

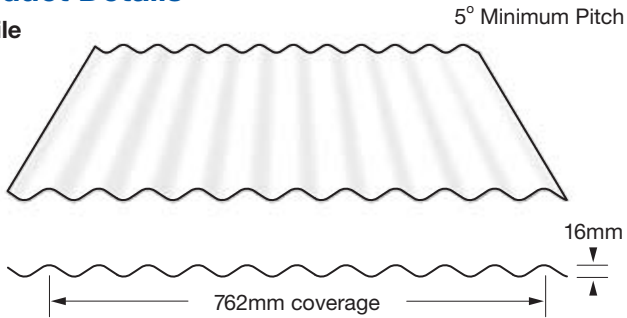
CORRUGATED Roof and Wall



Corrugated roofing has been used in domestic and industrial applications for over 100 years and is still very popular today. Corrugated is available in a wide range of colours and is suitable for roof and wall on contemporary homes. Galvanised roofing is also available for the old traditional roof.

Product Details

Profile



Material Specification

0.42 or 0.48	Zincalume®	G550 AM125
0.42 or 0.48	Galvanised	G550 Z450
0.42 or 0.48	Colorbond®	G550 AM100

Special Orders

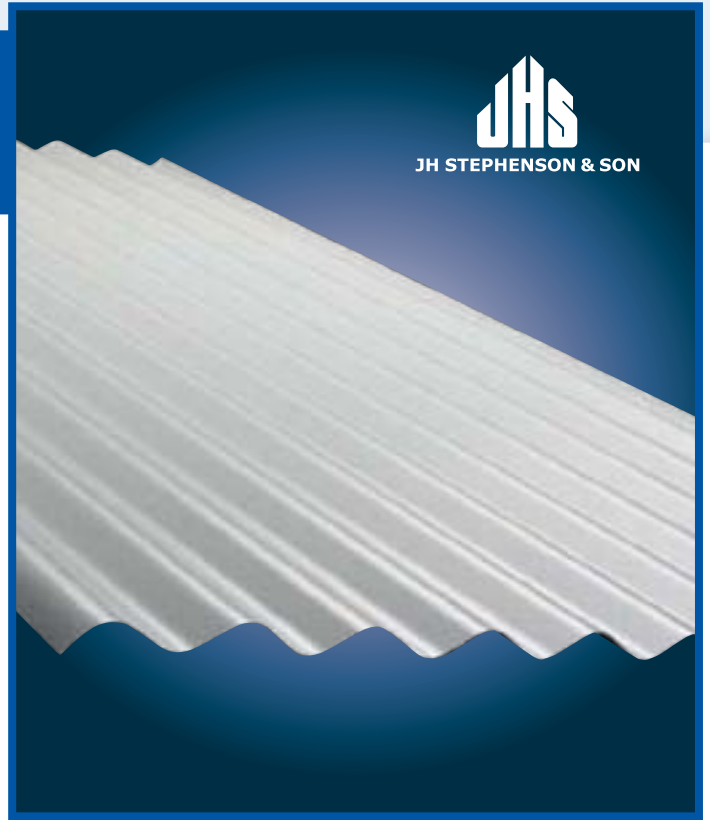
Stainless Steel, Metallic, Coolmax and Ultra

Product Mass

BMT		kg/m ²
0.42	Zincalume®	4.24
0.42	Colorbond®	4.27
0.42	Galvanised	4.65
0.48	Zincalume®	4.81
0.48	Colorbond®	4.85
0.48	Galvanised	5.23

Wind Load Conversion

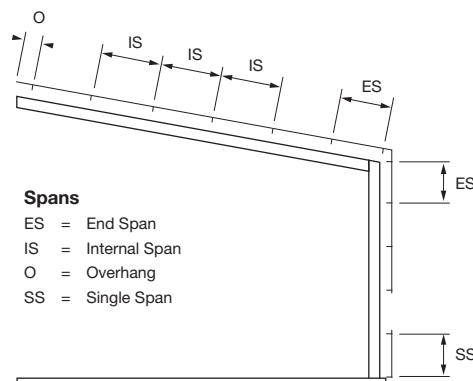
Wind Classification	Region & Category
(Domestic)	(Commercial/Industrial)
N1 (W28)	Reg A, Cat 3
N2 (W33)	Reg A, Cat 2.5 - Reg B, Cat 3
N3 (W41)	Reg A, Cat 2 - Reg B, Cat 2.5
N4 (W50)	Reg B, Cat 2



Maximum Support Spacings (mm)

Type of Span	Thickness (mm)	BMT
	.42	.48
ROOFS		
Single Span	700	800
End Span	900	1300
InternalSpan	1200	1700
Unstiffened Eaves Overhang	150	200
WALLS		
Single Span	1500	1600
End Span	1500	1800
InternalSpan	1800	2100
Overhang	200	200

Maximum Support Spacing has been determined by load tests and deflection in accordance with AS 1562-1 AS 4040 1 & 2 1992.





