

PALLET DESIGN SYSTEM Version 6.2

Pallet Specification Sheet

All dimensions in inches

Customer:

GMA User

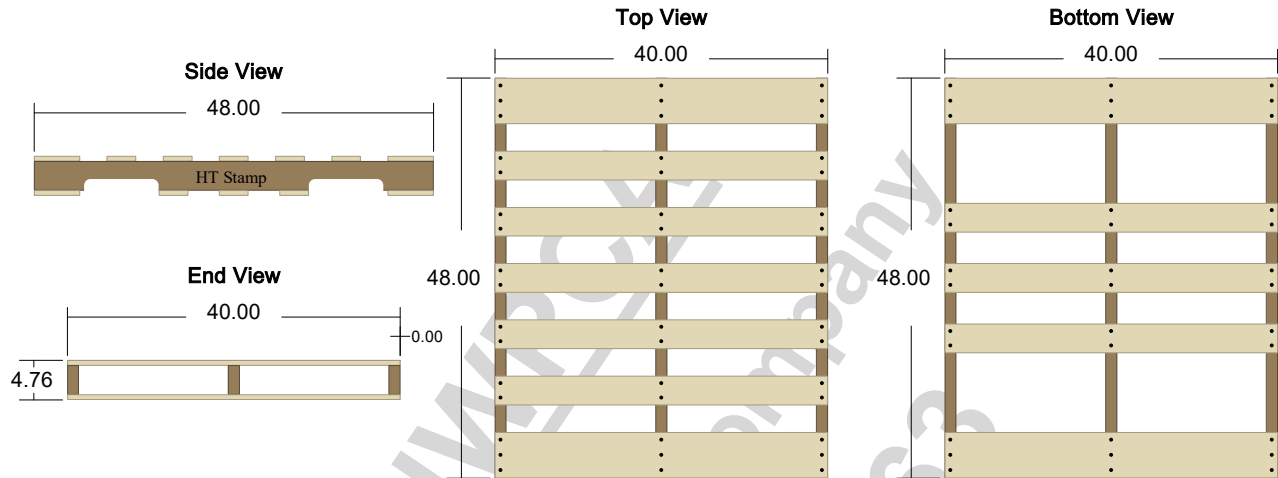
Prepared by:

Hinchcliff Products Co.
13550 Falling Water Road
Strongsville, OH 44136
Phone: 440-238-5200 Fax: 440-238-5202
E-Mail: sales@hinchcliffproducts.com
PDS License: 63 Printed: April 15, 2021

Pallet ID: 48x40 GMA

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

Pallet Treatments: ISPM-15 Compliance: Heat Treatment (HT)



Components

Materials

Top Deck:

Style: Deckboard Type: New Lumber

Number	Thickness	Width	Length
5	0.630	3.500	40.00
2	0.630	5.500	40.00

Volume: 5.0 bd ft

Bottom Deck:

Style: Deckboard Type: New Lumber

Number	Thickness	Width	Length
3	0.630	3.500	40.00
2	0.630	5.500	40.00

Volume: 3.8 bd ft

Stringers:

Type: New Lumber

Number	Width	Height	Length
3	1.380	3.500	48.00

Volume: 4.8 bd ft

Partial 4-way Entry Notch:

Depth: 1.380 Length: 9.00 Location: 6.00 Radius: 1.50

Fasteners:

Fastener ID:	2" Machine Nail
Fastener Type:	Helically Threaded Nail
Fastener Length:	2.00
Thread Length:	1.33
Thread Diameter:	0.137
Wire Diameter:	0.120
Head Diameter:	0.281
Flutes:	4
Helixes:	8.0
Pitch:	0.166
Thread Angle:	57
MIBANT Angle:	28
FWC:	3.25
Total Number:	84

New Lumber:

Lumber ID: Mixed Hardwood

Species Class	Grade	Lumber Mix
High Density Eastern Hardwoods	Standard &BTR	30 %
Yellow Poplar	Standard &BTR	10 %
Eastern Oaks	Standard &BTR	60 %

Moisture Content (at manufacture and assembly): Green

Total New Lumber Volume: 13.6 bd ft

Spec Sheet Notes:

