

1. PURPOSE

The purpose of this procedure is to ensure product and material loaded onto road transport at Bekaert Wire Ropes Australia complies with industry standards for positioning and restraint of the load.

This document primarily focuses on the equipment used to restrain a load. The specific practices for restraining particular load types is described in detail in other Load Restraint Procedures as Guidelines see References below.

2. SCOPE

This procedure applies to Bekaert Wire Ropes Australia employees (primarily Warehouse/Despatch), customers, transport drivers and providers responsible for loading, restraining and transporting Ropes material and products via road transport.

3. REFERENCES

National Load Restraint Guide 2018, Published by National Transport Commission (NTC LRG)

WRW-OHS-SOP-002 CLOTHING AND PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD

4. RESPONSIBILITIES

Process owner Operations Manager

5. QUALIFICATION, TRAINING & COMPETENCE REQUIREMENTS

Bekaert Ropes Australia – Level 1 Induction
Bekaert Ropes Australia George St - Level 2 Induction
Load restraint training.

6. DEFINITIONS

7. RECORDING / REPORTING REQUIREMENTS

These guidelines are provided by Bekaert Wire Ropes Pty Ltd (trading as Bekaert Wire Ropes Australia) for guidance only. Compliance with applicable laws and standards remains your responsibility.

They are based on guidelines provided to preceding entities under license from BlueScope Steel. Whilst Bekaert Wire Ropes, in co-operation with transport operators, has taken considerable care to develop load restraint guidelines that are effective and comply with all requirements, Bekaert Wire Ropes 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 applicable, you should take further precautions.

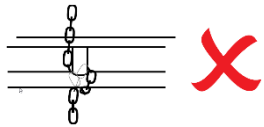
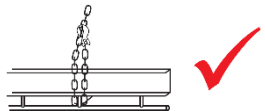
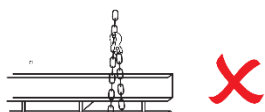
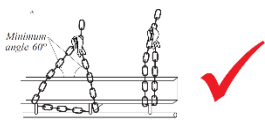
These guidelines are confidential to, and the property of, Bekaert Wire Ropes and you may only use these guidelines with permission of Bekaert Wire Ropes.

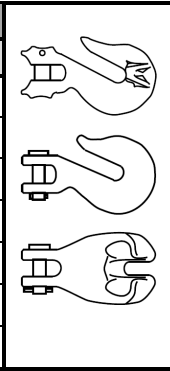
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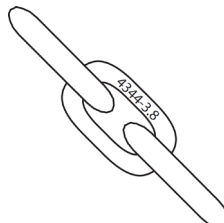
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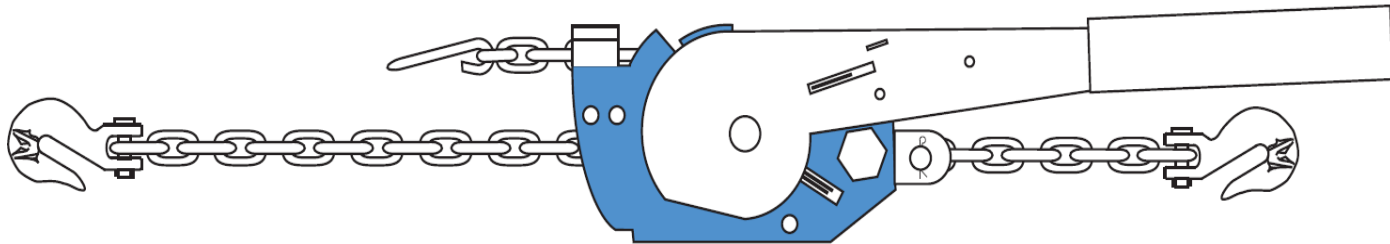
Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
8. CHAINS, HOOKS & BINDERS	The Lashing Capacity (LC) of a transport chain depends upon: • The strength of the weakest component (chain, hooks or binder); and • Whether the chain strength must be down-rated to allow for bending of its links at any point. There are three types of hooks in common use:			
	a) Standard Grab Hooks – Popular with drivers because they tend to stay on the chain even when the chain is loose. However, these hooks cause sideways loading on the link and Australian Standards dictate the system capacity must be down-rated by 25% to allow for this bending effect. 	Chain may be overloaded by side loading of hook on chain.	Safety	Ensure tie down capacity is reduced by at least 25%
	Winged Grab Hooks – Similar to standard grab hooks, but distribute the load across the link due to the flat surface of the wings, resulting in no bending. Hence allowing the use of the full strength of the chain. 			
	Claw Hooks – Allow the use of the full strength of the chain. Care is needed to ensure these are properly mounted over the links, as they may come off the chain when the chain is loose. 	Chain comes loose and hook detaches leaving load unrestrained.	Safety	Ensure claw is mounted correctly and chain has sufficient tension.

