

Handling and Erection

2.4

Long Span Erection Procedures

Long span trusses, 70 feet or greater in length, pose significant risk to installers. The dimensions and weight of a long span truss can create instability, buckling and collapse of the truss if it is not handled, installed and braced properly. Long span trusses can be installed safely and efficiently if installed in modules.



Trusses buckling during construction



1. Inspect the trusses. Prior to installation, repair all trusses according to the repair details supplied by the truss manufacturer.
2. Have the necessary lifting equipment and building materials on hand. Make sure the crane operator understands the special hoisting requirements of long span trusses. Get the weight of the trusses from the supplier.
3. On the ground, ensure level bearing, set and position the first five trusses. Plumb and properly brace the trusses to the ground. Ensure that the walls are adequately braced.
4. Brace webs laterally and diagonally where required by the Truss Design Drawing. Install bottom chord permanent lateral bracing every ten feet, and install the diagonal bracing before lifting.
5. If not sheathing the modules on the ground install top chord bracing with diagonals.
6. Lift the modules with adequate beams and the load distributed evenly. Use tag lines at all corners to position trusses.
7. Ensure that the structure can withstand the elements by installing sheathing as soon as possible.