



PACKAGING GUIDELINES

NORTH AMERICA

Revision A – January 14, 2019

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I. Introduction

PURPOSE

This document establishes a set of specifications for the required packaging and palletization of raw materials and finished goods that are shipped into Prestolite Electric facilities.

POLICY

All inbound shipments of raw materials, component parts, and finished goods must comply with these standards unless the Purchase Order specifically requires a non-standard alternative.

SUPPLIER COMPLIANCE

Packaging and palletization is subject to incoming inspection just as the parts themselves are. In the event of noncompliance to the specifications within this document, Prestolite reserves the right to:

- Issue a non-conformance Material Variance Report (MVR) to notify the supplier corrective action is required. The MVR can also to capture any cost incurred by Prestolite due to the non-conformance (sorting, scrap, re-packaging, etc.).
- Reject the lot of material and request a Return Material Authorization (RMA) to return any shipments received that are improperly packaged and/or identified at the supplier's expense.
- Issue a corrective action report (CAR). Requires systemic corrective action by supplier with evidence of effectiveness.

II. Packaging Guidelines

GENERAL REQUIREMENTS

Once a package configuration for a part or assembly is approved by Prestolite, that configuration should be used for all subsequent shipments. The package should be changed only if Prestolite requests a specific modification in writing.

The quantity per container of a given part must remain constant. If multiple containers are used in the same shipment, the quantity of parts in each container must be the same. The only exception is that the last box may contain the remaining quantity of a shipment. Any container holding a partial quantity must be conspicuously marked as such. Load all odd count boxes on the top layer of a pallet.

PART PROTECTION & CLEANLINESS

Packaging is expected to protect the contained goods during shipment to Prestolite and during handling and storage. Parts should have sufficient protection to arrive at the first production operation **or point of sale** in specified condition, provided the package was not opened or damaged.

Preparation for success:

1. Plan the packaging such that the parts may be removed without unnecessary handling.
2. Plan the packaging such that a safe and stable unit load is maintained in the “as packed” condition when the closure is removed.
3. Protect open holes of functional parts which may be adversely affected by contaminants
4. When plugs and caps are used they shall be easy to remove, but shall remain intact during transportation and handling.
5. Protect functional and pre-calibrated parts to the extent necessary to ensure print specification compliance.
6. Protect special surfaces such as:
 - a. Machined surfaces

- b. Finish painted or to be painted
 - c. Finish plated or to be plated
7. Packaging shall protect product from moisture and corrosion. Shipment method shall be considered when selecting packaging materials.
 8. Components subject to rust and/or corrosion shall be sufficiently protected via Prestolite APPROVED rust preventative oil, sealed containers, or both. This protection must be sufficient to protect the components for a minimum period of 6 months including shipping and warehousing. Any additives or chemicals....provide SDS
 9. Material contained per carton shall be considered when shipping bulk components. Components subject to distortion due to being packaged too tightly shall be taken into consideration when selecting packaging and per carton quantities.

Fragile materials must be handled appropriately. Pallets of fragile materials must not be double stacked. A single, empty box (clearly labeled) should be affixed to the top of the load to discourage double stacking of fragile materials.

Smaller containers are generally superior in strength and function to large, half or full pallet size containers. Smaller containers are preferred.

SHIPPING CONTAINER

Container sizes must be selected such that when arranged on a standard pallet, they do not overhang the edges of the pallet deck. A loaded pallet should have approximately 1 inch per side of exposed pallet deck.

In general, container height (skid included) must not exceed 46 inches [1170mm] maximum height to allow Prestolite to store it without issue.

Container size must match the volume of the parts to be contained. Minimize empty space and excessive dunnage. Small containers that are likely to be individually handled by Prestolite manufacturing must be limited to 28 gross pounds [12.7 kg] each.

If approved, all containers exceeding the weight limitation must have a warning label, conspicuously located, stating that it is an overweight container, and should be moved with mechanical assistance. This label must be highly visible and printed on a standard warning colored paper (for example yellow or orange).

PACKAGE IDENTIFICATION

Suppliers must provide a packing slip, and bar-coded carton labels that meet Prestolite specifications. Refer to Prestolite NA Labeling Standard P254105073.

