing diagrams can lead to truss failure.
- Appropriate and effective fall protection not being employed can lead to potential injury.

Recommended Precautions

- Hazard assessments must be completed to identify and control hazards that may exist at the worksite.
- It is important to have a thorough understanding of a truss placement diagram, as well as the erection and installation plans. These plans must be followed accordingly.
- Deviation from the plans must be approved by a suitably qualified professional engineer or the truss manufacturer.
- Bracing (both temporary and permanent) is a vital part of truss installation, and bracing plans must be followed.
- Truss placement diagrams and manufacturer information often require adherence to the Building Component Safety Information (BCSI) Canada "Guide to Good Practice and Handling, Installing, Restraining and Bracing of Metal Plate Connected Wood Trusses".
- Appropriate fall protection must be used when working at height. See [Part X](#) of the Province's Occupational Health and Safety Regulations.
- Pay particular attention to wind speeds and plan construction activities accordingly.
- Activities involving sheathing materials, aerial lifts and cranes must be properly evaluated.
- Post-storm inspections should be conducted to ensure structural integrity of buildings before work resumes.
- Work areas located beneath other work areas must be protected from falling objects.