

DeW PRODUCT

NAF / ULEF - Particleboard NAF / ULEF - Thermofused Laminate (TFL)

Setting the standard





As green as nature

At Uniboard[®], we meet the growing demand for environmentally friendly products and introduce the first ever particleboard using a naturally renewable resin system straight from nature. NU Green SOYA[™], the greenest solution because indoor air quality is our priority.

- NAF (No Added Formaldehyde)
- Exceeds CARB Phase 2 standards
- FSC[®] and ECC certified
- Made from 100% recycled and recovered wood fiber (pre-consumer)
- Helps you achieve LEED[®] points

What to know about the soy based adhesive technology

Uniboard NU Green SOYA uses a patented water-based soy resin formulated with soy flour and a proprietary cross-linking resin providing a durable and water-resistant thermoset adhesive. Made from a renewable feedstock, the soy based adhesive technology is cost-competitive against various other adhesives providing increased environmental benefits. NU Green SOYA is at the leading edge of formaldehyde regulation and indoor air quality.

NAF (No Added Formaldehyde)

Uniboard's NU Green SOYA products have earned Uniboard an exemption from the requirements of section 93120.3 of the Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products, classifying it as a NAF panel.

Certification		Purpose
CARB 2	CARB	Uniboard's production facilities have been certified by the Composite Panel Association (CPA) as compliant with regulation ATCM 93120 of the California Air Resources Board (CARB) Phase 2 emissions standards, for the production of raw particleboard and thermofused laminate (TFL).
ECC	EOO CERTIFICO	The ECC certification (Eco-Certified Composite [™]) is a voluntary standard developed by the Composite Panel Association (CPA). As this certification is awarded to a specific manufacturing facility, each facility must meet the stringent requirements for emissions of CARB phase 2 and comply with at least three out of five criteria established by the CPA. Uniboard's Sayabec mill currently meets all five criteria.
FSC	FSC www.sc.org	The Forest Stewardship Council [®] (FSC [®]) is a non-governmental, non-profit organization. It was created in 1993 by a representative group of organizations from 25 countries. Its mission is to promote the responsible management of forests with their objective being the chain of custody that follows the product from the forest to the consumer.
LEED	ALE	The Leadership in Energy and Environmental Design [®] (LEED) certification program is a U.S. and Canadian rating system originally developed by the US Green Building Council (USGBC). The Canadian version, instituted by the Canada Green Building Council (CaGBC), was adapted for the country's climate, building standards and regulation, in accordance with the principles of the U.S. LEED program.

These certifications set us apart from our competitors and signal to our customers that they can continue to count on Uniboard to meet their needs.

CONTRIBUTES UP TO 4 LEED® POINTS

NU Green SOYA™ NAF / ULEF particleboard can contribute to achieving Leadership in Energy & Environmental Design (LEED®) points

LEED V4

Category & Credit Name	Intent	Point	Uniboard NU Green SOYA
MATERIALS AND RESOURCES Building Product Disclosure and Optimization - Environmental Product Declarations	To reward project teams for selecting products from manufacturers who have verified improved environmental life-cycle impacts.	Option 1. EPD 1 point	Product-specific Type III Environmental Product Declaration (EPD) *Available in January 2015
MATERIALS AND RESOURCES Building Product Disclosure and Optimization - Sourcing of Raw Materials	To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner.	Option 2. Leadership Extraction Practices 1 point	 Applicable Leadership Extraction Practices: 1. Uniboard FSC certification C002807 Mix Wood 2. 100% pre-consumer recycled content wood fiber for a total of 85% of the product assembly by weight. 3. Regional material to be confirmed for each LEED project
MATERIALS AND RESOURCES Building Product Disclosure and Optimization - Material Ingredients	To reward project teams for selecting products for which chemical ingredients in the product are inventoried using an accepted methodology and for selecting products verified to minimize the use and generation of harmful substances. To reward raw material manufacturers who produce products verified to have improved life-cycle impacts.	Option 1. Material ingredient reporting 1 point	Material Ingredient Reporting Health Product Declarations *Available in January 2015
INDOOR ENVIRONMENTAL QUALITY Low-Emitting Materials - Volatile Organic Compound (VOC), formaldehyde emissions from composite wood products	To reduce concentration of chemical contaminants that can damage air quality, human health, productivity, and the environment.	Option 1. Product category calculations 1 point	Product Category Calculations Composite Wood Evaluation: ULEF criteria met

CONTRIBUTES UP TO 6 LEED® POINTS

NU Green SOYATM NAF / ULEF particleboard can help you achieve

up to 6 Leadership in Energy & Environmental Design (LEED®) points

LEED NC-2009 (USGBC)