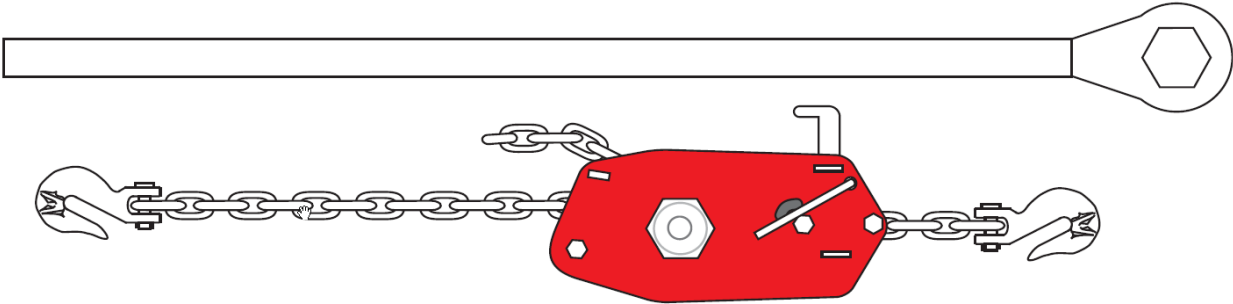
Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
9. ESSENTIAL REQUIREMENTS	✓ Bekaert Wire Ropes recommends the use of 8mm transport chain using either grab hooks (3.0t system), winged grab hooks (4.0t system) or claw type hooks (4.0t system). While the 4.0t system sometimes allows the use of less chains, in many cases (e.g. top hats, sheet packs, etc.) both 3.0t and 4.0t systems have the same limits. In such cases, the pretension or product geometry governs the system limits, and the higher chain strength offers no advantage.	Incorrect size chain used causing load restraint to become loose.	Safety	Use recommended 8mm transport chain.
	✗ 6mm or 10mm chains are not recommended for transport lashings. In particular, 10mm chain cannot automatically be used instead of 8mm unless an average pretension of at least 750kgf can be guaranteed. ✓ Note: if there is a mixture of hook types in a system, then the lower limit applies. e.g., 8mm chain with claws on both ends, but using a binder with a standard grab hook, the system is rated as 3.0t not 4.0t. ✓ All chains and components should conform to AS4344 (Motor Vehicles – Cargo Restraint Systems – Transport Chain Components). ✗ Chains and fittings must not be used if they are: ○ Visibly bent, stretched or damaged. ○ Worn greater than 10% of their cross section. ○ Cut or nicked.	Non conforming or damaged chain used.	Safety	Only use chains and components that confirm to AS4344. Do not use damaged, bent or worn components.

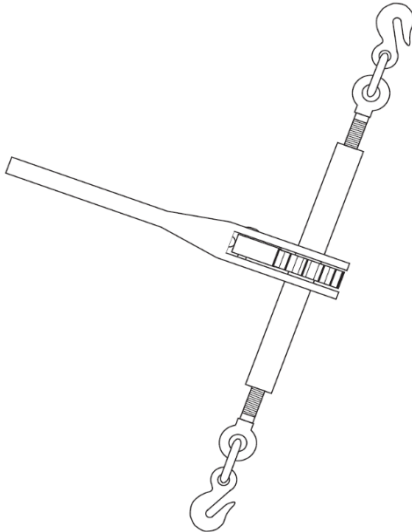
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10. CHAIN LASHING PRACTICES	✗ DO NOT tie chains off with a knot! Both ends of all chains should be fitted with a hook or claw. Knots may come undone due to slack in the chain before tensioning or vibration during the journey.		Chains lashed incorrectly.	Safety Follow safe chain lashing practices. Use hooks, claws and other suitable tie down equipment. DO NOT TIE OFF CHAIN USING A KNOT.
	✓ The best Tie Down point is a Cross Beam. - Loop the chain end around the connection point and hook it back onto itself. - Hook must be above the coaming rail if relying on the full strength of the chain (e.g., 4 tonnes)			
	✗ It is UNACCEPTABLE and DANGEROUS to tie to the rope rail.			
	✓ Other acceptable Tie Down methods These include tying midway between adjacent points with a triangle (above left) or looping around a fully welded rope rail support midway between cross beams (above right)			

Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls	
11. RECOMMENDED EQUIPMENT	Table 1: Lashing Capacities of Chain Systems with Load Binders				
	8.0mm Chain Systems (Recommended)	3.0 tonnes with one or more grab hooks			
		4.0 tonnes with all claw or other approved hooks			
	7.3mm Chain Systems (Not preferred)	3.0 tonnes with all claw or other approved hooks			
	Table 2 – Certified Hook Types				
	The following hook types are certified to 3.0 tonnes or 4.0 tonnes Lashing Capacity.				
	Make	Identification Marking	Part Number		
			3.0 tonnes LC	4.0 tonnes LC	
	PWB Anchor Fittings Grab Hook	None or Part Numbers	40299		
	PWB Anchor Fittings Claw Hook	None or Part Numbers		40558	
	PWB Anchor Herc-Alloy 800	7-8 Grab		40311*	
		7-8 Pinlock Grab		40379*	
	Gunnebo Pin Grab Hook Type GG	G-R	GG-7-8*	GG-8-8*	
	Beaver Sales Clevis Claw Hook	None or Part Numbers		352008	
	Beaver Sales Clevis Grab Hook	None or Part Numbers	35400	886207*	
	* Chain strength is not decreased due these grab hooks including special ‘wing’ supports which prevent link bending				

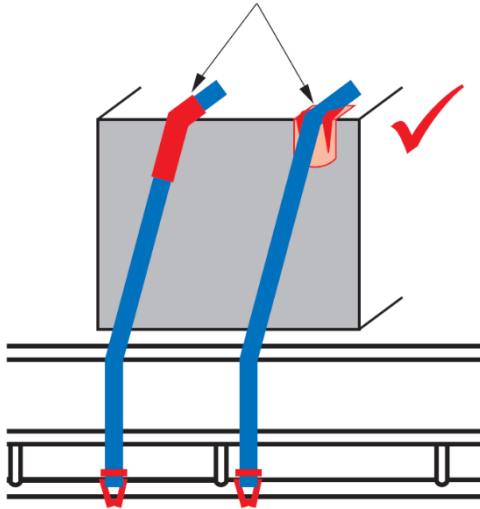
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	Table 3: Rated Chain Types The following chain types are rated to 3.0 tonnes Lashing Capacity for 8.0mm chain. <table><tr><th rowspan="2">Make</th><th rowspan="2">Identification Marking</th><th colspan="2">Part Number</th></tr><tr><th>7.3mm Chain</th><th>8.00mm Chain</th></tr><tr><td>PWB Anchor HiLITE</td><td>HiLITE or AS4344</td><td>40556</td><td>41026</td></tr><tr><td>Beaver Sales</td><td>Beaver or 4344</td><td>148007</td><td>148008</td></tr><tr><td>Gunnebo Type KL Lifting Chain</td><td>G8</td><td>KL-7-8</td><td>KL-8-8</td></tr><tr><td>PWB Anchor Herc-Alloy</td><td>800HA 800 CM; PWB HA800; PWB HA; HA CM; PWB HA; CMU HA800; G80; G800; HA800; or HA8</td><td>40136</td><td>40959</td></tr></table> How to identify the chain: - All chains are marked with the manufacturer’s identification and the digits 4344 followed by the first two digits of the chains lashing capacity every 500mm along the chain. - For an 8mm chain used in the Bekaert Wire Ropes Guidelines, the digits must read 4344-3.8 indicating that it is to the Australian Standard and has a lashing capacity of 3.8 tonnes. 	Make	Identification Marking	Part Number		7.3mm Chain	8.00mm Chain	PWB Anchor HiLITE	HiLITE or AS4344	40556	41026	Beaver Sales	Beaver or 4344	148007	148008	Gunnebo Type KL Lifting Chain	G8	KL-7-8	KL-8-8	PWB Anchor Herc-Alloy	800HA 800 CM; PWB HA800; PWB HA; HA CM; PWB HA; CMU HA800; G80; G800; HA800; or HA8	40136	40959			
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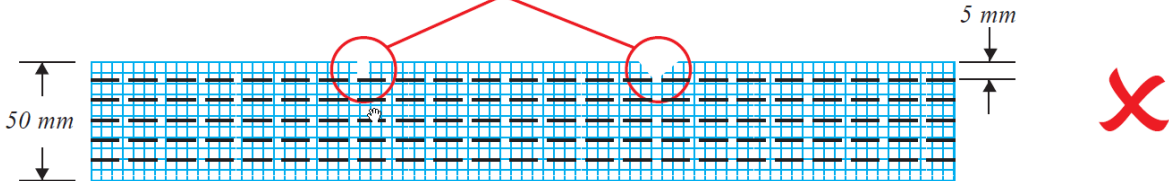
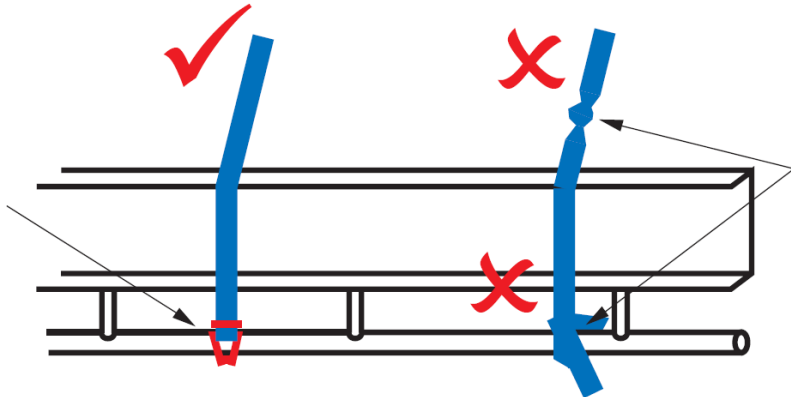
Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls															
	Table 4: Certified Load Binders <table><tr><th>Name</th><th>Distributed By</th><th>Use</th></tr><tr><td>AUSBINDER mark II</td><td>Bullivants</td><td>Unlimited</td></tr><tr><td>EV-CAM 8mm Inline Chain Winch</td><td>Dangerous Goods Equipment & Training</td><td>Unlimited</td></tr><tr><td>Tunbuckle Ratchet Binder</td><td>Numerous load restrain retailers</td><td>Unlimited</td></tr><tr><td>Web Dog</td><td>Spanset</td><td>Unlimited</td></tr></table> Refer to <i>BlueScope Steel Approved Load Binders documentation</i> for further information Refer to <i>Lashing Tensioners in National Load Restraint Guide (2018)</i> for further guidance. AUSBINDER mark II binders • Can be used on all products within the Load Restraint Guidelines. • Simple to use and apply tension • Permanently attached handle that folds back onto the unit. • Able to adjust chain tension without releasing or removing. • Weight 6kg. • 3 month manufacturer’s warranty. • Safety-t-step may be required to allow drivers access to the binder. 	Name	Distributed By	Use	AUSBINDER mark II	Bullivants	Unlimited	EV-CAM 8mm Inline Chain Winch	Dangerous Goods Equipment & Training	Unlimited	Tunbuckle Ratchet Binder	Numerous load restrain retailers	Unlimited	Web Dog	Spanset	Unlimited			
Name	Distributed By	Use																	
AUSBINDER mark II	Bullivants	Unlimited																	
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Web Dog	Spanset	Unlimited																	

Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
	EV-CAM 8mm Inline Chain Winch • Can be used on all products within the Load Restraint Guidelines. • Simple to use and apply tension. • Widely tested on steel products. • Able to adjust chain tension without releasing or removing. • Weight 5kg. • Durable. • Safety-t-step may be required to allow drivers access to the binder. 			

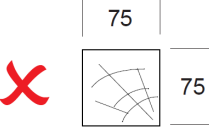
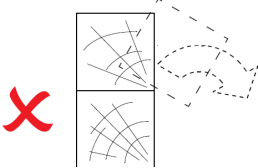
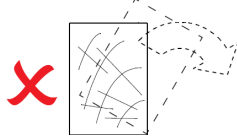
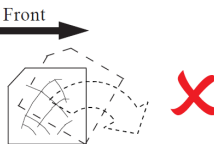
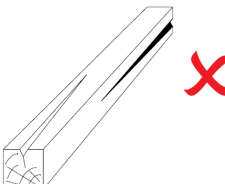
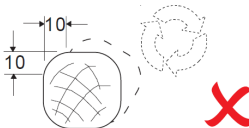
Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
	Turnbuckle Ratchet Binder • Can be used on all products within the Load Restraint Guidelines. • Able to adjust chain tension without releasing or removing. • Simple to use and apply tension. • Removable handle model available. • Rigid unit • Handle position forces application of binder across the body. • No quick release mechanism. • Regular Maintenance required. - Threads, pawl and ratchet require lubricating every one to two weeks. - Spray lubricant recommended (eg WD-40, Lanotec). • Safety-t-step may be required to allow drivers access to the binder. 	Strain, sprain and bruising.	Safety	Ensure ratchet binder is regularly maintained and lubricated with WD-40 etc. Replace ratchet binder as necessary. Do not over reach, use safety step if required. Wear correct PPE.

