

PALLET DESIGN SYSTEM Version 6.7

Pallet Specification Sheet

All dimensions in millimeters

Customer:

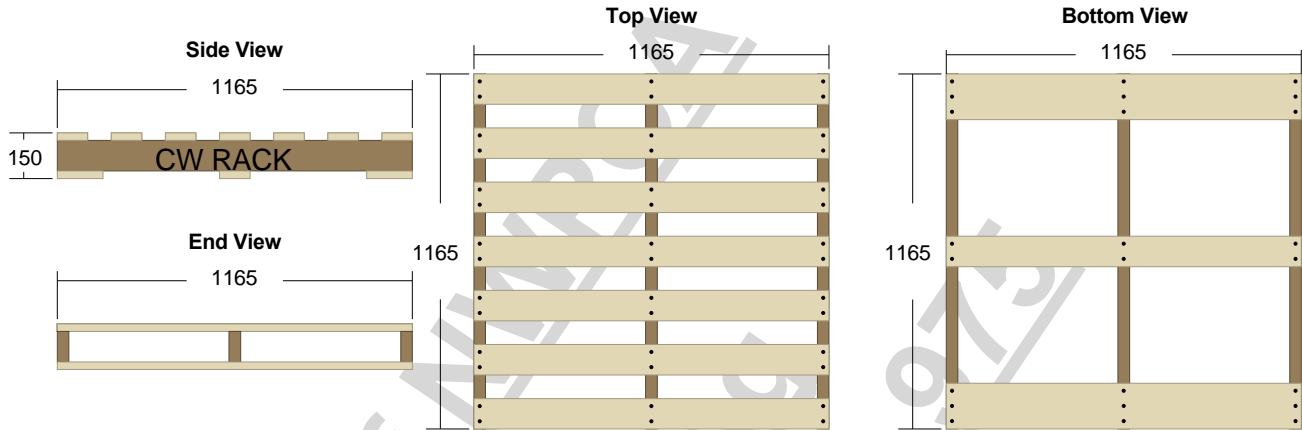
VARIOUS

Prepared by:

CIVIC PALLETS
68-72 Fitzgerald Road Laverton North VIC
8 Forge Close Sumner QLD
PDS License: 975 Printed: April 10, 2024

Pallet ID: HDRACK

Classification: 1165 x 1165, Stringer-Class, Double-Face Non-Reversible, 2-Way, Reusable, New Manufacture



Components

Top Deck:

Style: Deckboard Type: New Lumber

Number	Thickness	Width	Length
7	25	100	1165

Volume: 0.0204 cubic meters

Bottom Deck:

Style: Deckboard Type: New Lumber

Number	Thickness	Width	Length
1	25	100	1165
2	25	150	1165

Volume: 0.0116 cubic meters

Stringers:

Type: New Lumber

Number	Width	Height	Length
3	38	100	1165

Volume: 0.0133 cubic meters

Materials

Fasteners:

Fastener ID:	
Fastener Type:	Helically Threaded Nail
Fastener Length:	57
Thread Length:	40
Thread Diameter:	2.9
Wire Diameter:	2.6
Head Diameter:	6.0
Flutes:	8
Helixes:	8.5
Pitch:	4.7
Thread Angle:	76
Yield Strength:	1000 MPa
FWC:	2.40
Total Number:	66

New Lumber:

Lumber ID:	
Species Class	Grade
Radiata Pine (Australia)	Standard
Moisture Content (at manufacture and assembly): Green	
Total New Lumber Volume: 0.0453 cubic meters	

Spec Sheet Notes:

