

TITLE 8, DIVISION 1, CHAPTER 4

Subchapter 4. Construction Safety Orders

Article 24. Fall Protection

Amend Section 1671.1 to read:

§1671.1 Fall Protection Plan

(a) This section applies to all construction operations when it can be shown by the employer that the use of conventional fall protection is ~~impractical~~ infeasible or creates a greater hazard.

Note: There is a presumption that conventional fall protection is feasible and will not create a greater hazard. Accordingly, the employer has the burden of establishing that conventional fall protection is infeasible or creates a greater hazard.

Note: Authority cited: Section 142.3, Labor Code. Reference: 142.3, Labor Code.

Commented [NA1]: Amendment proposed to address Fed OSHA concern of not being ALAEA (concern mentioned during the Advisory Committee mtgs)

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

TITLE 8, DIVISION 1, CHAPTER 4

Subchapter 4. Construction Safety Orders

Article 29. Erection and Construction

Amend Section 1716.2 to read:

§1716.2. Residential-type Framing Activities, Wood and Light Gage Steel Frame Construction
~~Residential/Light Commercial.~~

(a) Scope and Application.

This section applies to work directly associated with the framing of new buildings or structures using the operations, methods, and procedures associated with residential-type and light commercial framing activities, i.e., joists or trusses resting on stud walls.

(b) Definitions.

(7) Residential-type Framing Activities. For the purposes of this section, residential-type framing activities include: installation of floor joists, floor sheathing, layout and installation of walls, hanging and nailing of shear panels, setting and bracing roof trusses and rafters, installation of starter board, roof sheathing, and fascia board; installation of windows, siding and exterior trim. The limited use of structural steel in a predominantly wood-framed home, such as steel I-beam to help support wood framing does not disqualify a structure from being considered residential-type construction. Residential-type framing activities includes framing of commercial structures that use traditional wood frame construction materials and methods.

~~(10) Slide Guards. A 2 inch nominal cleat, on centers not to exceed 4 feet, securely fastened to the roof sheathing to provide footing on a sloped roof.~~

Commented [NA2]: Amendment proposed to address Fed OSHA concern of not being ALAEA (issue brought up during the advisory committee mtgs)

~~(11)~~ Starter Board. The board-type sheathing material installed at eaves and gable ends in the plane of the sheathing and visible from the underside.

~~(12)~~ Stud. A vertical framing member in walls and partitions, also referred to as a wall stud, attached to the horizontal sole plate below and the top plate above.

~~(13)~~ Top Plate. Top horizontal member of a frame wall supporting ceiling joists, rafters, or other structural members.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

TITLE 8, DIVISION 1, CHAPTER 4

(413) Truss. Prefabricated structural roof unit consisting of triangular bracing (truss webs) between the ceiling joist (bottom chord) and the roof rafter (top chord) commonly installed parallel with other trusses to create a structural support system for a roof after which sheathing is fastened. The bottom chord often serves as a ceiling joist. Each member is usually subjected to longitudinal stress only, either tension or compression.

(4514) Truss Support Plate. A temporary support structure erected near mid-span of an area with a large open span, such as a garage, to support trusses during installation.

(e) Work on Top Plate, Joists and Roof Structure Framing.

(1) When employees are walking/working on top plates, joists, rafters, trusses, beams or other similar structural members ~~over 6~~ 45-foot or more above the surrounding grade or floor level below, fall protection shall be provided by scaffolding, guardrails, safety nets, a personal fall protection system, or, provided the employer demonstrates that the use of conventional fall protection methods are infeasible, a fall protection plan with safety monitors and controlled access zones as described in Sections 1671.1 and 1671.2 by other means prescribed by CSO Article 24, Fall Protection.

Commented [NA3]: Amendment proposed for consistency with the modifications proposed to these sections and address Fed OSHA concern of not being ALAEA

~~Exceptions: (A) When employees are walking/working on securely braced joists, rafters or roof trusses on center spacing not exceeding 24 inches, and more than 6 feet from an unprotected side or edge, they shall be considered protected from falls between the joists, rafters or roof trusses.~~

Commented [NA4]: Amendment proposed to address Fed OSHA concern of not being ALAEA/referencing California Standards that may not be at least as effective as the federal requirements.

