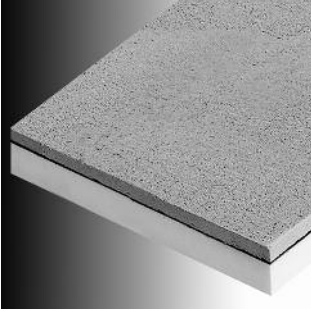


FLINTBOARD™ ISO PLUS

Composite Polyisocyanurate/Perlite Roof Insulation

Product Information



Rigid board insulation for hot asphalt BUR, modified bitumen and single ply roofing systems.

Consult membrane manufacturer for suitability and system requirements.

FlintBoard™ ISO Plus Composite Polyisocyanurate/perlite Roof Insulation features a closed-cell polyiso core bonded to 1/2" perlite with a fiber-reinforced felt facer on the bottom side. The perlite top makes FlintBoard ISO Plus an ideal recovery board, and when used as the second layer over FlintBoard ISO eliminates the need for a separate overlay board, yet retains the benefits of a second layer of iso.

FlintBoard ISO Plus is offered in a variety of thicknesses, providing long-term thermal resistance (LTTR) values from 7.4 to 23.1. Available in 4' x 4' (1220mm x 1220mm) and 4' x 8' (1220mm x 2440mm) panels.

FlintBoard ISO Plus is a recommended roof insulation in conjunction with CertainTeed Commercial Roofing Systems including Flintlastic® Roof Systems.

Typical Physical Properties (Foam Portion)

PROPERTY (Foam Portion)	TEST METHOD	TYPICAL RESULTS
Dimensional Stability (Length and Width)	ASTM D2126	< 2%
Compressive Strength (10% Deformation)	ASTM D1621	20 psi (140 kPa)
Water Absorption	ASTM C209 ASTM D2842	< 1% < 3.5%
Moisture Vapor Transmission	ASTM E96	< 1.0 perm (85.0ng/ (Pa•s•m ²))
Product Density	ASTM D1622	Nominal 2.0 pcf
Flame Spread	ASTM E84 (Full 10 min.Test)	< 60**
Tensile Strength	ASTM D1623	>730 psf (35 kPa)
Service Temperature	—	-100 to 250°F (-73 to 122°C)

The physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation. This data is offered as a service to our customers and is subject to change. All information can be confirmed by contacting CertainTeed's Technical Department.

**The numerical ratings as determined by ASTM Test Method E84 are not intended to reflect hazards presented by this or any other material under actual fire conditions. A flame spread index of 75 or less meets code requirements regarding flame spread for foam plastic roof insulation. However, flame spread values are not required for foam plastic insulation used in roof deck constructions that comply as an assembly with FM 4450 or UL 1256.

Installation

Refer to the CertainTeed FlintBoard product brochure and to the CertainTeed Commercial Roof Systems Manual for installation details regarding FlintBoard Roof Insulation. Refer also to Technical Bulletin CT-ISO-08-02.

Storage

Storage/Precautions: Factory-applied packaging is intended only for protection during transit. When stored outdoors or on the job site, packages should be stacked on pallets at least four inches above ground level and completely covered with a weatherproof covering such as a tarpaulin. The temporary factory-applied packaging should be slit or removed to prevent accumulation of condensation. Roof insulation which has become wet or damaged should be removed and replaced with solid, dry insulation.

Warning! Do Not Leave Exposed: This product is a polyiso organic plastic foam and will burn if exposed to an ignition source of sufficient heat and intensity, or open flame, such as a welder's torch. Like other organic materials, this product will release smoke if ignited. Do not apply flame directly to FlintBoard roof insulations. This product should be used only in strict accordance with CertainTeed recommended uses and instructions.

FlintBoard ISO Plus Compliances:

- ASTM C1289, Type III
- Miami-Dade County, Florida
- California State Insulation Quality Standards and Title 25 Foam Flammability Criteria
- IBC, NBC, UBC, SBC Sections on Foam Insulation

FM Standard 4450/4470 Approval

FlintBoard ISO Plus is approved for Class 1 insulated steel, wood, concrete and gypsum roof deck construction for both 1-60 and 1-90 Windstorm Classifications (may be mopped or mechanically fastened to concrete roof deck). Refer to FM Approvals RoofNav for details on specific systems.

UL Standard 1256 Classification

Insulated metal deck construction assemblies – Construction #120 and Construction #123.

UL Standard 790 (ASTM E108) Classification

Class A with most roof membrane systems. See UL Roofing Materials & Systems Directory.

UL Standard 263 Fire Resistance Classification (ASTM E119)

Some classifications for fire resistance are P230, P259, P508, P510, P514, P710, P711, P715, P718, P814, P815, P818, and P828. See UL Fire Resistance Directory for updated listings.

FlintBoard ISO Plus Thicknesses and LTTR FlintBoard ISO Plus Long-Term Thermal Resistance*					
Nominal Thickness		FlintBoard ISO Plus		Metal Deck	Flute Spanability
IN	MM	LTTR Value	RSI	IN	MM
1.5"	38.10	7.4	1.30	4-3/8"	111.125
2.0"	50.80	10.4	1.83	4-3/8"	111.125
2.5"	63.50	13.5	2.38	4-3/8"	111.125
3.0"	76.20	16.7	2.94	4-3/8"	111.125
3.5"	88.90	19.9	3.50	4-3/8"	111.125
4.0"	101.60	23.1	4.07	4-3/8"	111.125

*Long-term thermal resistance values of the foam were determined in accordance with CAN/ULC-S770. All test samples were third party selected and tested by an accredited materials testing laboratory. R-value for perlite of 1.39 was provided by ASHRAE Handbook, *Fundamentals*.
1" = 25.4 mm

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