Safety Absolute Brief Facts

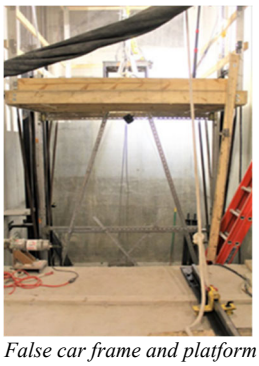
Suspended Scaffold/False Cars and Suspended Scaffold/Temporary Work Platforms
All workers using a Suspended Scaffold/False Car or a Suspended Scaffold/Temporary Work Platform during conveyance construction must familiarize themselves with hoist operation, functionality, and maintenance. Elevator technicians and apprentices must fully understand the controls and safety features of the Suspended Scaffold/False Car or a Suspended Scaffold/Temporary Work Platform prior to use. Hoist safety checks outlined in the hoist instructional manual must be performed before use.

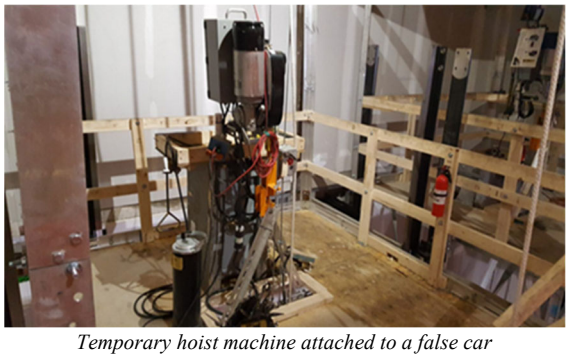
1926.450(b): Suspension scaffold means one or more platforms suspended by ropes or other non-rigid means from an overhead structure(s). In the conveyance industry, false cars and temporary work platforms are classified as suspended scaffolds under the OSHA standards if they have temporary guides or, temporary platform or, temporary suspension means.

There is not much difference between the industry safety practices we use and the OSHA regulations regarding safety while working from these conveyances. We will reference industry practices as well as applicable OSHA standards for false cars, temporary work platforms, and suspended scaffolds.

Before beginning work, perform a written or verbal Job Hazard Analysis (JHA) to determine potential hazards or special precautions needed. Choose the appropriate Personal Protective Equipment (PPE) for the job and have it ready before work begins.

Suspended Scaffold/False Car.
Suspended Scaffold/False Car is a temporary movable hoistway working platform, generally assembled on the jobsite by the Elevator Constructors for the purpose of installing elevator equipment. This conveyance will have temporary suspension means, car sling, platform, and guides, and require manual or automatic safeties.

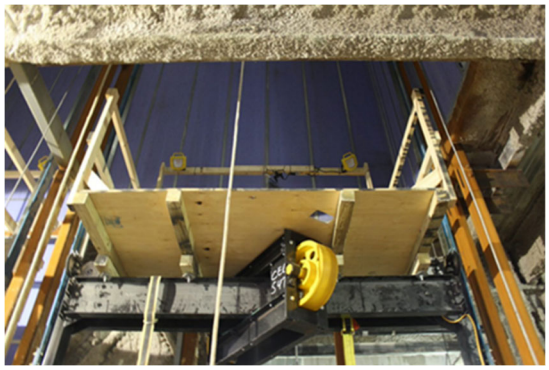

False car frame and platform


Temporary hoist machine attached to a false car

Suspension scaffolds/false cars are pre-engineered by the manufacturer. Always follow manufacturer's instructions when installing platforms and guardrail systems.

Suspended Scaffold/Temporary Work Platform.
Suspended Scaffold/Temporary Work Platform is a permanent elevator car sling and platform using temporary hoist and suspension means for the purpose of installing elevator equipment. This conveyance will require the installation of governor actuated safeties or overspeed device. Before hoisting or roping of a platform, the governor or overspeed device must be installed and attached to the safety releasing arm and tested to ensure that the safety is operational. The suspended scaffold/temporary work platforms shown below are using a temporary hoist and temporary suspension means.


Temporary hoist motor attached to the permanent car sling


Temporary work platform installed on the crosshead

Elevator:
An elevator is a work platform using the permanent guides, hoist machine, car sling, platform, and suspension means. This installation requires the installation of the permanent governor. The governor rope must be attached to the safety releasing arm and tested to ensure that the safety is operational.


Elevator with overhead protection canopy

Fall Protection Required.
If a fall hazard exists, the conveyance must have fall protection. Always follow your company safe work practices for fall hazards.

If classified as an elevator, 1926.501(b)(1).

Unprotected sides and edges. Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.

If classified as a suspended scaffold/false car or suspended scaffold/temporary work platform, 1926.451(g)(1)(ii).
Each employee on a single-point or two-point adjustable suspension scaffold shall be protected by both a personal fall arrest system and guardrail system.
Each employee on a scaffold more than 10 feet (3.1 m) above a lower level shall be protected from falling to that lower level.

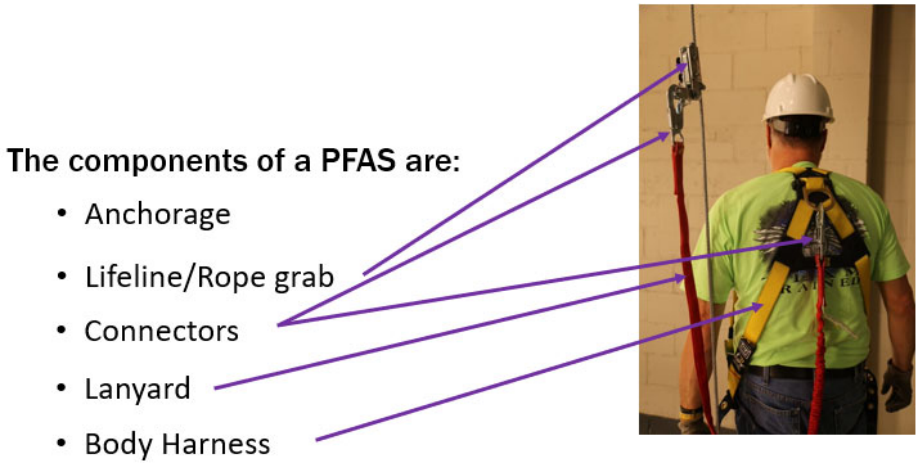
Guardrail system: Must meet the requirements of OSHA 1926.502(1)
42″ top rail (+- 3″)
21″ mid rail
3 ½″ toe board
Posts shall not be more than 8′ apart.

