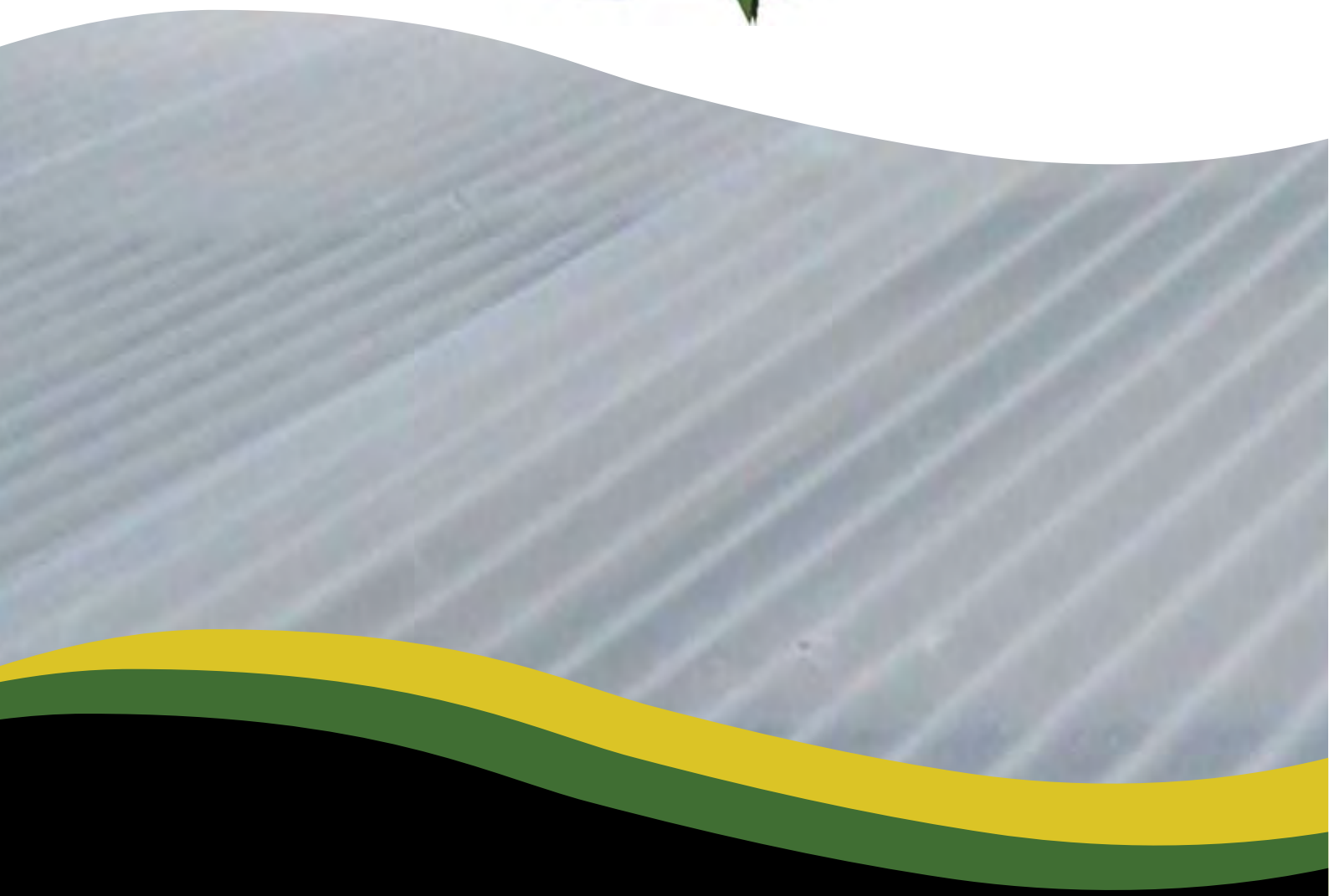

ECO PLASTICS

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ROOFING

ECO PLASTICS ROOFING manufactures revolutionary polyethylene roofing and cladding, suitable for many applications such as;

- Patios / Entertainment areas / Pergolas
- Carports / Shade ports / Verandas
- Stoep / Sun-rooms / Awnings
- Garden-huts / Tool-sheds / Wendy Houses
- Greenhouse / Nurseries / Gazebo's
- Factories / Warehouses / Workshops (Side cladding and/or skylights)
- Even conventional house roofing.

