

Centurion

Freight Preparation Policy - Part A

## Revision

Revision No	Revision Date	Reviewed by	Nature of Amendment
0	28/11/2011	M Gale	Draft.
1	05/12/2011	M Gale	Implemented and distribution of document.
2	16/05/2012	M Moore	Document control modifications.
3	18/11/2014	S Uren	Minor Formatting

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## 1 Forward

Centurion is committed to providing and maintaining a safe working environment and methods to the highest standards of occupational health and safety for all employees.

There is no compromise with safety and as such, we will conduct our operation in such a manner so as to meet and exceed recognised legislative safety and health requirements.

In addition to our commitment to safety, core values of Centurion highlight the professional integrity of its people and the unparalleled service of transporting freight.

This process, and the information contained, is derived from legislative policy, standards and guides and Chain of Responsibility providing a comprehensive safety package for the safe transport of freight.

What may be considered sufficient preparation for a metro or short distance delivery will not always suffice for freight dispatched to regional or remote areas of Australasia. For example, where freight is transported over long distances, a metal strap over an item on a softwood pallet will often be in a poor state before reaching its final destination.

This, in turn, can present a hazard to supply staff, transport providers who handle the freight, other road users and the general public.

With this in mind, freight must be presented in such a manner that it:

- Can withstand road transport over long distances and rough terrain;
- Can be safely lifted on and off transport vehicles;
- Minimises the risk of injury to those involved in freight and handling;
- Minimises the risk of damage to that particular item; and
- Minimises the risk of damage to other freight, other road users or the general public.

This policy covers the minimum requirements for the presentation and packaging of inbound and outbound goods and equipment for delivery into or within Australasia.

It is the consignor's responsibility to comply with this policy and the specific requirements of the relevant Australian and New Zealand Standards and legislation for the goods, equipment or materials being transported.

## 2 Introduction

### 2.1 [Document Number](#)

The Document Number is CEN-HSE-POL-042.

### 2.2 [Reason for a Freight Preparation Policy](#)

The following recent articles highlight the significance of safe transport and the effects of debris and insecure loads which is why safe packaging and restraint is paramount within the transport industry:

- *Gold Coast News, June 30th 2011*: Two people were injured last night when their car was hit by an object that fell from the back of a truck on the M1 near Burleigh Heads around 10:10pm. One person suffered burns to their legs and the other a wrist injury.
- *Herald Sun, January 21st 2011*: A distraught mum has told how flying metal from a truck slammed into her car as she sped at 100km/h along a city freeway with her three young sons. "I had nowhere to go. If I'd stopped or tried to slow down it would have created a major collision," "Kelly" said. Caller Kelly told Neil Mitchell's program on Radio 3AW that the metal fell from the truck as they travelled along the West Gate Freeway into the city. "It bounced off the road and straight into our windscreen. "You could see it coming, that was the worst bit," she said. She said the steel about the size of a football smashed the screen, splitting the windscreen "like a cobweb", leaving two large holes and scattering glass shards through the Kia Carnivale.
- *WA News, 29 November 2010*: Mitchell Freeway turns into a car park after a truck lost its load after hitting a bridge near Hay Street.



- *Northern Territory News 22 July 2011*: Rock that smashed through windscreen and killed wife like a bullet, says grieving husband. THE husband of a woman killed when a small boulder smashed through the windscreen of their four-wheel-drive said it was not a freak accident. Cairns man Darryl O'Neill, 66, said he saw the boulder, 23cm long and 13cm thick fall from the back of a truck which had just pulled out of the quarry entrance on the Arnhem Highway. Mr O'Neill said police were wrong when they said the large rock was flicked up from the road by a passing vehicle, striking the passenger side of the

windscreen. "I'm not going to let police sweep it under the carpet," a devastated and angry Mr O'Neill told The NT News. Mr O'Neill and his wife of 38 years, Rosalyn, were driving at 80km/h, near Mt Bundy, when he saw the truck travelling towards them. "I saw the rock tipping on the back of the truck as it came up towards me, about two feet away," he said. "Then I saw the rock disappear and a car (travelling behind the truck) swerve. The next thing I saw was the rock coming from behind the truck straight at me. It was like a bloody bullet.



The purpose of this document is to articulate the policy and procedure for Centurion freight and distribution. This policy is a three part document and provides:

- a) Specific details on packaging, marking and acceptance of consignments;
- b) Document providing images of both conforming and non-conforming packaging, and
- c) Packaging requirements to ensure identified products are correctly restrained for loading / unloading operations with forklift and for safe transport.

This includes the approach taken with regards to:

- Compliance with legal obligations of consignors / receivers and loader / packers under Chain of Responsibility legislation; and
- Duty of care as defined by the relevant Australian State / Territory and New Zealand Occupational Safety & Health Act.

### 2.3 [Aim](#)

The aim of this freight preparation policy and procedure is to:

- Protect staff, the environment, contractors and members of the public from the risk of accidents and incidents occurring as a result of non-compliance by suppliers of goods with existing relevant Australian & New Zealand Standards, Legislation and guidelines;
- Take all reasonable steps to ensure that Centurion personnel, when consigning goods from vendors, comply with this policy;
- Ensure that staff and contractors comply with all heavy vehicle laws, including those relating to mass, dimension and load restraint;

- Take all reasonable steps to ensure suppliers of goods and services comply with the above; and
- Assist Centurion and suppliers to comply with the Chain of Responsibility Laws in Australia.

