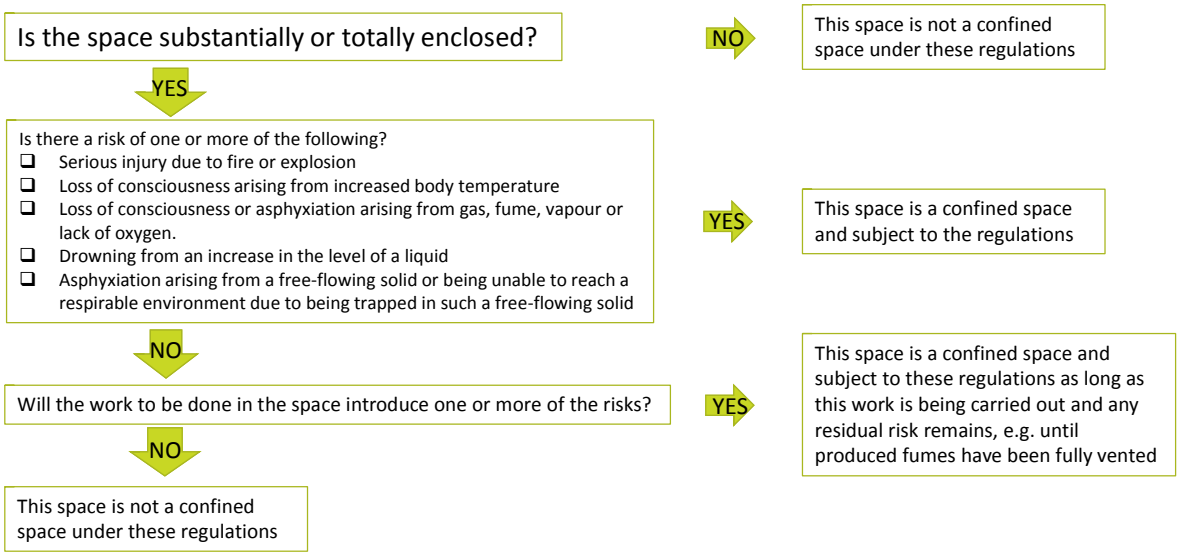
An Introduction to Confined Spaces

What safety equipment is available for confined spaces?

RVTGROUP
Protecting long-term health on site

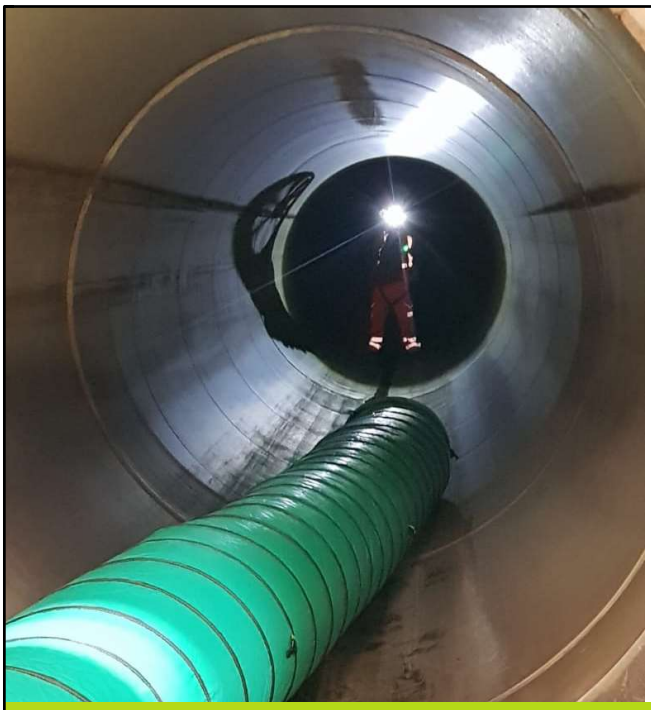
What is a confined space?



The Confined Space Regulation 1997 defines a confined space as;

“any place, including any chamber, tank, vat, silo, pit, trench, pipe, sewer, flue, well or other similar space in which, by virtue of its enclosed nature, there arises a reasonably foreseeable specified risk”.

The above table is provided in the approved Code of Practice, to help identify a confined space which would be subject to the regulations.



Examples of a confined space

- Ducts
- Culverts
- Tunnels
- Boreholes
- Manholes
- Shafts
- Excavations and trenches
- Sumps
- Inspection and under-machine pits
- Cofferdams
- Ships engine room
- Plant rooms
- Building voids

The expression ‘confined space’ may also refer to the following locations and other similar places, but only where there is also the presence of or a reasonably foreseeable risk of one of the specified risks to the health and safety of those working in the space:
(a) ducts, culverts, tunnels, boreholes, bored piles, manholes, shafts, excavations and trenches, sumps, inspection and under-machine pits, cofferdams;
(b) freight containers, ballast tanks, ships’ engine rooms and cargo holds;
(c) buildings, building voids;
(d) some enclosed rooms (particularly plant rooms) and compartments within them;
(e) enclosures for the purpose of asbestos removal;
(f) areas used for storage of materials that are likely to oxidise (such as store rooms for steel chains or wood pellet hopper tanks);
(g) unventilated or inadequately ventilated rooms and silos;
(h) structures that become confined spaces during fabrication or manufacture; and interiors of machines, plant or vehicles.

