

Job Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 552: Crawl Spaces (Plumbing)

Introduction: Many buildings have been constructed with crawl spaces to provide access to the substructure and the plumbing. Repair and maintenance projects may require employees to access these crawl spaces. Employees must protect themselves from the many hazards that are associated with working in crawl spaces. Following are safety guidelines for safely accessing and working in crawl spaces:

- **All employees that are required** to enter crawl spaces to perform maintenance or repair activities must be instructed as to the nature of any possible hazards involved, and the necessary precautions to be taken.
- **One of the most important safety precautions** will be to consider the age and condition of the structure prior to entering the crawl space. Check all foundations for weaknesses caused by termites or ground settling before entering the crawl space.
- **Employees must be trained** in the correct use of personal protective equipment needed for working in crawl spaces.
- **Employees must know** how to properly use any emergency equipment that may be required during crawl space repair or maintenance operations.
- **Any crawl space** having a limited means of egress, which is subject to the accumulation of toxic or flammable contaminants, or has an oxygen deficient atmosphere, must be identified prior to entry.
- **Appropriate measures must be taken** to eliminate atmospheric hazards such as efficiently ventilating the crawl space, and the use of a respirator that will sufficiently protect employees from asphyxiation.

Employees must not enter a crawl space on a project unless:

- **All pipes, electrical,** and other supply lines in the crawl space whose contents are likely to create a hazard are turned off.
- **There is a means of egress** from the crawl space that is easily accessible for emergency purposes.
- **Mechanical equipment** in the crawl space is disconnected from its power source and locked out.
- **The space is large enough** so an employee can safely perform the required work.
- **The crawl space has been checked** to see if any hazards exist. When a hazard is found, it must be eliminated before entry.
- **All other construction operations** are prevented from being conducted near the space opening.
- **Barricades are used** to keep all mechanical or heavy construction equipment away from crawl space entrances.
- **Suitable arrangements have been made** to remove a worker from the crawl space should assistance be required.
- **An assistant is nearby** to watch for hazardous situations, assist in the case of an emergency, or call for help.

Employees must not enter a crawl space before it has been checked for hazards such as:

- | | | |
|--|---|---|
| ■ Chemicals or chemical residues | ■ Materials that could possibly trap an employee | ■ Thermal hazards (e.g. cold, hot) |
| ■ Flammable materials or substances | ■ Dust that may obscure vision | ■ Excessive noise levels which could interfere with communication efforts |
| ■ Decomposing organic matter | ■ The presence of stinging insects | ■ The possibility of falling objects |
| ■ The presence of rodents | ■ Hazardous mechanical equipment | ■ Water or gas leaks |
| ■ Hazardous atmospheric conditions | ■ Converging walls, or sloped floors which could trap an employee | ■ Exposed electrical wiring |
| ■ Pipes which contain chemical or gas supplies | | ■ Deteriorating sub-structures |

Employees must ensure that the supplies, equipment, or tools they will be using in the crawl space are safe for use in that environment.

- **When cleaning solvents or paints** are going to be used in the space employees must wear the appropriate breathing apparatus.
- **All flammable substances** and fire hazards must be eliminated, or safely contained before any welding, cutting, brazing, riveting, scraping, or sanding operations are performed in the space.
- **Sufficient ventilation is required** when working with flammable materials, or when welding, cutting, or brazing in crawl spaces.
- **Fire extinguishers must** be readily accessible when working with any equipment, tools, or supplies which have the potential to start a fire.
- **Employees must not use** gasoline powered tools in crawl spaces. Gasoline powered tools generate high levels of flammable and toxic gases.
- **Employees must not use** any tools which will cause hazardous or unsafe conditions in a crawl space.
- **Personal Protective Equipment (PPE)** that will be needed while working in a crawl space will include a hard hat, safety goggles or glasses, dust mask, respirator, heavy duty gloves, cover-all clothing, and safety boots. Because it is common to find rodent droppings in crawl spaces, employees must always wear respiratory protection when entering such places.

Conclusion: Always have an assistant nearby, use the correct tools, and follow safety procedures while working in crawl spaces. Utilize these safety guidelines when performing repair and maintenance operations in crawl spaces.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

Personnel Safety Violations: _____

Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.

