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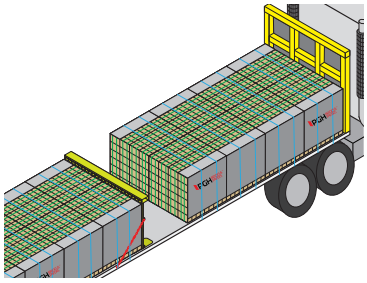

- Covers PGH brick packs and pallets transported by road, and restrained by forwards blocking and tie down to meet the requirements of the Performance Standards specified in Schedule 7 of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation 2018.
- The loader and driver guide to certification E01411-LRC1 to meet the loading performance standards listed in Schedule 7 of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation (22 February 2021).

Key Elements

- ✓ All loads and sections of loads must be blocked forwards (see page 2) and tied down (see page 4).
- ✓ Webbing straps for tie down must be minimum 50 mm wide and have a lashing capacity of 2500 kg force.
- ✓ Equipment must be in good working order.
- ⚠ Damaged and unstable products/packs are not to be loaded. Correct the pack/repack.
- ⚠ Packaging must be in good condition and meet the performance standards.
- ✓ Bricks must be prevented from coming off of the vehicle by use of corners with solid infills, angles with mesh infills, gates, packaging straps or stretch wrap.
- ✓ 9 mm structural plywood (or similar strength material) is suitable for forwards blocking infill (if required).
- ✓ Webbing straps must be protected from sharp product edges.
- ✓ If using gates, webbing straps must go through the gate securing the product and not be obstructed. An additional lashing is required over slot-in gates.

Packaging Requirements

- ✓ Stretch and Shrink wrapping must cover the full height of bricks.
- ⚠ The restraint method available is dependent on the packaging method, shown on Page 2.
- ✓ PET strapping must meet the performance standards and must unitise the pack.
- ⚠ Replace any missing or broken PET straps.

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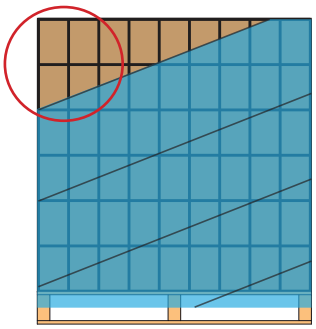
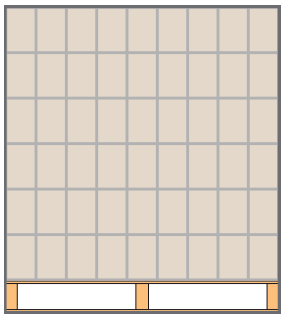
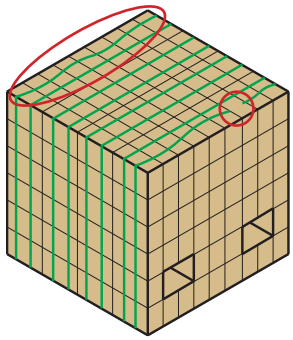


Stretch and shrink wrap not full height of the pack



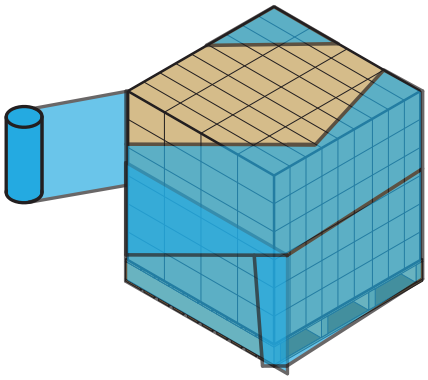
Restraint method dependant on the packaging type



Replace broken and loose PET straps

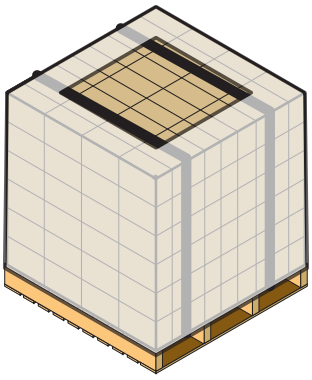
Minimum Restraint Required for Packaging Performance

