



CI MAX Soffit Board (PIR)













Thermacon Insulation Pty Ltd 16 Hodgson Way, Kewdale WA 6105





CI Max Soffit Board

DESCRIPTION

CI Max[™] Soffit Board is composed of a uniform closed-cell polyisocyanurate foam core bonded on each side to a printed foil and glass mat facer.CI Max foam sheathing is produced with a non-HCFC blowing agent, meeting the latest environmental regulations for using chemicals that do not harm the protective ozone layer in the earth's atmosphere. CI Max foam sheathing passed NFPA 286 Corner Burn Test for walls only or ceiling only without joint treatment, meeting all necessary building codes both in Australia, Europe, and in the USA.

Product Information

Product Thickness mm	25, 27, 31, 42,	51, 55, 66, 77, 88, 99
Board Size – Length mm	2286	
Board Size – Width mm	1219	
Reflectance (Foil Side)	96%	
	25mm	R1.14
	27mm	R1.2
	31mm	R1.4
	42mm	R1.9
'R' Value	51mm	R2.35
	55mm	R2.5
	66mm	R3.0
	77mm	R3.5
	88mm	R4.0
	99mm	R4.5

Product Testing

Test	Test Standard	Result	
Compressive Strength	ASTM C1289-12	>110	Pass
Thermal Conductivity	ASTM C518-10	0.22	1 435
Cone Calorimeter	AS/NZS 3837	Group 1	
Ignitability	A3/1123 3037		
Flame Spread			
Heat Release	AS/NZS 1530.3	0/0/0/1	
Smoke			
Emmittence	ASTM C1371	Reflective	E0.04
Water Absorbtion	ASTM C1289-12	0.1	Pass
Water Vapour	ACTNA C1200 12	2	Dava
Permeance 25mm	ASTM C1289-12	3	Pass
Corner Burn Test	NFPA 286		Pass
Service Temperature	Above Test	-73°C to 12	22°C
Full Room Cnr Burn Test	: ISO9705	Group 1 (Ce	eiling only)
		Group 1 (Ceili	
		Gloup I (cem	
VOC Emissions from	CDPH/EHLB/Standard	Meets acce	ntance
	Method V1.1	criteria for	prance
Building Products	(Section 01350)	individual V	OC's of
	(Section 01220)	concern	
		concern	



- O AS/NZS 4859.1 Compliant.
- No measurable
 Formaldehyde.
- Low Thermal Conductivity of only 0.022.
- CFC/HCFC free with Zero
 Ozone Depletion
 Potential (ODP).
- ^o Does not cause corrosion.

USE

CI Max Soffit Board is designed for easy installation where high thermal efficiency is required within both new and retrofit interior construction. It is an excellent interior insulation solution for both residential and commercial construction. Masonry or framed walls or ceilings, industrial, agricultural, farm, storage, buildings & undercrofts, carparks, soffits and interior exposed applications.

SPECIFICATION GUIDE

"The Soffit Insulation shall be Thermacon CI Max Polyisocyanurate (PIR) Foam Soffit Board ___mm Thick comprising of a CFC/HCFC free rigid uniform closed cell PIR Foam core, bonded on each side to a foil and glass mat facer, manufactured by Johns Manville in the USA. This board is to be installed in accordance with the instructions issued by Thermacon Insulation Pty Ltd." – refer below







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Thermal Performance ^

Total R-Values for various thicknesses of Thermacon CI Max Soffit Board with various fixing methods.

Roof Application – no ceiling (150mm concrete)		
Product Thickness	Heat Flow In	Heat Flow
(mm)		Out
27	R _⊤ 2.11	R _⊤ 1.68
31	R _⊤ 2.29	R _⊤ 1.87
42	R _⊤ 2.76	R _⊤ 2.40
55	R _T 3.33	R _T 3.03
66	R _⊤ 3.81	R _⊤ 3.56
77	R _T 4.29	R _T 4.08
88	R _⊤ 4.77	R _⊤ 4.61
99	R _⊤ 5.25	R _⊤ 5.14

Roof Application – suspended ceiling (150mm concrete)

Product Thickness	Heat Flow In	Heat Flow
(mm)		Out
27	R _T 3.32	R _⊤ 2.18
31	R _T 3.50	R _⊤ 2.38
42	R _T 4.01	R _T 2.91
55	R _T 4.60	R _T 3.55
66	R _T 5.09	R _T 4.08
77	R _T 5.59	R _T 4.61
88	R _⊤ 6.08	R _⊤ 5.14
99	R _⊤ 6.57	R _⊤ 5.67