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Pallet Structural Analysis

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General Load Type: Uniformly Distributed - Full Pallet Coverage
Load Weight Variability: Low
Service Environment: Wet Environment (EMC > 19%)

Support Condition	Safe Maximum Load	Deflection at Maximum Load	User Specified Deflection Limit	Maximum Load for Deflection Limit	Critical Member or Connection
<p>Racked Across Length 3 Beam Support</p>	5243 lbs.	0.28 in.	----	----	Interior Top Deckboard
<p>Racked Across Width 3 Beam Support</p>	4447 lbs.	0.21 in.	----	----	Interior Top Deckboard
<p>Forklift Support Enter and Lift from Pallet End</p>	7251 lbs.	0.45 in.	----	----	Interior Top Deckboard
<p>Warehouse Storage Stacked 1 Unit Load High</p>	6268 lbs.	0.28 in.	----	----	Interior Top Deckboard
<p>Stacked 3 Unit Loads High</p>	3214 lbs. per pallet	0.28 in.	----	----	Interior Top Deckboard
<p>Lateral Collapse Resistance</p>	<p style="text-align: center;"> Low Medium Good Excellent </p> <p style="text-align: right;">LCR Indicator = 2.81</p>				

The results from PDS are based on the NWPCA's continuing program of laboratory and field research. While the engineering outcomes reflected in the results are based on sound science, 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, and specifically disclaims any responsibility for such. Notwithstanding the history of the PDS system, users of the PDS system are strongly encouraged to undertake individual, unique analysis of the results as they then pertain to specific applications and the production process. 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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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	59 lbs.	43 lbs.	41 lbs.	39 lbs.	38 lbs.



Component	Original Dimension	Shrinkage from Manufacture to 19% MC	Shrinkage from Manufacture to 15% MC
Top Deckboards	0.630 in. Thickness	0.015 in. (+/- 0.005 in.)	0.022 in. (+/- 0.007 in.)
	3.500 in. Width	0.084 in. (+/- 0.027 in.)	0.122 in. (+/- 0.039 in.)
	5.500 in. Width	0.132 in. (+/- 0.043 in.)	0.191 in. (+/- 0.062 in.)
Stringers	3.500 in. Height	0.084 in. (+/- 0.027 in.)	0.122 in. (+/- 0.039 in.)
	1.380 in. Width	0.033 in. (+/- 0.011 in.)	0.048 in. (+/- 0.016 in.)
Bottom Deckboards	0.630 in. Thickness	0.015 in. (+/- 0.005 in.)	0.022 in. (+/- 0.007 in.)
	3.500 in. Width	0.084 in. (+/- 0.027 in.)	0.122 in. (+/- 0.039 in.)
	5.500 in. Width	0.132 in. (+/- 0.043 in.)	0.191 in. (+/- 0.062 in.)

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PALLET DESIGN SYSTEM Version 6.2

2-D Pallet Drawings

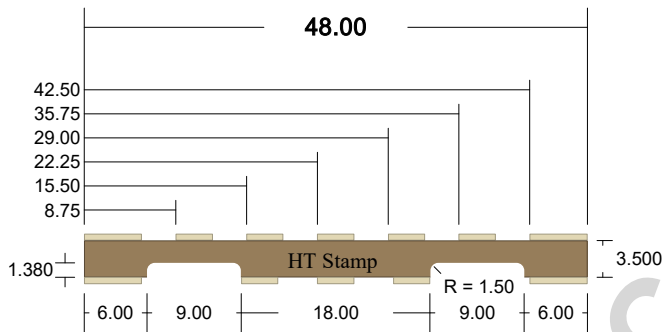
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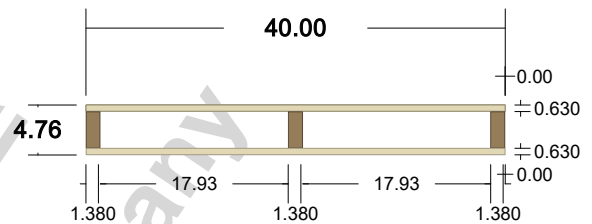
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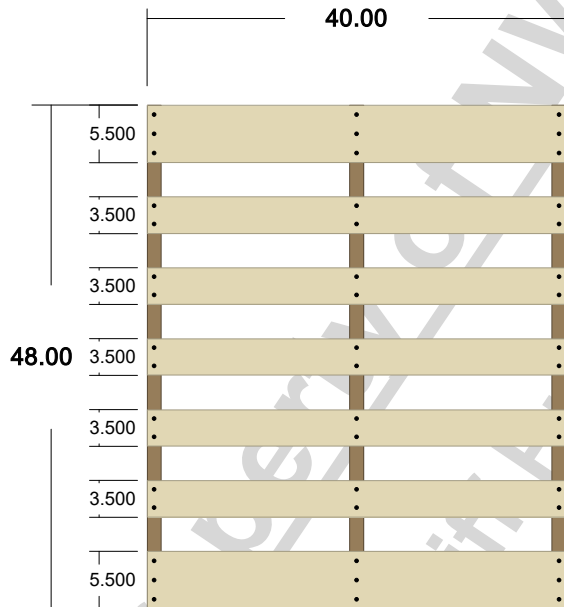
Side View



