

## FALL PROTECTION – GENERAL REQUIREMENTS

**STANDARD:** 1926.501

**TOTAL VIOLATIONS:** 7,216

**FISCAL YEAR 2017  
RANKING:** NO. 1  
(6,887 VIOLATIONS)

This standard outlines where fall protection is required, which systems are appropriate for given situations, the proper construction and installation of safety systems, and the proper supervision of employees to prevent falls. It is designed to protect employees on walking/working surfaces (horizontal or vertical) with an unprotected side or edge above 6 feet.

### TOP 5 SECTIONS CITED:

1. 1926.501(b)(13) Each employee engaged in residential construction activities 6 feet or more above lower levels shall be protected by guardrail systems, safety net system, or personal fall arrest system unless another provision in paragraph (b) of this section provides for an alternative fall protection measure – 4,570 violations
2. 1926.501(b)(1) Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge that is 6 feet 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. – 1,124
3. 1926.501(b)(10) Except as otherwise provided in paragraph (b) of this section, each employee engaged in roofing activities on low-slope roofs, with unprotected sides and edges 6 feet or more above lower levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system and guardrail systems, warning line systems and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system. – 593
4. 1926.501(b)(11) Each employee on a steep roof with unprotected sides and edges 6 feet or more above lower levels shall be protected from falling by the guardrail systems with toeboards, safety net systems, or personal fall arrest systems. – 427
5. 1926.501(b)(4)(i) Each employee on walking/working surfaces shall be protected from falling through holes (including skylights) more than 6 feet (1.8 m) above lower levels, by personal fall arrest systems, covers, or guardrail systems erected around such holes. – 116

## HAZARD COMMUNICATION

**STANDARD:** 1910.1200

**TOTAL VIOLATIONS:** 4,537

**FISCAL YEAR 2017  
RANKING:** NO. 2  
(4,652 VIOLATIONS)

This standard addresses chemical hazards – both those chemicals produced in the workplace and those imported into the workplace. It also governs the communication of those hazards to workers.

### TOP 5 SECTIONS CITED:

1. 1910.1200(e)(1) Employers shall develop, implement, and maintain at each workplace, a written hazard communication program which at least describes how the criteria specified in paragraphs (f), (g), and (h) of this section for labels and other forms of warning, Safety Data Sheets, and employee information and training will be met. – 1,510 violations
2. 1910.1200(h)(1) Employers shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new chemical hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and safety data sheets. – 1,167
3. 1910.1200(g)(8) The employer shall maintain in the workplace copies of the required Safety Data Sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). – 496
4. 1910.1200(g)(1) Chemical manufacturers and importers shall obtain or develop a Safety Data Sheet for each hazardous chemical they produce or import. Employers shall have a Safety Data Sheet in the workplace for each hazardous chemical which they use. – 331
5. 1910.1200(f)(6)(ii) Product identifier and words, pictures symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical. – 195

## SCAFFOLDING

**STANDARD:** 1926.451

**TOTAL VIOLATIONS:** 3,319

**FISCAL YEAR 2017  
RANKING:** NO. 3  
(3,697 VIOLATIONS)

This standard covers general safety requirements for scaffolding, which should be designed by a qualified person and constructed and loaded in accordance with that design. Employers are bound to protect construction workers from falls and falling objects while working on or near scaffolding at heights of 10 feet or higher.

### TOP 5 SECTIONS CITED:

1. 1926.451(g)(1) Each employee on a scaffold more than 10 feet above a lower level shall be protected from falling to that lower level. – 552 violations
2. 1926.451(e)(1) When scaffold platforms are more than 2 feet above or below a point of access, portable ladders, hook-on ladders, attachable ladders, stair towers (scaffold stairways/towers), stairway-type ladders (such as ladder stands), ramps, walkways, integral prefabricated scaffold access, or direct access from another scaffold, structure, personnel hoist, or similar surface shall be used. Crossbraces shall not be used as a means of access. – 412
3. 1926.451(b)(1) Each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supported. – 332
4. 1926.451(g)(1)(vii) For all scaffolds not otherwise specified in paragraphs (g)(1)(i) through (g)(1)(vi) of this section, each employee shall be protected by the use of personal fall arrest systems or guardrail systems meeting the requirements of paragraph (g)(4) of this section. – 253
5. 1926.451(c)(2) Supported scaffold poles, legs, posts, frames, and uprights shall bear on base plates and mud sills or other adequate firm foundation. – 147

## RESPIRATORY PROTECTION

**STANDARD:** 1910.134

**TOTAL VIOLATIONS:** 3,112

**FISCAL YEAR 2017  
RANKING:** NO. 4  
(3,381 VIOLATIONS)

This standard directs employers in establishing or maintaining a respiratory protection program. It lists requirements for program administration; worksite-specific procedures; respirator selection; employee training; fit testing; medical evaluation; respirator use; and respirator cleaning, maintenance and repair.