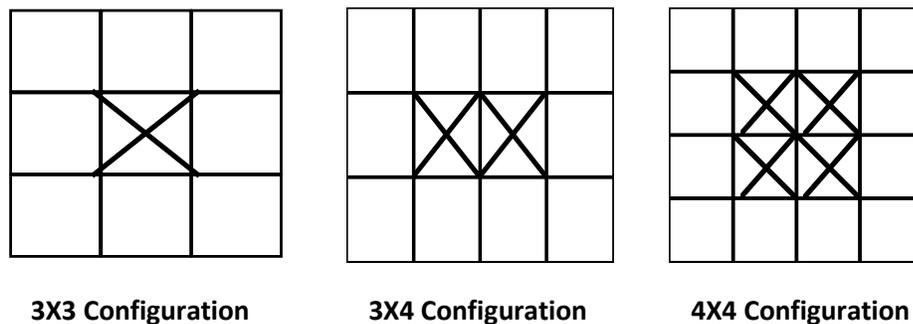
➤ See pages 9 - 12 at the end of this document for label locations per method of pack.

Deviation from this requirement will be allowed only through advanced, written, special agreement with Prestolite receiving plant Material Control Department.

Containers must be positioned on the pallet so all carton labels face out. Depending on the container size, a center core may be used on the stack to satisfy this requirement (see Fig. 1).

Fig. 1

Example: Top View (The X's indicate filler or empty boxes)

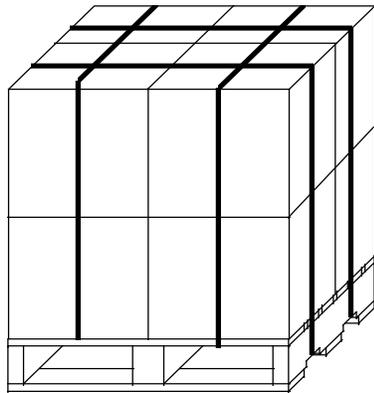


PALLETIZATION

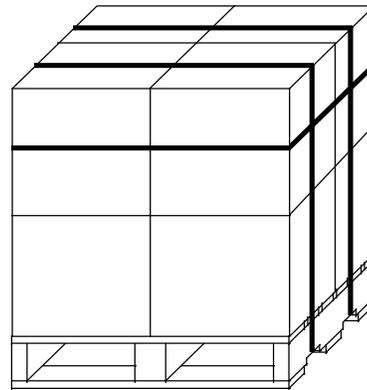
The load is to be secured to the pallet. If plastic strapping is used, place edge protectors under the straps to prevent damaging containers when the straps are tightened. Two methods of strapping are described and illustrated below. Either method is acceptable provided load stability is not jeopardized. **METAL STRAPPING MUST NOT BE USED.**

- **4-WAY BANDING:** Two bands per direction using one band through each entry hole as shown in Fig. 2.
- **3-WAY BANDING:** Two bands through fork hole entry (1 per side). Use one horizontal band around the top units as shown in Fig. 2.

Fig. 2



4-WAY BANDING



3-WAY BANDING

If stretch wrap is used on the pallet load, do not place any labels on the outside of the wrapping. All packing information must be inside the wrapping. Do not place packing information in any of the containers.

Pallet loads must be uniform, and total heights are not to exceed 46 inches [1170 mm] for large pallets and 33 inches [840 mm] for half pallets. These overall heights include the pallet itself. The top of the pallet load must be flat for safe stacking, and not have extra boxes or non-uniform size cartons protruding on the top, unless stacking is undesirable to protect the material.

If the total number of containers in a shipment results in a partial pallet load, the stack must be made uniform with empty boxes that do not have labels or are conspicuously labeled as empty.

It is acceptable to have more than one part number on a pallet as long as they are individually packaged & labelled. If it is necessary to mix parts or Purchase Order numbers on the same pallet, the pallet must be clearly marked "MIXED PALLET". Stack the containers on the pallet to make verification as easy as possible.

PALLETS

The use of standard pallets able to meet Prestolite specifications is desired.

1. STANDARD PALLET - 40 inches [1020 mm] x 48 inches [1220 mm] Maximum
2. All pallets used must have sufficient structural integrity and load carrying capability for the product being shipped.
3. All pallets used in shipment of product to Prestolite must be of a 4-way entry design; the pallet shall have the ability to be moved by forklift from each side.

