



## PRODUCT SPECIFICATION SHEET

## CORE: VOLCORE EXTERNAL WALLS & FACADES

### VOLCORE CORE

In response to the industry need for high performance fire resistant panel. ASKIN Volcore is a non combustible material that has been tested to C1.9e performance requirement as stipulated in C1.1 of the NCC. Volcore Panel is a versatile product that can be used in Type A and B Construction, external walls as well as plant rooms.

The Volcore External Wall system has been tested to all the performance requirements in concern of thermal, weatherproofing, fire, wind loadings and fire resistance levels.

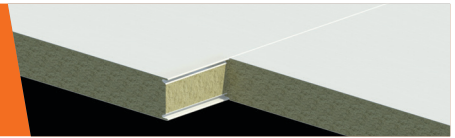
### FIRE PERFORMANCE

Volcore is a non-combustible insulation material tested to AS 1530.1 and ideal for industrial applications with a significant risk of fire such as plant rooms. Volcore panel can provide fire performance in excess of 2 hours.

CRITERIA	PERFORMANCE
AS 1530.3: 1993 (Test for Flammability of materials)	Flame Spread 0 Ignitability 0 Heat evolved 0 Smoke Dev. 1
C1.1 Fire Resisting Construction	- / 120 / 120 (150mm Panel)
AS1530.4.	- / 60 / 60 (100mm Panel)
C3.15 Penetrations of Walls, Floors and Ceilings by services.	- / 180 / 180 (150mm Panel) Penetrations - / 120 / 30 (150mm Panel) Fire Doors (Refer ASKIN FRL Details)
Compliance to C1.10 - AS5637.1	Group 1, SMOGRA = 0 (m <sup>2</sup> / s <sup>2</sup> x 1000)
AS ISO 9705:2003	
NCC compliant C1.9e	Non-Combustible
Compliant to FP1.4 and FP1.5 Weatherproofing	AS 4284 Water Ingress Test - Pass

**PRODUCT SPECIFICATION SHEET**

**CORE: VOLCORE EXTERIORS**



**R VALUES**

PANEL THICKNESS (mm)	50	75	100	120	150
Volcore R-Value (m <sup>2</sup> K/W) at 15°Celsius	1.3	1.9	2.6	3.1	3.8

Volcore Panel with Air Films (Zones 1-6, wind speed <7m/s)  
NCC Specification J1.2-2, AS 2498.1: 1993

**ACOUSTIC**

ASKIN® Panel achieves the following ratings for panel tested in accordance with AS 1191-2002 and assessed against AS/NZS ISO 717.1: 2004

PANEL THICKNESS	RW	RW + Ctr
ASKIN Volcore Panel 75mm	28	25
ASKIN Volcore Panel 100mm	29	
ASKIN Volcore Panel 120mm	30	
ASKIN Volcore Panel 150mm	31	

**PHYSICAL PROPERTIES**

CRITERIA	PERFORMANCE
Density	100 / 120 kg/m <sup>3</sup>
Trafficability	Resistant to maintenance traffic with crawl boards

**MANUFACTURING TOLERANCES**

CRITERIA	MANUFACTURED	TOLERANCE
Length	2,000mm to 13,500mm	+/- 5mm
Width	1,000mm / 1200mm. Dependant on location and MOQ.	+/- 2mm
Thicknesses	50, 75, 100, 120, 150mm	+/- 2mm

**COLOUR RANGE**

A full range of colours are available depending on Minimum Order Quantities and warranties. Please contact your ASKIN representative as each project needs clarification on Solar Absorbance as stated in the NCC.

**ENVIRONMENTAL**

**ZERO ODP**

Volcore insulation manufacturing does not use Ozone Depleting Substances such as CFCs, HCFCs or HFCs.

**Resource Efficiency**

As an insulation product Volcore is efficient in its use of resources. Coupled with the high insulation, this means that the energy savings from using Volcore will amount to many of times the energy required to produce the product.

