## Residential Fall Protection

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## Cal/OSHA Residential Fall Protection Changes Effective July 1, 2025

Cal-OSHA Title 8, section 1671.1 Fall Protection Plan has been amended to align with Federal OSHA requirements section 1926 Subpart M.

- V Lowered Fall Protection Trigger Height
- New Requirement: Fall protection is now mandated at 6 feet above the surrounding grade or floor level, aligning with federal OSHA standards.
- Who Must Follow These Rules:
- Roofers
- Framers
- Carpenters
- Anyone working 6 feet or higher on residential or light commercial buildings



## Approved Fall Protection Methods

Employers must implement one or more of the following systems:

- Personal Fall Arrest Systems (PFAS)
- Guardrails
- Safety Nets
- Scaffolding











## Section 1671.1 Fall Protection Plan (a) Cont.

(a) If conventional methods are infeasible (changed from impractical) a sitespecific Fall Protection Plan with safety monitors and controlled access zones may be used.

**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."

(1) The fall protection plan shall be prepared by a **qualified person** and developed specifically for the site where the construction work is being performed. The plan shall document the identity of the qualified person.

Competent vs. Qualified Person – OSHA Definitions (29 CFR 1926.32)

- ➤ Competent Person: Someone who can identify jobsite hazards and has the authority to take immediate corrective action. Required for inspections under 1926.650 & 1926.651.
- ➤ Qualified Person: Someone with a recognized degree, certificate, or extensive experience who can solve technical problems related to the work. Required for designing support systems under 1926.651(f).

### Section 1671.1 Fall Protection Plan (cont.)

- (2) Plan Updates: Must be approved by a qualified person and documented.
- (3) On-Site Access: Keep the latest version of the plan at the job site.
- (4) Supervision: A competent person must oversee plan implementation; their identity must be documented.
- (5) Justification: Clearly explain why conventional fall protection (e.g., guardrails, PFAS, safety nets) is infeasible or creates greater hazard.
- (6) Alternative Measures: Describe other steps taken to reduce fall risks (e.g., scaffolds, ladders, lifts).
- (7) Controlled Access Zones: Identify areas where conventional methods can't be used.
- (8) Safety Monitoring: If no other options are viable, implement a monitoring system.
- (9) Authorized Personnel Only: List employees allowed in controlled access zones; others are prohibited.
- (10) Incident Review: Investigate any fall or near-miss, revise the plan as needed, and take corrective action.

These requirements remain unchanged

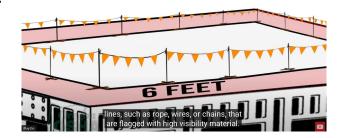
## Section 1671.2 – Controlled Access Zones & Safety Monitoring Systems

#### (a) Controlled Access Zones

- Use control lines or barriers to restrict entry near leading edges. Post warning signs.
- Control lines must be 6–25 ft from edges (or up to 60 ft for precast concrete).
- Lines must run the full edge length, be anchored, and:
- Marked every 6 ft with high-visibility material.
- Height: 39"–45" above the work surface.
- Have 200 lb minimum breaking strength.

#### (b) Safety Monitoring Systems

- A competent person must monitor others and:
- Recognize hazards and warn workers.
- Stay within sight and communication range.
- Have no other duties while monitoring.
- Only authorized employees may enter monitored areas.
- Workers must comply with monitor warnings.





### 1675. General Ladder Requirements

- Use ladders when no stairs, ramps, or runways are available.
- Portable ladders must meet Section 3276 standards.
- Fixed ladders must meet Sections 3277 & 3278.
- Single-rail ladders are prohibited.

### 1676. Job-Made Ladders

- Design & Use: Built for intended purpose. If only access point for 25+ workers or two-way traffic, use double cleat ladders.
- Side Rails: Must be quality Douglas fir; no large knots or sharp edges. Splices must match full strength.
- Cleats: Clear, straight wood, no large knots. Spaced ≤12", minimum 4.5" overhead clearance. Hod carrier ladders: max 9" spacing.
- Lengths:
- > Double cleat: max 24 ft
- > Single cleat: max 30 ft between base and landing, with platforms for longer runs.
- Widths:
- ➤ Single cleat: 15–20 inches wide
- > Double cleat: rail size based on length (2x4 up to 12 ft, 2x6 up to 24 ft)
- Construction:
  - > Use proper lumber sizing based on ladder height.
  - Cleats inset or blocked, secured with 3 10d nails (no double-head nails).
- Strength: Ladders must safely support intended loads.
  - > Portable ladders must hold 200 lbs on the middle step at 1:4 slope.
  - Fixed ladders must hold 200 lbs on any step.

