LOAD RESTRAINT INSPECTION GUIDELINE AND CHECKLIST

Mainfreight Air & Ocean Australia

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CONTAINERS

Important information

There are 11 important steps to follow when restraining your load:

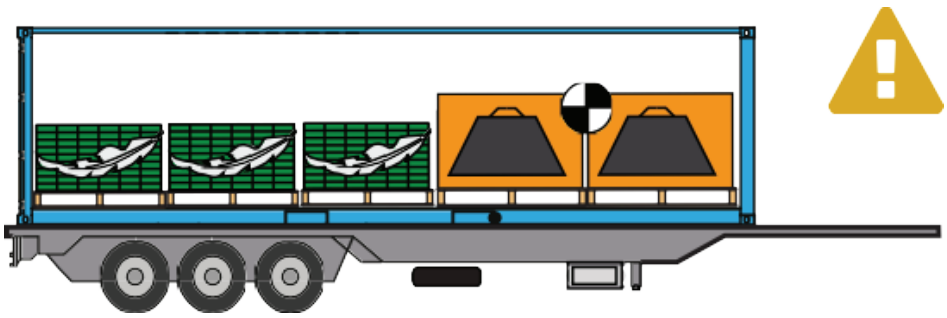
1. Planning the load.
2. Understand your load.
3. Use a restraint system that is suitable for your load as per the Load Restraint Guide in force from time to time.
4. Position your load to maintain vehicle stability, steering and braking when loaded.
5. Check your container structure and restraint equipment are in good working condition and strong enough to restrain your load.
6. Always pack contained loads tightly to minimise movement horizontally.
7. Fill gaps with empty pallets, dunnage, foam or other suitable materials.
8. Do not leave gaps unblocked in contained loads as freight can move during transport.
9. When loading freight into containers make sure there is even weight distribution both across the width and preferably along the length of the container.
10. Uneven weight distribution may affect the stability of the carrying vehicle.
11. Sign the Load Restraint Declaration and attach copy to shipping documentation (incomplete documentation may result in rejection or delays)

Further information can be found https://www.ntc.gov.au/sites/default/files/assets/files/Load-Restraint-Guide-2018.pdf or contact your local office.

Example of an unbalanced load

Consignors/Packer or Loaders should advise drivers how a containerised load is packed so that they can understand the impact of the load on a vehicle's stability. Complete Checklist LR 24.

Example of offset centre of gravity

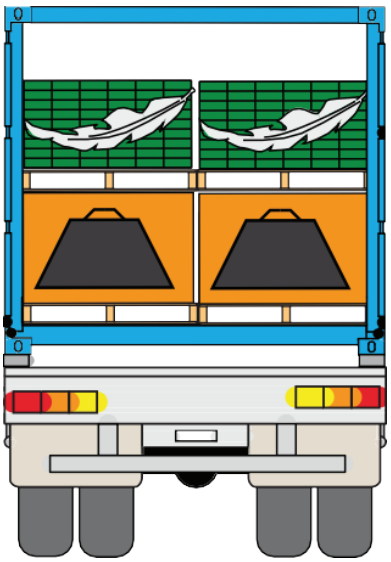


Consignors/Packers or Loaders should mark the centre of gravity on the container if it is more than 10% of the container length away from the container centre – as above. Complete Checklist LR 13.

To understand more about your load restraint responsibility, see further information contained with the Load Restraint Guide 3rd Edition 2018.

https://www.ntc.gov.au/sites/default/files/assets/files/Load-Restraint-Guide-2018.pdf

Light on heavy load



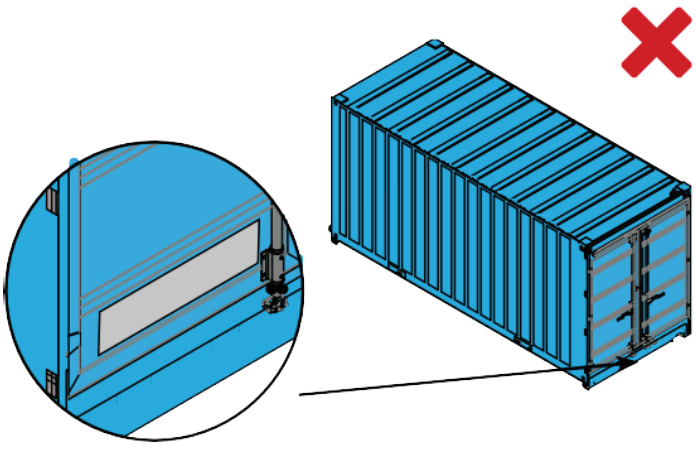
Load light freight on top of heavy freight to lower the centre of gravity and increase vehicle stability