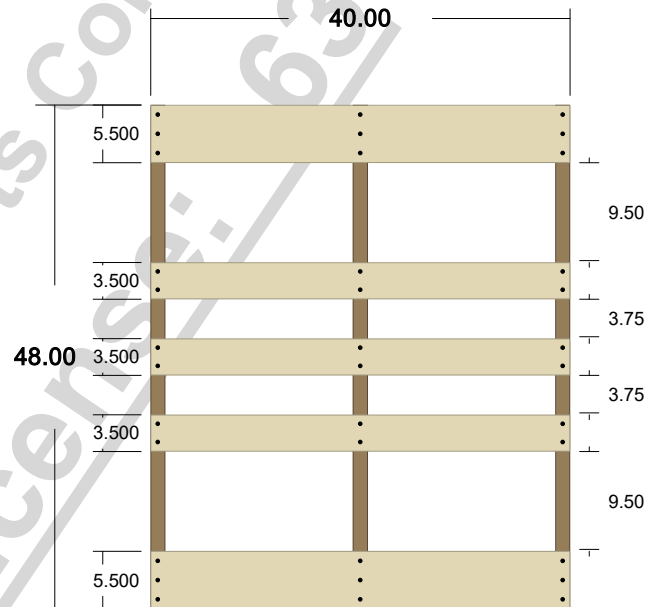
End View



Top View



Bottom View



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Pallet Drawing - Side and End View

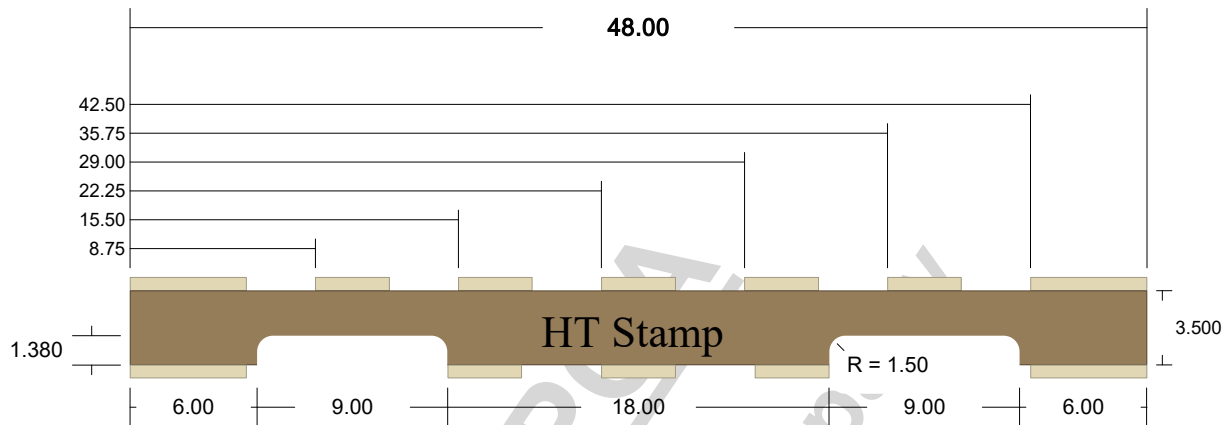
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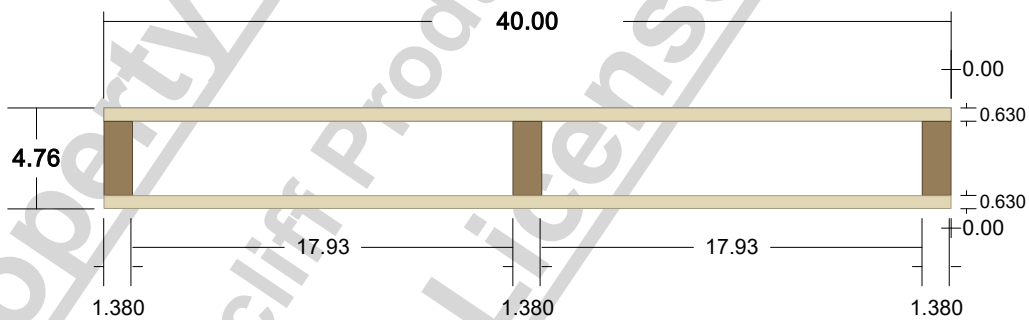
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Side View