PALLET DESIGN SYSTEM Version 6.7

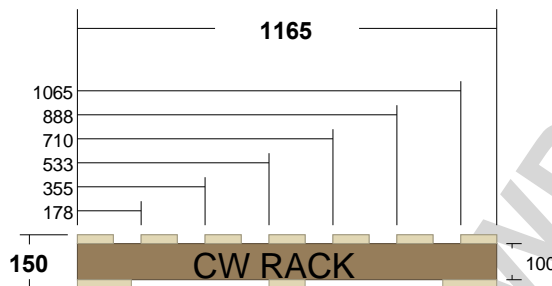
2-D Pallet Drawings

All dimensions in millimeters

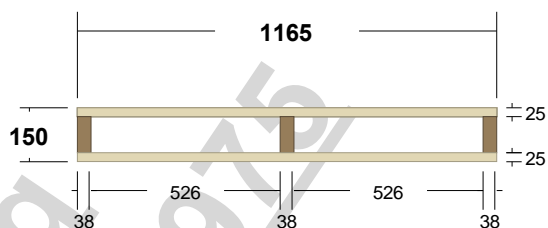
Pallet ID: HDRACK

Classification: 1165 x 1165, Stringer-Class, Double-Face Non-Reversible, 2-Way, Reusable, New Manufacture

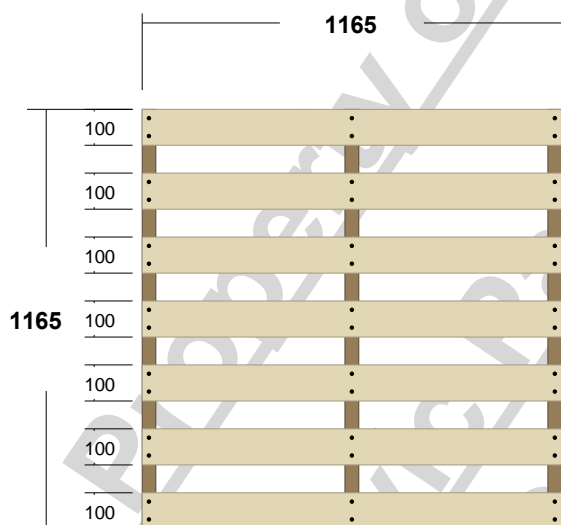
Side View



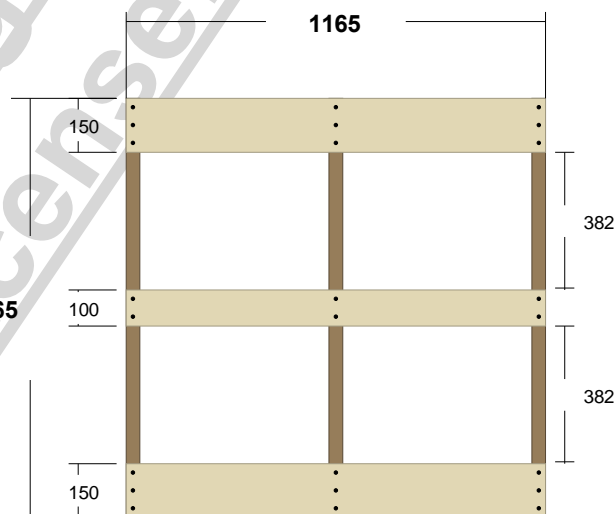
End View



Top View



Bottom View



All output generated from the PDS software (including without limitation the designs, drawings, plans, specification sheets, data, analyses, information, materials or other output produced by or with the assistance of the Software (PDS Output) are protected by copyright and other intellectual property laws and cannot be reproduced without the prior written consent of NWPCA. Lessee may provide a copy of the Output, which must bear the Lessee's watermark, to its manufacturer for the sole purpose of manufacturing the pallet for Lessee to sell or to its direct pallet customer for the sole purpose of selling pallets to that customer.

