

OSHA FALL PROTECTION COMPLIANCE

TOUGH NEW
STANDARDS TO
PROTECT PEOPLE
AND THE
BOTTOM LINE

“Fall Protection under OSHA regulation 29 CFR 1926.501 has been the number one violation for the last seven straight years, from 2011-2017. It’s amazing how many facility managers and CFOs have not been briefed on the extreme financial implications of non-compliance.”

PHILLIP HARRIS, JR.

*Product Manager of Safety Solutions
Tremco Roofing and Building Maintenance*





When it comes to managing risk, building managers and financial executives have at least one important responsibility in common —meeting OSHA Fall Protection Standards and state building codes to reduce the likelihood of falls resulting in serious injury or death. Yet according to OSHA’s most recent data, meeting these standards continues to be a challenge for building owners across the country.



CONSIDER THESE FACTS:

1



Fall protection violations are the number one cause of death in all types of construction and accounted for 37% of construction deaths in 2017.

2



There were 6,072 OSHA fall protection violations nationally in 2017.

3



Falls have been the number one cause of OSHA violations for the past seven years, from 2011-2017.

4



Falls account for nearly 10% of all traumatic occupational deaths.

NEW REGULATIONS

CLEARLY DEFINE OWNER RESPONSIBILITIES

According to **Thom Kramer, President of the International Society for Fall Protection**, OSHA is placing more emphasis on fall protection than ever before. “With the regulation that went into effect January 2017, OSHA has made its requirements for fall protection much clearer,” says Kramer. “For instance, in the past, there were questions about the safe distance from an unprotected edge. Now it is very clear: for a maintenance-type application, if the work is within six feet of a roof edge at any time, you need to have some means of conventional fall protection, which would be a guardrail, a personal fall protection system, or a safety net. On the other hand, if the work is temporary, infrequent and 15 feet away from the edge, you don’t need any permanent means of fall protection. You can simply use an administrative control in the form of a policy, training and procedures to comply.”



WHAT'S AN OWNER TO DO?

OSHA SAYS PLAN, PROVIDE AND TRAIN

Because prevention is the best approach to fall protection, OSHA recommends building owners follow these three steps toward the development of a rooftop safety program:

1 CREATE A PLAN according to your various roofs and corresponding OSHA standards.

2 PROVIDE the right safety equipment for each roof level.

3 TRAIN EMPLOYEES to ensure they understand how to use the equipment and recognize hazards.

“Owners also need to be aware of where you may have integrity issues with the working surfaces on your roof,” said Kramer. “Deterioration of a roof area started by a leak can create a hole through which a worker could fall. In situations where penetrating objects, like roof vents, have been removed, the structural area underneath, including the deck, must be rebuilt to its original strength before the roofing layers and membrane go on top. Otherwise there could be a spot where a worker could fall through. Some contractors trying to cut corners will put the new roof membrane over the open hole, creating a potentially disastrous situation.”

*“Another thing many owners don’t know is that **an assessment of Personal Protection Equipment (PPE) is now incorporated into the OSHA regulation**,” said Kramer. While this has already been required for hard hats, hand protection, safety shoes, eyeglasses, and earplugs, the new regulation requires you to do it for fall protection as well. And you need to formulate a plan for communicating that information to all workers.”*

OSHA FALL PROTECTION REGULATIONS

FOR LOCATIONS UNDER CONSTRUCTION:

Section 1926.501(b)(2)(ii) requires that employees on walking/working surfaces six feet or more above a lower level shall be protected from falling by a guardrail system, safety net system, or personal fall arrest system.

Section 1926.501(b)(4)(i) requires that employees on walking/working surfaces be protected from falling through holes (including skylights) more than six feet above lower levels, by personal fall arrest systems, covers, or guardrail systems around such holes.

Sections 1926.501(b)(4) (ii) and (iii) require that employees on a walking/working surface be protected from tripping or stepping into or through holes (including skylights) or from objects falling through holes by covers.