Corrugated - Roof and Wall

.42 Bmt Corrugated Roof & Wall

Limit State Wind Pressure Capacities (kpa)

3 Screw intermediate 5 Screw Gutter & Apex Line				Walls Only				
SPAN TYPE		Span mm						
		700	900	1200	1500	1800	2100	2400
SINGLE	Serviceability Strength		See 5 Screw for Single Span					*
END	Serviceability Strength		1.40 7.50	1.16 5.80	1.00 4.70	0.90 3.80	0.80 3.20	
INTERNAL	Serviceability Strength			1.45 7.40	1.21 6.00	1.00 4.80	0.90 3.80	*

.42 Bmt Corrugated Roof & Wall

Limit State Wind Pressure Capacities (kpa)

5 Screw intermediate 5 Screw Gutter & Apex Line				Walls Only				
SPAN TYPE		Span mm						
		700	900	1200	1500	1800	2100	2400
SINGLE	Serviceability Strength	4.60 12.00	3.18 12.00	1.75 10.00	0.90 8.00	0.35 6.00		*
END	Serviceability Strength		4.25 12.00	2.75 9.50	1.60 7.40	0.80 5.75	0.50 4.45	*
INTERNAL	Serviceability Strength			3.25 12.00	2.20 10.70	1.48 8.50	0.90 6.60	*

.48 Bmt Corrugated Roof & Wall

Limit State Wind Pressure Capacities (kpa)

3 Screw intermediate 5 Screw Gutter & Apex Line				Walls Only						
SPAN TYPE		Span mm								
		800	900	1200	1300	1500	1600	1700	1800	2100
SINGLE	Serviceability Strength		See 5 Screw for Single Span							
END	Serviceability Strength		1.65 9.30	1.46 7.20	1.42 6.10	1.30 4.90	1.25 4.55	1.20 4.35	1.15 4.00	
INTERNAL	Serviceability Strength					1.61 7.20	1.50 6.45	1.42 6.00	1.20 5.50	1.05 4.50

.48 Bmt Corrugated Roof & Wall

Limit State Wind Pressure Capacities (kpa)

5 Screw intermediate 5 Screw Gutter & Apex Line				Walls Only						
SPAN TYPE		Span mm								
		800	900	1200	1300	1500	1600	1700	1800	2100
SINGLE	Serviceability Strength	4.80 12.00	3.74 12.00	2.23 10.75	1.90 10.25	1.30 8.95	1.00 8.30	0.80 7.60	0.55 7.00	
END	Serviceability Strength		4.70 12.00	2.85 12.00	2.50 11.60	1.90 10.30	1.70 9.55	1.55 8.60	1.40 7.50	
INTERNAL	Serviceability Strength					3.30 12.00	2.80 11.65	2.50 11.10	2.15 10.55	1.60 8.00

Compliance

Wind pressure capacity tables have been determined by full scale testing in accordance with AS 1562.1 and AS 4040.1&2 1992.

Non-Cyclonic areas.

The pressure considered is based on buildings up to 10m high in Region B, Terrain Category 3, $M_3 = 0.85$, $M_1 = 1.0$, $M = 1.0$ with the following assumptions made:

Roofs

$C_{pi} = +0.20$, $C_{pe} = -0.90$, $K_1 = 2.0$ for single and end spans, $K_1 = 1.5$ for internal spans.

Walls

$C_{pi} = +0.20$, $C_{pe} = -0.65$, $K_1 = 2.0$ for single spans, $K_1 = 1.5$ for internal spans.

Note

Serviceability tests are carried out to maximum allowed deflection.

Pitch deflection on the 3 screw is reached before max span deflection is reached.

Maximum pitch deflection is not reached with 5 screw fixings.



Corrugated - Roof and Wall



Fixing Details

Crest: 3 Fasteners



Crest: 5 Fasteners



Valley: 3 Fasteners

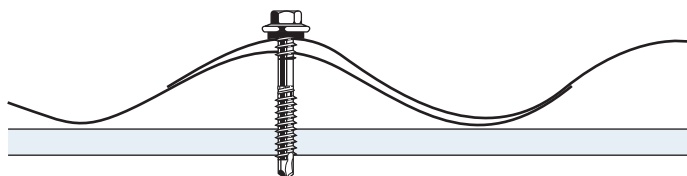


Valley: 5 Fasteners



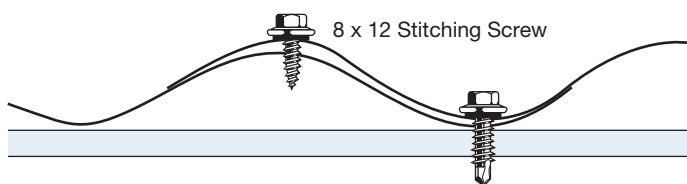
Crest Fix

Roof or Walls



Valley Fix

Walls only (note washers and screws)



Corrugated Roofing

Should be laid square to the gutter line and into the prevailing wind, with a side lap of 1.5 corrugations. Five fasteners at both ends of roof sheets (apex and gutterline). Roof sheets must be turned up at the apex and turned down at the gutter line.

Corrugated Wall

Side lap fixing is recommended mid span when spans exceed 1200mm. Use 8 x 12mm Stitching Screws.

Design Considerations

The recommended minimum pitch for corrugated roofing is 5°.

Length

- Corrugated roofing is custom cut to your exact length.
- The maximum length for pierce fixed roofing is 23.7m before an expansion joint is required. This length is recommended for light colours only. Dark colours should not exceed 16.0m because of increased thermal expansion.

Foot Traffic

- Always walk over purlins and place your foot print over as many corrugations as possible, to avoid sheet damage.

Handling On Site

- Delivery arrangements are the responsibility of the customer.
- Sheets should be kept dry and clear of the ground.
- When handling sheets use dry, clean gloves and don't drag sheets over each other.

Cutting

- It is recommended to cut sheets with tin snips or a nibbler. Don't use an abrasive disc cutter.

Fasteners

	Fixing to Steel	Fixing to Timber
Crest Fixing Roof	12 - 14 x 35 Tekes or M6 x 50mm Tekes	12 x 50 Type 17
Neo Washer	.55-1.0mm Thick Steel	M6 x 50 Tekes
Walls Neo Washer	10 - 16 x 16 Tekes	12 x 25 Type 17



Roof Pressure Test

