

\* Conduit receiver track optional addition

**DeltaOrb-EPS-FR** is an Insulated Roof Panel System, comprising of two pre-painted, roll-formed steel skins, with a fire retardant grade expanded polystyrene insulating core.

CodeMark Australia Certificate - CM40309 - certifies that DeltaTrim-PIR complies with the stated BCA2019 performance requirements.

The top profile offers striking looks with all of the benefits of modern insulated panel technologies while the bottom skin has a roll-formed tongue and groove joining edge.

### Recommendations

- Patios
- Pergolas
- Carports
- Portable Buildings
- Home Extensions
- Commercial Buildings
- Residential Buildings
- Wineries
- Spray Booths

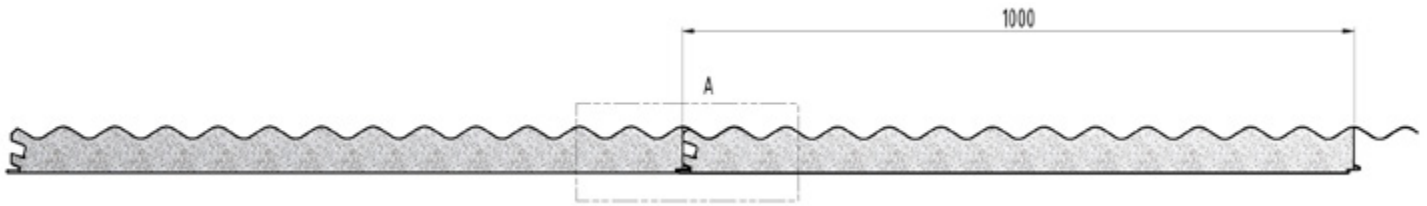
### Profiles Available (Underside Skin)

- Smooth
- Ribbed
- SatinLine
- Mesa

Single Spans (mm)					
Wind Category	Panel Thickness	3 Sides Open	2 Sides Open	1 Side Open	Fully Enclosed
N2 (W33)	50	5400	5000	4500	4300
	75	6500	5500	5000	4700
	100	7200	6200	5700	5500
N3 (W41)	50	4800	3800	3300	3000
	75	5500	4300	3900	3700
	100	6200	5000	4500	4300
N4 (W50)	50	4000	3300	3000	3000
	75	4600	3600	3400	3300
	100	5300	4100	3800	3500

<b>Steel Skin Details</b>	Top Skin	0.42mm / G550 AZ150
	Bottom Skin	0.60mm / G300 Z275
<b>Max. Skin Temperature</b>	78°C Dry Heat	
<b>Core Material Details</b>	SL Grade Polystyrene - Fire Retardant Grade	
<b>Thermal Conductivity AS 1366.2/ASTM C 518</b>	0.037 W/mK @22.5°C	
<b>Adhesive</b>	Thermosetting two-part adhesive	
<b>Core Density</b>	13.5kg/m <sup>3</sup>	
<b>Weight (kg/m<sup>2</sup>)</b>	50mm Panel	10.58
	75mm panel	10.94
	100mm Panel	11.17
	125mm Panel	11.80
	150mm Panel	12.23
<b>R Value @ 22.5°C</b>	50mm Panel	1.4
	75mm panel	2.1
	100mm Panel	2.7
	125mm Panel	3.4
	150mm Panel	4.1
<b>Certificate of Conformity</b>	CertMark International Certificate - CM40309	
<b>Sheet Coverage</b>	1000mm	
<b>Length (mm)</b>	Cut to Length Min of 1800mm	
<b>Length Tolerance (mm)</b>	5mm+/-	
<b>Thickness (mm)</b>	50, 75, 100, 125, 150	
<b>Minimum Roof Pitch</b>	3°	

Version Date: 05.01.2020



### Exposure to the External Surface - AS 3959-2009

BRANZ Fire Test Certificate 805 - 24-10-2018 - BAL40

### Early Fire Hazard Properties AS 1530-1999

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



Detail A

**DeltaOrb-EPS-FR** Acoustic Testing has been performed in compliance with the requirements of AS 1191-2002 "Acoustics - Method for Laboratory Measurement of Airborne Sound Insulation of Building Elements".

