

## **CONSTRUCTION PROJECT SAFETY**

**1753**

(November 1991)

Every supervisor shall require employees to use safety devices and safeguards as required by CCR, Title 8, and shall adopt and use practices, means, methods, operations, and processes which are adequate to render the employment and place of employment safe and healthful.

No worker shall be required or permitted to work in a place that is known to be unsafe, unless for the purpose of making it safe, and then only after proper precautions have been taken to protect the worker.

Prior to the start of each work shift, the supervisor shall make a thorough survey of the conditions of the site to determine, so far as practicable, the predictable hazards to employees and the kind and extent of safeguards necessary to perform the work in a safe manner.

### **SAFETY INSTRUCTIONS FOR EMPLOYEE**

**1753.1**

(November 1991)

Workers, when first employed, must receive instructions regarding the hazards and safety precautions applicable to the type of work in question and will be directed to read the Code of Safe Practices. This training tool is a collection of at least ten of the most applicable construction safety orders from CCR, Title 8. It should be part of the Project Safety Work Plan (see Sections 1751 and 1752).

The supervisor may permit only those employees qualified by training or experience to operate equipment and machinery.

Where employees may be subject to known job site hazards, such as flammable liquids and gases, poisons, caustics, harmful plants and animals, toxic materials, confined spaces, etc., they must receive instruction in the recognition of the hazard, in the procedures of protecting themselves from injury, and in the first aid procedure in the event of injury. Supervisors should follow procedures outlined in Sections 1742 Hazardous Material Communication Program; 1743 Use of Hazardous Materials; and 1752 Safety Talks--Tailgate Briefings.

Supervisors should document safety instructions.

## **FIRST AID KIT**

**1753.2**

(November 1991)

Every supervisor working on or furnishing personnel for a construction project, line crews, or other short duration or transient jobs shall provide at least one first aid kit in a weatherproof container. Inspect the contents of the first aid kit regularly to ensure that the expended items are promptly replaced. Arrange the contents of the first aid kit so that items may be found easily and kept sanitary. First aid dressings shall be sterile and sealed individually. (Supplies for First Aid).

## **CONSTRUCTION SITE MAINTENANCE**

**1753.3**

(November 1991)

During the course of construction, alteration, or repairs, keep work areas, passageways, and stairs in and around buildings or other structures reasonably clear of form and scrap lumber, nails, and all other debris. It is important to keep the ground area within six feet of a building under construction as free as possible from irregularities by grading or similar methods wherever practicable. Bridge open ditches to provide passageways at convenient places. Keep material storage areas and walkways on the construction site reasonably free of dangerous depressions, obstructions, and debris.

Promptly remove combustible debris accumulated within the building or structure during the course of construction. Safe means shall be provided to expedite such removal.

Pack flammable or hazardous wastes in covered containers separate from the normal debris.

Dispose of all waste at intervals determined by the rate of the accumulation and the capacity of the job site container.

Keep toilet facilities clean and in good working order, and keep them provided with an adequate supply of toilet paper. (These requirements shall not apply to mobile crews having readily available transportation to nearby toilet facilities.)

**ILLUMINATION**  
(November 1991)

**1753.4**

Construction areas, ramps, corridors, offices, shops, storage areas, etc., shall be lighted to not less than the minimum illumination intensities shown in CCR, Title 8, 1523.

**TOILET AT CONSTRUCTION JOB SITES**  
(November 1991)

**1753.5**

A minimum of one separate toilet facility shall be provided for every 20 employees or fraction thereof of each sex. If facilities include both toilets and urinals, the number of toilets cannot be less than one half of the minimum number required. Under temporary field conditions, or if there are less than five employees, at least one lockable toilet shall be provided.

Where the provision of water closets is not feasible due to the absence of a sanitary sewer or the lack of an adequate water supply, nonwater carriage disposal facilities shall be provided. Unless prohibited by applicable local regulations, these facilities may include privies (where their use will not contaminate either surface or underground waters), chemical toilets, recirculating toilets, or combustion toilets.

**DEMOLITION**  
(November 1991)

**1753.6**

Permits are required only for the demolition of buildings and structures, or the dismantling of scaffolding or falsework more than three stories high or the equivalent height for private industry. CAL FIRE, however, requires all demolition projects to be reviewed by the CAL-OSHA consultation service prior to beginning work.