Compliance with this document will also reduce delays in the receipts' processing and Delivery in Full on Time (DIFOT). This, in turn, means that invoice payments will not be unduly delayed and expediting / late reminder / delivery disputes will be avoided.

## 2.4 [Scope](#)

The scope of this document covers all freight that suppliers submit for Centurion to transport to the end user. It is to be read and followed by suppliers, particularly by staff involved in packing and securing items for transportation.

## 2.5 [Principles](#)

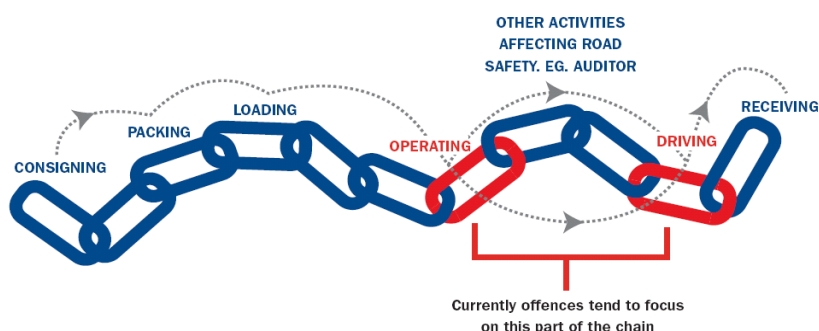
Central to this document is the acceptance of the accountability of all parties in managing risks and the demonstration of a high level of duty of care in accordance with Chain of Responsibility legislation.

## 2.6 [Chain of Responsibility](#)

Chain of Responsibility legislation is enforced by the Department of Transport in Western Australia and states that all parties in the road transport supply chain - including the consignor, consignee, packer, loader and receiver, as well as the driver and operator - must take proactive steps to prevent a breach of the road transport, fatigue, speed, mass, dimension and load restraint laws.

Chain of Responsibility (COR) is legislation either in place, or pending, in all Australian States and Territories. New Zealand has similar legislation that is contained in the NZ Land Transport Act 1998.

Amongst other aims, the COR legislation aims to improve road safety and minimise negative impact on the environment, road infrastructure and traffic management associated with breaches of heavy vehicle road laws. By recognising the parties within the chain and making these parties responsible for their actions the COR legislation aims to encourage 'effective and efficient compliance with heavy vehicle road transport law.'



If a person plays a role in the transport of goods (or passengers) by road, then they are part of the "Chain of Responsibility" (COR).

Control = Responsibility = Legal Liability

Under the COR laws, all parties with some control in the transport chain now have legal responsibilities to ensure compliance with relevant heavy vehicle road laws, including compliance with mass, dimension and load restraint obligations. This includes people involved in consigning,

loading, packing and receiving freight (or managing those activities), as well as drivers of those vehicles (including, for example, in relation to speeding and fatigue management).

This document is aimed specifically at Consignors (including OEMs, packers and loaders and their supervisors) for consignments travelling via Centurion. Compliance with this policy does not, in isolation, cover all components of COR legislation.



### 3 Documentation

#### 3.1 [General](#)

Shipping documentation and delivery dockets must be securely attached to the outside of all packaged items in a weather-resistant, sealed envelope or, to the goods, if packing is not required and must not be obscured. (Where a windowed envelope is used, the delivery address must remain visible.)

Freight containers must have delivery dockets and packing lists inside weather-resistant envelopes, attached to the internal wall.

Where packing is required, duplicate copies of shipping documentation, delivery dockets / invoices should also be placed inside the packaging in the event the external documents are misplaced.

Each purchase order must be packaged separately.

If a unit of equipment has to be shipped in more than one package, then the documents for the equipment must be forwarded with the first package and must indicate the number of packages to be expected.

#### 3.2 [Centurion Pickup Policy](#)

When a consignor identifies the requirement for a Centurion consignment pickup, the booking process is followed.

Consignors are required to contact either 9278 3000 or 9278 3111 and provide the following details:

- Consignor's Details, Consignee's Details, Cargo type (including declaring if consignment is classed as Dangerous Goods)
- Cost Code
- Order Number and description of freight
- Weight in Kilograms , Length x width x height in millimetres; and Quantity
- The 'Insurance is the Responsibility of Consignor' section
- MSDS paperwork (if applicable – Refer to Para 2.3.2)
- What service is required – services are:
  - Same day car to site,
  - Same day air,
  - Road Express
  - General

On completion of providing all above details, operators will then provide a 'PICKUP' number. Consignor(s) are to notate this reference number in the "PICKUP" section of the con note.

