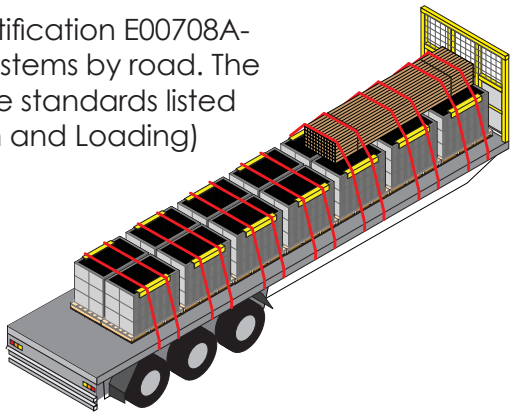
This Document:

- Is a loader and driver guide for the load restraint certification E00708A-LRC1-Rev6 for the transportation of Monier roofing systems by road. The certification is compliant to the loading performance standards listed in Schedule 7 of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation (22 February 2021).

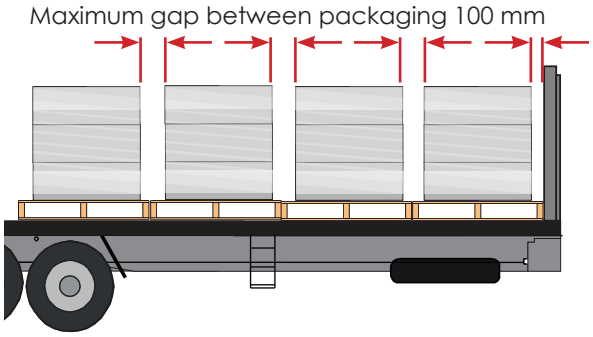


Key Common Elements

- ✓ The pallet and packaging must be in good condition and to Monier standards.
- ✓ Product should be in good order. It should not include substantial breakage.
- ✓ Inspect equipment and ensure lashings are in good condition.
- ✓ Lashings must be retensioned within 10 kms of a leaving the loading point.
- ✓ The number of lashings depends on the type of tensioner. See Sections 4.0 and 5.0.
- ✓ Lashings must be fully tensioned.
- ✓ Mobile plant loaded on or at the rear of a trailer and trucks must be restrained as the OEM (Original Equipment Manufactures) Instructions.

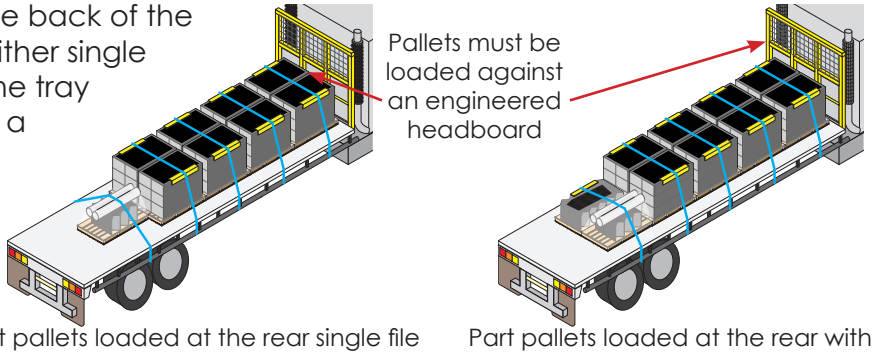
1.0 Forwards Restraint - Blocking

- ✓ Pallets are to be loaded against an engineered headboard or reinforced pipe gate, see Appendix A3 on page 9 for details on reinforced pipe gates.
- ✓ Pallets are then to be butted against each other in the forwards direction.
- ✓ Maximum gap forward between the packaging of the pallet and the blocking device is to be 100 mm. If a gap larger than 100 mm but no greater than 200 mm exists refer to appendix A1 or A2 on page 5 and 6.



Pallets butted up against each other

- ✓ Part Pallets and Accessories pallets may be loaded at the back of the full pallet load and either single file in the middle of the tray or against a pallet of a similar height.

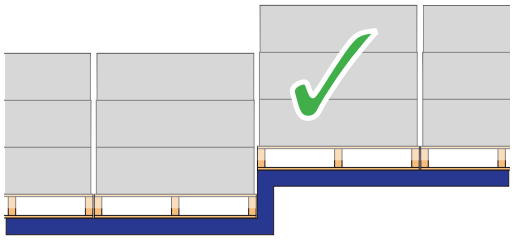


Part pallets loaded at the rear single file

Part pallets loaded at the rear with a pallet of a similar height

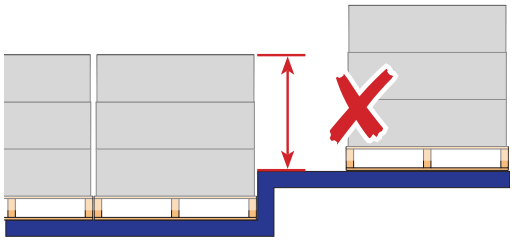
✓ Pallets, including double stacked pallets, must be blocked forwards to at least half the height of the top row of tiles.

