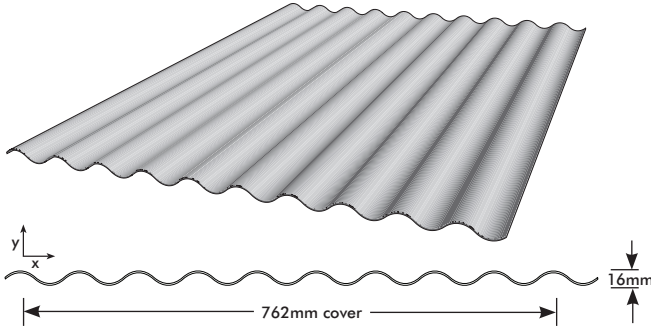


2.15 S-Rib™ Corrugated



S-Rib™ Corrugated Material Specifications						
Property		0.35 BMT	0.42 BMT	0.48 BMT	0.60 BMT	Notes
Total Coated Thickness		0.40	0.47	0.53	0.65	TCT
Mass / Unit Length (kg/m)	ZINCALUME®	2.75	3.30	3.70	4.70	1000 / (m/Tonne)
	COLORBOND®	2.80	3.36	3.77	4.78	
Mass / Unit Area (kg/m²)	ZINCALUME®	3.60	4.34	4.87	6.18	1000 / (m Mass/profile width)
	COLORBOND®	3.68	4.42	4.96	6.29	
2 nd moment of area about principal axis (10 ³ mm ⁴)	I _x	11	14	15	19	
	I _y	19510	23420	26760	33450	
Section modulus about principal axis (10 ³ mm ³)	Z _x	1	2	2	2	
	Z _y	47	56	64	80	
Warping Constant (10 ⁹ mm ⁶)	I _w	1	1	1	1	
Torsion Constant (mm ⁴)	J	13	23	35	68	
Minimum Yield Strength		G550	G550	G550	G300	Base Steel Designation
Coating Class		AZ150 (150g/m²) AZ200 (Ultra) Z450 (Galvanised) Z600 (Heritage Galvanised)				Minimum Coating g/m² of Zinc - Aluminium
Coverage (mm)		762				
Tolerance		Sheet Length ±7mm Cover Width ±4mm				
Thermal Expansion		2.9mm average per 5m at 50° C change				

Table 2.15.A S-Rib™ Corrugated Material Specifications

1. S-Rib Corrugated is manufactured to AS 1397 and AS 2728 Cat. 3. It is to be installed in accordance with AS 1445, AS 1562, and HB39.
2. The sectional properties are theoretical values per sheet width. These properties are gross values only.

Rainfall Capacity

For further information, please refer to sections 4.2 'Rainfall Intensity' and 4.3 'Water Carrying Capacity and Rainwater Run-Off'.

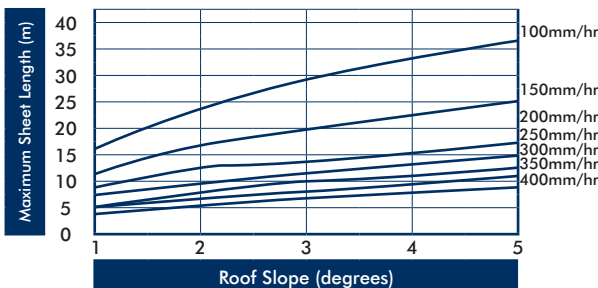


Figure 2.15.A S-Rib™ Corrugated Rainfall Capacity (mm/hr)

Note: Minimum recommended slope is 5°. Sheet lengths greater than 24m are not recommended due to thermal expansion and contraction.

S-Rib™ Corrugated Max Sheet Length (m)							
Roof Slope (degrees)	Rainfall Capacity (mm/hr)						
	100	150	200	250	300	350	400
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	37	25	18	15	12	11	9

Table 2.15.B S-Rib™ Corrugated Maximum Sheet Length (m)

Load Span Tables

The allowable spans have been determined from tests carried out in accordance with the following Australian Standards (wind load available by region): AS 1562.1 :1992, "Design and installation of sheet roof and wall cladding - Metal" and AS 4040:1992, "Methods of testing sheet roof and wall cladding".

