



ASSP- San Diego Fall Protection Construction

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Overview

- Scope, Application and Definitions
- Fall Protection Regulations
 - California Code of Regulations Title 8
 - NEW fall protection standards
- Potential Solutions
- Planning and Integration
- Cal/OSHA Consultation
- Q&A



Scope and Applications

§1502. Application.

(a) These Orders establish minimum safety standards whenever employment exists in connection with the construction, alteration, painting, repairing, construction maintenance, renovation, removal, or wrecking of any fixed structure or its parts. These Orders also apply to all excavations not covered by other safety orders for a specific industry or operation

(b) At construction projects, these Orders take precedence over any other general orders that are inconsistent with them, except for Tunnel Safety Orders or the Pressurized Worksite Standards in Article 154 of the General Industry Safety Orders

(c) Machines, equipment, processes, and operations not specifically covered by these Orders shall be governed by other applicable general Safety Orders



Title 8 Regs (Construction)

Division 1. Department of Industrial Relations
Chapter 4. Division of Industrial Safety



Title 8 Regs (All of them)

Subchapter 4. Construction Safety Orders

[Return to index](#)

[New query](#)

[Article 1. Introduction \(Sections 1500 - 1503\)](#)

[Article 2. Definitions \(Sections 1504 - 1505\)](#)

[Article 3. General \(Sections 1508 - 1527\)](#)

[Article 4. Dusts, Fumes, Mists, Vapors, and Gases \(Sections 1528 - 1537\)](#)

Scope and Applications

§1671.1. Fall Protection Plan

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

§1716.2. 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 framing activities, i.e., joists or trusses resting on stud walls

Scope and Applications



Misc. Construction(Fall Protection)- 1670

Roofing – 1730, 1731

Scaffolding – 1637-47

Framing – 1712.1,.2

Steel Erection – 1710

Elevating Equipment (scissor lifts, aerial devices and industrial trucks)-
3646, 3648, 3657

General Industry Safety Order (GISO)

Find what applies to your workplace!

Definitions: 1504



- **Competent Person:** One who can identify existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them
- **Hole:** Any opening in a floor or platform, which is smaller than an opening
- **Leading Edge:** The edge of a floor, roof, or formwork for a floor or other walking/working surface (such as the deck) which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed. A leading edge is considered to be an “unprotected side and edge” during periods when it is not actively and continuously under construction
- **Opening:** An opening in any floor or platform, **12 inches** or more in the least horizontal dimension. It includes stairway floor openings, ladderway floor openings, hatchways and chute floor openings

Definitions: 1504

- **Qualified Person:** A person designated by the employer who by reason of training, experience or instruction has demonstrated the ability to safely perform all assigned duties and, when required, is properly licensed in accordance with federal, state, or local laws and regulations
- **Personal Fall Arrest System:** A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body belt or body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these. As of January 1, 1998, the use of a body belt for fall arrest is prohibited
- **Wall opening:** A gap or void 30 inches or more high and 18 inches or more wide, in a wall or partition, through which employees can fall to a lower level

Residential Framing: 1716.2

**** Effective July 1, 2025 ****

Changing from 15' to 6': When Fall Protection is required

- **(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.**

6 feet!!!



Read it!

Residential Framing: 1716.2

**** Effective July 1, 2025 ****

Changing from 15' to 6': When Fall Protection is required

- **(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

6 feet!!!

Residential-type framing activities includes framing of commercial structures that use traditional wood frame construction materials and methods.

Residential Framing: 1716.2

- (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 feet or more above the surrounding grade or floor level below, fall protection shall be provided by one or more of the following methods: **scaffolding, guardrails, safety nets, a personal fall protection systems**, 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.

