Powered Platforms



WHAT'S AT STAKE?

OSHA has a regulation that covers thousands of workers who toil on powered platform installations permanently dedicated to interior or exterior building maintenance. Building maintenance includes window cleaning, caulking, metal polishing and reglazing. This standard does not apply to two situations.

1. To suspended scaffolds (Swinging scaffolds) used to service buildings temporarily.
2. To suspended scaffolds used for construction work.

WHAT'S THE DANGER?

Pre – Condition to use of Powered Platforms

Make sure you have written assurance from building owner that the installation has been inspected, tested and maintained in according with OSHA regulation BEFORE your employees starts to work on a powered platform.

- **Hazards / Dangers**

Work on Powered Platforms means that employees are at increased risk should an emergency occur. This is due to their remote proximity to emergency services/care. Workers have responsibility in Powered Platform operations, such as:

- Workers must know how to properly inspect and operate all equipment.
- Workers must be prepared to handle any anticipated emergency situation, especially should the equipment malfunction.
- Workers must respond appropriately when the weather condition become serious.
- Workers need to understand the platform's load rating, especially when using additional materials for the task.

HOW TO PROTECT YOURSELF

A. Engineering Requirements for the OSHA standard

Structural supports, tie-in guides, anchoring devices, and any affected parts of the building included in the installation must be designed by, or under the direction of, a registered professional engineer experienced in such design.

B. Employer Requirements in the use of Stabilization Systems

All building stabilization systems must have one of the following:

- A continuous stabilization system using tie-in guides such as indented mullions, T- rails, or other equivalent guides.
- An intermittent stabilization system in which the maximum vertical interval between building anchors is three floors or 50 feet (15.3 meters) whichever is less.
- A button guide stabilization system.
- A system using angled roping and building face rollers if the suspended platform is not more than 130 feet (or 39.6 meters) above a safe working surface.
- An alternative stabilization system if a registered professional engineer designs the building and equipment installation.
- The professional engineer must demonstrate that the proposed method of suspending and securing the powered platform will provide a degree of safety equal to or greater than one of the above methods.

C. Requirements for Personal Fall Protection

- Wear when on or around powered platforms
- Attach lanyard to center of back
- Use one lifeline per worker
- Properly tie off
- Check potential fall path

More Prevention

- Protect Lanyards from damage
- Inspect daily
- Do not use defective equipment
- Know how to use your personal fall arrest system
- Understand rescue procedures

D. Requirements for Emergency Plans

Employers must develop and implement a written emergency plan that describes procedures for their employees to follow during power failures, equipment failures, or other emergencies. Employers must also review with their employees those parts of the plan necessary to protect workers in emergencies.

E. Employer Requirements for Training

Employers must have a competent person train their employees who operate powered platforms to do the following:

- Recognize and prevent safety hazards.
- Use personal fall arrest systems.
- Follow safe work procedures for operating, using, maintaining, and inspecting platforms.

Note: A competent person is someone who can identify health and safety hazards in the workplace and has the authority to correct them.

F. Equipment / Suspension Rope Inspections

Inspections are critical and MUST be done before a platform can be used.

- Inspect building supporting structures every 12 months.
- Inspect all parts of the equipment according to the manufacturer's suggested time interval but not to exceed 12 months. This inspection includes wire ropes, bearings gears, and governors.
- Inspect the platform and its components for visual defects each day before use. Inspect in after an occurrence for visual defects that could affect the platform's structural integrity.
- Inspect and test the governors and secondary brakes as specified by the manufacturer or at least every 12 months. A competent person must perform the inspection. The results of the inspection and tests must confirm that the secondary brake functions properly. When any hoisting machine or initiating device for the secondary brake system is removed and reinstalled for testing purposes, related components must be re-inspected before use.
- Test the secondary brake governor and actuation devices. If testing is not possible, visually inspect the brake to determine if it is free to operate.
- Operators should inspect all suspension wire ropes visually before use and after each occurrence that might affect the rope's integrity. Perform a thorough inspection every 30 days. Ropes that have not been in service for 30-days or longer need a thorough inspection. As with all inspections, a competent person must perform them.

G. Requirements for Load Capacity Design

Employers and workers must know the following related to Load Capacity:

- Capable of 4 times maximum load.
- Hold 250 pounds per platform occupant.
- Withstand 50 mph winds.
- Connections able to handle vibration.
- Load rating plate visible.

Tips / Safe Work Practices

Don't

- Overload platforms
- Work on platform with a slippery floor
- Carry flammable liquids on platforms
- Operate platform in bad weather

Do

- Protect platforms from corrosives or heat – producing processes

More safe practices

- Mount a wind-measuring anemometer to platform
- Don't let tools, materials, debris accumulate

- Keep stabilizer ties untangled
- Maintain voice communication
- Lock power disconnect “on”

Powered Platform Safety Measures

The following features safety must be implemented in all Powered Platform Operations

- 2 feet wide
- Slip-resistant floors
- Fire extinguisher
- Tool and material storage
- Operating controls on platform
- Maximum rated speeds
- Safety access ways
- Vertical lifelines for each occupant

Guardrails

- Working platforms
- Roofs and access ways
- Top rails
- Midrails
- Toe board

FINAL WORD

Inspecting, testing and maintaining Powered Platforms in accordance with OSHA regulation is the key to maintaining the safety of workers who perform dangerous work in the use of powered platforms.