Not Meeting Performance Standards Stretch Wrapping



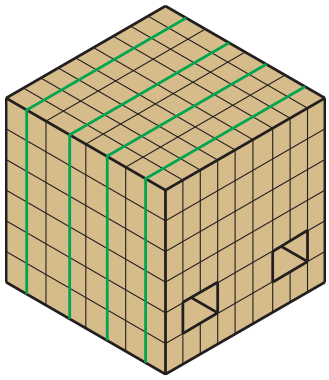
- ✓ Tie-down
- ✓ Rated Headboard
- ✗ Reinforced Pipe Gate
- ✓ Intermediate Headboard
- ✗ Chain Carrier Angles

Meeting Performance Standards Stretch Wrap with Strapping



- ✓ Tie-down
- ✓ Rated Headboard
- ✓ Reinforced Pipe Gate*
- ✓ Intermediate Headboard
- ✓ Chain Carrier Angles*

Meeting Performance Standards

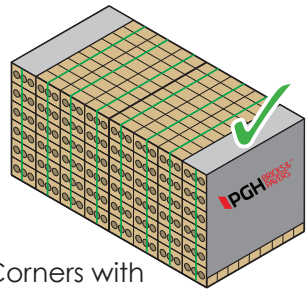


- ✓ Tie-down
- ✓ Rated Headboard
- ✓ Reinforced Pipe Gate
- ✓ Intermediate Headboard
- ✓ Chain Carrier Angles

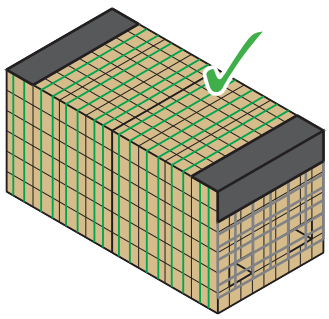
* Reinforced Pipe Gate and Chain Carrier Angles require a solid infill.

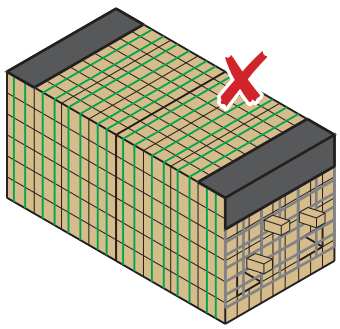
Corners with Solid Infill/Angles with Mesh Infills

- ✓ Packs must have corners with solid infills or angles with mesh infills.
- ✓ Corners with solid infills or angles with mesh infills reduce the overall risk of the transport task by minimising the likelihood of bricks seperating from packs.
- ✓ Where angles with infills are used, they must have sufficient coverage, strength and a small enough aperture to prevent bricks coming off of the vehicle.
- ✗ Angles with mesh infills must not be used where bricks (or part thereof) are likely to damage the mesh or pass through it.



Corners with solid infill installed on brick pallet



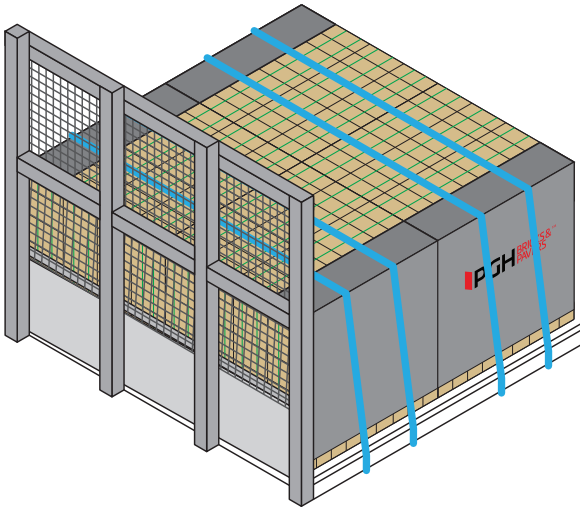


Angles with mesh infills must have sufficient strength and small enough aperture to prevent bricks from coming off the vehicle.