The roof sheets are 100% compatible with conventional galvanized sheets and are manufactured in the following profiles:

IBR 686	Corrugated 610	Corrugated 762

- We manufacture any length on request
- Colours are available in; White, Blue, Green,Terracotta or Custom on request

Strong, Light, Bright, attractive and manufactured from high quality UV Stabilized Polyethylene resin, our sheets have unique qualities making it ideal for any roofing purpose from carports and patios to conventional roof cover for houses and industrial buildings.

ECO PLASTICS PRODUCT TECHNICAL SPECIFICATIONS

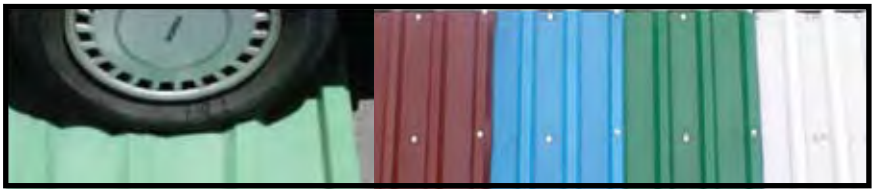
GENERAL SPECIFICATIONS

- Polyethylene is highly resistant to corrosion, mineral acids, organic acids, salt solutions, fats and oils.
- The material burns but does not emit toxic gasses during burning.
- For practical purposes polyethylene sheets do not transmit UV radiation.
- Our product is environment friendly because the material can be recycled and it is non-toxic.

QUALITY TESTS

Tests conducted by University of Stellenbosch and S.A.B.S - Test report number 611/85391/95 Life Span Of Eco Roof Sheets.
The SABS predicts a useful life span of 20 to25 years on this product.
Light Transparency

White – 55%	Blue – 40%	Green – 38%	Terracotta – 25%



APPLICATIONS

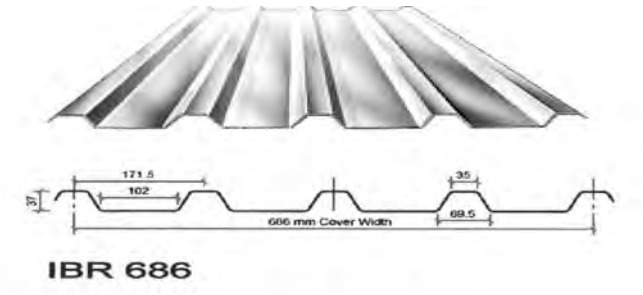
COMMERCIAL
Nurseries
Hot Houses
Parking Port Roofing
Entertainment Areas / Lapa's
Skylights
Tool Sheds

DOMESTIC
Patios
Braai Areas
Sunrooms
Garden Huts
Gazebos
Carport roofs
Pergolas
Verandas
Awnings
Standard conventional roofing

AGRICULTURE
Green Houses / Tunnels
Seedling Nurseries
Hatcheries
Farm Stores
Dairy Roofing
Stables

INDUSTRIAL
Factory / Warehouse Skylights
Factory / Warehouse Side Cladding
Chemical Stores

IBR 686



IBR 686
Maximum length manufactured:
13 meters
Overall sheet width:
730 mm
Cover width:
686 mm
Sheet thickness:
Between 2,5mm & 3,5mm
Weight per running meter:
2 Kg's

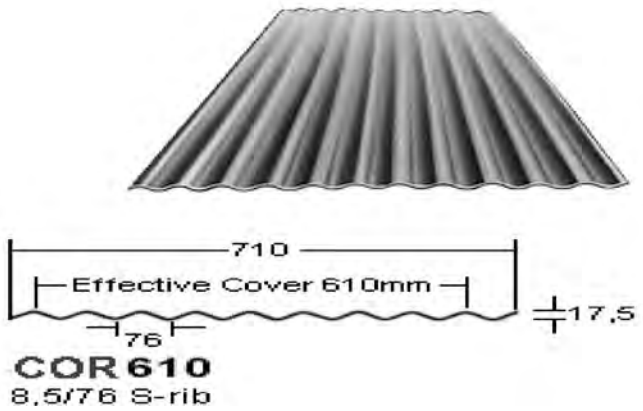
IBR is a square fluted profile with an effective covering width of 686mm designed for use as side cladding or roofing material in commercial, industrial and residential buildings. The name IBR is abbreviated from "Inverted Box Rib" and has become a household name in the South African building industry. The deep broad flute design offers excellent drainage characteristics combined with optimum weight versus load/span capabilities.

