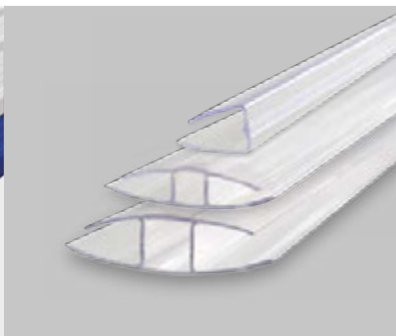
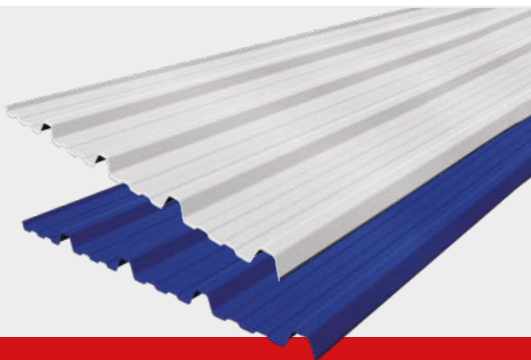




klar[®]



THE BEST SOLUTIONS FOR COVERINGS AND CONSTRUCTION APPLICATIONS

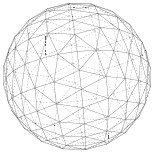
Polycarbonate Twinwall Sheets

Polycarbonate Profiles & Connectors

PVC Ribbed & Corrugated Panels

Solid Polycarbonate Sheet





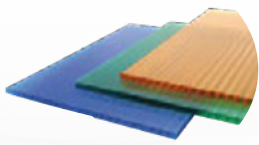
klar[®]

ABOUT US

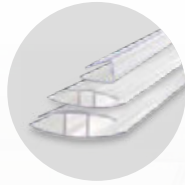
Klar is a reliable, leading manufacturer, regional distributor, and experienced exporter of superior thermoplastic products for architectural, industrial, commercial, agricultural, and DIY construction projects. We are committed to the highest quality standards and product innovation as well as an excellent US-based customer service so you can rely on a rapid response, logistics management and short lead times.

Our brands are synonymous of superior quality, durability, sustainability, and value in all the markets and countries we serve.