## Title 8, Article 29. Erection and Construction, Section 1716.2 – Effective 7/1/2025

Residential-type Framing Activities, Wood and Light Gage Steel Frame Construction. Applies to work associated with the framing of new residential and light commercial buildings; joists or trusses resting on stud walls.

- (b) (7) Residential-type Framing Activities Include: installation of floor joists, floor sheathing, layout and installation of walls, 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.

## Title 8, Article 29. Erection and Construction, Section 1716.2 (cont.)

- (c) Raising Walls.
- (1) Before manually raising framed walls that are 15 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 framed wall bottom plate.
- (2) Anchor bolts alone shall not be used for blocking or bracing when raising framed walls 15 feet or more in height.
- (d) Stabilization of Structures. Employees shall not work from or walk on top plates, joists, rafters, trusses, beams or other structural members until they are securely braced and supported.

These requirements remain unchanged

## Section 1716.2 (e) - Work on Top Plate, Joists and Roof Structure Framing – Effective 7/1/2025

#### Fall Protection for Work on Structural Members

- **1.Over 6 Feet High:** Workers on top plates, joists, trusses, etc., over 6 ft above ground/floor must use fall protection—scaffolds, guardrails, safety nets, personal fall arrest systems, or, if infeasible, a fall protection plan with safety monitors and controlled access zones per §§1671.1–1671.2.
- **2.Interior Framing (6–15 Feet)**: A fall protection plan may be used **instead of conventional methods** if all the following are met:
  - 1. (A) Members are securely braced or laid flat during install.
  - 2. (B) Spacing ≤ 24" **or** covered with plywood sheathing.
  - 3. (C) Workers stay 6+ ft from unprotected edges.
- **3.Truss Support Plate**: Must be built with a flat 2x6 secured to an edge-laid 2x6, supported by 2x4 legs (max 6 ft spacing), and braced to handle the load safely.

The trigger height for fall protection is 6' – not 15'!

## Section 1716.2(f) – Work on Elevated Floors and Surfaces – Effective 7/1/2025

When working 6 feet or more above grade/floor on surfaces to be enclosed by framed walls, workers involved in layout/framing must be protected by:

- Personal fall protection systems, scaffolds, safety nets, guardrails per §1620, or
- If conventional methods are infeasible, a fall protection plan with safety monitors and controlled access zones per §§1671.1–1671.2.
- **Note**: Floor, roof, and wall openings must be guarded per §1632 The trigger height for fall protection is 6' – not 15'!

### Section 1632 - Floor, Roof, and Wall Openings to Be Guarded.

- (a) Applies to temporary or emergency situations with fall risks through floor, roof, wall openings, stairways, or runways.
- (b) (1) Floor, roof, and skylight openings must be protected with either guardrails/toeboards or covers.
  - (2) Railings must meet §§1620–1621 standards; required on all exposed sides (except stair entrances).
  - (3)Covers must support ≥400 lbs or 2x expected load, be secured, and labeled "Opening—Do Not Remove."
- (c) Ladder openings must have railings with a gate or be offset to prevent direct access.
- (d) Hatchways/chute openings:
- Use hinged covers with one exposed side guarded, or
- Use removable railings on ≤2 sides and fixed railings elsewhere.
- (e-f) Pits, trap doors, and manholes: Guard with secure covers or standard railings when open.
- (g-h) Temporary floor openings and floor holes must be guarded with railings or secured covers.
- (i) Doors opening onto stairways must have platforms ≥20" wide; door swing must not reduce width.
- (j) Wall openings (drop >4 ft):
- Use railings depending on height and location.
- Openings <4" above the floor must have a toeboard or screen.</li>
- (k) Extension platforms must have side rails; one side may be removable for material handling.
- (l) No toeboard needed if a chute is attached to the opening.
- (m) Wall opening protection must withstand 200 lbs force; screens must be strong and have limited openings.

