



EnStron™ by Plummer Forest Products

Environmentally Strong

FSC Certified

Certified sustainable wood fiber

Formaldehyde Free

Made with pMDI resin certified formaldehyde free

CARB Exempt

Certified exempt by the California Air Resources Board

Moisture Resistant

All products moisture Resistant
MR10/MR50 Available

ECC Eco Certified Composite

Certified pre-consumer industrial waste
100% recycled wood fiber

Fire Resistant-Coming Soon

EnStron Particleboard is a wood, formaldehyde free, composite panel used in all types of woodworking and millwork applications. Our product offers an extensive list of environmentally friendly attributes, and is made from inland western softwoods.

EnStron panels are friendly on tools and equipment, as well as the environment. Our environmental claims are third party certified as is our formaldehyde free claim. When using *EnStron* Particleboard, you can be confident in it's sustainability as well as it's contribution to safe indoor air environments.

▶ 100% Recycled - The fiber used to make *EnStron* is certified by the CPA to be 100% Pre Consumer Recycled.

▶ Fire Resistance - (under development)
A Class A/Class 1 rated fire retardant panel.

▶ LEED Credits - *EnStron* Particleboard can contribute to your project earning credits. **

▶ Formaldehyde Free - Every test since 2008 the year of the conversion to pMDI resin, has yielded 0.00ppm. Our testing is performed by the CPA.*

▶ Moisture Resistance - *EnStron* can be characterized as waterproof. This does not make the panel waterproof as it still contains wood, but the bond of the resin will not degrade because of water.

* CPA-Composite Panel Association

** See chart on last page for details>>>



Product Line

EnStron Underlayment

The use of a moisture resistant resin in the manufacture of *EnStron* underlayment makes it the perfect choice in areas where additional moisture resistance is a plus such as kitchens, bathrooms, and entry ways.

***EnStron* Underlayment Plus**

Perfect for both repair and remodeling as well as new construction. The lightweight homogenous panels provide ease of installation, requiring little if any patching and sanding.

***EnStron* FR Underlayment (*Under Development*)**

A Class A/Class 1- rated fire retardent panel, ideal for interior, non-structural residential and commercial applications.

For years, builders have settled for Lauan plywood as underlayment which is produced in a layering process and more susceptible to delamination and voids. Vinyl floor coverings require a smooth, consistent surface. *EnStron* Underlayment fulfills this need and more. *EnStron* is a composite underlayment panel engineered with a smooth surface and hardness 50% greater than Lauan plywood.

EnStron Underlayment is made with a no added formaldehyde (NAF) process using recycled quality pine and northwest white wood fibers which do not have natural acids like Lauan plywood. These acids often cause bleed-through and staining of vinyl floor coverings. *EnStron* is the most environmentally friendly underlayment choice available.

EnStron Underlayment PLUS by Plummer Forest Products exceeds expectations. In fact, we are so confident in *EnStron's* performance, we backed it with one of the best warranties in the industry; our 15-year performance guarantee means you will not find a better underlayment.

***EnStron* Industrial Particleboard**

EnStron is produced from Inland Northwest softwoods featuring a light color and excellent machinability. Combined with moisture resistant characteristics, EnStron industrial particleboard is the ideal choice for office and residential furniture, kitchen and bathroom cabinets, shelving, and door core.

Conforming to ANSI standards, Grades LD2, M1, M2 and M3i are part of our standard offering. Customized grades are also available upon request.

EnStron products are available as FSC certified products for those individuals and companies, which have policies, that state a preference for FSC-certified products, Green building standards, including the US Green Building Council.

***EnStron* MR10 and MR50**

Produced not only to physical property standards, enhanced moisture characteristics allow *EnStron* to be used in the most demanding applications.

***EnStron* FR Industrial (Coming Soon)**

A Class A/ Class 1 rated fire retardant panel ideal for interior, non structural residential and commercial applications.





Product Line Technical Data

EnStron Technical Data	Industrial M1	Industrial M2/MR10	Industrial M3i	Underlayment	Underlayment Plus	FR	Door Core LD2	MR50 M2	MR50 M3i
Density lbs/ft3	43	44-46	45-47	44-46	44-46	45-47	28	45-47	46-48
Modules of Rupture psi	1450	1885	2176	1595	1885	2176	406	2050	2350
Modules of Elasticity psi	224,800	290,100	362,600	250,200	290,100	362,600	108,655	312,160	389,960
Internal Bond psi	52	58	73	58	58	73	20	62	79
Lineal Expansion Max Avg. percent	0.40	0.40	0.40	0.35	0.35	0.40	0.40	0.40	0.40
Thickness Tolerance Panel Avg from specified inch	±0.008	±0.008	±0.008	±0.008	±0.008	±0.008	±0.008	±0.008	±0.008
Thickness Tolerance Variance from Panel Avg. inch	± 0.004	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004	±0.004
Dimensional Tolerances Length & Width inch	±0.080	±0.080	±0.080	±0.080	±0.080	±0.080	±0.080	±0.080	±0.080
Screw Holding Face/Edge lbs	N/A	202/180	225/202	N/A	N/A	225/202	117	202/180	225/202
Certifications	FSC,ECC,NAF	CPA, FSC ECC, NAF	FSC,ECC,NAF	CPA,FSC,ECC, NAF	CPA,FSC,ECC, NAF	FSC, NAF	FSC, ECC NAF	TECO,FSC ECC,NAF	TECO,FSC, ECC,NAF
Thickness	1/2--1 1/8	.235--1 1/8	1/4--1	1/4,3/8,1/2, 5/8,3/4	5/16, 3/8	11/16, 3/4		5/8--3/4	5/8--3/4
Warranty					15 years				

EnStron Composite Board LEED Credit Information

LEED v4 Category	EnStron Qualification	
Low Emitting Materials	All <i>EnStron</i> composite Board products are manufactured using No Added Formaldehyde (NAF) Resins. Our formaldehyde testing yields a value of 0.00 ppm, and our product is California Carb Exempt N-14-002.	
Sourcing of Raw Materials	Recycled Content	All <i>EnStron</i> Composite Board products are manufactured using 100% pre-consumer recycled wood fiber.
	Regional Materials	All wood fiber used to manufacture <i>EnStron</i> Composite Board products is harvested and collected within 252 miles from our plant site in Post Falls, Idaho.
	FSC Certified Wood Products	All <i>EnStron</i> Composite Board products are available FSC Certified.

