

OSHA Safety and Health Regulations Related to SPF Applications

Module Four: General SPF Application Safety Handouts and Quiz



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Module Four: General SPF Application Safety

Fire Prevention Plan

A written Fire prevention Plan is required (per jobsite) for companies with 10 or more employees. An oral plan is acceptable for companies with less than 10 employees.

Specific Fire Hazards from SPF Applications

- Spontaneous combustion due to exothermic heat build-up
- Flash fires from “hot work”
- Static sparks from sprayfoam applications (walking across a SPF covered roof)
- Fires from flammable liquids (i.e. Gas/diesel, solvents)

Barricades and Signs

- *Barricade* means an obstruction to deter the passage of persons or vehicles.
- *Signs* are the warnings of hazard, temporarily or permanently affixed or placed, at locations where hazards exist.
- *Signals* are moving signs, provided by workers, such as flagmen, or by devices, such as flashing lights, to warn of possible or existing hazards.
- *Tags* are temporary signs, usually attached to a piece of equipment or part of a structure, to warn of existing or immediate hazards.

Danger Sign

- Red as predominant color with black on borders
- White lower section for additional wording
- Designates an immediate hazard



Caution Sign

- Yellow with black letters
- Warns against hazards
- Cautions against unsafe practices



Fall Protection

Any working surface with an unprotected side or edge six (6) foot high or more requires:

- Guardrail systems,
- Safety net systems,
- Or personal fall arrest systems

Fall Protection on a Low Sloped Roof

Alternately on a low sloped roof you may use:

- Warning line system and safety monitoring system
- Or
- On roofs 50-feet (15.25 m) or less in width, the use of a safety monitoring system alone is permitted



Scaffolds

- Capable of supporting 4 times the anticipated load
- Load-carrying timber members of scaffold framing shall be a minimum of 1,500 f. (Stress Grade) construction grade lumber.
- Planking shall be Scaffold Grade and sized according to table in 1910.28(a) (9)
- All planking or platforms shall be overlapped (minimum 12 inches) or secured from movement.
- An access ladder or equivalent safe access shall be provided.
- Scaffold planks shall extend over their end supports not less than 6 inches nor more than 18 inches

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- The poles, legs, or uprights of scaffolds shall be plumb, and securely and rigidly braced to prevent swaying and displacement.
- Materials being hoisted onto a scaffold shall have a tag line.
- Overhead protection shall be provided for men on a scaffold exposed to overhead hazards.

Scaffold Designations

Light - Designed and constructed to carry a working load of 25 pounds per square foot.

Medium - Designed and constructed to carry a working load of 50 pounds per square foot.

Heavy - Designed and constructed to carry a working load of 75 pounds per square foot.

Ladders

Portable ladders: fall protection is not required for employees climbing or working on portable ladders.

Confined space

- (1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- (2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and
- (3) Is not designed for continuous employee occupancy.

A “Permit-Required Confined Space” has one or more of these characteristics:

- (1) Contains or has the potential to contain a hazardous atmosphere;
- (2) Contains a material with the potential to engulf someone who enters the space;
- (3) An entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section; and/or
- (4) Contains any other recognized serious safety or health hazard (i.e. Less than 23.5% oxygen)

Quiz - Module Four: General SPF Application Safety

1. Specific fire hazards in the SPF industry include:

- a. Flash fires from “Hot Work”
- b. Static sparks from sprayfoam applications
- c. Fires from flammable liquids
- d. All of the above

2. A predominately red sign with a black border is:

- a. Men at Work sign
- b. Stop sign
- c. Caution sign
- d. Danger sign

3. A predominately yellow sign with black letters is a Caution Sign:

- a. True
- b. False

4. Fall protection in construction is required when a surface features an unprotected edge at what height?

- a. 4 foot
- b. 6 foot
- c. 10 foot
- d. 12 foot

5. A worker must use fall protection while working on or climbing a ladder.

- a. True
- b. False

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6. Guardrail, Safety Net and Personal Fall Arrest System are acceptable means of fall protection.

- a. True
- b. False

7. Scaffolds must be capable of supporting

- a. Its anticipated load
- b. Twice its anticipated load
- c. Four times its anticipated load
- d. The heaviest person working on the jobsite plus 100 pounds.

8. Scaffold planks shall extend over their end supports:

- a. At least six inches but no more than eighteen inches
- b. At least one foot
- c. No more than two feet
- d. Planks are not allowed to extend past the end supports

9. A worker must use fall protection while working on or climbing a ladder.

- a. True
- b. False

10. Light duty scaffolding has a working load of 25lbs. per square foot

- a. True
- b. False

Answer Sheet for Quiz - Module Four: General SPF Safety

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9. A confined space is a space which is big enough so that a worker can enter, has limited means of entry and is not designated for continuous employee occupancy.

- a. True
- b. False

10. Light duty scaffolding has a working load of 25lbs. per square foot

- a. True
- b. False