Customer:
VARIOUS

Prepared by:
CIVIC PALLETS
68-72 Fitzgerald Road Laverton North VIC
8 Forge Close Sumner QLD
PDS License: 975 Printed: April 10, 2024

PALLET DESIGN SYSTEM Version 6.7

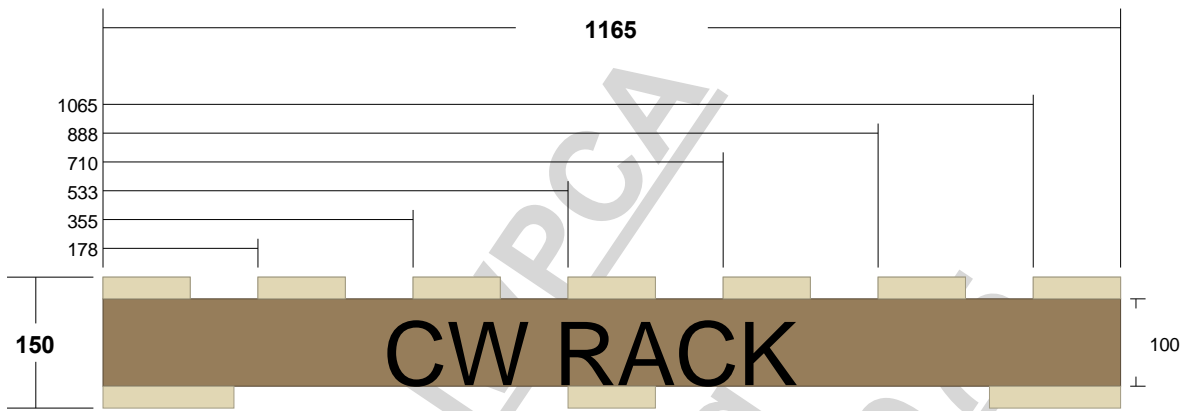
Pallet Drawing - Side and End View

All dimensions in millimeters

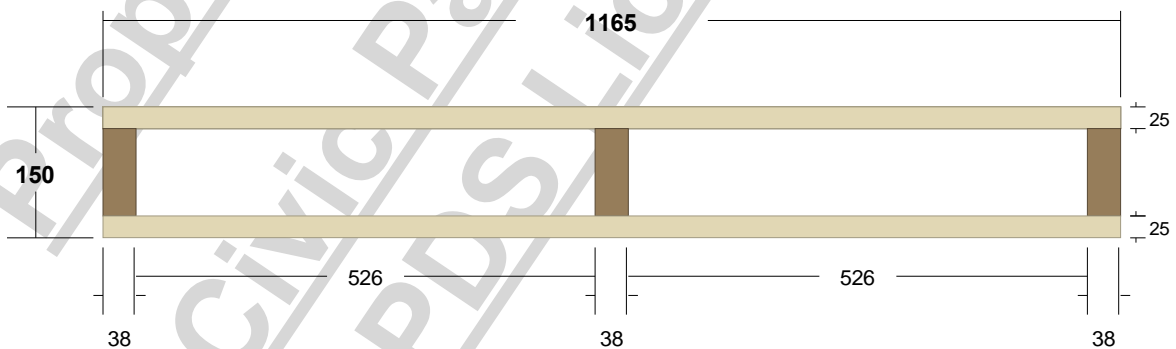
Pallet ID: HDRACK

Classification: 1165 x 1165, Stringer-Class, Double-Face Non-Reversible, 2-Way, Reusable, New Manufacture

Side View



End View



All output generated from the PDS software (including without limitation the designs, drawings, plans, specification sheets, data, analyses, information, materials or other output produced by or with the assistance of the Software (PDS Output) are protected by copyright and other intellectual property laws and cannot be reproduced without the prior written consent of NWPCA. Lessee may provide a copy of the Output, which must bear the Lessee's watermark, to its manufacturer for the sole purpose of manufacturing the pallet for Lessee to sell or to its direct pallet customer for the sole purpose of selling pallets to that customer.

