

**RECOMMENDED
SOUTHERN PINE
PALLET SPECIFICATIONS
for the
GROCERY INDUSTRY**

ENDORISING ORGANIZATIONS

NATIONAL ASSOCIATION OF FOOD CHAINS

UNITED FRESH FRUIT & VEGETABLE ASSOCIATION

Endorsement Pending From:

GROCERY MANUFACTURERS OF AMERICA, INC.

COOPERATIVE FOOD DISTRIBUTORS OF AMERICA

NATIONAL-AMERICAN WHOLESALE GROCERS' ASSOCIATION

NATIONAL ASSOCIATION OF CONVENIENCE STORES, INC.

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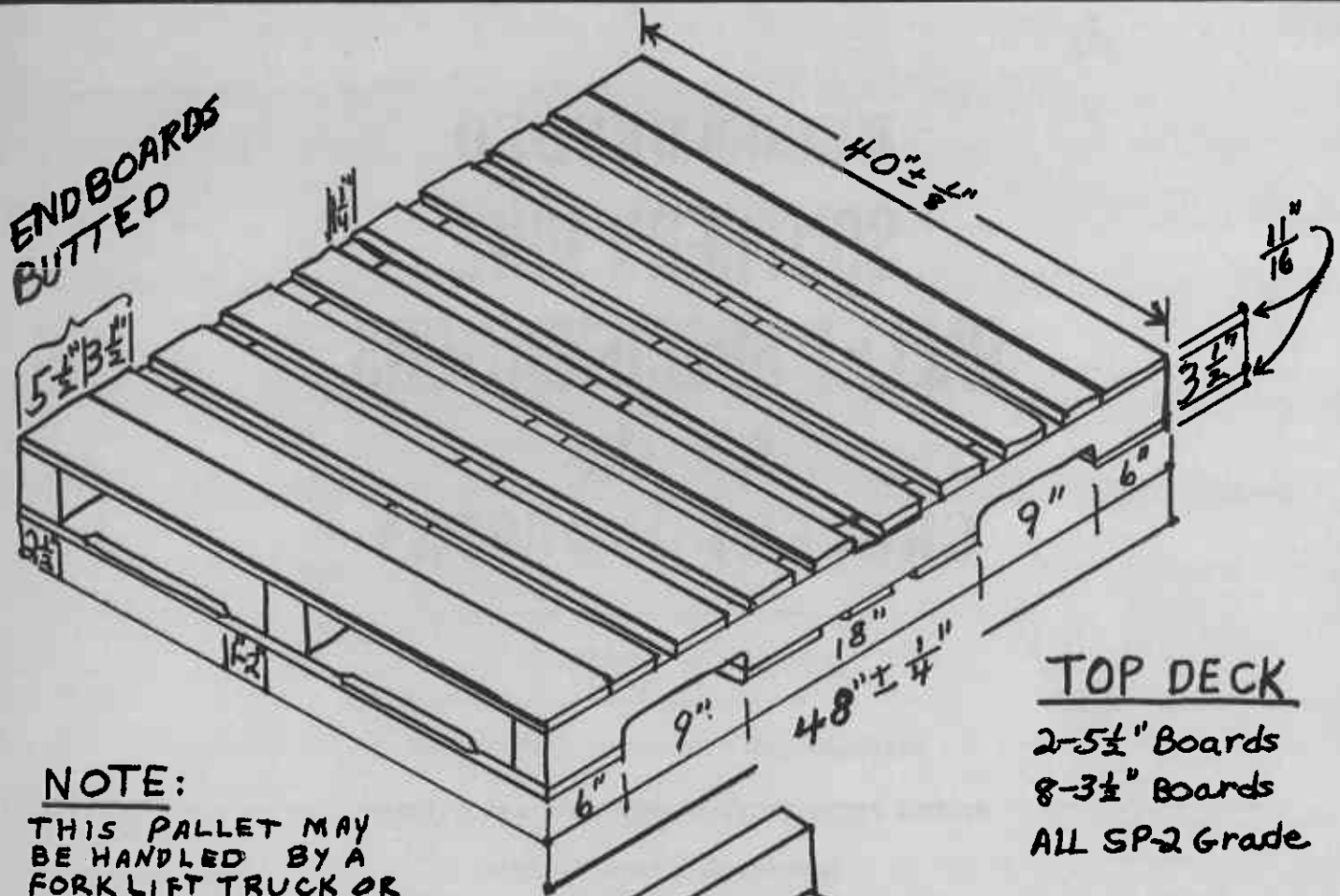
For additional copies of this booklet, contact:

GROCERY PALLET COUNCIL, INC.
221 North LaSalle Street
Chicago, Illinois 60601

November, 1976



GPC Southern Pine Pallet Specification

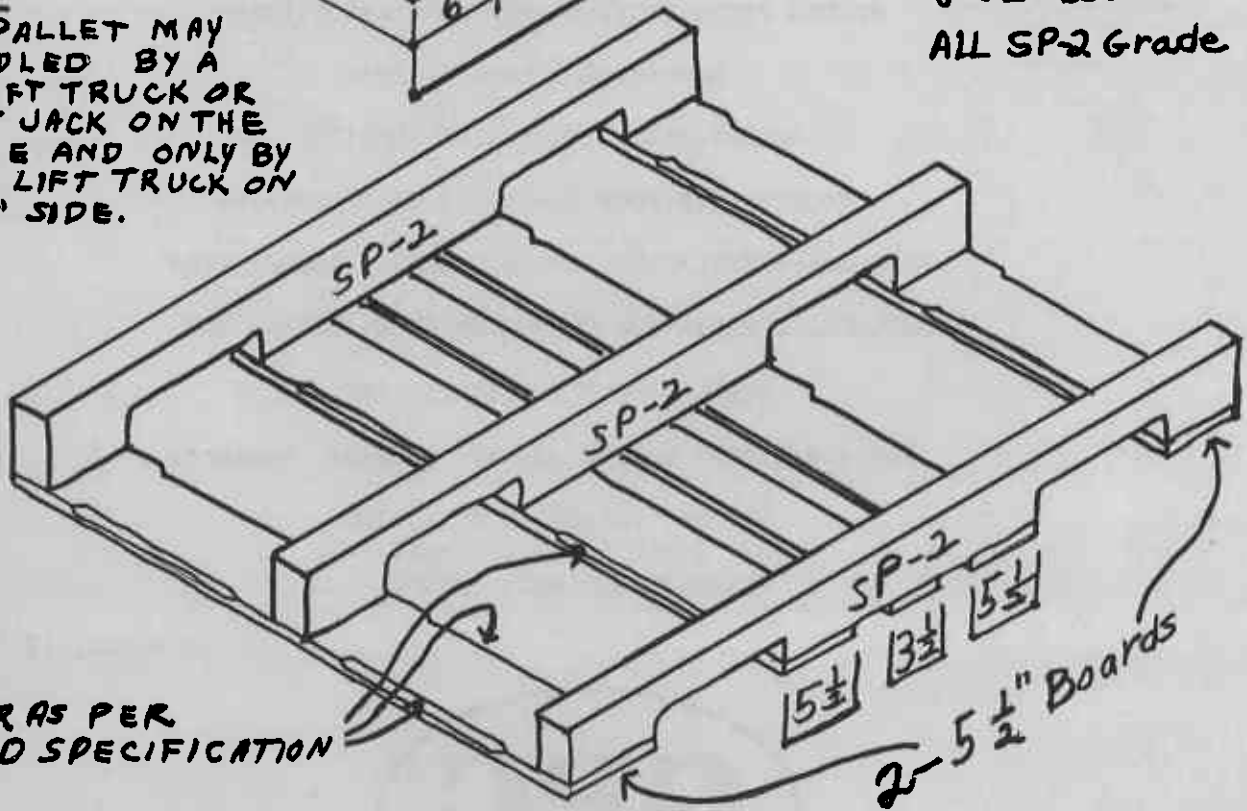


NOTE:

THIS PALLET MAY BE HANDLED BY A FORK LIFT TRUCK OR PALLET JACK ON THE 40" SIDE AND ONLY BY A FORK LIFT TRUCK ON THE 48" SIDE.