~~(B) When installing floor joists, employees shall be considered protected from falls up to and including 15 feet above the surrounding grade or floor level below when standing on or working from joists laid on their sides on the top plate on center spacing not exceeding 24 inches when walking/working within 24 inches of the top plate or other structural support.~~

Commented [NA5]: Amendment proposed to address Fed OSHA concerns of not being ALAEA

(2) Truss Support Plate. Where a truss support plate is used during the installation of trusses, it shall be constructed of a 2x6 plank laid flat, secured lineally to a 2x6 plank laid on edge, supported with 2x4 wood members (legs) spaced no more than 6 feet on center and attached to diagonal bracing adequately secured to support its intended load. All material dimensions are minimum and nominal.

(f) Work on Floors and Other Walking/Working Surfaces. When working on floors and other walking/working surfaces that are 6 feet or more above the surrounding grade or floor level below and will later be enclosed by framed exterior walls, employees directly involved with the layout and construction of framed stud walls shall be protected from falling by one or more of

Commented [NA6]: Paragraph moved from the end of this subsection to improve readability.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

TITLE 8, DIVISION 1, CHAPTER 4

any combination of the following methods: personal fall protection, scaffolding, safety nets, standard guardrails as specified in Section 1620 around all unprotected sides or edges, or, provided the employer demonstrates that the use of conventional fall protection methods are infeasible, fall protection plan with safety monitors and controlled access zones as described in Sections 1671.1 and 1671.2, by other means prescribed by CSO Article 24, Fall Protection, when the floor or walking/working surface is over 15 feet above the surrounding grade or floor level below.

Commented [NA7]: Amendment proposed for consistency with the modifications proposed to these sections and address Fed OSHA concern of not being ALAEA

Commented [NA8]: Amendment proposed to address Fed OSHA concern of not being ALAEA/referencing California Standards that may not be at least as effective as the federal requirements.

(1) Floor, roof, and wall opening shall be guarded as required by section 1632.

(g) Work on Starter Board, Roof Sheathing and Fascia Board.

(1) When installing starter board, roof sheathing, and fascia board, employees shall be protected from falls when 6 feet or more above the surrounding grade or floor level below ~~falling by one or more of any combination of the following methods: scaffolding, safety nets, guardrails, personal fall protection systems, or, provided the employer demonstrates that the use of conventional fall protection methods are infeasible, fall protection plan with safety monitors and controlled access zones as described in Sections 1671.1 and 1671.2, other means prescribed by CSO Article 24, Fall Protection~~ as follows

Commented [NA9]: Amendment proposed to address Fed OSHA concern of not being ALAEA/referencing California Standards that may not be at least as effective as the federal requirements.

(A) For structures greater than one story in height where the fall height exceeds 15 feet above the surrounding grade or floor level below, or

(B) When working on roofs sloped greater than 7:12.

EXCEPTION to (g)(1)(B): For roofs sloped up to 12:12, slide guards may be used as fall protection up to and including 15 feet as measured from the eaves to the surrounding grade or floor level below.

~~(2) Employees working inside the gable end truss or rafter shall be considered protected from falls where the gable end truss has been installed and braced to withstand a lateral force of 200 pounds and the employee installs fascia or starter board working from within the gable end truss or rafter.~~

Commented [NA10]: Amendment proposed to address Fed OSHA concern of not being ALAEA

(3) When work must be performed outside the gable end truss or rafter, the employee shall be protected from falling when working 6 feet or more above the surrounding grade or floor level below by one or more of any combination of the following methods: scaffolding, safety nets, guardrails, or a personal fall protection system, or, provided the employer demonstrates that the use of conventional fall protection methods are infeasible, fall protection plan with safety

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

TITLE 8, DIVISION 1, CHAPTER 4

~~monitors and controlled access zones as described in Sections 1671.1 and 1671.2 other means prescribed by CSO Article 24.~~

Commented [NA11]: Amendment proposed for consistency with the modifications proposed to these sections and address Fed OSHA concern of not being ALAEA

~~EXCEPTION to (g)(3): When the work is of short duration and limited exposure and the hazards involved in rigging and installing the safety devices required equal or exceed the hazards involved in the actual construction, these provisions may be temporarily suspended provided the work is performed by a qualified person.~~

(i) Scaffolding.

(1) Where scaffolding is used, it shall be constructed in accordance with all applicable requirements of CSO Articles 21 and 22 (Scaffolds).

(2) Where scaffolds are installed parallel and adjacent to framed structure walls, the interior railing may be omitted for installing joists, rafters or trusses if the scaffold platform is ~~6-15~~ 6-15 feet or less from the interior floor level below and the top plate is higher than the adjacent work platform.

(3) When a scaffold is used as an edge protection platform:

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

TITLE 8, DIVISION 1, CHAPTER 4

Subchapter 4. Construction Safety Orders
Article 30. Roofing Operations and Equipment

Amend Section 1730 to read:

§1730. Roof Hazards.