Residential Framing: 1716.2

- (2) When walking/working on top plates, joists, rafters, trusses, beams or other similar structural members for interior framing activities **between 6 and 15 feet** above the surrounding grade or floor level below and all requirements in paragraphs (A) through (C) are met, **the employer may use a fall protection plan with safety monitors and controlled access zones** as described in Sections 1671.1 and 1671.2, instead of the conventional fall protection methods specified in subsection
- (e)(1): (A) For structural members, they shall either be **securely braced** or during installation, are laid on their sides on the top plate; and, (B) either the center spacing between structural members **shall not exceed 24 inches or plywood sheathing shall be laid down** to cover the spacing between structural members; and (C) **Employees are more than 6 feet** from an unprotected side or edge.

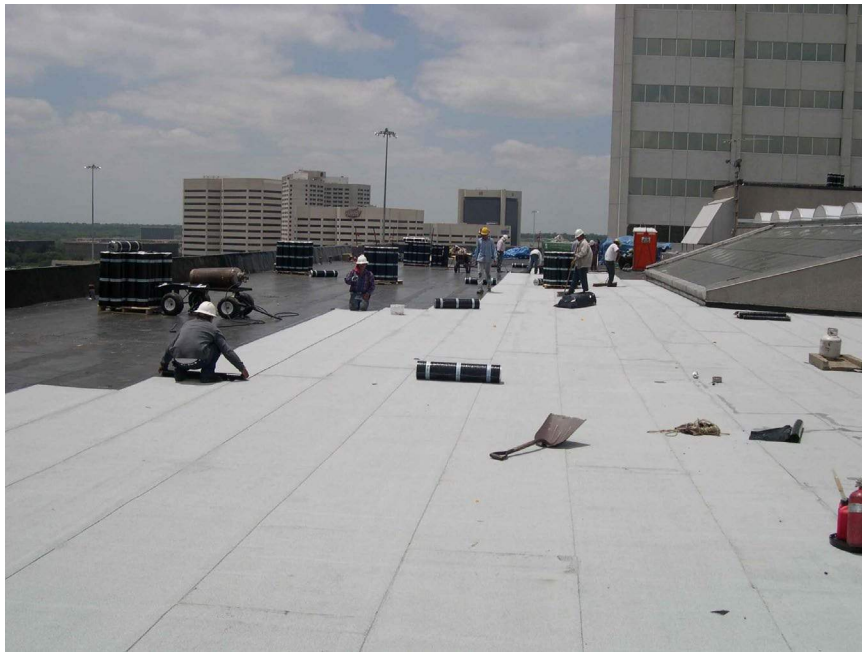
Residential Framing: 1716.2

- (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 1/2 feet or less** from the interior floor level below and the top plate is higher than the adjacent work platform.

Roofing CCR, T8, 1723-1731



- **Application - 1723 (a)**-The Orders contained in this Article are intended to apply to employees engaged in the **removal or application of:**



20 feet (Commercial)



20 feet (Residential)



15 feet (Tract Homes)

Current Title 8
(15' and 20')

6'

Roofing-Residential CCR, T8, 1723-1731

NEW 1731:

Scope: This section shall apply only to **residential-type** roofing activities

Residential-type roofing activities. Roofing 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. Roofing 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 does not include the construction of the roof deck.**

Roofing-Residential CCR, T8, 1723-1731

NEW 1731:

(e) For the purposes of this section, 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.

Roofing-Residential CCR, T8, 1723-1731



a. 23 feet

b. 18 feet

- Protection required?
- Pre July 1, 2025?
- Post July 1, 2025?

c. 7 feet

Potential Solutions

Go find it!



Climb Assist Systems



Rafter Anchor Point



Permanent Anchors



Anchor Point

Potential Solutions



Next Gen Hitch
Clip



2100080
Door/Window Jamb Anchor



2103670
Permanent Roof Anchor
with Flashing and Cap

Potential Solutions

Roofing, Sheathing



Elevating Equipment Potential Solutions

Scissor lift (3646)(3328)



Aerial Device (3648 (o))

Potential Solutions



Potential Solutions



Potential Solutions



Potential Solutions



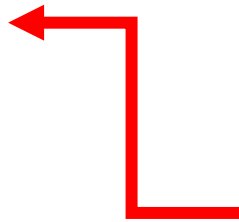
Potential Solutions



Potential Solutions

Bracket Scaffolding (Permitters)

< 42"



Make sure that the inside fall
is not more than 6'.