Top rails must be capable of withstanding a force of 200 lbs. and mid-rails a force of 150 lbs, applied in any outward or downward direction.

While not a regulation, for safe access and egress, guardrail systems must be removable at hoistway entrances, escalator/moving walk wellway, and at the entrance to false car/running platforms.


False car with removable barricade

Personal Fall Arrest Systems are designed to catch workers after they have fallen.



Overhead Protection.
In addition to fall protection, overhead protection must be provided to protect workers from objects falling down the hoistway.

This can be accomplished by fully enclosing the hoistway openings or separate adjacent hoistways with protective netting, installing a canopy structure on the conveyance, or barricade the area to prohibit people from entering.


False car canopy

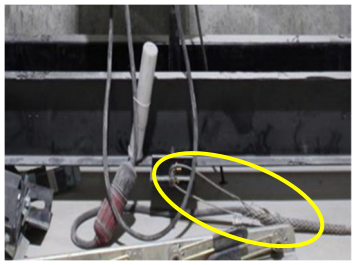
Post installation testing.
After False Car or temporary working platform installation, a load test must be performed. The test should be performed, at the hoisting point, at 1.5X the Working Load Limit.

Section B.1.1 of the EN1808 – Safety Requirements for suspended access equipment provides the calculation for performing a static test of the hoist:
The static test coefficient is equal to 1.5.
A hoist shall be statically loaded for 15 minutes to 1.5 times it's Working Load Limit.
A traction hoist shall not show any signs of the wire rope slipping or creeping through the traction sheave. The wire rope should be lubricated in accordance with the manufacturer's instructions.
The service brake shall hold the load without slipping or creeping.
No load bearing components of the hoist shall fail, deform, or weaken and the load shall be held in position.
After the load is released, the hoist should operate in accordance with the manufacturer's instructions.

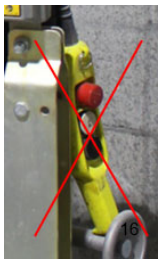
Temporary hoists must have the safeties tested before each shift, and the hoist cable must be inspected daily. Always follow the hoist manufacturer's instructions for testing and inspection.
1926.451(d)(10):
Ropes shall be inspected for defects by a competent person prior to each work shift and after every occurrence which could affect a rope's integrity. Ropes shall be replaced if any of the following conditions exist:
(i) Any physical damage which impairs the function and strength of the rope.
(ii) Kinks that might impair the tracking or wrapping of rope around the drum(s) or sheave(s).
(iii) Six randomly distributed broken wires in one rope lay or three broken wires in one strand in one rope lay.
(iv) Abrasion, corrosion, scrubbing, flattening or peening causing loss of more than one-third of the original diameter of the outside wires.
(v) Heat damage caused by a torch or any damage caused by contact with electrical wires.
(vi) Evidence that the secondary brake has been activated during an overspeed condition and has engaged the suspension rope.

Power Cables and Run Buttons.
Power cables and temporary run button cords should always have a strain relief on the cord.
Temporary run buttons must ALWAYS have a minimum of 5 wires with an independently wired emergency stop switch, and must have safe, up, and down buttons. Never use a pendant station with only an up and down button.
Temporary run button cords should NEVER be spliced. OSHA Standard 1926.405(g)(2)(iii) states: Flexible cords shall be used only in continuous lengths without splice or tape.

NOTE: 1926.405(g)(2)(iii) - Hard service flexible cords No. 12 or larger may be repaired if spliced so that the splice retains the insulation, outer sheath properties, and usage characteristics of the cord being spliced.


Strain relief on pendant cord


Pendant station with up, down, safe, and stop


Pendant with only up, down, and stop

Summary.
The hoistway is your space. No other trades should ever work above you or below you.
Always follow your company's policies and procedures when assembling and operating suspended scaffolds/false cars and suspended scaffolds/working platforms.
Inspect and test equipment according to the manufacturer's instructions.
Identify and follow capacities for suspended scaffolds/false cars and suspended scaffolds/working platforms.

Through the Alliance between OSHA's 10 Regional Offices and the Elevator Contractors of America (ECA), Elevator Industry Work Preservation Fund (EIWPF), International Union of Elevator Constructors (IUEC), National Association of Elevator Contractors (NAEC), National Elevator Industry Educational Program (NEIEP), and National Elevator Industry Inc. (NEII), collectively known as The Elevator Industry Safety Partners, developed this Industry Specific Training for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. March 2025

Under the Occupational Safety and Health Act, employers are responsible (http://www.osha.gov/as/opa/worker/employer-responsibility.html) for providing a safe and healthy workplace and workers have rights (https://www.osha.gov/workers). OSHA can help answer questions or concerns from employers and workers. OSHA's On-Site Consultation Program (https://www.osha.gov/consultation) offers free and confidential advice to small and medium-sized businesses, with priority given to high-hazard worksites. For more information, contact your regional or area OSHA office (https://www.osha.gov/contactus/bystate), call 1-800-321-OSHA (6742), or visit https://www.osha.gov/.