### TOP 5 SECTIONS CITED:

1. 1910.134(e)(1) The employer shall provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. The employer may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator. – 583 violations
2. 1910.134(c)(1) In any workplace where respirators are necessary to protect the health of the employee or whenever respirators are required by the employer, the employer shall establish and implement a written respiratory protection program with worksite-specific procedures. The program shall be updated as necessary to reflect those changes in workplace conditions that affect respirator use. – 450
3. 1910.134(f)(2) The employer shall ensure that an employee using a tight-fitting facepiece respirator is fit tested prior to initial use of the respirator, whenever a different respirator facepiece (size, style, model or make) is used, and at least annually thereafter. – 276
4. 1910.134(c)(2)(i) An employer may provide respirators at the request of employees or permit employees to use their own respirators, if the employer determines that such respirator use will not in itself create a hazard. If the employer determines that any voluntary respirator use is permissible, the employer shall provide the respirator users with the information contained in Appendix D to this section. – 209
5. 1910.134(k)(6) The basic advisory information on respirators, as presented in Appendix D of this section, shall be provided by the employer in any written or oral format, to employees who wear respirators when such use is not required by this section or by the employers. – 202

This standard outlines minimum performance requirements for the control of hazardous energy during servicing and maintenance of machines and equipment.

### TOP 5 SECTIONS CITED:

1. 1910.147(c)(4)(i) Procedures shall be developed, documented and utilized for the control of potentially hazardous energy when employees are engaged in the activities covered by this section. – 587 violations
2. 1910.147(c)(6)(i) The employer shall conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the requirements of this standard are being followed. – 342
3. 1910.147(c)(1) The employer shall establish a program consisting of energy control procedures, employee training and periodic inspections to ensure that before any employee performs any servicing or maintenance on a machine or equipment where the unexpected energizing, startup or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source and rendered inoperative. – 332
4. 1910.147(c)(7)(i) The employer shall provide training to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of the energy controls are acquired by employees. – 262
5. 1910.147(d) Affected employees shall be notified by the employer or authorized employee of the application and removal of lockout devices or tagouts devices. Notification shall be given before the controls are applied, and after they are removed from the machine or equipment. – 179

## LOCKOUT/ TAGOUT

**STANDARD:** 1910.147

**TOTAL VIOLATIONS:** 2,923

**FISCAL YEAR 2017  
RANKING:** NO. 5  
(3,131 VIOLATIONS)





## LADDERS

**STANDARD:** 1926.1053  
**TOTAL VIOLATIONS:** 2,780

**FISCAL YEAR 2017  
RANKING:** NO. 6  
(2,567 VIOLATIONS)

This standard covers general requirements for all ladders.

### TOP 5 SECTIONS CITED:

1. 1926.1053(b)(1) When portable ladders are used for access to an upper landing surface, the ladder side rails shall extend at least 3 feet above the upper landing surface to which the ladder is used to gain access; or when such an extension is not possible because of the ladder's length, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grabrail, shall be provided to assist employees in the mounting and dismounting the ladder. In no case shall the extension be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support. – 1,599 violations
2. 1926.1053(b)(4) Ladders shall be used only for the purpose for which they were designed. – 372
3. 1926.1053(b)(13) The top or top step of a step ladder should not be used as a step. – 260
4. 1926.1053(b)(16) Portable ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, shall either be immediately marked in a manner that readily identifies them as defective, or be tagged with "Do Not Use" or similar language, and shall be withdrawn from service until repaired. – 119
5. 1926.1053(b)(5)(i) Non-self-supporting ladders shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder (the distance along the ladder between the foot and the top support). – 74



## POWERED INDUSTRIAL TRUCKS

**STANDARD:** 1910.178  
**TOTAL VIOLATIONS:** 2,281

**FISCAL YEAR 2017  
RANKING:** NO. 7  
(2,349 VIOLATIONS)

This standard covers the design, maintenance and operation of powered industrial trucks, including forklifts and motorized hand trucks. It also covers operator training requirements.

