



STATE OF CALIFORNIA
CAL OSHA
DEPARTMENT OF INDUSTRIAL RELATIONS

Fall Protection


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Senior Safety Engineer
Cal/OSHA Consultation

DIR
EST. 1927

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OSHA Statistics - 2022

- Falls from elevation continue to be a leading cause of death for construction workers, accounting for **395** of the 1069 construction fatalities recorded in 2022 (36.9%) (BLS)



In CA- Top 10 – Fed OSHA #1

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Overview

- Statistics
- Scope, Application and Definitions
- Inspections and Fall Prevention Systems
- Fall Protection Regulations-
 - California Code of Regulations Title 8
- Planning and Integration
- Cal/OSHA Consultation
- Summary

Join the
National Safety Stand-Down
To Prevent Falls in Construction

MAY 6-10, 2024

Falls can be prevented:
PLAN ahead to get the job done safely.
PROVIDE the right equipment.
TRAIN everyone to use the equipment safely.

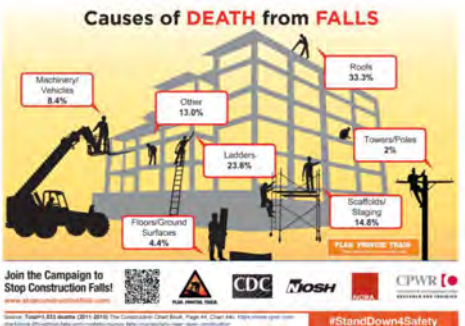
osha.gov/stepfalls

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Statistics

Causes of DEATH from FALLS

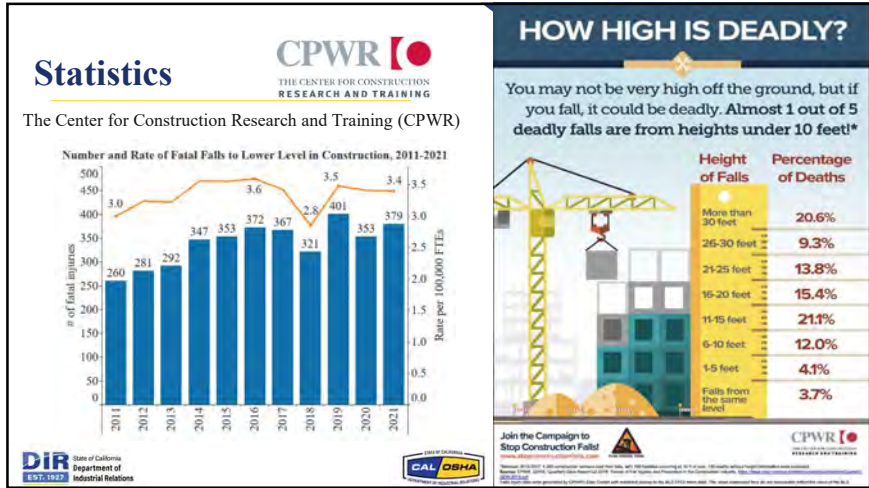


Join the Campaign to Stop Construction Falls!

#StandDown4Safety

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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

QR Code

QR Code

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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

QR Code

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

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 1506 - 1527)
Article 4. Dusts, Fumes, Mists, Vapors, and Gases (Sections 1528 - 1537)

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Scope and Applications

Misc. Construction- 1670
Roofing - 1730
Scaffolding – 1637-47
Framing – 1712.1,2
Steel Erection – 1710
Elevating Equipment (scissor lifts, aerial devices and industrial trucks)- 3646, 3648, 3657
GISO


Find what applies to your workplace!

QR Code



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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

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Plan: Misc. Construction 1670 -Rescue Plans?

- (b)(14)-The employer shall provide for prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves
 - Suspension trauma straps
 - Harnesses with built in saddles
 - Using fall protection and working alone?








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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

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Misc. Construction 1671.1 (a)-Fall Protection Plans

- 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

Fall Protection Policy – YES!

Fall Protection Plan is only needed when traditional fall protection is impractical or creates a greater hazard.