FORWARDS



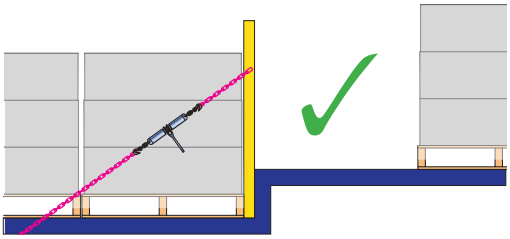
Block pallets forwards with other product

FORWARDS



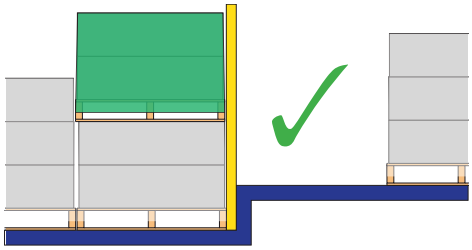
Pallet not blocked forwards

FORWARDS



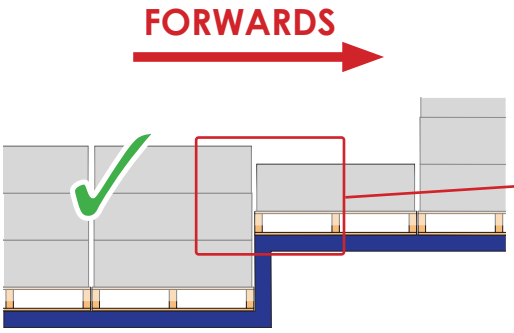
Blocked pallet with chain reinforced headboard

FORWARDS

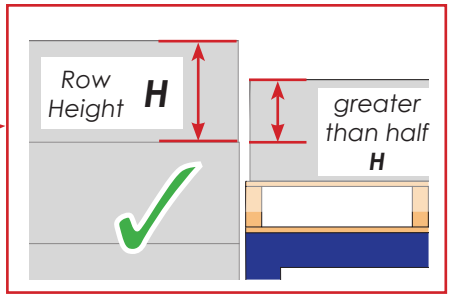


Blocked double stacked pallets with engineered headboard

FORWARDS

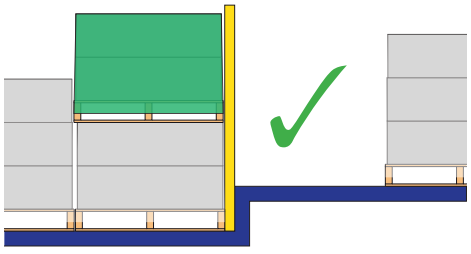


Block full height with engineered headboard

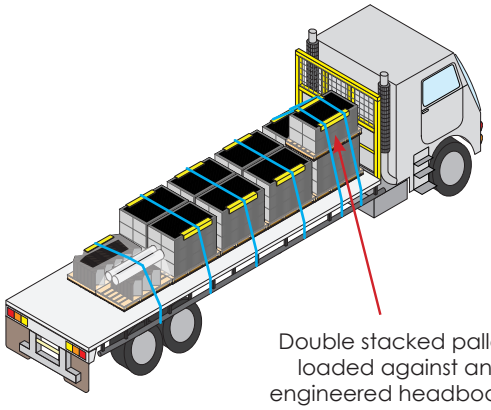


To be considered blocked the top row must be blocked by at least half its height

FORWARDS



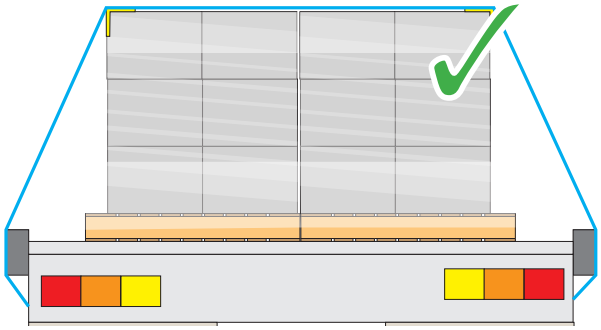
Blocked double stacked pallets with engineered headboard