LEED Category - Credit	Intent	Requirements	Credits & points	NU Green SOYA NAF particleboard
MATERIALS AND RESOURCES MR credit 4 - Recycled Content	Increase the use of products that incorporate recycled content material.	Sum of recycled content constitutes at least 10% (1 point) or 20% (2 points) of the materials in the project.	2 points	NU Green SOYA NAF / ULEF particleboard is ECC™ certified and contains 100% pre-consumer recycled content and recovered wood fiber (pre- consumer). The wood fiber content makes up a total of 85% of the product assembly by weight.
MATERIALS AND RESOURCES MR credit 5 - Regional Material	Increase the use of materials that are extracted and manufactured within the project region.	Use a minimum of 10% (1 point) or 20% (2 points) of the combined value of construction materials and products that have been extracted, harvested or recovered as well as manufactured, within a 500-mile (800 km) radius of the project. (See our website for Canada's requirement)	2 points	NU Green SOYA NAF / ULEF particleboard is manufactured at our Sayabec mill in Quebec, Canada and may contribute to points if your LEED project site is located within the radius. The distance between the location of extraction, harvest or recovery and the project site is to be validated for each LEED project.
MATERIALS AND RESOURCES MR credit 7 - Certified Wood	Encourage environmentally responsible forest management.	Use a minimum of 50% of wood-based and products that are Forest Stewardship Council® (FSC®) certified for building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in all Materials and Resources credits 3-7.	1 point	NU Green SOYA NAF / ULEF particleboard is FSC [®] certified. FSC CO02807 Mix Wood. The wood fiber content makes up a total of 85% of the product assembly by weight.
INDOOR ENVIRONMENTAL QUALITY IEQ credit 4.4 - Low-Emitting Materials: Composite Wood and Agrifibre Products	Improve indoor air quality.	Composite wood products must contain no added urea formaldehyde resins.	1 point	NU Green SOYA NAF / ULEF particleboard has no added urea formaldehyde resins during the manufacturing process.

Setting the standard... in sustainability

Why is NU Green SOYA[™] NAF / ULEF particleboard beneficial to the environment?

NU Green SOYA NAF / ULEF particleboard is FSC[®] certified (Forest Stewardship Council[®]) and Eco-Certified Composite[™] (ECC) by the Composite Panel Association (CPA). It contains 100% recycled and recovered wood fiber (pre-consumer), which saves trees.

NU Green SOYA NAF / ULEF particleboard uses a process whereby no formaldehyde is added with the soya resin. The result is a product that is environmentally friendly and exceeds the CARB Phase 2 standards.

NU Green SOYA is NAF / ULEF (Ultra Low Emission Formaldehyde) certified by the CPA. This designation, determined by the California Air Resources Board (CARB), is intended only for products with formaldehyde emissions that are below 0.04 ppm. NU Green SOYA is consistently **below 0.00 ppm**.

NU Green SOYA NAF / ULEF particleboard can help you achieve up to six LEED® points, based on the NC-2009 (USGBC), and up to four LEED points with the new LEED V.4 version (available in 2015 in Canada).

NU Green SOYA NAF / ULEF particleboard is available through our extensive network of distributors, making it readily available in all major markets. NU Green SOYA NAF / ULEF particleboard is available in our full collection of melamine colours and is manufactured with the same standards as our other panels, so you benefit from the same quality and product consistency that has become synonymous with Uniboard[®] and can be ordered in the industry's largest selection of sizes and thicknesses.

Use of the soya based resin binding system in the manufacture of NU Green SOYA NAF / ULEF particleboard may result in differing cutting, drilling, routing and glueing procedures from those used with standard particleboard. Although generally unproblematic, we recommend that you test NU Green SOYA NAF / ULEF particleboard prior to full-scale production.

For further details, please consult the GREEN or the Product section of our website at www.uniboard.com.



Setting the standard

GRADE M-2 Technical Specifications

Properties	ANSI A208.1-2009 (Grade M-2)			
	Metric	Imperial		
MOISTURE CONTENT	Max. 10%			
DENSITY RANGE	620-670 kg/m ³	38.7–41.8 lb/ft ³		
THICKNESS TOLERANCE: BETWEEN PANELS WITHIN PANELS	± 0.200 mm ± 0.100 mm	± 0.008 in ± 0.004 in		
MODULUS OF RUPTURE	13.0 N/mm ²	1,885 psi		
MODULUS OF ELASTICITY	2,000 N/mm ²	290,100 psi		
INTERNAL BOND	0.40 N/mm ²	58 psi		
LINEAR EXPANSION	< 0.40%			
SCREW HOLDING: FACE CORE	900 N 800 N	202 lb 180 lb		
FORMALDEHYDE EMISSIONS	≤ 0.01 ppm			
LENGTH-WIDTH	± 2.0 mm	± 0.080 in		

NU Green SOYA[™] NAF/ULEF Particleboard meets the requirements of ANSI A208.1-2009/Grade M-2 and is FSC[®] certified NU Green SOYA Particleboard is NAF certified and exceeds ULEF (Ultra Low Emission Formaldehyde) and CARB Phase 2 standards

NU Green SOYA NAF/ULEF Particleboard is available in our extensive collection of melamine colours

At Uniboard, we believe environmental stewardship is not just about the future, it is also about the present.

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