*Note: It is during the booking process that operators will request if the consignment conforms to the 'Freight Preparation Policy'. If freight is delivered to Centurions yard that does not conform, vendor will be contacted and requested to rectify all safety and packaging non compliances (Refer to Para 4.2 on quarantine process).*

#### 3.3 [Centurion Con notes](#)

The following information must be shown on the delivery docket with respect to each package:

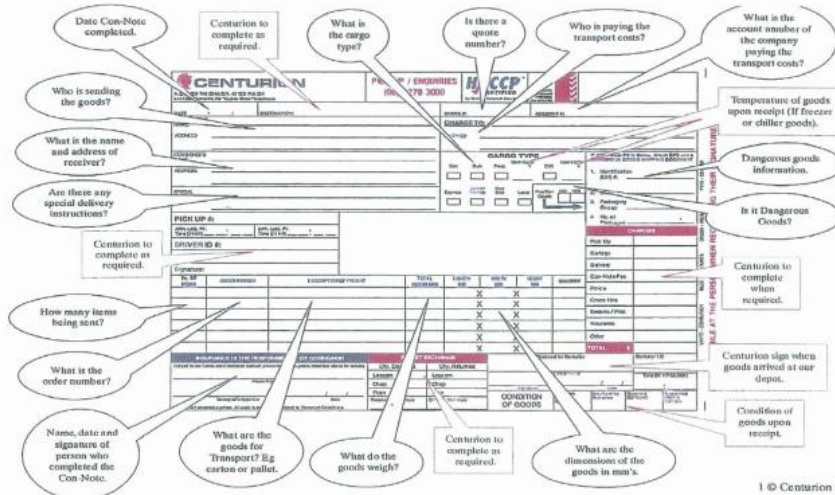
- Consignor's Details, Consignee's Details, Cargo type (including declaring if consignment is classed as Dangerous Goods)
- Order Number and description of freight
- Weight in Kilograms , Length x width x height in millimetres and Quantity
- The 'Insurance is the Responsibility of Consignor' section
- MSDS paperwork (if applicable)

Dangerous Goods information must be included on all con notes. Note: The notation of 'Mixed Load' is not adequate and does not provide required details for data entry and Manifesting. Details must as a minimum include:

- Identification / UN Number
- DG Class
- Packaging Group, and
- Number of packages.

In the event the supply of mixed Dangerous Goods exceeds the available space to notate UN numbers and DG Class, separate connotes are to be raised.

The consignment note image below explains in detail areas that require to be completed.



Note: Oval shapes indicate areas of the Con-Note the sender or their representative needs to complete, and the square shapes with red background indicate areas of the Con-Note that Centurion Staff Transport Receiving Staff will complete.

28 October 2010 8:44 AM 330547 001 COVER BOB: BLACK PMS400

**CENTURION** PICK UP / ENQUIRIES (08) 9379 3000 **HACCP** CERTIFIED Quality Standard Committed for Quality Associated Services **4890282**

DATE: 11/8/2011 DESTINATION: TEREX LIFTING  
 CONSIGNOR'S NAME: CANNING VALE  
 ADDRESS: PARABARA IRON  
 CONSIGNEE'S NAME: PARABARA IRON  
 ADDRESS: PARABARA IRON MINE SITE  
 SPECIAL INSTRUCTIONS: WIA 6754

QUOTE #: CHARGE TO: ALBARRA IRON  
 ADDRESS: PARABARA IRON

CARGO TYPE: Gen ☒ Bulk ☐ Piece ☐ Unit ☐ Temp ☐  
 Express ☐ Special ☐ Quat ☐ Local ☐ Hazard ☐ Goods ☐ No ☒ Yes ☐

IF YES Please Fill in Below, Attach EPG and a DANGEROUS GOODS SHIPPING DOCUMENT  
 1. Identification (UN No): UN 1202  
 2. Class: 2.1  
 3. Packaging Group:  
 4. No. of Packages: 1

PICK UP #: ARR. LDO. PT. Time (24 HR): DFT. LDO. PT. Time (24 HR):  
 DRIVER ID #: Print Name: Signature: 4890282

No. of ITEMS	ORDER NUMBER	DESCRIPTION OF FREIGHT	TOTAL KILOGRAMS	LENGTH MM	WIDTH MM	HEIGHT MM	QUANTITY
1	3002253095	PARCEL	20	200	200	300	1
1	"	Box (DG)	10	200	150	400	1

INSURANCE IS THE RESPONSIBILITY OF CONSIGNOR

JOE BLOESS 11/8/2011

PALLET EXCHANGE: Qty. Delivered Qty. Returned  
 Logcam Logcam  
 Cheap Cheap  
 Plain Plain  
 Receiver's Signature Driver's Signature

Received for Centurion: Please Print Name: Date: Time (24 HR CLOCK)  
 CONDITION OF GOODS: Apparent Order Insufficiently Protected Received Damaged Suspected Internal Damage

PINK - SENDER  
 GREEN - RECEIVING  
 BLUE - ACCOUNTS  
 WHITE - CENTURION

### 3.4 [Material Safety Data Sheet](#)

Consignor(s) responsible for the packaging of any goods or materials requiring an MSDS are to ensure a copy of the MSDS is attached to:

- the item
- the paperwork

When Consignor(s) submit a delivery of multiple pallets; each pallet must each have a relevant MSDS included with palletised goods. *Note: It is not practical to supply one MSDS per delivery if consignments are destined for different regions / sites.*

## 4 Marking

The supplier must ensure that all packages for dispatch are marked in a clearly legible manner.