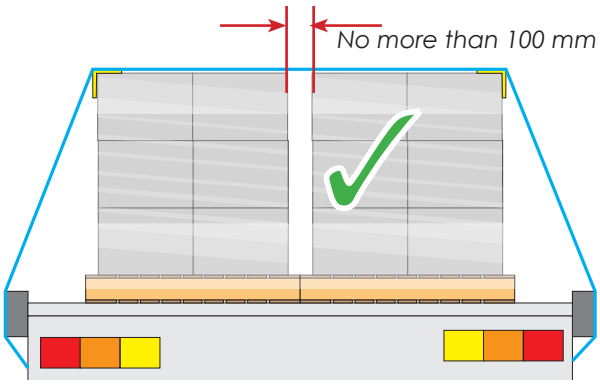
Double stacked pallet loaded against an engineered headboard

2.0 Sideways Restraint - Tie Down

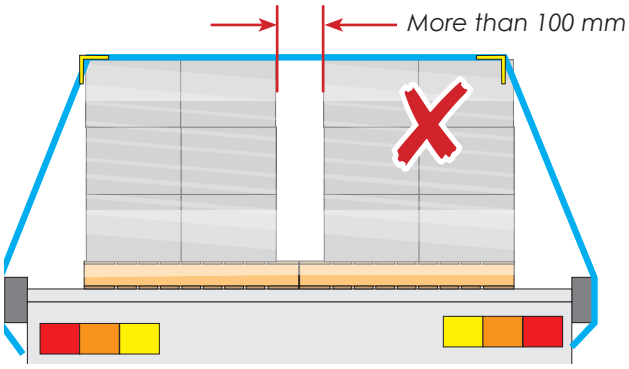
- ✓ Pallets are to be butted tightly against each other.
- ✓ Maximum gap between the packaging of the pallet on the same row is to be 100 mm.
- ✓ Pallet rows must be centred across the tray.
- ✓ Pallets loaded on the same row must be of a similar height, within 350 mm.
- ✓ Pallets with a height difference above 350 mm must be broken down and loaded on the opposite pallet. The pallets will then need to be repackaged to Monier standards.



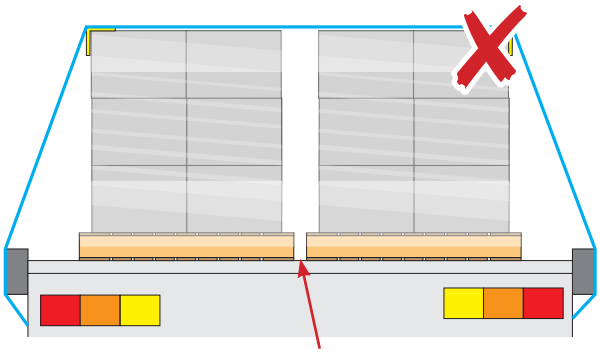
Pallets butted together and packaging within 100 mm



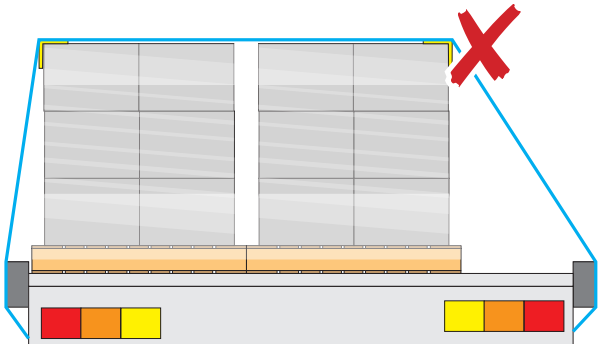
Pallets butted together and packaging within 100 mm



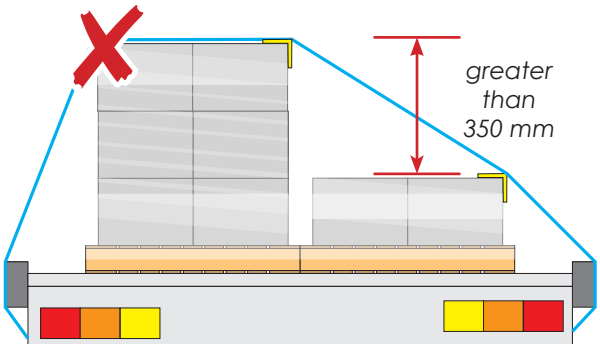
Gap greater than 100 mm between packaging



Pallets not butted together



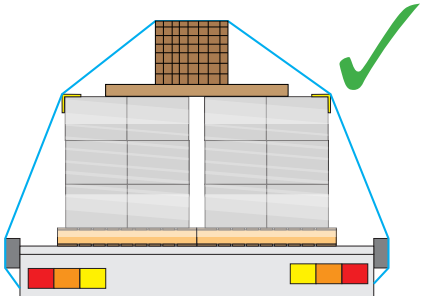
Pallets row not centred across tray



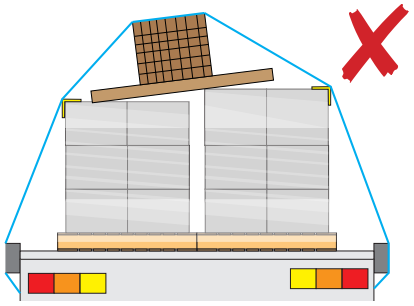
Pallets with row height difference greater than 350 mm