Forwards Blocking Requirements

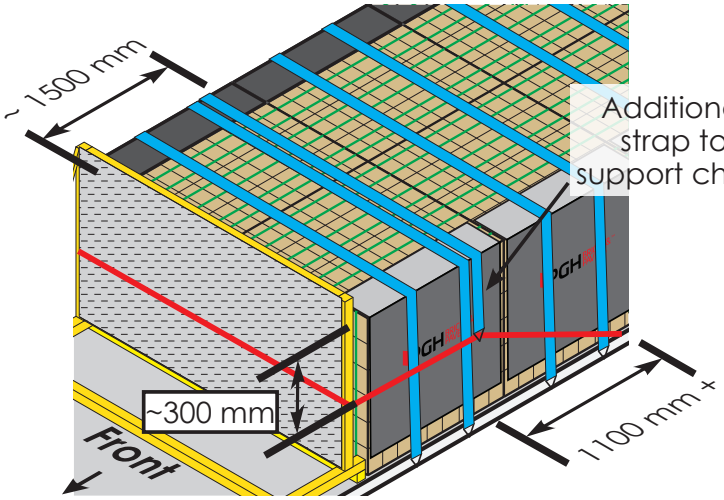
✓ All loads and sections of loads are to be blocked forwards. Maximum cumulative gap within the load must be kept to less than 200 mm, unless the blocking structure is certified for a larger gap.

Engineered Headboard



Rating should be for 30% of load being blocked. For semi trailer, typ. 4 off 100 × 100 SHS verticals.
For rigid trucks, 2 off 100 PFC or 4 off 75 PFC.

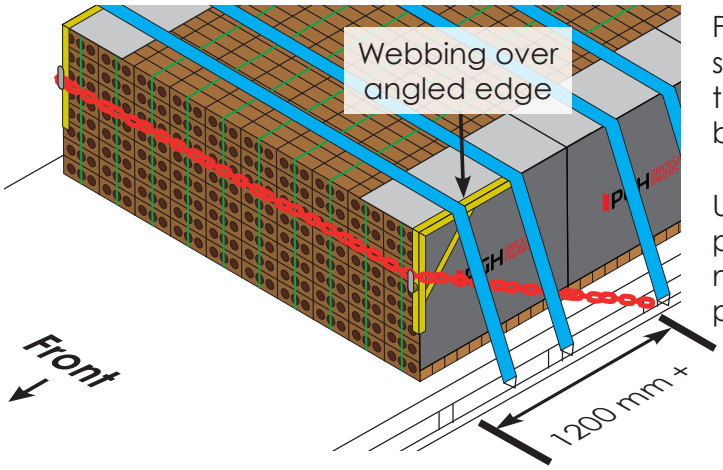
Intermediate Headboard



Not representitve of pipe gate

A movable headboard (or two hardwood pallets) braced with a single 8 mm transport chain can be used for blocking up to 16.45 tonnes.

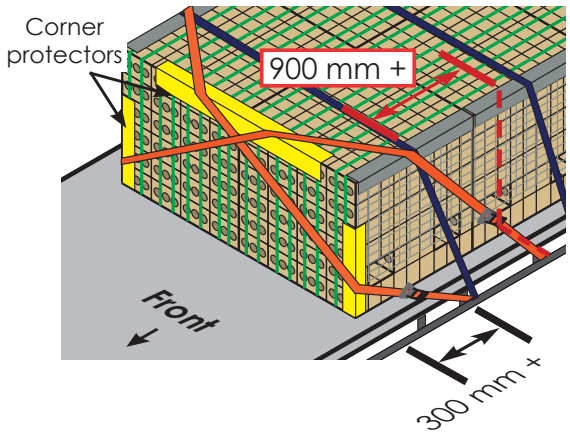
Chain Carriers



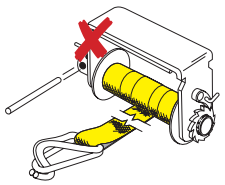
PGH Bricks Chain Hangers secured with single 8 mm transport chain is suitable for blocking 16.45 tonnes of product.