(a) During roofing operations the employer shall comply with the provisions of Section 1509 and employees shall be trained and instructed in accordance with the provisions of Section 1510 of these orders. This section does not apply to residential-type roofing activities as defined in Section 1731.

~~Note: (g) For purposes of Section 1730, the height measurement shall be determined by measuring the vertical distance from the employee's walking/working surface lowest edge of the roof or eaves to the ground or level below. The height of parapets shall not be included in the roof height measurements.~~

Commented [NA12]: Amendment proposed based on Advisory Committee mtgs to clarify the roof height measurement concept

~~Exception to Section 1730: Section 1731 applies instead of Section 1730 for roofing work on new production type residential construction with roof slopes 3:12 or greater.~~

Commented [NA13]: Amendment proposed for consistency with the modifications proposed to this section/ wording moved to subsection (a)

Note: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

TITLE 8, DIVISION 1, CHAPTER 4

Subchapter 4. Construction Safety Orders
Article 30. Roofing Operations and Equipment

Amend Section 1731 to read:

§1731. ~~Roof Hazards New Production Type Residential Construction~~ Residential-type Roofing Activities.

(a) Scope and Application.

(1) This section shall apply only to residential-type roofing activities ~~roofing work on new production type residential construction with roof slopes 3:12 or greater.~~

(2) ~~This section does not apply to custom built homes, re-roofing operations, roofing replacements or additions on existing residential dwelling units.~~

Note: ~~For other roofing operations and slopes less than 3:12, see Section 1730.~~

(b) Definitions.

~~Custom Built home. A single detached housing unit built under a single contract.~~

~~Eaves. The lowest edge of a sloped roof.~~

Commented [NA14]: Proposed deletion as this term is no longer used in this section

~~Production type residential construction. Any new residential housing unit that is not a custom built home.~~

Residential-type Roofing Activities. Roof work consists of roofing and re-roofing work including roof removal performed on single-family homes, townhouses, duplexes and other structures covered by Section 1716.2. Roof work also includes loading and installation of roofing materials, including related insulation, sheet metal that is integral to the roofing system, and vapor barrier work, but not including the construction of the roof deck.

Roof. The exterior surface on the top of a building. This does not include floors or formwork which, because a building has not been completed, temporarily become the top surface of a building.

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

TITLE 8, DIVISION 1, CHAPTER 4

Roof slope. For the purposes of this section, the incline angle of a roof surface, given as a ratio of the vertical rise to the horizontal run. For example, a 4:12 roof has 4 feet of vertical rise for 12 feet of horizontal run.

~~Roof work. The loading and installation of roofing materials, including related insulation, sheet metal that is integral to the roofing system, and vapor barrier work, but not including the construction of the roof deck.~~

(c) Fall protection for roofing work.

(1) Roof Slopes 0:12 up to and including 7:12: Employees shall be protected from falling when on a roof surface where the employee fall distance is 6 feet or more above the grade or level below by use of one or more of any combination of the following methods: personal fall protection systems, scaffolding, safety nets, guardrails, or, provided the employer demonstrates that the use of conventional fall protection methods are infeasible, fall protection plan with safety monitors and controlled access zones as described in Sections 1671.1 and 1671.2.

~~(1) Roof Slopes 3:12 through 7:12: Employees shall be protected from falling when on a roof surface where the eave height exceeds 15 feet above the grade or level below by use of one or any combination of the following methods:~~

~~(A) Personal Fall Protection (Section 1670).~~

~~(B) Catch Platforms [Section 1724(e)].~~

~~(C) Scaffold Platforms [Section 1724(d)].~~

~~(D) Eave Barriers [Section 1724(e)].~~

~~(E) Standard Railings and Toeboards (Article 16).~~

~~(F) Roof Jack Systems [Section 1724(a)].~~

(2) Roof slopes ~~steeper~~ greater than 7:12. Employees shall be protected from falling by methods prescribed in Subsections (c)(1)(A), (B), (C), or (E) regardless of height.

Commented [NA15]: Amendment proposed for consistency with the modifications proposed to these sections and address Fed OSHA concern of not being ALAEA

Commented [NA16]: Amendment proposed to address Fed OSHA concern of not being ALAEA

TITLE 8, DIVISION 1, CHAPTER 4

(e) For the purposes of Section 1731, the employee's fall height measurement shall be determined by measuring the vertical distance from the employee's walking/working surface to the ground or level below. The height of parapets shall not be included in the roof height measurement.

Note: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Commented [NA17]: Amendment proposed for consistency with the modifications proposed to these sections

DRAFT