

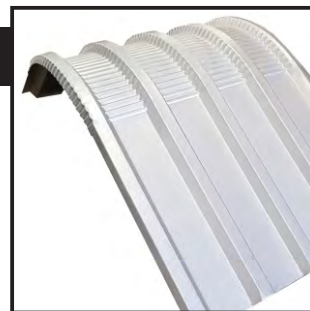
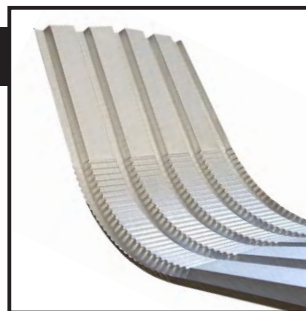
## IBR (686MM COVER) PROFILE

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### 1. GENERAL INFORMATION AND APPLICATIONS:

Since its introduction to the market in 1958, **IBR** has become the most popular form of roof sheeting. Due to its numerous advantageous characteristics, it is widely used on commercial and industrial buildings and popular for most residential applications where low-pitched roofs are specified. **IBR** 686 (an abbreviation for Inverted Box Rib), has an effective cover width of 686mm (i.e. including the side-lap) and is a crisp, trapezoidal / angular fluted sheet, designed for use as roof covering and side / wall cladding. Its excellent strength to weight ratio provides the most optimum loadspan consistency and the deep, broad fluted design provides excellent drainage capacity. **IBR** can be factory cranked to the narrow flute (NFO) or broad flute (BFO) (a reverse crank) or bullnosed to a wide range of specifications (Minimum internal radius: 450mm) to suit your application. **IBR** can be requested / ordered as roofing where the colour is specified to show on the narrow flute side (NFO / Narrow Flute Out) and as cladding to the sides of the building where the colour is often specified to show on the broad flute side (BFO / Broad Flute Out). **IBR** can also be roll-formed with a stiffener rib in each wide pan/ broad flute when used as cladding to assist in minimising oil-canning.



### 2. SHEET LENGTH AND RECOMMENDED PITCH:

We are able to supply and deliver **IBR** sheets of up to 15 metres in length using our own vehicles. Delivery of sheets up to 22 metres in length can be arranged by special request at an additional cost. The minimum recommended roof pitch for IBR is 5 degrees (approx. 87.5mm rise per metre), provided that the roof slope is less than 15 metres. For longer sheets a minimum pitch of 7.5 degrees is recommended.

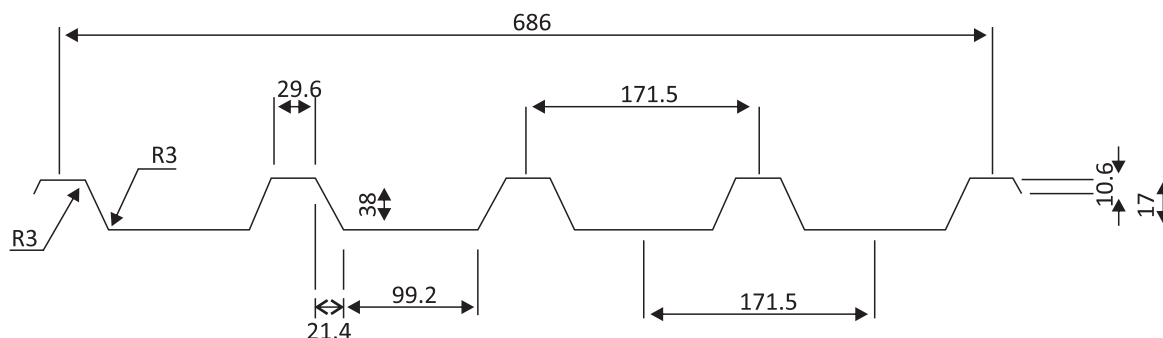
### 3. STRUCTURAL GUIDELINES AND CHARACTERISTICS:

**IBR** roof sheets are available in a range of materials which will display varying structural properties. The table below should be used as a guideline only as purlin spacing is dependant on numerous factors, i.e. the prevailing wind conditions in the region; the type of structure that is being erected (single storey / multi storey) and the roof pitch; as examples. We therefore recommend an engineer is consulted to determine the purlin spacing for each particular application.

