



3 OSHA Safety Guidelines

YOUR FACILITY SHOULD BE MEETING

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Introduction

Maintaining a safe working environment is critical in any manufacturing facility. Plant safety should be every organization's first priority – even before business goals or production capabilities. Your workers are your most valuable asset; when they're healthy and safe, your plant can run efficiently and safely.

According to the Federal Occupational Safety and Health Administration (OSHA), 4,821 workers were killed on the job in 2014 – that's more than 92 per week, or 13 per day. Of all fatal accidents that year, contracting jobs accounted for 17%, while one in five were in construction. The leading causes of these fatalities included falls, electrocutions, being struck by an object, and getting caught in equipment.



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With the right safety precautions, however, these accidents can be prevented – but it's critical that the solutions are properly implemented. OSHA cites fall protection, scaffolding, ladder construction, and machine guarding as some of its most frequently violated standards.

As the nation's leading supplier of physical and industry safety products for 30 years, OMEGA Industrial Products always aims to create a safer workplace for our customers. To do this, we've examined specific OSHA regulations and outlined the steps manufacturers can take to ensure they remain in compliance with these federal guidelines.

OSHA Requirements and How to Meet Them

Requirements for Guardrails

Worker slips and falls – the leading cause of construction fatalities – can be effectively prevented by installing guardrails throughout your facility. OSHA mandates this precaution across a variety of overhead and ground-level applications, with several [specific designations](#) to be followed depending on the type of equipment.



Guardrails



Handrails

Guideline 1: Minimize falls with guardrails & handrails

Per standard [1910.28\(b\)\(15\)](#), “Guardrails not less than 2 x 4 inches or the equivalent and not less than 36 inches or more than 42 inches high, with a mid-rail, when required, of 1 x 4 inch lumber or equivalent, and toeboards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toeboards shall be a minimum of 4 inches in height.”

By installing mid-rails, top rails, and toeboards onto scaffolding, employers ensure workers stay safe in elevated work stations and overhead platforms. For specific types of scaffolding such as narrow, swinging and floating, and tube and coupler, OSHA provides additional information on how to minimize hazards and educate staff on proper scaffolding safety.

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Guideline 2: Prevent interactions with dangerous equipment.

Scaffolding isn't the only fall risk, however; workers also need protection when walking around any type of surface in a plant. Employers are therefore required to install guardrails, safety nets, or personal fall arrest systems to prevent falls into dangerous equipment such as conveyor belts or vats filled with harmful chemicals. Failure to implement guardrails in places 6 or more feet above a dangerous lower level will result in an "unprotected side or edge," per [OSHA 1926.501\(b\)\(1\)](#).

Not only do guardrails/handrails and safety nets prevent people from falling off elevated surfaces, they also prevent objects and materials from falling onto passersby below. In warehouses and construction worksites where falling objects pose a high risk to worker safety, OSHA specifications require that openings between rails are small enough to prevent large objects from passing through.

To view the complete list of requirements pertaining to fall protection, consult [OSHA Section 1910](#) as well as safeguards from the [International Building Code](#).

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Stairways

Dangerous stairways can also result in slips and falls on the job. OSHA lays out a number of requirements to secure facility stairways and reduce the risk of accidents, with special designations for specific dimensions, load bearing capacities, treads, and guards to maintain safe working conditions.



Stairways

Guideline 3: Secure every stairway, not just those connected to equipment.

Per [OSHA 1917.120\(a\)](#), “‘Fixed stairway’ means interior and exterior stairs serving machinery, tanks and equipment, and stairs to or from floors, platforms or pits. The term does not apply to stairs intended only for fire exit purposes, to articulated stairs (the angle of which changes with the rise and fall of the base support) or to stairs forming an integral part of machinery.” Simply put, manufacturers are required to secure every stairway in the entire facility, not just those connected directly to the equipment.

Fall prevention is critical for optimal stairway safety, especially as flights increase in height. Similar to the safety features required for overhead platforms and scaffolding, OSHA mandates that stairways surpassing certain elevations be equipped with handrails, mid-rails, screens, and intermediate vertical members to protect workers from falling.

The complete list of requirements pertaining to industrial stairway safety can be found in [OSHA Section 1917](#).

Handrails vs. Guardrails: Lets Clear Up Some confusion!

What's the Difference?

OSHA and several Building Codes refer to Handrails as “Guardrails,” generating common confusion that the two products are the same. However, there are key differences to understand before purchasing either product.

When referring to fall protection from raised platforms and stairways, the industry considers this form of guarding as handrails.

Guardrails are actually heavy-duty beams of formed steel. Like highway guardrails, these products are designed to absorb the energy of collisions from moving vehicles and heavy equipment in excess of 10,000 lbs.

OSHA requirements for fall protection (Handrails) require multiple horizontal rails and that they hold a 200-lb. horizontal force at any point along the top rail. This is really an issue of semantics and the design and functions are very different.

Nearly 100 workers are killed – and 95,000 injured every year – while operating forklifts. Based on 2014 data from the Bureau of Labor Statistics, 261,930 private industry and state/local government workers missed one or more days of work due to injuries from falls on the same level or to lower levels. 798 workers died from such falls.

The construction industry experienced the highest frequency of fall-related deaths, while the highest counts of non-fatal fall injuries continue to be associated with the health services and wholesale/retail industries.

Omega Industrial Products offers both handrail and guardrail solutions to keep your workers safe and to avoid downtime from missed days on projects. We've pioneered the guardrail/safety barrier specifically designed for the workplace.

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By implementing several simple steps – such as guardrail installation and stairway securing – manufacturers can drastically reduce the risk of fatal accidents in their facilities. For three decades, OMEGA Industrial Products has designed, manufactured, and supplied a variety of custom rails, guards, and shields to allow for optimal worker safety and superior productivity.

We also have a nationwide dealer network.

Omega Industrial Products can help you create a safer workplace, reduce employee injuries and improve productivity. We help prevent accidents and damage caused by moving forklifts. And, we protect your most valuable assets – people and equipment – with products that are proven in-the-field. Omega products are used by the leading companies, government agencies and institutions throughout the world.

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