SPECIAL INSTRUCTIONS

Additional packaging requirements may appear as “Special Instructions” on the Purchase Order or Prestolite print.

Failure to comply with any of the above conditions may result in a chargeback for additional handling.

PACKAGING FOR SPECIFIC COMMODITIES

Cast/Machined Housings - Any housing whether supplied in natural or coated form must be adequately protected during shipping. Rub marks, dents, chips, etc. due to bulk shipment is not acceptable. Prestolite preferred packing method: individual bubble wrap packaging.

Stator/Coil Assemblies – All stator and/or coil assemblies supplied to Prestolite must be packed such that damage does not occur during shipment. Packaging which requires any part to be altered prior to use must also be avoided. All stator/coil assembly packaging is subject to approval by Prestolite prior to shipment (Example: wires bent for packaging which require straightening or further manipulation prior to use by Prestolite).

Packaged-for-sale Goods – All goods which are packaged for sale shall arrive to Prestolite in saleable condition. This includes the appearance of the individual packaging. Damage to product packaging including crushed boxes, rub marks, water damage, etc. is not acceptable and will be subject to re-packaging at the supplier’s expense.

***All packaged-for-sale goods must adhere to the state of California's "Proposition 65" laws and must be labeled as such. <https://www.p65warnings.ca.gov/>

PACKAGING SAFETY

The use of metal edge protectors or any other sharp exterior metal in packaging is prohibited.

Cardboard packaging is the preferred palletization method. Use of wooden containers should be avoided whenever possible.

Care must be taken to avoid any sharp nails, staples, or banding protruding from containers.

PACKAGING FOR SPECIAL CONDITIONS

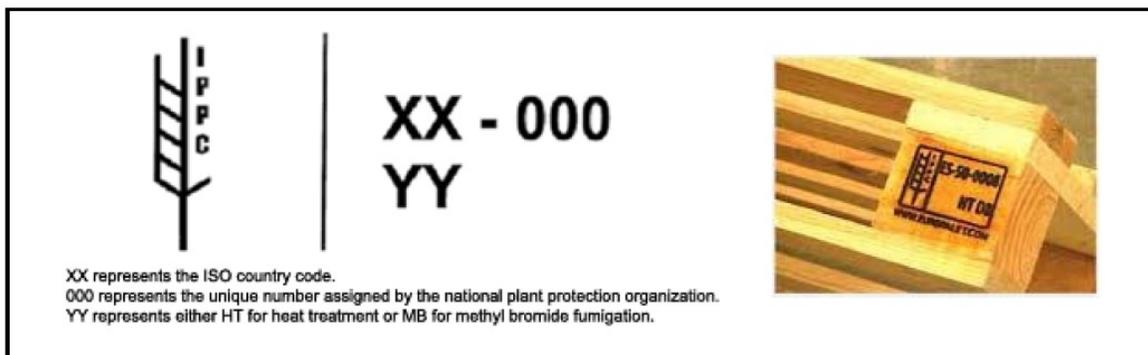
If non-standard shipping methods are required (air shipment, expedited shipment, etc.), packaging must be sufficient to withstand additional handling. Additional or alternate packaging may be required.

Shipments received via non-standard shipping methods will be subject to all requirements of this standard, regardless of abnormal circumstances.

ISPM 15 REGULATION

Pallets and all solid timber packaging must comply with ISPM 15 for all international shipments.

See below:

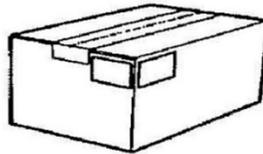


Refer to the ISPM website for additional guidance and up to date rules and regulations: <https://ispmp15.com/>

LABELING LOCATION

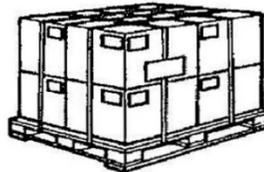
NOTE: ALL PACKAGING METHODS ILLUSTRATED IN THE FOLLOWING PAGES ARE ACCEPTABLE PER ITEM BEING SHIPPED, BUT MUST BE APPROVED BY PRESTOLITE PRIOR TO USE.

THE IMAGES BELOW ILLUSTRATE THE PROPER LABELING LOCATION FOR DIFFERENT STYLES OF PACK.