Blocked loads

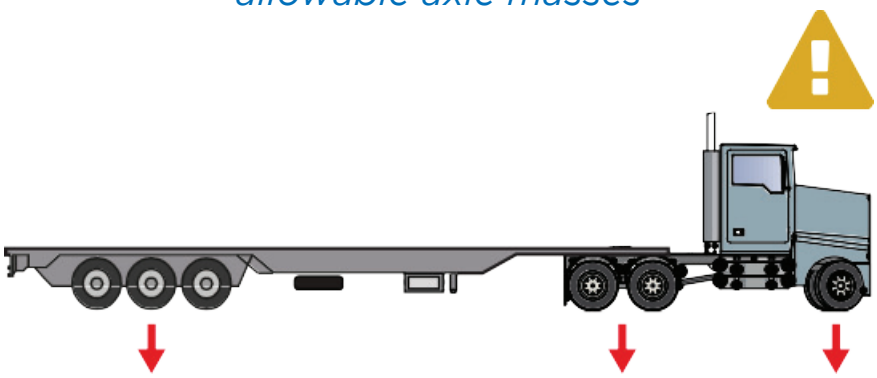
Make sure blocked loads do not exceed the allowable wall or floor loads for all modes of transport in the supply chain. For maximum wall and floor loads in general purpose containers refer to Australian Standard AS 3711.4 Freight containers Part 4: General purpose containers.

- ☒ Do not exceed the manufacturer specified maximum allowable load mass of the container or vehicle
- ☒ Do not exceed the maximum allowable axle masses of the carrying vehicle

Example Manufacturer-specified capacity

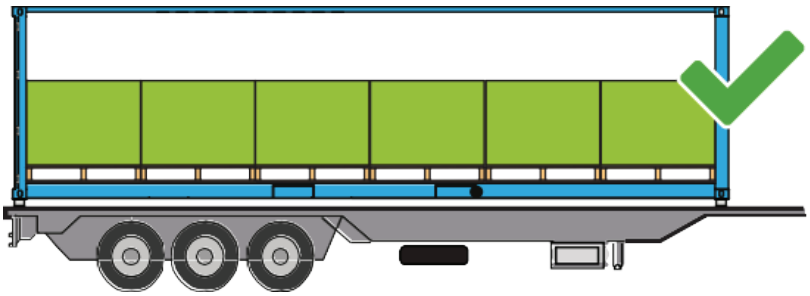


Do not exceed maximum allowable mass limits Figure above Maximum allowable axle masses

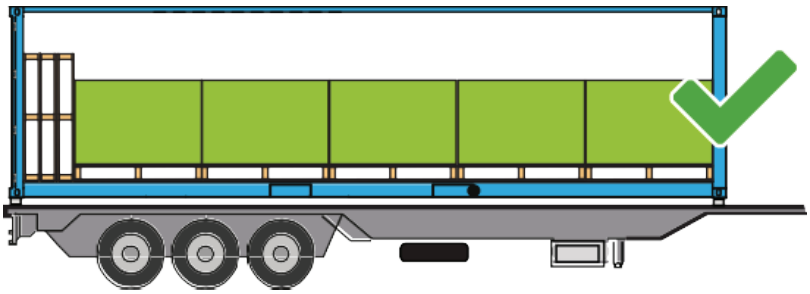


Pack loads tightly within containers to prevent the load from moving sideways or horizontally and fill gaps with empty pallets dunnage, foam, custom framing or other suitable materials.

