

Temporary Work Areas

To begin with, lets work with an analogy. The term "confined space" is like the word "vehicle" - everyone drives one, but they all have different names. There's brand names like Ford or Chrysler, model name like Sunbird or Silverado, category name like truck or SUV; or there's the nick names like "the bomb" or "the rocket". No matter what we call it - they are a vehicle. The term indicates a mode of transportation involving tires, motor, transmission and steering wheel. Options we add to it "customize" the vehicle to our liking or our budget.

The term "confined space" is the same. Organizations around the world have silos, tanks, sewers, or crawl spaces. They could be known as Finish Mill #2 or Waste Water Tank 05. The possibilities are endless. We can easily spot vehicles because we look for specific thing, it's the same for confined spaces.

The first characteristic to examine is, is it a temporary work area? Is work being performed in the area:

- periodically during a shift (eg. less than 50% of the time), or
- only when the regular process is not in operation, or
- for a purpose other than the regularly intended operation of the area

Another characteristic that all confined spaces have is that they are isolated. In other words are the worker(s) segregated in a way they are not visible to other workers or other people due to a barrier of either distance, time or a physical design.

A third characteristic would be is the space fully or partially enclosed. For something to be partially enclosed, it must have some form of walls. Key criteria of the walls would be that they enclose at least 50% of the perimeter and be greater than 1 m in height. This enables the area to trap heavy than air gases or hamper emergency response.

The fourth characteristic is the lack of human occupancy requirements. With the exception of outside work, workplace designers build in safeguards that ensure worker comfort (eg. heat, lights, ventilation, aisles and doorways) as well as facilitating egress and emergency response.

The final characteristic of a confined space is there is a hazard (actual or potential) is inside the work area. Different jurisdictions define different hazards (eg. Ontario requires a hazardous atmosphere, the Federal legislation says "a hazard".) In my opinion look for an action (eg. sudden movement), reaction (eg. bacteria consuming oxygen), mindset (eg. worry) or any other situation that could cause an injury.

These characteristics would include most machine enclosures, trenches, excavations, tanks, vats, bins and other enclosures. It would however, eliminate roofs as a confined space. Please remember the point at this stage of the game is just to identify confined spaces. Once you find one, a lot more work needs to occur before your finished. The worksheet on the back provides a checklist you can use to identify possible confined spaces. Good luck!

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Confined Space Determination Checklist

Instructions: Review the work area and check off appropriate that have Yes answers.

Criteria	Yes
1) Occupancy:	
Less than 50% of the shift occurs daily in the area	
Normal operations preclude occupancy	
Construction activity	
2) Isolation:	
Work area is segregated in such a way workers inside are not visible to others outside of area.	
3) Fully or partially enclosed:	
Walls make up more than 50% of the permeter	
Walls, slopes or hills greater than 1 m in height	
4) Human Occupancy Requirements:	
No wired overhead lights with a light switch on the wall by the door and supplies 5 watts/m2.	
No heating unit that keeps the temperature at least 15 degrees Celsius	
No man made floor of concrete, asphalt or plastic	
No mechani <mark>cal ventilation syste</mark> m that provides 7 lpm or an opening of .1m/50m2	
No a doorway at least 61 cm x 91 cm	
No a work area at least 61 cm on all sides	
5) Hazardous Atmosphere containing:	
The accumulation of flammable, combustible or explosive agents,	
An oxygen conten <mark>t in the atmosphere that is</mark> less than 19.5% or more than 23% by volume, or	
The accumulation of atmospheric contaminants that could	
(i) result in acut <mark>e health effects that po</mark> se an immediate <mark>threat to life, or</mark>	
(ii) interfere with a person's ability to escape unaided from a confined space;	
6) Engulfment Potential:	
Liquid greater than 1.2 m deep	
Bulk Material Storage facility	
Excavation, casing or shaft leading to a tunnel greater than 1.2 m deep that someone can enter	
Subterranean passage made by excavating under the overburden	
7) Other Hazards:	
Energy form such as electrical, mechanical, hydraulic, pneumatic, or other energy	
Extreme temperatures, hazardous chemicals/substances	
Falling, traffic, structural failure	
8) Limited or Restricted Entry & Egress:	
A doorway less than 61 cm x 91 cm	
Ceiling heights less than 2 m	
A exit route greater than 5 m	
A work area less than 61 cm on all sides	

Triage:

- 1) If any part of Questions #1,2,3 & 4 are checked, the space is a confined space.
- 2) If Question 5 has any positive checks, the requirements for entry are governed by the confined space legislation
- 3) If Question 6 has any positive checks, the requirements for entry are governed by Part III (Excavations), or Part IV (Tunnels, Shafts or Cassions) of the Construction Safety legislation
- 4) If Question 7 has any positive checks, the requirements for entry are guided by CSA Z1006 Managing Work in Confined Space Standard.