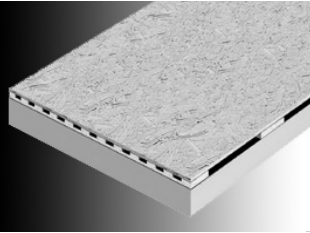


FLINTBOARD® ISO CV

APP MODIFIED BITUMEN VERSATILE
POLYESTER MEMBRANE WITH SMOOTH SURFACE

Product Information



Physical Properties

Product Use: FlintBoard® ISO CV is a polyisocyanurate insulation designed for steep sloped roofs to provide thermally efficient insulation with uniform cross venting that promotes the air circulation required by many shingle and metal roofing manufacturers. FlintBoard ISO CV allows heat to dissipate while providing a nailable surface and efficient insulation in a one-step process.

FlintBoard ISO CV is offered in a variety of thicknesses, and consists of a thermally efficient rigid polyiso insulation board with five 1.0", 1.5" or 2.0" ventilation channels separating a minimum 7/16" APA/TECO rated OSB or minimum 19/32" CDX plywood from the polyiso foam insulation to create a cross ventilating airspace. FlintBoard ISO CV is made to order in 4' x 8' (1220 mm x 2440 mm) size panels and in nominal thicknesses from 2.5" to 6.5".

Property	Test Method	Results
Dimensional Stability	ASTM D2126	< 2%
Compressive Strength	ASTM D1621	20 psi (140 kPa) or 25 psi (172 kPa)
Water Absorption	ASTM C209 ASTM D2842	< 1.0% < 3.5%
Water Vapor Transmission	ASTM E96	< 1.0 perm (57.5ng/(Pa•s•m²))
Product Density	ASTM D1622	Nominal 2.0 pcf (32.04 kg/m³)
Flame Spread	ASTM E84 (10 min.)	140-60
Smoke Development	ASTM E84 (10 min.)	150-170
Tensile Strength	ASTM D1623	> 730 psi (35 kPa)
Service Temperature	—	-100°F to +250°F

¹Numerical ratings are not intended to reflect performance under actual fire conditions. Flame spread index of ≤75 and smoke development ≤450 meet code requirements for foam plastic roof insulation. Codes exempt foam plastic insulation when used in FM 4450 or UL 1256.

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.

Installation

- Install FlintBoard CV only over fully supported structural decking. **FlintBoard CV is NOT a structural panel.**
- FlintBoard CV must be applied perpendicular to the flutes in steel deck applications
- Minimum 3" FlintBoard CV required for single layer steel deck applications
- It is preferable to install FlintBoard CV parallel to the eaves whenever possible
- The polyiso panel may be trimmed back from the rake edge to accommodate rake nailers.
- Install FlintBoard CV on slopes 3:12 or greater
- Do not leave exposed. Cover with any of CertainTeed's underlayments appropriate to the system: DiamondDeck®, DRYROOF™ SA, ROOFRUNNER™, or any WinterGuard® product

Note: When installing FlintBoard CV over an acoustical deck, check local codes for fire ratings. The use of a 5/8" minimum gypsum fire barrier may be required.

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 where 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 fluctuations. Excessive moisture migration will potentially damage the system and cause unwanted condensation.

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 three 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: 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 CV roof insulation. This product should be used only in strict accordance with CertainTeed recommended uses and instructions.

Codes and Complies

- ASTM C1289, Type V
- IBC Chapter 26 & NBC Sections on Foam Insulation
- State of Florida Product Approval (FL17989)
- California State Insulation Quality Standards and Title 25 Foam Flammability Criteria (License #T 1231)
- Miami-Dade County Approved (19/32" CDX Plywood)

Underwriters Laboratories, Inc. Classifications

- UL Standard 1256 Classification Construction No. 120, 123 & 458
- UL Standard 790 (ASTM E108) For use with Class A, B or C Shingles, Metal or Tile Roof Coverings
- UL Standard 263 (ASTM E119) Fire Resistance Classification

Factory Mutual Approvals

- FM Standard 4450/4470 Approved (1-90, 1-105)
- Approved for Class 1 Insulated Roof Deck Construction. Refer to FM Approvals RoofNav® for specific system details
- APO/TECO Rated OSB Nailing Surface
- FHA min. Property & ARMA Insulated Deck Requirements

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 CV Thicknesses and LTTR

⁴ Compound Thickness	in mm	2.5 64	3.0 76	3.5 89	4.0 102	4.5 114	5.0 127	5.5 140	6.0 152	6.5 165
1.0" Air Space (NFA/LF=9.5 sq. in.)	² LTTR Value ³ RSI	5.7 1.00	8.6 1.50	11.4 2.01	14.4 2.54	17.4 3.06	20.5 3.60	23.6 4.15	—	—
1.5" Air Space (NFA/LF=14.25 sq. in.)	² LTTR Value ³ RSI	— —	5.7 1.00	8.6 1.50	11.4 2.01	14.4 2.54	17.4 3.06	20.5 3.60	23.6 4.15	—
2.0" Air Space (NFA/LF=19.0 sq. in.)	² LTTR Value ³ RSI	— —	— —	5.7 1.00	8.6 1.50	11.4 2.01	14.4 2.54	17.4 3.06	20.5 3.60	23.6 4.15

²LTTR (long term thermal resistance) values were determined in accordance with CAN/ULC-S770-09 and only reported for FlintBoard ISO. Test samples were selected by a third-party and tested by an accredited material testing laboratory. Unsealed air space thermal resistance does not apply.

³RSI is the metric expression of R-value ($m^2 \cdot K/W$).

⁴Composite thickness includes wood layer, vent spacer strips, and FlintBoard ISO or FlintBoard ISO Cold insulation board.

*To minimize thermal bridging consider using multiple layers when the total R-value requires an insulation thickness greater than 2.7" thick.



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