TOP DECK

2-5 1/2" Boards
8-3 1/2" Boards
ALL SP-2 Grade



CHAMFER AS PER DETAILED SPECIFICATION

BOTTOM DECK
ALL SP-2 Grade

RECOMMENDED SOUTHERN PINE PALLET SPECIFICATION FOR THE GROCERY INDUSTRY

November, 1976

I. SIZE AND TYPE OF PALLET

Pallet shall be 48" x 40"; flush non-reversible, four-way modified. (See accompanying drawing for details.)

II. TYPE AND QUALITY OF LUMBER

A. Allowable Species

Lumber shall be sound, square edge, free of mold and noxious odors. The following species is to be used:

Southern Pine

B. Moisture Content

Deckboards

Deckboard thicknesses described in Section V are net dry dimensions (19% moisture content) at the time of manufacture. Only dry (19%) deckboards are permitted.

Stringers

The stringer dimensions described in Section V are net dry dimensions (19% moisture content) at time of manufacture. Either dry (19%) or green (any degree of seasoning) stringers are permitted. If green, then stringers must be 2-3/4" x 3-3/4" net dimension at time of manufacture to compensate for residual shrinkage.

C. Permissible Defects, Characteristics, and Lumber Grade

For purposes of this standard, lumber is classified as Southern Pine-2 (SP-2) or better. (Note: SP-2 may be cut with a minimum waste factor from lumber commercially known as No. 2 dimension Southern Pine.) This SP-2 Grade is defined as follows:

Knots:

The size is measured by its greatest dimension across the width of the piece and limited by cross sectional displacement. Well-spaced knots of any quality are permitted in sizes not to exceed: 1/4 nominal cross section for holes in 5-1/2" boards, 1/3 nominal cross section for knots on edge of wide face of stringers and holes in 3-1/2" deckboards, 1/2 nominal cross section for knots along the center line of the wide face of stringers and deckboards.

The sum of the sizes of knots in any given 6" of length not to exceed twice the diameter of maximum single knot allowed but two knots of maximum permissible size are not allowed in the same 6" of length. No knots shall be allowed that interfere with the nailing or exposed edges of any deckboards.

Splits, Shakes, and Seasoning Checks:

Through checks, splits, and heart shakes are permitted provided their length not exceed 1-1/2 times the width of the piece.

Pitch:

Unlimited

Surfacing:

Smooth sawn skips - hit and miss (1/16" deep); in addition 5% of pieces may be hit or miss (1/16" by length of piece), or heavy skip (1/8" deep by 1/4 length).

Torn Grain:

Not limited

Warp:

Cup, 1/8" in 6" of width
Crook, 1/8" in 24" of length

Pin Worm Holes:

Scattered 16 per surface foot

Stain:

Unlimited

Density:

No restriction

Grain Deviation:

Not to exceed 1" deviation in 8" of length except for short local deviations.

Wane:

1/3 thickness x 1/3 width. 5% of pieces may have wane up to 2/3 thickness, 1/2 width.

Unsound Wood:

Not permitted in stringers. Heart center streaks permitted in deckboards, provided they not exceed 1/3 the width or thickness.

III. LUMBER PREPARATION

Lumber must be smooth sawn or surfaced to square edge, uniform dimensions.

