FACT SHEET FEBRUARY 2026
California Department of Industrial Relations
Division of Occupational Safety & Health

Confined Spaces in Construction

Information for Employers

Every year, workers die from confined space hazards, such as:

- Oxygen deficiency
- Toxic or explosive atmospheres
- Engulfment by a liquid or fine material, such as sand

This includes not only workers who entered the space to do work but would-be rescuers. To prevent confined space accidents, construction employers must:

- Identify confined spaces and which of them are permit-required confined spaces.
- Know, understand, and effectively implement requirements in **Article 37** (**sections 1950-1962**) of title 8 of the California Code of Regulations.

This fact sheet is a brief overview of the confined space requirements for the construction industry. Read the full standards for scope, details, and exceptions.

What is a confined space?

A confined space is a space that has all of the following characteristics:

- Large enough and configured so that an employee can enter it.
- Has limited or restricted means for entry and exit.
- Not designed for continuous occupancy.

What is a permit-required confined space (permit space)?

A permit-required confined space (permit space) is a confined space that also has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere.
- Contains material that has the potential for engulfing an entrant.

- Could trap or asphyxiate an entrant with
  - walls that converge inward or
  - floors that slope downward and taper to a smaller cross-section.
- Contains any other recognized serious safety or health hazards.

Whenever possible, employees should avoid entering these spaces. Instead, use equipment that allows work to be done from the outside. If employees must enter, the employer must comply with applicable Cal/OSHA regulations, such as:

- **Section 1509** (Injury and Illness Prevention Program)
- **Article 6** (Excavations)
- **Article 37** (Confined Spaces in Construction)
- **Sections 2943(b)** and **2943.1** (High-Voltage—Underground and Enclosed Spaces)
- **Section 8616** (Telecommunications)

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Examples of confined spaces at construction sites

- Pits (elevator, escalator, pump, valve, or other)
- Manholes (sewer, storm drain, electrical, communication, or other utility)
- Tanks (fuel; chemical; water; or other liquid, solid, or gas)
- Concrete pier columns
- Sewers
- Storm drains
- Vessels
- Cesspools
- Turbines

Key Requirements

- Hazard identification
  - Identify confined spaces and permit-required confined spaces if your employees may enter such spaces.
  - Evaluate potential hazards in the spaces, including:
    - Toxic gases (e.g., hydrogen sulfide)
    - Flammable gases and vapors and combustible dust
    - Low oxygen levels (less than 19.5%)
    - Physical hazards (e.g., unguarded pinch points, corrosive liquid, heat)
- Communication
  - Post danger signs to warn exposed employees and prevent unauthorized entries into the permit spaces.
  - Maintain effective communication between workers inside the permit space and those outside.
  - Use radios or other devices to aid communication.
  - Communicate with other contractors on site about permit spaces, their hazards, and entry procedures.
  - Coordinate with other contractors so no one creates hazards for others.

- Permit system
  - Implement a permit system for all entries of permit-required confined spaces.
  - Ensure that permits are filled out correctly and completely.
- Training and competency
  - Provide training for all workers who may enter confined spaces, serve as attendants, or otherwise be exposed to the hazards.
  - Ensure workers understand the hazards and control measures.
  - Ensure workers know the emergency procedures.
  - Instruct workers on the dangers of attempting entry rescues if they are not authorized to do them.
- Safety measures
  - Use ventilation or other appropriate methods in confined spaces to remove or reduce hazardous atmospheres.
  - Isolate any physical hazards (e.g., lockout/tagout, blocking, blanking/blinding).
  - Use personal protective equipment (PPE) as needed.

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- Monitoring atmospheres
  - Continuously monitor the atmosphere inside the confined space before and during work.
  - Use calibrated gas meters to check for (in this order):
    - Oxygen levels – below 19.5% is oxygen deficient; above 23.5% increases fire hazard.
    - Explosive atmosphere (% LEL) – within a certain range, a spark or flame could cause an explosion.
    - Toxic gases – Need to install a sensor appropriate for the confined space hazards.
- Emergency procedures
  - Establish and communicate clear emergency procedures specific to confined space operations.
  - Ensure a trained rescue team is on standby and can respond immediately.
  - Ensure that rescue equipment is readily available.
  - Ensure the rescue team practices with the actual confined spaces at least annually.
- Alternate procedures and non-permit spaces
  - Alternate procedures are allowed only under certain conditions specified in **1952(e)(1)**.
  - Can reclassify permit spaces to non-permit spaces under conditions specified in **1952(g)**.
- Supervision
  - Designate a competent person to supervise confined space work.
  - The supervisor must have the authority to halt work if unsafe conditions arise.

Written permit space program

All affected employers are required to implement a written permit space program that complies with **section 1953**. This must include the following and more:

- Measures to prevent unauthorized entry into permit spaces.
- Procedures to identify and evaluate the hazards of all permit spaces before employees enter them.
- A system for preparing, issuing, using, and canceling entry permits.
- Procedures to test and monitor the permit spaces before and during all employee entries.
- Procedures to always have an attendant outside the permit space while employees are working inside.

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- Effective controls of the following inside the permit space:
  - Atmospheric hazards (existing and potential).
  - Any physical hazards.
- Equipment for entry (testing and monitoring, ventilation, PPE, lighting, rescue, etc.).
- Employee and supervisor training on safe work procedures, hazard identification and controls, and rescue procedures.
- Effective and timely rescue and emergency procedures, including emergency medical services.
- Procedures to coordinate entry operations when employees of more than one employer enter the permit space.
- Review of the program annually and when procedures may not protect employees.

Resources

- **Article 37** – Confined Spaces in Construction
- **Cal/OSHA Confined Spaces Hazard Alert**
- **OSHA - Confined Spaces in Construction**