These requirements remain unchanged

## Section 1716.2 (g) Work on Starter Board, Roof Sheathing and Fascia Board – Effective 7/1/2025

(1) When installing starter board, roof sheathing, or fascia board at heights of 6 feet or more, employees must be protected using one or more of the following: scaffolding, safety nets, guardrails, personal fall protection systems, or, if conventional methods are infeasible, a fall protection plan with safety monitors and controlled access zones per §§1671.1 and 1671.2.

#### THESE NO LONGER APPLY:

- •Trigger height of 15 feet it's now 6!
- •Slope greater than 7:12 all slopes above 6 feet apply!
- •Slide guards are no longer an acceptable fall protection method on roofs!
- •Working inside the gable end truss or rafter when it has been installed and braced, and installing fascia or starter board from within the gable end truss or rafter!

# Section 1716.2 (g) Work on Starter Board, Roof Sheathing and Fascia Board (cont.) – Effective 7/1/2025

(1) When work must be performed outside the gable end truss or rafter at heights of 6 feet or more, employees must be protected using one or more of the following: scaffolding, safety nets, guardrails, personal fall protection systems, or, if conventional methods are infeasible, a fall protection plan with safety monitors and controlled access zones per §§1671.1 and 1671.2.

There is no longer an exception for work of short duration and limited exposure when the hazards involved in rigging and installing the safety devices required equal or exceed the hazards involved in the actual construction.

## Section 1716.2 (h) Installation of Windows.

Wall openings shall be guarded as required by Section 1632. The guardrail may be removed immediately prior to the installation of the window components if removal of the guardrail is necessary to install the window(s).

This requirement remains unchanged.

## Section 1716.2 (i) Scaffolding – Effective 7/1/2025

- (1) Scaffolds must comply with CSO Articles 21 and 22.
- (2) When set parallel to framed walls, the interior guardrail may be omitted for joist, rafter, or truss installation if:
- The scaffold platform is 6 feet or less above the interior floor, and
- the top plate is higher than the scaffold platform.

The trigger height for fall protection is 6' – not 15'!

## Section 1716.2 (i) Scaffolding (cont.) & (j)

- (3) Scaffold as Edge Protection Platform:
- A. Platform must be fully planked and no more than 2 feet below the top plate.
- B. Platform's inboard edge must be within 16 inches of the structure wall.
- (4) Additional Requirements for Metal Frame Scaffolds:
- A. A 2x6 or larger toeboard must be secured parallel to the outer rail.
- B. Scaffold must be tied to the structure in tension and compression at each end and every other frame, max 20 ft apart.
- C. Guardrails must extend at least 42 inches above the eaves if the platform extends less than 12 inches past the eaves.
- (j) Training: Workers exposed to fall hazards must be trained to recognize and minimize fall risks, training must be documented.

These requirements remains unchanged

## 1718. Riding on Loads.

(a) No person shall be permitted to ride on loads, hooks, or slings of any derrick, hoist, or crane.

This requirement remains unchanged



### Section 1730. Roof Hazards – Effective 7/1/2025

- (a) During roofing operations, employers must follow Section 1509 (Injury and Illness Prevention Program) and train employees per Section 1510 (Safety Instructions).
- This section does **not** apply to residential-type roofing (see Section 1731).

#### **Section 1509 – Injury and Illness Prevention Program**

- Employers must have an effective IIPP per Section 3203.
- A written Code of Safe Practices must be adopted, posted at the job site, or provided to supervisors.
- Supervisors must hold regular safety meetings and conduct "toolbox" talks at least every 10 working days.

#### **Section 1510 – Safety Instructions**

- New workers must be instructed on hazards and safety precautions.
- Only qualified persons may operate equipment.
- Employees exposed to known hazards must be trained on recognition, protection procedures, and first aid.
- (g) For purposes of Section 1730, the height measurement shall be determined by measuring the
  vertical distance from the <u>employee's walking/working surface</u> (was 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.

