

	<b>Engineering Guidance Paper</b>	Document AITA-013	Page 1/3
	<b>Transporting and stacking wide loads</b>	Rev. Date 14.03.2018	Rev 2

Special precautions need to be taken when handling wide loads. The wider the load the greater the precaution required. For example an 8 metre wide load weighing 500kg can be lifted off and on a truck and transported short distances by a standard forklift (straddle or counterbalance type) which has ratings between 1000kg to 2500kg @ 600mm L.C., as long as the appropriate extra precautions are taken.

The site should have a safe system of work in place for these applications and these should be addressed in the Traffic Management Plan (TMP). For additional guidance on TMP refer to AS2359.2.

If handling wide loads is a standard practice, the user should use a purpose built attachment (e.g. spreader bar, ref illustration 1) and truck rated accordingly. Forklifts with dual wheels (wider wheel base) and wider carriages are more appropriate for wide loads. Depending on the loads being handled and the frequency, side loading or multi directional forklifts should be considered.

If the load is extremely wide, the user needs to consider other methods of handling the load and refer to AS2359.2 clause 3.13 regarding simultaneous use of two trucks.



## CAUTION

**When handling wide load use extreme care**

### DO'S

- ✓ Spread forks as wide as possible.
- ✓ Ensure load is supported, stabilized and secured.
- ✓ Centralise the load (this is critical). Operator should do a test lift to determine lateral centre of gravity and potential movement in the load during transport, when lifting an unknown extra wide load, ref illustration 3 & 4.
- ✓ Use appropriate truck or spreader bar for the task and load – particularly for sagging loads (eg roofing material, plaster board), ref illustration 1.
- ✓ Always drive and brake in a slow smooth manner; lift, lower, tilt and or side shift slowly.
- ✓ Take more care that the load does not strike something due to wider extremity of load and poor visibility of load ends.
- ✓ Use a spotter if visibility is restricted.



## DONT'S

- \* Do Not travel or operate hydraulics at excess speed.
- \* Do Not create a hazardous situation by using sudden movements or harsh braking.
- \* Do Not travel with load elevated at height above the minimum necessary to transport.  
Never travel with the load elevated beyond 300mm except when loading and unloading.

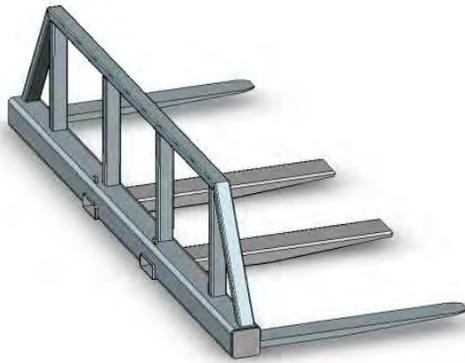


illustration 1

Illustration 1 is a typical slip on fork spreader, which can be used for handling wide loads or double pallets.

**CAUTION:** The forklift must be rated for use with the attachment, check capacity plate. If it is not rated for the attachment **DO NOT** use the attachment

### Rating of FLT for use with Attachment

The forklift truck data plate/name plate, sometimes referred to as a load rating plate or capacity plate must display actual capacity, load centre and lift heights of all attachments approved for use on that particular forklift truck.

**Note:** Your truck might have more than one data plate/load rating plate, depending on number of approved attachments allowed to be used.

The only person authorised to provide the forklift truck data plate information is the forklift truck manufacturer or approved agent or distributor.

## Load Centre of Gravity

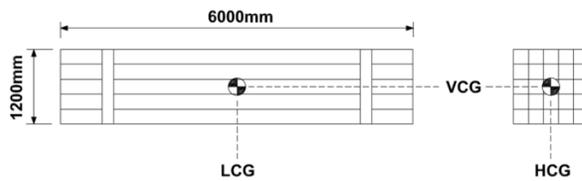


illustration 2

With uniformly distributed wide loads (ULD's), for example a bundle of steel tubes, bundle of timber etc. The vertical centre of gravity (VCG), the horizontal centre of gravity (HCG) and the lateral centre of gravity (LCG) will be in the centre of the bundle/wide load as per illustration 2.



illustration 3

**Note:** An unknown wide boxed load the lateral load centre is unknown (illustration 3) and needs to be determined by a test lift.



## Know the Hazards

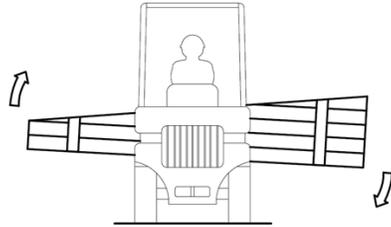


illustration 4

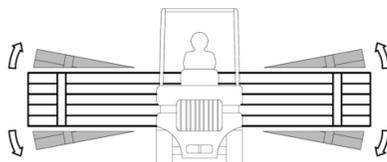


illustration 5

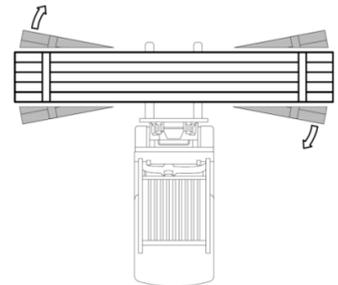


illustration 6

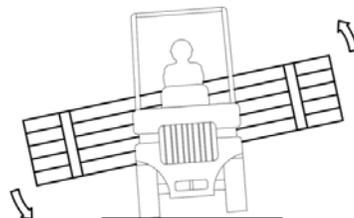


illustration 7

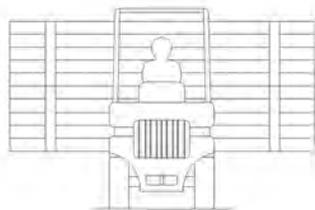


illustration 8

### Load lateral centre of gravity

Where it is necessary to lift a wide load where the lateral load centre of gravity is unknown. Do a test lift first to determine lateral centre of gravity and potential movement with the load during transport.

Exercise extra caution when handling off-centre loads that cannot be centred.

### Load Stability

Be careful when stopping or changing direction suddenly, lifting or lowering suddenly as wide loads could become unstable.

### Load Swing

Be careful whilst travelling or turning, the load ends will swing wide. Make sure you have adequate clearance, and watch out for people in the area.

### Load Shift

Be careful when turning, turn slowly to prevent load from shifting.

### Visibility

When carrying a bulky load which blocks or restricts forward visibility the truck shall be driven with the load trailing and if necessary under the direction of a person who has visibility in the direction of travel, unless safe work practises allow otherwise.