3.0 Timber Batten Pack Restraint

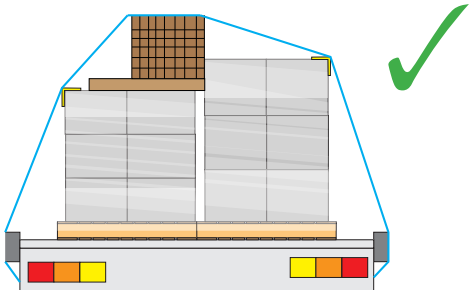
- ✓ Timber batten packs are to be loaded as per the four correct loading configurations shown in the pictures below.
- ✗ Do not load a timber pack against a single file full pallet row if the height difference is greater than 350mm. Ensure mass distribution across the trailer is no greater than 20%.
- ✓ If loading against two full tile packs there must be no gap between the timber pack, tile pack and/or coaming rail. Timber pack must be blocked against the headboard.
- ✓ If the height of the tile packs is different then load the pack on the lower pallet butt against the higher pallet. The higher pallet must cover the pack from sliding
- ✗ Do not load timber batten pack on uneven tile packs.
- ✓ Remove plastic from the top of the pack if loading timber battens on top. Ensure this does not compromise the strength of the pallet packaging system.
- ✓ Where possible, load the timber pack against the engineered headboard.



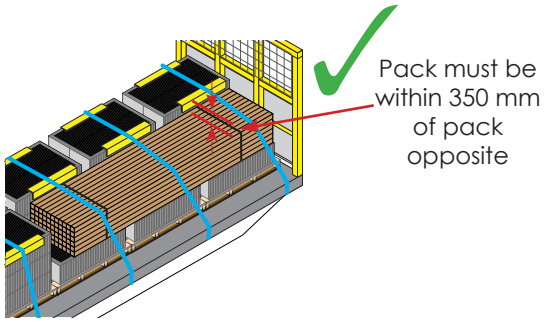
Timber pack to be loaded in the centre of the pallet row



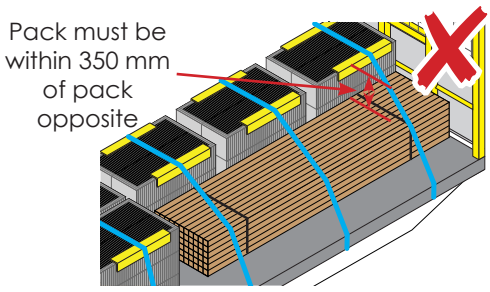
Do not load timber pack on uneven height tile packs



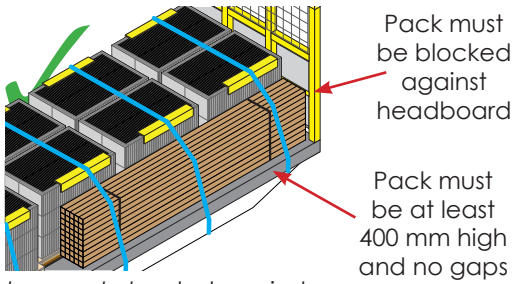
Timber pack loaded on smaller tile pack against tallest tile pack



Timber packs height difference less than 350 mm



Timber packs height difference greater than 350 mm



Timber packs loaded against 2 abreast full pallet row

4.0 Apply Tie-down Lashings - Single High Pallets

✓ Where **standard pretension ratchets or winches** are used, apply **two (2) tie-down lashings** over every row,

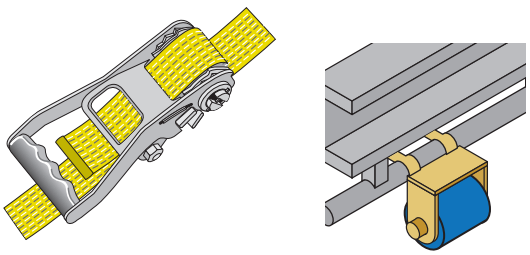
OR;

✓ Where **high pretension ratchets or winches** are used, apply **one (1) tie-down lashing** over every row.

✓ To be defined as a high pretension device, the manufacturer must certify that the typical pretension gained by the ratchet or winch exceeds 600 kg.f averaged over the load. See typical example images below.

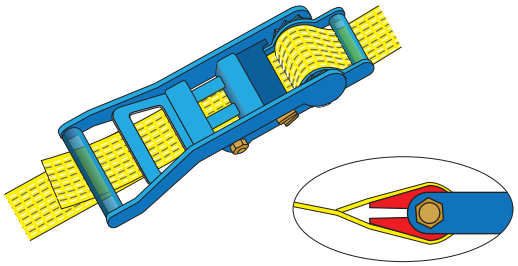
✓ Lashings must be fully tensioned.