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Misc. Construction Solar Panels – 1670 (a)

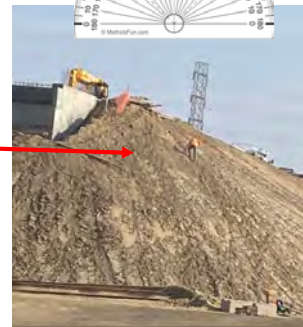


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Misc. Construction Slopes – 1670 (a)



- (a) Approved personal fall arrest, personal fall restraint or positioning systems
... worn... fall in excess of 7 1/2 feet...
- surfaces steeper than 7:12, or other
- sloped surfaces steeper than 40 degrees



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Misc. Construction Solar Panels – 1670 (a)

- 1670 (a) – 7 1/2 feet
- Short duration – 1669 (c) apply?

Worked with Solar Panel Installers?

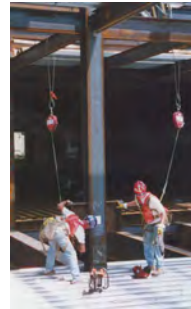
NOT ROOFING!



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Steel Erection - 1710

- 15' Erecting
- 30' Connecting



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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:
 - Single-unit
 - Multiple-unit

 2/12 pitch	 4/12 pitch	 5/12 pitch
 6/12 pitch	 7/12 pitch	 8/12 pitch
 9/12 pitch	 10/12 pitch	 12/12 pitch




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Scaffolding (1637-1672)

?

- 7 1/2 feet guardrails
- Access






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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)
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Elevating Equipment

Scissor lift (3646)(3328)

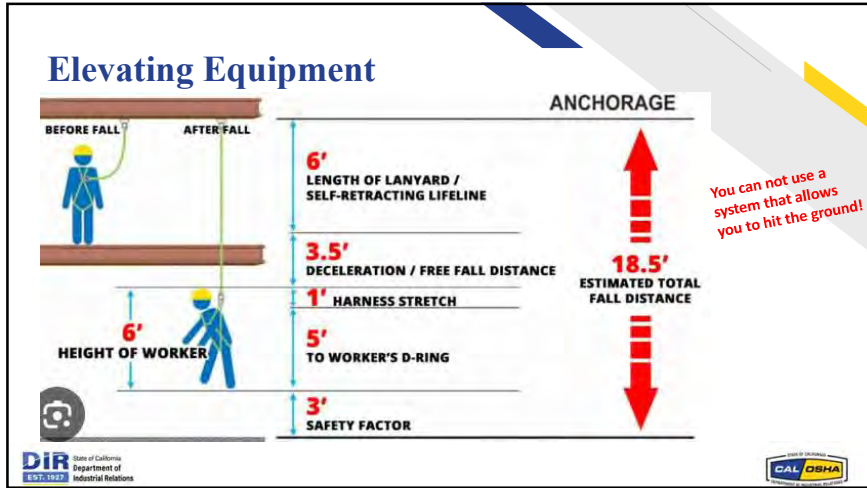


Aerial Device (3648 (o))





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Planning Needs Assessment

Plan - before work begins
Provide - equipment and tools
Train - equip people to do their job: look out for others

Do not fail to plan and cause the exposed to pay the price!!!

Join the
National Safety Stand-Down
 To Prevent Falls in Construction
 MAY 6-10, 2024

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Planning Needs Assessment

- Who bids the jobs? How?
- Type of work-roofing, framing, steel erection, painting, gutter installation, satellites, cable, hvac, solar panels,...?
- Work Area known?
- Requirements?
- Fall Hazards?
- Plan?
- Integrate?
- Train?
- Implement?
- Review and Culture and Mission

1670(b)(19): Each personal fall arrest system shall be inspected not less than twice annually by a **competent person** in accordance with the **manufacturer's recommendations**. The date of each inspection shall be documented.

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Planning Needs Assessment

Can we use a Safety Net?

1671(a): Where the elevation is 25 feet or more above the ground, water surface, or continuous floor level below, and when the use of personal fall arrest systems, personal fall restraint systems, positioning device systems or more conventional types of protection are clearly impractical...

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Solutions

Go find it!

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Solutions

Next Gen Hitch Clip

2100080 Door/Window Jamb Anchor

2103670 Permanent Roof Anchor with Flashing and Cap

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Solutions

Go find it!

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Equipment

Go find it!