The procedures specified by AS 1276-1979 and AS/NZS ISO 717.1:2004 were used to calculate the Sound Transmission Class (STC) and the Weighted Sound Reduction Index (Rw) of **DeltaOrb-EPS-FR**.

**DeltaOrb-EPS-FR** is classed as trafficable when used in a roof application.

### DeltaOrb-EPS-FR Acoustic Values

Frequency		50mm	125mm
	100		15.41
160		16.40	15.09
200		18.81	17.70
250		19.70	18.51
315		21.39	19.40
400		22.31	19.69
630		23.40	19.10
800		23.69	17.31
1000		25.61	18.29
1250		21.01	30.10
1600		20.00	36.19
2000		34.79	37.30
2500		41.70	37.09
3150		44.10	35.69
5000		44.61	39.90
<b>STC</b>		24.00	23.00
<b>RW</b>		25.00	24.00

### DeltaOrb-EPS-FR Fixing Details

Crest fixing only. One fixing every second crest

Panel Thickness (mm)	Fixing into Steel	Fixing into Timber
<b>50</b>	Tek 14 x 115 Hex Head Screw	T17 14 x 125 Hex Head Screw
<b>75</b>	Tek 14 x 135 Hex Head Screw	T17 14 x 150 Hex Head Screw
<b>100</b>	Tek 14 x 150 Hex Head Screw	T17 14 x 175 Hex Head Screw
<b>125</b>	Tek 14 x 175 Hex Head Screw	T17 14 x 200 Hex Head Screw
<b>150</b>	Tek 14 x 200 Hex Head Screw	T17 14 x 230 Hex Head Screw

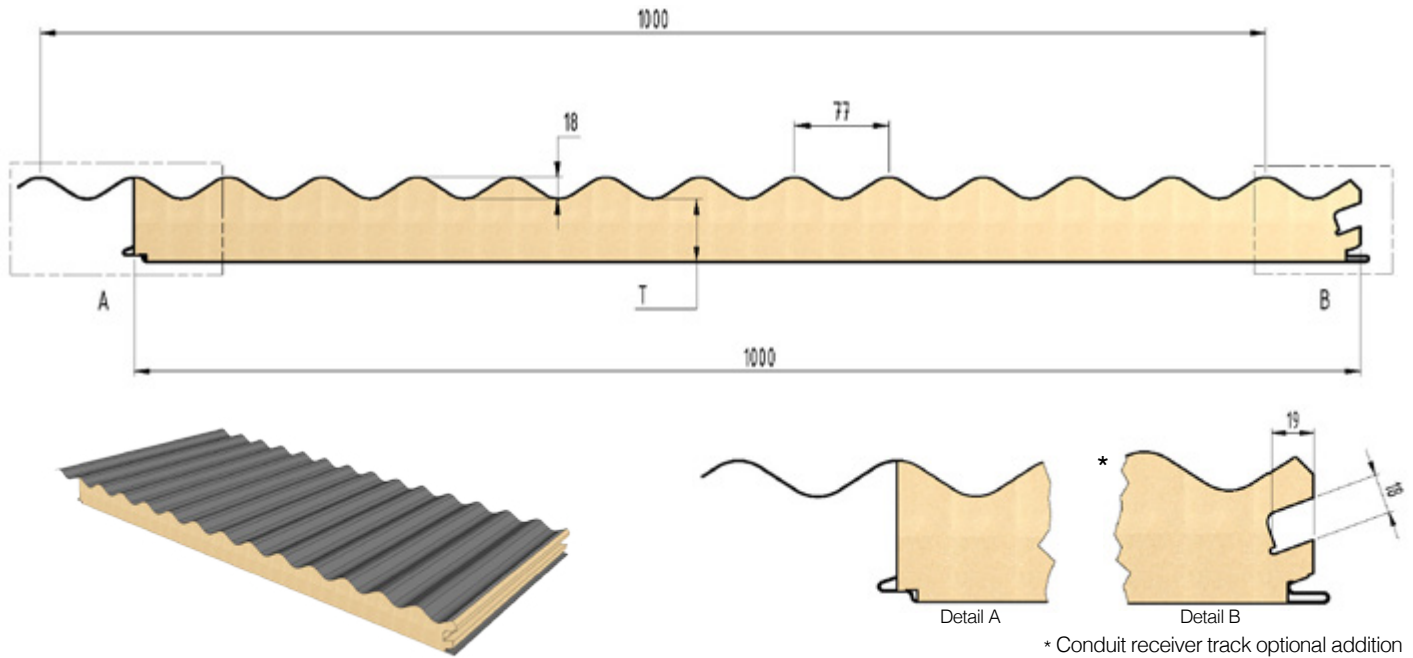
Use Cyclone Plate and Neo Washer on each fixing.