RECOMMENDED INSTALLATION METHOD

1. **Purlin Spacing** • not more than 600mm
2. **Structure**

Due to our sheet being much lighter in weight than conventional galvanized sheets, you can erect a structure using lighter material than for a galvanized-sheet roof, without sacrificing strength in your roof frame. The costs saving in using lighter mild steel or lighter timber will enable you to install more purlins in accordance with our recommended purlin spacing of 600mm's.

CORRUGATED 610 / 760



CORRUGATED 610	CORRUGATED 760
Maximum length manufactured:	
13 meters	13 meters
Overall sheet width:	
700 mm	860 mm
Cover width:	
610 mm	762 mm
Sheet thickness:	
Between 2,5mm & 3,5mm	Between 2,5mm & 3,5mm
Weight per running meter:	
1,9 Kg's	2,2 Kg's

Corrugated is the traditional and familiar S-Rib profile for roofing and cladding applications. It is the oldest and most commonly used roofing profile because of it's easy handling and fixing properties and related strength. The S-rib is derived from the sinus curve and offers very strong structural properties. The 8.5/76 stands for 8.5 corrugations over the width of the sheet and76 refer to the distance in millimeters between two consecutive curves.

RECOMMENDED INSTALLATION METHOD

1. **Purlin Spacing** • not more than 400mm
2. **Structure**

Due to our sheet being much lighter in weight than conventional galvanized sheets, you can erect a structure using lighter material than for a galvanized-sheet roof, without sacrificing strength in your roof frame. The costs saving in using lighter mild steel or lighter timber will enable you to install more purlins in accordance with our recommended purlin spacing of 400mm's.

ROLLTOP ROOF CAPPING/RIDGING & FLASHING

ROLLTOP ROOF CAPPING / RIDGING & FLASHING
Maximum length manufactured:
2,3 meters
Overall sheet width
Flanges on each side = 200mm
Sheet thickness
Between 2,5mm and 3,5mm
Weight per running meter
1,4 Kg's

PLASTIC HARVEY TILES

PLASTIC HARVEY TILES
Maximum length manufactured
1.7 meters
Overall sheet width
410mm
Sheet thickness
Between 2,5mm and 3,5mm
Weight per running meter
1,4 Kg's

ADDISIONAL PRODUCTS AVAILABLE

PLASTIC WHEELBARROWS

PLASTIC BIN WHEELBAROWS
STRONG
Cannot rust / no corrosion
Heavy duty wheels & solid bar axel

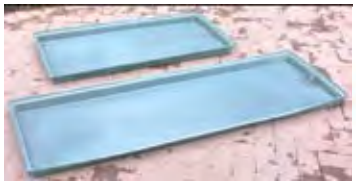
PLASTIC WHEELBARROW BINS

Types:	
Concrete liner	Flatbed liner

PLASTIC DRAIN COVERS

PLASTIC DRAIN COVERS			
STRONG			
Cannot rust / no corrosion			
Colours available			
Terracotta	White	Green	Blue

PLASTIC GEYSER TRAYS



PLASTIC GEYSER TRAYS	
Types	
150 Lt Geyser Tray	200 Lt Geyser Tray
Size	
115mm x 550mm x 80mm	170mm x 550mm x 80mm

PLASTIC CONCRETE MIXING TRAYS

PLASTIC CONCRETE MIXING TRAYS
1300 long x 900 wide x 200 deep
STRONG
Cannot rust / no corrosion
Easy to clean

CATTLE WATER TROUGHS

PLASTIC WATER TROUGHS
2000 long x 500 wide x 300 deep
150 Lt
Includes float valve & cover
STRONG
Cannot rust / no corrosion
Hygienic & Easy to clean

CATTLE FEEDING TROUGHS

PLASTIC FEEDING TROUGHS
2000 long x 500 wide x 300 deep
150 Lt
STRONG
Cannot rust / no corrosion
Hygienic & Easy to clean

HORSE FEEDING BIN

PLASTIC HORSE FEEDING BIN
40 Lt
Ideal to hang onto stable door
STRONG
Cannot rust / no corrosion
Hygienic & Easy to clean

SHEEP FEEDING BINS

PLASTIC SHEEP FEEDING BINS
Ideal to hang on fence
STRONG
Cannot rust / no corrosion
Hygienic & Easy to clean

DIY EXAMPLES

BRAAI AREA ROOF

This area between the garden wall and garage was transformed into a cosy braai area with this roof made of ECO PLASTICS polyethylene sheets. The effect of this coverage created a heat-stabilized and UV protected area.
ECO PLASTICS polyethylene sheets are UV resistant.

