Construction Site Fall Protection

The role employers play in preventing construction site fatalities and injuries.

Kee® Safety

SEPARATING PEOPLE FROM HAZARDS

The Continuing Need for Fall Protection on the Construction Site

Why Does OSHA Have a Standard for Fall Protection?

The majority of deaths in the construction business historically have been caused by falls, which account for around one-third of all fatalities. For instance, out of the 828 deaths recorded overall in 2013, the Bureau of Labor Statistics reported 291 fatal falls to a lower level.

OSHA is aware that accidents involving falls are usually complicated occurrences that involve a number of variables. In order to safeguard employees from fall dangers, these fall protection standard address both equipment-related and human-related accidents. The purpose of this document is to provide employees and employers with a better understanding of the standards and rationale for the fall protection standards in construction.

OSHA's 2021 Top 10 Most Frequently Cited Violations

The following is a list of the top 10 most frequently cited standards following inspections of worksites by OSHA for all industries. OSHA publishes the list to alert employers about these commonly cited standards so they can take steps to find and fix recognized hazards addressed in these and other standards before OSHA arrives. Far too many preventable injuries, illnesses, and deaths occur in the workplace that are related to these top 10 cited standards.

Fall Protection, construction
(29 CFR 1926.501)

Fall Protection Training, construction
(29 CFR 1926.501)

Respiratory Protection, general industry
(29 CFR 1926.501)

Control of Hazardous Energy (lockout/tagout), general industry
(29 CFR 1926.501)

Ladders, construction
(29 CFR 1926.501)

Eye and Face Protection, construction
(29 CFR 1926.501)

Hazard Communication, general industry
(29 CFR 1926.501)

Powered Industrial Trucks, general industry
(29 CFR 1926.501)

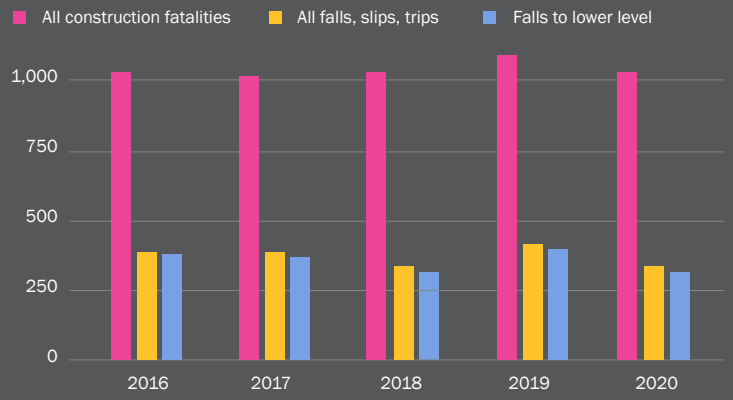
Scaffolding, construction
(29 CFR 1926.501)

Machinery and Machine Guarding, general industry
(29 CFR 1926.501)

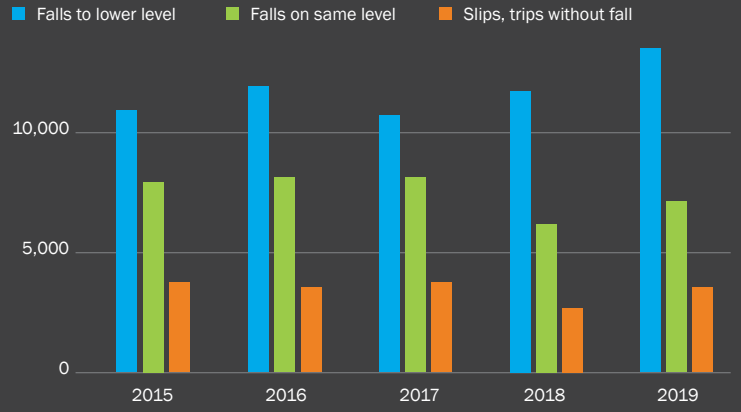
Fatal and nonfatal falls, slips, and trips in the construction industry

2019 saw 1,102 fatal injuries in the construction industry across both the commercial and public sectors. These fatalities accounted for 20.7% of all occupational fatalities in the US (5,333). The majority of fatal incidents in the construction sector—representing 37.9% of all fatalities—were caused by falls, slips, and trips (418 of 1,102). The number of fatal falls, slips, and trips increased by 22.9% from 2017 to 2018. Falls to a lower level account for the majority of fatal falls, slips, and trips.

