



# MetroUltraGreen

## PANEL PRODUCTS

### FSC, NAUF, CARB Phase II Certified - Particleboard (PBC)

(Panels may contribute to LEED® credits)

Metro Hardwoods stocks Metro UltraGreen particleboard panels. These panels are Forest Stewardship Council (FSC), no added urea formaldehyde (NAUF), and CARB Phase II Certified. Panels are manufactured from post-industrial or pre-consumer recycled wood fiber — particleboard panels typically contain 90% wood fiber, and 10% resin, on a dry weight basis. This is important to note for LEED projects as the resin is not recycled material and therefore is deducted when calculating LEED NC MR 4 Recycled Content.

NAUF is the current requirement of formaldehyde content in particleboard (composite wood panels) to contribute to LEED NC Credit EQ 4.4 Low-Emitting Materials. The Metro UltraGreen panels, beyond NAUF are CARB Phase II Certified. This ensures the panels meet the most stringent formaldehyde emission standards in the world.

Forest Stewardship Council (FSC) certification ensures the wood residues come from sustainably harvested forests; FSC standards also promote socially acceptable, environmentally conscious and economically viable forest management. Certification provides a credible link from certified forests to our customers. FSC products may also contribute to Certified Wood Credits in LEED.

Metro Hardwoods stocks the largest breadth and depth of FSC, NAUF, CARB Phase II Certified particleboard in the Midwest.

### Properties

Averages <sup>1</sup>	3/8" to 1/2"	> 1/2" to < 1"	≥ 1
MOR-Modulus of Rupture (psi)	1885	1885	1885
MOE-Modulus of Elasticity (kpsi)	290.1	290.1	290.1
IB-Internal Bond (psi)	90	80	75
Face Screwholding Capacity (lbs)	202	202	202
Edge Screwholding Capacity (lbs)	NA	1802	180

1 - One-panel minimum average (ASTM D1037 / ANSI A208.1-2009) 2. 5/8" and thicker

### Tolerance

Density	46 - 50
Length & Width Tolerance	± 1/16"
Squareness Tolerance	≤ 1/8"
Straightness Tolerance	± 1/64" / 2ft.
Thickness Tolerance (Within Panel Average)	± 0.004"
Thickness Tolerance (Panel to Panel Average)	± 0.004"

## Environmental Credits

LEED	Credits	Description
<b>Recycled Content</b>	MR credit 4*	Awards 1 or 2 points for using products with recycled content that constitute at least 10% or 20%, based on cost, of the total value of materials in the project. (Note: the recycled content value of a material assembly is determined by weight.)
<b>Locally Produced Materials</b>	MR credit 5*	Awards 1 or 2 points for using materials on a project that are extracted and manufactured within 500 miles that constitute at least 10% or 20%, based on cost, of the total value of project materials.
<b>Environmental Quality</b>	EQ credit 4.4*	Composite wood panels on the project shall contain no urea-formaldehyde.
<b>Certified Wood</b>	MR Credit 7*	Awards 1 point for 50% (based on cost) of wood based materials in the project to be certified in accordance with Forest Stewardship Council's principals and criteria. An innovation point can be attained for 95% FSC. (Note: product assemblies - measurement by weight as a percentage of product cost.)

\*LEED Credits noted as per LEED BD+C for New Construction

Green Globes	Credits	Description
<b>Low-VOC Emitting Materials</b>	G2.9	Specifies architects to select low-VOC emitting materials

NAHB	Section	Description
<b>Pre-Consumer Recycled Content</b>	604.1	Use recycled content building materials for a minimum of two minor and/or two major components of the building.
<b>FSC® Certification</b>	606.2(c)	Wood or wood-based products available that are certified by Forest Stewardship Council™
<b>Low Formaldehyde/VOC emissions</b>	901.4(2)(4)(5)	Compliance with ANSI 208.1, CPA 2, NAUF and CARB phase II
<b>Non-emitting products</b>	901.4(6)	Metro UltraGreen NAF Available upon request

CARB	ATCM	Description
<b>California Air Resource Board</b>	93120	Meets CARB Phase II -- Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products.

## Recycled Content Certification

Metro UltraGreen is certified by the Composite Panel Association (CPA) to comply to their Environmentally Preferable Product (EPP) specification CPA 3-08. This certification verifies that all Metro UltraGreen particleboard contains 100% recycled and/or recovered fiber.

## Formaldehyde Emissions

Metro UltraGreen particleboard is NAUF and also meets CARB Phase II. CARB ATCM 93120 Phase II requires product testing as per ASTM E1333-96 (2002), with levels of .09 ppm, or lower, for particleboard.

## FSC Certification

Midwest Hardwood, our parent company was certified in 1985 with the SW-COC-000008.

Our company is proud to be one of the first companies in North America to achieve FSC® certification.