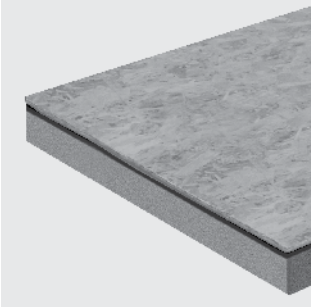


FLINTBOARD® ISO NB

Composite Polyisocyanurate/OSB Roof Insulation

Product Information



Rigid board insulation for use with heavyweight shingles, standing seam metal, tile, slate and single ply roofing systems.

Consult membrane manufacturer for suitability and system requirements.

FlintBoard® ISO NB Composite Polyisocyanurate/OSB Roof Insulation features a closed-cell polyiso core bonded to either 7/16" or 5/8" OSB with a fiber-reinforced felt facer on the bottom side. FlintBoard ISO NB is also available bonded to plywood (CDX and fire-treated available in 5/8" or 3/4") upon request.

FlintBoard ISO NB is offered in a variety of thicknesses, providing long-term thermal resistance (LTTR) values from 6.6 to 25.6. Available in 4' x 4' (1220mm x 1220mm) and 4' x 8' (1220mm x 2440mm) panels.

FlintBoard ISO NB is a recommended roof insulation in conjunction with CertainTeed Roofing 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) or 25 psi (172 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 (32.04 kg/m ³)
Flame Spread	ASTM E84 (Full 10 min.Test)	< 40-60*
Tensile Strength	ASTM D1623	>730 psf (35 kPa)
Service Temperature	—	-40 to 200°F

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.

The incorporation of a vapor barrier or retarder within the roofing assembly is highly recommended when the project is located in zones 4 to 8 as determined by the International Code Council Dept. of Energy NW National Lab of the United States (map is located on www.polyiso.org). Consult a licensed design professional, architect or engineer to establish whether or not a vapor barrier is necessary and to specify its type and location. This is especially important during the construction phase, when excessive moisture drive is present. CertainTeed recommends that a dew point calculation be performed. This calculation is based on the building's interior relative humidity, interior temperature conditions and outside temperature. Excessive moisture migration and temperature fluctuations during construction will potentially damage the system and cause unwanted condensation and aesthetic anomalies.

Installation

Shingles, Tiles, Slate, Metal and Membrane Roofing: FlintBoard ISO NB is installed wood side up, over metal, wood or structural roof decks. FlintFast SIPLD Fasteners or other approved SIP/NB panel fasteners are required to secure the FlintBoard ISO NB to the roof deck. Wood blocking, if necessary, should be equal in thickness to the FlintBoard ISO NB, and installed along the eaves and rake edges of the roof. The roofing system is then installed according to the manufacturer's recommendations.

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 NB Compliances:

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

FM Standard 4450/4470 Approval

FlintBoard ISO NB is approved for Class 1 insulated roof deck construction. 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-NB Thicknesses and LTTR

Thickness		LTTR Value*	Metal Deck Flute Spanability	
IN	MM		IN	MM
1.5	38.10	6.3	4.375	111.125
2.0	50.80	9.2	4.375	111.125
2.5	63.50	12.0	4.375	111.125
3.0	76.20	15.0	4.375	111.125
3.5	88.90	18.0	4.375	111.125
4.0	101.60	21.1	4.375	111.125
4.5	114.30	24.2	4.375	111.125

*LTTR (Long-term thermal resistance) values are based on ASTM C 1289, effective 1/1/2014, which provides updated 15 year time weighted averages

For more information, contact CertainTeed Commercial Roofing Technical Services at 800-396-8134 x2.

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