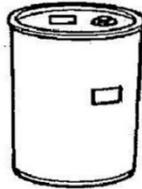
Box or Carton

Identical labels shall be located on two adjacent sides (wrap around label acceptable.) The upper edges of the labels should be as high as possible up to 20 inches from the bottom of carton.



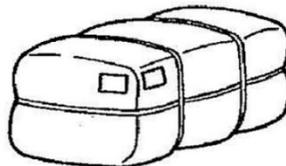
Cartons on Pallets

Each carton shall be individually labeled as described above. One master label may be used as described in Section 6.1, or one mixed load label as described in 6.2. Each pallet shall contain a master label or mixed load label.



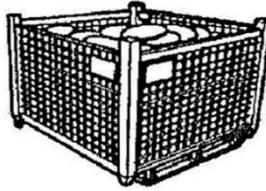
Drums, Barrels, or Cylindrical Containers

Identical labels shall be located on the top and near the center of the side.



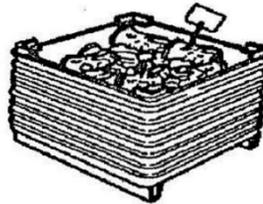
Bales

Identical labels shall be located at the upper corner of an end and the adjacent side (wrap around label acceptable).



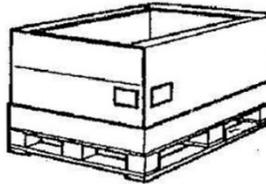
Basket, Wire Mesh Container

Identical labels shall be located on two adjacent sides.



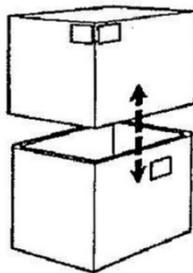
Metal Bin or Tub

Tag one visible piece near top, or use a label holder.



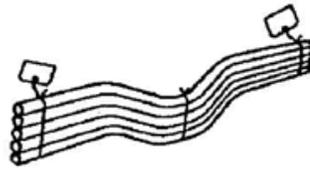
Pallet Box

Identical labels shall be located on two adjacent sides (wrap around label acceptable).



Telescopic or Set-Up Containers

Identical labels shall be located on two adjacent sides of the outer box. Some applications may also require identification of the inner box (wrap around label acceptable).



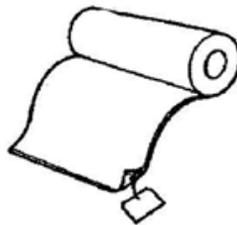
Bundle

Identical tags shall be located at each end.



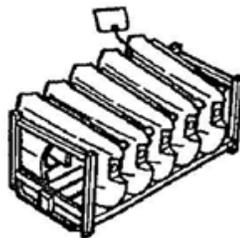
Bag

Place one label at the center of face.



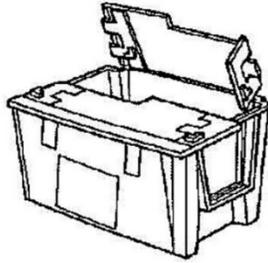
Roll

Hang one tag 2.0 in. (51 mm) from end of the material.



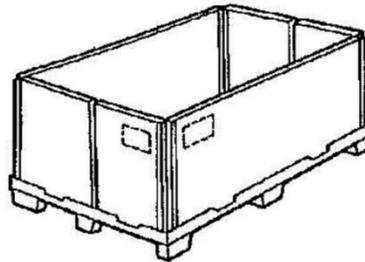
Rack

Tag one visible piece near top or use a label holder.



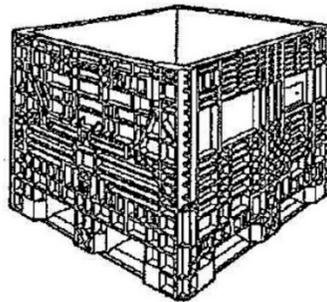
Plastic Modular Container

Identical labels shall be located on two adjacent sides in designated locations.



Collapsible Sleeve Pack

Identical labels shall be located on two adjacent sides in designated locations.



Plastic Pallet Box

Identical labels shall be located on two adjacent sides in designated locations.

Revision History

<i>Revision</i>	<i>Revision Date</i>	<i>Page(s)</i>	<i>Description of Change</i>
A	January 14, 2019	Various	Updated Prestolite - NA Packaging Standard P254105074 to this new format to provide consistency. Updated document with various requirements. All NEW requirements are identified with yellow highlighting.