Unenclosed sub-floor application (150mm concrete)

Product Thickness	Heat Flow In	Heat Flow
(mm)		Out
27	R _⊤ 1.49	R _⊤ 1.64
31	R _T 1.66	R _⊤ 1.83
42	R _T 2.15	R _⊤ 2.36
55	R _T 2.72	R _T 2.98
66	R _T 3.20	<u>R</u> _T 3.51
77	R _⊤ 3.68	R _⊤ 4.04
88	R _⊤ 4.16	R _⊤ 4.57
99	R _⊤ 4.64	R _⊤ 5.10

Enclosed sub-floor application (150mm concrete)

Product Thickness	Heat Flow In	Heat Flow
(mm)		Out
27	R _T 2.20	R _⊤ 2.94
31	R _⊤ 2.37	R _⊤ 3.13
42	R _⊤ 2.86	R _⊤ 3.66
55	R _⊤ 3.43	R _⊤ 4.28
66	R _⊤ 3.91	R _T 4.81
77	R _⊤ 4.39	R _⊤ 5.34
88	R _⊤ 4.87	R _⊤ 5.87
99	R _⊤ 5.35	R _⊤ 6.40

[^] The R-Values shown were prepared and certified by James M. Fricker MIEAust. CPEng. Consultant engineer in insulation to the BCA, the NCC 2011, and the insulation industry. These values are based upon product in an in service condition, and are in accordance with AS/NZS 4859.1:2002. Total R Values are based on product in-service conditions in accordance with AS/NZS4859.1:2002/Amdt 1 (Dec 2006) including the alteration of insulation material R for temperature and derations of reflective foil emittances due to dust as noted. Where a cavity is sealed, it is assumed there is no dust and hence emittance is not derated.

Storage

Must be kept dry and indoors. CI max must be protected from outside elements, wind, rain and direct sunlight.

Environmental and Formaldehyde Free Statement

In keeping with Thermacon Insulations dedication to supplying only the best Formaldehyde Free products, our CI Max Soffit Boards and All Purpose (PIR) do not contain any measurable levels of Formaldehyde.

The following is an extract from a report written by four research scientists of Dow Chemical Company, Midland MI, USA in to comparison between Phenolic Foam and Polyisocyanurate Foam (PIR):

Formaldehyde:

"Liquid chromatography (LC) was used to determine the amount of unreacted formaldehyde monomer remaining in the Phenolic foam samples. The total residual formaldehyde found in both phenolic foam samples ranged from 137-264 PPM. As a comparison, the raw materials used to produce PIR do not measure a reportable level of formaldehyde"

CI Max Soffit Board (PIR) is produced with an EPA compliant hydrocarbon-based blowing agent which has a zero Ozone Depletion Potential (ODP) and virtually no Global Warming Potential (GWP). It meets CFC and HCFC free specification requirements.







CI Max Soffit Board

INSTALLATION GUIDE

Thermacon CI MAX Soffit Board should be fitted to concrete roof or floor using a minimum of 11 insulation fasteners with a minimum head diameter of 40mm.

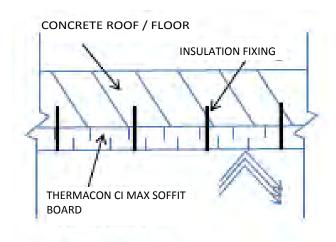
1.Thermacon CI MAX Soffit Board can be fixed overhead in either a staggered pattern or a square pattern. All joints are required to be taped with a minimum 48mm Reinforced tape.

2.Fixings are required to be evenly distributed over the board. Use 4 fasteners along each long side no less than 50mm, no more than 150mm from the edge. Use 3 fixings through the centre offset from the edge positions. The fixings are required to penetrate the substrate by at least 40mm.

3.Where the board is being installed in areas subject to external wind pressure, there may be a requirement for additional fixings. This should be assessed in accordance with the appropriate Australian Wind Load standards.

4.Where the substrate is severely uneven or damaged, either an alternative product with the identical or superior 'R Value' and performance, which would allow fixing in the same manner as the PIR Board, or, the fixing of furring channels which would support the Thermacon CI Max Soffit Board evenly is recommended. Please contact your Thermacon consultant who will only be happy to offer you a cost effective, successful solution to your problem.

INSTALLATION DETAIL















Revision III - Revision Date: 16.06.2023



FIXING PATTERN