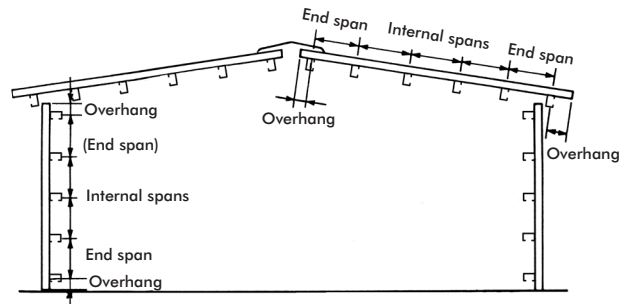


Figure 2.15.B End Spans, Internal Spans and Overhangs

Maximum Recommended Span* (mm) S-Rib™ Corrugated Non Cyclonic								
Span Type	0.35 BMT		0.42 BMT		0.48 BMT		0.60 BMT	
	Roof	Wall	Roof	Wall	Roof	Wall	Roof	Wall
End Span	N/A	1200	900	1350	1200	1800	1200	1350
Internal Span	N/A	1600	1200	1800	1600	2400	1800	1800
Unstiffened Overhang	N/A	N/A	200	N/A	250	N/A	200	300
Stiffened Overhang	N/A	N/A	300	N/A	350	N/A	300	300

Table 2.15.C S-Rib™ Corrugated Maximum Recommended Span - Non Cyclonic

S-Rib™ Corrugated Pierce Fixing - Non Cyclonic			
Fixing Supports	Crest Fixing	Valley Fixing (Wall only)	Side Lap Fixing
Steel 1.0 to 3.5mm	12-14x35mm Metal Tekes hexagon head with seal	10-16x16mm Metal Tekes hexagon head with seal	10-16x16mm hexagon head Tekes screws with seal
Timber Hardwood	M6-11x50mm RoofZips hexagon head with HiGrip & seal	M6-11x25mm RoofZips hexagon head with seal	
Timber Softwood	M6-11x50mm RoofZips hexagon head with HiGrip & seal	M6-11x25mm RoofZips hexagon head with seal	
Metal Battens (0.55 to 1.0mm)	M6-11x50mm RoofZips hexagon head with HiGrip & seal	15-15x25mm Metal Batten Tekes hexagon head with seal	

Table 2.15.D S-Rib™ Corrugated Pierce Fixing - Non Cyclonic

S-Rib™ Corrugated Pierce Fixing - Cyclonic			
Fixing Supports	Crest Fixing	Valley Fixing (Wall Only)	Side Lap Fixing
Steel 1.0 to 3.5mm	M5.5 x 50mm Auto Tekes hexagon head with HiGrip and seal	10-16x16mm Metal Tekes hexagon head with seal	10-16x16mm hexagon head Tekes screws with seal
Timber Hardwood	M6-11x65mm RoofZips hexagon head with HiGrip & seal	M6-11x25mm RoofZips hexagon head with seal	
Timber Softwood	M6-11x65mm RoofZips hexagon head with HiGrip & seal	M6-11x25mm RoofZips hexagon head with seal	
Metal Battens (0.55 to 1.0mm)	M6-11x50mm RoofZips hexagon head with HiGrip & seal	15-15x25mm Metal Batten Tekes hexagon head with seal	

Table 2.15.E S-Rib™ Corrugated Pierce Fixing - Cyclonic

SPECIFYING FIELDERS

Pierce Fixing

Fasteners must be selected to match the life expectancy of the cladding material. Recommendations from fastener manufacturers should be sought.

Only fasteners complying with AS 3566:2002 and those that are compatible with the roofing material should be used for its fastening.

Notes: All fasteners used externally should be fitted with an EPDM seal (washer).
Do not use punches to form fastener holes.

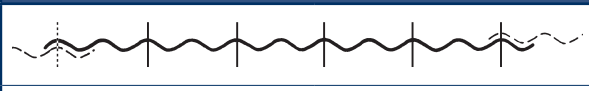
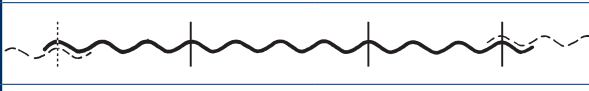
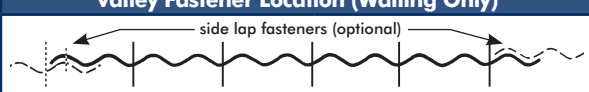
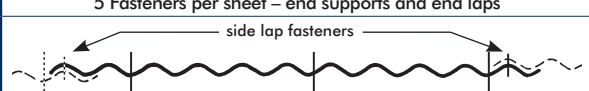
Fastener Spacings - Non Cyclonic	
Crest Fastener Location	
	5 Fasteners per sheet – end supports and end laps
	3 Fasteners per sheet – Internal supports Roofing should be lapped away from the prevailing weather.
Valley Fastener Location (Walling Only)	
	5 Fasteners per sheet – end supports and end laps side lap fasteners (optional)
	3 Fasteners per sheet – Internal supports side lap fasteners

Table 2.15.F S-Rib™ Corrugated Fastener Spacings - Non Cyclonic

AQUABLOK™ System

The AQUABLOK system utilises an anti-capillary gap that prevents water from seeping into roofing joints.