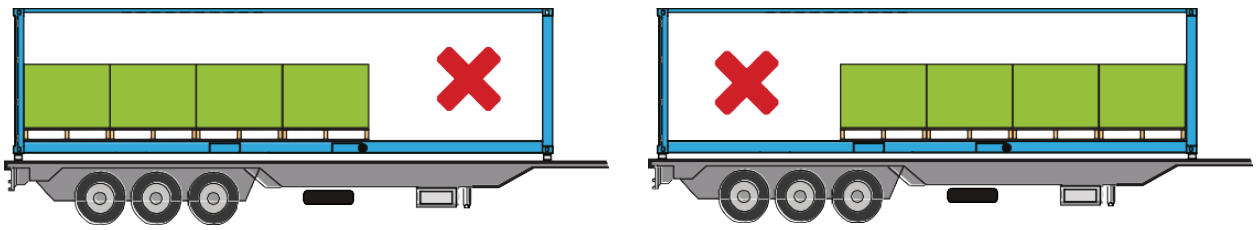
Containerised load – tightly packed



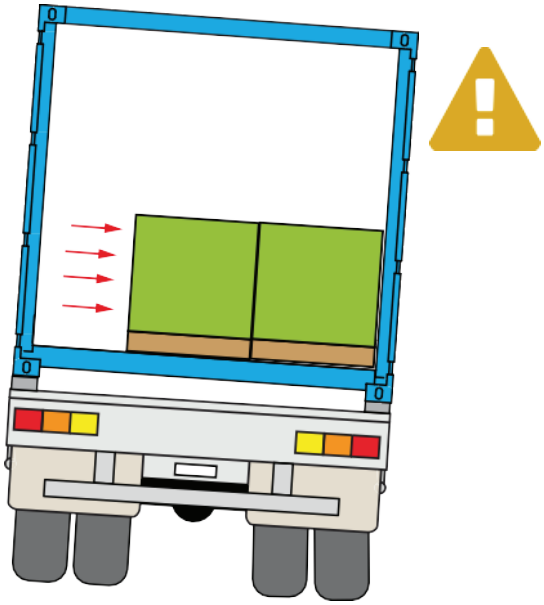
Containerised load – gaps filled with pallets



Gaps in containerised load



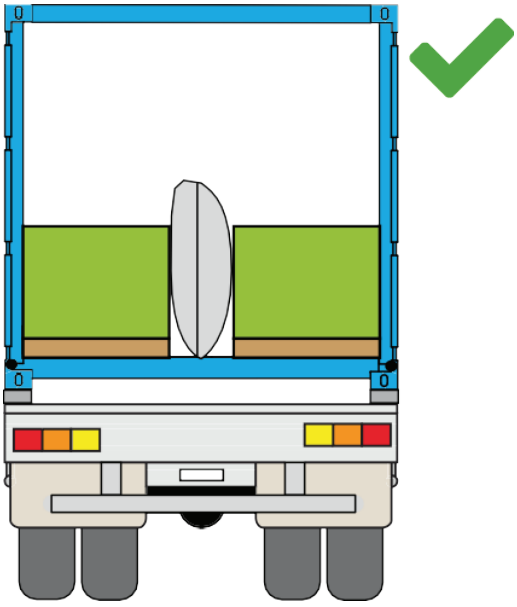
Sideways movement / Sideways gaps in load



Sideways movement - gap filled

With pallets

With air bags



Use rated inflatable dunnage as part of restraint systems within containers

- ☒ Do not use inflatable dunnage to restrain sharp objects
- ☒ Do not leave gaps unblocked in containerised loads because freight may move during transport and impact the container walls

Air bags with sharp load

For more information see **Inflatable dunnage in the Vehicles and equipment module** within the Load Restraint Guide.

https://www.ntc.gov.au/sites/default/files/assets/files/Load-Restraint-Guide-2018.pdf

Webbing net to prevent load shift

Shoring bars (Pogo Sticks)

Use lashings, webbing nets or gates to prevent loads that may have shifted during transport from falling out when the doors are opened.

Only use shoring/blocking bars to stabilise loads because they have limited load restraint capacity Rated bars may be suitable for blocking some loads.

