

Tailgate/Toolbox Topics



TT-4: Feb 2006

Division of Occupational Safety and Health
California Department of Industrial Relations

Roofing Safety: Slips and Falls

Of all the accidents associated with roofing, falls are not only the most common; they are also likely to cause the most serious injuries. About 30 percent of injuries to roofers are sustained as a result of falls or slips.

Section 1730 of Title 8 of the California Code of Regulations pertains to roofing operations. When these regulations are followed, many falls and resulting injuries are avoided.

This tailgate/toolbox topic summarizes Section 1730. Refer to the safety order itself for exact wording and specific requirements.

Single-Unit roof coverings – Slopes 0:12–4:12

This part of Section 1730 applies to roofs with a height more than 20 feet and when using backward-pulling machinery, such as felt-layers, regardless of height.

- ◆ Install flagged warning lines, with a minimum tensile strength of 500 pounds, 34 to 45 inches above the roof surface to warn workers of the roof edge.
- ◆ When possible, place headers consisting of sheets of roofing or other materials parallel to the roof edge.
- ◆ Place warning lines and headers no closer than 5 feet from the roof edge.

When using felt-laying machines or other equipment that is pulled by an operator who walks backwards or motorized equipment on which the operator rides, the headers shall be no closer than 10 feet and the warning lines no closer than 5 feet from roof edges. When conditions prohibit the use of headers, the warning lines shall be placed no closer than 10 feet from roof edges that are perpendicular to the direction in which the operator is moving.

Connect materials handling and storage areas to the work area with a clear access path formed by two warning lines.

Single-Unit Roof Coverings

On roofs higher than 20 feet, protect workers by one or more of the following: parapets 24 inches or higher, personal fall protection, catch platforms, scaffold platform, eave barriers, standard toeboards and railings. Do not use backward-pulling equipment.

Multiple-Unit Roof Coverings – Slopes 0:12 – 5:12

Use a roof jack system or a 24-inch high parapet on roofs more than 20 feet high.

Multiple-Unit Roof Coverings – Slopes Greater than 5:12

On roofs more than 20 feet high, use one or more of the following: parapets 24 inches or higher, personal fall protection, catch platforms, scaffold platforms, eave barriers, roof jacks (personal fall protection must be used with roof jacks on slopes greater than 7:12).

Other Safe Work Practices

- ◆ Keep your work area free of trash and equipment.
- ◆ Store materials neatly and away from roof edges.
- ◆ Cover or barricade skylights and other roof openings.

Discussion Questions

- What is the slope of the roof you are working on?
- Are the protections required by law present?
- What else can be done at this worksite to make your work safe?

Resources:

Cal/OSHA Pocket Guide for the Construction Industry and other educational materials can be ordered from the Cal/OSHA publications website: <http://www.dir.ca.gov/dosh/puborder.asp>, or obtained from a Cal/OSHA District Office.

Cal/OSHA Construction Safety Orders can be reviewed at: <http://www.dir.ca.gov/Title8/sub4.html>

Health & Safety Guide for the Commercial Roofing Industry – Booklet No. 78-194 from:
NIOSH
4676 Columbia Parkway
Cincinnati, Ohio 45226

Note: The information provided is not meant to be either a substitute for or legal interpretation of the occupational safety and health regulations. Readers are cautioned to refer directly to Title 8 of the *California Code of Regulations* for detailed information regarding the regulation's scope, specifications, and exceptions and for other requirements that may be applicable to their operations.