⚠ NOTE - Higher capacity lashings (e.g. 75 mm, 5 tonne L.C. webbing) do not automatically provide improved load restraint for this system. Check the ratchet pretension.



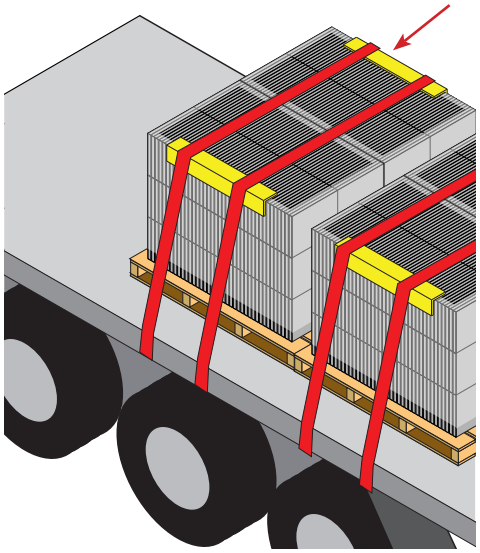
Standard Ratchet or Winch (minimum 300 kg.f)

OR

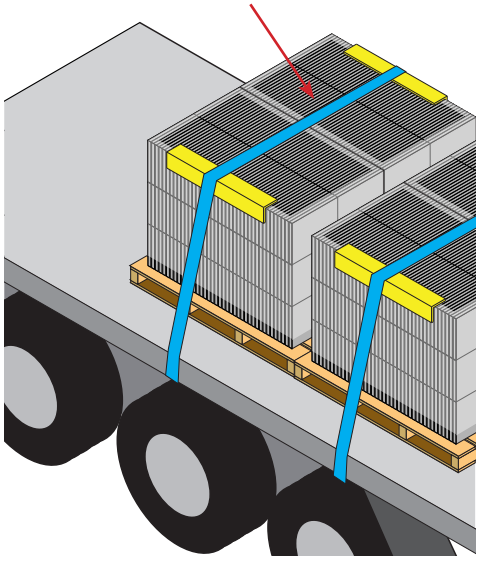


Higher tensioning device (minimum 600 kg.f)

2 lashing per row



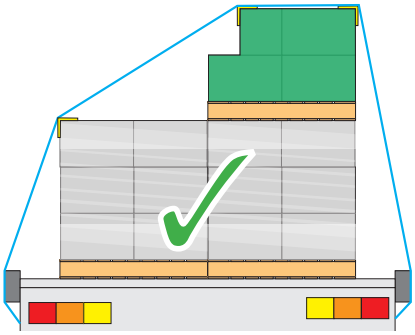
1 lashings per row



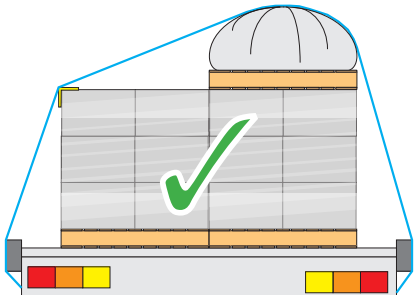
Note: This restraint system is based on the performance of the tensioning device and not the capacity of the straps.

5.0 Double Stacked Pallet Restraint

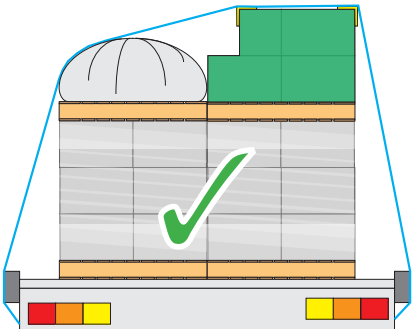
- ✓ Double stacked pallets must be restrained using **two (2) high pretenioned tie-down lashings** or **four (4) standard pretenioned tie-down lashings** over the row. See page 5 for more details on high pretension devices.
- ✓ Double stacked pallets are to be loaded as per the loading configurations shown in the pictures below.
- ✗ Do not load double stacked accessory pallets two abreast.
- ✗ Do not load double stacked pallets on the last row.
- ✓ Accessory pallet max mass is 800 kg and max height is 900 mm.
- ✓ Bulka bag max mass is 500 kg. Bulka bag must be loaded centrally on a pallet with no overhang.