Use infill at front of load if packaging is unsuitable for maintaining unitisation of packs/ pallets under the applied forces

Crossover Strapping



Two 50 mm webbing straps placed in a crossover configuration is suitable for 13 tonnes of product.

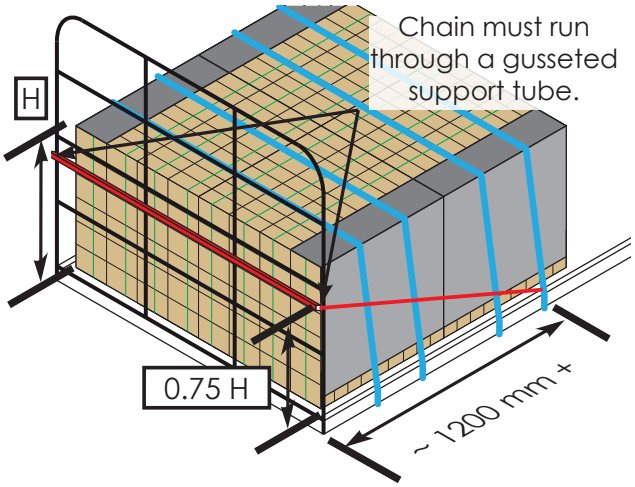


Winch drums must not be used for crossover strapping.

Use infill at front of load if packaging is unsuitable for maintaining unitisation of packs/ pallets under the applied forces

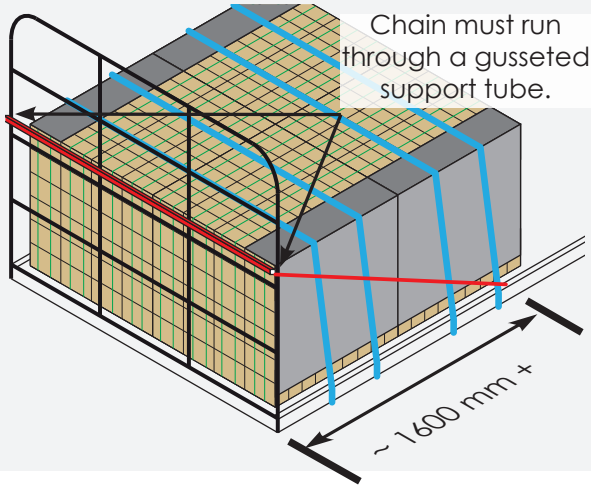
Reinforced Pipe Gate

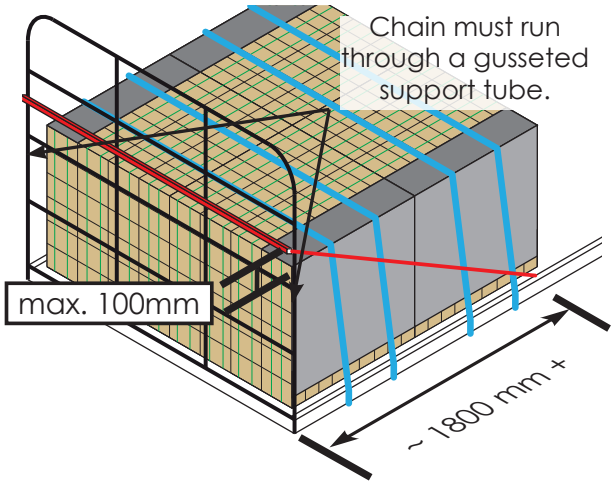
Pipe gates must be constructed of min. 4 x 40 mm DN 350MPa pipe uprights, each slotting into the deck, and with a 3 mm or greater wall thickness for options (2) & (3)



(1) Reinforced pipe gate with single 8 mm transport chain through support tube located **at 3/4 height** of brick packs/pallets is suitable for blocking **16.45 tonnes** of product.