Upon Installation the overlap needs to be stitch screwed or riveted every 300mm.

Please refer to the web page for the available colour range, paint finishes and relevant warranty conditions.



Version Date: 05.01.2020



**DeltaOrb-PIR** is a Factory Mutual Approved Insulated Roof Panel System, comprising of two pre-painted, roll-formed steel skins, with a polyisocyanurate core.

CodeMark Australia Certificate - CM40309 - certifies that DeltaTrim-PIR complies with the stated BCA2019 performance requirements.

The top profile offers striking looks with all of the benefits of modern insulated panel technologies while the bottom skin has a roll-formed tongue and groove joining edge.

### Recommendations

- Patios
- Pergolas
- Carports
- Portable Buildings
- Home Extensions
- Commercial Buildings
- Residential Buildings
- Wineries
- Spray Booths

### Profiles Available (Underside Skin)

- Smooth
- Ribbed
- SatinLine
- Mesa

### Exposure to the External Surface - AS 3959-2009

BRANZ Fire Test Certificate 805 - 24-10-2018 - BAL40

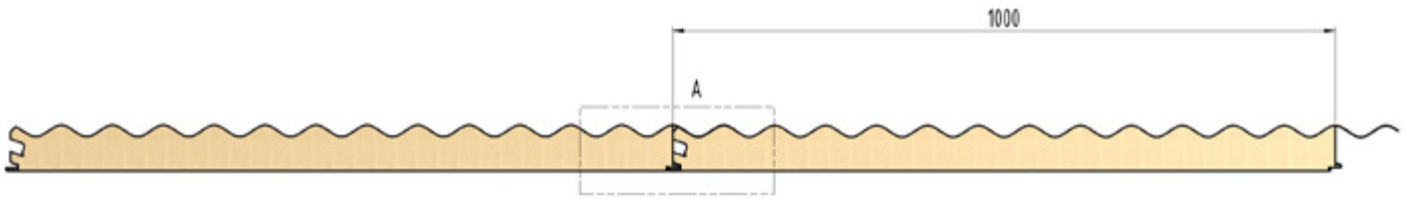
### Early Fire Hazard Properties AS 1530-1999

AWTA Test Report 18-006077 15-11-2018

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	3

<b>Steel Skin Details</b>	Top Skin	0.42mm / G550 AZ150
	Bottom Skin	0.4mm-0.6mm / G300 Z275
<b>Max. Skin Temperature</b>	78°C Dry Heat	
<b>Core Material Details</b>	Polyisocyanurate	
<b>Thermal Conductivity AS 1366.2/ASTM C 518</b>	0.0232 W/mK at 23°C	<b>Test Report D110856-001-01</b>
<b>Core Density</b>	38-42kg/m <sup>3</sup>	
<b>Weight (kg/m<sup>2</sup>)</b>	50mm Panel	12.58
	75mm panel	13.88
	100mm Panel	15.17
	125mm Panel	16.17
	150mm Panel	18.23
<b>R Value @ 22.5°C</b>	50mm Panel	2.16
	75mm panel	3.23
	100mm Panel	4.31
	125mm Panel	5.39
	150mm Panel	6.47
<b>Factory Mutual</b>	Approved	
<b>Certificate of Conformity</b>	CertMark International Certificate - CM40309	
<b>Sheet Coverage</b>	1000mm	
<b>Length (mm)</b>	Cut to Length Min of 1800mm	
<b>Length Tolerance (mm)</b>	5mm+/-	
<b>Thickness (mm)</b>	50, 75, 100, 125, 150	
<b>Minimum Roof Pitch</b>	3°	

