



## GROUP 2 RIGID THERMAL INSULATION PANEL WITH SILVER FOIL FACING



## PIRmax ISO<sup>2</sup> PANEL PRODUCT BROCHURE



# PRODUCT INTRODUCTION

**PIRMAX ISO<sup>2</sup> Panel** is an Australian Made modified PIR (Polyisocyanurate) rigid thermal panel that can be used in many applications.

**PIRMAX ISO<sup>2</sup> Panel** is a high performance insulation product for use in commercial and residential developments. Designed to achieve excellent thermal performance, and reduce thermal bridging, by providing a continuous barrier where minimal cavity is available.

**PIRMAX ISO<sup>2</sup> Panel** has amongst the highest thermal values of rigid board insulation products, giving buildings continued thermal efficiency throughout their life span.



**PIRMAX ISO<sup>2</sup> Panel** is a light weight closed cell PIR consisting of a Polyisocyanurate foam inner core, thermoset between two layers of embossed aluminium foil facings.



## Benefits

- ▶ Complies with AS/NZS 4859.1:2018.
- ▶ Achieves a Group 2 BCA/NCC fire classification when tested in accordance with AS 5637.1:2015 in a full room ISO 9705 test.
- ▶ Achieves excellent fire hazard results when tested to AS/NZS 1530.3.
- ▶ RED LIST FREE product, ingredients are 100% disclosed to 100 ppm, and do not contain any Red List chemicals.
- ▶ Custom lengths and widths available upon request (min order quantities apply).
- ▶ Manufactured in Australia for fast manufacturing turnaround times.



## Declare - Red List Free

**PIRMAX ISO<sup>2</sup> Panel** is a RED LIST FREE product, ingredients are 100% disclosed to 100 ppm, and do not contain any Red List chemicals. They have been shown to meet the Materials Petal requirements of the Living Building Challenge and emissions testing criteria for Health + Happiness Petal. **PIRMAX ISO<sup>2</sup> Panel** does not exceed maximum limits as defined by CDPH Standard Method v1.2-2017.

**PIRMAX ISO<sup>2</sup> Panel** meet the requirements of the WELL Specification AE-ES-SPS-003 relating to WELL X11 Long Term Emission Control and WELL X12 Short Term Emission Control.

**Declare.**



## Applications

**PIRMAX ISO<sup>2</sup> Panel** is designed to be used in exposed wall or ceiling/soffit applications typically in commercial or multi-residential use, it can also be used in residential applications. The **PIRMAX ISO<sup>2</sup> Panel** is designed to be mechanically fixed into concrete or masonry substrates in accordance with the installation instructions.

Typical applications include Soffit (Carpark Applications), Wall Systems, Suspended Timber and Concrete Floors, Ground Floor Slabs, Ceiling Systems, Roofs.

## Australian Made

**PIRMAX ISO<sup>2</sup> Panel** is manufactured in Australia by an Australian owned and operated company, and guarantee the highest quality insulation material. As our products are wholly Australian Made we take pride in our manufacturing to ensure a high standard of quality, service and value.





# PRODUCT RANGE

## PIRMAX ISO<sup>2</sup> Panel Product Details

<b>Product Name</b>	PIRMAX ISO <sup>2</sup> Panel Silver “modified PIR rigid thermal insulation”
<b>Product Code</b>	PIRMAX ISO <sup>2</sup> _____ (mm)
<b>Panel Size</b>	2400mm x 1200mm (2.88m <sup>2</sup> ) Custom lengths and widths available upon request <sup>#</sup>
<b>Facings</b>	Silver embossed aluminium sheet laminated to both sides.

<sup>#</sup>Subject to minimum order quantities

## PIRMAX ISO<sup>2</sup> Panel Product R-Values

Nominal Thickness	Declared R-value (m <sup>2</sup> K/W)
PIRMAX ISO <sup>2</sup> 25mm	R <sub>d</sub> 1.05
PIRMAX ISO <sup>2</sup> 30mm	R <sub>d</sub> 1.30
PIRMAX ISO <sup>2</sup> 40mm	R <sub>d</sub> 1.90
PIRMAX ISO <sup>2</sup> 42mm	R <sub>d</sub> 2.00
PIRMAX ISO <sup>2</sup> 50mm	R <sub>d</sub> 2.35
PIRMAX ISO <sup>2</sup> 60mm	R <sub>d</sub> 2.85
PIRMAX ISO <sup>2</sup> 70mm	R <sub>d</sub> 3.30
PIRMAX ISO <sup>2</sup> 75mm	R <sub>d</sub> 3.55
PIRMAX ISO <sup>2</sup> 80mm	R <sub>d</sub> 4.00
PIRMAX ISO <sup>2</sup> 90mm	R <sub>d</sub> 4.50
PIRMAX ISO <sup>2</sup> 100mm	R <sub>d</sub> 5.00*

