

## Chapter 15: [Ladder and Scaffold Safety](#)

# Quick Start Summary

Product ID: [488](#) | Revision ID: 2248 | Date published: 15 July 2021 | Date effective: 15 July 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/ladderQuickstart.pdf>

## 1 Who needs to know about these requirements

The requirements of Ladder and Scaffold Safety apply to workers using any type of ladder – fixed (permanently attached), portable, mobile ladder stand, or mobile ladder platform – or scaffold, and their supervisors, line management, ladder and scaffold custodians, scaffold qualified persons, scaffold erectors/dismantlers, the ladder and scaffold safety program manager, and Facilities and Operations and Purchasing.

## 2 Why

Using a defective or damaged ladder or scaffold or using it incorrectly can lead to falls and injuries.

## 3 What do I need to know

- Every ladder, regardless of type, must be inspected before each use. Any ladder found to be defective must be tagged, removed from service, and repaired or destroyed.
- All fixed ladders must be tagged: red, do not use; green, no additional requirements; yellow, additional information/requirements on or attached to the tag. Defective fixed ladders must be reported to the program manager. New fixed ladders are subject to Building Inspection Office review.
- Scaffold use must be reviewed by a scaffold qualified person, who will approve purchase and rental, supervise erecting and dismantling, and perform the required inspections, maintaining an inspection tag on each scaffold.
- Scaffolds may only be assembled and disassembled by designated erectors and dismantlers and used by workers trained and authorized per the requirements in this chapter. Workers must inspect the scaffold before using.

## 4 When

These requirements take effect 15 July 2021.

## 5 Where do I find more information

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 15, “Ladder and Scaffold Safety”](#)

Or contact the [program manager](#).



## Chapter 15

# Ladder and Scaffold Safety

Product ID: [10](#) | Revision ID: [2247](#) | Date published: 15 July 2021 | Date effective: 15 July 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/pdfs/ESHch15.pdf>

## 1 Purpose

The purpose of this program is to ensure the safe use of ladders and scaffolds. The program covers selecting, procuring, erecting, dismantling, inspecting, and using ladders and scaffolds. It applies to workers (as ladder and scaffold users), supervisors, line management, ladder and scaffold custodians, scaffold qualified persons, scaffold erectors/dismantlers, the ladder and scaffold safety program manager, and Facilities and Operations and Purchasing.

## 2 Roles and Responsibilities

Functional roles and general responsibilities for each under this program are listed below. More detailed responsibilities and when they apply are provided in the requirements documents.

The roles may be performed by one or more individuals and one individual may play more than one role, depending on the structure of the organizations involved.. Responsibilities may be delegated.

### 2.1 Ladder User

- Completes required training before first use
- Follows safe use practices
- Verifies an inspection tag is attached to a fixed ladder. Green tagged ladders may be used without additional requirements; yellow tagged ladders will have additional information/requirements on or attached to the tag; red tagged ladders are not to be used.
- Performs pre-use inspection every time he or she uses a ladder and reports unsafe conditions to ladder custodian or supervisor
- Reports *fixed ladders* that fail the pre-use inspection to the ladder custodian

### 2.2 Scaffold User

- Completes required training before first use
- Follows safe use practices
- Verifies an inspection tag is attached to the scaffold with a scaffold qualified person's name, signature, and date before using a scaffold

- Performs pre-use inspection before accessing the scaffold and reports unsafe conditions to the qualified person listed on the inspection tag, custodian, or supervisor (confirming no change in conditions since last inspection)

## 2.3 Supervisor

- Ensures that workers perform pre-use inspections and follow proper safe use practices
- Contacts scaffold qualified person to evaluate the need for scaffolding
- Ensures only ladders that meet applicable regulations and standards are authorized for purchase
- Ensures scaffolds are reviewed by a scaffold qualified person before they are authorized for purchase

## 2.4 Fixed Ladder Custodian

- Is a building, facility, or area manager or person designated by line management
- Notifies the ladder and scaffold safety program manager when a ladder fails the required pre-use inspection
- Ensures fixed ladders are properly tagged (red, green, or yellow) and any ladder with special requirements (tagged yellow) has the requirements documented either on or attached to the tag

## 2.5 Scaffold Custodian

- Is designated by line management
- Ensures scaffolding is properly stored
- Ensures scaffold is properly maintained (in accordance with manufacturer's recommendations and scaffold qualified person instructions)

## 2.6 Scaffold Qualified Person

- Reviews scaffolding purchase requests and rental contracts before they are approved to ensure compliance with SLAC requirements
- Reviews work plans for work performed at heights to help evaluate if scaffolding is needed
- Supervises scaffolding erection and dismantling
- Ensures correct, color-coded inspection tag is in place near the access point and is kept current

## 2.7 Scaffold Erector / Dismantler

- Is trained and designated
- Erects and dismantles scaffolds according to scaffold qualified person instructions

## 2.8 Line Management

- Designates fixed ladder custodians

- Designates scaffold custodians

## 2.9 Facilities and Operations Division

- Maintains and repairs fixed ladders
- Responds to service requests for scaffolds

## 2.10 Purchasing Department

- Ensures purchases or rentals of scaffolds are reviewed by a scaffold qualified person

## 2.11 Ladder and Scaffold Safety Program Manager

- Must be a scaffold qualified and fall protection competent person
- Develops program requirements and develops training
- Maintains list of scaffold qualified persons and scaffold erectors/dismantlers in the [Competent and Qualified Persons and Engineers](#) site
- Maintains list of every fixed ladder and its status

# 3 Procedures, Processes, and Requirements

These documents describe the detailed requirements for this program and how to implement them:

- [Ladder and Scaffold Safety: Fixed Ladder Procedures](#) (SLAC-I-730-0A21C-001). Describes procurement, commissioning, inspection, and use of fixed ladders
- [Ladder and Scaffold Safety: Portable Ladder Requirements](#) (SLAC-I-730-0A21S-001). Describes procurement, selection, inspection, and use of all portable ladder types (extension, step, straight, and mobile)
- [Ladder and Scaffold Safety: Scaffold Erecting and Dismantling Procedure](#) (SLAC-I-730-0A21C-027). Describes process for selecting, erecting, dismantling, and inspecting scaffolds
- [Ladder and Scaffold Safety: Scaffold Purchasing Procedure](#) (SLAC-I-730-0A21C-028). Describes process for renting and purchasing scaffolds
- [Ladder and Scaffold Safety: Scaffold Use Procedure](#) (SLAC-I-730-0A21C-029). Describes safe use of scaffolds

These documents provide useful guidance; their use is not mandatory:

- [Ladder and Scaffold Safety: Using Portable Ladders Safely](#) (SLAC-I-730-0A21T-013). Provides guidance on how to choose a ladder appropriate for the task and use the ladder safely
- [Ladder and Scaffold Safety: Portable Ladder Pre-use Inspection Checklist](#) (SLAC-I-730-0A21J-001). Checklist of common inspection items, can be used to report problems

These are the forms and tools for this program:

- [Competent and Qualified Persons and Engineers](#). SharePoint site for approval and listing of competent and qualified personnel

## 4 Training

### 4.1 Ladder User

Any person who will use a ladder to reach an elevation greater than 48 inches is required to take the following course before performing such work:

- ESH Course 293, Ladder Safety Training ([ESH Course 293](#))

Any person who will use a fixed ladder requiring fall protection must complete additional training requirements specified in [Chapter 45, "Fall Protection"](#). (Fall protection requirements are posted on ladders.)