## Section 1731. Residential-type Roofing Activities – Effective 7/1/2025

(Was Roof Hazards-New Production-Type Residential Construction)

- (a) Scope and Application.
- (1) This section shall apply only to <u>residential-type roofing activities</u> (was roofing work on new production-type residential construction with roof slopes 3:12 or greater).

There is no longer an exception for custom-built homes, re-roofing operations, roofing replacements or additions on existing residential dwelling units!

(b) Roofing work consists of roofing and re-roofing work, <u>including roof</u> <u>removal</u> performed on single-family homes, townhouses, duplexes and other structures covered by Section 1716.2. <u>Roofing work also includes</u> <u>loading and installation of roofing materials</u>, 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.

## Section 1731. Residential-type Roofing Activities – Effective 7/1/2025 (cont.)

- (c) Fall Protection for Roofing Work.
- (1) Roof Slopes: 0:12 to 7:12
- Fall protection required at or more above grade
- Acceptable methods:6 feet
  - Personal Fall Protection Systems
  - Scaffolding
  - Safety Nets
  - Guardrails
  - Fall Protection Plan with safety monitors & controlled access zones. (only if other methods are infeasible)

No more exception for 3:12-7:12 slopes

#### Catch platforms and roof jack systems are no longer acceptable

(2) Roof slopes greater than 7:12: Employees shall be protected from falling by methods prescribed in Subsections (c)(1) regardless of height.

If you are working above 6 feet on any residential unit, you must use 1 or more of the fall protection methods, regardless of slope!

## Section 1731. Residential-type Roofing Activities (cont.) (d) Training

In addition to Sections 1509 (IIPP) and 3203, employees must be trained on

- ▲ Fall hazards specific to roofing, including:
- Work on or near gable ends
- ➤ Slipping hazards
- Roof holes and openings
- > Skylights
- Work on ladders and scaffolds
- > Accessing the roof
- Material placement on the roof
- > Impalement hazards
- Proper use and care of fall protection systems

These requirements remain unchanged.

## Fall Protection on Gable Ends – Residential Roofing

#### **Key Hazards:**

- Sloped Edges: Increased risk of slips and falls.
- Elevated Heights: Potential for severe injuries.
- Weather Conditions: Rain, snow, or wind can exacerbate hazards.

#### **Best Practices:**

- **Training:** Ensure all workers are trained in fall hazard recognition and equipment use.
- Equipment Inspection: Regularly inspect fall protection equipment for wear and damage.
- Weather Monitoring: Suspend work during adverse weather conditions.
- Material Storage: Keep materials and tools at least 6 feet away from the gable edge.

### Slipping hazards on residential roofs

**Slipping hazards on residential roofs** are primarily caused by wet or uneven surfaces, loose materials, and debris, all of which significantly increase the risk of falls. To mitigate these risks, roofers should:

- Wear appropriate, slip-resistant footwear with adequate traction.
- Keep the work area clean and organized to avoid tripping over tools or materials.
- Remain vigilant of environmental conditions such as ice, snow, and wind, which can make surfaces more hazardous.
- Implementing these safety measures can greatly reduce the likelihood of accidents and promote a safer working environment on residential rooftops.

## Roof holes and openings Hazards

Hole: A gap or void 2 inches or more in its least dimension in a floor, roof, or other walking/working surface.

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.

Floor Opening: An opening measuring 12 inches or more in its least dimension, in any floor or platform, through which persons may fall.

Hazards: Falls through holes and openings can result in serious injuries, including:

Broken bonese Back injuries Internal organ damage Head injuries Fatalities

#### **Safe Work Practices:**

- Wear appropriate PPE: Use personal protective equipment suitable for the task.
- Stay alert: Be aware of your surroundings; avoid distractions like mobile devices.
- Communicate hazards: Inform others about the location of holes or openings.
- Guard or cover holes: Use covers or guardrails on all open sides.
- Cover specifications: Covers should support at least twice the weight of the heaviest employee plus equipment and materials, and be secured to prevent displacement.
- Mark covers: Clearly label covers with "Opening—Do NOT remove" or "HOLE" in safety orange.
- Avoid misuse: Do not sit on, lean against, or step on covers unless they are designed to support your weight.

