

Tension Grid Safety

Updated June 2021

This fact sheet is intended to give information on safe work procedures when working on a tension grid installed in a performing arts venue.

What is a Tension Grid?

A tension grid is a type of non-standard largely-transparent catwalk. Tension grids are composed of tightly woven wire rope steel cables that create a taut floor strong enough for technicians to walk on. They are not typically designed for material or equipment storage, and there are two common types:

- 1) uses full length cable and tensioning components attached at edges
- 2) uses pre-tensioned grid panels (called modular)



Control Measures for Cast and Crew

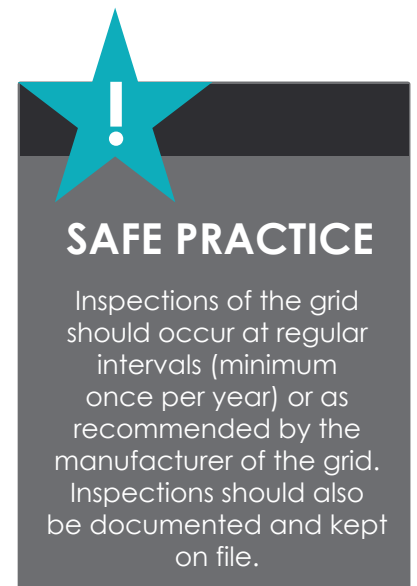
Working on the grid

- Only trained and authorized personnel may access and work on the tension grid. Don't go alone if possible.
- Remove all items from pockets prior to entering the grid. All tools going to the grid should be attached to personnel via lanyard.
- Always work with a spotter below when there is a risk of objects falling from the tension grid i.e., during setup and strike. The spotter should wear a CSA approved hard hat and be positioned in a safe location to keep people out of the area below and warn those working on the grid of hazards.
- Wear a hard hat equipped with a chin strap in low ceiling grid areas or as a spotter working below.
- If work is performed outside the tension grid at heights of 10' or more, including times of access and departure, other means of fall protection (such as a plan, guardrails, fall-restraint, fall-arrest, safe procedures, etc.) should be developed, implemented, and monitored.
- When extending lighting circuits, lowering rigging points or other hanging materials from the grid, lower them with a ground spotter and clear directions.
- When lowering any other materials and equipment from the grid use stairs when possible, or a rope and bucket system.
- Never cut holes in the tension grid, bounce on it or otherwise physically alter the grid.

Working below the grid

When there is a risk of objects falling from the grid, i.e., during setup and strike, personnel working beneath the grid should:

- Be limited in number and wear hard hats.
- Install warning signs and barriers to prevent unauthorized personnel from entering the areas affected by the work.
- Consider warning lights and lockable access when overhead work is being conducted.



SAFE PRACTICE

Inspections of the grid should occur at regular intervals (minimum once per year) or as recommended by the manufacturer of the grid. Inspections should also be documented and kept on file.

Information in this fact sheet was obtained from the [University of California Performing Arts Safety Manual](#).

Fact Sheets are intended for information purposes only. Consult all applicable rules and regulations.