PALLET DESIGN SYSTEM Version 5.0

Pallet Specification Sheet

All dimensions in inches

Customer:

Customer in search of "The Total Pallet Solution"

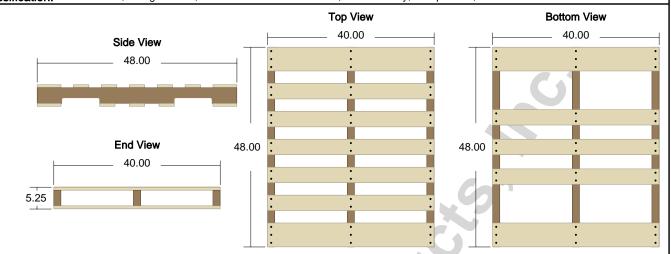
Prepared by:

RCD Timber Products, Inc, 1699 Matassino Road New Castle, DE 19720 302-778-5700 info@rcdtimber.com

PDS License: 209 Printed: May 15, 2012

Pallet ID: Generic Pallet Spec

Classification: 48.00 x 40.00, Stringer-Class, Double-Face Non-Reversible, Partial 4-Way, Multiple-Use, New Manufacture



Components

Materials

Top Deck:

Style: Deckboard Type: New Lumber Number Thickness Width

 Number
 Thickness
 Width
 Length

 5
 0.750
 3.750
 40.00

 2
 0.750
 5.750
 40.00

Volume: 6.3 bd ft

Bottom Deck:

Style: Deckboard Type: New Lumber Number Thickness Width

 Number
 Thickness
 Width
 Length

 3
 0.750
 3.750
 40.00

 2
 0.750
 5.750
 40.00

Volume: 4.7 bd ft

Stringers:

Type: New Lumber

 Number
 Width
 Height
 Length

 3
 1.750
 3.750
 48.00

Volume: 6.6 bd ft

Partial 4-way Entry Notch:

Depth: 1.250 Length: 9.00 Location: 6.00 Radius: 0.75

Fasteners:

Fastener ID: 2-1/4 x .112 SS
Fastener Type: Helically Threaded Nail

Fastener Length: 2.25 Thread Length: 1.25 Thread Diameter: 0.128 Wire Diameter: 0.112 **Head Diameter:** 0.280 Flutes: 4 Helixes: 6.0 Pitch: 0.208 Thread Angle: 64 MIBANT Angle: 36 FWC: 2.69

New Lumber:

Total Number:

Lumber ID: Medium Density &Btr Mixed Hardwoods

84

Species ClassGradeLumber MixHigh Density Eastern HardwoodsStandard &BTR33 %Eastern OaksStandard &BTR33 %Medium Density Eastern HardwoodsStandard &BTR34 %

Moisture Content (at manufacture and assembly): Green

Total New Lumber Volume: 17.6 bd ft

Spec Sheet Notes:

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Pallet Structural Analysis

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General Load Type: Uniformly Distributed - Full Pallet Coverage

Unit Load Weight Variability: User-Specified

Weight Coefficient of Variation: 49.5 % Maximum to Average Weight Ratio: 2.15

Service Environment: Dry Environment (EMC <= 19%)

Support Condition		Safe Maximum	Deflection at Maximum	User Specified Deflection	Maximum Load for Deflection	Critical
Side View Er	nd View	Load	Load	Limit	Limit	Member
Racked Across Length 2 Beam Support Span = 44.00		3174 lbs.	0.59 in.	0.50 in.	2062 lbs.	Center Stringer
Racked Across Width 2 Beam Support Spa	an = 36.00	3239 lbs.	1.00 in.	0.50 in.	1229 lbs.	Interior Bottom Deckbd
Warehouse Storage Stacked 1 Unit Load High Stacked 4 Unit Loads High		11822 lbs.	0,25 in.	9		Interior Top Deckboard
		4378 lbs. per pallet	0.25 in.			Interior Bottom Deckbd
Lateral Collapse Resistance	Low .	Medium		Good	Excellent	
				H/V = 2		

Pallet Design System (PDS)

Developed and owned by:

National Wooden Pallet and Container Association (NWPCA)

Research and development for early versions of PDS were conducted in cooperation with: Center for Unit Load Design, Virginia Tech Department of Wood Science and Forest Products; U.S.D.A. Forest Service and Forest Products Laboratory; APA - The Engineered Wood Association; Software Technologies Laboratory, Virginia Tech Department of Industrial and Systems Engineering

The recommendations from PDS are based on the NWPCA's continuing program of laboratory and field research. They represent the best available engineering information compiled to date. However, the quality of workmanship, the input data, and the conditions in which pallets are used may vary widely. Therefore, the Association cannot accept responsibility for pallet performance or design as actually constructed. Wood pallets manufactured to this PDS design are for the sole purpose of storing and/or transporting material.