FOR GENERAL INDUSTRY:

Section 1910.132(d) now requires workplace assessment of fall hazards, including:

- Determine whether hazards are present and, when present, communicate to employees, select types of PPE to protect employees, and ensure proper fit of equipment.
- Coordinate with other entities to assess hazards for multi-employer sites.
- Document the completion of assessments, including what workplaces were evaluated, who certifies that an evaluation was performed, and the date of the assessment.

Section 1910.28(a)(1) requires employers to provide protection for each employee exposed to fall and falling object hazards. Unless stated otherwise, the employer must ensure that all fall protection and falling object protection required by this section meet the criteria in § 1910.29, including personal fall protection systems required by this section to meet the criteria of § 1910.140.

Section 1910.28(b)(13) addresses low slope roofs and requires:

- (i) When work is performed less than 6 feet (1.6 m) from the roof edge, the employer must ensure each employee is protected from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system.
- (ii) When work is performed at least 6 feet (1.6 m) but less than 15 feet (4.6 m) from the roof edge, the employer must ensure each employee is protected from falling by using a guardrail system, safety net system, travel restraint system, or personal fall arrest system. The employer may use a designated area when performing work that is both infrequent and temporary.

(iii) When work is performed 15 feet (4.6 m) or more from the roof edge, the employer must:

- (A) Protect each employee from falling by a guardrail system, safety net system, travel restraint system, or personal fall arrest system or a designated area. The employer is not required to provide any fall protection, provided the work is both infrequent and temporary; and
- (B) Implement and enforce a work rule prohibiting employees from going within 15 feet (4.6 m) of the roof edge.

Section 1910.28(b)(3) addresses holes and requires that each employee is protected from falling into a ladderway floor hole or ladderway platform hole by a guardrail system and toeboards erected on all exposed sides, except at the entrance to the hole, where a self-closing gate or an offset must be used.

Section 1910.28(b)(9) addresses fixed ladders (that extend more than 24 feet (7.3 m) above a lower level) or equipment.

- (i)(A) Existing fixed ladders. Each fixed ladder installed before November 19, 2018 is equipped with a personal fall arrest system, ladder safety system, cage, or well;
- (i)(B) New fixed ladders. Each fixed ladder installed on and after November 19, 2018, is equipped with a personal fall arrest system or a ladder safety system;
- (i)(C) Replacement. When a fixed ladder, cage, or well, or any portion of a section thereof, is replaced, a personal fall arrest system or ladder safety system is installed in at least that section of the fixed ladder, cage, or well where the replacement is located; and
- (i)(D) Final deadline. On and after November 18, 2036, all fixed ladders are equipped with a personal fall arrest system or a ladder safety system.

Section 1910.30(a) covers training requirements regarding fall hazards. It requires:

- (1) Before any employee is exposed to a fall hazard, the employer must provide training for each employee who uses personal fall protection systems or who is required to be trained as specified elsewhere in this subpart. Employers must ensure employees are trained in the requirements of this paragraph on or before May 17, 2017.
- (2) The employer must ensure that each employee is trained by a qualified person.
- (3) The employer must train each employee in at least the following topics:
 - 1910.30(a)(3)(i) - The nature of the fall hazards in the work area and how to recognize them;
 - 1910.30(a)(3)(ii) - The procedures to be followed to minimize those hazards;
 - 1910.30(a)(3)(iii) - The correct procedures for installing, inspecting, operating, maintaining, and disassembling the personal fall protection systems that the employee uses; and
 - 1910.30(a)(3)(iv) - The correct use of the personal fall protection systems and equipment specified in paragraph (a)(1) of this section, including, but not limited to, proper hook-up, anchoring, and tie-off techniques, and methods of equipment inspection and storage, as specified by the manufacturer.

