hempitecture®



PRODUCT DESCRIPTION

PlantPanel X is a rigid continuous insulation material used in exterior above-ground applications. With an R Value of R3.25 per inch, PlantPanel adds to thermal and acoustic comfort and performance.



CHARACTERISTICS

PlantPanel is an ideal material for exterior rigid insulation due to its ease of installation, dimensional stability, fire resistance, sustained R-value across diverse temperatures, and exceptional vapor permeability.

PRIMARY USE

Engineered with a density to resist compression and deflection, PlantPanel is used in split-insulation wall and roof assemblies with either a rain screen cladding or roofing material, depending on the application. With 100% biobased and recycled content, PlantPanel is a sustainable, low carbon continuous insulation solution that's easy to install and safe to handle.

TECHNICAL DATA

ASTM C518

Thermal Resistance @ 75 F - R3.25 Apparent Thermal Conductivity (Btu·in/ft²· h° F) = .3154 Thermal Resistivity Per Inch (ft²· h° F/Btu·in) = 3.17

ASTM E84

Flame Spread and Smoke Developed - Class B (Class A rating coming in 2025) Flame Spread Index = 40 Smoke Developed Index = 250

ASTM C165 Stress at 10% Displacement - 5.64 lb/in^2

ASTM C303

Specimen Mass (Ib) = 1.2 Average Thickness (in) = 2.06 Specimen Density (Ib/ft3) = 7.02 ASTM C1338 Fungi Resistance - Pass

ASTM C1617 Corrosion Mass Loss - Pass

ASTM D2126 Thermal and Humid Aging - Pass After 168 hours of exposure to 158 F / 97% RH - 24% Deviation

ASTM E96 Water Vapor Transmission - 26 Perms / Pass







ENVIRONMENTAL

• Red List ingredient free

- Low embodied energy due to rapidly renewable plant-based feedstock
- Reduction of greenhouse gases (GHGs); Currently being analyzed for an Environmental Product Declaration.
- VOC Free
- Recoverable, recyclable, compostable biobased material

