## **DELTA COLDROOM RANGE**



## **> DeltaCool™-Coldrooms**

DeltaCool<sup>™</sup> is the perfect solution for walling applications, utilising modern Insulated Panel technologies.

- An all-in-one walling solution for energy efficient housing or cold-rooms
- Wide 1200mm panel for faster installation and less visible joins
- Impressive insulating and sound dampening properties
- Available in 3 steel thicknesses (0.6mm, 0.5mm & 0.4mm)
- Steel face finishes available in Smooth, Ribbed, Mesa, Mico-Ribbed, 5V and Single V
- Wide range of classic and contemporary colours to match any existing structure
- Written 20 year structural warranty for true peace of mind
- \* Download technical data information from the Delta Panels™ website



DeltaCool<sup>™</sup> is an Insulated Wall Panel System, comprising of two pre-painted, roll-formed steel skins, bonded to an insulated core of either fire retardant grade polystyrene, polyisocyanurate or mineral wool.

Both skins have a roll-formed tongue and groove edge.

Skins are coated with an anti-bacterial paint that inhibits the growth of bacteria.

**Delta Panels Pty Ltd** 

* Polyisocyanurate - PIR is Factory Mutual Approved							
Steel Skin Details	Top Skin	0.40mm	0.40mm / 0.60mm / G300 Z275				
ColorBond®	Bottom Skin	0.40mm	0.40mm / 0.60mm / G300 Z275				
Adhesive	Thermosetting two-part adhesive						
Core Material	Expanded Po Fire Retarda	olystyrene nt Grade	Polyisocyanurate	Mineral Wool			
Options		EPS-FR	PIR	MW			
Thermal Conductivity	22.5°C	0.037	0.232	0.042			
Core Density	kg/m³	13.5	38/42	100			
	50mm Panel	10.58	12.58	16.0			
0.6mm	75mm panel	10.94	13.88	18.5			
Skin Weight	100mm Panel	11.17	15.17	21.0			
(kg/m²)	125mm Panel	11.80	16.17	23.5			
	150mm Panel	12.23	18.23	26.0			
	50mm Panel	1.4	2.16	1.3			
	75mm panel	2.1	3.23	1.9			
	100mm Panel	2.7	4.31	2.5			
R Value @ 22.5°C	125mm Panel	3.4	5.39	3.2			
	150mm Panel	4.1	6.47	4.1			
	200mm Panel	5.4	7.54	-			
	225mm Panel	6.1	8.62	-			
Sheet Coverage	Sheet Coverage 1200mm						
Length (mm)	Cut to length. Min. of 1800mm						
Thickness (mm)	35,50,75,100,125,150,175,200, 225, 250 * MW 50-150 only.						
Flatness Standards	0.40mm 0.60mm	Surface deformations can be apparent to the naked eye when observed in certain lighting conditions					

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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 interpolate Bracing Capacity heights between 1.2m & 4.8m. For heights outside of this dimension range, Diaphragm Analysis is required to establish Bracing Capacity.



**Shear Load Transference** - Shear load is transferred by rivets into the floor / ground surface or the perpendicular walls, ceiling & roof at a rate of 1.21 kN per 4.0 mm diameter rivet.

Fixing rivets at 200mm centres complies with the 20-minute flame barrier requirements and delivers 14.5 kN of shear capacity transfer per panel (6 on each side) horizontally, and 12.1 kN per metre in vertical joints. Limited by the ability of the panel to transfer the shear.

0.6mm DeltaCool-EPS-FR Wind Pressure (kPa)									
Span (mm)	Panel Thickness (mm)								
	50mm	75mm	100mm	125mm	150mm	175mm	200mm	250mm	
2000	1.84	2.92	6.11	6.11	7.35	8.01	9.21	11.55	
2400	1.42	2.54	5.14	5.14	6.28	6.92	7.92	9.67	
3000	0.97	1.86	3.73	3.73	4.93	5.35	6.00	7.65	
3600	0.70	1.39	2.68	2.68	3.84	4.28	4.77	6.05	
4200	0.51	1.06	1.96	1.96	2.87	3.33	3.79	4.81	
4800	0.38	0.81	1.49	1.49	2.19	2.57	2.94	3.67	
5400	0.29	0.64	1.17	1.17	1.72	2.02	2.31	2.88	
6000	0.22	0.50	0.94	0.94	1.38	1.62	1.86	2.32	
6600	0.17	0.39	0.77	0.77	1.14	1.34	1.54	1.91	
7200	0.12	0.30	0.64	0.64	0.95	1.13	1.29	1.60	
7800	0.09	0.24	0.54	0.54	0.80	0.95	1.10	1.36	
8400	0.07	0.19	0.43	0.43	0.69	0.82	0.94	1.17	
9000	0.06	0.15	0.35	0.35	0.60	0.71	0.82	1.01	
9600	0.05	0.14	0.27	0.37	0.48	0.54	0.66	0.82	
10200	0.05	0.13	0.18	0.29	0.39	0.40	0.53	0.68	

## The above table lists ultimate wind load pressures for strength design and the pressure corresponding to a Span/150 single span deflection for 0.6mm G300 steel skins bonded to a EPS-FR core and in accordance with Serviceability Limit State criteria as per AS 1170.0 - Table C1. The designer shall determine if Span/150 deflection ratio is appropriate for intended use. Loads for a more stringent deflection ratio can be determined by linearly proportioning the loads provided. Differential thermal effects are not incorporated in the loads provided.

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