### 4.2 Scaffold User

Any person who will access or perform work on scaffolds must complete

- ESH Course 164, Safe Use of Scaffolding Training ([ESH Course 164](#)) (retrain every 36 months)
- ESH Course 293, Ladder Safety Training ([ESH Course 293](#))

### 4.3 Scaffold Erector / Dismantler

Any person who will erect or dismantle scaffolding must complete

- ESH Course 166, Scaffold Erector/Dismantler Training ([ESH Course 166](#)) (retrain every 36 months)
- ESH Course 293, Ladder Safety Training ([ESH Course 293](#))

### 4.4 Scaffold Qualified Person

The scaffold qualified person must complete

- ESH Course 165, Scaffold Qualified Person Training ([ESH Course 165](#)) (retrain every 36 months)
- ESH Course 166, Scaffold Erector/Dismantler Training ([ESH Course 166](#)) (retrain every 36 months)
- ESH Course 293, Ladder Safety Training ([ESH Course 293](#))

## 5 Definitions

*cage/well.* A *cage* is a guard that may be referred to as a cage or basket guard, which is an enclosure that is fastened to the side rails of the fixed ladder or to the structure to encircle the climbing space of the ladder for the safety of the person who must climb the ladder. A *well* is a permanent complete enclosure around a

fixed ladder, which is attached to the walls of the well. Proper clearances for a well will give the person who must climb the ladder the same protection as a cage.

*custodian, fixed ladder.* A person at SLAC, either a building, facility, or area manager or a person designated by such, responsible for meeting fixed ladder requirements

*custodian, scaffold.* A person at SLAC who has been designated by line management and is responsible for the scaffolding in his or her care

*ladder, fixed.* A ladder permanently attached to a structure, building, or equipment

*ladder, portable*

- *ladder, extension.* A non-self-supporting portable ladder adjustable in length. It consists of two or more sections traveling in guides or brackets so arranged as to permit length adjustment. Its size is designated by the sum of the lengths of the sections measured along the side rails.
- *ladder, mobile.* A movable, fixed height, self-supporting ladder consisting of wide flat treads in the form of steps which give access to a top step
- *ladder, step.* A self-supporting portable ladder, non-adjustable in length, having flat steps and a hinged back. Its size is designated by the overall length of the ladder measured along the front edge of the side rails.
- *ladder, straight (fixed-length).* A non-self-supporting portable ladder that is not adjustable in length

*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 regulation

*scaffold, system.* A scaffold consisting of posts with fixed connection points that accept runners, bearers, and diagonals that can be interconnected at predetermined levels

*scaffold, tube and coupler.* An assembly consisting of tubing which serves as posts, bearers, braces, ties, and runners, a base supporting the posts, and uprights, and serves to join the various members, usually used in fixed locations

## 6 References

### 6.1 External Requirements

The following are the external requirements that apply to this program:

- Title 8, *California Code of Regulations*, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 4, “Construction Safety Orders”, Article 25, “Ladders”
  - Section 1675, “General” ([8 CCR 1675](#))
  - Section 1676, “Job-Made Ladders” ([8 CCR 1676](#))

- Title 8, *California Code of Regulations*, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 7, “General Industry Safety Orders”, Group 1, “General Physical Conditions and Structures Orders”, Article 4, “Access, Work Space, and Work Areas”
  - Section 3276, “Portable Ladders” ([8 CCR 3276](#))
  - Section 3277, “Fixed Ladders” ([8 CCR 3277](#))
  - Section 3278, “Use of Fixed Ladders” ([8 CCR 3278](#))
- Title 8, *California Code of Regulations*, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 7, “General Industry Safety Orders”, Group 4, “General Mobile Equipment and Auxiliaries”, Article 23, “Mobile Ladder Stands and Scaffolds (Towers)”
  - Section 3627, “Mobile Ladder Stands” ([8 CCR 3627](#))
- Title 8, *California Code of Regulations*, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 4, “Construction Safety Orders”,
  - Article 21, “Scaffolds: General Requirements”, Section 1637, “General Requirements” ([8 CCR 1637](#))
  - Article 22, “Scaffolds – Various Types” ([8 CCR Subchapter 4, Article 22](#))
  - Article 23, “Suspended Scaffolds”, Section 1658, “Suspended Scaffolds – General” ([8 CCR 1658](#))
- American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.1, “Wood Safety Requirements” ([ANSI ASC A14.1](#))
- ANSI ASC A14.2, “Portable Metal - Safety Requirements” ([ANSI ASC A14.2](#))
- ANSI ASC A14.3, “Fixed – Safety Requirements” ([ANSI ASC A14.3](#))
- ANSI ASC A14.5, “Portable Reinforced Plastic – Safety Requirements” ([ANSI ASC A14.5](#))
- ANSI ASC A14.7, “Mobile Ladder Stands and Mobile Ladder Stand Platforms” ([ANSI ASC A14.7](#))
- American National Standards Institute (ANSI)/American Society of Safety Engineers (ASSE) A10.8, “Safety Requirements for Scaffolding” ([ANSI/ASSE A10.8](#))

## 6.2 Related Documents

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 45, “Fall Protection”](#)
- [Chapter 47, “Mobile Elevating Work Platforms \(MEWP\)”](#)



Chapter 15: [Ladder and Scaffold Safety](#)

# Fixed Ladder Procedures

Product ID: [485](#) | Revision ID: 2249 | Date published: 15 July 2021 | Date effective: 15 July 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/ladderProcedFixed.pdf>

## 1 Purpose

The purpose of these procedures is to ensure fixed ladders comply with regulations and remain safe for use. They cover procuring, commissioning, inspecting, and using fixed ladders. They apply to workers using fixed ladders, project managers (for the installation of new ladders), fixed ladder custodians, and the ladder and scaffold safety program manager.

## 2 Procedures

### 2.1 Procurement and Commissioning

Step	Person	Action
1.	Requester or project manager	Ensures that procurement includes a design review by the Building Inspection Office
2.	Requester or project manager	Notifies ladder and scaffold safety program manager when the fixed ladder is to be installed
3.	Ladder and scaffold safety program manager	Inspects ladder before first use

### 2.2 Use

Only persons who are current in ladder safety training can be assigned to perform work associated with using a fixed ladder (see Section 4, “Training”, of Chapter 15). If fall protection is required (as posted on the ladder), training must be current per [Chapter 45, “Fall Protection”](#).