\* Estimated R-Value, based on λ0.020

## PIRMAX ISO<sup>2</sup> Panel Summary of Testing Results

<b>Thermal</b>	AS/NZS 4859.1:2018	Refer to table above
<b>Surface Corrosion and Delamination</b>	AS/NZS 4859.1:2018 (Appx E)	Pass
<b>Group Number</b>	AS 5637.1:2015	Group 2
<b>SMOGR<sub>RC</sub></b>	AS 5637.1:2015	≤ 100 m <sup>2</sup> /s <sup>2</sup> x 1000
<b>Ignitability Index</b>	AS/NZS 1530.3	0
<b>Spread of Flame Index</b>	AS/NZS 1530.3	0
<b>Heat Evolved Index</b>	AS/NZS 1530.3	0
<b>Smoke Developed Index</b>	AS/NZS 1530.3	0-1
<b>Flame Propagation- Vertical Surface Ignition</b>	AS 2122.1-1993	Upon Request
<b>Emittance</b>	ASTM E 408-71	0.05
<b>Emittance</b>	AS/NZS 4200.1:2017	IR Reflective
<b>Volatile Organic Compounds (VOC)</b>	California Specification 01350	<0.01 mg/m <sup>3</sup>
<b>Maximum Service Temperature</b>	California Specification 01350	200°C

## PIRMAX ISO<sup>2</sup> Panel Specification Notes

When specifying, state the following:

**Product Name:** Reflex Insulation PIRMAX ISO<sup>2</sup> Panel \_\_\_\_\_ mm

The insulation to be installed shall be PIRMAX ISO<sup>2</sup> Panel System from Reflex Insulation.

This system comprises of: PIRMAX ISO<sup>2</sup> Panel, plastic fasteners and PIRMAX/AFC100 reinforced self-adhesive tape supported by a **15 Year System Warranty**.

Group 2 AS ISO 9705:2003 (R2016) and AS 5637.1:2015 fire classification with an R Value of \_\_\_\_\_. CFC free with zero Ozone Depletion Potential (ODP), does not release Volatile Organic Compounds (VOC's). Certified by the Living Building Challenge's Declare labelling system as “Red List Free”.

All insulation panels shall meet the requirements of the WELL Specification AE-ES-SPS-003 relating to WELL X11 Long Term Emission Control and WELL X12 Short Term Emission Control.

Product is Australian Made, manufactured by PIRMAX Pty Ltd, and shall be installed in accordance with the manufacturers installation instructions.



## Ceilings & Soffit Installation Summary

The installation summary has been compiled based upon empirical testing in accordance with AS 5637.1:2015 and its reference standard AS ISO 9705:2003 (R2016). Any variation to this install recommendation will need to be referred to PIRMAX, or the design team on the project. Please contact us for a full system installation guide which includes further detailed information.

The system comprises of the following:

- PIRMAX ISO<sup>2</sup> Panels
- Plastic insulation fasteners (please refer to the full system installation guide for recommended fasteners)
- PIRMAX/AFC100 (100mm) reinforced self-adhesive tape



For a typical 2400mm x 1200mm PIRMAX ISO<sup>2</sup> panel, a minimum of 7 plastic insulation fasteners per board is required ( $\geq 2.43$  fixings per m<sup>2</sup>).

Where custom length long boards have been ordered, a minimum fixing density of 2.43 fixings per m<sup>2</sup> must be maintained. The fixing pattern should resemble a repeat pattern of the diagram below. For smaller panels, fixing should be located at 100mm from each edge, and a maximum 1100mm in the longitudinal direction and 1000mm in the cross direction, with every second row requiring a centre fixing as indicated below.

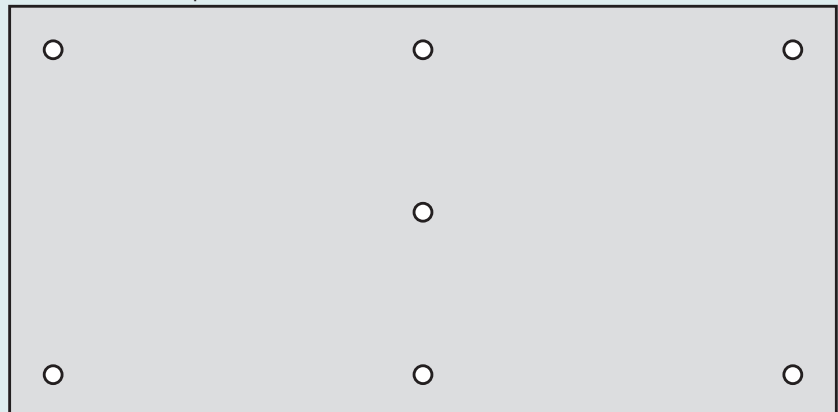
When fixing the panel to the soffit, start with the centre fixing, this will help support the weight of the board while the remaining fixings are installed.

The plastic fasteners must be installed at a perpendicular angle to the face of the panel. This will ensure a flush placement of the fastener on the PIRMAX ISO<sup>2</sup> panel.

For ends or an edge where an exposed edge will be visible, please refer to taping instructions before fastening into position.

Once the panel is fastened, attention must be given to the correct application of the PIRMAX/AFC (100mm) reinforced aluminium foil tape. Please refer to the full system installation guide for further detailed information.

7 insulation fastener pattern



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