This means the platform needs to be
42" below interior wall. This makes
Much of the bracket scaffold
un-useable.

Potential Solutions

Employees can work from scaffolding to roll out the trusses, set them in place, attach the lateral bracing, nail freeze blocks, cut rafter tails, attach the fascia board, and nail the first row of roof deck sheathing. This keeps them off the top plate and is safer and faster than using a ladder. The scaffold can be made from materials on the job, or you can use a manufactured scaffold bracket.



Manufactured exterior carpenter's bracket scaffolding.

Potential Solutions

Scaffolding (Permitters)



< 42"

Make sure that the inside fall is not more than 6'.

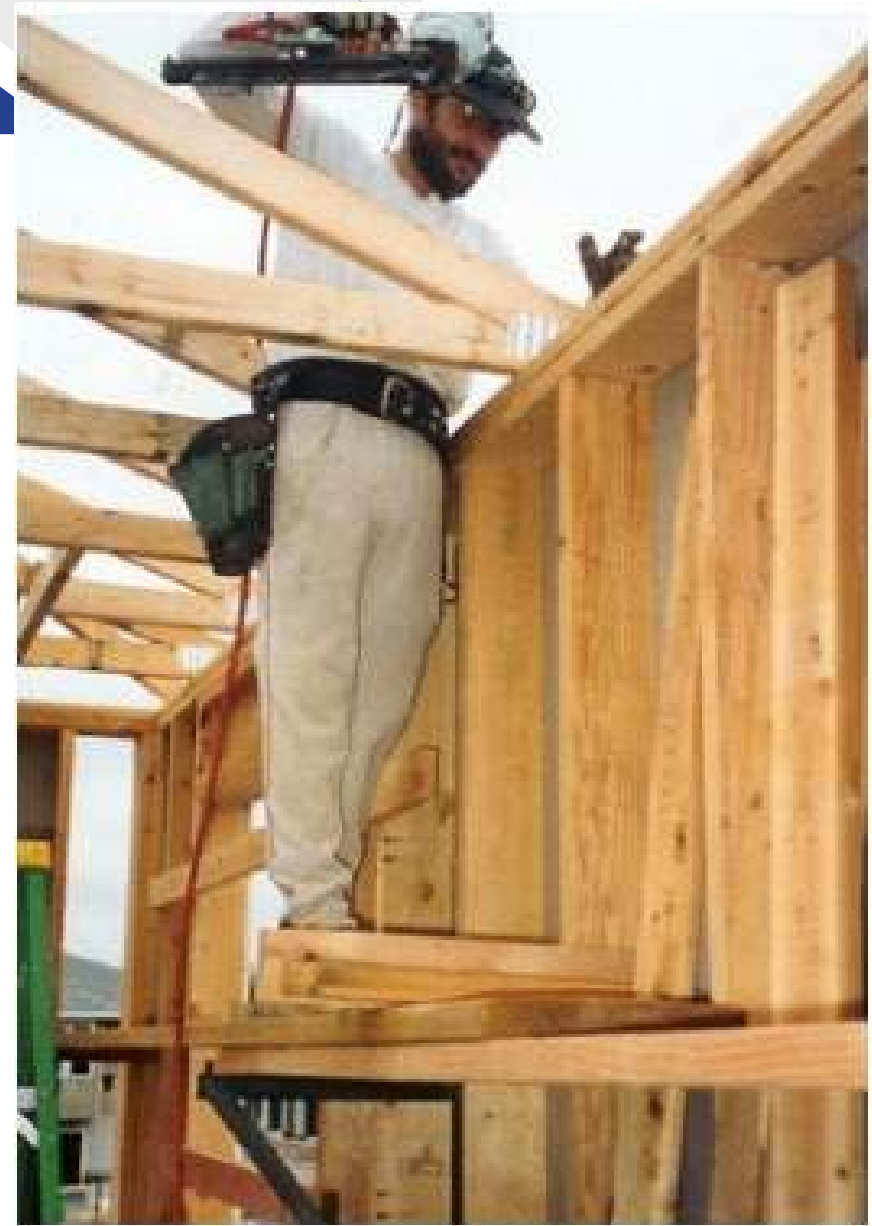
This means the platform needs to be 42" below interior wall. This makes Much of the bracket scaffold un-useable.