Demolition work must at all times be under the immediate supervision of a qualified person with proper experience, training, and authority to secure maximum safety for demolition workers.

Prior to starting demolition operations, a properly qualified person must make an engineering survey of the structure to determine the type and condition of the framing, floors, and walls to prevent collapse of any portion of the structure. When advisable, any adjacent structures should also be checked.

Prior to starting demolition projects, the structure must be checked for materials containing asbestos. If found, contact the CAL-OSHA consultant service to determine the necessary safety procedures to follow.

## **SCAFFOLDING**

(November 1991)

**1753.7**

The department requires a 20-inch wide or wider scaffold with standard double guard railings within 10 inches of the back plank for all work done over 7-1/2 feet above the ground, unless the work is very lightweight, of short duration, and is, in the opinion of a qualified person, safe to do from a ladder.

Install the top rail of the scaffold 42 to 45 inches above the work level. Scaffold wooden plank shall be 2 inches by 10 inches structural scaffold grade lumber or larger and shall not span more than 10 feet.

Scaffold plank must overlap each ledger by at least 6 inches but not more than 18 inches.

Install scaffold plank within 16 inches of the building or structure.

Plank shall not be sloped more than 2 feet vertically for every 10 feet horizontally and must be secured from slipping by cleats if sloped.

The department will provide all scaffolds with ladders with rungs 12 inches apart vertically and with side rails extending 3 feet above the scaffold platform. Ladders must be secured to scaffolds.

Securely tie a light trade wooden scaffold to the building with double wrapped No. 12 iron wire, or with 2-inch by 4-inch lumber with four 8-penny nails at each connection. Install the ties a maximum distance apart of 20 feet vertically and 20 feet horizontally. For heavy trade, install the same way but space the ties no more than 15 feet apart.

Securely tie metal scaffolds the same as above except the horizontal and vertical maximum spacing between ties must not exceed 26 feet horizontally and 26 feet vertically.

Support wooden scaffold uprights at the bottom with continuous wooden sills. Provide each line of uprights with 1-inch by 6-inch diagonal bracing installed diagonally from the bottom outside to the top outside.

Install cross bracing across the width of all metal tube and coupler scaffolds horizontally on at least every third set of vertical upright posts and vertically on every fourth ribbon.

All metal scaffold uprights must be supported at the bottom by a manufacturer's metal base plate. When the scaffold rests on dirt, install an additional 2-inch by 10-inch wooden base plate under the metal base plates. 1-1/8-inch by 10-inch by 10-inch exterior grade plywood may also be used as a wooden base support on dirt.

A single 2-inch by 10-inch plank without guard rails may be used up to a maximum height of 4 feet for light trades work.

## **HORSE SCAFFOLDS**

**1753.7.1**

(November 1991)

The height of a collapsible horse scaffold may not exceed 6 feet.

The height of any horse scaffold may not exceed 16 feet. Horse scaffold may not be less than 20 inches wide.

## **ROLLING SCAFFOLDS**

**1753.7.2**

(November 1991)

The height of all rolling scaffolds may not exceed three times the base support width.

The maximum allowable exposed height of a screw jack is 12 inches.

Wheels or casters must have locks and be locked when employees are on the rolling scaffold. All joints on a rolling scaffold must be provided with lock pins or bolts.

Platforms must be tightly planked for the full width of the rolling scaffold. The plank bottoms must be cleated with 1-inch material to prevent plank slippage.

The department must provide ladders with rungs 12 inches apart for access to rolling scaffolds.

## **LADDER JACK SCAFFOLDS**

**1753.7.3**

(November 1991)

Do not use ladder jack scaffolds more than 16 feet above the ground. Not more than two workers are allowed on a scaffold.

The structural plank should be at least 14 inches wide.

If workers are more than 7-1/2 feet above the ground, they must use approved safety belts and lifelines, or guard railings made of 3/8-inch wire rope cables or 2 x 4 inch boards, 42 and 21 inches in height behind and on the ends of the platform.

NOTE: All scaffolds must be equipped with guardrails 42 and 21 inches in height to support a load of 20 pounds per linear foot.

**PUMP JACKS**  
(November 1991)

**1753.7.4**

Pump jack scaffolds may be used for loads of up to 500 lbs.

Pump jack brackets and braces must be fabricated from metal plates and angles only.

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