LAUNDRY ROOF

An old, poly-carbon roof was replaced with ECO PLASTICS polyethylene sheets to protect these laundry lines from rain and harmful UV sunrays. Note the old, polycarbon sheets of the previous roof on the floor.
ECO PLASTICS Polyethylene sheets are durable with an expected life span of 20 to 25 years. No maintenance is required: no paint, no rust.

PERGOLA ROOF

ECO PLASTICS polyethylene sheets provide good temperature isolation from outside. It has a low noise level. This photo was taken on a cloudy day - note that the area does not appear dark.

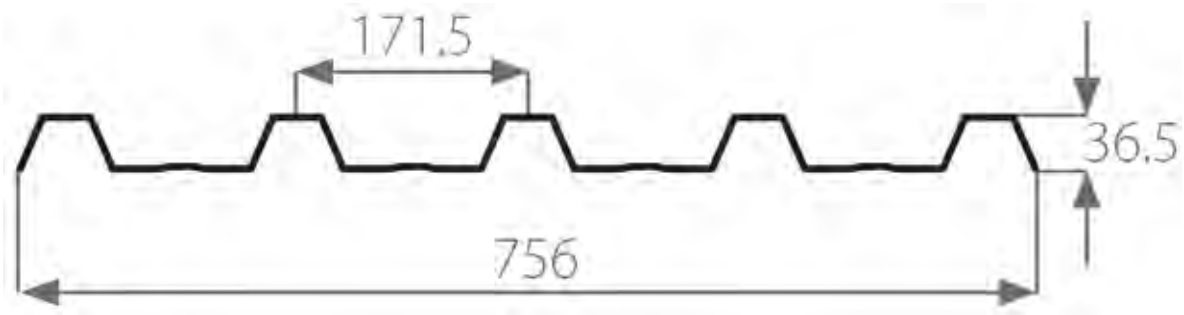
PROTECTION FROM RAIN AND WIND WITHOUT DARKNESS

Pergola roof creates protection from rain. ECO PLASTICS polyethylene sheets are durable for outdoor application, because UV stabilizer is added during the manufacturing process.

This pergola used light-green polyethylene sheets. Note that the colorant makes virtually no difference to the brightness of the light in comparison to white sheets.

SUNTUF® Rooflights Technical Guide
Profile: 6500 IBR

Profile Drawing



Profile Dimensions

Profile (mm)	Thickness (mm)	Length (m)	Overall width (mm)	Cover Width (mm)	Side-Lap (%)
171.5 / 36.5	1.0 – 2.0	1.5 - 11.8	756	686	9.3

Load / Span Data

Load (kg/m^2)	Maximum Roof Span (mm)					
	1.0 mm		1.2 mm		1.5 mm	
	Mid Field	End Field	Mid Field	End Field	Mid Field	End Field
75	1700	1275	1800	1350	1900	1425
100	1600	1200	1700	1275	1800	1350
125	1500	1125	1600	1200	1700	1275
150	1400	1050	1500	1125	1600	1200

- The dimensions specified do not supersede the requirements of local construction codes.
- The maximum purlin spans is based on continuous beam setting, the panel's structural properties, according to allowed deflection of 1/20 of the span.
- For single span application use the end field column.
- The mentioned load refers to both wind and snow loads and intended for rooflights only.
- Minimum recommended slope – 10%.
- Maximum recommended panel length - 7.0 m.

Curved Roof

- Minimum curving radius 14.0 m.