To avoid confusion, markings and references from previous freight movements must, where practicable, be covered, made illegible or removed.

### 4.1 Marking of All Items

Items that will be handled as parcel freight must be clearly marked, in English on at least one side.

All items packaged in boxes or crates, palletised goods and unit items must be clearly marked, in English on two sides, as follows:

- Purchase order number (as quoted to be marked externally on all packages);
- Consignee / Receiver address;
- Item description;
- Supplier name;
- Case / box / package number (for example, 1 of 4);
- Dimensions: length x width x height (metric);
- Weight (kg); and
- Dangerous goods classification (if applicable) and placarding.

Fragile or heavy items must be clearly marked or labelled 'fragile' or 'heavy' and Handle with Care for ease of handling

Where items are above 1.5m high, markings must be in a position so as to permit visibility to forklift operators.

The marking shall be durable, waterproof, fade resistant and able to withstand prolonged storage in bright sunlight and harsh conditions. The colour shall be in sharp contrast to the background on which it is marked.

Freight that extends beyond the confines of pallets must also be marked to highlight potential handling issues.

Any tags used shall be non-rusting or durable plastic to avoid wear and tear.

## 5 Packing

### 5.1 General

Prior to packing, the supplier must ensure that all items for the Purchase Order are prepared, protected and marked in accordance with the following clauses listed. All packaging must be capable of withstanding both metro and regional road transport.

All packaging must be suitable for multiple handling movements. Freight can be unloaded and reloaded as it is consolidated and/or transhipped through regional or capital city depots.

All packaging must be capable of being safely lifted on and off transport vehicles and being safely transported without rolling, tipping, sliding or spilling. All packaging materials should be environmentally friendly. Substitutes for polystyrene foam and plastic beads are to be used whenever possible.

Packaging methods used must ensure safe delivery of the goods to the Client. They must take into account the value of the item (refer to 4.2 Equipment Protection for further detail) and the weight and size limits of cargo that can be transported.

No employee or contractor may be called on or permitted to manually handle an item likely to affect his or her health or safety. After a risk assessment and Take 5, any package deemed unable to be handled by one person must be packaged suitable for either crane or forklift handling. If safe forklift handling is not possible, approved lifting and slinging lugs must be fitted by the supplier to facilitate safe crane handling.

All items that require mechanical lifting must have forklift access points, lifting lugs that must be approved or have suitable access for slings. For standard forklifts access points must be sufficient to allow the use of tines that are 210mm wide x 80mm high. For 20 tonne forklifts access points must be sufficient to allow the use of tines that are 250mm wide x 120mm high.

Where multiple items are packaged in the one package (carton, crate or skid), heavy items must be packed at the bottom of the package.

Heavy or large / awkward items that do not fit in a case or crate must be strapped with steel strapping to a skid or pallet. The skid or pallet must be strong enough to support the weight of the item and multiple handling movements.

Securing devices applied to articles packed shall not abrade or otherwise damage the equipment and/or materials consignments of multiple packages wherever possible must be either:

- Placed in a secure cage; or
- Palletised for ease of handling.

Shrink wrapping of items onto a pallet for restraint is not a formal method of restraint. The sole purpose of the 'shrink wrapping' application is to ensure goods are protected from the elements, dust and climatic change. Plastic wrap has a tendency to lift from pallet corners exposing contents for free movement and, when not suitably restrained with strapping, present potential missile hazards during transport. ALL goods must be securely restrained to pallets to ensure safe movement to destination, avoid potential injury to personnel during loading and unloading processes and to minimise possible injury to public during transport operations.

When using black or white coloured plastic, strapping should be applied over the top of the plastic to ensure that:

- A visual can be performed to confirm adequate restraint has been applied for transport;
- Transport bolts are fitted for large / heavy items and secured; and

- Dangerous goods / hazardous substances are packaged according to the ADGC and are not leaking or damaged.

Centurion recommend the use of a Freight preparation checklist for all large items (refer to appendix 1 to this policy).

Further general packaging requirements can be viewed in the Centurion Freight Packaging Companion which compliments this document. This includes specific packaging instructions required for the transport of:

- Dangerous Goods
- 209L Drums (full and empty)
- Hoses
- Products containing oil / chemicals
- Tyres
- Wet Cell Batteries
- Wheeled Cases / Consignments
- Windscreens

## 5.2 Consignments Quarantined

All consignments that do not meet the requirements of this freight policy, will be quarantined at Centurion and held until rectified.