Step	Person	Action
1.	Ladder user	Checks the ladder for an inspection tag <ul style="list-style-type: none"> <li>▪ If the tag is red, does not use the ladder. Contacts fixed ladder custodian to determine alternate means of access</li> <li>▪ If the tag is yellow, reviews information on the tag, including hazards and requirements, goes to step 2</li> <li>▪ If the tag is green, goes to step 2</li> </ul>

Step	Person	Action
2.	Ladder user	Conducts pre-use inspection (see Section 2.3)
3.	Ladder user	Uses ladder according to training and any special requirements noted on ladder inspection tag

## 2.3 Pre-use Inspections

Step	Person	Action
1.	Ladder user	Inspects ladder before each use Pre-use inspection items: <ul style="list-style-type: none"><li>▪ Anchorage to the structure is secure and the ladder is stable</li><li>▪ No defective steps, rungs, side rails, cage, or other structural damage</li><li>▪ No corroded metal parts or exposed sharp edges</li><li>▪ No oil, grease, or dirt build up</li><li>▪ No indication that the ladder should not be in service (a red tag or DO NOT USE sign)</li></ul>
2.	Ladder user	If ladder passes inspection, continues use procedure (see Section 2.2) If ladder fails inspection, goes to step 4
3.	Ladder user	If the ladder fails inspection for a safety-related reason, immediately tags the ladder out (attaches DO NOT USE sign) and removes ladder from service by applying a positive control to block access, such as stringing a chain or rope across the rungs. Immediately informs the supervisor, custodian, and ladder and scaffold safety program manager.
4.	Ladder and scaffold safety program manager	Responds to reports of unsafe ladders by working with the custodian and line management to repair or remove the ladder

## 3 Forms

The following forms and systems are required by these requirements:

- None

## 4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- Fixed ladder custodians are responsible for ensuring fixed ladders are properly tagged (red, green, or yellow) and any ladder with special requirements (tagged yellow) has the requirements documented either on or attached to the tag
- The ladder and scaffold safety program manager maintains a list of every fixed ladder and its status

## 5 References

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 15, “Ladder Safety”](#)
- [Chapter 45, “Fall Protection”](#)



Chapter 15: [Ladder and Scaffold Safety](#)

## Portable Ladder Requirements

Product ID: [486](#) | Revision ID: 2250 | Date published: 15 July 2021 | Date effective: 15 July 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/ladderReqPortable.pdf>

### 1 Purpose

The purpose of these requirements is to ensure portable ladders comply with Cal/OSHA regulations and industry standards for safe use. They cover the procurement, inspection, and use of all portable ladder types (extension, step, straight, and mobile). They apply to workers using portable ladders, ladder custodians, and the ladder and scaffold safety program manager.

### 2 Requirements

#### 2.1 Procurement

Only ladders that comply with the applicable American National Standards Institute (ANSI) standard for the ladder type can be authorized for purchase.

*Note*      *The procurement of wooden ladders is discouraged due to more intensive maintenance and inspection requirements (see [ANSI ASC A14.1](#)).*

#### 2.2 Selection

The ladder appropriate to the work must be selected based on required height, type, and design.

- Always use portable ladders manufactured to ANSI ASC A14 series standards

*Note*      *Fiberglass or composite ladders with a duty rating of Type IAA, Special Duty Rugged Professional, are highly recommended.*

- Select the correct length or height of ladder for the task:
  - Extension ladders must extend three feet above the roof or platform.
  - Extension ladders must be long enough so that the worker stands below the third from the last rung.
  - Step ladders must be high enough so that the worker stands below the second rung from the top.

For more information, see [Ladder Safety: Using Portable Ladders Safely](#).

## 2.3 Inspections

### 2.3.1 Pre-use

Ladder users must visually inspect a ladder before each use. Inspection items are provided in [Ladder Safety: Portable Ladder Pre-use Inspection Checklist](#).

If the ladder fails inspection, the ladder must be tagged out immediately (attach DO NOT USE sign) and removed from service by locking it out. In addition, the ladder custodian or supervisor must be informed immediately, who must then ensure the ladder cannot be used until it is repaired or disposed of.

### 2.3.2 Ongoing

The ladder and scaffold safety program manager provides ongoing safety oversight and if a sub-standard ladder is identified he/she will take it out of service and notify the affected supervisor or custodian. The ladder must then be repaired or destroyed.

## 2.4 Use

### 2.4.1 General Safety Rules

These rules apply to the use of all portable ladder types:

- Complete all required ladder safety training before using a ladder to reach a height of 48 inches or higher
- Only use a ladder for the purpose for which it is designed
- Do not let anyone else use a ladder while you are
- Check the rating of the ladder and verify that you will not exceed its capacity (include body weight and tools)
- Always face the ladder when ascending or descending
- Always place a ladder only on a stable surface (never on a box or any unstable area)
- When used in a doorway, barricade or guard the area around the ladder
- Do not move, shift, or extend a ladder while it is occupied – never “walk” a ladder
- Do not overextend sideways. Use the belt buckle rule: keep your belt buckle positioned between the side rails.
- Use both hands to climb the ladder – carry objects in a backpack or on tool belt
- Do not carry any object that may cause you to lose balance or fall
- If an object cannot be carried safely use a rope to raise or lower it
- Secure ladders during transport and store properly to avoid damage
- Do not use a metal ladder when the risk of contact with an energized conductor or circuit exists
- Do not paint wooden ladders. Limited marking or stenciling is permissible.

- Do not modify a portable ladder

## 2.4.2 Safety Rules for Specific Ladder Types

These additional safety rules apply to the specified ladder type.

### 2.4.2.1 Step Ladders

- Do not use the ladder top (cap) or the rung below it for standing or stepping
- Do not stand on rear bracing or spreaders
- Never use a step ladder that is not fully opened and be sure the spreaders are locked

### 2.4.2.2 Ladder Stands

- Ensure safety feet or non-skid material are functional and in good condition
- Ensure spring mechanisms and locking brakes are functional and in good condition
- Do not over-reach or stand on tip-toes to reach beyond the ladder; find a higher ladder
- Do not stand on hand rails (if present)

### 2.4.2.3 Single and Extension Ladders

- Remove from service single and extension ladders without safety feet
- Do not use the top section of an extension ladder as a straight ladder
- Do not tie or fasten ladders together unless specifically designed for such use
- Do not make adjustments when a user is on the ladder and stand at the base when making length adjustments
- Position ladder for a 1:4 lean ratio; that is, one foot out for every four feet of elevation
- Tie off ladders whenever possible at or near the top for added stability. Tie off at the bottom if there is difficulty in maintaining stability. When tying off or untying the top, or if the ladder cannot be tied off, someone on the ground should hold the ladder to ensure it remains stable.
- Extension ladder overlap requirements for the two sections:
  - Up to 36 feet in length, the overlap must be at least three feet
  - 36 to 48 feet in length, the overlap must be at least four feet
  - 48 to 60 feet in length, the overlap must be at least five feet
- Place ladders with both side rails supported unless equipped with a single support attachment
- Extend the ladder a minimum of three feet above the landing area when accessing roofs, landings, or open floor levels

