

1. This Technical Advice Document applies to

- The transportation of 1830mm wide slab on dual-axle tractor units by road, rail and sea.

The lowest friction factor determined as per EN 12195-1:2010 Annex B.1.2 is $\mu=0.6$ (Product-on-Anti Slip Matting).

2. Essential requirements

- Anti-slip matting must be placed beneath all base timbers.
- All restraints must be a minimum of LC 2000 daN webbing straps and must be compliant with EN 12195-2.
- Cross-over restraints added to the front **and** rear of the load.
- Opposing-loops evenly spread along the load.
- Heavy duty webbing sleeve edge protection where required (see *TIS-0005 Webbing strap edge protection*).
- Do NOT overload lashing points (see *TIS-0009 Lashing Points*).
- Side pins fitted for loading and unloading safety on all loads.
- Additional restraint measures must be added during Winter Weather Advisory Periods.

3. Load configuration and restraint

3.1 Road, Sea and Intermodal transportation



Minimum of
LC 2000 daN straps

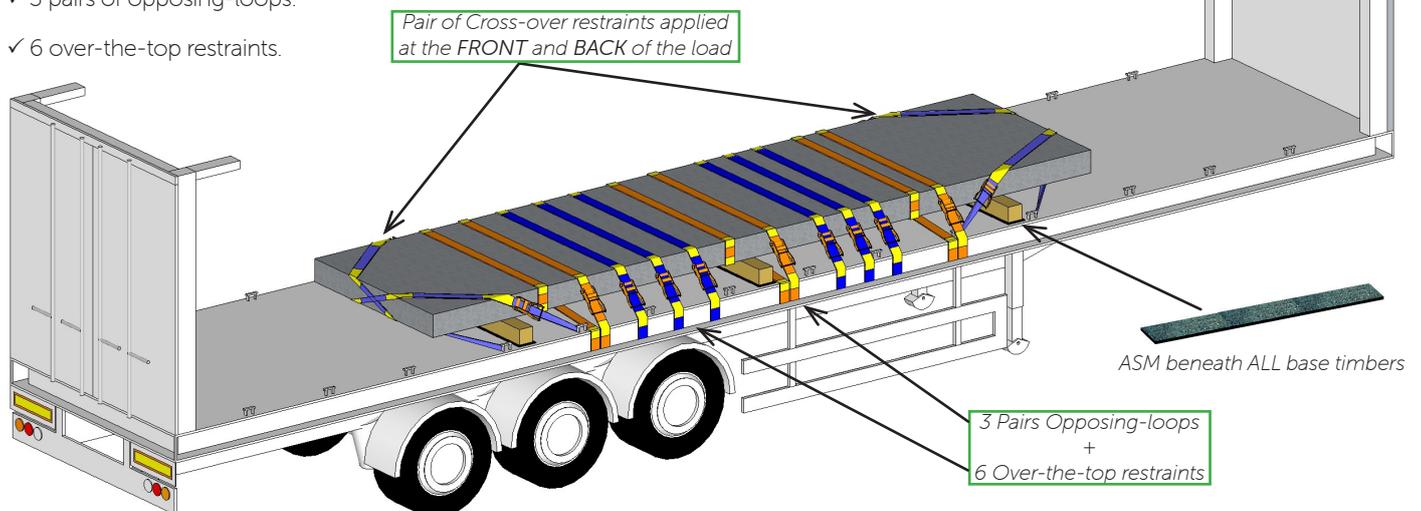


x16



as required

- ✓ Anti-slip-matting beneath all base timbers.
- ✓ All timbers to be a minimum of 125mm x 125mm full width timbers.
- ✓ Load to satisfy axle weights (see *TIS-0012 Axle loads & weight distribution*).
- ✓ Heavy duty webbing-sleeve edge protection where required.
- ✓ Cross-over restraints fitted at the front **and** rear of the load.
- ✓ 3 pairs of opposing-loops.
- ✓ 6 over-the-top restraints.