End View



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Pallet Drawing - Top View

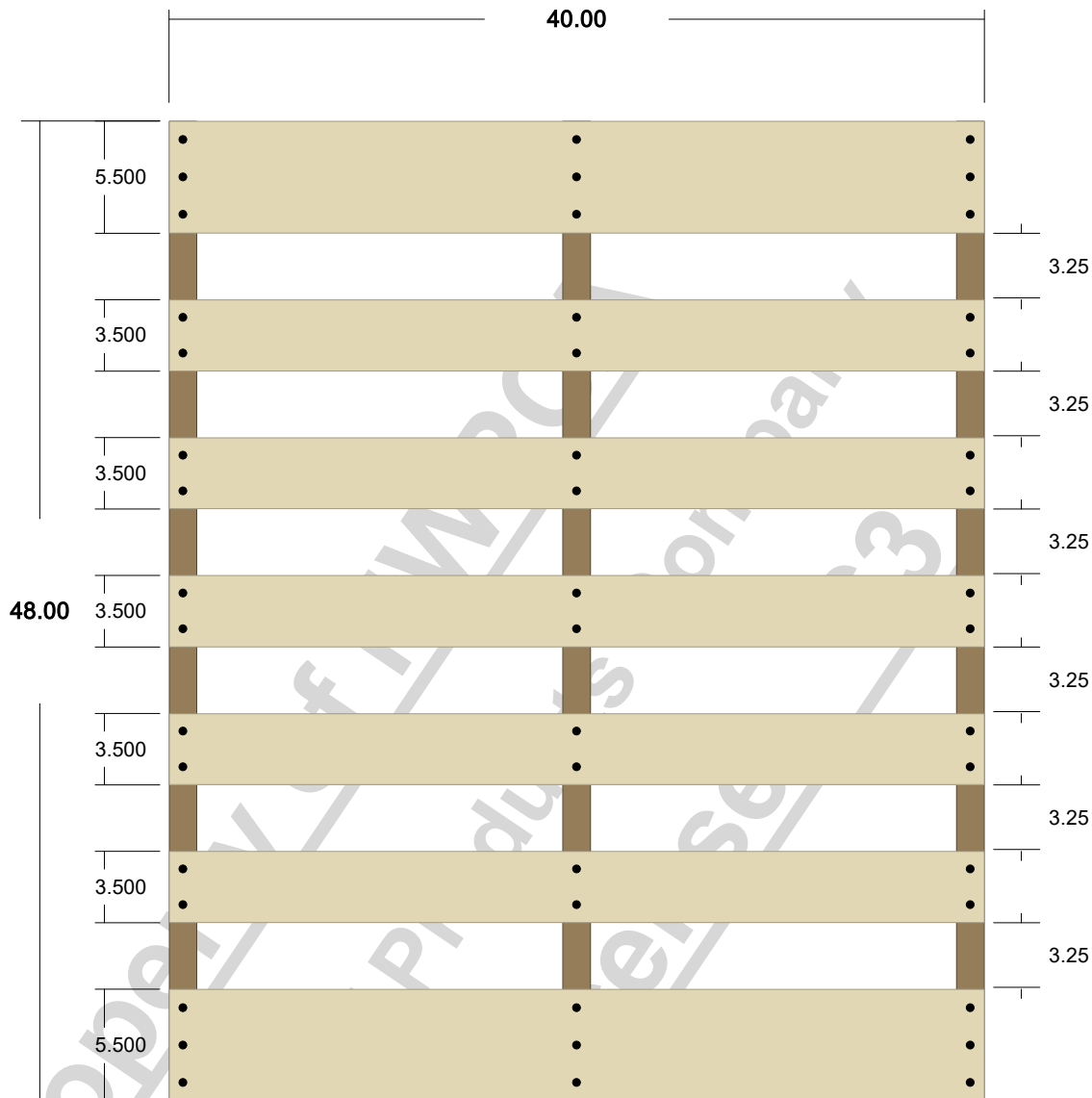
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Top View



