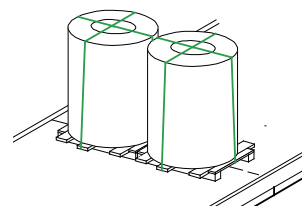


Load Restraint Guideline

Bore Vertical Coils – Two Abreast

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).
- ✓ Position coils about the centre of the vehicle deck, with pallets butted against each other.
- ✓ The height variation between adjacent two abreast coils must not exceed 100 mm. Both coils must be similar in diameter.
- ✓ 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.

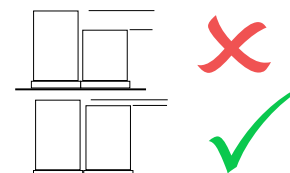
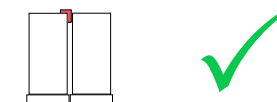
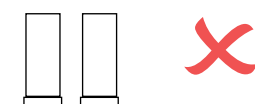


Figure 1. Max Height Difference 100 mm



No Pallet or Coil Gaps!
Place a poly corner between coils where a gap exist.



Bad Pallet Gap!

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.
- ✓ Anti-slip rubber must be used under both pallets, as per **Figure 3**.

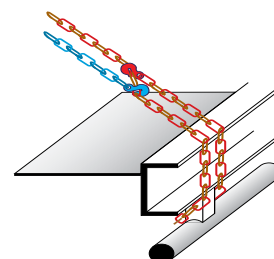


Figure 2. 2nd off 1st method.

Table 1. Maximum Individual Coil Weight (Tonnes)%

Coil height or Sheet width (mm)	2 Chains 2 nd off 1 st Only
600 to 950	0 - 4.8
951 to 1100	0 - 4.6
1101 to 1200	0 - 3.9
1201 to 1300	0 - 3.3 [#]
1301 to 1600	0 - 1.3 [#]

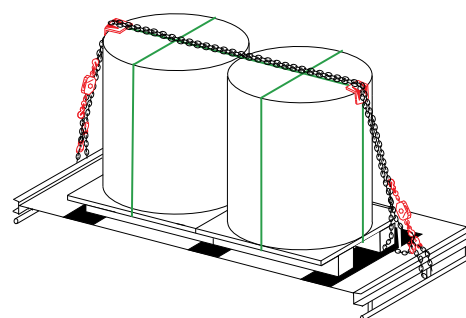


Figure 3. Anti-slip Rubber **MUST** be placed underneath both pallets.

Notes: % For coil masses greater than those given in Table 1 use Galas Corner Method , Table 2.

Coils with a wall thickness less than 75mm must be carried bore horizontal when using Poly Corners.

Load Restraint Guideline

Bore Vertical Coils – Two Abreast

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.

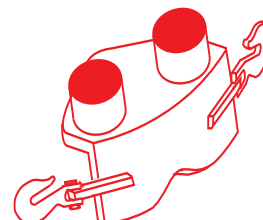
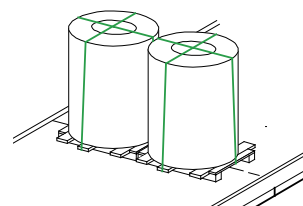
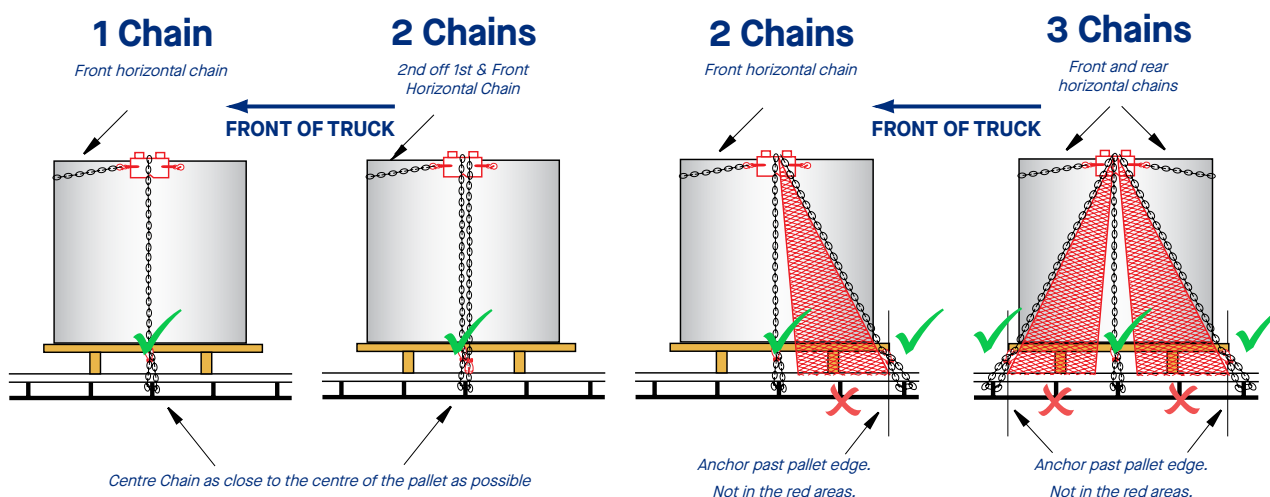


Table 2. Maximum Individual Coil Weight (Tonnes)

Coil height or Sheet width (mm)	1 Chain	2 Chains 2nd off 1st or 1 Vertical, 1 Rearward	3 Chains
600 to 950	0 - 2.3 [#]	2.3 - 4.8	4.8 - 5.1
951 to 1100	0 - 2.3 [#]	2.3 - 4.6	4.6 - 6.4
1101 to 1200	0 - 2.3 [#]	2.3 - 3.9	3.9 - 5.8
1201 to 1300	0 - 2.3 [#]	2.3 - 3.3	3.3 - 5.8
1301 to 1400	0 - 2.3 [#]	2.3 - 2.9	2.9 - 4.4*
1401 to 1600	0 - 1.4 [#]	–	1.4 - 4.1

Notes: # Coils with a wall thickness less than 50mm must be carried bore horizontal.



"These guidelines are provided to you by BlueScope Steel for guidance only, and compliance with applicable laws and standards remains your responsibility. Whilst BlueScope Steel, in cooperation with transport operators, has taken considerable care to develop load restraint guidelines that are effective and comply with all requirements, BlueScope Steel makes no warranty as to the applicability of these methods in all circumstances. It remains your responsibility at all times to ensure that the methods you use are adequate for the particular situation and where appropriate you should take further precautions. The contents of these guidelines are confidential to, and the property of, BlueScope Steel, and you may only use these guidelines with permission from BlueScope Steel."