

DeltaCool-EPS-FR is an Insulated Wall Panel System, comprising of two pre-painted, roll-formed steel skins, bonded to a fire retardant grade expanded polystyrene insulating core.

Both skins have a roll-formed tongue and groove edge. Skins are coated with an anti-bacterial paint that inhibits the growth of bacteria.

CodeMark

CodeMark Australia Certificate CM40365 certifies that DeltaCool-EPS-FR complies with the stated performance provisions of the NCC2022. Please refer to the certificate as displayed on our web page for the exact details of the compliance.



Profiles Available

- Smooth
- Ribbed
- MicroRibbed
- 5V
- SingleV

Recommendations

- Cold Stores
- Commercial Kitchens
- Food Processing Areas
- Portable Buildings
- Home Extensions
- Spray Booths
- Wineries
- Commercial Buildings
- Residential Buildings
- Growing Rooms

Bushfire Attack Level - BAL 29

DeltaCool-EPS-FR Wall up to 150mm thick has a BAL 29 rating as per the BRANZ Bushfire Report FC10893-001, 24 October 2018

Fire Test Certificate - AS ISO 9705

Group 1 Classification in accordance with NCC Volume One Specification BCA2022 C2D11 & Specification 7, Fire Hazard Properties, Clause S7C4 determined in accordance with AS 5637.1:2015 as per BRANZ test report 374 Issue 2 on 23rd February 2021

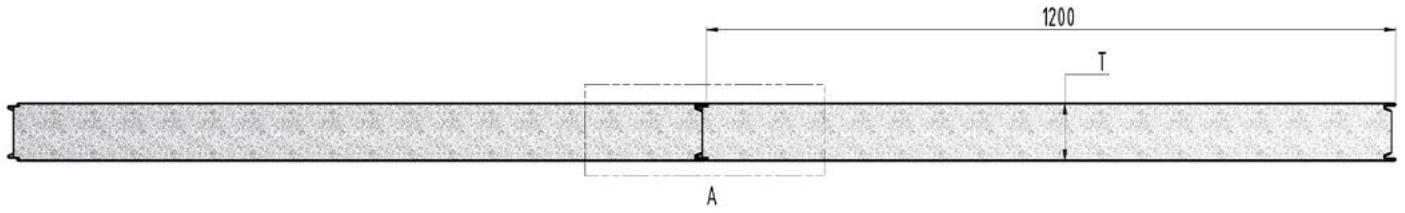
Early Fire Hazard Properties AS 1530.3:1999

AWTA Test Report 18-006076 14-11-2018

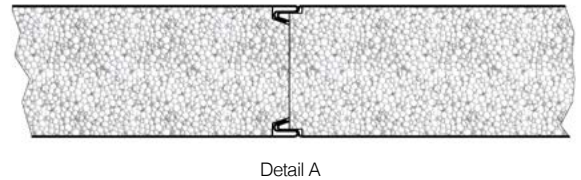
Index	Test Range	External Top Skin
Ignitability	0-20	0
Spread of Flame	0-10	0
Heat Evolved	0-10	0
Smoke Developed	0-10	2

Due to the nature of the manufacturing process the actual dimensions may vary. Please refer to the stated acceptable tolerances allowances.

Steel Skin Details ColorBond®	Top Skin	0.40mm / 0.60mm / G300 Z275	
	Bottom Skin	0.40mm / 0.60mm / G300 Z275	
Max. Skin Temperature	78°C Dry Heat		
Core Material Details	Expanded Polystyrene - Fire Retardant Grade		
Thermal Conductivity AS 1366.2/ASTM C 518	Average result of 0.042 W/mK @ 23°C		
Adhesive	Thermosetting two-part adhesive		
Core Density	13.5kg/m³		
Panel Weight (kgs/m²) based on 0.6mm steel skins	50mm Panel	10.58	
	75mm Panel	10.94	
	100mm Panel	11.30	
	150mm Panel	12.02	
	200mm Panel	12.72	
External Wall R Value (m².K/W) AS/NZS 4859 Parts 1 & 2:2018	Thickness	Winter (15°C)	Summer (23°C)
	50mm Panel	1.39	1.32
	75mm Panel	1.91	1.81
	100mm Panel	2.53	2.40
	150mm Panel	3.70	3.52
200mm Panel	4.89	4.64	
Certificate of Conformity	CodeMark Australia Certificate - CM40365		
Length Tolerance (mm)	5mm+/-		
Sheet Coverage (mm)	1200mm +/-5mm		
Length (mm)	Cut to Length Min of 1800mm		
Thickness (mm)	50,75,100,150, 200		
Flatness Standards	0.40mm 0.60mm	Surface deformations can be apparent to the naked eye when observed in certain lighting conditions	