Customer:

VARIOUS

Prepared by:

CIVIC PALLETS
68-72 Fitzgerald Road Laverton North VIC
8 Forge Close Sumner QLD
PDS License: 975 Printed: April 10, 2024

PALLET DESIGN SYSTEM Version 6.7

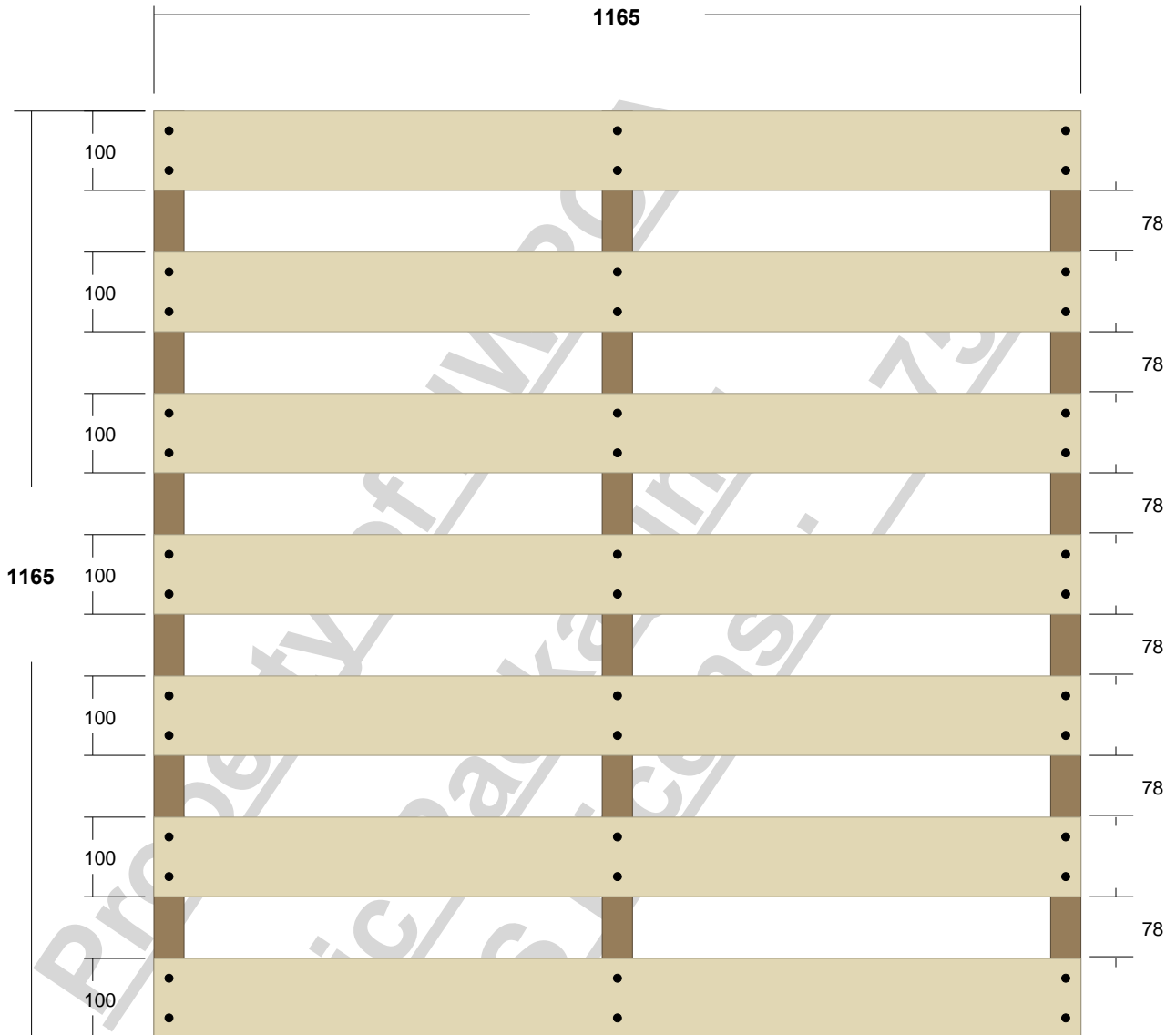
Pallet Drawing - Top View

All dimensions in millimeters

Pallet ID: HDRACK

Classification: 1165 x 1165, Stringer-Class, Double-Face Non-Reversible, 2-Way, Reusable, New Manufacture

Top View



Customer:

VARIOUS

Prepared by:

CIVIC PALLETS
68-72 Fitzgerald Road Laverton North VIC
8 Forge Close Sumner QLD
PDS License: 975 Printed: April 10, 2024

PALLET DESIGN SYSTEM Version 6.7

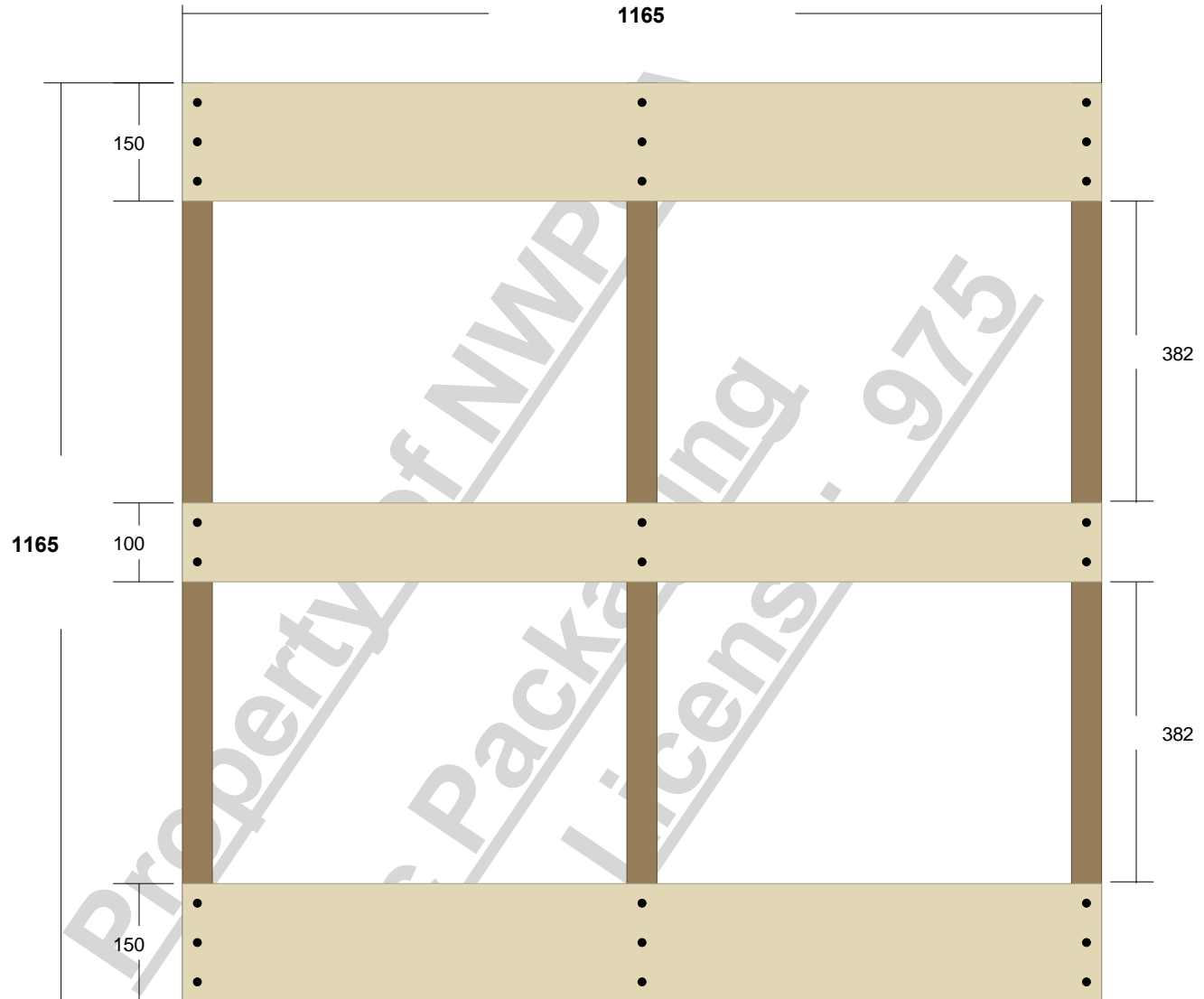
Pallet Drawing - Bottom View

All dimensions in millimeters

Pallet ID: HDRACK

Classification: 1165 x 1165, Stringer-Class, Double-Face Non-Reversible, 2-Way, Reusable, New Manufacture