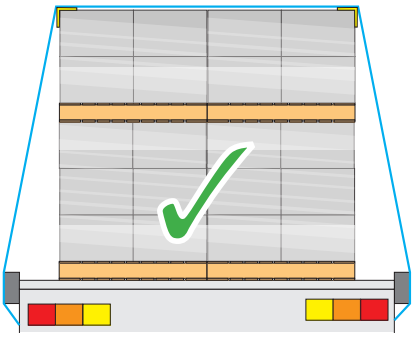
One accessory pallet



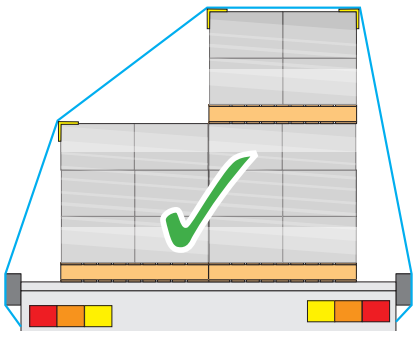
One bulka bag pallet



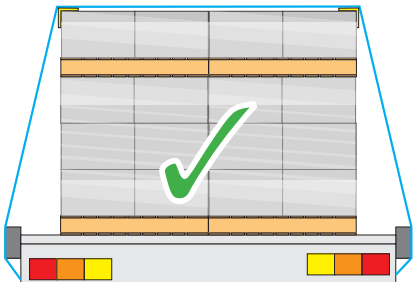
One bulka bag pallet and one accessory pallet



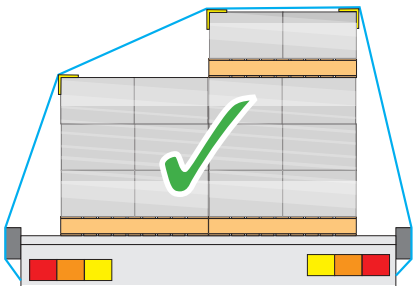
Two two-high pallets
Rosehill Pallets Only



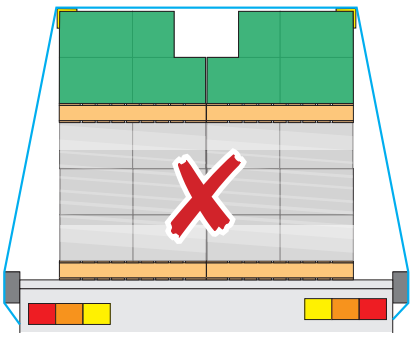
One two-high pallet
Rosehill Pallets Only