OUR PRODUCT LINES



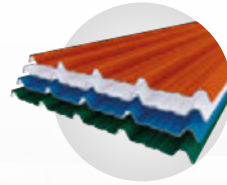
Polycarbonate
Twinwall
sheets



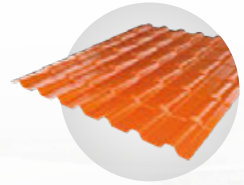
Polycarbonate
Profiles &
Connectors



Solid
Polycarbonate



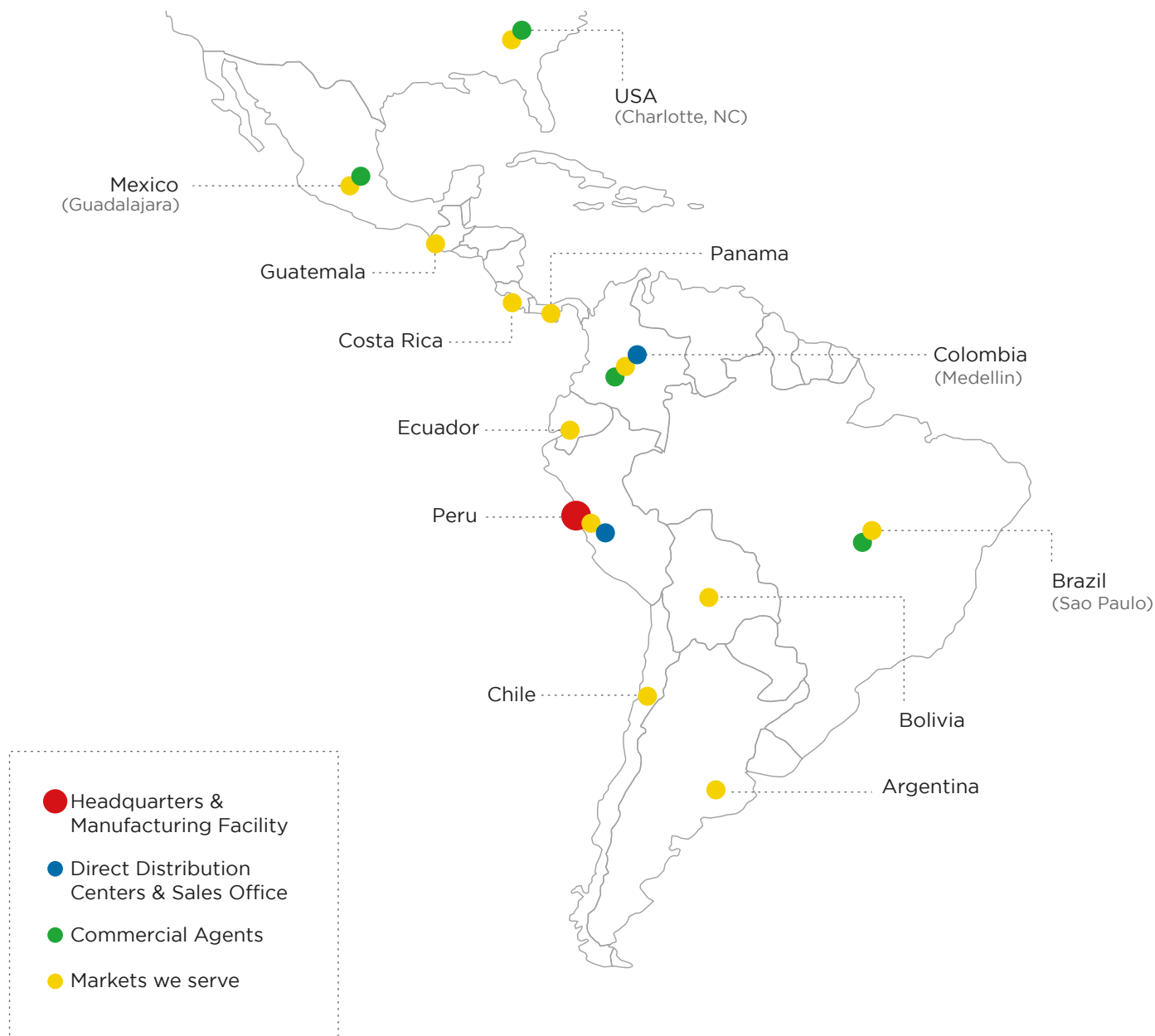
PVC Ribbed
& Corrugated
Panels



Colonial Tile



INTERNATIONAL PRESENCE



SUCCESS FACTORS

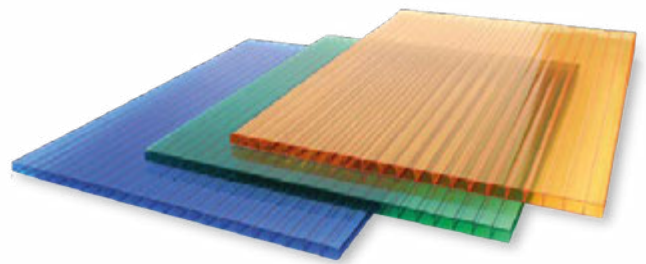
SUPERIOR QUALITY PRODUCTS AND EXCELLENT CUSTOMER SERVICE

PRIME MATERIALS, STATE-OF-THE-ART TECHNOLOGY
& QUALITY CONTROLS

INTERNATIONAL REACH

POLYCARBONATE TWINWALL SHEETS

When we plan our projects, we want them to last. We know extreme climates can be very damaging, so our sheets were designed and manufactured with prime materials to overcome challenging environments. Klar combines 100% virgin resin, top quality colorants and UV co-extruded coating that acts against solar radiation and prevents it from accelerated aging. Our advanced technology provides great impact resistance, thermal insulation, excellent light transmission while keeping its flexibility for customized cutting and cold curving.



PROPERTIES

- UV Protection
- 10-year warranty
- High impact (hall) and aging resistant (yellowness)
- Weather resistant
- Fire resistant
- Thermo-insulator
- Flexible for cold forming
- Excellent transparency for sunlight transmission
- Also available with Antifog / Anticondensation for Greenhouse & Agricultural applications



APPLICATIONS AND USES

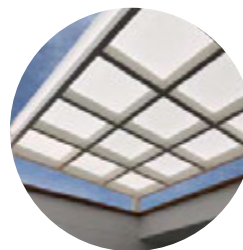
KLAR Polycarbonate twinwall sheets are used as coverings in greenhouses, edifications and warehouses, horizontal and vertical enclosures, coliseums, malls, industrial and commercial buildings, and residential applications that require natural illumination.