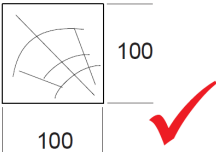
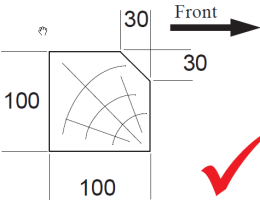
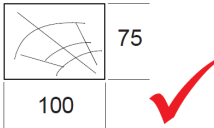
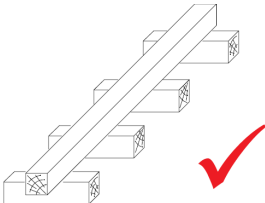
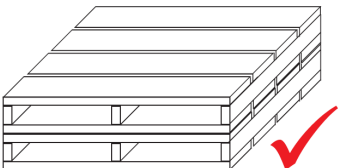
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12. HOW TO CHECK CHAINS ARE OK	- All links should be uniform and not stretched. - Links should not have visible damage such as nicks, gouges or necking (i.e., stretched narrower sections). - Chain should not have lost more than 10% of its cross sectional area. A Chain Gauge can be used to check this requirement: If the top of the 8.0mm link, fits the 7.3mm side, the chain needs to be replaced. Also refer to <i>What To Look For When Using Chains</i> in <i>National Load Restraint Guide (2018)</i> for further guidance. NOT TO SCALE Chain Gauge can be obtained from BlueScope Steel Logistics – Technical Services Phone: +61-2-8207-2345 	Use of damaged chain.	Safety	Inspect chain for wear using suitable gauge and discard faulty equipment.

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13. WEBBING & BINDERS	This guideline applies for - Webbing and webbing load binders. - Webbing may only be used for restraint where required for product protection and reasons and/or specifically nominated in the load restraint guideline for that product. Essential Requirements ✓ All webbing must be woven polyester, polyamide or polypropylene load restraint webbing to AS/NZS4380 or approved equivalent, with a minimum 2.0 tonne lashing capacity. Such webbing is normally 50mm wide. ✓ Load restraint capabilities for webbing is usually governed by the tension applied by the binder not the breaking strength of the webbing. See Table 1 below. ✓ Ensure webbing and components are free from significant damage and wear before every use. ✓ If More than 10% of the webbing strands are cut, worn or damaged, the webbing must not be used. For further detail, refer to AS4380 and NTC Load Restraint Guide. ✓ Webbing must be protected against friction and abrasion using protective sleeves or corner protectors. Protective sleeves or corner protectors must be used on abrasive or sharp surfaces 	Incorrect or damaged webbing used.	Safety	Check that webbing used complies with AS/NZS4380 Do not use webbing if greater than 10% of the webbing is cut.

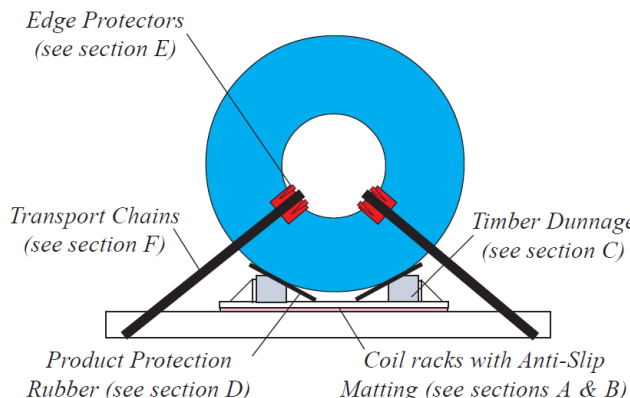
Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
	✓ Webbing must NOT have knots of any kind. ✓ Webbing must be attached to rail using hook and keeper, or similar, not simply tied. ✓ Webbing must NOT be twisted. One half turn is allowable, to prevent vibration and flapping. ✓ Ensure a minimum of 2.5 turns of webbing on the tensioning spindle, or manufacturers requirements, whichever is greater. ✓ Avoid throwing from heights or leaving on the ground where vehicles may damage the metal fittings  Webbing should be attached to rail using hook and keeper or similar  No knots or Twists	Incorrect attachment method used.	Safety	Use hook and keeper method to attach webbing to tie down rail rail and do not tie knots.

