

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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Attachment No. 2

INITIAL STATEMENT OF REASONS

CALIFORNIA CODE OF REGULATIONS

TITLE 8: Chapter 4, Subchapter 4, Article 29, Section 1716.2
of the Construction Safety Orders (CSO)

Proposed Vertical Standard – Fall Protection for Residential-Type Framing ActivitiesSUMMARY

This rulemaking action is the result of a petition to the Board from the California Building Industry Association (CBIA) to develop and adopt an industry-specific fall protection standard for residential-type framing activities. The petition (OSHSB File No. 440, adopted May 16, 2002) was initiated in response to enforcement actions resulting from Construction Safety and Health Inspection Project (CSHIP) “sweeps” of residential framing worksites throughout the state coupled with what the Petitioner feels is a more restrictive interpretation by the Division of Occupational Safety and Health (Division) when a fall protection plan may be implemented. The CSHIP sweeps have resulted in a significant increase in fall protection citations in the residential construction industry.

The last comprehensive update of fall protection standards for residential construction was conducted in 1997. The changes made at that time were initiated by revisions to Federal 29 CFR Part 1926, Subpart M, Fall Protection, on August 9, 1994. The revised Subpart M established the employer’s duty to provide fall protection at a trigger height of 6 feet and above. California Labor Code, Section 142.3(a)(2), requires the State to adopt standards at least as effective as federal standards.

Most of Subpart M was proposed to be adopted verbatim into California Code of Regulations, Title 8. Due to comments received on the proposal at a December 1994 public hearing (a majority of which were submitted by roofers), the Board convened an advisory committee to compare existing State fall protection standards with Subpart M and to determine where changes to the State standards are necessary. The committee’s consensus was that Federal OSHA’s six-foot trigger height was unreasonable, economically onerous and unacceptable, both to labor and management. Subsequent meetings between all interested parties, including Federal OSHA, culminated in the comprehensive 1997 rulemaking. Revisions made at that time concerned fall protection systems and procedures and were intended to prevent employees from falling off, onto, or through working levels. They include revisions to CSO Article 24, Fall Protection, Sections 1669, 1670, 1671, 1671.1 and 1671.2. These

sections prescribe fall protection systems and procedures for the construction industry, including residential frame construction.

One of the problems expressed by the residential framing industry is that the present fall protection standards have different requirements based on the nature of the work and the height above which the work is being performed. For example, the trigger height for roofers is 20 feet. For employees working on 4 inch or wider structural members the trigger height is 15 feet, and for anyone working on unprotected platforms, scaffolds, or the edge of structures, it is 7-1/2 feet.

Due to the nature of residential construction, under the current regulations, employees can frequently be subject to different fall protection requirements within a single day, even on single story construction, and the various work activity-based trigger heights create confusion, which often hinders compliance.

The Board directed staff to convene an advisory committee to consider the following:

- Developing industry specific fall protection requirements for residential framing.
- Reviewing residential framing fall protection trigger heights for possible modification.
- Considering clarifying when conventional fall protection is "impractical or creates a greater hazard," and thus when a fall protection plan may be used for residential framing.

The advisory committee was composed of a representative cross-section of management, labor, manufacturers, and safety consultants. The proposed rulemaking, based on advisory committee consensus, differs from the Federal counterpart in two aspects:

1. Subpart M establishes a 6-foot trigger height, but Federal OSHA Instruction STD 3-0.1A permits the use of "alternative procedures" which effectively circumvent the 6-foot trigger. Prior to this rulemaking, California employed a number of task-based trigger heights which have been found over the years to cause confusion and hinder compliance in the residential framing industry. The proposed 15-foot trigger was chosen by committee consensus because it already applies to work performed from thrustouts or similar locations, such as trusses, beams, purlins, or plates of 4-inch nominal width, or greater. [CSO 1669(a)]
2. The Federal OSHA Instruction modifies the requirements of Subpart M so that alternative procedures are permitted without any requirement for demonstrating that conventional methods are infeasible. Furthermore, while the Federal OSHA Instruction requires a fall protection plan, it does not require the plan to be written nor does it have to be specific to the jobsite. Although the use of a fall protection plan is permitted by Title 8, Section 1671.1, the State is more restrictive in that a number of criteria must be satisfied before alternative procedures can be implemented, including that the fall protection plan must be site-specific, must be documented in writing, and a copy of the plan must be maintained at the jobsite.

For these reasons, Board Staff is of the opinion that the proposed amendments to Section 1716.2 will provide alternative work procedures specific for residential framing that will provide safety at least as effective as counterpart Federal OSHA fall protection standards modified for residential framing by Instruction STD 3-0.1A, which is how they are actually being enforced by Federal OSHA.

SPECIFIC PURPOSE AND FACTUAL BASIS OF PROPOSED ACTION

Section 1716.2. Wood-Frame Construction, Residential/Commercial.