IV. TYPE AND QUALITY OF FASTENERS

Type: Helically threaded

Length: 2-1/4"

Wire Diameter: 0.110" minimum to 0.120" maximum

Thread Angle: 60 degrees \pm 5 degrees

Hardened: (or tempered) to bend not more than 28 degrees on the MIBANT Nail Tester

Threaded Body Outside Diameter: 0.123" minimum to 0.143" maximum but must exceed wire diameter by at least 0.013"

Head Diameter: Average 9/32" \pm 1/32"

Point: Diamond (not longer than 5/32"), no point, or chisel. No part of the point may exceed the wire diameter.

Flutes: 4-5

V. DIMENSIONS, SPACING AND ARRANGEMENT

A. Deckboards (see Section II, B.)

Thickness: 11/16" plus 1/16" minus 1/32"

Length: 39-7/8" to 40-1/8" range

Top Deckboards

End deckboards are to be 5-1/2" wide plus 1/4" minus 1/32". There are to be 8 intermediate top deckboards 3-1/2" wide plus 1/4" minus 1/32". Spacing between boards shall be 1-1/4" \pm 1/4". Second boards are to be butted tight to end deckboards. Deckboards must provide a minimum cumulative surface of 39".

Bottom Deckboards

The two end deckboards are to be 5-1/2" plus 1/4" minus 1/32". The 3 intermediate bottom deckboards shall consist of two 5-1/2" wide boards plus 1/4" minus 1/32" and one 3-1/2" board plus 1/4" minus 1/32" positioned as per the drawing.

Bottom deckboards shall not protrude over any notch opening. Outer edges of the center cluster shall be flush with the inside of the notches. Ends of all deckboards shall be flush with outside of stringers. Bottom deckboards must provide a minimum cumulative surface of 25-1/2".

Chamfer inner and outer edges of bottom deck edgeboards and wheel space edges of center cluster boards to within 1/4" to 1/2" of bottom face. All chamfers to be cut at 35 - 45 degree angles and to extend within 2" but not closer than 1" of stringers at each end of chamfer.

B. Stringer Dimensions and Placement (See Section II, B.)

Stringer dimensions shall be width: $2\text{-}1/2'' \pm 1/8''$. Length: $48'' \pm 1/8''$.
Height: $3\text{-}1/2''$ plus $1/4''$ minus $1/32''$.

Notch openings shall be $9''$ wide, plus $1/4''$ minus 0 . Notch openings shall not be closer than $6''$ from the ends of the stringers, plus $1/4''$ minus 0 . Stringer notches shall have a depth of $1\text{-}1/2''$ and shall have round corners with a radius of $3/4''$; the top of the notch shall be flat cut between the corner radii.

Center stringer shall be parallel to and equidistant between outside stringers.

VI. ASSEMBLY

A. Predrilling

Predrilling of deckboards shall be required when nails are hand driven. When predrilling is required, the outer ends of the deckboards shall be predrilled approximately $1/32''$ larger than the nail shank. When pallets are assembled by nailing machines, predrilling is not required.

B. Nailing

The number of nails which shall be employed at all bearing points for the various widths of deckboards is as follows:

<u>Width of Deckboard</u>	<u>Number of Nails</u>
$3\text{-}1/2''$	2
$5\text{-}1/2''$	3

Nails shall be staggered alternately on either side of stringer centerline and countersunk $1/16''$ deep.

VII. WORKMANSHIP

- A. Protruding nail heads or points are not permitted. Bent over nails must be driven below surface of deckboards.
- B. Deviation in dimension of assembled pallets shall be limited to $3/8''$ out-of-square ($3/4''$ difference in diagonals), plus or minus $3/16''$ in overall pallet length or width.
- C. No combination of defects in workmanship, including nail splits, which will adversely affect the strength of the pallet to a material extent will be permitted.

VIII. IDENTIFICATION OF PALLETS

Pallets shall be marked on the exterior surface of one outside stringer, in letters of not less than 1-inch, to clearly show that the pallet meets GPC Standards, the manufacturer's designation, and otherwise conforms to pallet marking specifications developed and approved by the Grocery Pallet Council, Inc.

Pallets shall also be marked with the pallet species type "SP".