SOPRA-ISO® s

Rigid Polyisocyanurate Thermal Insulation Panel





PRODUCT DATA SHEET PDS10308 - REV 230926

APPLICATIONS

ROOFING

PRODUCT NUMBERS:

For ordering information contact customer service.

DESCRIPTION & FEATURES:

SOPRA-ISO s is a rigid polyisocyanurate thermal insulation board for use in approved multi-ply membrane assemblies. **SOPRA-ISO s** is a rigid roof insulation board composed of a closed-cell polyisocyanurate foam core bonded in the foaming process to universal fiber glass reinforced facers.

- Available in two grades of compressive strengths per ASTM C1289 Type II, Class 1 Grade 2 (20 psi) or Grade 3 (25 psi)
- Available in 4 ft x 4 ft (1.2 m x 1.2 m) and 4 ft x 8 ft (1.2 m x 2.4 m) panels in thicknesses of 1 in (25.4 mm) to 4.0 in (101.6 mm)
- Has the highest R-value per inch compared to any other type of non-polyiso insulation of equivalent thickness
- Lightweight and easy to handle, can be cut with a utility knife or saw
- Compatible with most construction adhesives, roof and wall coverings and attachment systems
- Manufactured using CFC-free, HCFC-free, and HFC-free foam blowing technology with zero ozone depletion potential (ODP) and virtually no global warming potential (GWP)

APPLICATION:







Prior to installation, ensure all **SOPRA-ISO s** panels have not been subject to moisture. Butt edges and stagger joints of adjacent panels. Secure boards to substrate using mechanical fasteners, insulation adhesive or hot asphalt. For approvals and listings to meet project-specific wind rating requirements, contact SOPREMA.

Refer to the SOPREMA Low-Slope Roofing Insulation Technical Manual for complete application guidelines.

STORAGE:

Store board flat on a raised pallet to prevent damage. Store in a clean, dry location and cover as necessary to protect from environmental damage such as extreme cold, heat or moisture. The factory packaging is intended for the protection of the boards during transit and is not intended for job site protection. When product is stored outdoors, the plastic shroud must be slit and the insulation protected by a waterproof, breathable covering such as a tarpaulin.

LIMITATIONS:

Do not apply flame directly to **SOPRA-ISO s** when installing a torch-applied modified bitumen system. This product will burn if exposed to an ignition source of sufficient heat and intensity. DO NOT LEAVE EXPOSED. Install only as much **SOPRA-ISO s** as can be covered in the same day.



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TESTING & APPROVALS:

- ASTM C1289, Type II, Class 1, Grade 2 (20 psi) or Grade 3 (25 psi)
- CAN/ULC-S704, Type 2, Class 3 or Type 3, Class 3
- · CCMC No. 12423-L
- UL Certified for Canada Insulated Roof Deck Assemblies Construction No C38 and 52. Meet CAN/ULC-S126, CAN/ ULS-S101 and CAN/ULC-S107
- UL Standard 1256 Classification Construction No. 120, 123, & 292
- UL Standard 790 (ASTM E108) Roofing Systems Classification
- UL Standard 263 (ASTM E119) Fire Resistance Classification
- UL Standard 1897 Uplift Resistance
- FM Standard 4450/4470 Approved Refer to FM Approvals RoofNav for Specific System Details
- IBC Chapter 26 & NBC Sections on Foam Insulation
- California State Insulation Quality Standards and Title 25
 Foam Flammability Criteria (License #TC 1231)
- · Miami-Dade County Approved
- State of Florida Product Approval (FL17989)
- · Has achieved GREENGUARD GOLD Certification











WARRANTY:

For more information refer to www.SOPREMA.us or contact your SOPREMA representative.

SUSTAINABILITY:



RECYCLED Content	OZONE DEPLETION POTENTIAL (ODP)	ENVIRONMENTAL PRODUCT DATA (EPD)*	HEALTH PRODUCT DECLARATION (HPD)*
Varies with thickness, refer to LEED product sheet	0	Yes	No

^{*} EPD and HPD sheets are available at soprema.us



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TECHNICAL INFORMATION & TESTING:

SHEET PROPERTIES					
PROPERTY	VALUE				
Material	Closed-cell polyisocyanurate foam				
ASTM	C1289, Type II Class 1				
Surfacing	Organic facers reinforced with glass fibers				
Length, ft (m)	4 (1.2), 8 (2.4)				
Width, ft (m)	4 (1.2)				
Thickness, in (mm)	1 - 4.0 (25.2 - 101.6)				

PHYSICAL PROPERTIES*						
PROPERTY	VALUE	ASTM				
Compressive strength, psi (kPa)	Grade 2 - 20 (140) Grade 3 - 25 (172)	D1621				
Dimensional stability, $\%$	< 2	D2126				
Tensile strength, psf (kPa)	> 730 (35)	D1623				
Product density, pcf (kg/m³)	Nominal 2.0 (32.04)	D1622				
Vapor transmission, perm	< 1.5	E96				
Water absorption, %	< 1.5, < 3.5	C209 / D2842				
Flame spread, core**	40 - 60	E84				
Smoke developed, core**	50 - 170	E84				
Service temperature, °F (°C)	-100 to 250 (-73 to 122)	-				

^{*} Data is represented by average values, unless noted otherwise

STANDARD THICKNESSES & THERMAL VALUES

NOMINAL THICKNESS		RIC/TIMA 1		METAL DECK Flute Spanability	
INCHES	MILLIMETERS	LTTR-VALUE**	RSI***	INCHES	MILLIMETERS
1.0	25.4	5.7	1.00	2.625	66.68
1.5	38.1	8.6	1.50	4.375	111.13
2.0	50.8	11.4	2.01	4.375	111.13
2.5	63.5	14.4	2.53	4.375	111.13
3.0*	76.2	17.4	3.06	4.375	111.13
3.5*	88.9	20.5	3.60	4.375	111.13
4.0*	101.6	23.6	4.15	4.375	111.13

^{*} To minimize the effects of thermal bridging, SOPREMA strongly recommends the use of multiple layers when the total desired or specified R-value requires an insulation thickness greater than 2.7" thick.



^{**} Numerical 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. Physical properties listed above are presented as typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation

^{**}LTTR (long term thermal resistance) values were determined in accordance with CAN/ULC-S770-09. Test samples were third-party selected and tested by an accredited material testing laboratory. The LTTR results were reviewed by FM Global and certified by the PIMA Quality Mark Program.

*** RSI is the metric expression of R-value (m2• K/W)