

TST #163-A

## Suspended Slab Safety

Openings, as defined by OSHA Standard 1926.500, include:

- A hole, gap or void that is 2 inches or more in its smallest dimension. The opening can be in a floor, roof or other walking or working surface with a fall potential of 4 feet or more.
- An opening, gap or void that measures 30 inches or more in height and 18 inches or more in width—usually in a wall or partition—through which an employee can fall more than 4 feet to a lower level.

Further, OSHA 1910.23 (a) (9) states that every floor hole into which persons cannot walk by accident (because of fixed machinery, equipment, or walls) shall be protected by a cover that leaves no opening more than 1 inch wide. The cover shall be securely held in place to prevent tools or materials from falling through.

In order to adhere to these standards, and work safely when cutting and removing slabs, it is recommended that operators and helpers follow these guidelines:

1. Inspect the entire work area before work begins to make sure it is secured.
2. Know where a cut piece of concrete could possibly fall. Anticipate the worst case scenario and what precautions need to be taken if it was to occur.
3. Before a suspended slab opening is created, complete a pre-job task plan or job safety analysis. The weight of the concrete must be calculated using 150-pounds per cubic foot. The type of rigging to be used must be able to support the piece that is being picked or lowered, including the correct safety factor multiplier.
4. Appropriate fall protection and other personal protective equipment must be planned for and used during and after cutting.
5. Picking points must be placed accordingly so that the weight of a cut piece is distributed evenly.
6. The area below must be protected from access by a watch person or barricades as appropriate.
7. Appropriate shoring may be placed below the opening if other means of rigging cannot be used.

In addition, any type of opening must be secured before leaving the jobsite. Notify the owner or general contractor that the hole or opening(s) is complete. It is their responsibility to comply with the OSHA Standard cited above. If the cutting contractor is responsible for securing any small opening, it should be covered with at least 3/4-inch plywood, clearly marked indicating that an “Opening” or “Hole” exists. Also, the plywood must be anchored into the concrete.

Additional information about openings is available in the CSDA Safety Manual, Safety Handbook and in the association’s Specifications for sawing and drilling disciplines. Visit [www.csda.org](http://www.csda.org) or call 727-577-5004 for more information about these resources.

# Suspended Slab Safety Quiz

The following statements should be answered with "True" or "False." Answers below.

1. A pre-job task plan or JSA (job safety analysis) should be performed before cutting suspended slabs.
2. The opening created does not need to be covered if smaller than 1 foot by 1 foot in size.
3. Using caution tape is sufficient to prevent people accessing the area below where an opening is being made.
4. The weight of concrete being cut can be estimated with a best guess.
5. Always refer to the applicable OSHA Standard for the most up-to-date definition of an opening.

**Employee Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Answers:**

1. True
2. False
3. False
4. False
5. True