General

HANDLING, ASSEMBLY, AND USE OF TRUSSES

Load, unload, or move trusses with the necessary personnel to assure that the trusses are not dragged or dropped; this may damage the ends and the structure or result in other unseen damage.

When transporting truss

- Ensure that trusses are secured to prevent bouncing;
- Ensure that nothing rubs against the trusses that might cause wear or puncture;
- Ensure that nothing is loaded onto the top of the trusses.

Load data

- Are only valid for static loads and spans with two supporting points (one at each end);
- Are to be considered for indoor use only. If dynamic loads or more supporting points are applied contact a structural engineer or Arcofab;
- Are valid when the truss is used with the diagonals oriented vertically (see attached figures in page G-3);
- Are valid when the end plates are installed vertically for the bolted trusses (see figure in page G-3 – note 1);
- Are valid when the pins are installed horizontally for the spigoted trusses (see figure in page G-3 – note 2);
- Take into consideration the self-weight of the trusses and indicate how much additional weight may be safely added;
- Deflexions are theoretical (based on the rigidity of the truss when full loaded). Actual deflexion may be slightly higher because of possible movement between truss sections due to attachment tolerance;
- When corner blocks are used, loading capacity must be reduce by 50% when corners are loaded on two adjacent faces.

1 888 515-1704 / 450 515-1705 / sales@arcofab.com
HANDLING, ASSEMBLY, AND USE OF TRUSSES

Rigging, loading, and unloading

- Trusses should be assembled by competent personnel who are familiar with the use and assembly of aluminum trusses;
- Always use washers on both sides of plates for bolted trusses;
- Trusses must be hung using bottom and top chords in order to ensure an optimal stability. Spanset must be as close as possible to the extremities (see figure in page G-3 – notes 3 and 4);
- Trusses must be loaded symmetrically on each side; unbalanced loads could twist the trusses (see figure in page G-3 – note 5);
- All loads must be applied to, or as close as possible to, node points. A node point is the meeting of diagonal and/or vertical on the main chord (see figure in page G-3 – note 6);
- When raising or lowering trusses, hoists should run simultaneously in order to maintain the trusses leveled up;
- Always unload trusses before disassembling connections.

Inspection

Arcofab trusses are engineered and built to provide many years of reliable service provided that they are used within the recommended loading parameters and handled properly.

To prevent undesired consequences that could occur when the manufacturer recommendations are not respected, it is very important that all truss structures and connecting parts be inspected regularly and documented by qualified personnel in order to detect abnormal wear and abuse such as:

- Cracks in welds;
- Local permanent deformations in the structure;
- Dents or chew marks in the main chords or diagonals;
- Wear or bending in the attachment pin and spigot;
- Bending in the plates or distortion of bolt holes;
- Damage on zinc surface treatment or corrosion.

If any of the above failures is detected, do not use the piece.

Nuts, bolts, and washers should be replaced periodically as regular use degrades bolt threads. Never over-torque nuts and bolts beyond manufacturer specifications and always use Grade 8 nuts, bolts, and washers.