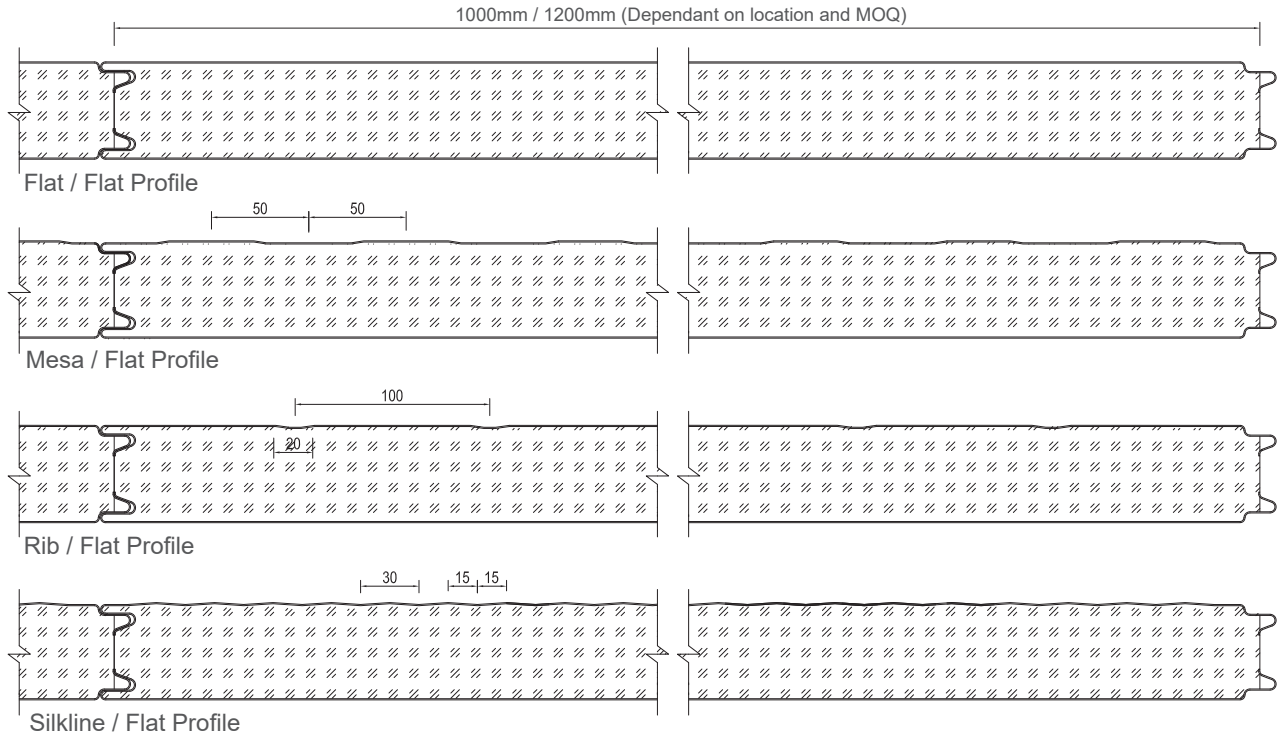
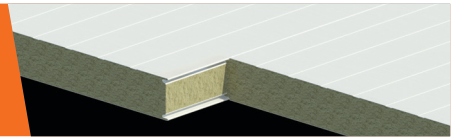
**FEATURES & BENEFITS**

- C1.9e Non-Combustible
- Warranties up to 15 years
- Fast to install
- 2 Hour FRL's achievable
- Resilient material for a changing climate
- Lengths available up to 13.5m
- Robust and durable building envelope
- Extremely thermally efficient (R Values up to 3.8)
- Moisture Resistant

**EXTERNAL WALL & FACADE PROFILE COMBINATIONS**

		EXTERNAL SURFACE PROFILES			
		FLAT	MESA (50mm)	RIB (100mm)	Silkline
INTERNAL SURFACE PROFILES	FLAT	✓	✓	✓	✓
	MESA (50mm)	✓		✓	
	RIB (100mm)	✓		✓	✓
	Silkline	✓	✓	✓	

Note: Other profile combinations available dependant on application.



**0.6mm EXTERNAL FACE SKIN WITH 0.6mm INTERNAL FACE SKIN**

**STANDARD STEEL SPECIFICATION**

AS/NZS 2728 Paint Coating

AS 1397 Substrate System

External Skin material – 0.6mm Thick G300S AM100 high performance steel with pre-painted superior polyester finish coat of 25 microns.

Internal Skin material – 0.6mm Thick G300S Z275 pre-painted off-white (Permaguard®) steel with superior polyester finish coat of 25 microns and antibacterial protection.

**PANEL WEIGHT**

PANEL THICKNESS (mm)	50	75	100	120	150
Mass (kg / m <sup>2</sup> ) for 0.6 / 0.6	15.4	18.2	20.9	23.1	26.4

**PANEL SPAN (m)**

Allowable UDL accounting for ULS SLS Span/200 single or multiple span condition (kPa)

PANEL THICKNESS	2.0	2.4	3.0	3.6	4.0	5.0	6.0
50mm	1.36	0.94	0.60	0.42	0.34	0.22	0.15
75mm	2.11	1.46	0.94	0.65	0.53	0.34	0.23
100mm	3.03	2.10	1.35	0.94	0.76	0.48	0.34
120mm	3.90	2.70	1.73	1.20	0.98	0.62	0.44
150mm	5.19	3.61	2.31	1.60	1.30	0.83	0.58

- >0.87 kPa Minimum Exterior
- >0.5 Minimum Internal
- <0.5 kPa Special Design

Span data generated in accordance with AS/NZS 1170: 2011  
Based on 5% LPL 80% Confidence

**Disclaimer**

Information provided here for design guidance only. Designers are encouraged to seek advice from a suitably qualified professional. All data is subject to change without notice.