

Fall Protection – Tension Grid



The tension grid is modular wire grid system that provides access to theatrical lighting, audio cables, loudspeakers, and stage rigging. Any edge of the grid that is not attached directly to a wall must be equipped with guardrails.

Guardrails must have a top rail that ranges between 42 inches and 45 inches above the grid floor and a mid rail approximately halfway between the top rail and the grid floor. The guardrails must be designed for a live load of 20 pounds per linear foot applied either horizontally or vertically downward at the top rail. The guardrails must also be equipped with toeboards that extend at least 4 inches above the grid.

On the Grid

- 1. Only trained and authorized personnel may access and work on the tension grid.
- 2. Never enter the grid alone.
- 3. 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 be positioned in a safe location to keep people out of the area below and warn those working on the grid of hazards or hazardous behavior.
- 4. Remove all items from clothing pockets prior to ascending to the grid.
- 5. Tie or otherwise secure tools to the worker.
- 6. Wear a hard hat equipped with a chin strap in low ceiling grid areas. Hoist the hard hat to the grid using a bucket and line system similar to getting other materials onto the tension grid; never wear it while climbing to the grid. Secure the hard hat to your head with the chin strap once you attain the grid.
- 7. Wear fall protection harnesses attached to the fall arrest system in accordance with the fixed ladder code of safe practice when using fixed ladders to access the grid.
- 8. Wear fall protection harnesses and properly anchored lanyard when working on lighting and other elements suspended outside of the tension grid.
- 9. Never drop ropes or electrical cables from the grid to the stage. Pull ropes and electrical cable up to the grid, coil them, and carry them down or lower them using a bucket and line system.
- 10. Never cut holes in the tension grid or otherwise physically alter the grid.
- 11. Never bounce on the tension grid surface.
- 12. Never exceed the weight load specified by the grid manufacturer.
- 13. Conduct routine documented inspections of the grid.
- 14. Immediately report hazards to your supervisor or instructor.

On the Stage

1. Wear hard hats on the stage floor whenever personnel are working in the grid.

2. Install warning signs and barriers to prevent personnel from entering the area beneath the grid when there is a risk of objects falling from the grid; i.e., during set-up and strike.

Talk to your supervisor if you have any questions about this information.