Guardrail requirements: Top rail at 42–45 inches high, midrail halfway between top rail and floor, and toeboards at least 3.5 inches high with no more than 0.25-inch clearance at the bottom.

Use fall arrest systems: When working near unguarded holes, use personal fall arrest systems limiting free fall to 6 feet and arresting forces to 1,800 pounds.

Report hazards: Immediately notify supervisors of any unguarded or newly discovered holes or openings. Assign monitors: If a hole cannot be guarded or covered, designate a person to monitor the hazard continuously.

## Skylight Fall Protection

Hazards: Skylights may appear solid but often lack the strength to support a person's weight, posing significant fall risks.

#### **OSHA Requirements:**

Protection Measures: Skylights must be safeguarded using one of the following:

- Covers capable of supporting twice the weight of the heaviest worker, secured to prevent displacement, and marked with "Opening—Do Not Remove."
- Guardrails around all exposed sides, standing 42–45 inches high.
- Personal Fall Arrest Systems when other protective measures are not feasible.

#### **Types of Guards:**

- Skylight Screens: Constructed of grillwork (openings ≤4 inches) or slatwork (openings ≤2 inches), designed to prevent deflection upon impact.
- Guardrails: Include a top rail and midrail or equivalent protection, meeting specified height and strength criteria.

#### **Best Practices:**

- Training: Ensure all workers are trained in recognizing fall hazards and using fall protection equipment.
- Inspection: Regularly inspect fall protection equipment and ensure anchorage points are secure.
- Awareness: Be vigilant of skylights obscured by snow, dirt, or debris.
- Communication: Clearly mark and communicate the presence of skylights to all personnel.
- Behavior: Avoid sitting, leaning, or stepping on skylights or their covers unless confirmed safe.

#### **Contributing Factors to Skylight Falls:**

- Failure to identify and eliminate fall hazards.
- Inadequate or missing fall protection systems.
- Removal of protective covers.
- Lack of precaution during adverse weather conditions.

#### Work on ladders



#### **Common Ladder Types:**

- Fixed Ladders: Permanently attached to structures.
- Portable Ladders: Include extension, A-frame, articulated, combination, and job-made ladders.
- Mobile Ladders: Equipped with wheels for mobility.

**Ladder Duty Ratings:** Ladders are classified based on their maximum load capacity:

- Type IAA (Special Duty): 375 lbs.
- Type IA (Extra Heavy Duty): 300 lbs.
- Type I (Heavy Duty): 250 lbs.
- Type II (Medium Duty): 225 lbs.
- Type III (Light Duty): 200 lbs.

Always check the ladder's duty rating to ensure it supports the intended load.

### Work on ladders

#### Safe Ladder Practices

- Inspect Before Use: Check for defects; remove damaged ladders from service.
- Stable Setup: Place on firm, level surfaces; secure extension ladders at the top.
- Climbing: Maintain three points of contact; face the ladder; avoid overreaching.
- Top Rungs: Do not stand on the top step or rung unless designed for that purpose.
- Electrical Safety: Use non-conductive ladders near electrical sources.
- Footwear: Wear closed-toe, non-slip shoes.
- Storage: Store ladders properly to prevent damage.
- Never carry tools in your hands while climbing a ladder.

#### **Ladder Hazards**

- Falls: Due to loss of grip, ladder tipping, or overreaching.
- Electrical Hazards: Electrocution risks when metal ladders contact live wires.
- Structural Failures: Collapses from defects or overloading.
- Falling Objects: Tools or materials dropping from heights.
- Obstructions: People walking into improperly placed ladders.
- Musculoskeletal Injuries: From repetitive climbing or improper handling.

#### **%** Selecting the Right Ladder

- Material: Use fiberglass or wood ladders near electrical sources to prevent electrocution.
- Height: Ensure the ladder provides sufficient reach without standing on the top rung.
- Duty Rating: Choose a ladder that supports your weight plus tools and materials.



Worker using a personal fall arrest system on a ladder when using a tool that prevents 3 points of contact.

