

DATE ISSUED
02/23/99

DENSO

Production Control Supplier Manual

DATE REVISED
01/25/2005
09:17:13 AM

Control Number

PKG-004

POLICIES AND GUIDELINES

LEVEL/SECTION

PACKAGING

TITLE

**EXPENDABLE PACKAGING
REQUIREMENTS**

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APPROVED
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PURPOSE

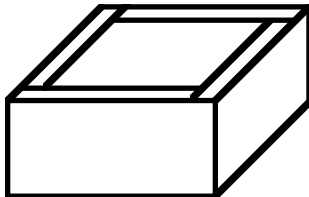
To define DMMI's expendable packaging requirements.

STANDARDS

A. Container requirements

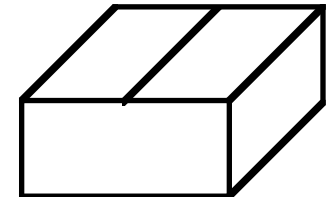
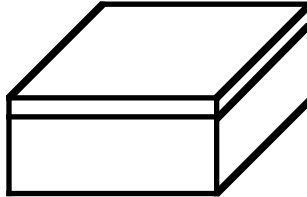
- Boxes must be open-topped. Half slotted containers (HSC) are required, with a 2" flange or lid.
- No printing or designs are allowed on the box. There are two exceptions that MAY be printed on the box:
 - 1) The suppliers name
 - 2) A small font part number, for inventory purposes, on the bottom of the box.
- Regular slotted containers (RSC) are not acceptable.

HSC with 2" flange



Acceptable Boxes

HSC with lid



Unacceptable Box

- Boxes must be designed to stack a minimum of 96" in the truck and 192" in warehouse storage.

DMMI is standardizing expendable box sizes. When completing a packaging specification, please chose from the sizes below:

Size	Pkg Code	Minimum Board Grade
12 x 15 x 4	EXP9L	275# C Singlewall
12 x 15 x 7	EXP7L	275# C Singlewall
24 x 15 x 4	EXP9D	275# C Singlewall
24 x 15 x 7	EXP7D	275# C Singlewall
24 x 15 x 11	EXP5D	275# C Singlewall
24 x 15 x 14	EXP4D	275# C Singlewall
32 x 15 x 7	EXP7H	275# C Singlewall
32 x 15 x 14	EXP4H	275# Doublewall
32 x 15 x 20	EXP3H	275# Doublewall
32 x 15 x 22	EXP2H	275# Doublewall
45 x 16 x 14	EXP4I	275# Doublewall
45 x 16 x 20	EXP3I	275# Doublewall
45 x 24 x 14	EXP4K	275# Doublewall

Board grade **must** be increased where appropriate. The above board grades are minimum requirements.

- Corrugated layer pads are required when using HSC with flanges. This adds stability to the pallet.
- Target weight for one full container is 25 lbs.
- Container weight cannot exceed 35 lbs. when full.
- Containers weighing between 30 - 35 lbs. must be labeled "HEAVY".
- Container quantity cannot exceed *a multiple of 24.
- Part orientation should be simple and consistent. Avoid excessive reach.

B. Wood Pallet Requirements

- DMMI's standard wood pallet size is 48" X 45". The supplier is expected to propose this size when submitting new expendable packaging specifications. (See Attachment # 1)
- Pallet material must be adequate for weight of product. Use guidelines below:

Light Products 1 to 400 lbs.	Softwood
Mid-Weight Products 400 to 600 lbs.	Softwood
Heavy Products 600 lbs. and over	Hardwood

Softwood 48" x 45" pallets must be heated treated and identified. Pallet assemblers must use lumber from approved mills.

Hardwood 48" x 45" pallets do not require heat treating, but identification is mandatory. Identification is to include "non-coniferous" and indicate the origin of the lumber.

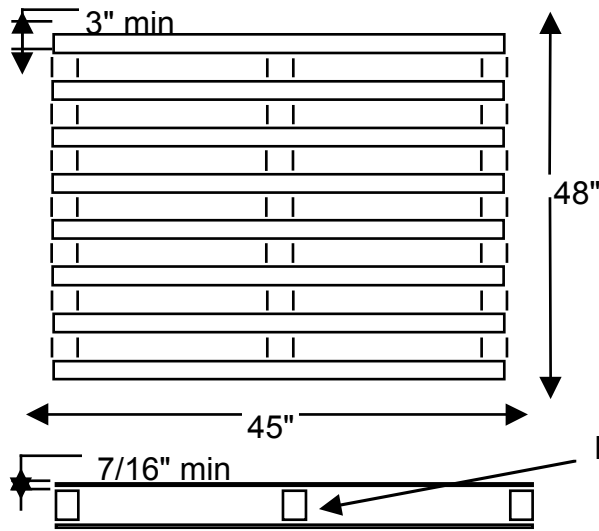
Example: NC-CA would represent non-coniferous lumber originating from Canada

- In special cases, the 48" X 45" pallet may be unacceptable. If this occurs, the supplier can propose a 48" X 42" pallet. **48" x 42" pallets require**

heat treating whether softwood or hardwood

- Wing style and block style pallets are not acceptable.
- Striping is required on the middle stringer to identify the size of the pallet.
- Reconditioned pallets may be used but broken stringers and rotted wood are not acceptable.

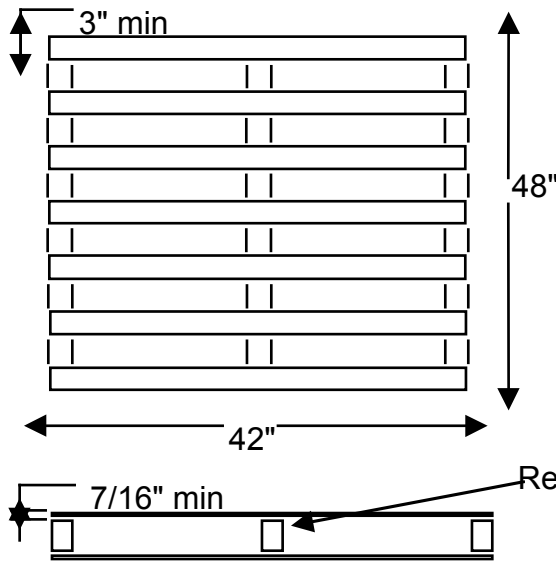
* Attachment # 1



48" x 45" Pallet Specification

Material: See weight chart
 if softwood = requires heat treatment and identification
 if hardwood = requires identification
 Dimensions: 48" x 45" x 5"
 Deckboards: 8 top, 4 bottom
 Joint style: Nails, 2 per deckboard/stringer
 Pallet Style: 4 way entry
 Print Style: Stripe
 Print Color: Blue, pantone # 072C
 or stenciled 48x45
 Print Location: Center Stringer

Blue Stripe



48" x 42" Pallet Specification

Material: See weight chart
Requires heat treatment and identification
 Dimensions: 48" x 42" x 5"
 Deckboards: 7 top, 4 bottom
 Joint style: Nails, 2 per deckboard/stringer
 Pallet Style: 4 way entry
 Print Style: Stripe
 Print Color: Red, pantone # 032C
 or stenciled 48x42
 Print Location: Center Stringer

Red Stripe



* denotes change in procedure