

## Tension Grid Safety

Created April 2017

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.



### Control Measures for Cast & Crew Safety

#### Working on the grid

- Only trained and authorized personnel may access and work on the tension grid.
- Remove all items from pockets prior to entering the grid. All tools going to the grid should have lanyards attached.
- 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.
- Wear a fall protection harness and properly anchored lanyard when working on lighting and other elements where required outside of the tension grid.
- 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 or otherwise physically alter the grid.
- Never bounce on the tension grid surface.
- Never exceed the weight load specified by the grid manufacturer.
- Do not attach anything to tension wires, or non-structural components.
- Immediately report hazards to your supervisor or instructor.

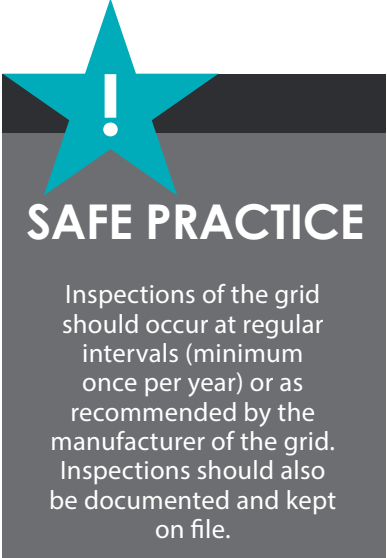
#### Working below the grid.

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

- Wear hard hats.
- Install warning signs and barriers to prevent unauthorized personnel from entering the area.
- Consider warning lights and lockable access when overhead work is being conducted.

Sources:

Information in this fact sheet was obtained from the following sources:  
University of California Performing Arts Safety Manual



**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.