Version Date: 05.01.2020



### DeltaOrb-PIR Single Span Non-Cyclonic Span Tables

Wind Category	Panel Thickness	STYLE 1	STYLE 2	STYLE 3	STYLE 4	Maximum Overhang
		3 or more sides open	2 sides open	1 side open	Fully enclosed	
N1/N2 (W28 / W33)	50mm	5400	4800	4300	4400	900
	75mm	6700	5700	5200	5300	900
	100mm	7400	6300	5900	6000	1000
	125mm	8000	6700	6200	6300	1200
	150mm	8500	7000	6500	6500	1200
N3 (W41)	50mm	5100	4000	3400	3600	900
	75mm	5700	4500	4100	4200	900
	100mm	6200	4900	4500	4600	1000
	125mm	6600	5400	5000	5100	1200
	150mm	6900	5500	5100	5200	1200
N4 (W50)	50mm	4000	3100	2600	2700	600
	75mm	4700	3700	3200	3300	600
	100mm	5100	4300	3600	3700	800
	125mm	5400	4700	4200	4300	900
	150mm	5600	4900	4300	4400	900



Detail A

**DeltaOrb-PIR** Acoustic Testing has been performed in compliance with the requirements of AS 1191-2002 "Acoustics - Method for Laboratory Measurement of Airborne Sound Insulation of Building Elements".

### DeltaOrb-PIR Acoustic Values

Frequency	DeltaOrb-PIR Acoustic Values		
		50mm	125mm
	<b>STC</b>	24.00	23.00
<b>RW</b>	25.00	24.00	

### DeltaOrb-PIR Fixing Details

Crest fixing only. One fixing every second crest

Panel Thickness (mm)	Fixing into Steel	Fixing into Timber
<b>50</b>	Tek 14 x 115 Hex Head Screw	T17 14 x 125 Hex Head Screw
<b>75</b>	Tek 14 x 135 Hex Head Screw	T17 14 x 150 Hex Head Screw
<b>100</b>	Tek 14 x 150 Hex Head Screw	T17 14 x 175 Hex Head Screw
<b>125</b>	Tek 14 x 175 Hex Head Screw	T17 14 x 200 Hex Head Screw
<b>150</b>	Tek 14 x 200 Hex Head Screw	T17 14 x 230 Hex Head Screw

Use Cyclone Plate and Neo Washer on each fixing.

Upon Installation the overlap needs to be stitch screwed or riveted every 300mm.

To comply with Delta Panels Factory Mutual Certification, Fixings and Installation must conform with the conditions as outlined in the Factory Mutual approval displayed on our web page.

### DeltaOrb-PIR Multi Span Non-Cyclonic Span Tables

Wind Category	Panel Thickness	STYLE 1	STYLE 2	STYLE 3	STYLE 4	Maximum Overhang
		3 or more sides open	2 sides open	1 side open	Fully enclosed	
N1/N2 (W28 / W33)	50mm	5900	5280	4730	4840	900
	75mm	7200	6200	5700	5800	900
	100mm	7900	6800	6400	6500	1000
	125mm	8500	7200	6700	6800	1200
	150mm	9000	7500	7000	7000	1200
N3 (W41)	50mm	5600	4400	3740	3960	900
	75mm	6200	4950	4510	4620	900
	100mm	6700	5390	4950	5060	1000
	125mm	7100	5900	5500	5600	1200
	150mm	7400	6000	5600	5700	1200
N4 (W50)	50mm	4400	3410	2860	2970	600
	75mm	5170	4070	3520	3630	600
	100mm	5600	4730	3960	4070	800
	125mm	5900	5170	4620	4730	900
	150mm	6100	5390	4730	4840	900