## Scaffolding Safety: What You Need to Know

Ladders may get you there—but scaffolds help you work safely. That is, only when used properly.

Scaffolding is a common sight on construction sites, with an estimated 2.3 million workers using it frequently. But safety incidents remain all too common—and costly. According to OSHA, better scaffold practices could prevent 4,500 injuries, 50 fatalities, and save \$90 million in lost time each year.

#### 

The top causes of injury account for 72%\* of all scaffolding-related incidents:

- Collapses or planking failures
- Falls from height
- Struck-by incidents (from falling tools or materials)

#### Types of Scaffolding

- Supported Scaffolds: Build from the ground up with planks and supports.
- Suspended Scaffolds: Hanging platforms (e.g., window-washer rigs).
- Mobile Scaffold: Set on wheels or casters to be easily moved.



<sup>\*</sup> Source: Bureau of Labor Statistics' Census of Fatal Occupations Injuries (CFOI)



Starts from the Bottom

Stability is key. Follow these best practices:

- Anchor to solid, rigid ground—never place scaffolds on boxes, bricks, or cinder blocks.
- Withstand 4x the intended load, including workers, tools, and materials.
- Brace all supports to prevent sway.
- Tie to permanent structures to reduce tipping risk.

Scaffold Planking

- Planks should extend 6–18 inches over supports.
- Keep planks free of clutter, ice, and snow—sand them in winter to prevent slips.
- Inspect regularly for cracks, rot, or warping.

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Inspections Are Non-Negotiable

Scaffolds must be inspected:

- After installation
- Daily, before each shift
- After weather events or other impact risks
- Check for plank condition, bearing integrity, bracing, anchoring, and guardrails.

## Scaffolding Safety(cont.)

- ✓ Safety Measures by Hazard Type
- 1. Falls
- Use only fully planked scaffolds with < 1/4-inch gaps.
- Do not climb crossbraces—use proper access ladders.
- Ensure guardrails and midrails are in place and secure.
- 2. Struck-By Injuries
- Barricade areas underneath scaffolds.
- Require hard hats at all times.
- Keep scaffolding within 14 inches of the structure (18 inches for stucco/plaster).
- 3. Electrocution
- Stay at least 10 feet away from energized power lines.
- De-energize nearby lines if possible.
- Remember: shock isn't always fatal—but a fall following one often is.

Scaffolding safety saves lives. A few extra minutes for setup and inspection can mean a lifetime of difference for your crew.

## **Roof Access Safety**

Safe Access Is Required OSHA Standard: 29 CFR 1926.1051

Workers must be provided with safe access to and from all elevations, including roofs.

#### Acceptable access methods include:

- Fixed ladders
- Portable ladders
- Scaffolding with safe access
- Stair towers
- Aerial lifts or boom lifts (if fall protection is in place)
- O DO NOT allow workers to climb structural elements, pipes, or unsecured ladders.

#### Weather Considerations - Do not access roofs during:

- High winds
- Rain, snow, or icy conditions
- Lightning storms

#### Before You Step on the Roof:

- 1. Inspect your access equipment.
- 2. Verify your fall protection system is ready and rated.
- 3. Check for any edge protection, holes, skylights, or trip hazards.
- 4. Ensure proper supervision and training for everyone involved.

Reminder: OSHA compliance isn't optional—and neither is coming home safe. Make roof access planning part of your job hazard analysis (JHA) every time.

## Material placement on the roof

Improper storage or placement of materials on a roof can lead to serious hazards—including falls, structural failure, and struck-by incidents.

OSHA doesn't just regulate how you work on roofs—it also regulates how and where you store materials.

#### Know the Load

- Never exceed the load-bearing capacity of the roof.
- Be aware of concentrated load risks—don't stack all materials in one spot.
- Check roof specs and consult an engineer if unsure.

#### Proper Placement

- Keep materials away from roof edges—at least 6 feet from the edge.
- Use guardrails or warning lines if materials must be placed closer.
- Don't block access points, ladders, or walkways.

#### Storage Guidelines

- Secure all materials to prevent sliding or blowing off the roof.
- Avoid stacking materials too high—maintain stable, low-height piles.
- Don't store materials near skylights or fragile surfaces unless properly guarded.

