



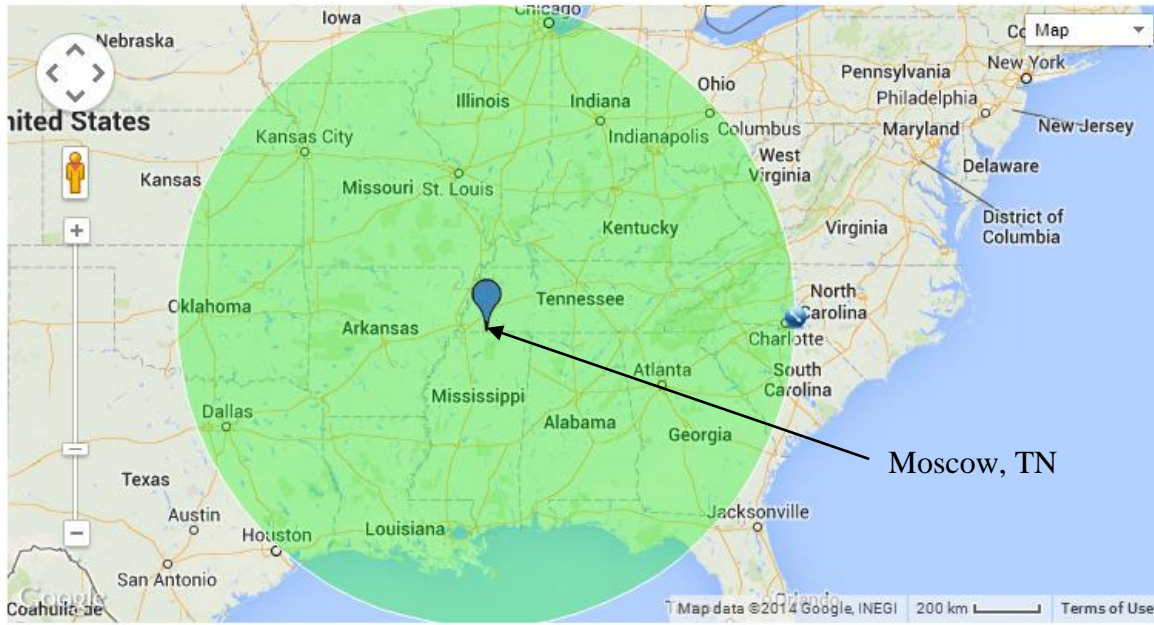
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LEED Information
Product: Fiberboard Reinforced Plastic (FRP) Panels (Standard FRP, Symmetrix, Induro, Artizan, Envue FRP)

SECTION	DESCRIPTION	MATERIALS
MR Credit 4.1	Recycled Content: 10% (post-consumer + ½ pre-consumer) Use Materials with recycled content such that the sum of post-consumer recycle content plus one-half of the pre-consumer content constitutes at least 10% (based on cost) of the total value of the materials in the project.	0% Pre-consumer 0% Post-Industrial
MR Credit 4.2	Recycled Content: 20% (post-consumer + ½ pre-consumer) Use Materials with recycled content such that the sum of post-consumer recycle content plus one-half of the pre-consumer content constitutes an additional 10% beyond MR Credit 4.1 (total of 20%, based on cost) of the total value of the materials in the project.	0% Pre-consumer 0% Post-Industrial
MR Credit 5.1	Regional Materials: 10% Extracted, Processed & Manufactured Regionally. Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site.	See Chart below
MR Credit 5.2	Regional Materials: 20% Extracted, Processed & Manufactured Regionally. Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site.	See Chart below
MR Credit 6	Rapidly Renewable Materials: Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter).	Does not currently meet criteria
MR Credit 7	Certified Wood: Use a minimum of 50% of wood-based materials and products, which are certified in accordance with the Forest Stewardship Council’s (FSC) principles and criteria for wood building components.	Does not currently meet criteria
EQ Credit 4.4	Low-Emitting Materials: Composite Wood & Agrifiber Products. Composite wood and agrifiber products used on the interior of the building (defined as inside of the weather-proofing system) shall contain no added urea-formaldehyde resins.	No added urea-formaldehyde resins

EQ Credit 10	Mold Prevention: Project Teams must achieve the following credits: EQ Credit 3.1: Construction IAQ Management Plan: During Construction, EQ Credit 7.1: Thermal Comfort: Design, EQ Credit 7.2: Thermal Comfort. Verification and provide HVAC systems and controls designed to limit space relative humidity to 60% or less during all load conditions, both occupied and unoccupied.	ASTM D6329-98 Resists fungal and mold contaminants
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500 Mile Radius Chart



CERTIFICATE OF COMPLIANCE



Marlite Standard FRP

25573-420

Certificate Number

06/15/2012 - 06/15/2020

Certificate Period

Certified

Status

UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using a Classroom Environment with an air change of 0.82 hr^{-1} and a loading of 94.60 m^2 ; and Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office Environment with an air change of 0.68 hr^{-1} and a loading of 33.40 m^2 .

Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.



UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC ^(A)	-	0.22	mg/m ³
Formaldehyde	50-00-0	9 (7.3 ppb)	µg/m ³
Total Aldehydes ^(B)	-	0.043	ppm
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Particle Matter less than 10 µm ^(C)	-	20	µg/m ³
1-Methyl-2-pyrrolidinone ^(D)	872-50-4	160	µg/m ³
Individual VOCs ^(E)	-	1/2 CREL or 1/100th TLV	-

- (A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₆ range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.
- (C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day
- (E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.2 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



Environment

CERTIFICATE OF COMPLIANCE



Marlite Standard FRP

25573-410

Certificate Number

06/15/2012 - 06/15/2020

Certificate Period

Certified

Status

UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Wall finishes are determined compliant using an Office Environment with an air change of 0.68 hr^{-1} and a loading of 33.40 m^2 .

Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.



UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

GREENGUARD Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC ^(A)	-	0.50	mg/m ³
Formaldehyde	50-00-0	61.3 (50 ppb)	µg/m ³
Total Aldehydes ^(B)	-	0.10	ppm
Particle Matter less than 10 µm ^(C)	-	50	µg/m ³
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Individual VOCs ^(D)	-	1/10th TLV	-

- (A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₆ range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD (0.50 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.1.
- (B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.
- (C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) Allowable levels for chemicals not listed are derived from 1/10th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).

