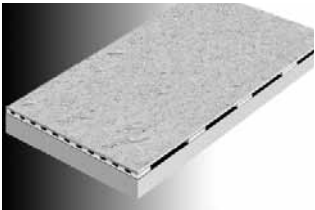


## **FLINTBOARD® CV** **Cross Ventilating Polyisocyanurate Roof Insulation**

**Rigid board insulation specifically for use over sloped unventilated roof decks.**

### Product Information



FlintBoard® CV Polyisocyanurate Roof Insulation is designed to provide thermally efficient insulation with uniform cross venting that promotes the air circulation required by many shingle manufacturers. FlintBoard CV allows heat to dissipate while providing a nailable surface and efficient insulation in a one-step process.

FlintBoard CV is offered in a variety of thicknesses, and consists of a thermally efficient polyiso insulation board with 1.0", 1.5" or 2.0" ventilation channels separating APA/TECO rated OSB or plywood from the polyiso foam insulation to create a cross ventilating airspace. FlintBoard CV is made to order in 4' x 8' (1220 mm x 2440 mm) size panels and in nominal thicknesses of 2.5" to 6.5". Non-standard vent spaces are available on special order.

### Typical Physical Properties

FlintBoard CV is available with an optional radiant barrier on the underside of the OSB nailing surface. The radiant barrier prevents most radiant heat transfer and reduces the temperature gradient across the polyiso board.

PROPERTY	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 (85.0 ng/(Pa•s•m <sup>2</sup> ))
Product Density	ASTM D1622	Nominal 2.0 pcf (32.04 kg/m <sup>3</sup> )
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 and smoke development of 450 or less meet code requirements regarding flame spread and smoke development for foam plastic roof insulation. However, flame spread values do not apply to foam plastic insulation used in roof deck constructions that comply as an assembly with FM 4450 or UL 1256 (see IBC, NBC, UBC, and SBC sections on foam plastic insulation, Chapter 26).

### 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 CertainTeed #15 or #30 roofing felt or synthetic underlayment, such as CertainTeed's Diamond Deck underlayment.

**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.**



**FlintBoard CV Thicknesses and LTTR**

Thickness**		LTTR Value*	Metal Deck Flute Spanability	
IN	MM		IN	MM
2.5	63.50	5.7	2.625	66.675
3.0	76.20	8.6	4.375	111.125
3.3	83.82	10.3	4.375	111.125
3.5	88.90	11.4	4.375	111.125
4.0	101.60	14.4	4.375	111.125
4.5	114.30	17.4	4.375	111.125
5.0	127.00	20.5	4.375	111.125
5.5	139.70	23.6	4.375	111.125
5.8	147.32	25.5	4.375	111.125
6.0	152.40	26.8	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.

\*\*Thickness is calculated with 7/16" OSB and 1" airspace. For other dimensions, contact CertainTeed.

**Definition of NFA/LF**

The Net Free Area of Ventilation per Linear Foot is derived by multiplying the air space in inches by the length in inches of the FlintBoard CV panel. The area of the wood spaces is then subtracted and the difference is divided by 4 or 8.

Airspace Dimension	NFA/LF
1.0"	7.5/9.5 sq. inch
1.5"	11.25/14.25 sq. inch
2.0"	15.00/19.0 sq. inch

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](http://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/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.

**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.

**FlintBoard CV Compliances:**

- ASTM C1289, Type II
- IBC, NBC, UBC, and SBC sections on foam plastic insulation (Chapter 26)
- State of Florida Product Approval
- Miami-Dade County, Florida

**FM Standard 4450/4470 Approval**

FlintBoard CV 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 #123.

**UL Standard 790 Classification**

For use with Class A, B or C shingles, metal or tile roof coverings.

**UL Standard 263 Fire Resistance Classification (ASTM E119)**

See UL Fire Resistance Directory for updated listings.

**UL Certified for Canada**

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

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CertainTeed Corporation  
P.O. Box 860  
Valley Forge, PA 19482

Professional: 800-233-8990  
Consumer: 800-782-8777