### 2.4.2.4 Mobile Ladder Stands

- Only use on a level surface
- Always face the steps when ascending or descending
- Do not move the ladder when a person is using it

- Do not store material or equipment on the steps or platform
- Do not extend the height of a platform by adding an extension or object to the stand
- Do not use to access an elevated or other surface or work area

### 3 Forms

The following forms and systems are required by these requirements:

- [Ladder Safety: Portable Ladder Pre-use Inspection Checklist](#) (SLAC-I-730-0A21J-001). Checklist of common inspection items, can be used to report problems, does not need to be kept

### 4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- None

### 5 References

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 15, “Ladder Safety”](#)
  - [Ladder Safety: Using Portable Ladders Safely](#) (SLAC-I-730-0A21T-013)

Other Documents

- American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.1, “Wood Safety Requirements” ([ANSI ASC A14.1](#))





Chapter 15: [Ladder and Scaffold Safety](#)

# Portable Ladder Pre-use Inspection Checklist

Product ID: [487](#) | Revision ID: 2251 | Date Published: 15 July 2021 | Date Effective: 15 July 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/ladderFormPreUsePortable.pdf>

ENVIRONMENT, SAFETY & HEALTH DIVISION

Ladder users must visually inspect portable ladders before each use. (See [Ladder and Scaffold Safety: Portable Ladder Requirements](#) [SLAC-I-730-0A21S-001]). Listed below are common inspection items for reference. If a ladder **fails** any inspection item, remove the ladder from service immediately, tag it out with a DO NOT USE sign, and report it:

- If the ladder is owned by a subcontractor, report the problem to the SLAC field construction manager/service manager.
- If the ladder is owned by SLAC, report the problem to the ladder custodian (if known) or the area or building manager.

This form may be used to report failed inspection items.

User name: \_\_\_\_\_ Phone: \_\_\_\_\_ Inspection date: \_\_\_\_\_

Ladder location: \_\_\_\_\_

Sample form, see [URL at top of page](#)

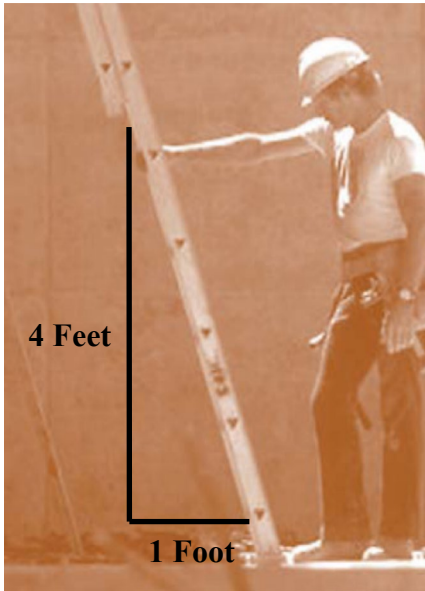
Inspection Item	Ladder Type			
	Step Ladder	Extension Ladder	Fixed Length Ladder	Ladder Stand (Mobile and Platform)
Manufacturer's labels present and legible <i>(must include manufacturer, month / year of manufacture, maximum rated load)</i>	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
No indication that the ladder should not be in service, such as the presence of a DO NOT USE sign	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Ladder is the proper length for the job	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
No evidence of unusual damage, wear, deterioration, corrosion, sharp edges, burrs	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
All bolts, nuts, or connections tight; no loose steps, rungs, hardware	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Steps are free of obstacles, grease, oil, or dirt	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Safety or non-skid feet (if provided) are functional	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Rungs or steps are slip resistant (knurled, corrugated)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
No cracks in welds or other metal parts	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Inspection Item	Ladder Type				Ladder Stand (Mobile and Platform)
	Step Ladder	Extension Ladder	Fixed Length Ladder		
No missing or damaged truss block supports, reinforcing rods, or knee braces	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	–	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	–	
No delaminations, blisters, visible cracks, no splits in rungs, rails, or other structural parts	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	–	
Spreader or locking device fully functional	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	–	–	–	
No damaged or defective pulley, rung locks, or rope	–	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	–	–	
Locking mechanism and casters (wheels) (if present): intact and operable	–	–	–	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
Guard handrails secure (required if more than 4 steps)	–	–	–	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
Ladder is completely stable (no wobbling, resting on an even surface, surface not slippery)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
<b>Work Area</b>					
Area cordoned off (barricaded if necessary)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
No electrical hazards (immediate and surrounding areas)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
No additional hazards	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	

Sample form, see URL at top of page

**Notes**

- Place the ladder for a 1:4 lean ratio: one foot out for every four feet up.



### 5. Work Safely

- Always do this
  - Follow manufacturer's recommendations for blocking and securing the ladder.
  - Face the ladder when climbing up and down.
  - Perform your work in line with the ladder, keeping your belt buckle between the rails.
  - Follow the "three-point" rule; keep both feet and one hand or both hands and one foot in contact with the ladder.
  - Keep the top and base areas of a ladder clear of obstructions.
  - Tie off extension ladders.

### Do Not

- Do not stand on the ladder top (cap) or on the next rung right below it.
- Do not "walk" the ladder over; instead, get off the ladder and move it to the current work area.
- Do not work at height if you are not feeling well or you are taking medication that may impair your balance – let your supervisor know!



### Training

Workers who will be using a ladder to reach an elevation greater than 48 inches are required to take the following course before first use:

- ESH Course 293, Ladder Safety Training ([ESH Course 293](#))

### References

[SLAC Environment, Safety, and Health Manual \(SLAC-I-720-0A29Z-001\)](#), [Chapter 15, "Ladder and Scaffold Safety"](#)

## Using Portable Ladders Safely





## 1. Evaluate the Task or Work

- What needs to be accomplished?
- Where will the work be performed?
- Has training for this task been completed?



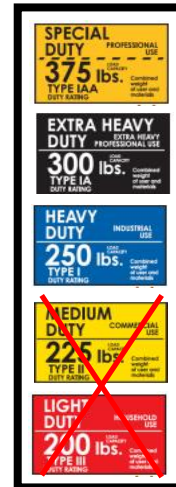
## 2. Select the Correct Ladder for the Job

- Always use ladders manufactured to ANSI ASC A14-series standards.
- Use only ladders rated as heavy duty or higher (for the correct rating, include weight of both the worker and tools).
- For electrical work, select only a dry ladder – preferably made of fiberglass and never one made of metal.
- Select the length or height of ladder for the task at hand:
  - Extension ladders should extend 3 feet above the roof or platform.

- Extension ladders should be long enough that you stand below the third rung from the top.
- Step ladders should be high enough so that you stand below the second rung from the top.