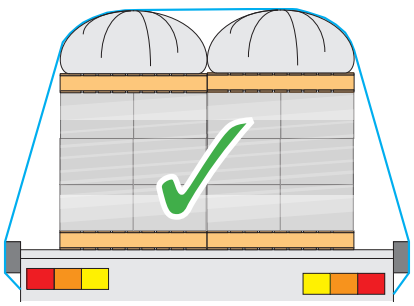
Two one-high pallets



One one-high pallet



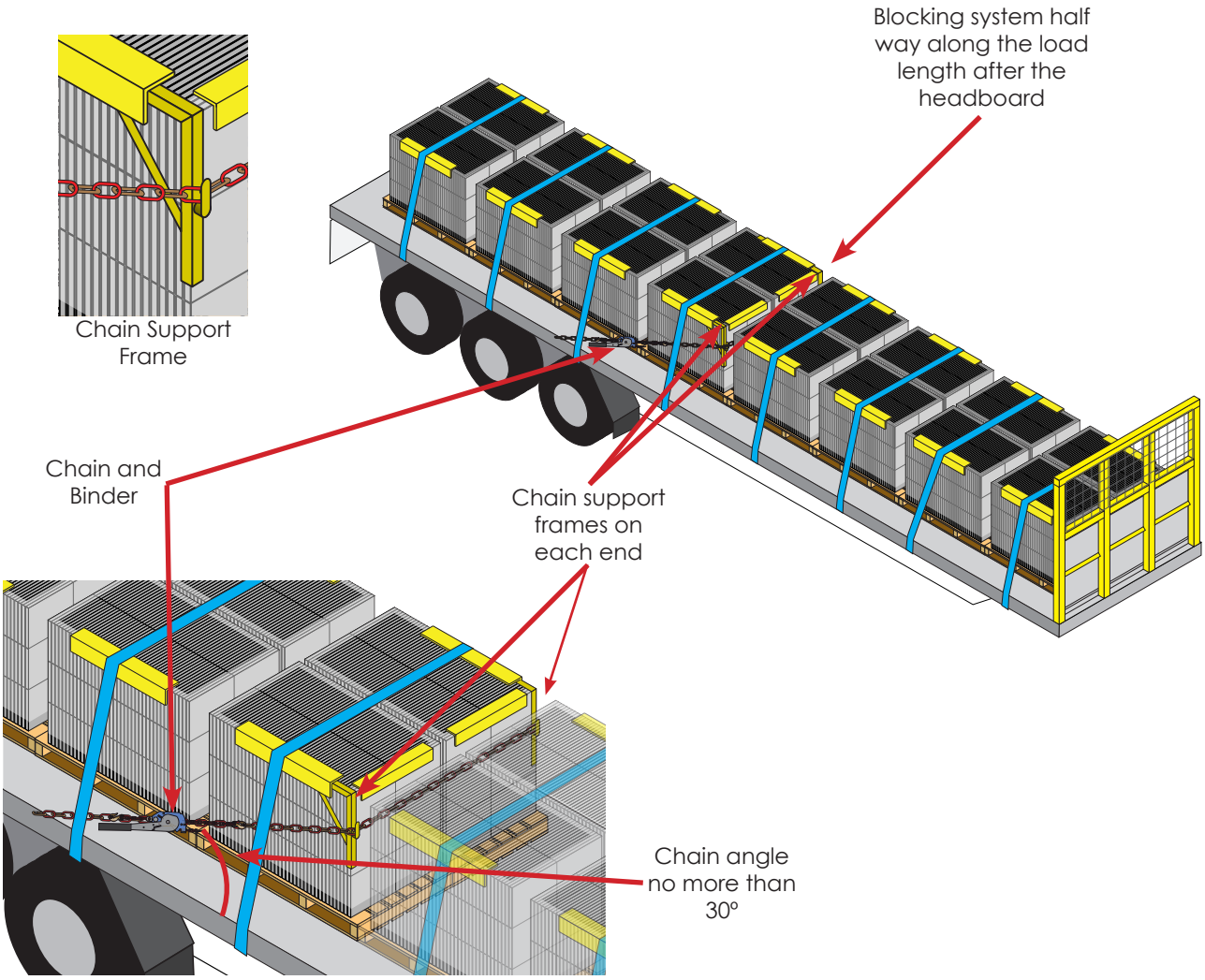
Two accessory pallets



Two bulka bag pallets

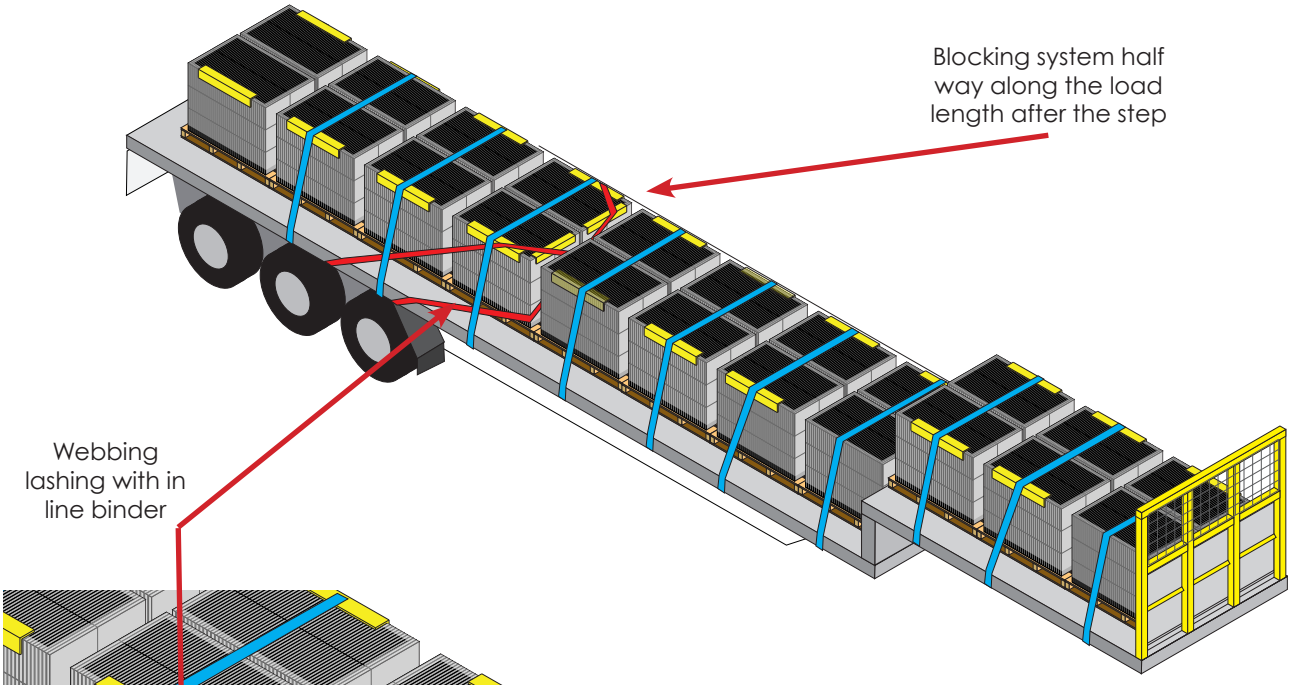
Appendix A1: Blocking Chain Method for Gaps Between 100 to 200 mm