To rectify, the following options are available:

- Consignments maybe returned to vendor by Centurion (incurring cost of return) if safe to travel or can be picked up by vendor to rectify at their facility (again, if consignment is safe to travel).
- Supplier can attend Centurion site (through agreement with staff) to undertake repackaging to rectify. All visitors must sign in at the Administration Centre prior to proceeding into Centurions Yard and will be required to be escorted at all times. It is the supplier's responsibility to provide all equipment and consumables required to rectify consignment issue and provide mandatory PPE. For all restraint / banding requirements, mandatory PPE is to be worn at all times. This includes Australian Standard approved steel cap footwear, safety spectacles and gloves and a high visibility vest. Relevant task specific Safe Work Procedures are to be produced on request.
- Centurion can provide contact details for an authorised company to undertake rectification of packaging. Including restraint, packaging and palletising and or item crating.
- Centurion can rectify packaging issues at the vendor's expense. At the date of release of this document, repackaging costs by Centurion are advised as \$145.00 per pallet. This includes staff labour, supply of pallet if required, strapping and consumables. In order to utilise this option, Suppliers are to provide their ABN and credit card details for payment. Additionally, if supplier has a current account with Centurion, the cost for repackaging can then be costed to their account.

Due to the volume of freight received at Centurion, vendors should allow 48hrs for return paperwork to be completed prior to pick up. Centurion can be contacted at any time on 08 9278 3000 to confirm consignment has been processed and ready for pick up.

All vendor pickups for quarantined pallets, due to safety and non-compliance to Freight Preparation Policy / Chain of Responsibility Policy, are undertaken at 'Door 47'. Drivers are to report to this area and identify the consignment that is to be picked up for rectification.

All freight packaging / restraint issues that have not been rectified within 7 days will be returned from Centurion to vendor's facility at vendor's cost.

*Note: Under Chain of Responsibility, consignments that are not deemed safe for transport will be rejected by driver.*

### 5.3 [Packaging Methods](#)

#### 5.3.1 [Cases, Boxes and Crates](#)

All boxes and crates must be fitted with skids suitable for lifting by forklifts. The design of timber boxes must take into consideration the method of lifting. Where slings are to be used on crates, particularly those weighing over 300kg, the top edges must be sufficiently reinforced to withstand loads applied by slinging.

Where timber is used, either internally and externally, it must be free of bark and insect infestation. Plastic or steel cases, boxes or crates are a preferred option.

Contents must for, purposes of handling and transportation, fit snugly inside the case and must be restrained from movement by blocking the items. Where metal or prepared paintwork may come into contact with the case timbers, it must be protected from abrasion by felt pads, foam rubber, plastic or cardboard.

Cases or cages must be used for delivery of bulk items and, if used, must be firmly secured on pallets. If the cases or cages are reusable, then arrangements must be made for their return to the supplier prior to subsequent order placements.

#### 5.3.2 [Timber Crates / Cases](#)

All timber crates and cases must be of close-jointed, solid timber, preferably hardwood, suitable to adequately support the item. All timber crates and cases must have an SWL exceeding the weight of the item. Cases must be fully closed (for example, not partially open-topped construction) and the base of all cases and crates must be constructed for lifting by forklift.

Timber cases, boxes and crates must be secured with straps capable of bearing the unrestrained weight of the item. Straps must be secured in a manner consistent with the strapping material type. For example, metal straps must utilise crimped steel seal or nylon and propylene straps must be secured using either crimping or appropriate heat technology.

Wherever possible, screws, not nails, should be used when sealing timber crates / cases.

#### 5.3.3 [Cages](#)

Where the amount of items in a cage is insufficient to effectively block the items from moving, then the items must either be restrained to the base of cage by way of straps or by blocking, using timber or similar to prevent movement.

### 5.4 [Equipment Protection](#)

Equipment must be suitably protected and packaged to prevent damage or corrosion during transport and be protected from climatic damage during storage on-Site. If there are specific packaging requirements these are to be placed on the Purchase Order. In the event of no specific requirements the following guidelines apply:

- Where applicable all machined surfaces, bearings and electrical components must be protected against the ingress of salt air, water vapour, seawater, moisture and other corrosive and harmful substances.



- Where applicable all bearings must be protected against “brinelling” by suitable locking of shafts or false bearings used to relieve bearings of the load during transportation.
- All doors on equipment must be locked, the keys labelled and securely taped to the door handles. Keys must not be left in locks during transport.
- All painted items must be packed and handled in such a way that minimises damage to the surface.
- All openings must be sealed. Engines, drivelines, pumps, valves and similar should be plugged or capped and filters replaced where appropriate prior to dispatch. This is to avoid wind sucking fluid from items while on the back of trucks.
- Equipment such as electrical switchboards and panels, office machines and precision instruments must be packed within a moisture / vapour-proof barrier with a suitable desiccant to absorb moisture within the package. The packaging of this type of equipment and the application of desiccants must comply with AS2400.18 – SAA Packaging code-Part18-Use of desiccants in packaging.
- Openings in electric motors, generators and other electrical equipment must be sealed with waterproof tape or in some equally effective manner.
- Where possible, goods containing oils or lubricants such as gearboxes, hydraulic components or transmissions, should be drained before transport, and carry a tag stating "NO OIL".
- Where goods containing oils or lubricants such as gearboxes, hydraulic components or transmissions are being dispatched for repair and have leaking seals or can be expected to leak oil during transport, these must be drained before transport and carry a tag stating "NO OIL".
- Gearboxes, exciters, suitable hydraulic components and transmissions must contain in quantities sufficient to ensure effectiveness, the corrosion inhibitor "Shell VSI 8235" or a Site-specific equivalent, for internal corrosion protection for a shelf life of at least 6 months. A tag nominating the presence of corrosion inhibitor and the date it was applied must be clearly displayed. Ensure all vents breathers and openings are plugged. Breathers to be attached to the gearbox in a clean plastic bag with a tag stipulating “attach to gearbox after installation”. This is to due to the corrosion inhibitor being effective only in a closed area.
- Exposed machined surfaces must be coated with the corrosion inhibitor "Valvoline Tectyl 506" or a Site-specific equivalent. Hydraulic and pneumatic cylinder rods must be in the fully retracted position.
- Goods contaminated with grease, waste oil, solid lubricants or other process contaminants and that are being consigned from mine sites must be cleaned before transport to prevent environmental damage during the entire supply chain.