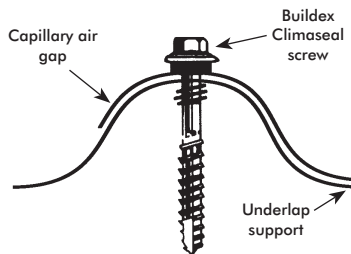


Figure 2.15.C AQUABLOK™ System

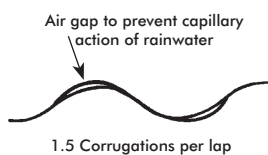


Figure 2.15.C Corrugation Laps

S-Rib™ Corrugated Installation Procedure

For installation procedures see section 4.7 "Typical Pierce Fix Installation Guide". For general handling instructions refer to section 5.0 'Maintenance and Care'.

Side Lap Fixing

It may be necessary to use side lap fasteners at mid spans when using S-Rib at maximum spans. These will help to hold the sheet laps firmly in place and maintain a weather-proof joint.

Turning of Roof Sheeting Ends

Refer to section 4.8 "Flashings, Cappings & Ends of Sheets".

Curving S-Rib™ Corrugated

For details regarding spring, crank and smooth curving of S-Rib sheets, please see section 4.5 "Curving of Steel Decks".

Curving quality corrugated is manufactured from G300 sub-strate (0.60 BMT). It is consequently more ductile, enabling specialist tradesmen using precision curving machines to form sheets to traditional heritage shapes and challenging architectural details down to radii as tight as 450mm. Fielders have a dedicated roll forming machine for G300 thus avoiding any inconsistency arising out of changing over from G550 Hi-tensile coil.



Curving Orders

When ordering curved sheets, please state the following:

Zincalume	Sheets
Colorbond	Sheets
Color	Sheets
Direction of laying (facing roof)	
Left to right	Sheets
Right to Left	Sheets
Overall Length of Sheet (Allow 50mm into Gutters)	mm

Bullnosed

A Radius (minimum 500mm)	mm
B Pitch or fall	mm
D Wall to outside fascia	mm
E Straight length	mm
H Height	mm