Number of fatal work injuries in the construction industry by selected events or exposures, all ownerships, 2016-2020



Number of nonfatal injuries and illnesses involving days away from work by selected event or exposure, private construction industry, 2015-2019

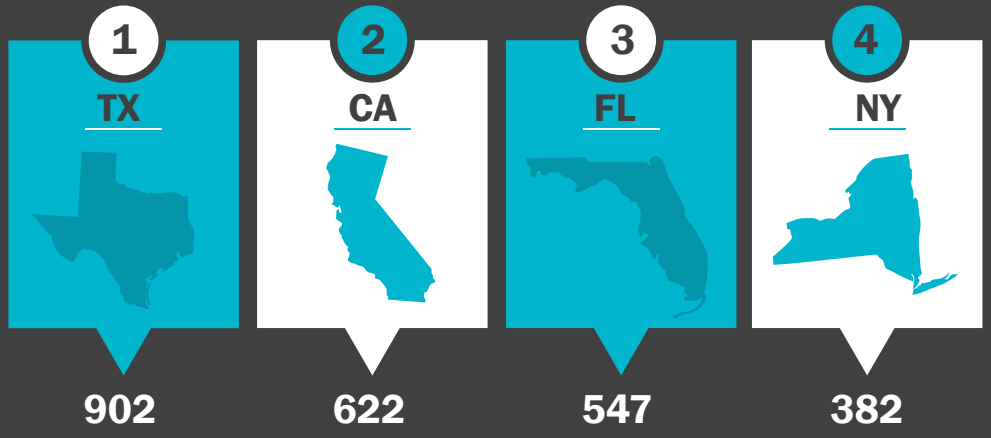


Rate of nonfatal injuries and illinesses involving days away from work per 10,000 full-time workers by selected events or exposures and industries, private industry, 2020

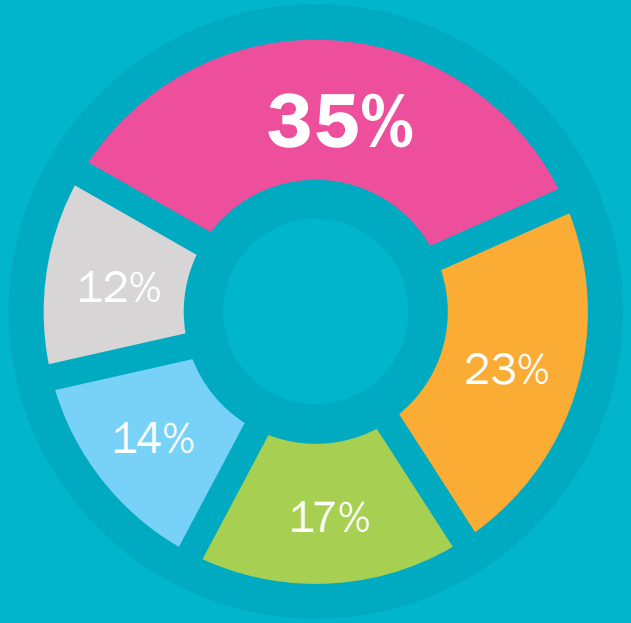
Construction Fatalities in the United States.

On the job site, construction workers encounter a variety of dangers on a daily basis. Since 2016, more than 1,000 people have suffered a fatal injury at work each year, with falls to a lower level accounting for more than one-third of these fatalities, despite continued attempts to increase safety.

Number of fatal injuries in construction top 4 states



Percent share of fatal injuries by injury type



Percentage of total inspections by establishment size

All Construction (NAICS 23)

1-9

Establishment size: **1-9 employees**

Number of inspections: **260.1K**

Percent of inspections: **70.7%**

10-19

Establishment size: **10-19 employees**

Number of inspections: **44.7K**

Percent of inspections: **12.2%**

20-99

Establishment size: **20-99 employees**

Number of inspections: **45.6K**

Percent of inspections: **12.4%**

100+

Establishment size: **100+ employees**

Number of inspections: **17.4K**

Percent of inspections: **4.7%**

Falls Are the Leading Cause of Death in Construction

Out of **1,008** construction fatalities in 2020, **351** were fatal falls to a lower level (BLS data). These deaths are avoidable. Since 2012, OSHA has collaborated on the Fall Prevention Campaign with the National Institute for Occupational Safety and Health and the National Occupational Research Agenda (NORA) - Construction Industry to raise awareness among workers and employers about common fall hazards in construction and how falls from ladders, scaffolds, and roofs can be avoided.

