

DEPARTMENT OF INDUSTRIAL RELATIONS  
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

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*Juliam Sum, Chief*

February 08, 2016

J. Robert Harrell  
4012 Santa Nella Place  
San Diego, CA 92130-2291

Re: Title 8 Section 1716.2 Fall Protection in Wood Frame Construction

Dear Mr. Harrell:

This letter is provided in response to your inquiry dated December 24, 2015 regarding the California Code of Regulations Title 8 requirements applicable to fall protection and training for employees performing wood-frame construction. The contents and conclusions of this letter are based only on the facts described and responsive only to the original requestor. They may not be construed as a statement of general Division policy or general interpretation of the regulations referenced in this letter.

**Question # 1:**

*Refer to picture #1 - once the joists are sheathed and there is a floor or deck, if the height of the elevated floor/deck is 7 ½ feet or greater, are guardrails or other means of fall protection required to prevent workers from falling to a lower level?*

[Picture # 1 from your letter shows two employees working from the sheathed joists of the second floor of a wood-frame building. The picture is included as an attachment to this letter]

**Answer #1:**

The height at which fall protection is required depends on the work activity of the employees and the nature of the construction. From picture #1, it appears that the employees are working on a wood sheathed floor of a new wood framed structure under construction. This type of work is governed by Title 8 section 1716.2 Wood and Light Gage Steel Frame Construction, Residential/Light Commercial. The text of the regulation is available at [https://www.dir.ca.gov/title8/1716\\_2..html](https://www.dir.ca.gov/title8/1716_2..html).

Section 1716.2 applies to employees who are engaged in residential-type framing activities which includes work on wood sheathing and floors as shown in picture #1. Section 1716.2(b)(7) defines residential-type framing activities as:

...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.

Pursuant to section 1716.2(f), employees working from floors or other walking/working surfaces must be protected from falls when the walking/working surface is greater than 15 feet above the surrounding grade or floor level below. This can be accomplished by the use of guardrails or other method, such as personal fall protection, prescribed by Article 24 of the Title 8 Construction Safety Orders. Since the employees in picture #1 are on the second story floor, which is less than 15 feet above the surrounding grade, fall protection is not required regardless of the fact the guardrails can easily be installed.

Employees working on the same floor, but not engaged in the residential framing activities defined above must be protected from falls in excess of 7 ½ feet from the surrounding grade or floor level below according to Title 8 section 1670. The employees shown in picture #1 appear to be higher than 7 ½ feet above the surrounding grade and would be required to be protected from falls if they were not engaged in residential framing. The text of section 1670 is available at <https://www.dir.ca.gov/title8/1670.html>.

When work such as remodeling or renovation is being conducted on an existing wood-frame or light-gauge steel building or structure, all employees in connection with the construction must be protected from falls in excess of 7 ½ feet from the surrounding grade or floor level below pursuant to Title 8 Section 1670.

### **Question # 2:**

*Refer to picture #2- once the deck or floor is sheathed, either completely or partially, does Cal/OSHA require the use of guardrails or other fall protection methods to prevent workers from falling to a lower level when the height of the deck/floor is 7 ½ feet or higher above the next lower level?*

*Should materials be stored at or near the edge of the deck where there is a possibility of the materials falling to a lower level and striking a person?*

[Picture # 2 from your letter shows three employees working from the sheathed floor joists of the second floor of a wood-frame building that is not completely sheathed. The picture is included as an attachment to this letter]

### **Answer #2**

As stated in 'answer #1' above, employees engaged in residential framing activities who are working from floors, sheathing or other walking/working surfaces must be protected from falls when the walking/working surface is greater than 15 feet above the surrounding grade or floor level below (section 1716.2(f)).

However, employees working on joists (where there is no sheathing) are not required to have fall protection for falls through the spaces between joists, regardless of the height of the fall, if the joists are securely braced and center spacing does not exceed 24 inches (section 1716.2(e))

exception A). Employees on joists must still be protected from falls greater than 15 feet if they are within 6 feet of the unprotected edge or side of the structure.

Employee not engaged in residential framing activities or employees engaged in the remodeling or renovation of an existing wood-frame or light-gauge steel building or structure must be protected from all falls in excess of 7 ½ feet from the surrounding grade or floor level below (section 1670). Employees covered by section 1670 must be protected from falls through the spaces between the joists as well as falls from the side or edge of the structure.

In response to the second portion of question #2, material may not be stored at or near the open edges of buildings or floor openings unless secured by positive means to prevent it from falling. Title 8 section 1549(e) contains the following requirements for storing materials during building construction:

§1549. Piling Material (<https://www.dir.ca.gov/title8/1549.html>).