0.60mm DeltaCool-EPS-FR Bracing Capacity			
Panel Height (m)	2.4	1.2*	4.8*
Kn/m	5.0	10.0	2.5
Bracing Units (BU)	100	200	50



* Figures for 1.2m & 4.8m high panels are extrapolated. It is acceptable to extrapolate Bracing Capacity heights between 1.2m & 4.8m. For heights outside of this dimension range, Diaphragm Analysis is required to establish Bracing Capacity.

EXTERNAL SPANS - ROOF & WALL

DeltaCool-EPS-FR Panel Span Tables (mm)

		Roof					Wall		Roof					Wall	
		Freestanding	1 Wall	2 Wall	3 Wall	Enclosed			Freestanding	1 Wall	2 Wall	3 Wall	Enclosed		
N1	50mm	5300	5300	5300	4200	4700	3550	N3	50mm	4400	4400	3800	2750	3300	3550
	75mm	7100	7100	6500	4500	5300	4400		75mm	5400	5200	4200	2900	3600	4000
	100mm	7800	7500	7000	4850	5500	5250		100mm	5600	5400	4400	3050	3900	4300
	150mm	9600	9600	7600	5600	7500	8050		150mm	6900	6500	5000	3300	4900	4900
	200mm	10500	10500	8300	6600	8200	10050		200mm	7800	7800	5400	3700	5300	6300
N2	50mm	5000	5000	4300	3450	4200	3550	N4	50mm	3600	3600	2500	2050	2400	2750
	75mm	6500	6500	5300	3850	4700	4400		75mm	4400	3900	2650	2150	2600	3050
	100mm	7000	6700	5500	3950	4850	5250		100mm	4600	4100	2800	2250	2700	3150
	150mm	8600	8600	6300	4500	6100	8050		150mm	5600	4800	3400	2450	3300	3650
	200mm	9800	9800	7200	4800	7100	10050		200mm	6800	5400	3600	2650	3500	4000

The Engineer's notations relating to the applied conditions of use of the table are fully displayed on our web page.

INTERNAL SPANS - CEILING, WALL & COLD STORAGE

DeltaCool-EPS-FR Panel Span Tables (mm)

Application	Maximum Pressure	Single Span (mm)								Continuous Span (mm)							
		50mm	75mm	100mm	125mm	150mm	175mm	200mm	250mm	50mm	75mm	100mm	125mm	150mm	175mm	200mm	250mm
Non Load Bearing Walls	0.25 kPa	5900	7900	9990	10808	11180	11600	12200	12840	5900	8140	9990	10880	11180	11600	12200	12840
Load Bearing Walls		4370	5850	7390	8050	8270	8580	9030	9500	4910	6020	7390	8050	8270	8580	9030	9500
Ceilings		3950	5290	6690	7290	7490	7770	8170	8600	4450	5450	6690	7290	7490	7770	8170	8600
Non Load Bearing Walls	Chiller >0°C	-	-	6990	7620	8940	9280	9760	10270	-	-	6990	7620	8940	9280	9760	10270
	Freezer <0°C	-	-	-	-	7830	8120	8540	8990	-	-	-	-	7830	8120	8540	8990
	Blast Freezer <-25°C	-	-	-	-	-	-	7810	8220	-	-	-	-	-	-	7810	8220
Load Bearing Walls	Chiller >0°C	-	-	6390	7510	7830	8120	8540	8990	-	-	6780	7660	7980	8280	8710	9170
	Freezer <0°C	-	-	-	-	7830	8120	8540	8990	-	-	-	-	7830	8120	8540	8990
	Blast Freezer <-25°C	-	-	-	-	-	-	7810	8990	-	-	-	-	-	-	7890	8270
Ceilings	Chiller >0°C	-	-	6190	7290	7490	7770	8170	8600	-	-	5880	6930	7120	7380	7770	8340
	Freezer <0°C	-	-	-	-	7490	7770	8170	8600	-	-	-	-	6830	7090	7450	8010
	Blast Freezer <-25°C	-	-	-	-	-	-	7690	8600	-	-	-	-	-	-	7070	7570

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As at the stated Version Date all of the information contained in this document is correct. Please check on our WebPage to ensure that you're referencing the current version.