Bottom View



Customer:

VARIOUS

Prepared by:

CIVIC PALLETS
68-72 Fitzgerald Road Laverton North VIC
8 Forge Close Sumner QLD
PDS License: 975 Printed: April 10, 2024

PALLET DESIGN SYSTEM Version 6.7

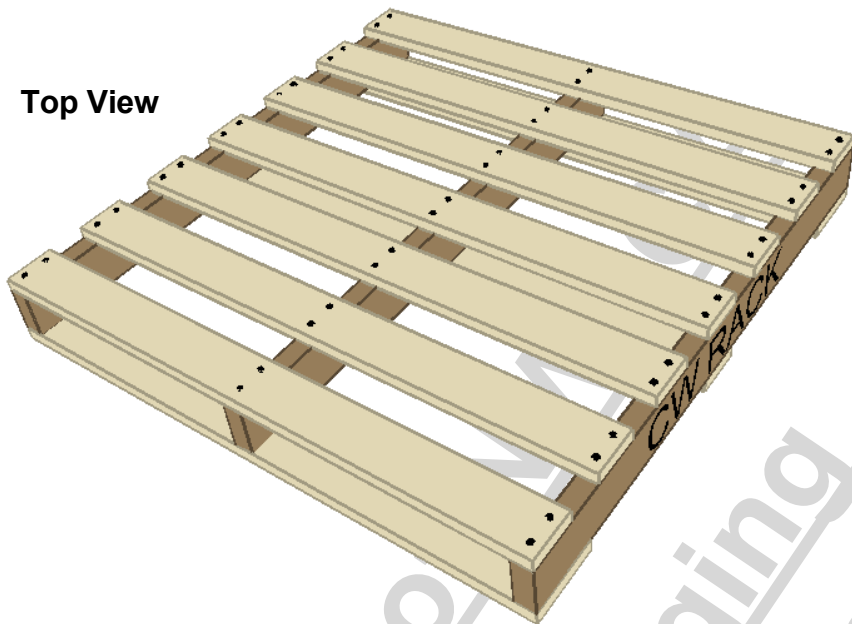
3-D Pallet Drawings

All dimensions in millimeters

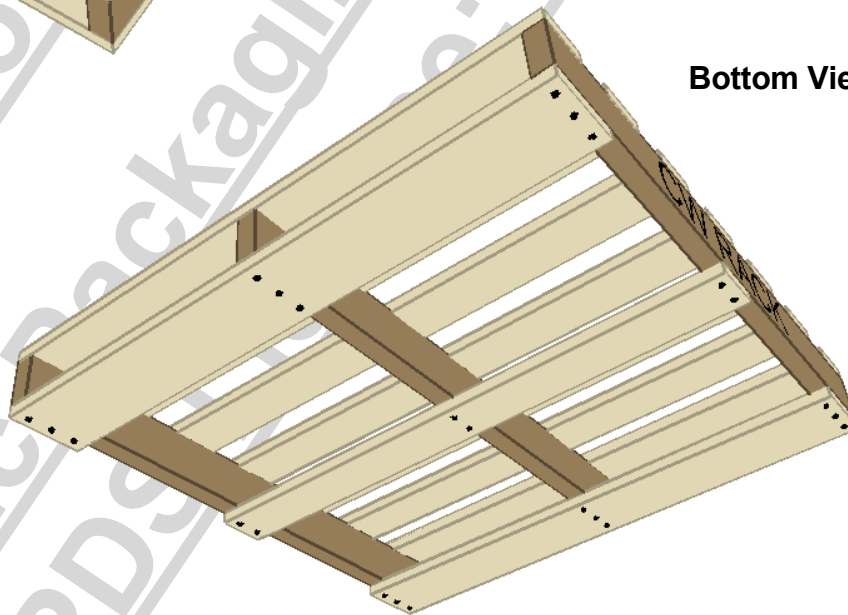
Pallet ID: HDRACK

Classification: 1165 x 1165, Stringer-Class, Double-Face Non-Reversible, 2-Way, Reusable, New Manufacture