This proposal would amend the title to read “Wood and Light Gage Steel Frame Construction, Residential/Light Commercial” (*new text underscored*). Light gage steel has been added to the title to accommodate current industry practice to also use light gage steel, in addition to using traditional dimensional wood products for residential framing. Residential-type framing is used in some “light commercial” structures as well, and the proposal is written to apply to this type of framing whether it is found in a residential or a light commercial structure. This amendment is necessary to address a type of framing which is increasingly being used in the framing of residential-type structures and about which the regulations are currently silent, and to ensure that employees engaged in residential framing operations are protected from falls by specific regulations which can be readily located by the employer.

Subsection (a)

Existing subsection (a) requires that before manually raising wood framed walls that are 10 feet or more in height, temporary restraints such as cleats on the foundation/floor system or straps on the wall bottom plate shall be installed to prevent inadvertent horizontal sliding or uplift of the wood framed wall bottom plate when it is being tilted up.

This proposal would revise and relocate subsection (a) to subsection (c)(1) in order to accommodate two new subsections: (a) entitled “Scope and Application” and (b) “Definitions.” The purpose of the proposed changes is to create a vertical standard for fall protection that will apply to work associated with the framing of new buildings or structures using the operations, methods, and procedures associated with residential-type framing activities, i.e., joists or trusses resting on stud walls. This proposed change is necessary to clarify the applicable types of framing for this vertical standard. Although residential-type framing is understood by most to consist of joists or trusses resting on stud walls, the term “light-commercial,” although widely used, is more ambiguous, and the proposed subsection is necessary to clarify the applicable types of structures for this standard.

Subsection (b)

Existing subsection (b) requires that anchor bolts shall not be used for blocking or bracing when raising wood framed walls. This proposal would revise and relocate subsection (b) to subsection (c)(2) in order to accommodate a new subsection (b) entitled “Definitions” which will contain definitions of framing terms. These definitions were developed from two main sources: (1) glossaries of residential framing terms available on the Internet, and (2) input from ad hoc advisory committee participants. The committee recognized there are regional differences in meaning and usage of framing terms throughout the United States. Therefore, all of these terms have been reviewed by the committee and determined by consensus to be as generally used and understood in the framing industry in California. Furthermore, each definition has been determined by consensus of the ad hoc advisory committee to be necessary for proper application of the proposed vertical standard. The proposed changes are necessary to define

terms for the proper understanding and application by employers of fall protection requirements to residential-type framing activities.

Subsection (c)

New subsection (c) entitled “Raising Walls” will contain relocated subsections (a) and (b) as new subsections (c)(1) and (c)(2) respectively. This amendment is necessary to facilitate compliance by consolidating existing standards for raising framed walls into one subsection within the new vertical standard for residential framing, thus assuring employees will be protected from hazards when raising framed walls.

Subsection (c)(1)

Existing subsection (a) is proposed to be modified and relocated to new subsection (c)(1). “Wood framed” is proposed to be changed to “framed” to provide performance-oriented language which will include light gage steel framing as well as other materials that may be used for residential-type framing in the future. The trigger height is proposed to be increased from 10 feet to 15 feet for consistency with the trigger height used throughout the rest of the proposed vertical standard. Input from advisory committee members indicated that framed walls up to and including 15 feet are already commonly being manually raised safely using the prescribed precautions. The proposed amendments are necessary to promote compliance by establishing a uniform trigger height for residential framing and to prescribe proper bracing when raising framed walls, thus ensuring that employees are protected from hazards when raising framed walls.

Subsection (c)(2)

Existing subsection (b) is proposed to be relocated to new subsection (c)(2). Performance-based modifications are proposed to accommodate light gage steel and other residential-type framing materials, and to establish a consistent 15-foot trigger height for raising framed walls. The modifications will also clarify that, while anchor bolts can be used for blocking or bracing, they cannot be used alone; i.e., they must be used in conjunction with other forms of restraint to prevent horizontal sliding or uplift when raising framed walls. The proposed modifications are necessary to establish a uniform trigger height for residential framing and to prescribe proper blocking and bracing when raising framed walls, to ensure that employees are protected from hazards when raising framed walls.

Subsection (d)

A new subsection (d) entitled “Stabilization of Structures” will require top plates, joists, rafters, trusses, beams or other structural members be braced, supported or secured before employees are permitted to work from or walk on them. Although these requirements are contained generally in Section 1709, General Requirements, the advisory committee consensus was that they should be prescribed within the vertical standard for residential framing. This proposed amendment is necessary to establish structural stabilization prior to the implementation of other practices permitted by this vertical standard for residential framing, thus ensuring that employees are protected from falling when working from or walking on top plates, beams or other structural members, joists, rafters, trusses, etc.