PLAN ahead to complete the job safely

Employers must plan projects to ensure that employees work safely from heights. Begin by determining how the job will be completed, what tasks will be involved, and what safety equipment may be required for each task. Employers should include safety equipment and plan to have all necessary equipment and tools on hand at the construction site when estimating the cost of a job. Consider all of the different fall hazards, such as holes or skylights and leading edges, when planning and selecting fall protection for a roofing job, and then plan and select fall protection appropriate for that work, such as personal fall arrest systems (PFAS).

PROVIDE the neccessary equipment

Workers six feet or more above lower levels are at risk of serious injury or death if they fall. Employers must provide fall protection and the appropriate equipment for the job, such as ladders, scaffolds, and safety gear, to protect these workers. To complete the job safely, use the appropriate ladder or scaffold. If workers are using personal fall arrest systems (PFAS) on the roof, provide a harness for each worker who needs to tie off to the anchor. Check that the PFAS fits properly and that it is used safely on a regular basis.

TRAIN everyone to safely use the equipment

Each employee should receive training on how to set up and operate the tools they use at work safely. Employers are required to provide workers with safety awareness training.

The State of Construction Safety in 2022

The industry is moving forward thanks to advancements in wearable technology and equipment as construction safety continues to change. Nevertheless, considering the number of avoidable accidents and fatalities that occur in the industry each year, a renewed dedication to safety and training is crucial in 2022.

Due to the pandemic, attention to protective gear has increased dramatically during the last two years. Construction workers encounter a variety of risks, and the best response is ongoing awareness, education, regulation, and equipment.

Putting safety first is essential in lowering the high injury rate in the construction industry, and businesses who prioritize safety over other priorities eventually make money. Don't wait to evaluate your safety procedures; everyone on the building site benefits from promoting a culture of safety.

Total workplace injury costs exceed

$170 Billion

each year. [NSC]

Workers' compensation claims for nonfatal falls account for

$2.5 Billion

annually. [Liberty Mutual]

Occupational Safety and Health Administration (OSHA) penalties can cost anywhere from

$13,653 to $136,532

for safety violations. [OSHA]

What kinds of Fall Protection should employers use?

The Employer Must Determine Whether Fall Protection Is Required

The Responsibility for Determining If Fall Protection Is Necessary Falls Upon the Employer

In general, **guardrail systems**, **lifeline systems**, or **personal fall arrest devices** can be used to offer fall protection. These devices are referred to as conventional fall protection by OSHA. When doing specific tasks, several fall safety technologies and techniques could be applied. For instance, a positioning device system might be employed when working on formwork. OSHA advises companies to use fall-prevention measures like guardrails that protect employees from going down the side of a structure.

KeeGuard

Offers the best stability for all standard rooftop fall protection systems including membrane, metal profile, and standing seam roofs. It's also very flexible and can be used on everything from complex roof shapes to those that change in elevation. Rooftop guardrail protection from KeeGuard separates your people from hazards.

KeeLine

Freedom to Work. Securely Attached. The KeeLine® horizontal lifeline system is designed to provide workers with freedom of movement on the rooftop while securely attached to the lifeline at all times.

Weightanka

Weightanka is a mobile, deadweight anchor device for use on roofs up to 5 degrees pitch, where the installation of collective protection or permanent anchor devices is not viable. Weightanka uses a central pedestal which allows the attachment of a safety harness and lanyard and raises the height at which the arrest force is applied.

Kee® Safety

SEPARATING PEOPLE FROM HAZARDS

Safety At The Highest Level

Kee Safety is a leading manufacturer of fall prevention and safety equipment with a global focus on separating people from hazards.

Since its founding in 1934, Kee Safety has a long history of building solid partnerships, providing top-notch customer service, and pioneering innovative product development. You already know Kee Safety as your trustworthy material supplier; therefore, we ask that you also think of us as your business partner, totally dedicated to the success of your company.