

Confined Spaces in Construction: Working in Permit Spaces

Handout

Overview

A confined space is any space large enough for a person to enter, has restricted means of entry or exit, and is not designed for continuous occupancy. Work involving permit spaces must be viewed as a process; safe entry is just a start. You want to enter, complete your work, and exit safely.

A **permit-required confined space** is any space that has:

- potentially hazardous atmospheres (asphyxiating, flammable, or toxic), or
- conditions where engulfment, entrapment, or other serious hazards may exist or develop, or
- an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section, or
- any other recognized serious safety or health hazard.

What must I do?

Before entering or working in a confined space, you must first obtain an entry permit. An entry permit must include:

- Identification of the space.
- Purpose of the entry.
- Date and duration of the permit.
- List of authorized entrants.
- Names of attendants and supervisor.
- List of hazards in the permit space.
- List of measures to isolate the space and eliminate or control the hazards.
- Acceptable entry conditions.
- Results of tests initiated by the person(s) performing the tests.
- Rescue and emergency services available and the means to summon them.
- Communication procedures for attendants and entrants.
- Required equipment.
- Other necessary information.
- Additional permits (e.g., for hot work).



Before you enter

Once the entry permits have been prepared check for:

- Atmospheric hazards.
- Energy hazards.
- Other physical hazards.

If hazards are in the atmosphere, you must:

- Test the air.
- Ventilate the space.
- Use an air-supplied respirator under certain conditions.
- Lock out sources of hazardous energy (mechanical, electrical, etc.).

The entry supervisor will verify that entry conditions are acceptable by signing the permit. The permit, and test results, must be available to the entrants.

Continue to monitor air quality during entry operations. Work being done may change the air quality while you work. Affected employees can observe all air monitoring tests.

Use locks and tags to prevent accidental startup of equipment while you are working in the permit space. Use only safe, grounded, approved equipment.

Safety requirements for permit spaces

When workers enter a permit space, at least one person must remain outside to summon help or provide assistance.

The entrants need to wear chest or full body harnesses with retrieval lines to make non-entry rescue attempts easier.

The attendant needs to communicate with the entrants to monitor their conditions. If a situation arises that requires emergency rescue, the attendant should summon the rescue service and stay outside of the permit space entrance. An attendant can be a trained member of the rescue service, but cannot enter the permit space until the rest of the team has arrived to start proper rescue procedures.