Winner Fall Protection - Pro-Form SP SwitchPoint Harness

Miller Confined Space Safety... \$135.00 ULINE	3M DBI-SALA Trauma Salet... \$37.00 ULINE	Miller H300 Safety Harness... \$110.00 ULINE	3M DBI-SALA ExoFit Safety... \$395.00 ULINE	Miller Standard H100 Safety... \$60.00 ULINE	Miller AirCore Deluxe Safety... \$435.00 ULINE	MONSOON 40-Ring Safety... \$176.70 keweenaw.com	Petzl VOLT International... \$209.95 CAL Supply Co.
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Inspections and Systems Edge Protection


(a) **Approved** personal fall arrest, personal fall restraint or positioning systems shall be worn by those employees whose work exposes them to falling in excess of 7 1/2 feet from the:

- perimeter of a structure,
- unprotected sides and edges,
- leading edges,
- through shaftways and openings,
- sloped roof surfaces steeper than 7:12, or
- other sloped surfaces steeper than 40 degrees not otherwise adequately protected under the provisions of these Orders

1670(l) All personal fall arrest, personal fall restraint and positioning device systems purchased or placed in service after February 1, 1997, shall be labeled as meeting the requirements contained in **ANSI A10.14-1991** American National Standard for Construction and Demolition Use, or **ANSI Z359.1-1992** American National Standard Safety Requirements for:

- Personal Fall Arrest Systems,
- Subsystems and
- Components

Do you have the right equipment?



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Inspections and Systems Edge Protection


- Non Edge SRL
- 250 lbs. weight
- 6' person
- 20' platform
- Cut steal lifeline




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Inspections and Systems Edge Protection

To be compliant with ANSI Z359.14, a **self-retracting lifeline (SRL)- leading edge (LE)** must have an integrated **shock absorber** and be rated by the manufacturer to be used in LE applications. In extensive product testing, Guardian has also made the determination that SRL-LEs must have a galvanized steel lifeline, since lifelines made from web or rope are too susceptible to damage



Do you have the right equipment?

SRL-LE =Self Retracting Lifeline – Leading Edge



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Inspections and Systems Edge Protection

- Non Edge SRL
- 250 lbs. weight
- 6' person
- 15' platform
- Cut steal lifeline




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Inspections and Systems

- 1670(b)(15) Personal fall arrest systems shall be inspected prior to each use...
- 1670(b)(19) Each personal fall arrest system shall be inspected not less than twice annually...manufacturer's recommendations. The dates... document

How do you document inspections?
Check the inspections!



Inspections and Systems



Know your equipment!



Inspections and Systems

Activation Date

Typically, the date of manufacture on a product or the date of purchase is used to help determine when a product is due for inspection. The date of the products first use can also be used as an activation date

The activation date is defined as the time when a product is first put into actual service (initially or after service/repair)



Technical Bulletin No. MSC902, Rev. E

Subject: Product Life
Date: February 1998

The current DIR/SALA policy on the life of products is totally dependent on the condition of the item and not the age. A OSHA/NIOSH product can be used as long as the inspection performed does not reveal any damage, wear, or other characteristics that will affect the product's performance.

The inspection of the product shall be performed according to details outlined in the user instruction manual on the specific product as well as other applicable information provided by DIR/SALA. The frequency of inspections to determine the usability of the product shall be as follows:

1. Inspect before each use (by user)
2. Monthly (by competent person other than user) for winches, RPO's, Reconnectors, Tripods, davit arms) (recorded)
3. Annually (by competent person other than the user) (recorded)



Inspections and Systems



Red tab means impacted and must be removed!



Inspections and Systems

Notice anything?



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Inspections and Systems

- Find manual on inspections and show what it says



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Inspections and Systems



You just saved a life!



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Inspections and Systems



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Tools and Technologies

- NIOSH Ladder App
- Fall protection companies' industry specific equipment and tools
- Go to their web sites!