Example Load: 1830mm x 225mm x 7400mm (23.9t) slab load

Table 1: Minimum number of restraints for intermodal slab loads

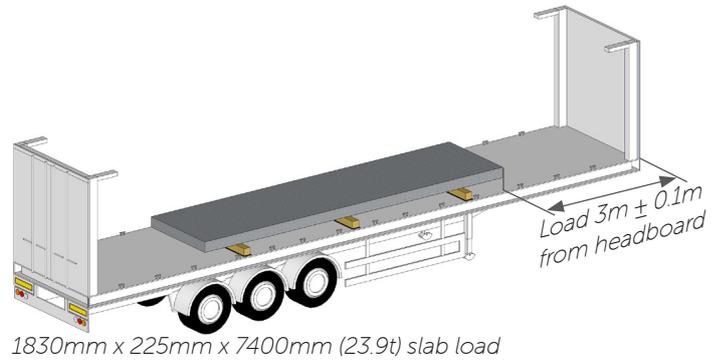
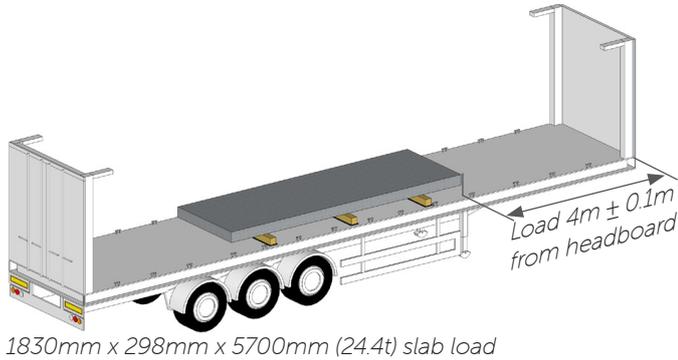
Load	Anti-slip-matting	Opposing-Loops	Over-the-top Restraints	Cross-over Restraints
Up to 25t	Beneath ALL base timbers	3 Pairs	6	2 Pairs (as shown)

This Technical Advice Document has been designed to meet the forces for road transport as stated in EN 12195-1:2010 and VDI 2700.

3.2 Axle loadings

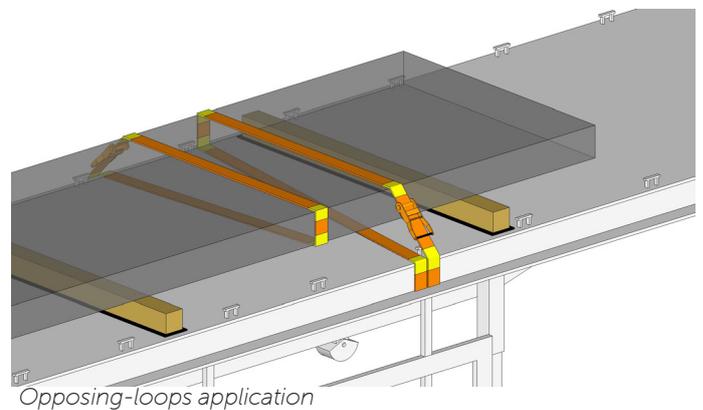
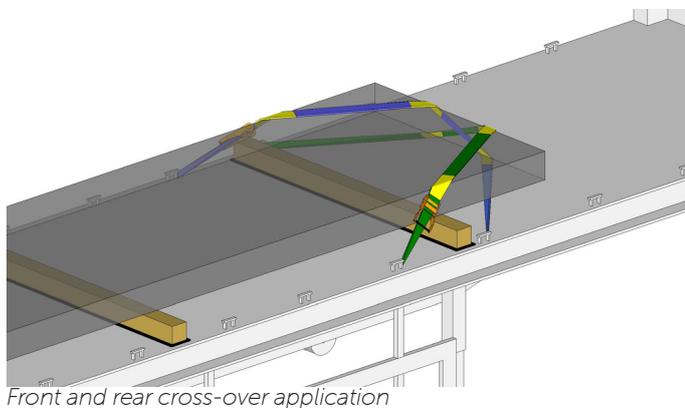
To satisfy axle-loadings, material must be loaded away from the headboard (see *TIS-0012 Axle-weights and load distribution*).

- ✓ Load centrally along the trailer bed.
- ✓ Guidance for dual-axle tractor units shown below:



3.3 Restraint application

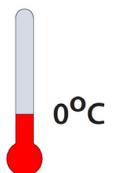
- Cross-over restraints must be applied at the front and the rear of the load.
- Opposing-loops - each webbing strap must be attached to two separate lashing points.
- Heavy-duty webbing sleeve edge protection must be used on all contact points between the product and the restraints.
- Do **NOT** overload lashing points



4 Winter weather advisory periods

During winter weather advisory periods when there is likelihood of frost and ice forming, additional restraint measures must be applied:

- ✓ Anti-slip matting must be placed on BOTH sides of all base timbers.



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2 BUILDING STRONGER FUTURES

