

## Roof Loading from Swing Stage Rigging

Roofs are designed to support a rated load, expressed as pounds per square foot. This rated load is designed to be evenly distributed, such as a load from accumulated snow or water. The rated load does not address the point loads that are common to rigging for swing stages. Outrigger jacks, scaffold frames, counterweights, wheels, and similar items create a point load where contact is made with the roof.

Consider the following when installing rigging that imposes a load on a roof:

- Place the load over or near roof joists.
- Reduce the impact of point loads by distributing such loads over wide areas through the use of wood sills, wood pads, or beams. Remember to protect these items from wind. Plywood can fly easily.
- Verify the fulcrum load from your supplier. Remember that the load at the fulcrum is greater than at other locations.
- Never assume decorative cornices and similar ornamental items on roofs are structural. Verify with the building owner.
- When using wood to distribute point loads, be aware of the limitations of plywood for such a purpose. Several manufacturers do not suggest plywood.

Typical roofing materials can lead to a false sense of security. While it is often assumed that a concrete roof will support a greater load than other roofing materials, in fact, concrete, metal, and wood roofs may all have identical rated loads. If you have any doubt about the ability of a roof to support a load, contact the building management, which may be familiar with the roof's rated load and may have experience with such matters. It may be necessary to consult with an engineer who can analyze the structure and make recommendations. Don't Guess!

This Technical Bulletin was prepared by members of the Scaffold & Access Industry Association SSFI Committee.

SSFI is a committee comprising manufacturers of shoring, scaffolding, forming, and suspended scaffolding. The committee focuses on engineering and safety aspects of scope products.

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