Honeywell
<https://sps.honeywell.com/us/en/products/safety/fall-protection>

3M Science Applied to Life.
https://www.3m.com/3M/en_US/fall-protection-us/applications/

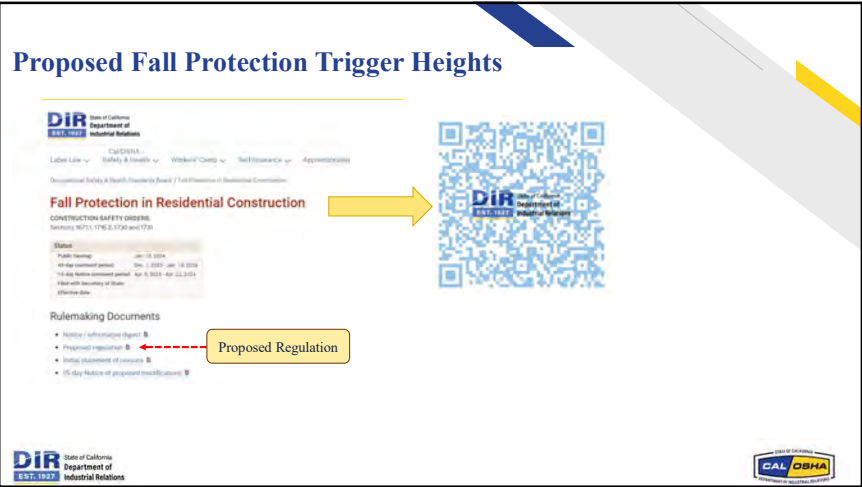
FALLTECH
<https://www.falltech.com/fall-protection-products/body-wear/full-body-harnesses/fit-one-fit/>



<https://www.cdc.gov/niosh/topics/falls/mobileapp.html>

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Proposed Fall Protection Trigger Heights



The screenshot shows the DIR website page for 'Fall Protection in Residential Construction'. A yellow arrow points from the page title to a QR code on the right. A red dashed arrow points from a 'Proposed Regulation' callout box to the 'Rulemaking Documents' section, which lists 'Notice of Informative Draft', 'Proposed Regulation', and 'Final Regulation'.


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Fall Protection Trigger Heights

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

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Poll Question



- Why do workers not wear fall protection?

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Planning and Integration

Safety voice at the table?

- Accident Investigation
- Tell the story
- Owner changed skylights
- Poor Planning
- Failure to protect
- Failure to provide
- Not a cover
- Subcontractor employee fell through
- Lost both legs








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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



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Planning and Integration

Does Health and Safety have a seat at the table?



- Integrated fall protection anchor in the concrete ceiling
- Inset pieces next to loading areas, fall hazards
- Required planning and safety integrated

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Why Partner with Cal-OSHA Consultation?

- Cal-OSHA Consultation beneficial?
- Experienced Staff
- Survey 2014-2018 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





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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/CCDC/PHP/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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Summary

- *Plan:* time, resources, systems, educate and relationships
- *Provide:* systems, time, resources, relationships and educate
- *Train:* resources, time, relationships educate and systems



Tell your Story!



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Thank you!
Contact me with questions and ideas
Gary McIver


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STATE COMPENSATION INSURANCE FUND State Fund and Cal/OSHA Present



Preventing Falls: Keeping Workers Safe & Cal/OSHA Compliant – Part II

Julie Lavezzari
Senior Loss Prevention Engineer
April 24, 2024

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STATE COMPENSATION INSURANCE FUND Is this worker protected from falling?



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STATE COMPENSATION INSURANCE FUND Stop Falls! Plan – Provide - Train

- Falls are the #1 cause of death in construction.
- Falls can be prevented!



Falls can be prevented:
PLAN ahead to get the job done safely.
PROVIDE the right equipment.
TRAIN everyone to use the equipment safely.


osha.gov/stopfalls

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STATE COMPENSATION INSURANCE FUND National Stand-Down: Why Focus on Falls?

- Falls are the #1 cause of death in construction.
- Falls can be prevented!



CPWR Publications



Join the Campaign to Stop Construction Falls!

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STATE COMPENSATION INSURANCE FUND **National Stand-Down: What is it?**

Voluntary event for employers to talk directly to employees about safety

Held annually and was started by OSHA

May 6 – 20, 2024

Join the National Campaign to Prevent Falls



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STATE COMPENSATION INSURANCE FUND **National Stand-Down: Who Can Participate?**



National Stand-Down: Who Can Participate?

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STATE COMPENSATION INSURANCE FUND **National Stand-Down: Who Can Participate?**

- Anyone can participate, even non-construction companies!
 - All 50 states and internationally
- Participation is easy!
- Small and large companies can participate




NSC Resources

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STATE COMPENSATION INSURANCE FUND **National Stand-Down: Small Company?**

Small Contractors Resources

Save Your Company Time and Money by PREVENTING FALLS. Click on the links below to find free tools and materials to help you plan, provide, and train:

Anyone can participate!