Mobile Fall Protection Anchor in the Sky - The Malta Dynamics XSERIES Mobil..



Potential Solutions

Using a ladder with Crane or Forklift



Plarform Ladders-Interior work



Potential Solutions

**Aluminum (light)
Scaffolding
(Interior)**



Potential Solutions

**A-frame Collapsable
Scaffolding up to 6'
(Interior & Exterior)**



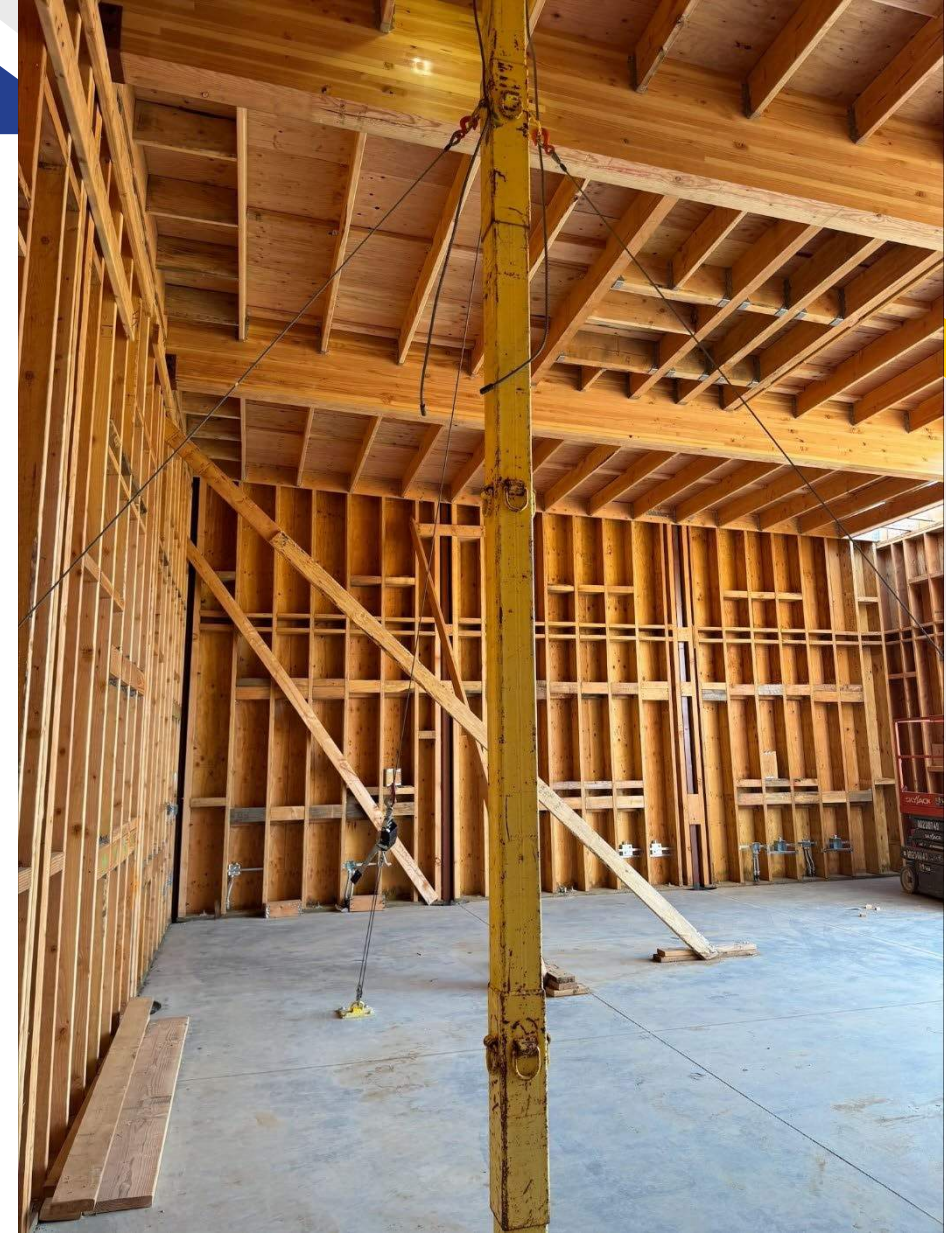
Potential Solutions?



