



MetroUltraGreen

PANEL PRODUCTS

FSC, NAUF, CARB Phase II Certified - Medium Density Fiberboard (MDF)
 (Panels may contribute to LEED® credits)

Metro Hardwoods stocks Metro UltraGreen medium density fiberboard 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 – medium density fiberboard panels typically contain 85% wood fiber, and 15% 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 medium density fiber board (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 LEED Certified Wood Credits.

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

Properties

Physical Properties ¹	< 3/8"	3/8" to < 1/2"	1/2" - 3/4"	> 3/4"
MOR-Modulus of Rupture (psi)	4,050	3,130	3,130	3,130
MOE-Modulus of Elasticity (kpsi)	405	313	313	313
IB-Internal Bond (psi)	110	100	90	85
Face Screwholding Capacity (lbs)	235	235	235	235
Edge Screwholding Capacity (lbs) ²	NA	NA	215	205

1 - One-panel minimum average per ANSI 208.2

2 - Edge screw pull for less than 5/8" not applicable

Tolerance

Density	47 to 50
Length & Width Tolerance	± 1/16" per panel
Squareness Tolerance	± 1/64" per foot of length
Straightness Tolerance	± 1/64" per 2ft of length
Thickness Tolerance (Within Panel Average)	± 0.005"
Thickness Tolerance (Panel to Panel Average)	± 0.005"

Environmental Credits

LEED	Credits	Description
Recycled Content	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.)
Regional	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 materials value. (Note: If only a fraction of a product or materials meets criteria, proportions are determined by weight as a percentage of product cost.)
Certified Wood	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.)
Environmental Quality	EQ credit 4.4	Composite wood panel resins and laminating adhesives on the project shall contain no added urea-formaldehyde.

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

NAHB	Section	Description
Pre-Consumer Recycled Content	604.1	Use recycled content building materials for a minimum of two minor and/or two major components of the building.
FSC® Certification	606.2(c)	Wood or wood-based products available that are certified by Forest Stewardship Council™
Low Formaldehyde/VOC emissions	901.4(2)(4)(5)	Compliance with ANSI 208.2, CPA 2, NAUF and CARB phase II
Non-emitting products	901.4(6)	Compliance NAF

CARB	ATCM	Description
California Air Resource Board	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 products distributed by Metro Hardwoods comply with CARB-NAF requirements as stated by the California Code of Regulations 93120-93120.12, title 17 of the California Code of Regulations 93120.3(f) (2) page 13. These NAF products are made using no-added formaldehyde resins. Product produced at Mt. Jewett plant has also received the CARB NAF exemption for formaldehyde emission limits as stated in executive order N-09-021, CARB ATCM 93120.

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.