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Pallet Drawing - Bottom View

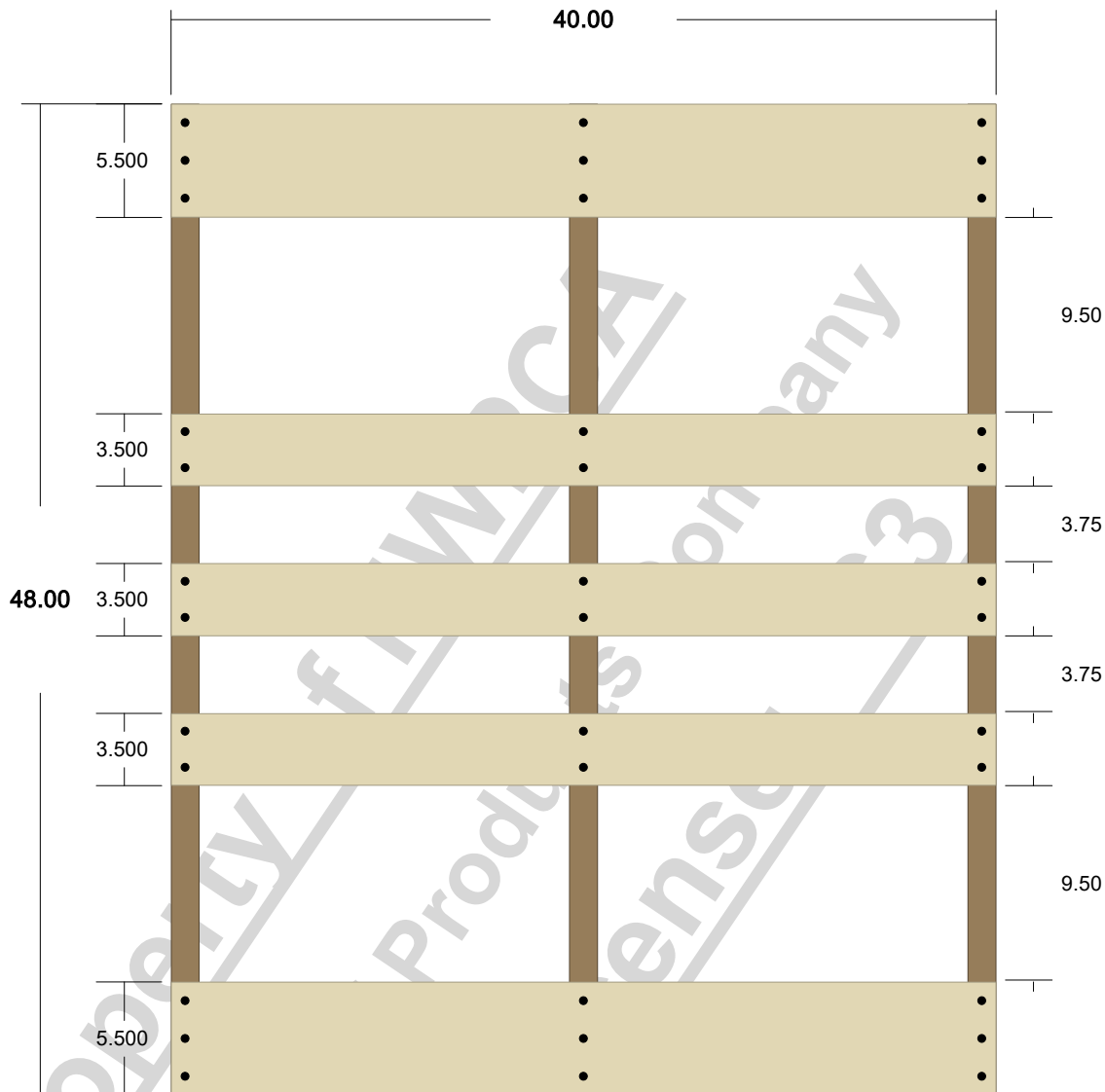
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Bottom View