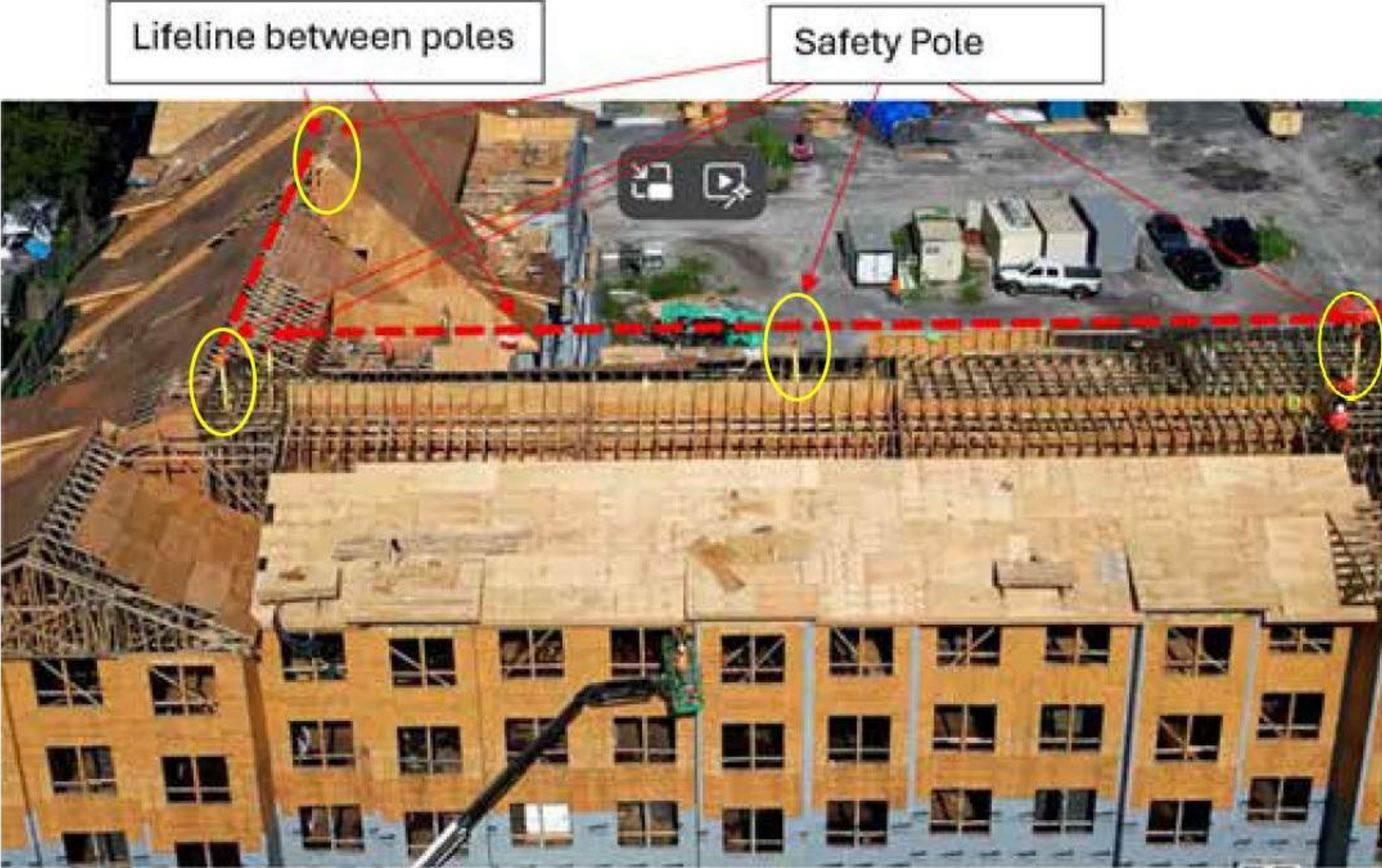


**Framing
Company
Has been
Using this
For 11 years**

**Installation
planning service
comes with
purchase**



Potential Solutions



Framing-Installing Trusses

Residential Framing: Review

1. Preplanning each house to determine means and methods of fall protection
2. Nets are probably not a viable option. Short fall distances, time and manufactures recommendations.
3. Fall Protection Plan is enticing, but not really possible because of the technology. Cost is not a consideration.
4. Many of the builders build the same houses type. So they need to evaluate each house before construction starts (see item 1).
5. Managers need to talk to the crew foreman to develop plan. Get their input and buy in.
6. Additional training on ladders, use of horse scaffolding and nail guns (use more near head).
7. Main problem area is first floor interior. The exterior can be protected by metal scaffolding or bracket scaffolding.
8. Bracing of walls will have to be planned out more so they do not get in the way of ladders and scaffolding being used.
9. General Contractor (Builder is Responsible): Multi- Employer Workplace **CCR, T8, 336.10**

Trigger Heights



Standards Board

Type of Work	Trigger Height	T8 Reference
Aerial Device	0	3648(o)
Building structures (GISO)	30''	3210(a)
Framing (CSO)	15' changing to 6'	1716.1., 1716.2
Other elevated locations (GISO)	4'	3210(b)
Roofing Commercial	20'	1730
Roofing Residential	20' changing to 6'	1731(c)
Scaffolding (non-framing or roofing)	7 ½'	1644
Steel Erection (Connecting)	15' 30'	1710
Tree Work (GISO)	0	3427 (a)
Unprotected edges, HVAC, Painting, Solar Panels, Electrical (CSO)	7 ½'	1670
Wall openings (CSO)	4'	1632

Cal/OSHA Consultation

- **Free** service to the employer community
- **No fines, penalties, or citations**
- We **do not share** our findings with Cal/OSHA Enforcement
- **Confidential**
- Employer will receive a **written report** summarizing our evaluation
- The written report is not a citation



Why Partner with Cal-OSHA Consultation?

- Cal-OSHA Consultation beneficial?
- Experienced Staff
- Survey of employers Consultation On-Sites
- Within 4 years the Experience Modification were reduced by approximately 25%-We help employers reduce injuries and thus costs