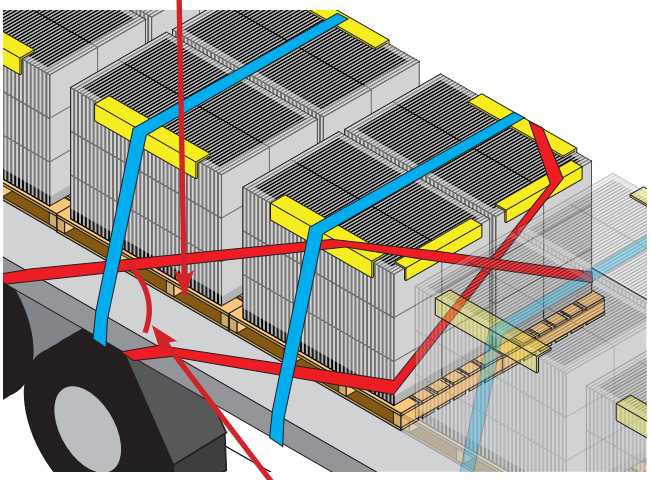
- ✓ If gaps between pallets exist which are larger than 100 mm but smaller than 200 mm a blocking system must be used halfway along the load from the headboard or step.
- ✗ If a gap is greater than 200 mm, this gap will need to be reduced.
- ✓ Blocking system must be placed halfway along the length of the load from the headboard or step.
- ✓ Chains must have a minimum lashing capacity of at least 3800 kg.f.
- ✓ Blocking chain must be held onto the pallet by chain support frames on each end of the pallet.
- ✓ Blocking chain must be placed back along the trailer at an angle no greater than 30°.

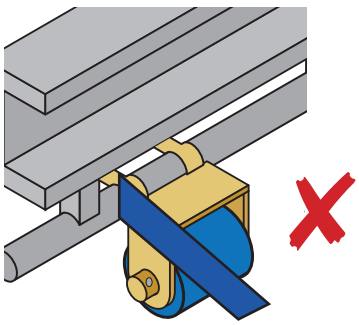


Appendix A2: Cross Over Method for Gaps Between 100 to 200 mm

- ✓ If gaps between pallets exist which are larger than 100 mm but smaller than 200 mm a blocking system must be used halfway along the load from the headboard or step.
- ✗ If a gap is greater than 200 mm, this gap will need to be reduced.
- ✓ Blocking system must be placed halfway along the length of the load from the headboard or step.
- ✓ Arrange cross-overs to cover the front face of the pallets.
- ⚠ Use only in-line ratchets for tensioning cross-over straps. Drum winches are not suitable
- ✓ The lashing angles for cross-over straps must be no steeper than 45°

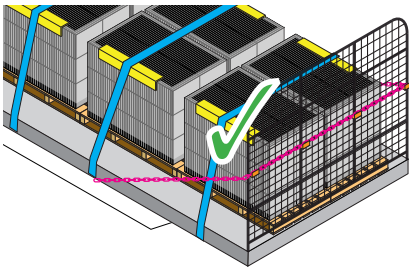




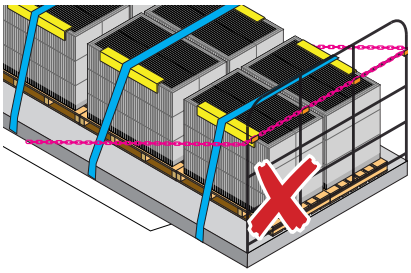


Appendix A3: Reinforced Pipe Gate Blocking

- ✓ A blocking system must be used halfway along the load from the headboard or step.
- ✓ Pallets are to be loaded against the reinforced pipe gate.
- ✓ Pallets are then to be butted against each other in the forwards direction.
- ✓ Reinforcement chains must be minimum 8 mm transport chains, fully tensioned with standard binders.
- ✓ Chains must have a minimum lashing capacity of at least 3800 kg.f.
- ✓ Blocking chain must be placed below the top of the load AND at least halfway up the height of the load.
- ✓ Chains must be held in position with chain holders or wrapped around vertical posts, on top of a horizontal post.
- ✓ Chains must have a maximum angle between the deck and chain holder of 30°
- ✓ Chain must be connected to a load post.
- ✓ Blocking system must be placed halfway along the length of the load from the headboard or step, see Appendix A1 and A2.
- ✓ Pipe gate must have a continuous mesh pattern or solid infill. If the pipe gate does not then attach plywood of suitable strength.



Chain must be located below the top of the load AND above half way up the load



Chain is located above the load