SUNTUF® Rooflights Technical Guide
Profile: 6500 IBR

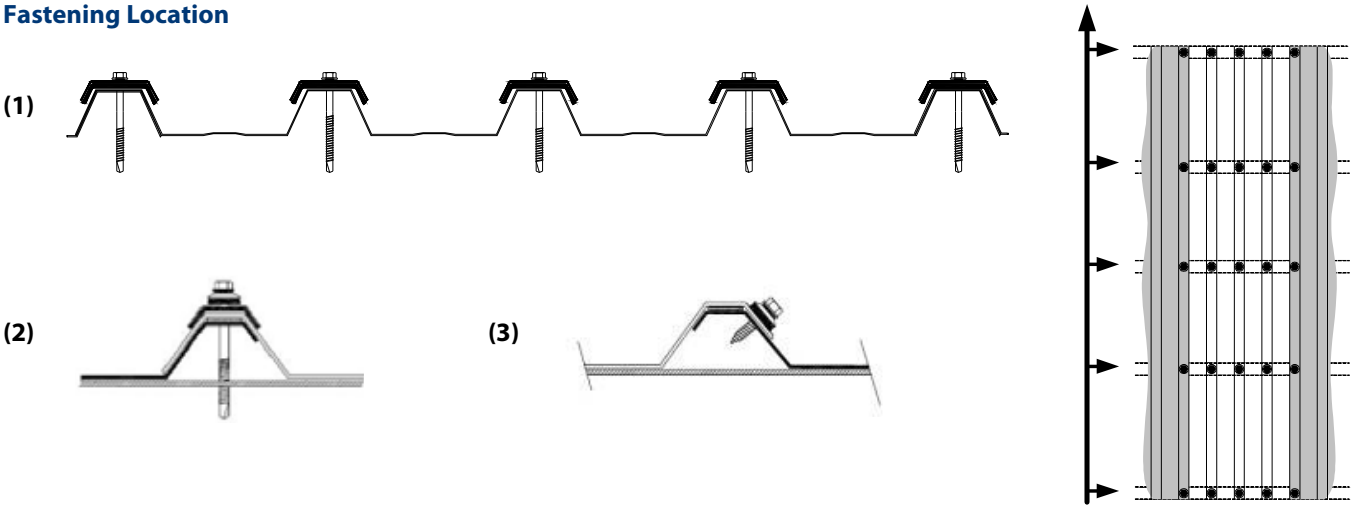
Positioning

- Make sure the UV protected side faces out.
- Lay the SUNTUF panel to overlap metal panels on both sides. If not feasible -
- SUNTUF Rooflight panels must underlap the metal roof panels against the primary direction of rain.
- The SUNTUF sheet must be located and installed without any stresses.
  Do not pull, stretch or force the sheets when the profiles are not perfectly matched.
- SUNTUF sheets should overhang Min. 50mm and Max. 200mm beyond the last fixings line.

Fastening

- Apply sealing tape along the Side-Lap metal panel's corrugation crests, on both sides.
- Apply sealing tape over the side-sap SUNTUF panel corrugation crests, where covered the Metal panel.
- Apply sealing tape along the bottom and top End-lap (if there is), along screws centerline or two tapes on both sides of screw centerline.
- Pre-drill 10mm holes at crests where screws are positioned.
- Start fastening the screws from the first side-lap (left) through the pre-drilled holes (2).
- Start fastening the screws on the lower edge purlin (End-lap), on each corrugation crest (1).
- Fasten screws at the internal and upper edge purlins, at each corrugation crest, starting at the same side (1, 2).
- **Do not over-tighten!**
- Fasten the stitching screws at the side-lap every 300-400 mm (3).

Fastening Location



Screws and Washers Specification

- Crest fixing: Self-drilling 5.5mm x 75mm (3") screw + matched metal crest rider (Storm washers) with EPDM gasket.
- Side Stitching: 5.5mm x 19mm (3/4") self-tapping screw with 19 mm washer/gasket.

SUNTUF® Rooflights Technical Guide
Profile: 6500 IBR

Important Notes

- Use only PALRAM approved accessories, including EPDM rubber washers, silicones, sealing tape, closure fixtures etc.
- For clear SUNTUF onto wooden purlins, apply white acrylic paint, or aluminum tape, in order to prevent over-heating of the purlins.

Cutting / Sawing Tips

- Table or Portable circular saw with small teeth.
- Jigsaw.
- When Sawing use high blade speed and slow feed rate.
- Support the sheet in the vicinity of the cut and clean dust and splinters away.

Fastening Tips

- Use adjustable electric screwdriver.
- The screw must be installed perpendicular to the SUNTUF sheet.
- **Important: Do not over-tighten.**

Safety

- Do not step directly on the panel.
- Use stepping boards.
- Work according to local safety regulations.

Handling and Storage

- Store in a shaded place, protect from direct sunlight and rain.
- Avoid covering the sheets with heat absorbing materials.
- Avoid contact or environment of chemicals.
- Protect the sheets from any physical damage.

HYDROPONIC SYSTEMS