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3-D Pallet Drawings

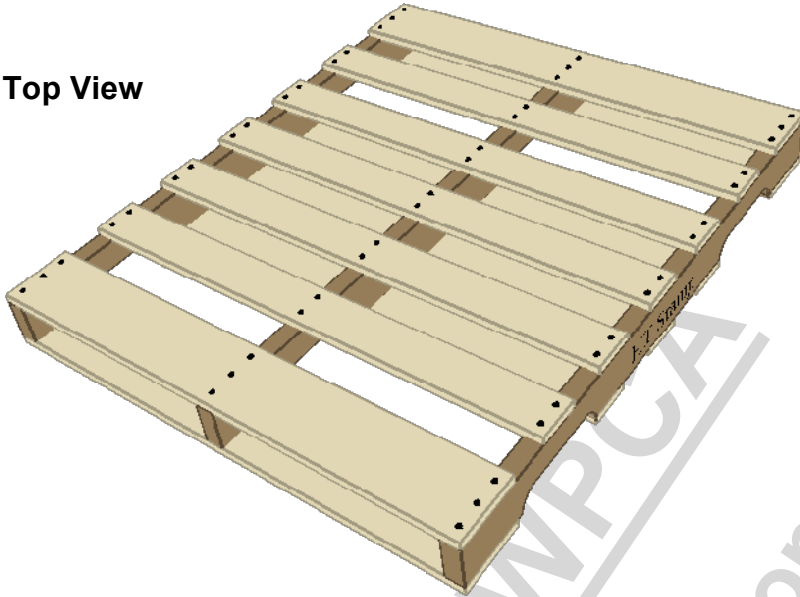
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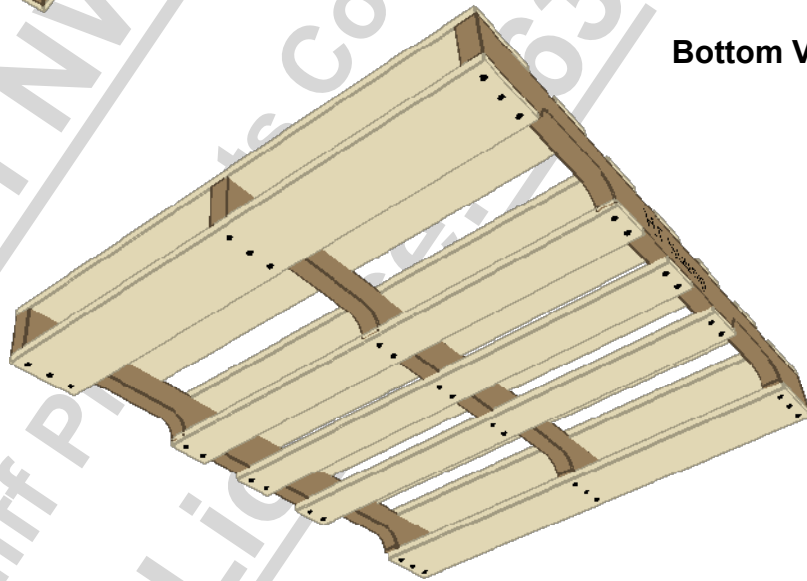
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Top View



Bottom View



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