Plan	Provide	Train
<p>Click here for resources to plan ahead to prevent falls on your jobsite.</p> <p>RESCUE PLANNING SAVES LIVES</p> <p>"Plan" Highlighted Resource: Rescue Planning Saves Lives (English, Spanish). Use this tool to learn about the importance of rescue planning and how to create a plan.</p>	<p>Click here for resources to provide the right tools and equipment on the job.</p> <p>PTVU (Personal Protective Equipment) RESCUE PLANNING SAVES LIVES</p> <p>"Provide" Highlighted Resource: Personal Protective Equipment for Home Construction Workers (English). Find information about fall protection in extended, adjustable, and folded sizes.</p>	<p>Click here for resources to train workers on equipment and work practices.</p> <p>Foundations for Safety Leadership 4 Residential Construction</p> <p>"Train" Highlighted Resource: Foundations for Safety Leadership for Residential Construction (FLS4RC) (English). Equips covering leaders. Take your crew to safety leadership with this interactive program.</p>

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STATE COMPENSATION FUND National Stand-Down: Certificate of Participation



Apply after your Stand-Down event!



The Occupational Safety and Health Administration recognizes
Your Company Name
 Project Title
 for participating in the OSHA
 2023 National Safety Stand-Down
 to Prevent Falls in Construction

OSHA
 Occupational Safety and Health Administration


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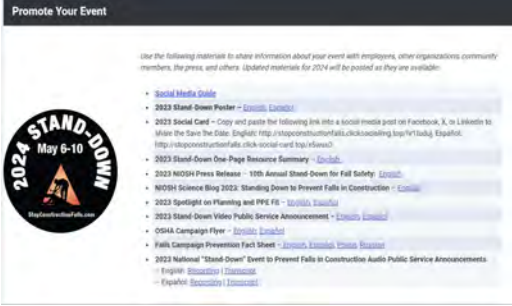
STATE COMPENSATION FUND Promote Your Stand-Down Event

- Tools to help you organize and promote
- Social Media Guide
- Promotes a positive safety culture
 - Employees
 - Customers
 - Insurance

Tell your own story or experience!



Success Stories - CPWR



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STATE COMPENSATION FUND How to Prepare for a Successful Stand-Down

- Start early! Designate a coordinator
- Who can you involve?
- Consider reviewing your fall prevention policies




Infographics - CPWR

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STATE COMPENSATION FUND National Stand-Down: Hard Hat Stickers

FREE Promotional Safety Items




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STATE FUND **Free Safety and Health Resources**



Accessing our safety resources is easy!

- ✓ [SafeAtWorkCA.com](https://www.SafeAtWorkCA.com)
- ✓ Explore our Safety Resource Center
- ✓ "Ask the Expert"
- ✓ Contact our Safety Support Unit at SafetySupport@scif.com



INFO: The deadline to file your 300 Log for 2022 with OSHA is March 2, 2023. Also, don't forget to post your 300A (Summary of Work-Related Injuries and Illnesses) at your workplace between now and April 30.

Cal/OSHA COVID-19 Regulation Updates

New COVID-19 regulations are now in place and will remain so through 2025. Learn about the changes and how they impact your business.

[READ MORE](#)

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STATE FUND **Online Safety Tools**




State Fund's IIPP BuilderSM

Free to All California Employers

Online tool to help you create a safety program for your business




State Fund's Online Safety UniversitySM


Free Safety Training for State Fund Policyholders

Occupational safety training with access to an easy-to-use learning management dashboard

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STATE FUND **State Fund Safety Services**



Industry-leading Safety Services

- Onsite Loss Prevention Services
- Ergonomics
- Industrial Hygiene
- Safety Support Unit

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STATE FUND **Safety and Health Campaigns**



Be their HERO
get home safe

Fall Prevention



Safety Culture



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STATE FUND **Safety Equipment Grants Program**



**Safety Equipment Grants
FAQs**



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STATE FUND **Questions?**




Your feedback is valued and used for future outreach.
Thank you for your time!

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STATE FUND **Thank You**

For all your safety resources please visit
SafeAtWorkCA.com



For more information:
www.safeatworkca.com
www.statefundca.com

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