#### 5.5 Fragile / Sensitive Components

All instruments, protection relays or other fragile parts must be placed in sealed plastic bags and packed in plastic cushioning, or some equally effective shock absorbent material, in timber boxes. Polystyrene foam alternatives are to be used where available. All fragile components must be securely supported to prevent damage in transit and must be packed in separate crates and not with heavy items.

*Note: The sensitive nature of the freight must be clearly marked on the outside of the packaging.*



## 5.6 [Contents](#)

To minimise the risk of theft or loss, small packages and components and those considered attractive must be packaged separately or consolidated into larger containers; NOT packed inside equipment such as pumps, electrical cubicles or other items.

## 5.7 [Freight Containers](#)

Containerised items must be blocked, bracketed and/or bolted to prevent movement within the container. Items that cannot be anchored or blocked, or where size or weight prohibits containerisation, must be packed and shipped separately.

For further information refer The IMO / ILO / UN ECE Guidelines for Packing of Cargo Transport Units.

Prior to international shipping of containers, the supplier must provide a packing plan to the Freight Forwarding agent for review.

## 5.8 [Palletised Items](#)

It is preferred that pallets are non-returnable; however some delivery points may choose to accept hire pallets. In these cases the pallets will be made available for one for one exchange.

Items conducive to damage from moisture, dirt and dust and which can be conventionally secured to a pallet to facilitate handling, must be packed in this manner.

Pallets must be, preferably hardwood, suitable to adequately support the item and with an SWL exceeding the weight of the item. Pallets must be two-way, flush sided and under railed.

European and American style pallets which are suitable for use in containers may not be robust enough to withstand Australasian road conditions. These pallets should be replaced with Australian standard hardwood pallets.

Items that require mechanical lifting during handling must be palletised. Pallets are to be used for items that:

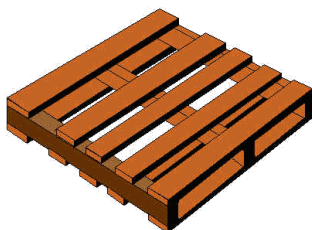
- Cannot be handled manually by one person or designed to be lifted by a forklift;
- Have dimensions that allow stable loading on the pallet; and
- Do not exert excessive point loads on the pallet.

Palletised items must be correctly restrained on the pallet to prevent movement. Damaged pallets, where restraints have been applied over pallet top slats, will be rejected on delivery.

Cylindrical items and items likely to roll or fall must be chocked and strapped with steel straps capable of bearing the unrestrained weight of the item to the pallet. Chocks should be fixed directly onto the pallet. This includes items / crates packed on casters or wheels and require fixing to eliminate roll (refer to Centurion Packaging Companion for examples).

The approved strapping method is secured to the bearers; not the boards. The strapping must ensure complete security and no chance of items falling off the pallet.

*Securing to pallet bearers avoids tension of banding pallet top slats:*



*Hardwood pallets remain the primary method for transporting all oil, gas and mining freight due to sturdy nature.*



- Loads must not overhang the forklift entry points of the pallet.
- Individual contents of each pallet must be clearly marked.
- Where timber is used, either internally and externally, it must be free of bark and insect infestation.
- Where possible steel pallets and skids should be used for the packaging of large and heavy items.
- White painted Pallets will not be accepted as this applied colour implies that the pallets has been condemned and a candidate for destruction. All freight delivered on white painted pallets will be rejected at the delivery point and returned to vendor to rectify.
- Pallets are not be adapted to suit freight. In particular, the joining of pallets together via means of wood or metal, although practical to cater for oversized freight, voids all SWL reference and is not suitable to safely conduct forklift operations. Purpose built oversize pallets are to be used for ALL consignments which are not suited for a standard pallet.
- All consignments delivered to Centurion on damaged pallets will be returned to vendor for rectification if safe for return transport / delivery.

#### 5.8.1 Skids

Skids are small pallets without under rails and are usually made of wood less rather than metal.

Skids have very limited application being suitable only for light and low profile items. An example of such an item would be small cylinders. Skids are typically not weight rated and without this certification there is a heightened risk in handling

Items over 1.0 m high need to be carefully assessed for stability. Some items will be unloaded on uneven ground which may increase the chance of the item becoming unstable during handling. It is essential that each individual load be assessed to ensure compliance.

