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Safe use of containers at worksites

Containers are often used at worksites as temporary structures for things like additional storage, site offices, and containment areas. Where they are placed and how they are used can create risks for workers.

This quick guide is for persons conducting a business or undertaking (PCBUs) who may have containers in use at worksites they control. It gives you advice on how to make sure containers do not create risks to workers. Containers are also sometimes known as ISO, intermodal, cargo, or shipping containers.

This quick guide should be read alongside WorkSafe's good practice guidelines [Managing work site traffic](#) which contains information about general risk management principles for worksites.

This quick guide applies to any worksite that may be using containers as a temporary structure. For example:

EXAMPLES OF WORKSITES	EXAMPLES OF USE
<ul style="list-style-type: none">- Construction sites (civil and residential)- Forestry sites- Farms- Trucking/transport yards- Waste transfer stations- Timber yards	<ul style="list-style-type: none">- Storage for tools, materials or chemicals- Site offices or workshops- Staff rooms- Overflow/seasonal goods storage- Spray booths- Sheltered walkways

This quick guide is not intended to cover the use of containers during shipping, logistics, and port operations.

Managing the risks associated with using containers at worksites

The sections below cover common risk areas for containers at worksites and list possible control measures.

Worksite traffic

- Position the container away from where vehicles or plant are operating (unless the container is being used specifically as a part of a traffic/pedestrian separation system).
- Allow enough space for workers to enter and exit the container safely and not directly into high traffic areas. Consider ease of exit in case of an emergency.
- Check the container is not affecting the visibility of drivers/operators of vehicles or plant, or of pedestrians.
- Position the container where there is good lighting – especially if the container is to be accessed at night.

Ground stability

- Where possible, place the container on flat ground – this will prevent the container from warping which can make closing the doors difficult. If packing is needed to level the container, make sure this is secure and cannot be accidentally dislodged.

- Place the container on stable ground with good drainage so the container does not sink or cause water to accumulate around it. Avoid placing containers near the edges of banks, bottoms of gullies, near waterways, or anywhere earthmoving has recently occurred.
- Make sure the container placement will not affect any underground services in the area.

Weather conditions

- Consider the prevailing wind/airflow and how this might affect activity surrounding the container. For example, windy locations may make it harder to control the doors. Make sure doors can be latched open.
- If being used for fumigation activities, avoid placing the container where ventilated fumes may drift into populated areas.
- If the area is prone to strong winds, tornadoes or other adverse weather, consider appropriate methods to secure the container to the ground. Consider any risks posed by nearby trees that could be uprooted and/or fall on or near the container.

Stacking containers/load bearing containers

- When stacking containers, using them for load-bearing of any type, or as a part of another structure, consider seeking the advice of a suitably qualified engineer to assess the safe limits for their use. For example:
 - What is a safe height for stacking?
 - What exclusion or 'fall zone' is required?
 - How should it be secured to the ground, another container, or other structure (such as a shelter)?
 - If used as a sheltered walkway, will it be strong enough to withstand predicted loads or possible impacts?
- Avoid working on the top of a container. Where it cannot be avoided (such as when doing repairs), make sure there is a form of edge protection around the sides to prevent workers or equipment from falling off. Make sure there is a safe way for workers to access the top of the container. See WorkSafe's [Working at height](#) webpage for more information.

Previous or current storage of chemicals

- Check for any residual contamination from previous uses of the container. Check the floor for any chemicals that may have leached into it. The container may need professional decontamination before being used at your worksite.
- If you plan to use it for storing chemicals or other hazardous substances or flammable items, check storage requirements. Avoid stacking or locating these containers close to other containers that may be occupied by people.

Heating, lighting and ventilation

- If the container is being occupied by workers for extended periods, such as being used as a site office or workshop make sure there is effective lighting, ventilation, heating, and cooling.
- Consider what fire protection measures will be needed, such as smoke alarms and a fire extinguisher.

Electrical installations and connecting to electricity supply

- Any electrical work should be done by a licenced electrical worker.
- All electrical installations such as wiring, light fittings, and outlets must comply with relevant electrical regulations and standards. For example, *AS/NZS 3000: The wiring rules* and *AS/NZS 3001.2: Connectable electrical installations and supply arrangements*.
- If the container is being used at a construction site, it must also comply with *AS/NZS 3012: Construction and demolition sites*.
- If the container has an electrical installation and a connectable plug for its power supply, the PCBU responsible for the worksite must make sure it has a current electrical warrant of fitness before it is plugged into the site power supply.
- For more information see the [WorkSafe Energy Safety website](#)

Other considerations

- Make sure any shelving or heavy items stored in a container are appropriately secured so they cannot fall onto workers.
- Do not operate BBQs inside a container. Always bring the BBQ out of the container before using it. Make sure the gas bottle is turned off immediately after use.
- If the container is to be accessed at night or by a lone worker, consider site security and place it in a secure area if possible.
- Check with your local authority for any required consents. A building consent may be required depending on the intended use and location.

Inspect containers regularly to make sure they continue to remain safe for use at your worksite. Check things like watertightness, structural integrity, ground stability, and that the doors are still opening, closing and locking freely.

Delivery and pickup of containers

- Before bringing a container to site, make sure the container will be fit-for-purpose and meet any relevant requirements mentioned in this guidance.
- Before the arrival of a container, plan where it will go, prepare the site, and make sure affected people are aware.
- Set up an exclusion zone while delivery or pickup is underway. Keep anyone not directly involved in the operation away from the area.
- Check for overhead hazards such as powerlines or trees.
- If the container is to be moved with contents inside, make sure those contents are secured.
- Use plant designed specifically for moving containers, for example, a side loader, truck mounted crane, or heavy forklift.
- Make sure plant is operated by a suitably trained, competent, and qualified person.
- Make sure the plant and all attachments (such as lifting chains) are in good working order and have all required certifications for safe operation.
- Use a spotter if needed.
- Take care when opening containers as any unrestrained items inside could fall on someone when the doors are opened.

Engage with your workers

Ask your workers for their ideas and opinions before making decisions relating to their health and safety at work. This includes managing the risks associated with using containers at worksites. For example, workers may have ideas for a suitable location based on how they typically move around the worksite. You should also ask your workers for feedback when you are doing your regular inspections of the container.

More information

Good practice guideline

[Managing work site traffic](#)

Quick guides

[Keeping safe from harmful substances while inspecting or unpacking containers](#)

[Safe reversing and spotting practices](#)

WorkSafe websites

[Managing your hazardous substances](#)

[Cranes](#)

[Forklifts](#)

[Energy Safety](#)