

Unsafe Practices Undermine Worker Safety: Proper Bracing and Adequate Access in Large Truss Buildings Will Save Lives!

In the ever-evolving landscape of construction, where innovation often takes the spotlight, it's crucial not to lose sight of the fundamentals that safeguard the well-being of our workers.

In the past three years the ministry of Labour, Immigration, Training and Skills Development has investigated at least four critical injuries that are directly linked to the construction of farm buildings where workers were either injured due to a fall as they were accessing the trusses or from the collapse of the structure itself.



The unsettling truth is that workplace incidents involving the erection of large wood truss buildings are frequently linked to missing or improperly installed temporary bracing. This critical safety measure, along with absence of proper worker safety measures (worker access and fall protection) during installation has emerged as a disconcerting trend that demands immediate attention.

This article highlights concerns that demands immediate attention.

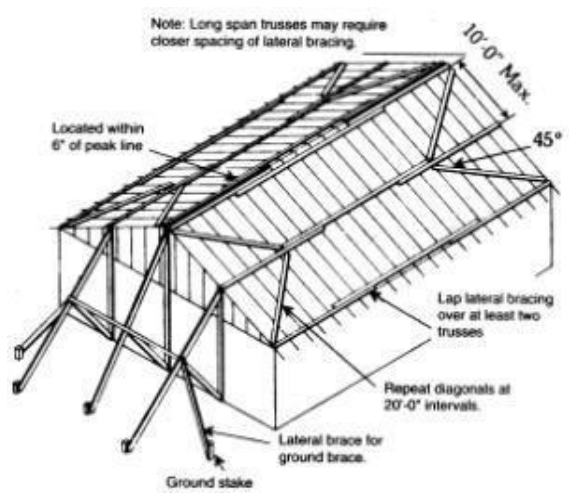
Temporary Bracing Matters:

Temporary bracing serves as a critical step in the installation of wood trusses. It helps to maintain their structural integrity while the remaining components i.e. permanent bracing of the building are added. Failing to adequately brace trusses during installation can lead to a range of issues, including:

- 1) Compromising the overall stability of the structure
- 2) Structural failure
- 3) Uneven weight distribution and premature deterioration.

It is crucial to follow Best Practices for Temporary Bracing of large wood truss buildings. The solution is to follow manufacturer installation guidelines, brace in multiple direction, use quality materials and consult engineers when necessary.

Ontario construction regulation 213/91 in section 31(1)(b) requires every part of a project, including temporary structure, to be adequately braced to prevent any movement that may affect its stability or cause its failure or collapse.



Access and fall protection:

The installation of large trusses on farm buildings presents a range of hazards related to worker access and egress to the work zone during erection.

Here are some of the hazards associated with accessing and egressing large truss structures:

- 1) Height-Related Risks: Large truss buildings often require workers to operate at significant heights. Accessing and egressing these heights can expose workers to the risk of falls, leading to severe injuries or even fatalities.

2) Inadequate stairways, ladders or work platforms: Insufficient or poorly designed stairways, ladders, or access points can make it difficult for workers to safely climb up or down truss structures. Uneven steps, narrow pathways, or unstable ladders can contribute to trips, slips, and falls.

3) Limited Space and Clearance: The spaces between trusses can be tight and constricted, making it challenging for workers to move freely. This lack of space can lead to accidental collisions, entanglement hazards, and difficulties in accessing or exiting work areas.

4) Fall Protection Issues: Inadequate or improperly installed fall protection systems, such as harnesses, lanyards, and anchor points, increase the likelihood of falls from heights during access and egress. Failure to use these safety measures compounds the risk significantly.



To mitigate these hazards, it is essential for employers to prioritize thorough planning, proper training, and adherence to safety regulations. Ontario construction regulation 213/91 spells out minimum requirements for access at heights, platforms, runways and ramps also requires workers to be adequately protected by fall protection.

Providing workers with the necessary equipment, including fall protection gear, and designing safe access and egress routes can significantly reduce the risks associated with working on large truss structures. Regular inspections, hazard assessments, and clear communication among all stakeholders are also crucial components of ensuring the safety of workers during these critical construction phases.



[Information about fall protection is available from the Infrastructure Health and Safety Association \(IHSA\).](#)