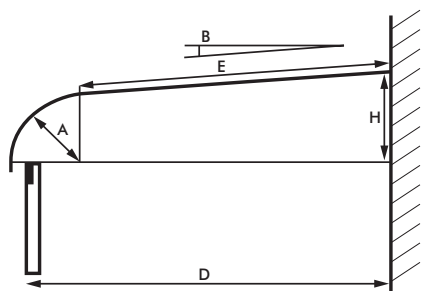


Figure 2.15.D Bullnosed Dimensions

Concave

D Wall to outside fascia	mm
H Height	mm
X Dip from Straight Line	mm

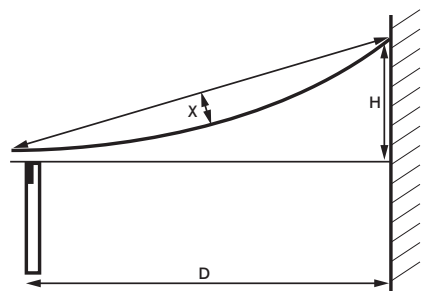


Figure 2.15.E Concave Dimensions

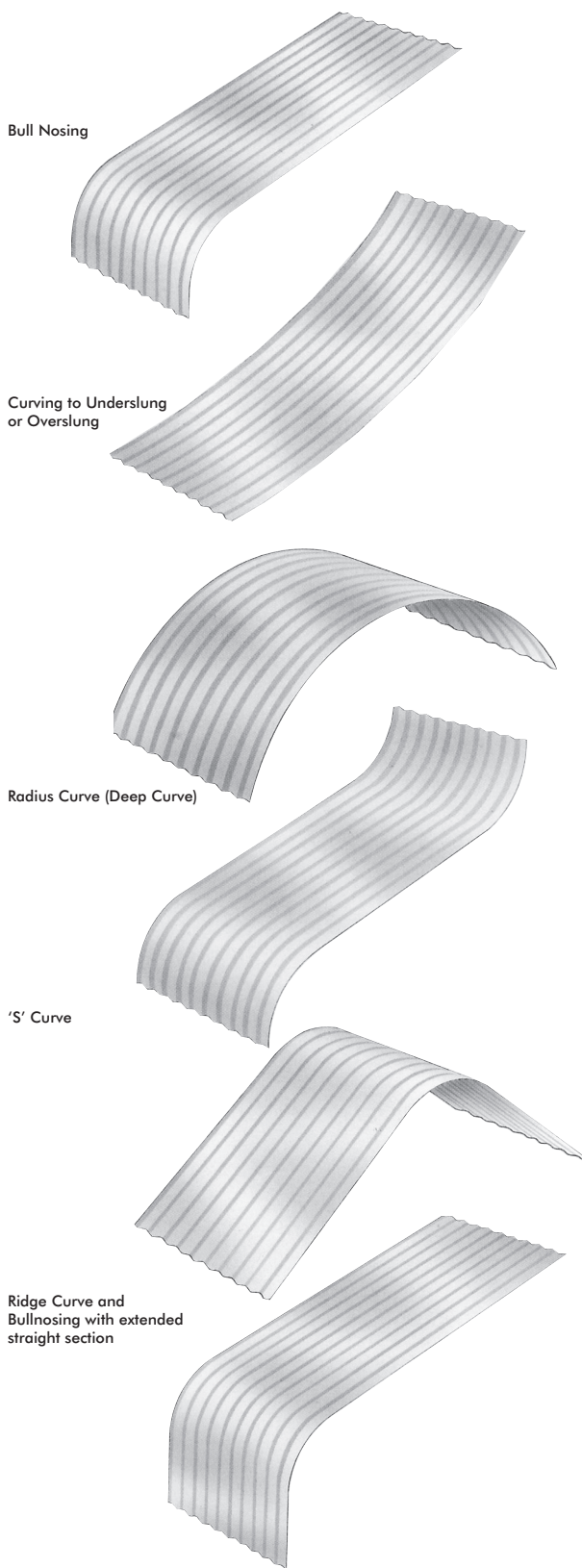


Figure 2.15.F Typical Curves

Curved Flashings

COLORBOND® and ZINCALUME® steel roofing gives the designer or architect greater flexibility than other roofing materials. Fielders curved flashings offer an attractive, watertight method of finishing off barges. Fielders sheet-metal workshop uses either Pittsburgh or Snap-Lock seams to achieve a curved profile flashing. Acrylead and flexible Deklite flashings may also be used.