### Do Not

- Do not use a chair or desk as a ladder.
- Do not use a step ladder as a lean-to ladder.



## 4. Position Ladders Correctly

- Rest the base of ladders on firm, level, dry, non-slippery surfaces, away from hallways, passageways, doorways, driveways, or heavy traffic areas.
- Use leg levelers when necessary to provide firm support.



## 3. Inspect Ladders before Using

- If a ladder shows any of these signs of an unsafe condition, remove it from service:
  - Is the ladder damaged, broken, bent, or delaminated?
  - Does it lack structural integrity; have broken treads or rails?
  - Are parts loose or missing?
  - Is the manufacturer's rating label missing or not readable?
  - Are accessories (leg levelers, paint shelves, stand-off shelves) in bad condition?
  - Step ladders: do the hinges open fully and do the spreaders lock?
  - Extension ladders: do the rung locks function?

Chapter 15: [Ladder and Scaffold Safety](#)

# Scaffold Purchasing Procedure

Product ID: [522](#) | Revision ID: 2253 | Date published: 15 July 2021 | Date effective: 15 July 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/scaffoldProcedPurchase.pdf>

## 1 Purpose

The purpose of this procedure is to ensure scaffolding meets SLAC requirements. It covers renting and purchasing scaffolding and associated components. It applies to workers, supervisors, scaffold qualified persons, and Purchasing.

## 2 Procedure

Step	Person	Action
1.	Requester	Contacts a scaffold qualified person ( <a href="#">Competent and Qualified Persons and Engineers</a> ) for assistance with identifying the scaffolding needed Initiates purchase or rental contract request using a SLAC-approved method (see <a href="#">SLAC How Do I: Purchase an Item or Service</a> )
2.	Scaffold qualified person	Reviews the purchase request(s) for compliance with SLAC requirements: <ul style="list-style-type: none"> <li>▪ If specifications meet requirements, approves</li> <li>▪ If specifications do not meet requirements, assists requester to identify compliant scaffolding or components</li> </ul> <p><i>Note: design specifications may be requested before the purchase or rental of the scaffolding to assist the scaffold qualified person's evaluation.</i></p> <p><b>Important:</b> scaffolds mounted on vehicles are not allowed at SLAC.</p>
3.	Purchaser	Places purchase request
4.	Requester	Contacts a scaffold qualified person upon receipt of equipment for a pre-use inspection (see <a href="#">Ladder and Scaffold Safety: Scaffold Erecting and Dismantling Procedure</a> )

## 3 Forms

The following are forms and systems required by this procedure:

- [Competent and Qualified Persons and Engineers](#). SharePoint site for approval and listing of competent and qualified personnel

## 4 Recordkeeping

The following recordkeeping requirements apply for this procedure:

- None

## 5 References

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 15, “Ladder and Scaffold Safety”](#)
  - [Ladder and Scaffold Safety: Scaffold Erecting and Dismantling Procedure](#) (SLAC-I-730-0A21C-027)

Other SLAC Documents

- [SLAC How Do I: Purchase an Item or Service](#)

Chapter 15: [Ladder and Scaffold Safety](#)

# Scaffold Erecting and Dismantling Procedure

Product ID: [521](#) | Revision ID: 2254 | Date published: 15 July 2021 | Date effective: 15 July 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/scaffoldProcedErectDismant.pdf>

## 1 Purpose

The purpose of this procedure is to ensure scaffolding is adequate for the work to be performed and properly erected and dismantled. It covers selecting, erecting, dismantling, and inspecting all types of scaffolds. It applies to workers using scaffolds, supervisors, scaffold custodians, scaffold qualified persons, scaffold erectors/dismantles, and Facilities and Operations.

## 2 Procedure

Step	Person	Action
<b>Scaffold Request</b>		
1.	Requester	Contacts a scaffold qualified person for assistance ( <a href="#">Competent and Qualified Persons and Engineers</a> )
2.	Scaffold qualified person	<ul style="list-style-type: none"> <li>▪ Assists the requester in determining the best method of accessing the work area based on the work to be performed and the location of the work</li> <li>▪ Determines the need to screen the platform area based on the work being performed, vehicle or personnel traffic, and other conditions</li> <li>▪ Requests the assistance of a fall protection competent or qualified person if needed due to the work location, restrictions in the area or building the work is located in, and choice of fall protection</li> </ul>
3.	Requester	<p>If a scaffold is to be used:</p> <ul style="list-style-type: none"> <li>▪ If requester has an approved standard system scaffold goes to step 6</li> <li>▪ Otherwise, submits a Facilities service request by using the <a href="#">Facilities Service Request System</a> or calling ext. 8901. Informs the Facilities Service Desk of the name of the scaffold qualified person who is assisting with scaffold. (All requests must contain the word “scaffold” within the request; presence of the word “scaffold” triggers e-mails.)</li> </ul> <p><i>Note: if a non-standard scaffold is required, enlists, with assistance of the scaffold qualified person, a qualified engineer to design or review the design of that scaffold, before submitting request to Facilities</i></p> <p><i>Note: if the scaffold needed is not available at SLAC, follows <a href="#">Ladder and Scaffold Safety: Scaffold Purchasing Procedure</a> to rent or buy</i></p>
4.	Facilities Service Desk	Generates service request documentation



Step	Person	Action
5.	Scaffold erector/dismantler supervisor	Is notified by requester (for standard system scaffolds) or Facilities Service Desk of request
6.	Scaffold custodian	Is contacted by the Facilities Service Desk, the scaffold erector/dismantler supervisor, or the scaffold qualified person of the need to use the scaffold in his or her care

### Scaffold Erection

7.	Scaffold erector/dismantler supervisor	<p>Contacts the scaffold qualified person assisting the requester and the requester to</p> <ul style="list-style-type: none"> <li>▪ Evaluate the work required</li> <li>▪ Inspect the location</li> <li>▪ Confirm the best scaffold choice</li> <li>▪ Determine the scaffold's duration</li> <li>▪ Schedule day, time, and location for the scaffold erection</li> </ul>
8.	Scaffold erector/dismantler supervisor	<ul style="list-style-type: none"> <li>▪ Develops work plan</li> <li>▪ Includes a scaffold qualified person and, as appropriate, subject matter experts (SMEs) in work planning and control (WPC) (see <a href="#">Chapter 2, "Work Planning and Control"</a>)</li> <li>▪ Reviews and includes procedures required by manufacturer as determined by the type of scaffolding</li> <li>▪ Includes in the work plan the hold and inspection points the scaffold qualified person requires</li> <li>▪ Has a toe board installed for platforms over 6 feet in height or as determined by the scaffold qualified person</li> <li>▪ Ensures wood used in wood scaffolding, used indoors, is approved by the fire marshal before its use</li> <li>▪ Ensures scaffold is guyed, tied-off, or braced if its height to base ratio exceeds three to one</li> </ul>
9.	Scaffold erector/dismantler supervisor	Contacts the area / building manager to arrange for WPC release
10.	Scaffold erector/dismantler supervisor	Conducts pre-job/tailgate meeting with erectors/dismantlers to cover the work, hazards, and mitigations (scaffold qualified person may attend)
11.	Scaffold erector/dismantler supervisor	Supervises, with assistance of and scaffold qualified person, scaffold assembly to ensure standards and regulatory requirements are met
12.	Scaffold erector/dismantler	<ul style="list-style-type: none"> <li>▪ Erects scaffold per the instructions from the scaffold erector/dismantler supervisor, the scaffold qualified person, and training</li> <li>▪ Advises scaffold erector/dismantler supervisor when finished</li> </ul>
13.	Scaffold erector/dismantler supervisor	As soon as the scaffold is self-supporting, contacts the scaffold qualified person to inspect the scaffold before its release for use