\* \* \* \* \*

(e) Material inside buildings under construction shall not be placed within 6 feet of any hoistway or inside floor openings, nor within 10 feet of an exterior wall which does not extend above the top of the material unless the material is positively barricaded, placed, or secured to prevent it from falling.

### **Question # 3:**

*Refer to picture #3 - Same questions and #1 and #2. Also, should the opening around the stairway have a guardrail around it? The stairs are being used as access to the 2<sup>nd</sup> floor.*

[Picture # 3 from your letter shows eight employees working on the second story floor of a new wood-frame building that is not completely sheathed. The picture is included as an attachment to this letter]

### **Answer #3**

The answer to the first portion of this question is the same as those provided for questions # 1 and #2. The fall protection requirements previously described apply to unprotected sides of the building.

With regards to the second portion of your question, stairwell openings must be guarded by railings (both top and mid-rail) with toeboards on all exposed sides except at the entrance to the stairs pursuant to Title 8 section 1632(b)(2) (available at <https://www.dir.ca.gov/title8/1632.html>). All other floor openings must guarded by secured covers or railings and toeboards.

### **Question # 4:**

*What type and level of training is acceptable to Cal/OSHA for wood framers? Does the training have to be documented? What standard or standards, like the American National Standards Institute (ANSI) Z359-2007 Third Revision, are acceptable to Cal/OSHA*

The type and level of training required for employees performing wood-frame construction depends on many factors including, but not limited to the specific tasks being performed, work activities, the location and environment of the work site, as well as equipment used to perform their work. It is the employer's responsibility to perform a diligent and thorough evaluation of their operations to determine the type and level of training necessary to provide employees with a safe and healthful workplace.

There is no particular Title 8 or consensus standard incorporated by Title 8 that defines an acceptable type or level of training. ANSI Z359 (entitled '*Fall Protection Code*') is not incorporated by Title 8.

General guidance for the provision of training is described in Title 8 Section 1509(a) which requires all employers performing construction work to establish, implement and maintain an effective Injury and Illness Prevention Program (IIPP) in accordance with Title 8 Section 3203 of the General Industry Safety Orders. This program includes provisions for training and instruction of employees regarding hazards they will be exposed to in the workplace. Pursuant to sections 3203(a)(7) and 1509(e), training and instruction must be provided:

1. When the IIPP is first established
2. To all new employees
3. To all employees given new job assignments for which training has not been provided
4. Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard
5. Whenever the employer is made aware of a new or previously unrecognized hazard
6. For supervisors to familiarize themselves with the safety and health hazards to which employees under their immediate direction and control may be exposed.
7. In construction, supervisory employees must conduct safety meetings with employees at least every 10 days. The safety meetings must be relevant to the job or tasks that workers perform.

Pursuant to Title 8 sections 1509 and 3203, employees must be provided with effective training that imparts the necessary information and knowledge to recognize, mitigate and/or eliminate hazards so that they may safely perform their work. This can include but is not limited to training on the employer's policies regarding safety and health, hazards specific to the work site and activities, environmental hazards, hazardous substances, emergency and first aid procedures and safe operation of tools and equipment.

In addition to the training requirements established by section 3203, Title 8 regulations also include many training requirements for specific work tasks and activities. A list of required training for construction and general industry is provided in the document "*Cal/OSHA Safety & Health Training and Instruction Requirements*" (available at [www.dir.ca.gov/dosh/dosh\\_publications/TrainingReq.htm](http://www.dir.ca.gov/dosh/dosh_publications/TrainingReq.htm)).

All trainings provided to employees must be documented as required by Title 8 Section 3203(b)(2). Pursuant to this section, all training documentation must be maintained for at least one year and contain the following:

1. The name or other identifier of the employee who received the training
2. Date(s) of the training provided

3. Type of training provided
4. Identification of trainer provider(s)

**Question # 5**

*What level of fall protection training is provided to the Cal/OSHA compliance officers and Cal/OSHA Consultation? Which safety standards are used in the training of Cal/OSHA personnel?*

**Answer #5**

Cal/OSHA personnel are provided with fall protection necessary to perform their work safely and apply Title 8 regulations effectively during onsite enforcement and consultation activity. As previously stated, there is no particular Title 8 or consensus standard that defines an acceptable level of training. Any and all Title 8 regulations and other standards incorporated by reference that are applicable to the activities of Cal/OSHA personnel may be employed for training purposes.

Thank you for your interest in occupational safety and health. Please feel free to contact me if you have any further questions.

Sincerely,



Eric Berg  
Deputy Chief  
Research and Standards

Attachment: Photographs (3)

Picture 1: Provided by Robert Harrel 12-24-15



Picture 2: Provided by Robert Harrel 12-24-15



Picture 3 Provided by Robert Harrel 12-24-15