Item weights and measurements should be considered prior to submitting on cardboard skids or remanufactured wood products to ensure skids are capable of supporting consignments. Broken skids will be returned to supplier for rectification.

#### 5.9 Sacks

Where protection from dust, dirt or moisture is necessary, liners must be used on the inside of the sacks and bags.

#### 5.10 Bundling

Each bundle must be treated as an individual package and marked accordingly.

All items must be segregated in accordance with length and size and bundled into units using steel straps capable of bearing the unrestrained weight of the item.

#### 5.11 Special Handling Instructions

Packages must be conspicuously marked with: "Handle with Care"; "Right Side Up"; "Keep Dry" and others in English and with the appropriate international standard symbols to prevent possible damage.

Pictorial markings complying with AS 2852 Packaging – Pictorial marking for the handling of packages must be used to fully convey information regarding specific handling requirements.

Lifting and slinging requirements must be clearly marked on goods.

#### 5.12 Centre of Gravity

Equipment and materials must be packed to ensure an even weight distribution within the package.

Where this is not possible, particularly in the instance where a case or crate conceals the internal goods, the supplier must ensure that the centre of gravity and hoisting position are marked on two sides to ensure loading, unloading and handling can be done in a safe manner. For example, top-heavy containers or unbalanced loads must be clearly marked with centre of gravity including sling marks to facilitate safe loading, unloading and handling.

#### 5.13 Large Equipment

Large equipment requiring disassembly before transport must be clearly match-marked prior to disassembly to facilitate efficient reassembly on Site.

Loose accessories in each package must be identified individually, by a metal or weather resistant label indicating the purchase order number, tag number, name of the main equipment, names of accessories, quantity and its position number on assembly drawings.

#### 5.14 [Furniture](#)

Furniture and office equipment shall be transported in covered vans fitted with trolleys and blankets designed for the purpose. Furniture deliveries are to be consolidated by the 3PL service provider and delivered to the delivery point in a dedicated furniture vehicle.

Furniture with readily detachable components shall be disassembled for packing and transportation to minimise damage in transit and for ease of handling.

## 6 Freight in Frames

Purpose-built transport frames must be designed, checked and manufactured to Australian Standard AS4991 (Lifting Devices). They must also incorporate load restraints and lashing points as described in the National Transport Commission publication "Load Restraint Guide" 2004 edition. Spreader beams or transport frames incorporating lifting beams must also conform to AS1418 (Cranes Hoists & Winches).

Wherever possible manufacture and structural integrity of all transport frames must conform to AS3990 (Mechanical Steelwork) including non-destructive testing of lifting lugs.

*If frames appear not to have been manufactured to the above standards, or there is doubt regarding the adequacy of a transport frame, Centurion will reject the consignment and return to vendor pending frame verification certificate.*

### 6.1 [Modifications to Frames](#)

No modifications must be carried out to Original Equipment Manufacturers (OEM) frames other than by the OEM themselves.

Frames that are delivered which appear to be modified will be rejected unless documentation is provided to confirm SWL, test certificates and formal engineering compliance documentation.

### 6.2 [Single-Use Frames](#)

Packing that typically accompanies equipment delivered from overseas OEM to local vendors in containers will not normally suffice for long distance road haulage.

If the supplier chooses to use a single-use frame, it must be built to a standard that will safely transport goods from point of origin to final destination. If a suitable single-use frame is not available, a multiple-use frame must be used.

*Note: Single use frames are not accepted by West Australian Rio Tinto sites, and in these instances - multi use frames must be utilised. These frames must conform to the Australian and New Zealand Standards described above.*

### 6.3 [Multiple-Use Frames](#)

Whenever an item is placed in a frame, an independent inspection is to be carried out by a Supervisor, or person deemed to be competent, to ensure that the item has been prepared correctly for transport, the item is secure that a Frame Checklist or similar (see Appendix 1) has been completed.

Suppliers using frames intended for multiple use must maintain a Transport Frame Procedure that, as a minimum, should include the following information:

- design standard;
- frame register;
- engineering calculations;
- engineering drawings; and
- tag system (for repair agency and BU use).

All transport frames must be engineered and fit for purpose. Inspection regimes for frame integrity must be implemented by the Supplier and should be subject for audit purposes on request to ensure conformance. Freight retained in supporting frames should be secured using washers combined with an appropriate minimum torque on the stud or nut to retain the item in the frame.

Nylok nuts, castellated nuts or similar must be used to ensure the retaining nuts do not vibrate loose in transit.

Lifting and tie-down points must be clearly indicated on the frame.

## **7 Dangerous Goods**

The packaging and transport requirements for the carriage of dangerous goods by road, rail and air shall be in accordance with the latest issues of the relevant Dangerous Goods transport legislation and codes.

All Dangerous Goods shall be identified by correct shipping name, labelled, packaged and packed in full compliance with the directives of the appropriate authority.

## **8 Load Restraint**

Correct restraint of packages and items onto transport vehicles is critical.

The National Transport Commission (NTC) Load Restraint Guide shall be used as a reference to assist with material specific packaging and restraint guidelines.

