

PURPOSE

Goods which are insufficiently packed are at a high risk of becoming damaged in transit, and can pose a serious hazard to drivers, freight handlers (clients, receivers etc) and other road users.

With this in mind, AirRoad have initiated this Freight Preparation and Packaging Guideline to ensure:

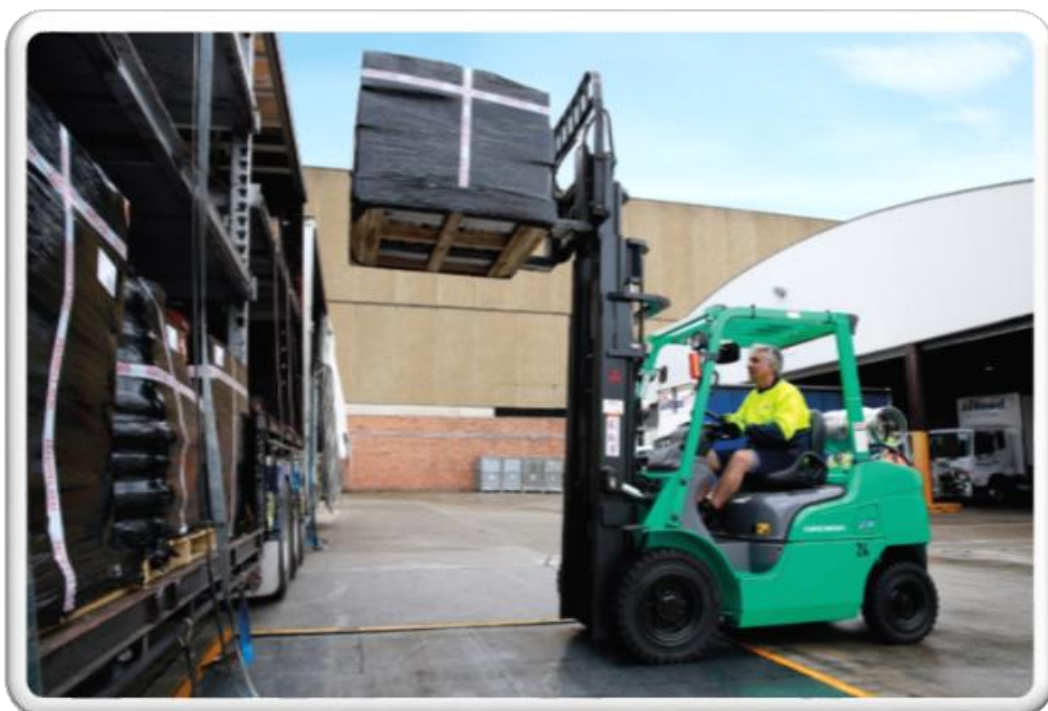
- That customers' goods will travel and arrive safely
- The goods can be safely handled by our drivers and freight loaders
- The goods can be safely lifted on and off transport vehicles
- Compliance with Legislation in relation to Chain of Responsibility, in particular Load Restraint, and Road Traffic Legislation.

This document provides examples of acceptable and unacceptable packaging. These examples have been sourced from AirRoad's 30-years of experience in transporting general goods throughout Australia.

SCOPE

This document applies to all freight which is submitted to AirRoad for transport.

Please note: The packaging guidelines contained in this document have been provided as general advice only and AirRoad will not accept liability for any losses. Our clients remain responsible at all times for ensuring that their items are packaged adequately for transportation. If you require further information about packaging your goods for transport, please call us on 1300 555 450.



CUSTOMER PACKING - Key Requirements

When consigning goods for transport or storage, the sender must ensure that all items in the consignment are prepared, protected and appropriately marked.

- All products must be packaged for transport.
- All packaging must be capable of withstanding road transport.
- All packaging must be suitable to withstand multiple instances of handling. Goods can be handled many times in the transport chain before it reaching the final destination.
- All packaging must restrain contents without rolling, tipping, sliding or spilling. Vacant airspace should be filled with foam etc. to stop compaction and item movement.
- Any goods in excess of 35 kilograms must be palletised.
- Palletised freight must not overhang the pallet.
- Packaging methods must take into account the weight, size and properties of the goods being transported. This includes the pallet dimensions and weight.
- All items that require handling with a forklift, must have standard forklifts access points for the tines which are ideally 210mm wide x 80mm high. Cross boards on the base of a pallet greatly improve stability during handling and reduce the potential for goods to be dropped.
- Goods are to be preferably packaged in an upright and secure position.
- Any motors or engines must be drained of all fluids prior to pickup and bolted or strapped to a pallet/skid.
- Do not allow any part of a product to protrude from the packaging. Any protrusion greatly increases the risk of damage or injury.
- If reusing packaging, ensure all old labels and barcodes are removed. Failure to do so can result in the product being sent to the incorrect location.
- All items must be labelled clearly showing the destination and transport barcode. Ensure that labels are applied to a clean surface – this is to avoid labels peeling off which can cause delivery delays.
- Place transport labels on the side of the carton or pallet, rather than on the top. This ensures the receiver information is still visible even when the product is stacked with other goods.

COMMON TYPES OF FREIGHT

CARTONS

- **Packing**

Cartons may be handled several times during the transport cycle and therefore need to be strong enough to keep the contents supported and enclosed at all times.



Example: Contents must be packed tightly or blocked preferably with foam or bubble wrap to prevent movement within the carton. Fragile items should not be boxed together with heavy or incompatible items



Example: Internal packaging not sufficient
Items have moved and are protruding out the end of the carton. This item will get broken.