Subsection (e)

A new subsection (e) entitled “Work on Top Plate and Roof Structure Framing” will prescribe safe work practices for work on the top plate and roof structure framing. Application of roofing materials is not a framing activity and thus the proposed standard will not overlap or duplicate vertical standards for roofing operations found in existing Article 30, Roofing Operations and Equipment. This new subsection is necessary to clarify to the regulated public the location of regulations prescribing safe practices for residential framing work on top plates and on roof structures to ensure employees are protected from falls from the top plate and roof structure during framing.

Subsection (e)(1)

New subsection (e)(1) requires the provision of fall protection when employees are walking or working on top plates, joists, rafters, trusses, beams or other similar structural members over 15 feet above the surrounding grade or floor level below. An exception will provide that employees shall be considered protected from falls between rafters or roof trusses when they are walking/working on securely braced rafters or roof trusses on center spacing not exceeding 24 inches when more than 6 feet from an unprotected side or edge. This subsection is necessary to clarify fall protection requirements contained in Article 24 as they apply to the unique circumstances of residential framing. The exception is necessary to prescribe a safe means for employees to install decking and/or sheathing by permitting them to walk and work on top plate and roof structure framing.

Subsection (e)(2)

A new subsection (e)(2) will prescribe minimum standards for truss support plates which are often used when installing roof trusses over large open spans such as multi-car garages. This subsection is necessary to promote safe working conditions for employees by prescribing minimum requirements for a stable walking/working surface during the truss installation process when employees may find it necessary to work on or from trusses or a truss support plate during the course of framing.

Subsection (f)

A new subsection (f) entitled “Work on Floor Joists” will prescribe safe work practices for work on floor joists using a 15-foot trigger height. The necessity for this new subsection is to maintain uniformity in trigger height for implementation of fall protection measures and to assist the employer in locating regulations pertaining to safe practices for residential framing work on floor joists, which are intended to protect employees from falls when working on joists over 15 feet above the surrounding grade or floor level below.

New subsections (f)(1)-(3) will cover the sequence of work in placing, rolling and installing floor joists. Subsection (f)(1) prescribes that employees shall be considered protected from falls when installing floor joists 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 center spacing not exceeding 24 inches on the top plate within 24 inches of the top plate or other structural support. The necessity for subsection (f)(1) is to clarify this practice as a legal walking/working surface below the 15-foot trigger height. Subsections (f)(2) and (f)(3) prescribe fall protection requirements for work on installed floor joists and floor joists within 6 feet of the building perimeter or other unprotected sides or edges over 15 feet above the surrounding grade or floor level below. The necessity for subsections (f)(2) and (f)(3) is to require the employer to provide fall protection for work on floor joists consistent with the requirements for similar work on the top plate and roof structure framing found in subsection (e)(1), to prevent employees from falling from/through floor joists to the level below.

Subsection (g)

A new subsection (g) entitled “Work on Floors and Other Walking/Working Surfaces” is proposed that would prescribe safe work practices for work on floors after the deck has been installed and while walls are being framed and placed, using a consistent 15-foot trigger height for fall protection. This new subsection is necessary to maintain consistency in trigger height for implementation of fall protection measures and to assist the employer in locating regulations for residential framing work on decked floors and other walking/working surfaces.

Subsection (h)

A new subsection (h) entitled “Work on Starter Board, Roof Sheathing and Fascia Board” will prescribe fall protection requirements for sheathing and trimming roof framing in preparation for roofing operations. This subsection will not address installation of roofing materials which is already regulated by Article 30, Roofing Operations and Equipment. Subsection (h)(1) clarifies that fall protection requirements will only apply to structures greater than one story in height where the fall height exceeds 15 feet and/or where the roof slope exceeds 7 in 12 consistent with Section 1670. An exception will permit the use of slide guards for fall protection on roofs with slopes up to 12 in 12 with fall heights of 15 feet or less. This subsection establishes a provision for work on limited portions of single story roof structures that may exceed 15 feet. The exception is based on provisions similar to Federal Subpart M, except that committee consensus was to limit the use of slide guards to a maximum slope of 45 degrees (12:12). Subsections (h)(2) and (h)(3) prescribe options for safe work procedures at the gable end of the structure, including an exception for work outside the gable end truss which is of short duration and

limited exposure. The necessity for this subsection is to prescribe safe work practices when applying starter board, roof sheathing and fascia board to roof framing.

Subsection (i)

A new subsection (i) entitled “Installation of Windows” will clarify for residential construction the guarding of wall openings as required by Section 1632 while permitting removal of the guarding where necessary immediately prior to installation of window components in those openings. The necessity for this subsection is to clarify employee fall protection and guarding requirements for window openings in residential construction.

