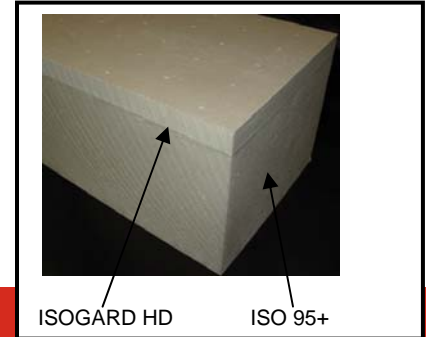


## ISOGARD™ HD Composite

### Item Description

High Density Composite Board



### Product Information

#### Description:

Firestone ISOGARD HD Composite roof insulation consists of a closed-cell polyiso foam core laminated to 1/2 inch (12.7 mm) high density ISOGARD HD board. It resists hail damage and foot traffic while providing outstanding thermal performance. Firestone ISOGARD HD Composite board is suitable for use with most commercial roofing systems.

All Firestone polyiso insulations use EPA accepted blowing agents and qualify under the Federal Procurement Regulation for Recycled Material. Firestone ISOGARD HD Composite board with ISOGARD™ Foam Technology incorporates a HCFC-free blowing agent that does not contribute to the depletion of the ozone (ODP-free).

#### Method of Application:

1. Insulation shall be neatly fitted to all roof penetrations, projections and nailers.
2. No more insulation shall be installed than can be covered with membrane and completed before the end of each day's work or before the onset on inclement weather.
3. Firestone ISOGARD HD Composite board may be installed using: Fasteners and Plates or Firestone Approved Insulation Adhesives:

- **I.S.O. Twin Pack™**
- **I.S.O. Stick™**
- **I.S.O. Spray™ S**
- **I.S.O. FIX™ II**

#### Storage:

- Keep insulation dry at all times.
- Elevate insulation above the deck or ground.
- Cover insulation with waterproof tarps.

#### Precautions:

1. Firestone ISOGARD HD Composite is not suitable as an immediate substrate for a ballasted roof system.
2. Polyiso foam will burn if exposed to a flame of sufficient heat and intensity. Keep away from heat, sparks, and open flames.
3. Protect against dust that may be during installation.
4. Refer to Safety Data Sheet (SDS) for additional information.
5. Use in accordance with Firestone ISO 95+™ Specifications.

# TECHNICAL INFORMATION SHEET

## ISOGARD™ HD Composite

### Specification Compliance:

ASTM C1289, Type IV

UL Classified

FM Global Class 1 Approved

FM Global approved for Class 1 insulated steel deck construction.

Foamed Plastic classified by UL as a roof deck construction material with resistance to internal fire exposure for use in construction numbers 120 and 123 (tested to UL 1256).

**Available Sizes:** 4' x 4' (1.22 m x 1.22 m)

4' x 8' (1.22 m x 2.44 m)



**Manufacturing Locations:** Youngwood, PA

### Typical Properties

Physical Property	ASTM Test	English Values	Metric Values
Compressive Strength:	D 1621	20 psi	138 kPa
Density:	D 1622	2 pcf	32 kg/m <sup>3</sup>
Dimensional Stability:	D 2126	<2%	<2%
Moisture Vapor:	E 96	<1.0	<57.5
Transmission:		Perm	ng/(Pa•s•m <sup>2</sup> )
Water Absorption by Volume:	C 209	<1%	<1%
Service Temperature:	-100 ° to 250 °F		-73 ° to 121 °C

### PRODUCT DATA

Thickness (inches)		LTTR* (R-Value)	Max Flute Span		TOTAL Recycle Content%	% Post Industrial	% Post Consumer
inches	mm		inches	mm			
1.50	38.10	8.2	4.375	111.12	44%	15%	29%
2.00	50.80	11.1	4.375	111.12	39%	15%	24%
2.50	63.50	13.9	4.375	111.12	35%	15%	18%
3.00	76.20	16.9	4.375	111.12	32%	15%	17%
3.50	88.90	19.9	4.375	111.12	30%	15%	15%
4.00	101.60	23.0	4.500	114.3	29%	15%	14%

\*Long Term Thermal Resistance (LTTR) in accordance with ASTM C 1303-11 and CAN/ULC-S770-09

## ISOGARD™ HD Composite

<b>Acceptable Substrates:</b>	
<i>Structural Concrete, 3000 psi (New and Existing)</i>  <i>Steel, min. 22 gage</i> <i>Lightweight Concrete</i> <i>Plywood and OSB, min. ½ in.</i>  <i>Gypsum Deck, min. 2"</i>	Please consult the SBS Design Guide and Quick Specs on line at <a href="http://www.firestonebpco.com">www.firestonebpco.com</a> to review specific information regarding fastener types appropriate for the type of deck and insulation in use.
<b>Not Acceptable:</b>	Do not use hot asphalt to adhere ISOGARD HD surface of ISOGARD HD Composite.  Firestone ISOGARD HD Composite is not suitable as an immediate substrate for a ballasted roof system.

Please contact your Firestone Building Systems Advisor at 1-800-428-4511 for further information.

*This sheet is meant to highlight Firestone products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials which meet published Firestone product specifications. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Firestone accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Firestone representative is authorized to vary this disclaimer.*