Step	Person	Action
14.	Scaffold qualified person	<p>Inspects scaffold and attaches at the access point(s) the appropriate tag:</p> <ul style="list-style-type: none"> <li>▪ Red: DO NOT USE, SCAFFOLD IS BEING ERECTED OR DISMANTLED</li> <li>▪ Yellow: SCAFFOLD DOES NOT MEET OSHA REQUIREMENTS. WORKERS MUST USE FALL PROTECTION WHEN WORKING FROM THIS SCAFFOLD</li> <li>▪ Green: SCAFFOLD IS OK FOR USE</li> </ul> <p>Tag must include the scaffold capacity:</p> <ul style="list-style-type: none"> <li>▪ Light duty: 25 pounds per square foot</li> <li>▪ Medium duty: 50 pounds per square foot</li> <li>▪ Heavy duty: 75 pounds per square foot</li> <li>▪ Special duty: greater than 75 pounds per square foot as determined by a qualified engineer</li> </ul> <p>Places name, signature, and date of the inspection on the tag</p>
15.	Scaffold qualified person	<p>Informs the worker of the hazards, mitigations, and allowed uses of the scaffolding</p>
16.	Scaffold user	<p>Uses the scaffold following requirements of <a href="#">Ladder and Scaffold Safety: Scaffold Use Procedure</a></p>
<b>Scaffold Dismantling</b>		
17.	Scaffold user	<p>Informs requester that the work requiring a scaffold has ended</p>
18.	Requester	<p>Repeats steps 3 and 5, indicating the scaffold is to be dismantled</p>
19.	Scaffold erector/dismantler supervisor	<ul style="list-style-type: none"> <li>▪ Repeats steps 7 through 11</li> <li>▪ Ensures the work site is left in a clean and safe condition</li> <li>▪ Requests inspection from scaffold qualified person</li> </ul>
20.	Scaffold erector/dismantler	<ul style="list-style-type: none"> <li>▪ Dismantles scaffold per the instructions from the scaffold erector/dismantler supervisor, the scaffold qualified person, and training</li> <li>▪ Advises scaffold erector/dismantler supervisor when finished</li> </ul>
21.	Scaffold erector/dismantler supervisor	<ul style="list-style-type: none"> <li>▪ Ensures the work site is left in a clean and safe condition</li> <li>▪ Requests inspection from scaffold qualified person</li> </ul>
22.	Scaffold qualified person	<ul style="list-style-type: none"> <li>▪ Inspects scaffold, requests changes or modifications if necessary to comply with regulations, standards, and requirements</li> <li>▪ If scaffold requires maintenance or repair, informs the scaffold custodian and places a DO NOT USE tag on the scaffold. Disposition of the scaffold is performed in consultation with the scaffold custodian.</li> </ul>
23.	Scaffold custodian	<ul style="list-style-type: none"> <li>▪ Ensures scaffold maintenance is performed if needed</li> <li>▪ Stores the scaffold according the manufacturer's recommendations and/or as instructed by the scaffold qualified person</li> </ul>

### 3 Forms

The following forms and systems are required by this procedure:

- [Competent and Qualified Persons and Engineers](#). SharePoint site for approval and listing of competent and qualified personnel
- [Facilities and Operations Project and Work Request System](#). System for requesting services from Facilities
- A scaffold tag, indicating status and capacity of the scaffold, and name and signature of the scaffold qualified person and date of inspection

## 4 Recordkeeping

The following recordkeeping requirements apply for this procedure:

- A scaffold tag must be attached to the scaffold as soon as possible by the scaffold qualified person responsible for the scaffold. The scaffold tag is required for the duration of the scaffold's erection, use, and dismantling.

## 5 References

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 15, "Ladder and Scaffold Safety"](#)
  - [Ladder and Scaffold Safety: Scaffold Use Procedure](#) (SLAC-I-730-0A21C-029)
  - [Ladder and Scaffold Safety: Scaffold Purchasing Procedure](#) (SLAC-I-730-0A21C-028)
- [Chapter 2, "Work Planning and Control"](#)
- [Chapter 45, "Fall Protection"](#)

Chapter 15: [Ladder and Scaffold Safety](#)

# Scaffold Use Procedure

Product ID: [523](#) | Revision ID: 2255 | Date published: 15 July 2021 | Date effective: 15 July 2021

URL: <https://www-group.slac.stanford.edu/esh/eshmanual/references/scaffoldProcedUse.pdf>

## 1 Purpose

The purpose of this procedure is to ensure the safe use of scaffolds. It covers inspecting and using scaffolds, both for working on and accessing other locations. It applies to workers using scaffolds, supervisors, and scaffold qualified persons.

## 2 Procedure

Step	Person	Action
<b>Scaffold Inspection</b>		
1.	Supervisor	Ensures user is trained, authorized, and released for using a scaffold following the requirements of work planning and control (WPC) (see <a href="#">Chapter 2, "Work Planning and Control"</a> )
2.	Scaffold user	<ul style="list-style-type: none"> <li>▪ Inspects the scaffold before using, following training</li> <li>▪ Verifies a green tag is attached to the scaffold with a scaffold qualified person's name, signature, and date and the capacity of the scaffold:               <ul style="list-style-type: none"> <li>▪ Light duty: 25 pounds per square foot</li> <li>▪ Medium duty: 50 pounds per square foot</li> <li>▪ Heavy duty: 75 pounds per square foot</li> <li>▪ Special duty: greater than 75 pounds per square foot as determined by a qualified engineer</li> </ul> </li> </ul>
3.	Scaffold user	If any changes or alterations to the scaffold are found <ul style="list-style-type: none"> <li>▪ Informs the scaffold qualified person (<a href="#">Competent and Qualified Persons and Engineers</a>)</li> <li>▪ Prevents others from using the scaffold by the use of a tag, danger or caution tape, or some other means until it is re-inspected by the scaffold qualified person</li> </ul>
4.	Scaffold user	Consults with the scaffold qualified person, if needed, on pre-use inspection, maintaining the scaffold, and any unique requirements for the scaffold's use
5.	Scaffold qualified person	<ul style="list-style-type: none"> <li>▪ Assists user as needed</li> <li>▪ Re-inspects the scaffold as needed</li> </ul>
<b>Scaffold Use</b>		