BLADDERS AND FLEXIBLE TANKS

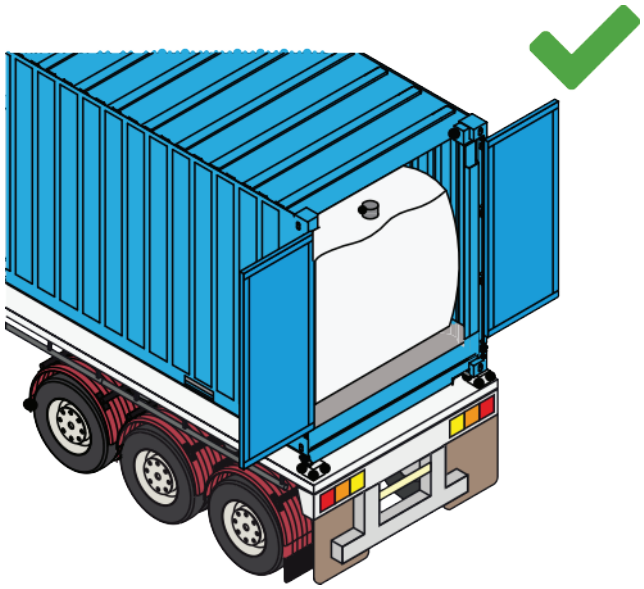
Bladders and flexible tanks can be transported inside rigid containers.

For maximum wall loads in general purpose containers refer to Australian Standard AS 3711.4 Freight containers Part 4: General purpose containers.

Always consider product surge and its effect on the carrying vehicle's stability.

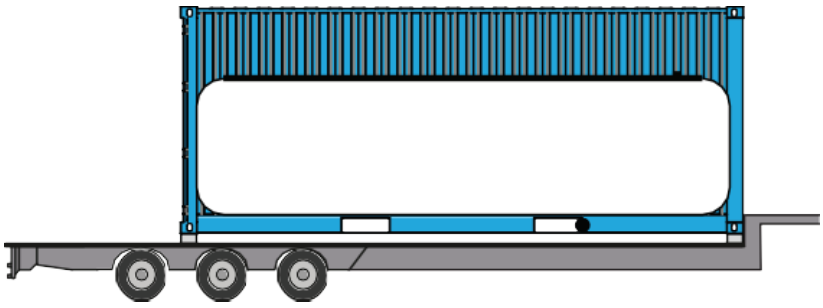
The container walls may not be rated to restrain the full specified payload and/or liquid surge forces.

Flexible tank inside container



Flexible tank product surge

Transport containers holding flexible tanks on drop deck trailers (or similar) to improve load stability.



For more information see the **Container Owners Association Code of Practice for Flexitanks.**

CONTAINER CHECKLIST

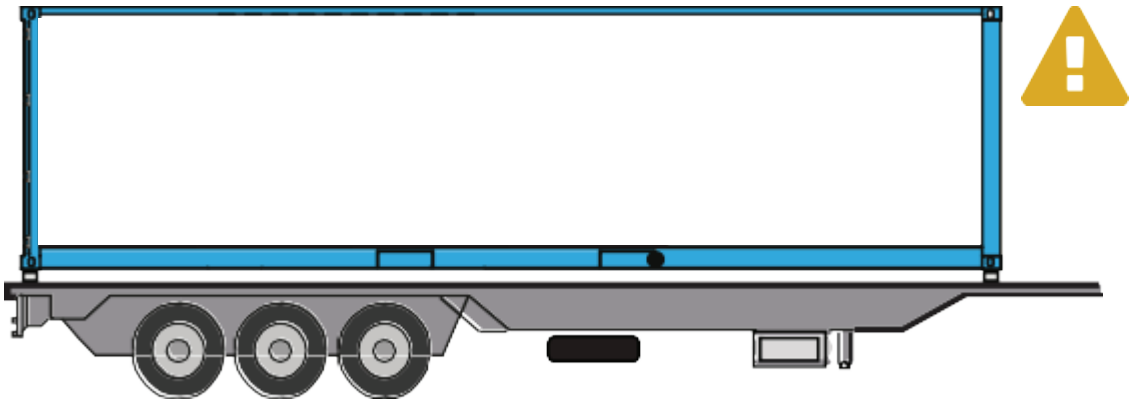
Please tick (✓)