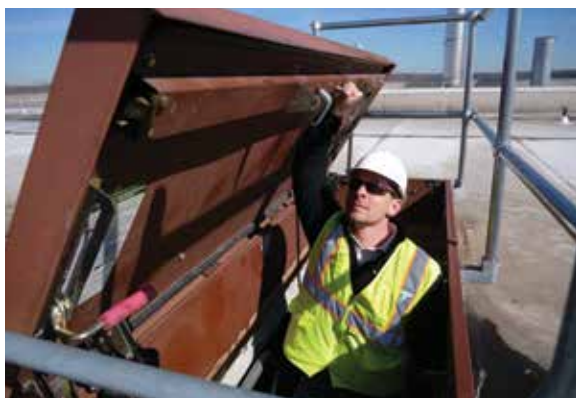
THE FINANCIAL COST OF NON-COMPLIANCE

Along with stricter regulations, OSHA continues to increase fines associated with fall protection non-compliance, as reflected in a 78% increase in fines in 2016 and another 17% increase in 2017. And for the first time, in 2017, lack of proper OSHA training became a top 10 OSHA fine category.

“As the owner, you have a legal responsibility to ensure that every person who goes on your roofs has been trained appropriately,” said Phillip Harris, Product Manager of Safety Solutions for Tremco Roofing and Building Maintenance. “You are at risk for both employees and contracted service providers who access your rooftop.”

VIOLATION FINE COSTS BY CATEGORY AND YEAR

TYPE OF VIOLATION	2015	2016	2017	2018
Serious or other than serious posting requirements	\$ 7,000	\$ 12,471	\$ 12,675	\$ 12,934
Failure to abate or failure to fix and improve beyond initial violation date (per day)	\$ 7,000	\$ 12,471	\$ 12,675	\$ 12,934
Willful or repeat violations	\$ 70,000	\$ 124,709	\$ 126,749	\$ 129,336



A LIBERTY MUTUAL WORKPLACE SAFETY INDEX ESTIMATED THAT FALLS TO A LOWER LEVEL RESULTED IN DIRECT COSTS OF \$5.5 BILLION ANNUALLY.

**Liberty Mutual U.S. Workplace Safety Index, 2017*



Getting a professional rooftop safety evaluation is a great first step toward meeting OSHA's Fall Protection requirements. Owners should receive an assessment of roofs' conditions and specific compliance recommendations for both physical and procedural changes to your facilities. There is often no fee for the service. It's a common-sense way to protect your workers and your bottom line.

For information about Tremco Fall Protection Solutions call your local Tremco sales representative or visit YourRoofExperts.com to request a consultation.

FOOTNOTES



Thomas E. Kramer, P.E., CSP, is President of the International Society for Fall Protection and Managing Principal of LJB Inc. He is a safety consultant and structural engineer with 20 years of experience. As a dually registered professional engineer and certified safety professional, he has spent much of his career consulting with clients to reduce risk for workers at heights. He specializes in the assessment and design of fall protection systems, as well as fall protection program development. He is widely considered a thought leader in the fall protection industry, having given more than 100 technical sessions and workshops on the topic. For his contributions to the safety profession, he received the Edgar Monsanto Queeny Safety Professional of the Year award in 2016.



Phillip Harris, Jr. is Product Manager of Safety Solutions for Tremco Roofing & Building Maintenance. With over 10 years of commercial sales and product management experience, he leads Tremco Roofing's development and design of innovative fiberglass reinforced plastic safety products for rooftop systems. Phillip's background in safety and commercial sales allows him to quickly identify risks associated with rooftop fall hazards and recommend compliant solutions. He is considered an expert on rooftop safety solutions spanning the US and Canada and leads Tremco Roofing's mission to "Lead with Safety."

OSHA DATA SOURCES

<https://www.msdsolnline.com/2011/11/01/the-top-10-osh-violations-of-2011/>
<https://www.arbill.com/arbill-safety-blog/bid/168107/2012-Top-10-OSHA-Citations>
<https://www.oshalawupdate.com/2013/11/04/osh-releases-2013-top-10-most-cited-standards/>
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<https://www.msdsolnline.com/2016/10/18/osh-top-10-most-cited-violations-of-2016/>
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<https://www.msdsolnline.com/2017/09/26/osh-top-10-cited-violations-2017/>

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