#### Mind & Weather

- In windy conditions, tie down or remove materials that could become airborne.
- Never leave loose materials on the roof overnight or unattended.

#### Fire & Trip Hazards

- Keep flammable materials away from ignition sources (hot work, sunlight).
- Store cords, hoses, and tools in an organized, clearly visible way.

#### **✓** Quick Roof Material Checklist

- ✓ Material is 6+ feet from edge
- ✓ Load is evenly distributed
- √ No access points or walkways blocked
- ✓ Materials are secured against wind
- √ Roof surface is strong enough to support weight

## Impalement Hazards

Impalement hazards are sharp or pointed objects that can penetrate the body if a worker falls or slips.

#### **Common Hazards**

- Uncapped vertical rebar
- Exposed metal stakes (formwork, fencing, survey pins)
- Sharp tools or conduit left upright
- Scrap metal, nails, or wood with protruding fasteners
- Grounding rods near the structure

#### **How to Stay Safe:**

#### 1. Eliminate or Guard Hazards

- Cap or bend over all exposed rebar and stakes
- Use steel-reinforced safety caps rated for impalement protection
- Cover or remove sharp tools and materials not in use

#### 2. Use Fall Protection

- > Always wear a harness and tie off when working 6 feet or more above hazards
- Check fall clearance to ensure a fall won't bring you into contact with impalement risks

#### 3. Keep the Site Clean

- > Store materials flat, not upright
- Clear walkways and ground-level work zones
- Don't lean tools or sharp objects against walls or fences

#### 4. Inspect Daily

Walk the site every morning to identify and correct impalement hazards before work begins

Key Rule - If you can fall onto it and it can pierce the body — it must be capped, guarded, moved, or removed.

#### When Are They Most Dangerous?

- When working at heights (roofs, ladders, scaffolds)
- Near floor openings or stairwells
- Around building edges or tight work areas
- When fall protection is misused or missing

## Proper use and care of fall protection systems

Falls are the #1 cause of death in residential construction.

#### **⚠** Key Fall Protection Systems

- Personal Fall Arrest System (PFAS) = Full-body harness + lanyard/SRL + anchor point
- Guardrails = Top rail (42"), mid-rail, and toe board
- Anchors = Must be rated to 5,000 lbs or certified by a qualified person

#### **✓** Proper Use

- Fit harness snugly; chest strap mid-chest
- Always connect to back D-ring
- Use shock-absorbing lanyards or SRLs
- Anchor above work level when possible
- Check fall clearance avoid hitting ground

#### **Q** Daily Inspections

- Check harness/lanyard for cuts, frays, or damage
- Ensure anchors are secure
- Test SRLs remove damaged gear immediately
- Never reuse gear after a fall

Fall protection systems save lives only when used and maintained properly.

#### Care and Storage

- Store dry and out of sun
- Don't toss or drop equipment
- Don't modify gear

#### Training Required

- Workers must be trained to:
- Use and inspect PFAS
- Estimate fall clearance
- Identify swing fall and impalement hazards

#### Avoid These Mistakes

- Loose or misused harness
- Too much lanyard slack
- Anchors nailed into sheathing only
- Ignoring damaged equipment

#### **Stay Safe**

Use it right, check it daily, and protect yourself and your crew.

### Cal/OSHA Fall Protection – Effective July 1, 2025

New 6-Foot Rule

Fall protection is now required at 6 feet (down from 15), aligning with Federal OSHA.

- Applies to:
- ➤ Roofers, framers, carpenters, and **anyone** working ≥6 feet on residential or light commercial structures.
- ✓ Approved Fall Protection Systems

Use one or more of the following:

- Personal Fall Arrest Systems (PFAS)
- Guardrails
- Safety Nets
- Scaffolding
- X Slide guards are no longer allowed!

Fall Protection Plan (FPP) – Only If Necessary

- Use ONLY when conventional methods are infeasible
- Must be site-specific, maintained, and developed by a qualified person
- Includes: Safety monitors + Controlled access zones

Employers must prove infeasibility — the default expectation is that fall protection is feasible.

## Questions??

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