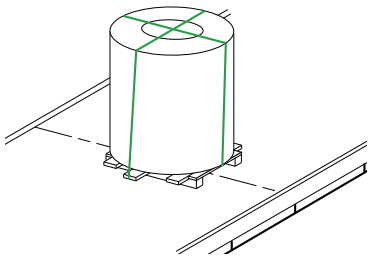
Load Restraint Guideline
Bore Vertical Coils - Single File

BV

1. This Guideline applies for:

- Restraint of bore vertical, sheet metal coils strapped securely to timber pallets in accordance with BlueScope procedure KICP-PR-004M. These coils are commonly known as “Top Hats”.



2. Essential Requirements

- ✓ All restraints must be 8 mm transport chain, assumed 3.0 tonnes Lashing Capacity (see AS/NZS4344 for details).
- ✓ Coils must be positioned in the centre of the vehicle deck
- ✓ No coil is to exceed the maximum coil weights shown in Table 1 or 2 for the given chain arrangement (shown in Section 3).
- ✓ Coils should be equal to, or slightly smaller than, the pallet with a maximum 50 mm difference (eg. 25 mm either side).
- ✗ Webbing lashings must NOT be used. Their stretch and the curved top of the coil makes them unsuitable.
- ✗ Do NOT load coils if the packaging is not in a sound condition. There should be 2 tight steel straps around the coil and pallet, at 90 degrees to one another.
- ✗ Timber pallets must NOT have visible faults such as broken bearers or runners.

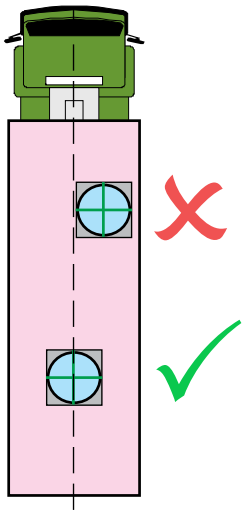


Figure 1. Place coils on the centre line of the vehicle

3. Restraint System

3.1 Poly Corners - Non Preferred Method

- ✓ Where Poly corners are used two chains are required, they **MUST** be applied by the “2nd off 1st” method, as per **Figure 2.**
- ✓ Chains are to be placed as close to the centre of the pallet as possible.

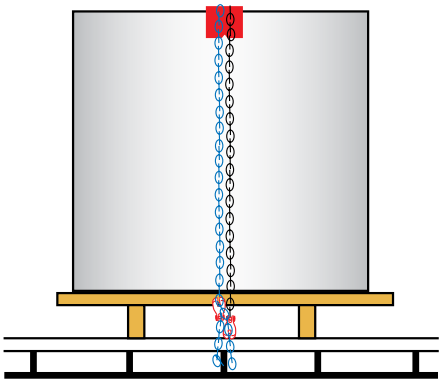


Figure 2. 2nd off 1st method.

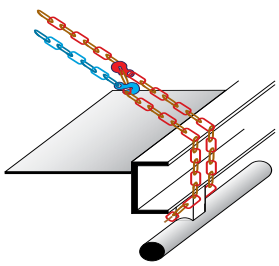


Table 1. Maximum Coil Weight (Tonnes)%

Coil height or Sheet width (mm)	2 Chains 2nd off 1st Only
600 to 950	0 - 7.9
951 to 1000	0 - 7.5
1001 to 1100	0 - 6.6
1101 to 1300	0 - 6.0
1301 to 1600	0 - 4.4*

*Notes: * Maximum coil mass is governed by pallet size.*
% For coil masses greater then those given in Table 1 use the Galas Corner Method on page 2. Coils with a wall thickness less than 75mm must be carried bore horizontal when using Poly Corners.

3.2 Galas Corners - Preferred Method

- To reduce the risk of coils "diving under" chains, use Galas corners with a front and rear horizontal chain where required. Horizontal chains are to be hand tight with minimal slack.
- Centre chains are to be placed as close to the centre of the pallet as possible.
- Angled chains must be anchored past the outside edge of the pallet.

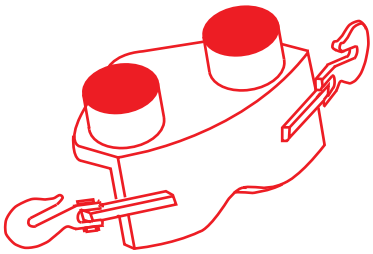


Table 2. Maximum Coil Weight (Tonnes)

Coil height or Sheet width (mm)	1 Chain	2 Chains 2nd off 1st or 1 Vertical, 1 Rearward	3 Chains
600 to 950	0 - 6.2	6.2 - 7.9	7.9 - 10.0
951 to 1000	0 - 5.3	5.3 - 7.5	7.5 - 10.0
1001 to 1100	0 - 4.7	4.7 - 6.6	6.6 - 10.0
1101 to 1200	0 - 4.2	4.2 - 6.0	6.0 - 10.0
1201 to 1300	0 - 3.7#	3.7 - 6.0	6.0 - 10.0
1301 to 1600	0 - 2.2#	2.2# - 4.4*	2.2# - 4.4*

Notes: # Coils with a wall thickness less than 50mm must be carried bore horizontal when using Galas Corners
** Maximum coil mass is governed by pallet size.*