MAXIMUM RECOMMENDED PURLIN SPACING (metres)						
THICKNESS (TCT- Top Coated Thickness)	0.40mm	0.47mm	0.50mm	0.53mm	0.58mm	0.80mm
GRADE (Yield Strength)	ISQ/ G 550	ISQ/ G 550	ISQ 550	G550	ISQ 230	ISQ 230
<b>ROOF</b>						
Single Span	0,90	1,20	1,20	1,30	1,30	1,70
End Span	1,00	1,30	1,30	1,35	1,35	1,75
Internal Span	1,00	1,15	1,20	1,20	1,50	1,90
Cantilever (Internal Span)	0,15	0,30	0,30	0,30	0,30	0,40
<b>WALLS/ CLADDING</b>						
Single Span	1,20	1,80	1,80	1,95	1,95	2,20
End Span	1,40	1,90	1,90	2,00	2,00	2,25
Internal Span	1,40	2,00	2,00	2,20	2,20	2,70
Cantilever (Internal Span)	0,40	0,60	0,60	0,75	0,75	0,85

#### 4. TOLERANCES AND TYPICAL PROFILE:

A length variation of  $\pm 5.0\text{mm}$  and a width tolerance of  $\pm 3.0\text{mm}$  is permissible.



#### 5. SPECIFICATION/MATERIAL OPTIONS: (COLORBOND NOW INCLUDING THE MATT FINISH)

MATERIAL TYPE	Thickness in millimetres (mm)						
(Subject to stock & availability)	0.3mm	0.4mm	0.47mm	0.5mm	0.53mm	0.58mm	0.8mm
Pre-Galvanised	Z100	Z150	Z275	Z275	Z275	Z275	Z275
Bluescope Zinalume® AZ150			✓		✓		
Bluescope Zinalume® AZ200			✓		✓		
Safal Zinal AZ150			✓		✓		
Safal Zinal AZ200			✓		✓		
Bluescope Clean COLORBOND™ AZ150			✓		✓		
Bluescope Clean COLORBOND™ Ultra AZ200			✓		✓		
Safal Colorplus® AZ150			✓		✓		
Safal Colorplus® Ultima AZ200			✓		✓		
POLYCARBONATE	Thickness in millimetres (mm)						
Available in Clear; White/ Opal; Bronze;	0.8mm		1.0mm		1.25mm		
Blue; Green; Solar Control & Difusser	UV1S		UV2S		UV2S		
	SUGGESTED TYPE OF FASTENER						
	WALL/CLADDING- BFO			ROOF- NFO			
	TIMBER	STEEL		TIMBER		STEEL	
Pre-Galvanised	50mm Class II		25mm Class II		75mm Class II		65mm Class II
Bluescope Zinalume® AZ150	50mm Class III		25mm Class III		75mm Class III		65mm Class III
Bluescope Zinalume® AZ200	50mm Class IV		25mm Class IV		75mm Class IV		65mm Class IV
Safal Zinal AZ150	50mm Class III		25mm Class III		75mm Class III		65mm Class III
Safal Zinal AZ200	50mm Class IV		25mm Class IV		75mm Class IV		65mm Class IV
Bluescope Clean COLORBOND™ AZ150	50mm Class III		25mm Class III		75mm Class III		65mm Class III
Bluescope Clean COLORBOND™ Ultra AZ200	50mm Class IV		25mm Class IV		75mm Class IV		65mm Class IV
Safal Colorplus® AZ150	50mm Class III		25mm Class III		75mm Class III		65mm Class III
Safal Colorplus® Ultima AZ200	50mm Class IV		25mm Class IV		75mm Class IV		65mm Class IV
	Colour coded caps are available and strongly advised when a Class IV fastener is required						

Further technical information can be obtained from W.C. Youngman S.A. (PTY) Ltd.  
Trading as Youngman Roofing and Sheet Metal Works