This is not an exhaustive list and there may be other types of confined space.

Not a confined space

An enclosed workplace without a ‘specified risk’ is not a confined space that is subject to the Regulations

Not all enclosed workplaces are subject to the Regulations; an enclosed workplace without a ‘specified risk’ is not a confined space that is subject to the Regulations even where there are other risks due to the size or difficulty of working in it. In ceiling voids, lofts and some cellars, if the space is cramped you may need to consider other risks, such as musculoskeletal disorders, or how people would be evacuated if they had a fall or injury.

The role of the Top Man:

- Check all team members hold the correct, valid qualification for their role
- Ensure all equipment checks have been carried out
- Confirm the classification of the confined space is accurate at the time of entry
- Ensure that the rescue provision is suitable and sufficient
- Confirm that lock out and isolation procedures have been completed
- Ensure that the permit to work, safe system of work, risk assessments and method statement have been completed
- Ensure adequate methods of communication are in place prior to and throughout entry
- Monitor the health, safety and wellbeing of entrants at all times
- Manage all members of the; rescue, entry and surface teams during the works
- Ensure access and egress arrangements are suitable
- Provide a comprehensive safety brief prior to starting work

Rescue Team

Fully equipped team on stand-by.

Equipment: Rescue Winch

- Referred to as a “tripod and winch
- Used for fall arrest during ladder access
- Designed to lift incapacitated people out of a confined space
- NOT for lowering materials or people into a hole; it is not a crane

Equipment: Rescue Harness

- Worn by every member of the access team
- Designed for recovery rather than fall arrest
- Often has front and rear recovery points
- Uncomfortable by definition…

Equipment: Gas Monitor

Set up for common confined space risks:

1. Methane and other flammable gases
2. Toxic gases, usually Hydrogen sulphide
3. Asphyxiant gases, usually carbon Monoxide
4. Oxygen

IMPORANT: It is important that you monitor for the correct hazard – you may need more than one type of monitor/ detector if there are several hazards. There are a wide range of monitors available and some will monitor more than one type of gas.

Equipment: ATEX Torches

Intrinsically safe lighting for use in potentially explosive atmospheres.

Equipment: Escape Kit

A tank of compressed air carried by every member of the team. As you open the lid, it turns on the airflow and gives you either 10 or 15 minutes of air. (bear in mind that when you panic, you breathe more quickly so these are maximum figures for an average person).

Equipment: Escape Kit

The turtle…
A smaller (though just as unwieldy) type of breathing apparatus, this one uses chemicals to adsorb the Carbon Dioxide from the air.

Equipment: Rescue Stretcher

A key part of any confined space access plan is how to get people out if something goes wrong.

RVT Group can supply a wide range of safety equipment for confined spaces

For a quote email:
enquiries@rvtgroup.co.uk

For more information, or to discuss a project, call 0808 178 3286.

James Dupont leads this area of business.

Call 0808 178 3286 to discuss your project.

Email James directly on james.dupont@rvtgroup.co.uk

Or send your enquiry to enquiries@rvtgroup.co.uk

Excessive heat, toxic dust and fumes, oxygen deficiency and flammable substances can all make confined spaces extremely dangerous. Working in a contaminated air space can cause dizziness, fatigue and, in the most severe instances, death.

This is why it is important to correctly identify a confined space and put the appropriate safety measures in place; including an appropriate ventilation system.

To ensure the safety of your workers, RVT offers a variety of solutions that will make your site compliant to the regulation. Our Ventex© Axial and Centrifugal fans can move up to 120,000 m3 of fresh hour per hour depending on the model selected. They can be set up to supply clean air/ and or extract contaminated air, depending on the application. These fans are also specifically designed to maintain high pressure over long duct runs, making them suitable for very long tunnels or deep shafts.

For more information and spec sheets visit;
https://rvtgroup.co.uk/hire-equipment/ventilation/equipment

RVT have a range of free educational resources available at **www.rvtgroup.co.uk/insights-resources**

This includes; tool box talks, best practice guides, posters, whitepapers, videos and you can also book CPD presentations.

To learn about our dust, fume, noise, monitoring, ventilation and climate control equipment please visit; **www.rvtgroup.co.uk/hire-equipment**

To request a FREE site visit or to discuss your project by phone, call us on **0808 178 3286**.

For general enquiries please email **info@rvtgroup.co.uk**
If you would like a quote for hire equipment please email **enquiries@rvtgroup.co.uk**

You will also find us on LinkedIn **@RVT-Group**