

# SOPRA-ISO SILVER

## High performance PIR thermal insulation board

January 2024

### DESCRIPTION:

SOPRA-ISO SILVER is a high performance thermal insulation board. It is composed of closed-cell polyisocyanurate (PIR) foam laminated on both sides with a textured aluminium facer providing great fire-resistance.

SOPRA-ISO SILVER has amongst the highest thermal values of the rigid board insulation products, giving buildings continued thermal efficiency throughout their life span.

SOPRA-ISO SILVER is mainly used as a thermal insulation for SOPREMA bitumen, PVC and TPO roofing systems. It has a light weight closed-cell foam core which makes it easy to handle and allows fast fixing to any application.



### PACKAGING:

Specifications	SOPRA-ISO SILVER
Board thickness	50, 60, 70, 80, 90, 100 mm
Board dimensions	2400 x 1200 mm
Edge finishing	Straight edge
Board finishing	Aluminium on both sides
Colour	Silver upper facing / Silver under facing

### PRODUCTIVE R VALUE:

Thickness	R Value
50 mm	R <sub>d</sub> 2.35 m <sup>2</sup> K/W
60 mm	R <sub>d</sub> 2.85 m <sup>2</sup> K/W
70 mm	R <sub>d</sub> 3.30 m <sup>2</sup> K/W
80 mm	R <sub>d</sub> 4.00 m <sup>2</sup> K/W
90 mm	R <sub>d</sub> 4.50 m <sup>2</sup> K/W
100 mm	R <sub>d</sub> 4.85 m <sup>2</sup> K/W

### TECHNICAL DATA:

Properties	Test Method	SOPRA-ISO SILVER
Designation	-	Rigid polyisocyanurate (PIR) foam
Density	ASTM D1622	34 kg/m <sup>3</sup> +/- 5%
<b>Thermal conductivity (λ value):</b>		
50-70 mm	AS 4859.1	0.021 W/m•K
80-100 mm		0.020 W/m•K



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**TECHNICAL DATA continued:**

Properties	Test Method	SOPRA-ISO SILVER
<b>Compressive strength at 10% deformation:</b>		
Measured parallel to rise	AS 2498.3	≥ 160 kPa
Measured perpendicular to rise		≥ 100 kPa
Rate of water vapour transmission measured parallel to rise at 38°C	AS 2498.5	≤ 2300 ug/m <sup>2</sup> s
<b>Dimensional stability of length, width and thickness after 20h:</b>		
at -10°C	AS 2498.6	≤ 1%
at 70°C and 95 ± 5 r.h		≤ 3%
Closed-cell content (uncorrected)	AS 2498.7	90%
<b>Determination ignitability, flame spread, heat release and smoke release:</b>		
Ignitability index	AS 1530.3	0
Flame spread index		0
Heat release index		0
Smoke release index		1

**CERTIFICATIONS:**

SOPRA-ISO insulation boards are awarded a Global GreenTag<sup>Cert</sup>™ GreenRate™ Level A certification with a Global GreenTag Product Health Declaration™ and a PlatinumHEALTH™ HealthRATE™ certification.

In addition, they are certified with a Declare label as Red List Free as they do not contain any Red List chemicals.



**SCOPE OF USE:**

SOPRA-ISO SILVER is used in Equus SOPREMA Warm Roof and Deck systems, installed over a vapour barrier and underneath a waterproofing membrane system. SOPRA-ISO SILVER boards are mechanically fastened to the roofing substrate and can be overlaid with a roof cover board. It is suitable for new builds and refurbishments, residential and commercial construction, in any location or wind zone in New Zealand (determined by project specific wind uplift calculations).

Suitable for other applications with written approval by Equus Industries Ltd.

**CONDITIONS OF USE:**

SOPRA-ISO SILVER must be covered by a specified waterproofing membrane system. Written approval is required for this product to be in a system not outlined in the standard Equus specifications.

The product must be installed by a Certified Equus Applicator. Verification of their status can be confirmed by a current applicator certificate or by contacting Equus Industries Ltd. Any installation must be done in accordance with the latest specifications and technical documentation, or with written approval by Equus Industries Ltd.

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**BUILDING CODE COMPLIANCE:**

**B2 Durability** - B2.3.1 (b), SOPRA-ISO SILVER has a durability of at least 15 years when installed with the correct specification, installation and maintenance. BRANZ Appraisal 1169.

**E3 Internal moisture** – E3.3.1 SOPRA-ISO SILVER provides habitable buildings with adequate thermal resistance and R-values that are equal to or above those specified in E3/AS1. See BRANZ Appraisal 1169.

**F2 Hazardous building materials** - F2.3.1 Well known experience with the type of materials used together with in-service history, show that SOPRA-ISO SILVER complies with this performance requirement. Refer to SDS at [www.equus.nz](http://www.equus.nz)

**H1 Energy Efficiency** – H1.3.1 (a) SOPRA-ISO SILVER provides the building with adequate thermal resistance and R-values that are equal to or above those specified in H1/AS1 and H1/AS2. See BRANZ Appraisal 1169.

**SUPPORTING DOCUMENTATION:**

The following additional documentation supports the compliance statements:

Title (type)	Version	URL
BRANZ Appraisal No. 1169	2 November 2022	<a href="https://www.equus.nz/content/reports/branz-appraisal-warmroof-1169.pdf">https://www.equus.nz/content/reports/branz-appraisal-warmroof-1169.pdf</a>

**STORAGE AND HANDLING:**

Do not throw, use shockproof transport. Must be stored in a dry condition and protected from direct weathering.

**WARNINGS AND BANS:**

Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?	No
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**MANUFACTURERS CONTACT DETAILS:**

Manufacture location	Australia
Legal and trading name of manufacturer	Soprema New Zealand Limited
Manufacturer address for service	Level 3, Candida Building 4, 61 Constellation Drive, Mairangi Bay, Auckland 0630, New Zealand
Manufacturer website	<a href="http://www.soprema.com.au">www.soprema.com.au</a>
Manufacturer email	<a href="mailto:info@soprema.com.au">info@soprema.com.au</a>
Manufacturer phone number	+61 3 9221 6230
Manufacturer NZBN	9429050312962