FLINTBOARD® ISO NB
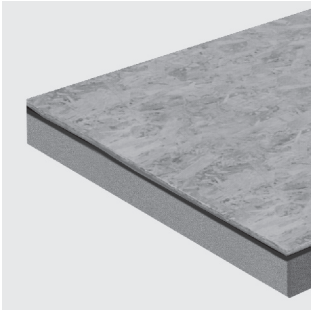
COMPOSITE POLYISOCYANURATE/OSB ROOF INSULATION

Product Information

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

FlintBoard® ISO NB is a composite polyisocyanurate/OSB roof insulation having a rigid closed-cell polyiso core with a heavy, black (non-asphaltic), fiber-reinforced felt facer on the bottom side bonded in-line to either 7/16″ or 5/8″ OSB. FlintBoard ISO NB is also manufactured off-line with 5/8″ or 3/4″ CDX or fire-treated plywood upon request. OSB and plywood are both APA-TECO Rated Exposure 1 and have rabbeted edges to allow for expansion and contraction of the wood. FlintBoard ISO NB contains no CFCs, HFCs, HCFCs, is Zero ODP, EPA Compliant, and has virtually no GWP. The product carries SH-1 and VSH hail ratings.

FlintBoard ISO NB is offered in a variety of thicknesses, providing long-term thermal resistance (LTTR) values from 6.3 to 21.1. See chart below for sizing.

The iso insulation is available with a compressive strength of 20 or 25 psi and an optional inorganic heavy-coated glass facer. FlintBoard ISO NB is manufactured in-line with an iso size of 47.5″ x 95.5″. When manufactured off-line, the iso size is 48″ x 96″.

FlintBoard ISO NB is a recommended roof insulation in conjunction with CertainTeed Roofing Systems.

Physical Properties
(Polyiso Foam Core Only)

Property	Test Method	Results
Compressive Strength	ASTM D1621	20 psi* (138 kPa, Grade 2)
Dimensional Stability	ASTM D2126	2% linear change (7 days)
Moisture Vapor Transmission	ASTM E96	< 1.0 perm (57.5ng/(Pa•s•m^2))
Water Absorption	ASTM C209	< 1.0% volume
Flame Spread**	ASTM E84	< 75
Smoke Developed**	ASTM E84	< 450
Service Temperature	—	-100°F to 250°F (-73°C to 122°C)

Also available in 25 psi, Grade 3
**Meets the requirements of the IBC code*

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 Commercial Technical Services.

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. Consult membrane manufacturer for suitability and system requirements.

FlintBoard ISO NB may be adhered to a properly prepared cementitious deck with a maximum 1/2″ per ft. slope using a full mopping of Type III or Type IV asphalt or low rise adhesive only when manufactured online. **All FlintBoard ISO NB manufactured off-line must be mechanically attached.**

![MADE IN U.S.A.]

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.

Caution: Fire Hazard

Warning: 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.

Codes and Compliances

- ASTM C1289, Type V, Grade 2 (20 psi) or Grade 3 (25 psi)
- International Building Code (IBC) Chapter 26
- State of Florida Product Approval Number FL5968
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1420
- Miami-Dade County Product Control Approved

Underwriters Laboratories, Inc. Classifications

- UL Standard 1256
- Insulated Steel Deck Construction Assemblies — No. 120, 123
- UL Standard 790
- UL Standard 263 Hourly Rated P Series Roof Assemblies

UL Classified for use in Canada

- Refer to UL Directory of Products Certified for Canada for more details

Factory Mutual Approvals

- FM 4450, FM 4470
- Approved for Class 1 Insulated Steel Deck Constructions. Refer to FM Approvals RoofNav® for specific system details

Technical Assistance and Services

CertainTeed provides technical assistance in the product selection, specification and application guidelines for all CertainTeed commercial roof systems. Field representatives are available for consultation in each region.

For more information, contact CertainTeed Commercial Roofing Technical Services at 800-396-8134 ext. 2 or rpg@saint-gobain.com

FlintBoard ISO NB Thicknesses and LTTR

| Thickness* | | | Flute Spandability | |
Inches	mm	LTTR R-Value**	Inches	mm
1.5	38.10	6.3	4.375	111.125
2.0	51.00	9.2	4.375	111.125
2.5	64.00	12.0	4.375	111.125
3.0	76.00	15.0	4.375	111.125
3.5	89.00	18.0	4.375	111.125
4.0	102.00	21.1	4.375	111.125

Thickness is calculated with 7/16" OSB.
LTTR (long term thermal resistance) values are based on ASTM C1289.

Manufactured only in the sizes listed above and on our packaging and weight chart.
R-values other than those listed can be achieved by installing a multi layer system consisting of an additional layer of flay polyiso under FlintBoard ISO NB.