(2) Reinforced pipe gate with single 8 mm transport chain through support tube located **at top** of brick packs/pallets is suitable for blocking **13 tonnes** of product.



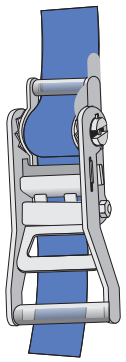


(3) Reinforced pipe gate with single 8 mm transport chain through support tube located **up to 100 mm above top** of brick packs/pallets is suitable for blocking **10 tonnes** of product.

Use infill at front of load if packaging is unsuitable for maintaining unitisation of packs/ pallets under the applied forces

Tie Down Requirements

- ✓ Restrain all packs/pallets with the number of lashings specified in Tables 1 & 2 shown on page 6 of this document.
- ✓ All pallets within a section must be butted together (no gaps).
- ✓ Locate straps centrally over packs.
- ✓ If two or more straps are required, they should be equally spaced along the pack / pallet.
- ✓ Truck winches and "push up" hand ratchets are standard pretension ratchets (notional 300 kg average min pretension).
- ✓ High tensioning ratchet "pull down" type (eg SpanSet® Ergo ABS ratchet). (Notional 600 kg average min pretension). If unsure, assume standard pretension (300 kg.f).



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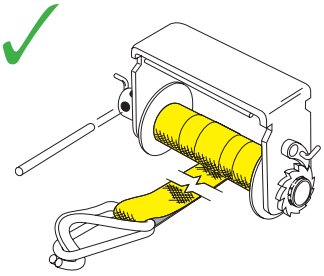

Winch Drum, or "push up" ratchet - typical pretension 300 kg.f

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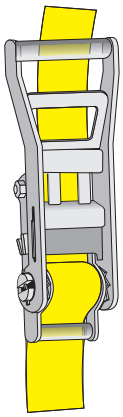

High pretension ratchets typically have a long handle "Pull down" tension action (typ. 600 kg.f pretension)

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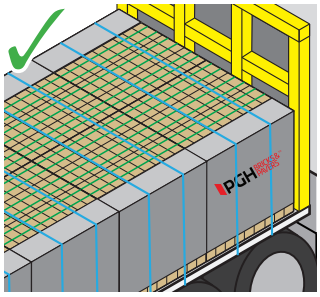

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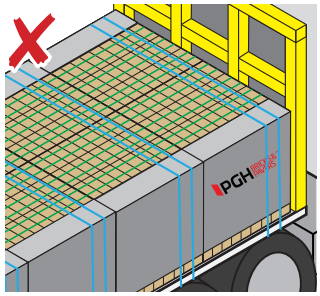
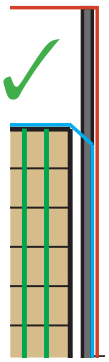


Lashings should be equally spaced along the pack/pallet.

✓



Freight + gate restrained

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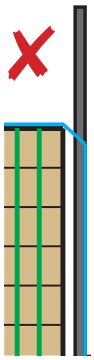

Freight only restrained

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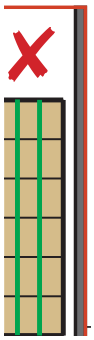
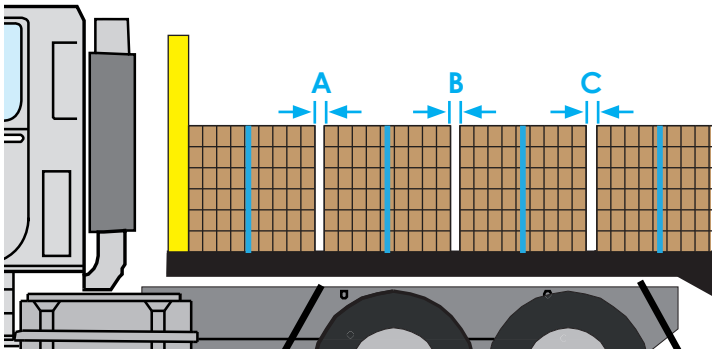


Gate only restrained

Tie-down lashings must go through side gates and an additional lashing is required to secure the slot-in gate.