Trust Cal-OSHA Consultation

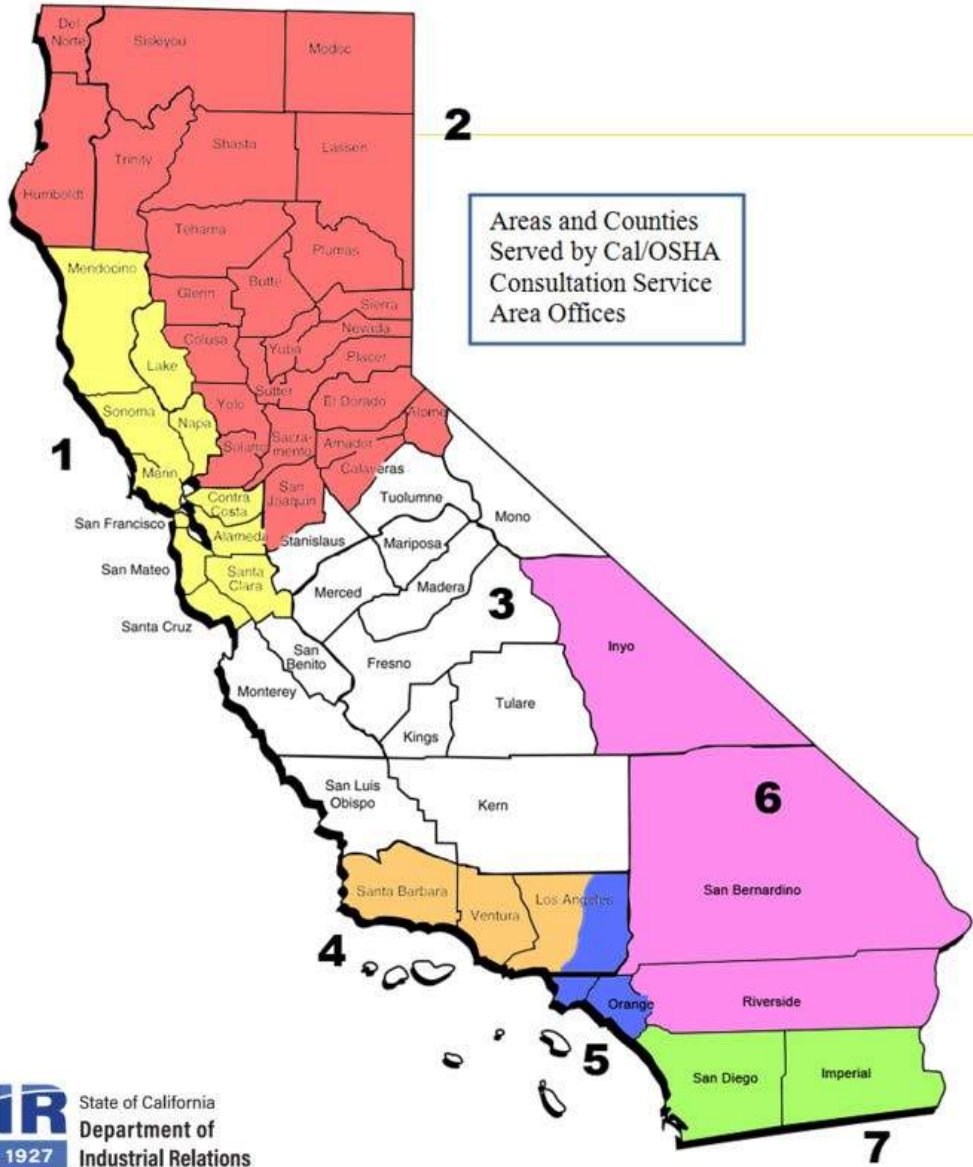


Consultation Services



Links and Sources

- **Title 8 Search:** <https://www.dir.ca.gov/samples/search/query.htm>
- **Cal/OSHA P&P Manual:** <https://www.dir.ca.gov/samples/search/querypnp.htm>
- **Cal/OSHA Publications List:** <https://www.dir.ca.gov/dosh/puborder.asp>
- **OSHA Establishment Search:** <https://www.osha.gov/ords/imis/establishment.html>
- **CDPH FACE Reports and Videos:**
<https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/OHB/FACE/Pages/Publications.aspx#>
- **OSHA Fatality Data:** <https://www.osha.gov/fatalities>
- **Cal/OSHA Standards Board:** <https://www.dir.ca.gov/oshsb/oshsb.html>
- **Cal/OSHA Appeals Board:** <https://www.dir.ca.gov/oshab/oshab.html>



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Thank you!
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