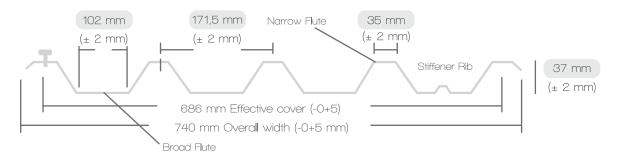




# Roof sheeting

Clotan Steel are trusted IBR roof sheeting suppliers in South Africa, supplying construction companies and individuals on the African continent with quality steel building products.

IBR roof sheeting is a square fluted profile with an effective covering width of 686mm, designed for use as side cladding or roofing material in commercial, industrial and residential buildings. The name IBR is abbreviated from "Inverted Box Rib" and has become a household name in the African building industry. The deep, broad flute design offers excellent drainage characteristics combined with optimum weight versus load/span capabilities. Clotan Steel's IBR sheeting can be factory cranked, curved and bullnosed to various radii depending on customer's requirements.



## Structural guidelines of IBR roof sheeting

IBR roof sheets are available in a wide range of materials displaying various structural properties. It should be noted that the load span characteristics are only to be used as a broad guideline as purlin spacings are dependant on other factors such as:

- · Prevailing winds in a certain area
- · Snow during winter periods
- The presence of dust and other particles in industrial areas and the type of structure that is being erected

We therefore recommend that a qualified engineer be consulted to determine the purlin spacing for a specific application.

# Recommended maximum purlin spacing (metres) - IBR

Thickness	0.40 mm	0.47 mm	0.50 mm	0.55 mm	0.58 mm	0.80 mm
Steel Grade	ISQ550	G550	ISQ550 G550	G550	ISQ300	ISQ230
Roof - Single span	1.25	1.50	1.50	1.50	1.50	2.00
Roof - Double span	1.40	1.95	1.95	2.10	2.10	2.50
Cantilever - Roof	0.20	0.40	0.40	0.45	0.45	0.55
Vertical cladding	1.80	1.80	1.80	1.80	1.80	1.80
Weight per metre	2.974 kg	3.495 kg	3.718 kg	4.090 kg	4.313 kg	5.949 kg
Weight per m2	4.34 kg	5.09 kg	5.42 kg	5.96 kg	6.29 kg	8.67 kg

The above table indicates standard stock available. Please discuss your individual needs with our sales consultants.

#### Available dimensions

IBR sheeting is available in standard lengths of 1.5~m to 14~m. The permissible length tolerance for the standard-length range will be -0 +5 mm. Sheets outside of these parameters are available on request and may be subject to special pricing arrangements. The maximum height which can be transported is 4.3~m.

This factor should be considered when bullnoses and cranked sheets are designed.

# Roof pitch

When using IBR, the recommended minimum pitch is 7.5° for roof slopes in excess of 30 m and 5° for slopes less than 30 m. When IBR roof sheets are end-lapped the roof pitch should be considered. The minimum end laps for roof pitches in excess of 15° is 150 mm and for other roofs a minimum of 250 mm is recommended. End laps for side sheeting should be at least 100 mm. It is recommended that end and side laps on low pitch roofs be sealed to ensure water tightness.



## Installation Procedure

The required number of IBR sheets can be calculated as follow:

Number of sheets = Length of building + 0.686 m (Cover width of sheet)

Roof sheets must be laid with the narrow flute of one corrugation side lap uppermost and should be fixed through the crests of alternate flutes to purlins using 65 mm Top Speed or Tex screws into steel purlins and 90 mm Tex or Top speed screws in the case of timber roofs. All fasteners should incorporate 26 mm dia bonded washers. For vertical wall cladding (side cladding) it is recommended that the broad flute be fixed externally with the main and side lap fasteners in the web of the flutes. Side cladding can be fixed using 25 mm Tex or Top Speed screws. All fasteners should incorporate 26 mm dia bonded washers.

In order to qualify for a guarantee on Zincalume® and Colorbond® sheets the following fasteners supplied by Buildex Industries should be used: Metaltex Climaseal 3 for steel purlins and Timbertex Zacs 4 for timber purlins. The use of these fasteners will dramatically increase the lifespan of the roof sheeting as corrosion caused by fasteners is avoided.

# Specification for erection

Specification (\*refer to table indicated below)

(\*Thickness and material quality) Clotan Steel IBR (with/without) integral stiffening rib steel roof sheeting and accessories with (Chromadek®/Colorbond®/ColorPlus®/Zincalume® and ZincAL®) finish on one side and protective primer coating on the reverse side fixed to (timber/steel) purlins or rails with a (\*refer to table) spacing. All sheeting is to be clearly marked on the reverse side at one metre intervals indicating thickness, material quality, coating thickness and paint system. (Colorbond®/ColorPlus®/Zincalume® and ZincAL®) (timber/steel)

hickness & quality	Coating	Available paint system	
.40 mm - ISQ550	Z100 - Z150 Galvanised*		
.47 mm - ISQ550	Z150 - Z275 Galvanised*		
.50 mm - ISQ550	Z150 - Z275 Galvanised*	Chromadek®	
		Chromadek Ultim®	
0.58 mm - ISQ300	Z100 - Z150 Galvanised*	Chromadek®	
		Chromadek Ultim®	
0.80 mm - ISQ230	Z100 - Z150 Galvanised*	Chromadek®	
		Chromadek Ultim®	
.47 mm - G550	AZ150 Zincalume®	Colorbond®	
.55 mm - G550	AZ150 Zincalume®	Colorbond®	
.50 mm - G550	AZ100, AZ150, AZ200	ColorPlus®	
	ZincAL®		
.55 mm - G550	AZ100, AZ150, AZ200	ColorPlus®	
	ZincAL®		
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