- ✓ All packs/pallets within a section must be butted together, maximum cumulative gap of 200 mm.



✓ Maximum cumulative gap along the load must be less than 200 mm.
i.e. A+B+C = 200 mm or less

- ✓ Single packs offset from the centre of the trailer must be restrained with a minimum of two straps to limit sideways movement of the pack during transport.
- ✓ Where single offset packs are heavier than 2000 kg, additional straps are required - see Tables 1 and 2 below.

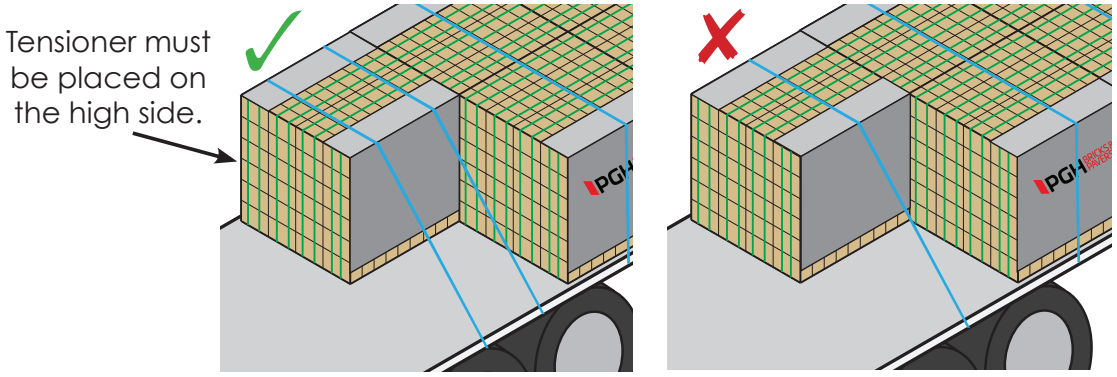


Table 1: Number of Tie-down Lashings Required for Pallets

	Minimum Number of Tie Down Straps per Row					
	Standard Ratchet			Pull down Ratchet		
	Lashing Angle			Lashing Angle		
Max. Mass Per Row (kg)	30˚ - 49˚	50˚ - 69˚	70˚ - 90˚	30˚ - 49˚	50˚ - 69˚	70˚ - 90˚
0 - 1000	1	1	1	1	1	1
1001 - 2000	2	2	1	1	1	1
2001 - 3000	3	2	2	2	1	1
3001 - 4500	4	3	2	2	2	1

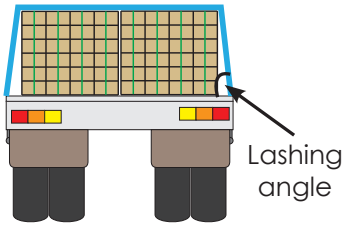


Table 2: Number of Tie-down Lashings Required for Brick Packs

	Minimum Number of Tie Down Straps per Row					
	Standard Ratchet			Pull down Ratchet		
	Lashing Angle			Lashing Angle		
Max. Mass Per Row (kg)	30˚ - 49˚	50˚ - 69˚	70˚ - 90˚	30˚ - 49˚	50˚ - 69˚	70˚ - 90˚
0 - 1400	1	1	1	1	1	1
1401 - 2000	2	1	1	1	1	1
2001 - 2600	2	2	1	1	1	1
2601 - 3200	3	2	2	2	1	1
3201 - 3800	3	2	2	2	1	1
3801 - 4500	3	2	2	2	1	1