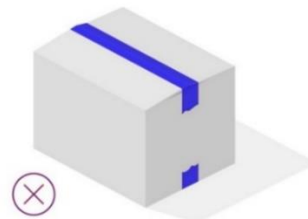
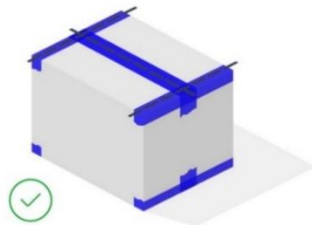
Example: Internal packing sufficient. Polystyrene foam assists to hold this drum in the carton

Use a carton that properly fits the contents. A box full of fresh air is prone to crushing and expensive to send.

• Sealing

Ensure cartons are properly sealed. Cartons opening in transit can result in goods being lost.

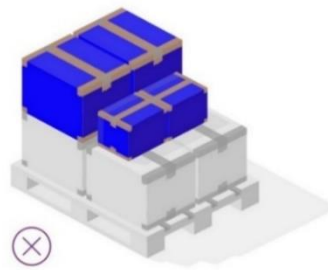
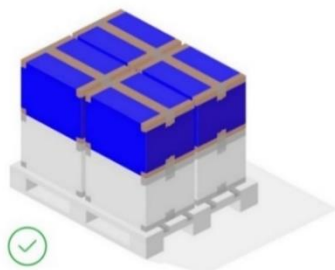
Use the 'H' taping method to improve the integrity of a carton. Tape along the middle seam and along the 'openings' at each end. Double layer the tape to increase the strength.



• Palletising

When palletising cartons, follow these best practice steps:

- Ensure pallet is strong enough to hold the load.
- Stack heavier items on the bottom of the pallet, with lighter ones on top. This will reduce compaction damage and make the pallet more stable to handle.
- Cartons should not extend past the pallet edges (no overhang). Increase risk of damage.
- Ensure the goods are attached to the pallet, either using stretchwrap (for lighter products), a combination of strapping and stretchwrap (for heavier products) or even bolting to the pallet (engines). We recommend the use of corner boards to prevent damage from strapping and spreading the tension more evenly. Applying at least 3 layers of stretchwrap will provide extra stability.



Strap and Wrap the Pallet

Items must be stretched wrapped to the pallet.



Example: Well palletised goods.

The additional use of strapping and cardboard angles also improves the stability of a stretchwrapped pallet in transit.

WHEELED CASES/ CRATES

All freight that is delivered on wheels must be restrained to prevent free movement.



The above example highlights how to effectively limit movement from items supplied on wheels.

These items must be stabilised for transport and the use of pallets underneath loads, with applied straps under the under bearers, is a perfect example on how to limit movement for safe transport.

No restraints, poorly protected.
Wheels sitting on pallet board.
These are difficult to handle and likely to be damaged.



TIMBER CASES/ CRATES

Equipment such as machinery, electrical switchboards and panels, office machines and precision instruments should be packed within a crate to prevent impact damage and any movement within the crate.

Equipment and materials must be packed to ensure an even weight distribution within the crate. 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 handling can be done in a safe manner.

Crates are required to have a solid timber structure all over and over the top so that the crate can be strapped and load restrained during transit without any risk of collapse to the timber structure.

Importantly, crated contents must be tied down or bolted or blocked so that the items will not move inside the crate.

Timber crates and cases must be constructed of solid timber (preferably hardwood), and engineered to adequately contain and support the item. Timber crates should have a safe weight limit that exceeds the weight of the contents.

Wherever possible, screws, not nails, or staples should be used when constructing timber crates/cases. Additional metal strapping to hold the timber crate structure is recommended.

Timber crates are required to have bottom lift points for forklifting. Forklift pockets need to be wide enough to receive a forklift tine and strong enough to be lifted at these points without causing the crate to collapse or warp.



Example above: a poorly crated item. The contents are too heavy for the flimsy crate construction. The heavy items were not adequately restrained by the plastic straps, so movement has resulted in the crate collapsing.



BUNDLES and LENGTHS

AirRoad will only accept items with a maximum length of 4 meters. Heavy and long items that do not fit in a case or crate must be strapped with steel strapping to a skid or pallet so they can be forklifted. If packed on a skid, then the skid must have a Safe Weight Limit (SWL) that exceeds the weight of the items.



Example: Bundles are properly secured for transit. Heavy steel or metal strapping/banding is required as in the examples here. It is also preferred that bundles have bearers strapped to enable forklift handling from underneath.



Example: Poorly packaged lengths for transit. Multiple lengths must be bundled tightly to prevent movement during transit. Bundles of steel require metal banding/strapping for proper support.



Don't make these common packaging mistakes

Two of the most common issues with freight identified as unsuitable or unsafe for transport are poor pallet selection and inappropriate methods of restraint. Following are examples of both problems along with images showing well prepared freight.

Pallet Selection

Selecting a stable foundation for loading freight is essential for freight to safely reach its destination and is a common area of failure.

Images below identify this common problem:



Freight Restraint

Common areas of failure include:



Example: Poorly strapped goods. Strapping has loosened in transit.

The goods have been strapped to a low grade pallet. The front pallet board has loosened and been pulled off by the tension of the straps. Freight has shifted in transit due to restraint failure.



Applying straps or restraints over pallet boards without loaded weight can lift the board. Strapping should only be applied around boards if there is sufficient weight on the board to negate the force of the strapping.

Multiple Failures

- Top heavy;
- On wheels, not appropriately chocked or blocked;
- Insufficient covering, protection;
- Low quality pallet with no cross-boards
- Unstable to handle. Likely to be dropped or damaged.

