

## SECTION 20 PALLETISED FREIGHT

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- 20.3 Principles of Good Pallet Stowage
- 20.4 Standard Pallet Sizes
- 20.5 Efficient Placement & Arrangement in Wagons
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- 20.7 Batteries
- 20.8 What to Do if the Load Shifts on the Pallet.

For equivalent guidelines in respect of road transportation see Section 3 of this Manual.

This Section covers the handling and stowage of palletised freight except freight forwarded in temperature-controlled boxes or IceLiners. For this type of freight, see Section 9 of this Manual,

## 20.1 SAFE HANDLING

Always consider these important points when stowing palletised freight:

- → Is the pallet **strong** enough?
- How well is the load **fixed** to the pallet?
- → How well is the pallet **fixed** to the wagon?

### DO...

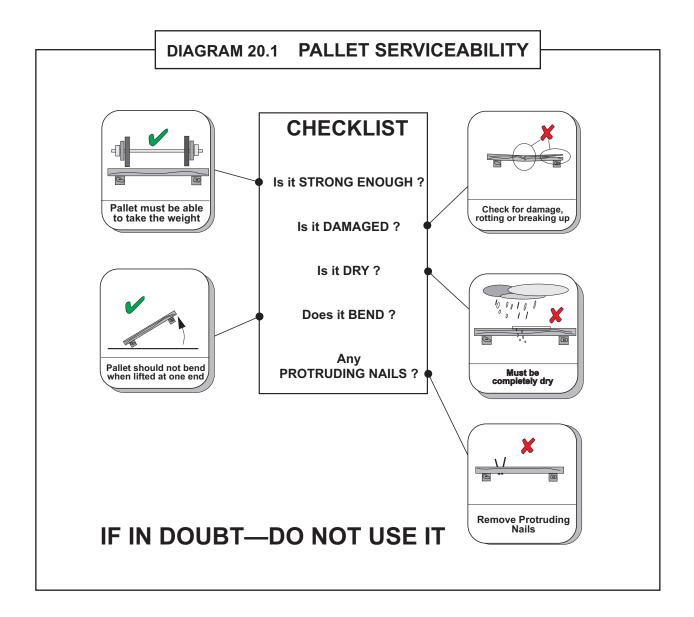
✓ Check each of these points before, during and after stowing palletised freight.



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## 20.2 PALLET SERVICEABILITY

# DO THE FOLLOWING CHECKS...





## 20.3 PRINCIPLES OF GOOD PALLET STOWAGE

#### **FULL OR NEARLY FULL LOADS**

#### DO...

- ✓ Always start stowing from an end or a corner.
- ✓ Stow each pallet as close as possible to the one next to it.
- If access is from the centre of the wagon, start from the far corners and work towards the middle.
- If access is from one end, start stowing at the other end and work towards the access point.
- If access is from the entire side of the wagon, start in the opposite corners and work towards one point.
- Fill any space between pallets with air bags or dunnage or other packing material.

#### DO NOT...

- DO NOT attach lashings to straps and bindings used to attach the freight to the pallet.
- **X** DO NOT double stack if there is any chance that the lower freight might be squashed, damaged or crushed.

#### **PART LOADS**

#### DO...

- ✓ Distribute the load on the load platform.
- Lash, baulk and restrain the pallets securely and safely by any approved acceptable method.



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## 20.4 STANDARD PALLET SIZES

Diagram 20.2 defines the standard pallet sizes found in regular use.

## DIAGRAM 20.2 STANDARD PALLET SIZES

Product	At right angles to the forks	Along the forks	Capacity (tonnes)
AHI (Bottles)	1370	1100	
Apple & Pear Board	1620	1120	1.5
Brewery	1200	1100	
Bricks	1220	915	1.5
Cartoned meat	1520	1140	1.3
Cement	1200	1000	1.4
Cement	1375	1115	2.0
Dairy Board	1080	930	
Dairy Board bins	1200	1000	0.9
Kiwifruit	1070	890	0.75
Milk powder	2200	1160	1.6
Salt	1400	1100	1.0
Standard pallet	1200	1000	1.0
Urea	1400	1040	1.0
Wallboard	up to 3600	1200	

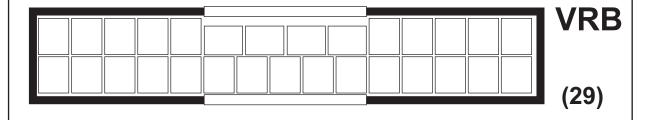
## **20.5 EFFICIENT PLACEMENT OF PALLETS**

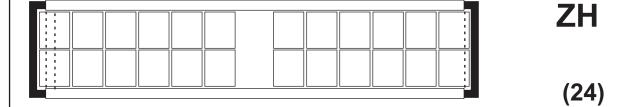
Diagram 20.3 shows effective pallet placements for some common wagon types.

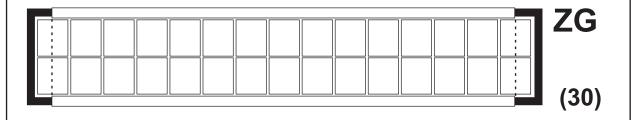
Note that the last four pallets to be loaded into a VRB should be rotated through 90 degrees.



## DIAGRAM 20.3 PLACEMENT OF STANDARD PALLETS









## 20.6 PLASTIC & STEEL DRUMS

Plastic and steel drums are very difficult to secure. The easiest and simplest approach is as follows:

#### DO...

- ✓ Place drums on pallets.
- ✓ Always stow drums upright.
- ✓ Lift and place on to line-haul unit.
- Lash the load in place.
- Where possible, load drums in pairs.

### DO NOT...

DO NOT place steel drums on steel deck.

## 20.7 BATTERIES

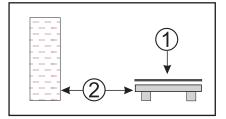
Batteries are Dangerous Goods and instructions for palletising are included in KiwiRail's 'Dangerous Goods Freight Procedures'. Please refer to this document or ask for a copy as it gives other important information on the stowage and transport of batteries.

## 20.8 WHAT TO DO IF THE LOAD SHIFTS ON THE PALLET

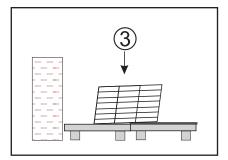
Loads do sometimes shift in transit, corrective measures can be taken but it is important that care is taken so that the freight is not damage during the process of fixing. Diagram 20.4 illustrates the appropriate action.



## DIAGRAM 20.4 WHAT TO DO IF A LOAD HAS SHIFTED ON THE PALLET

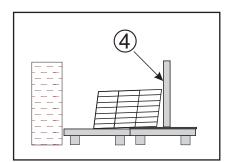


- Place a thin sheet of particle board (3–6 mm) on top of a spare pallet.
- Place this pallet one pallet width away from a solid, sturdy wall.

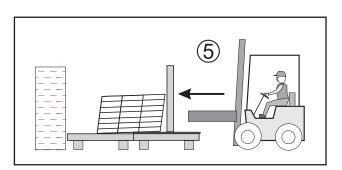


3 Lower the pallet with the shifted load into the gap.

Make sure that both pallets are tight up against each other.



Place a third pallet on its end up against the load.



(5)

Drive the fork hoist carefully against the upright pallet and continue until the load is shifted back onto its own pallet.

**STOP !!!** 

Stop as soon as the load is back on its' own pallet.

Remove the vertical pallet, the particle board and the spare pallet. Put them away, and check that the repositioned load is safe and secure.