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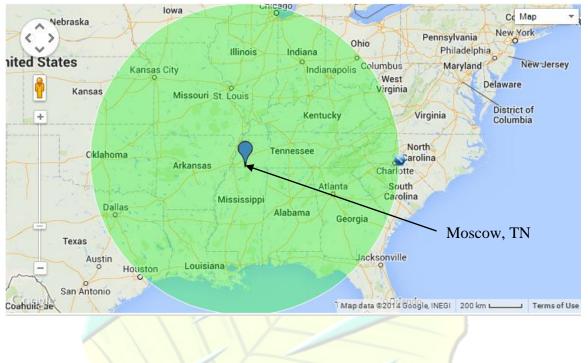
LEED Information

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

| SECTION | DESCRIPTION | MATERIALS |
|------------------|--|-----------------------------------|
| MR Credit | Recycled Content: 10% (post-consumer + $\frac{1}{2}$ pre- | 0% Pre-consumer |
| 4.1 | consumer) Use Materials with recycled content | 0% Post-Industrial |
| 4.1 | such that the sum of post-consumer recycle content | 070 FOSt-Industrial |
| | | |
| | plus one-half of the pre-consumer content | |
| | constitutes at least 10% (based on cost) of the total | |
| MD Creadit | value of the materials in the project. | 0% Pre-consumer |
| MR Credit 4.2 | Recycled Content: 20% (post-consumer + ¹ / ₂ pre- | |
| 4.2 | consumer) Use Materials with recycled content | 0% Post-Industrial |
| | 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 | |
| MD Carel's | of the materials in the project. | See Chart below |
| MR Credit | Regional Materials: 10% Extracted, Processed & | See Chart below |
| 5.1 | Manufactured Regionally. Use building materials | |
| | or products that have been extracted, harvested or | |
| | recovered, as well as manufactured, within 500 | |
| MD Caralit | miles of the project site. | |
| MR Credit | Regional Materials: 20% Extracted, Processed & | See Chart below |
| 5.2 | Manufactured Regionally. Use building materials | |
| | or products that have been extracted, harvested or | |
| | recovered, as well as manufactured, within 500 | |
| MD Cardit C | miles of the project site. | Description of an and a site site |
| MR Credit 6 | Rapidly Renewable Materials: Use rapidly | Does not currently meet criteria |
| | renewable building materials and products (made | |
| | from plants that are typically harvested within a | |
| MR Credit 7 | ten-year cycle or shorter). Certified Wood: Use a minimum of 50% of wood- | Does not currently meet criteria |
| MR Cleuit / | | Does not currently meet criteria |
| | based materials and products, which are certified in | |
| | accordance with the Forest Stewardship Council's | |
| | (FSC) principles and criteria for wood building | |
| EQ Cradit 1 1 | components. Low-Emitting Materials: Composite Wood & | No oddod ymae formoldebyde reging |
| EQ Credit 4.4 | 5 1 | No added urea-formaldehyde resins |
| | 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. | |
| | | |
| | | |
| | | |
| | | |
| | | |

| EQ Credit 10 | Mold Prevention: Project Teams must achieve the | ASTM D6329-98 |
|--------------|--|--------------------------------------|
| | following credits: EQ Credit 3.1: Construction IAQ | Resists fungal and mold contaminants |
| | 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% of less during all load | |
| | conditions, both occupied and unoccupied. | |

500 Mile Radius Chart



CERTIFICATE OF COMPLIANCE



PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS UL.COM/GG UL 2818

Marlite Standard FRP

25573-410 Certificate Number

06/15/2012 - 06/15/2021

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 m².

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



GREENGUARD Certification Criteria for Building Products and Interior Finishes

| Criteria | CAS Number | Maximum Allowable Predicted Concentration | Units |
|--|------------|--|-------|
| TVOC(A) | - | 0.50 | mg/m³ |
| Formaldehyde | 50-00-0 | 61.3 (50 ppb) | µg/m³ |
| Total Aldehydes (B) | - | 0.10 | ppm |
| Particle Matter less than 10 μm $_{\text{(C)}}$ | - | 50 | µg/m³ |
| 4-Phenylcyclohexene | 4994-16-5 | 6.5 | µg/m³ |
| 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).



CERTIFICATE OF COMPLIANCE



Marlite

Standard FRP

25573-420 Certificate Number

06/15/2012 - 06/15/2021

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 m². ; 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 m².

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



| Criteria | CAS Number | Maximum Allowable Predicted Concentration | Units |
|--|------------|--|-------|
| TVOC (A) | - | 0.22 | mg/m³ |
| Formaldehyde | 50-00-0 | 9 (7.3 ppb) | µg/m³ |
| Total Aldehydes (B) | - | 0.043 | ppm |
| 4-Phenylcyclohexene | 4994-16-5 | 6.5 | µg/m³ |
| Particle Matter less than 10 μm $_{\text{(C)}}$ | - | 20 | µg/m³ |
| 1-Methyl-2-pyrrolidinone (D) | 872-50-4 | 160 | µg/m³ |
| Individual VOCs (E) | - | 1/2 CREL or 1/100th TLV | - |

GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

(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).