Load restraint equipment such as Ratchet Load Binders, chains, ropes, gates and hurdles must be compliant and in suitable condition to perform the task. Dunnage is to be used to assist with the restraint of items. Loose dunnage is to be placed in an approved dunnage cage.

Due to safety risks associated with the use of 'over centre' load binders (dog and chain), this type of load restraint equipment must not be used. Ratchet tie down devices such as the "Ausbinder" or "Ev-Cam" should be used in their place.

Any lengths of steel should be correctly secured to its own dunnage for ease of loading and transportation.



## 9 Relevant Standards and Other Related Documents

In preparing this document, the following documents have been used as resources:

1. AS2852 - Packaging – Pictorial marking for the handling of packages;
2. AS4068 - Flat pallets for materials handling;
3. AS4762 – General-purpose flat pallets – Principal dimensions and tolerances (International Pallet sizes);
4. AS2400.1 Packaging-Part1: Glossary of packaging terms;
5. AS2400.6 – SAA Packaging code-Part6-Paper and Paperboard;
6. AS2400.7 – Packaging-Part7: Timber boxes;
7. AS2400.10 – Packaging-Part10: Protection against shock and vibration (cushioning);
8. AS2400.18 – SAA Packaging code-Part18-Use of desiccants in packaging;
9. AS4991 - Lifting Devices;
10. AS1418 - Cranes Hoists & Winches;
11. Relevant Australian State / Territory and New Zealand Occupational Safety & Health Regulations ;
12. Australian and New Zealand WorkSafe - General Duty of Care Guidance Notes;
13. Australian National Transport Commission - Load Restraint Guide 2004;
14. Australian and New Zealand Code for the transport of Dangerous Goods by Road, Rail or Air;
15. Emergency Procedure Guides (EPG) Australian Standard 1678;
16. NZ55.020 – Packaging and Distribution of Goods;
17. NZ55.040 – Packaging Materials and Accessories;
18. NZ55.180.10 – General Purpose Containers;
19. NZ55.180.20 – General Purpose Pallets;
20. NZ55.180.99 – Other Standards related to freight distribution of Goods;
21. NZ53.020 – Materials Handling Equipment; and
22. NZ5444. – Load anchorage points for Vehicles.
23. The IMO / ILO / UN ECE Guidelines for Packing of Cargo Transport Units.

## 10 Definitions and Terms

Term	Definition
<b>Bearer</b>	A member separating the top and bottom decks of a pallet and providing space for entry of tines (forks).
<b>Blocking</b>	<ul style="list-style-type: none"> <li>a) A method of interior packaging that builds up irregularly shaped articles to a regular shape to protect projections from damage, to reinforce weak parts and to maintain objects in fixed positions during transit, by bracing them against each other or against the sides of the container.</li> <li>b) An undesired adhesion between touching layers of material, such as might occur due to the effects of pressure, and sometimes temperature, during storage or use.</li> </ul>
<b>Bonded rubber units</b>	Solid rubber mouldings to which are bonded two metal parts for securing the rubber to the inner and outer frame of a packing case or crate in suspension packaging.
<b>Case</b>	A rigid, heavyweight timber box which has panels that are totally closed, as distinct from those of a crate.
<b>Case - timber-framed</b>	A box consisting of substantial frame members designed to withstand the design load with sheathing applied to give strength and complete coverage.
<b>Climatic damage</b>	Damage caused by the effects of climate (for example, temperature, humidity, rain, wind or water immersions, solar radiation, sand, dust or salt spray and corrosive atmospheres).
<b>Corrosion preventive</b>	Substance which, by intimate contact with metal surfaces, protects them from corrosion by acting as an impervious barrier by modification of the metal surface, for example, by absorption or by superficial oxide formation.
<b>Pallet - two-way</b>	A pallet with bearers that permit the entry of tines from two opposite directions only.
<b>Quality assurance</b>	All activities and functions concerned with the attainment and proof of the required quality.
<b>Safe Working Load (SWL)</b>	Is the breaking load of a component divided by an appropriate factor of safety giving a "safe" load that can be carried or lifted.
<b>Working Load limit (WLL)</b>	The maximum load that an item can lift in a particular configuration or application.
<b>Take 5</b>	<p>Pre Task Hazard Assessment with the following steps:</p> <ul style="list-style-type: none"> <li>a) think through the task;</li> <li>b) spot the hazard;</li> <li>c) assess the risk;</li> <li>d) make the changes; and</li> <li>e) do job safely.</li> </ul>

## 11 Appendices

### 11.1 [Appendix 1 – Freight Preparation Checklist](#)

<b>FREIGHT PREPARATION CHECKLIST</b>		YES	NO	N/A
Pallet/crate/stand selection appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free of bends/buckles/cracked welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forklift access points not damaged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All boards present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Load secure on pallet/frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
washers/lock nuts used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nuts torqued to required level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oils/lubricants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
drained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
plugged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pressure cleaned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation documentation accurate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All items listed on connote	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
< 250kg accurate to +/- 20kg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
>250kg <1000kg accurate to +/- 50kg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
>1000kg accurate to +/- 3%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prepared by (print name): <input type="text"/>				
Date: <input type="text"/>				