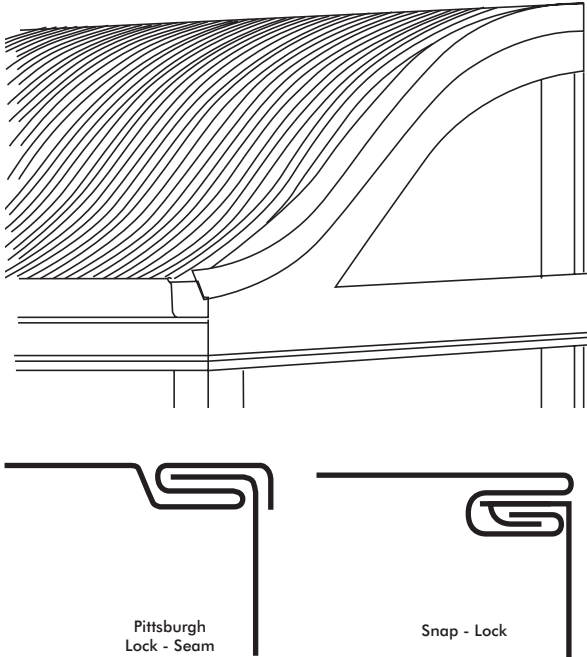


Figure 2.15.G Pittsburgh Lock-Seam and Snap-Lock

Hip Bracing

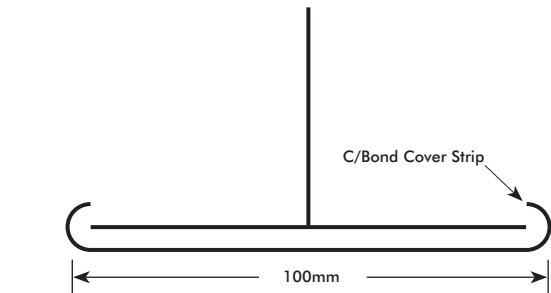
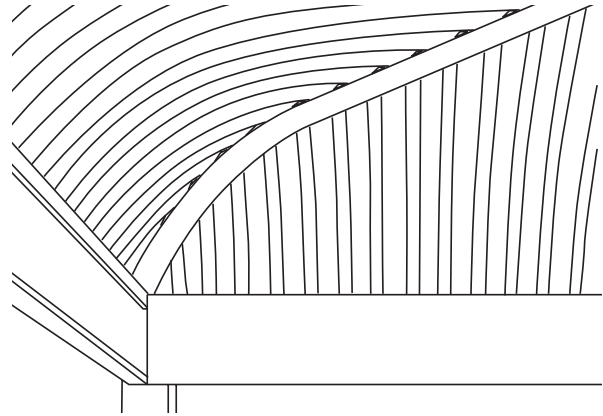


Figure 2.15.H Type A Hip Bracing

Figure 2.15.I Type B Hip Bracing

Curved Flashing Available Materials			
Finish	Conforming to Standard	BMT	Colour
ZINCALUME®	AS 1397 G300-AZ150	0.50	
COLORBOND® XRW	AS 1397 G300-AZ150 and AS 2728	0.50	As selected
COLORBOND® ULTRA	AS 1397 G300-AZ200 and AS 2728	0.55	As selected
COLORBOND® Stainless	Grade 430 base 300	0.45	As selected
Z600 Heritage Galvanised	AS 1397 G300-Z600	0.50	
Colorcoat HPS200	ZA255 Galvalloy Substrate (95% zinc and 5% aluminium) to BS EN 10214:1995, G220 tensile strength	0.50	As selected

Table 2.15.G Curved Flashing Available Materials

Hip Bracing Materials			
Finish	Conforming to Standard	BMT	Colour
Galvanised	AS 1397:2002 G300-Z450	0.95	-

Table 2.15.H Hip Bracing Materials

Cappings

Refer to section 3.5 'Cappings'.

Perforated Metal

S-Rib corrugated is also available ex stock in 0.48 BMT ZINCALUME® steel, conforming to AS 1397:2001 G550-AZ150, or in COLORBOND® steel (Surfmist only) to AS 1397:2001 G550-AZ150 with 2.38mm diameter holes at 6.74 pitch providing 11% open area. Other materials and gauges with different hole sizes and pitches are available upon request.

S-Rib Corrugated Flashings & Details			
Masonry Parapet Side Wall (Low) Product Code: CF1	Masonry Parapet Side Wall (High) Product Code: CF2	Apron Flashings Product Code: CF3 GIRTH 300	Apron Flashings Product Code: CF3 GIRTH 300
Headwall Apron Flashing Product Code: CF5 Girth 300	Soaker Gutter Product Code: CF6 Girth 350	Soffit Corner Flashing Product Code: CF7 Girth 150	Shoe Flashing Product Code: CF8
Offset Wall Flashing Type 1 Product Code: CF9 GIRTH 137	Offset Wall Flashing Type 2 Product Code: CF10	Valley Gutter Product Code: CF11 Girth 324	Under Over Flashing Product Code: CF12 Girth 300
Mansard Roof Flashing Product Code: CF13 Girth 300	Industrial Door Jamb Flashing Product Code: CF14 Girth 150	Opening Jamb Flashing Product Code: CF15	Door Head Flashing Product Code: CF16 Girth 100
Apex Capping Type 1 Product Code: CF17 Girth 270	Apex Capping Type 2 Product Code: CF18 Girth 260	Back Channel Product Code: CF19 Girth 100	External Corner & Barge Capping Product Code: CF20 Girth 300
Internal Corner Capping Product Code: CF21 GIRTH 330	Barge Capping Product Code: CF22 GIRTH 230	Fragmented Parapet Capping Product Code: CF23	Two Piece Step Flashing Product Code: CF24

Table 2.15.1 S-Rib Corrugated Flashings & Details

- ★ denotes size to be determined by application. All sizes are in mm and should be used as a guide only. They should be measured on-site to determine actual size.
- S.B. denotes 'Slight Break'.
- Also refer to section 4.6 "Typical Roofing Details".