Step	Person	Action
6.	Scaffold user	Uses the scaffold according to training and any additional guidance or requirements specified by the scaffold qualified person
7.	Scaffold user	<p>May ride on a rolling scaffold or tower provided all these conditions are met.</p> <ul style="list-style-type: none"><li>▪ The floor or surface is within 3 degrees of level, and free from pits, holes, or obstructions.</li><li>▪ The minimum dimension of the scaffold base is half the height or more. Outriggers may be used to increase the base dimension to meet the minimum requirement and if used must be on both sides of the scaffold.</li><li>▪ The wheels must support the scaffold and four times the rated load. All wheels must be locking and two must swivel.</li><li>▪ The manual force used to move the scaffold must be applied as close to the base as practicable, but not more than 5 feet (1.5 meters) above the supporting surface of the scaffold.</li><li>▪ Before a scaffold is moved, each user on the scaffold must be made aware of the move.</li><li>▪ No person may be on any part of the scaffold that extends outward beyond the wheels, casters, or other supports.</li><li>▪ A rolling scaffold may be moved by the person riding provided the platform is 4 feet or less high, the platform is 20 inches or greater in width, and the scaffold meets all of the conditions outlined above.</li></ul> <p>These requirements can be found in the Title 8, <i>California Code of Regulations</i>, “Industrial Relations”, Section 1646, “Tower Scaffolds and Rolling Scaffolds, Wood or Metal” (<a href="#">8 CCR 1646</a>).</p> <p><b>Important:</b> <i>scaffolds mounted on vehicles are not allowed at SLAC.</i></p>

### 3 Forms

The following forms and systems are required by this procedure:

- [Competent and Qualified Persons and Engineers](#). SharePoint site for approval and listing of competent and qualified personnel

### 4 Recordkeeping

The following recordkeeping requirements apply for this procedure:

- None

### 5 References

[SLAC Environment, Safety, and Health Manual](#) (SLAC-I-720-0A29Z-001)

- [Chapter 15, “Ladder and Scaffold Safety”](#)

– [Ladder and Scaffold Safety: Scaffold Erecting and Dismantling Procedure](#) (SLAC-I-730-0A21C-027)

- [Chapter 2, “Work Planning and Control”](#)
- [Chapter 45, “Fall Protection”](#)

#### Other Documents

- Title 8, *California Code of Regulations*, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 4, “Construction Safety Orders”, Article 22, “Scaffolds – Various Types”, Section 1646, “Tower Scaffolds and Rolling Scaffolds, Wood or Metal” ([8 CCR 1646](#))



# 851>Cal/OSHA Implementation Plan: Ladder and Scaffold Safety

This form is for documenting changes to a program and the program’s supporting resources (ESH Manual chapter or similar program description, training courses, databases, and so on) resulting from the adoption of the model Revolutionary Working Group (RWG) contract (see below) and the associated DOE variance from 10 CFR 851, “Worker Safety and Health Program”. The purpose is to ensure consistent, concise descriptions of the resulting changes. The form is to be completed by the program manager and sent to the DOE as a cover sheet with the revised documents. The general process is as follows:

1. Program manager completes form
2. Changes to program resources made and reviewed following normal revision processes
3. DOE sent draft form and revisions
4. Changes to program resources published
5. DOE sent final form and revisions

## 1 Introduction

The RWG model contract and 10 CFR 851 variance are intended to simplify and improve the implementation of worker safety and health requirements by tailoring the laws, regulations, and standards that apply while achieving a level of protection equivalent to the requirements of 10 CFR 851. This mostly entails replacing federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910 and 1926) with Cal/OSHA regulations (8 CCR) as external requirements to be complied with but may also involve other laws and regulations and either different versions of industry standards than those cited in 10 CFR 851 or entirely different standards. (One purpose of this form is to capture the specific changes in external requirements for each program.) (For more information on this effort, see the variance application in [851>Cal/OSHA](#) resources.)

## 2 Plan

Field Number	Field Name	Field
1.	Program name	<a href="#">Ladder and Scaffold Safety</a>
2.	Program manager	<a href="#">Christenson, Robin</a>
3.	LBNL counterpart	Goodwin, Kevin (Ladders); Tucker, Gene (Scaffolds) ( <a href="#">SME list</a> ) ( <a href="#">LBNL Phonebook</a> )
4.	Program documents	<p><i>The following is a list of existing program documents, to be reviewed by the program manager to determine which will need to be revised to reflect 851&gt;Cal/OSHA changes.</i></p> <ul style="list-style-type: none"><li>▪ <a href="#">ESH Manual Chapter 15: Ladder and Scaffold Safety</a></li><li>▪ <a href="#">Ladder and Scaffold Safety: Quick Start Summary</a></li><li>▪ <a href="#">Ladder and Scaffold Safety: Fixed Ladder Procedures</a></li><li>▪ <a href="#">Ladder and Scaffold Safety: Portable Ladder Requirements</a></li><li>▪ <a href="#">Ladder and Scaffold Safety: Portable Ladder Pre-Use Inspection Checklist</a></li><li>▪ <a href="#">Ladder and Scaffold Safety: Using Portable Ladders Safely</a></li><li>▪ <a href="#">Ladder and Scaffold Safety: Scaffold Purchasing Procedure</a></li></ul>