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14. WEBBING TENSIONING DEVICES	Table 1: Example Pre-Tension for Load Binders <table><tr><th>Tensioning Device Type</th><th>Pre-Tension</th></tr><tr><td>Ratchet Drum</td><td>300kg</td></tr><tr><td>Push Up ratchet</td><td>300kg</td></tr><tr><td>Pull Down Ratchet</td><td>600kg</td></tr></table> Table 2: Example High Tension Load Binders <table><tr><th>Tensioning Device Type</th><th>Pre-Tension</th></tr><tr><td>Spanset ‘ERGO’ ABS ratchet</td><td>600kg</td></tr><tr><td>EV-Cam Under Slung winch</td><td>600kg</td></tr><tr><td>Ancra “Ezi-Torque” winch</td><td>600kg</td></tr><tr><td>Ancra “Reverse Action” ratchet</td><td>600kg</td></tr></table>	Tensioning Device Type	Pre-Tension	Ratchet Drum	300kg	Push Up ratchet	300kg	Pull Down Ratchet	600kg	Tensioning Device Type	Pre-Tension	Spanset ‘ERGO’ ABS ratchet	600kg	EV-Cam Under Slung winch	600kg	Ancra “Ezi-Torque” winch	600kg	Ancra “Reverse Action” ratchet	600kg			
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Webbing Care and Maintenance - Lightly oil metal components prior to prolonged storage. - Store webbing and components in a clean dry place. - If contaminated with oil or fuel, remove with soapy water. - Keep webbing as clean as possible and the ratchet free from dirt. - If the ratchet mechanism becomes stiff in use, lubricate the moving parts (e.g., WD40, Nanotec).																						
Webbing Care and Maintenance - Lightly oil metal components prior to prolonged storage. - Store webbing and components in a clean dry place. - If contaminated with oil or fuel, remove with soapy water. - Keep webbing as clean as possible and the ratchet free from dirt. - If the ratchet mechanism becomes stiff in use, lubricate the moving parts (e.g., WD40, Nanotec).	Contaminated webbing or ratchet mechanism resulting in failure of tie down equipment	Safety	Clean contaminated equipment with soapy water and lubricate ratchet regularly.																			

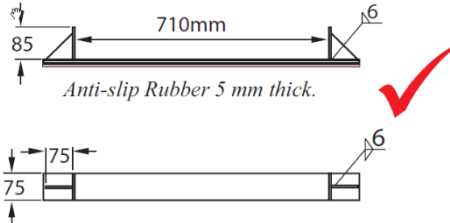
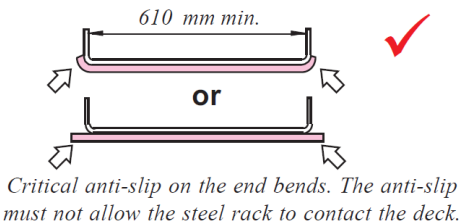
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15. DUNNAGE REQUIREMENTS	Unacceptable Practices			
	 75mm x 75mm non kiln dried softwood dunnage Too weak; Insufficient clearance at coaming rail.			
	 Double-stacked dunnage Unstable <i>In an accident, the upper dunnage will slide off the lower dunnage.</i>			
	 Non-square dunnage placed on its short edge Unstable <i>In an accident, the dunnage could fall/rotate and release the tension on the chains.</i>	Incorrect dunnage used, resulting in load shifting during transport.	Safety	Only use approved dunnage as per acceptable practices.
	 Do not use coil rack timber with chamfer to the rear Unstable; in an accident, the dunnage will roll			
	 Damaged, cracked or fatigued dunnage Too weak			
	 Rounded corners Do not use if more than 10mm missing off corners. Unstable			

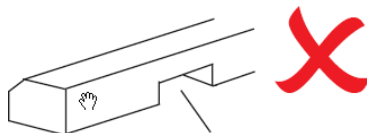
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	Acceptable Practices  RECOMMENDED 100 mm x 100 mm dunnage (or larger)  100 mm x 100 mm coil rack dunnage with 30mm chamfer. Chamfer must face front if used as loose dunnage.  Non-square hardwood, placed on its long edge Preferably only used as base dunnage where needed to allow for trailer camber.  Raising dunnage by placing 500mm long bearers across the truck, then 100 mm x 100 mm dunnage across them. Short lengths must be place to support the load and prevent the cross dunnage breaking through bending  Stacked hardwood pallets up to 3 high may be used as dunnage.			