Subsection (j)

A new subsection (j) entitled “Scaffolding” prescribes construction and installation standards for scaffolding used in residential construction. Subsection (j)(1) is included to assist the employer in locating existing Title 8 requirements for scaffolding pertinent to residential framing. Subsection (j)(2) is proposed to permit the omission of guardrails on the interior side of the scaffold under specific conditions similar to those for masons and bricklayers found in Section 1644(a)(6)(B). Subsection (j)(3) will permit scaffolding to be used as a form of edge protection subject to specified limitations. The concept of the edge protection platform is modeled after that of a catch platform which is permitted as a means of fall protection for roofing operations in Section 1724(c). The necessity for subsection (j) is to clarify acceptable construction, installation and use of scaffolding for residential-type framing activities and to ensure that scaffolding is used during residential framing activities in a manner that will prevent an employee from falling to a level below.

Subsection (k)

A new subsection (k) entitled “Training” is proposed that would supplement the Illness and Injury Prevention Programs prescribed in CSO Section 1509 and GISO Section 3203 by providing industry-specific guidance for residential-type framing activities. The necessity for this subsection is to ensure that employees who perform residential framing operations receive specific fall protection training for residential framing in order to minimize the fall hazards associated with erection and construction activities that the employee(s) will be exposed to.

DOCUMENTS RELIED UPON

1. OSHSB Petition and OSHSB Petition Decision, File No. 440, May 16, 2002.
2. Federal OSHA Instruction, Directive No. STD 3-0.1A, “Plain Language Revision of OSHA Instruction STD 3.1, Interim Fall Protection Compliance Guidelines for Residential Construction,” Effective June 18, 1999.
3. Fall Protection Guidebook for Residential Framers, Produced in a cooperative effort by The California Building Industry Association and Cal-OSHA Consultation Service, June 2002.

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California.

DOCUMENTS INCORPORATED BY REFERENCE

None.

REASONABLE ALTERNATIVES THAT WOULD LESSEN ADVERSE ECONOMIC
IMPACT ON SMALL BUSINESSES

No reasonable alternatives were identified by the Board and no reasonable alternatives identified by the Board or otherwise brought to its attention would lessen the impact on small businesses.

SPECIFIC TECHNOLOGY OR EQUIPMENT

This proposal will not mandate the use of specific technologies or equipment.

COST ESTIMATES OF PROPOSED ACTION

Costs or Savings to State Agencies

No costs or savings to state agencies will result as a consequence of the proposed action.

Impact on Housing Costs

The Board has made an initial determination that this proposal will not significantly affect housing costs.

Impact on Businesses

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states. This determination is based on advisory committee input that compliance with the proposed industry-specific standards will not be greater, and may actually be less costly than compliance with existing requirements generally applicable to the construction industry.

Cost Impact on Private Persons or Businesses

The Board is not aware of any cost impact that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Costs or Savings in Federal Funding to the State

The proposal will not result in costs or savings in federal funding to the state.

Costs or Savings to Local Agencies or School Districts Required to be Reimbursed

No costs to local agencies or school districts are required to be reimbursed. See explanation under “Determination of Mandate.”

Other Nondiscretionary Costs or Savings Imposed on Local Agencies

This proposal does not impose nondiscretionary costs or savings on local agencies.

DETERMINATION OF MANDATE

The Occupational Safety and Health Standards Board has determined that the proposed regulations do not impose a local mandate. Therefore, reimbursement by the state is not required pursuant to Part 7 (commencing with Section 17500) of Division 4 of the Government Code because the proposed amendments will not require local agencies or school districts to incur additional costs in complying with the proposal. Furthermore, these regulations do not constitute a “new program or higher level of service of an existing program within the meaning of Section 6 of Article XIII B of the California Constitution.”

The California Supreme Court has established that a “program” within the meaning of Section 6 of Article XIII B of the California Constitution is one which carries out the governmental function of providing services to the public, or which, to implement a state policy, imposes unique requirements on local governments and does not apply generally to all residents and entities in the state. (County of Los Angeles v. State of California (1987) 43 Cal.3d 46.)

These proposed regulations do not require local agencies to carry out the governmental function of providing services to the public. Rather, the regulations require local agencies to take certain steps to ensure the safety and health of their own employees only. Moreover, these proposed regulations do not in any way require local agencies to administer the California Occupational Safety and Health program. (See City of Anaheim v. State of California (1987) 189 Cal.App.3d 1478.)

These proposed regulations do not impose unique requirements on local governments. All employers - state, local and private - will be required to comply with the prescribed standards.

EFFECT ON SMALL BUSINESSES

The Board has determined that the proposed amendments may affect small businesses.

ASSESSMENT

The adoption of the proposed amendments to this regulation will neither create nor eliminate jobs in the State of California nor result in the elimination of existing businesses or create or expand businesses in the State of California.

ALTERNATIVES THAT WOULD AFFECT PRIVATE PERSONS

No reasonable alternatives have been identified by the Board or have otherwise been identified and brought to its attention that would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.