Pre-Loading Inspection		Yes	No	N/A
LR01	Container is free from damage and/or substantial corrosion to end walls, side walls or roof? Take photos of damage. Do not use if damage is structural.			
LR02	Door locking devices and handles function properly?			
LR03	Door seals are free from cracks, tears, holes or any other damage that may allow them to leak?			
LR04	Are floor sheets damaged, discoloured, or different in colour, free from delamination and similar height (maximum 5mm difference)?			
LR05	Is the floor free of damage such as forklift damage, holes or deep gouging (maximum 10mm)?			
LR06	The first-floor sheet sits on at least 3 bearers and is properly secured to the bearers?			
LR07	Walk in container up one side and back down the other (about 500mm from walls). Floor sheets do not flex under foot. Flexing may indicate crossmembers are damaged reducing structural integrity of the container floor.			
LR08	Photo taken of unladen container interior showing roof, floor and walls?			
Packing and Restraint (Do not pack container if NO has been ticked in any above)		**Yes**	**No**	**N/A**
LR09	Load mass does not exceed the allowable payload?			
LR10	Loads not distributed evenly over full length of the floor do not exceed the maximum line load. (4.5t/metre for 20-foot containers or 3t/metre for 40-foot containers)			
LR11	Freight is stacked in stable configuration and appropriately secured? (e.g. banded, wrapped, pallets in good condition)			
LR12	Lightweight freight is loaded on top of heavy freight?			
LR13	Container weight is evenly distributed across and along the container? If not, the centre of gravity is more than 10% of the container's length away from the centre? marked in the Declaration at Diagram 1			
LR14	Load is tightly packed (no gaps) within the container to minimise horizontal movement?			
LR15	Any gaps are filled with empty pallets, timber dunnage, foam, custom framing, inflatable dunnage or other suitable material?			
LR16	If using inflatable dunnage load does not have sharp corners or edges that will cause a puncture?			
LR17	If lashings are applied there are appropriately tensioned, in good condition and protected from sharp edges?			
LR18	Is the load restrained to a certified lashing detail /system, or, restrained in accordance with the Australian National Load Restraint In force from time to time.			
LR19	Photo taken of container interior once packed prior to shutting the doors?			

Loading (Do not load container if NO has been ticked in any above)		Yes	No	N/A
LR20	Does driver have a complying Container Weight Declaration and is it in hand?			
LR21	Has the Load Restraint Declaration been signed?			
LR22	Loaded container does not exceed the maximum allowable load mass or axle masses of the container or carrying vehicle?			
LR23	Container is loaded with the doors towards the rear of the vehicle?			
LR24	Driver has been advised how the containerised load is packed so that they understand the impact of the load on the vehicle's stability and drive accordingly?			
LR25	All four container twist locks are engaged. Do not load if twist locks are damaged or any twist lock does not engage correctly.			

No.	Requirement / Issue / Photo	PHOTO / Comments / Causes/ Actions Required	Completed By & Date
LR14	EXAMPLE – Gaps in load allowing horizontal movement.	Gaps filled with dunnage	Packer – 09/07/2019

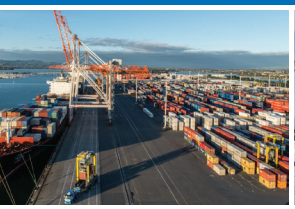
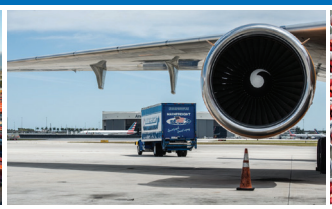
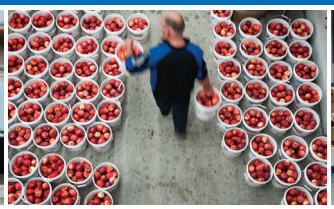
Indicate Centre of Gravity with an **X** *in Diagram 1*



Attach photos of load and restraints used here:

Our unique family and philosophy make Mainfreight, Mainfreight. This culture is our most treasured asset and is at the heart of our past, our present and our future.

AMERICAS ASIA AUSTRALIA EUROPE NEW ZEALAND

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