Field Number	Field Name	Field
		<ul style="list-style-type: none"> <li>▪ <a href="#">Ladder and Scaffold Safety: Scaffold Erecting and Dismantling Procedure</a></li> <li>▪ <a href="#">Ladder and Scaffold Safety: Scaffold Use Procedure</a></li> </ul>
5.	Training courses	<p>The following is a list of existing training courses, to be reviewed by the program manager to determine which will need to be revised to reflect 851&gt;Cal/OSHA changes.</p> <p><i>Course materials are available for review.</i></p> <ul style="list-style-type: none"> <li>▪ ESH Course 293, Ladder Safety Training (<a href="#">ESH Course 293</a>)</li> <li>▪ ESH Course 164, Safe Use of Scaffolding Training (<a href="#">ESH Course 164</a>)</li> <li>▪ ESH Course 165, Scaffold Qualified Person Training (<a href="#">ESH Course 165</a>)</li> <li>▪ ESH Course 166, Scaffold Erector/Dismantler Training (<a href="#">ESH Course 166</a>)</li> <li>▪ ESH Course 202, Fall Protection/Competent Training (<a href="#">ESH Course 202</a>)</li> </ul>
6.	Other program resources	<p><i>The following is a list of existing program resources, to be reviewed by the program manager to determine which will need to be revised to reflect 851&gt;Cal/OSHA changes.</i></p> <ul style="list-style-type: none"> <li>▪ <a href="#">Competent and Qualified Persons and Engineers</a></li> </ul>
7.	Current external requirements	<p><i>The following is a list of current external requirements for this program, as identified in the program documents above.</i></p> <ul style="list-style-type: none"> <li>▪ Title 8, California Code of Regulations, "Industrial Relations", Division 1, "Department of Industrial Relations", Chapter 4, "Division of Industrial Safety", Subchapter 4, "Construction Safety Orders", Article 25, "Ladders", Section 1675, "General" (<a href="#">8 CCR 1675</a>)</li> <li>▪ Title 8, California Code of Regulations, "Industrial Relations", Division 1, "Department of Industrial Relations", Chapter 4, "Division of Industrial Safety", Subchapter 4, "Construction Safety Orders", Article 25, "Ladders", Section 1676, "Job-Made Ladders" (<a href="#">8 CCR 1676</a>)</li> <li>▪ Title 8, California Code of Regulations, "Industrial Relations", Division 1, "Department of Industrial Relations", Chapter 4, "Division of Industrial Safety", Subchapter 7, "General Industry Safety Orders", Group 1, "General Physical Conditions and Structures Orders", Article 4, "Access, Work Space, and Work Areas", Section 3276, "Portable Ladders" (<a href="#">8 CCR 3276</a>)</li> <li>▪ Title 8, California Code of Regulations, "Industrial Relations", Division 1, "Department of Industrial Relations", Chapter 4, "Division of Industrial Safety", Subchapter 7, "General Industry Safety Orders", Group 1, "General Physical Conditions and Structures Orders", Article 4, "Access, Work Space, and Work Areas", Section 3277, "Fixed Ladders" (<a href="#">8 CCR 3277</a>)</li> <li>▪ Title 8, California Code of Regulations, "Industrial Relations", Division 1, "Department of Industrial Relations", Chapter 4, "Division of Industrial Safety", Subchapter 7, "General Industry Safety Orders", Group 1, "General Physical Conditions and Structures Orders", Article 4, "Access, Work Space, and Work Areas", Section 3278, "Use of Fixed Ladders" (<a href="#">8 CCR 3278</a>)</li> <li>▪ Title 8, California Code of Regulations, "Industrial Relations", Division 1, "Department of Industrial Relations", Chapter 4, "Division of Industrial Safety", Subchapter 7, "General Industry Safety Orders", Group 4, "General Mobile Equipment and Auxiliaries", Article 23, "Mobile Ladder Stands and Scaffolds (Towers)", Section 3627, "Mobile Ladder Stands" (<a href="#">8 CCR 3627</a>)</li> <li>▪ Title 8, California Code of Regulations, "Industrial Relations", Division 1, "Department of Industrial Relations", Chapter 4, "Division of Industrial Safety", Subchapter 4, "Construction Safety Orders", Article 21, "Scaffolds: General Requirements", Section 1637, "General</li> </ul>



Field Number	Field Name	Field
		<p>Requirements” (<a href="#">8 CCR 1637</a>)</p> <ul style="list-style-type: none"> <li>▪ Title 8, California Code of Regulations, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 4, “Construction Safety Orders”, Article 22, “Scaffolds – Various Types” (<a href="#">8 CCR Subchapter 4, Article 22</a>)</li> <li>▪ Title 8, California Code of Regulations, “Industrial Relations”, Division 1, “Department of Industrial Relations”, Chapter 4, “Division of Industrial Safety”, Subchapter 4, “Construction Safety Orders”, Article 23, “Suspended Scaffolds”, Section 1658, “Suspended Scaffolds – General” (<a href="#">8 CCR 1658</a>)</li> <li>▪ American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.1-2007, “Wood Safety Requirements” (<a href="#">ANSI ASC A14.1-2007</a>)</li> <li>▪ American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.2-2007, “Portable Metal - Safety Requirements” (<a href="#">ANSI ASC A14.2-2007</a>)</li> <li>▪ American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.3-2008, “Fixed – Safety Requirements” (<a href="#">ANSI ASC A14.3-2008</a>)</li> <li>▪ American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.5-2007, “Portable Reinforced Plastic – Safety Requirements” (<a href="#">ANSI ASC A14.5-2007</a>)</li> <li>▪ American National Standards Institute (ANSI) Accredited Standards Committee (ASC) A14.7-2006, “Mobile Ladder Stands and Mobile Ladder Stand Platforms” (<a href="#">ANSI ASC A14.7-2011</a>)</li> <li>▪ American National Standards Institute (ANSI)/American Society of Safety Engineers (ASSE) A10.8-2001, “Safety Requirements for Scaffolding” (<a href="#">ANSI/ASSE A10.8-2001</a>)</li> </ul> <p><i>The following is a list of current external reference/guidance documents.</i></p> <ul style="list-style-type: none"> <li>▪ None</li> </ul>
8.	Proposed external requirements	<p><i>List all the external requirements that will apply to this program. To determine, start by looking up existing external requirements in <a href="#">851&gt;Cal/OSHA</a> resources (variance, gap analysis, and contract) and finding replacements (for example a specific section in 29 CFR 1910 to a specific section in 8 CCR or a current version of an industry standard). Where Cal/OSHA requirements are less stringent than those of 10 CFR 851, check with Jeremy Sawyer on which to use. <b>Enter “no changes” if none.</b></i></p> <ul style="list-style-type: none"> <li>▪ No changes</li> </ul>
9.	Proposed substantive changes	<p><i>Describe (list) the substantive changes to be made in the program, based on the new external requirements. <b>Enter “no changes” if none.</b></i></p> <ul style="list-style-type: none"> <li>▪ No changes</li> </ul>
10.	Additional proposed substantive changes	<p><i>Describe (list) the substantive changes to be made in the program, in addition to those based on the new external requirements. For example, those due to stakeholder input, other reviews and audits, operating experience. <b>Enter “no changes” if none.</b></i></p> <ul style="list-style-type: none"> <li>▪ Updated purchasing methods</li> </ul>
11.	Affected program documents	<p>List program documents affected by the changes above. <b>Enter “no changes” if none.</b></p> <ul style="list-style-type: none"> <li>▪ None</li> </ul>
12.	Affected training courses	<p>List training courses affected by the changes above. <b>Enter “no changes” if none.</b></p> <ul style="list-style-type: none"> <li>▪ None</li> </ul>
13.	Other affected program resources	<p>List other program resources affected by the changes above. <b>Enter “no changes” if none.</b></p> <ul style="list-style-type: none"> <li>▪ None</li> </ul>

Field Number	Field Name	Field
14.	Comments/Questions/Issues	Any comments or questions regarding applicable requirements or changes. <i>Add any comments or questions regarding applicable requirements or changes.</i> [ Add text ]
15.	Status	<input checked="" type="checkbox"/> Initial draft (proposed changes) <input checked="" type="checkbox"/> Draft (for DOE review) <input checked="" type="checkbox"/> Final (published changes)
16.	Date completed	Date (of form, PM to complete) 3/24/2020 (rev 8/7/2020)                      8/26/2020                      7/15/2021