Under no circumstance should any person stand, step, or lean upon them or otherwise use them for support.

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National Wooden Pallet and Container Association, 1421 Prince Street, Suite 340, Alexandria, Virginia 22314-2805 http://www.palletcentral.com

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PALLET DESIGN SYSTEM Version 5.0 Pallet Physical Property Analysis

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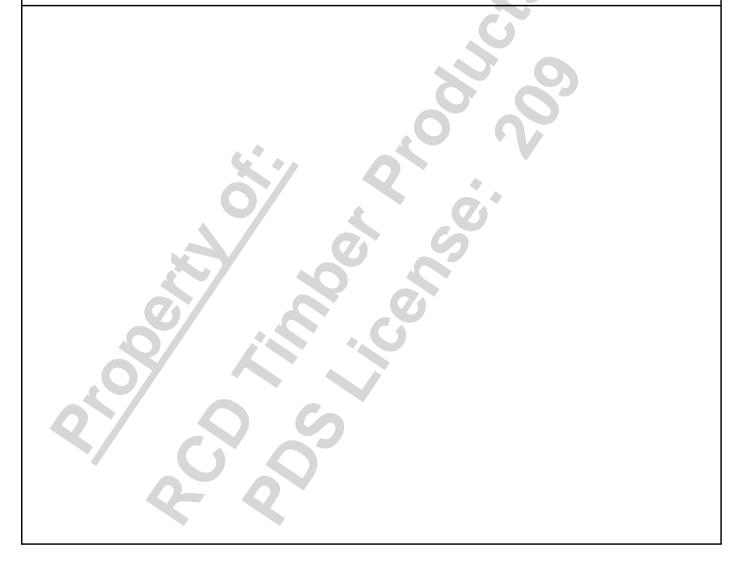
	At Manufacture	At 25% MC	At 19% MC	At 15% MC	At 12% MC
Average Pallet Weight	78 lbs.	56 lbs.	53 lbs.	51 lbs.	50 lbs.

Width Shrinkage

Thickness Shrinkage

Dimensional Change due to Wood Drying

Component	Original Dimension	Shrinkage from Manufacture to 19% MC	Shrinkage from Manufacture to 15% MC
Top Deckboards	0.750 in. Thickness	0.018 in. (+/- 0.005 in.)	0.026 in. (+/- 0.008 in.)
	3.750 in. Width	0.088 in. (+/- 0.027 in.)	0.128 in. (+/- 0.039 in.)
	5.750 in. Width	0.135 in. (+/- 0.042 in.)	0.196 in. (+/- 0.060 in.)
Stringers	3.750 in. Height	0.088 in. (+/- 0.027 in.)	0.128 in. (+/- 0.039 in.)
	1.750 in. Width	0.041 in. (+/- 0.013 in.)	0.060 in. (+/- 0.018 in.)
Bottom Deckboards	0.750 in. Thickness	0.018 in. (+/- 0.005 in.)	0.026 in. (+/- 0.008 in.)
	3.750 in. Width	0.088 in. (+/- 0.027 in.)	0.128 in. (+/- 0.039 in.)
	5.750 in. Width	0.135 in. (+/- 0.042 in.)	0.196 in. (+/- 0.060 in.)



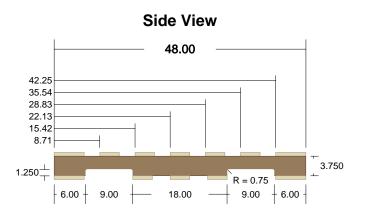
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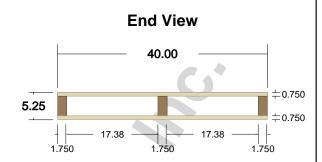
2-D Pallet Drawings

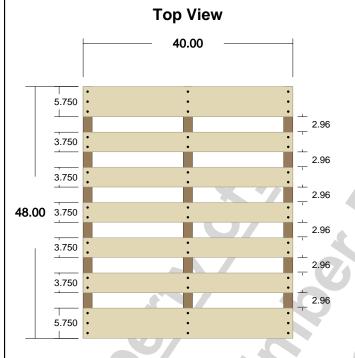
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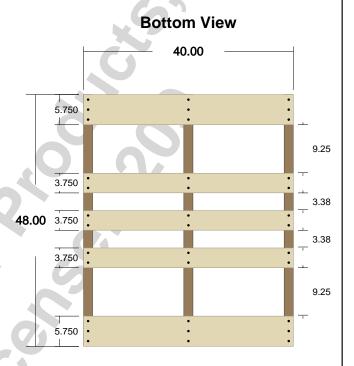
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