### TOP 5 SECTIONS CITED:

1. 1910.178(l)(1)(i) The employer shall ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training and evaluation specified in this paragraph (l). – 417 violations
2. 1910.178(l)(4)(iii) An evaluation of each powered industrial truck operator's performance shall be conducted at least once every three years. – 263
3. 1910.178(l)(6) The employer shall certify that each operator has been trained and evaluated as required by this paragraph (l). The certification shall include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation. – 258
4. 1910.178(p)(1) If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition. – 188
5. 1910.178(l)(1)(ii) Prior to permitting an employee to operate a powered industrial truck (except for training purposes), the employer shall ensure that each operator has successfully completed the training required by this paragraph (l), except as permitted by paragraph (l)(5). – 172



## FALL PROTECTION – TRAINING REQUIREMENTS

**STANDARD:** 1926.503  
**TOTAL VIOLATIONS:** 1,978

**FISCAL YEAR 2017  
RANKING:** NO. 9  
(1,724 VIOLATIONS)

This standard addresses training requirements for employers in regards to fall protection.

### TOP 5 SECTIONS CITED:

1. 1926.503(a)(1) The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazards. – 1,283 violations
2. 1926.503(b)(1) The employer shall verify compliance with paragraph (a) of this section by preparing a written certification record. The written certification record shall contain the name or other identity of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature of the employer. If the employer relies on training conducted by another employer or completed prior to the effective date of this section, the certification record shall indicate the date the employer determined the prior training was adequate rather than the date of actual training. – 368
3. 1926.503(c)(3) Inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisited understanding or skill. – 114
4. 1926.503(a)(2) The employer shall assure that each employee has been trained, as necessary, by a competent person. – 85
5. 1926.503(a)(2)(iii) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used. – 46



## MACHINE GUARDING

**STANDARD:** 1910.212  
**TOTAL VIOLATIONS:** 1,969

**FISCAL YEAR 2017  
RANKING:** NO. 8  
(2,109 VIOLATIONS)

This standard covers guarding of machinery to protect operators and other employees from hazards, including those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks.

### TOP 5 SECTIONS CITED:

1. 1910.212(a)(1) One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. – 1,289 violations
2. 1910.212(a)(3)(ii) The point of operation of machines whose operation exposes an employee to injury, shall be guarded. The guarding device shall be in conformity with any appropriate standards therefor, or, in the absence of applicable specific standards, shall be so designed and constructed as to prevent the operator from having any part of his body in the danger zone during the operating cycle. – 475
3. 1910.212(b) Machines designed for a fixed location shall be securely anchored to prevent walking or moving. – 76
4. 1910.212(a)(2) General requirements for machine guards. Guards shall be affixed to the machine where possible and secured elsewhere if for any reason attachment to the machine is not possible. The guard shall be such that it does not offer an accident hazard in itself. – 46
5. 1910.212(a)(3)(iii) Special handtools for placing and removing material shall be such as to permit easy handling of material without the operator placing a hand in the danger zone. Such tools shall not be in lieu of other guarding required by this section, but can only be used to supplement protection provided. – 28



## PERSONAL PROTECTIVE AND LIFE SAVING EQUIPMENT – EYE AND FACE PROTECTION

**STANDARD:** 1926.102  
**TOTAL VIOLATIONS:** 1,528

**FISCAL YEAR 2017  
RANKING:** UNRANKED)

This standard addresses appropriate personal protective equipment for workers exposed to eye or face hazards, such as flying particles and chemical gases or vapors.

### TOP 4 SECTIONS CITED\*:

1. 1926.102(a)(1) The employer shall ensure that each affected employee uses appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustics liquids, chemical gases or vapors, or potentially injurious light radiation. – 1,474 violations
2. 1926.102(a)(2) The employer shall ensure that each affected employee uses eye protection that provides side protection when there is a hazard from flying objects. Detachable side protectors (e.g., clip-on or slide-on side shields) meeting the pertinent requirements of this section are acceptable. – 48=
3. 1926.102(a)(3) The employer shall ensure that each affected employee who wears prescription lenses while engaged in operations that involve eye hazards wears eye protection that incorporates the prescription in its design, or wears eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses. – 4
4. 1926.102(b)(1) Protective eye and face protection devices must comply with any of the following consensus standards: [ANSI/ISEA Z87.1-2010, Occupational and Educational Personal eye and Face Protection Devices; ANSI Z87.1-2003, Occupational and Educational Personal Eye and Face Protection Devices; ANSI Z87.1-1989 (R-1998), Practice for Occupational and Educational Eye and Face Protection]. – 2

\*Note: OSHA cited only four sections within this standard during fiscal year 2018.