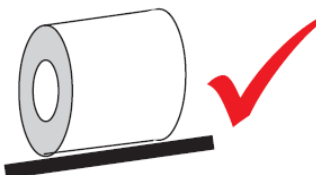
Task	Task Step Description			Hazard/Risk	Type S,Q,E	Controls
16. DUNNAGE ACCEPTABILITY	All dunnage must be restrained; it must not be left loose on the deck or within a load. The table below lists dunnage sizes, timber types and their acceptability for load restraint purposes.					
	Hardwood		F11 Grade rough sawn hardwood recommended. Assumed to be F7 Grade or better.			
	75 x 75 HW		✓	Only acceptable for slit strip, sheet packs and wire packaging, check coaming rail stepdown for suitability		
	100h x 75 HW (on edge)		✗	Unacceptable on edge as rolls over under emergency braking		
	100 x 100 HW		✓	Acceptable – RECOMMENDED OPTION		
	125H X 100 HW (on edge)		?	Not recommended – See note 1		
	125 x 125 HW		✓	Acceptable – recommended for use with large forklift tynes		
	150H x 100 HW (on edge)		✗	Unacceptable on edge as rolls over under emergency braking		
	150 x 150 HW		✓	Acceptable		
	190 x 45 x 1500		✓	Acceptable for use under Steel Coil Stems and Pendant Octagonal ‘Spider’ reel		
	Softwood		Assumed to be F5 Grade or better			
	75 x 75 SW		✗	Unacceptable because soft timber in small size allows roll over under braking		
	100h x 75 SW (on edge)		✗	Unacceptable on edge as rolls over under emergency braking		
	100 x 100 SW		✓	Acceptable		
	125h x 100 SW (on edge)		✗	Not preferred – See note*		
	125 x 125 SW		✓	Acceptable		
	150h x 100 SW (on edge)		✗	Unacceptable on edge as rolls over under emergency braking		
	150 x 150 SW		✓	Acceptable		
	Kiln dried Softwood		Assumed to be F7 Grade or better			
	75 x 75 KDSW		✓	Acceptable		
	* Note 125h x 100 SW dunnage may rotate more than 90 degrees, but is still acceptable; due to its geometry the chain tension will continue to increase. Refer to Technical Services Group prior to using.					

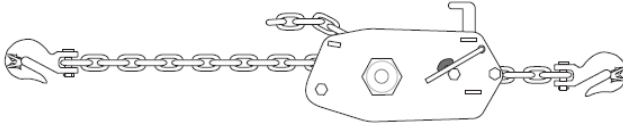
Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
	Rectangular Dunnage - Because rectangular dunnage is generally unacceptable on edge, it is recommended that it is not used, even with the long edge down, due to the risks of incorrect placement. - However, trailer camber does sometimes require smaller centre dunnage; 75 mm high x 100 mm hardwood timber is permitted for this use.			
17. MISCELLANEOUS EQUIPMENT	This guideline applies for: Equipment used for restraining products within the Load Restraint Guidelines, including but, not limited to: A. Coil Racks B. Anti-Slip Material C. Timber Dunnage D. Material for Product Protection E. Edge Protection F. Chains & Chain Load Binders G. Webbing & Webbing Load Binders H. Rope  The diagram illustrates a blue coil rack being secured with two black transport chains. The chains are attached to the sides of the rack and extend downwards to a base. The base consists of two grey coil racks with anti-slip matting. Two red edge protectors are positioned on the sides of the base, and two red product protection rubbers are at the bottom. A piece of timber dunnage is shown supporting the base from underneath.	Sharp edges not protected, resulting in load restraint failure.	Safety	Always protect sharp edges with approved materials.

Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
	A. Racks Racks come in three sizes, measured from inside the steel uprights; 610mm, 710mm and 810mm. There are separate “<i>Bore Horizontal Coil</i>” load restraint guidelines for each coil rack size. Coil Racks must satisfy the following criteria: ✓ Steel 6mm minimum thick for the preferred rack and 12mm for the non-preferred type. Recommended width is 75mm. ✓ The top of the coil rack must not extend above the timber (i.e. height less than 100mm)  ✓ Racks must have a high friction ✓ anti-slip material underneath (minimum 3mm thick), NOT conveyor belting. ✗ Racks are unacceptable and not suitable for use when the anti-slip material is worn or missing at the ends or the rack is visibly bent. 	Incorrect anti slip material used, resulting in load shifting during transport.	Safety	Use approved anti-slip material.

Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
	Welded Racks - Steel thickness for all component is 6mm minimum. - Anti-slip 5mm rubber thick. - Anti-slip material must extend the full width and length. Cover is critical at both ends. 			
	Bent Racks Racks must be 610 mm minimum. Anti-slip material must extend the full width and length. Cover at both ends is critical. 			
	B. Anti-Slip Material ✓ Anti-Slip material under coil racks and steel pallets is to be a minimum of 3mm thick. It can be either strips or a mat, provided it effectively prevents steel on steel contact and has a friction co-efficient against steel of at least 0.60. Used conveyor belting would not usually meet this high friction requirement. ✓ It can be either high friction matting (eg Regupol Load Boss “Long Life”) or high friction industrial rubber. Three strips of anti-slip mattering are required under steel pallets. ✓ The recommended minimum thickness of Anti-slip material is 5mm for coil racks and 8mm for steel pallets. ✓ Another alternative is paint on version of anti-slip material (eg Master Fibre Paint) which may be useful in some circumstances. Paint on versions may need to be reapplied regularly.			

Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls	
	C. Timber Dunnage ✓ Timber dunnage is to satisfy specifications defined in “Dunnage Requirements” on page 15. ✓ Timber dunnage used in a coil rack must be 100mm x 100mm with a 30mm chamfer (refer to “Dunnage Requirements” on page 15 for details). ✓ Notching of timber dunnage for use in coil racks is not recommended. The maximum allowable notch depth should be 10mm to prevent the timber bearing on the deck, which reduces the effectiveness of the anti-slip material. ✓ If doubling-up of timber dunnage in a rack is required to prevent a coil/reel from touching the trailer deck or rack, the spacer timber must be a single length of full width 100mm x 100mm dunnage, NOT small blocking pieces. ✓ New rack size is considered 100mm less e.g., 810 becomes 710.	  	Incorrect dunnage used.	Safety	Only use approved dunnage as per approved timber dunnage.

Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
	D. Material for Product Protection ✓ This rubber is to be a minimum of 10mm thick and 250mm wide. Rubber bonded to the timber may be less than 250mm. The minimum width of 250mm is necessary to ensure that the rubber stays in position during loading by resting on the base of the rack, eliminating possibility of: - injury caused by repositioning the rubber during loading; and - rubber slipping down under the product during travel. ✓ Product protection rubber (e.g. conveyor belting/industrial rubber) under the coil should extend past the edges of the coil/roll/reel.     	Incorrect edge protection used, resulting in load shifting or load restraint failure.	Safety	
	E. Edge Protection Edge Protection should be used under all chains where product damage may occur. Acceptable edge protectors include: - Polyurethane Angles (preferred option); - Industrial Rubber (minimum 10mm thick). Rubber must be free from all holes and defects (including dirt and oil); Other approved forms of edge protection. 			

Task	Task Step Description	Hazard/Risk	Type S,Q,E	Controls
	F. Chains & Chain Load Binders ✓ The recommended transport chain is 8mm chain to Australian Standard AS/NZ4344.  - Refer to the load restrain guideline “Chains, Hooks and Binders” for chain and binder information. - For load binder safety information, refer to the transport guideline “Manual Handling”.	Incorrect load binder used, resulting in load shifting or load restraint failure.	Safety	
	G. Webbing & Webbing Load Binders ✓ All webbing must be woven polyester, polymide or polypropylene load restrain webbing to AS/NZ4380 or approved equivalent, with a minimum 2.0 tonne lashing capacity. Such webbing is normally 50mm wide. Load restraint for webbing is usually governed by the tension applied by the binder. Refer to “Webbing and Binders” Section for further information.			
	H. Rope ✗ Rope is NOT TO BE USED for load restraint of heavy steel products. ✓ Rope can be used for tarping only. Rope may be used for light weight customer pickups only, in accordance with to National Road Transport Safety Guidelines.	NOTE. Do not use ropes for load restraint purposes.		

18. VERSION HISTORY

Version	Issue Date	Key Changes	Authorised by	Review Date
3	21/9/2018	Rebranded as BBRG.	BR	21/9/2020
4	24/9/2018	Migrated from previous entity (MolyCop/OneSteel) guidelines (based on BlueScope LRG17 v6.1 11/5/2010, LRG80 v1.1 30/9/2008, LRG18 v4.1 12/4/2006, LRG16 v6.2 10/10/2008). Added additional clauses for webbing use and maintenance. Added dunnage for Stems and Pendant reels. Removed references to Miscellaneous Equipment not used by BBRG Australia (Galas Corners & Chain Retainer – both are specific to Railway Wheels)	BR	24/09/2020
5	15/09/2021	Version Update – change of authoriser	GC	16/09/2023
6	12/08/2024	Branding change and updates in yellow	PB	12/08/2027