Top View



Bottom View



All output generated from the PDS software (including without limitation the designs, drawings, plans, specification sheets, data, analyses, information, materials or other output produced by or with the assistance of the Software (PDS Output) are protected by copyright and other intellectual property laws and cannot be reproduced without the prior written consent of NWPCA. Lessee may provide a copy of the Output, which must bear the Lessee's watermark, to its manufacturer for the sole purpose of manufacturing the pallet for Lessee to sell or to its direct pallet customer for the sole purpose of selling pallets to that customer.

Customer:
VARIOUS

Prepared by:
CIVIC PALLETS
68-72 Fitzgerald Road Laverton North VIC
8 Forge Close Sumner QLD
PDS License: 975 Printed: April 10, 2024

PALLET DESIGN SYSTEM Version 6.7

Carbon Impact Declaration



Qualifications

The impacts presented in this report are developed directly from life-cycle assessment data(1) and the associated Environment Product Declaration on Wooden Pallets that were verified by UL in accordance with ISO 14025, 14040, and 14044.

Applicability

The results represent an industry average 48x40 footprint and are tabulated on a per pallet basis and assuming one repair. Actual impacts may vary based on wood species, pallet design, actual number of repairs, and manufacturer business practices.

Carbon Footprint

Basis	1 Pallet	550 Pallets
	(kg of CO2)	(kg of CO2)
Carbon Impact(2)	4.88	2,684
Carbon Impact(3) with Potential Offsets	-0.51	-280
Stored Carbon(4)	-37.26	-20,493
Impacts Breakdown:	(kg of CO2)	(kg of CO2)
Carbon Impact for a New Pallet(5):	4.51	2,481
Carbon Impact from Pallet Repair(6):	0.37	204
Benefits Breakdown:	(kg of CO2)	(kg of CO2)
Coproduct Thermal Recovery (Boiler):	-1.28	-704
End-of-Life Thermal Recovery (Boiler):	-3.33	-1,832
Boards Reused for Remanufactured Pallets:	-0.76	-418
Steel Fastener Recycled:	-0.02	-11
Equivalencies(7):	(gallons of gas)	(cars per year)
Carbon Impact:	0.60	0.60
Carbon Impact with Potential Offsets:	-0.03	-0.03
Stored Carbon	-4.20	-4.40

References

- (1) Alanya-Rosenbaum, Sevda; Bergman, Richard D. 2020. Cradle-to-grave life-cycle assessment of wooden pallet production in the United States. Res. Pap. FPL-RP-707. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory. 82 p. <https://www.fs.usda.gov/treeearch/pubs/61866>
- (2) Sum of carbon impact of a new pallet, including repair and transportation distance as specified (single repair)
- (3) Sum of carbon impact and offsets determined from GWP in Table 11 in Module D of the Wooden Pallet EPD
- (4) Determined from Biogenic Removal from Product (BCRP) in Table 9 of the Wooden Pallet EPD.
- (5) Determined by summing GW impacts from Product Stage (A) in Table 6 of the Wooden Pallet EPD.
- (6) Determined from GW impacts from Use Stage (B) in Table 6 of the Wooden Pallet EPD.
- (7) One gallon of gasoline is equal to 8.887 kg of CO2, estimated fuel economy of 22 miles per gallon, and 11,500 miles driven per year. Environmental Protection Agency (EPA) document EPA-420-F-18-008.

All determinations are made by converting the functional unit of 100,000 lbs. of pallet load to a per pallet basis. The reported values in the EPD are divided by industry average number of pallets required to transport 100,000 lbs. of product, as reported in Table 4.