Greenhouses & Agricultural



Industrial & Commercial



Home improvement & DIY



Decorative & Interiors



klar

POLYCARBONATE TWINWALL SHEETS

Klar antifog / anticondensation + UV protection



BENEFITS



Excellent light transmission



Higher crop yields and plant quality results



Healthier & more productive growing environment



Fewer diseases and reduced drip damage

PRIMARY APPLICATIONS

Commercial greenhouses

Retail garden centers

Residential greenhouses

PRESENTATIONS AND TECHNICAL PROPERTIES

Thickness		Width		Length		
Millimeters	Meters	Inches	Millimeters	Meters	Inches	Millimeters
4, 6, 8, 10	1.2	48	1200	2.4	96	2400
	1.8	72	1800	3.0	120	3000
	2.10	82.68	2100	3.6	144	3600
				4.8	192	4800
				7.3	288	7300
				10.9	432	10900

Note: For other measurements please contact with your sales representative.

KLAR PHYSICAL AND CHEMICAL PROPERTIES

Physical & Mechanical Properties	Unit	Test Method	Thickness in mm			
			4	6	8	10
Resistance to impact	KJ/m ²	ASTM D5628	26	33	37	41
Module of flecion	Kj/m ²	ISO178	2,400			
Traction module	Mpa	ISO 527	2400			
Tensile strength in performance	Mpa	ISO 527	67			
K thermal conductivity	W/m ² k	ISO 10077	4	4	3	3
Acoustic isolation	db	DIN 52210	15	17	18	19
Distance between supports	m	STD	0.40	0.60	0.80	1.00

** Tolerance +- 0.01

KLAR OPTICAL PROPERTIES

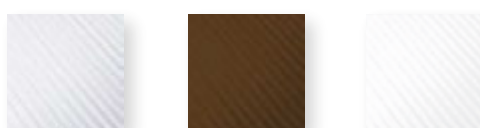
Product Code	Color	Shadow Coefficient (SC) ⁽¹⁾	Solar Heat Gain Coefficient (SHGC) ⁽²⁾	Light Transmission % (LT) ⁽³⁾ ASTM D-1003			
				4	6	8	10
K01TRANS	Clear	0.86	0.75	80	80	79	79
K02BLHT	White	0.60	0.52	25	24	23	21
K06BRON	Bronze	0.57	0.50	19	19	18	18
K05GHO	Smoke Gray	0.70	0.61	40	40	39	38
K07CELT	Light Blue	0.54	0.62	20	20	19	19
K08AZUL	Blue	0.80	0.70	26	25	24	24
K09ANAJ	Orange	0.78	0.68	55	55	54	54
K10AMAR	Yellow	0.80	0.70	78	78	77	77
K11ROJO	Red	0.72	0.63	16	16	15	15
K12TURQ	Turquoise	0.71	0.62	52	52	51	51
EL01GRRF	Reflective Gray	0.46	0.40	11	10	9	9
K13VERD	Green	0.68	0.59	30	30	29	29

*For other colors, please consult with manufacturer

(1) SC (Shadow coefficient): Amount of sun heat transmitted through a window compared to a standard single glass 1/8 inch-width window under the same conditions. (2) SHGC (Solar Heat Gain Coefficient): Percentage of solar radiation incident transmitted through an object that comprises a direct solar transmission and the part that solar radiation irradiates towards inside. (3) LT (Light transmission): Percentage of incident visible light that passes through an object.

COLORS

BASIC COLORS



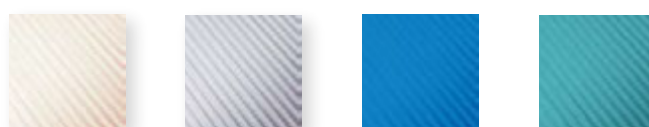
Clear Bronze White

SPECIAL COLORS



Yellow Turquoise Blue Green Orange Red Smoke Gray Light Blue

REFLECTIVE COLORS



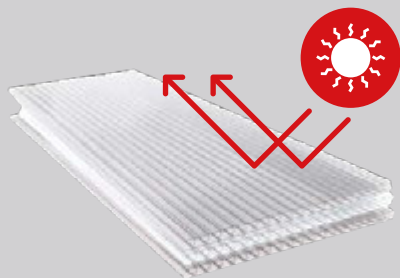
Reflective Pearl Reflective Gray Reflective Blue Reflective Green

SPECIALTIES

KLAREFLECT®

Reflective:

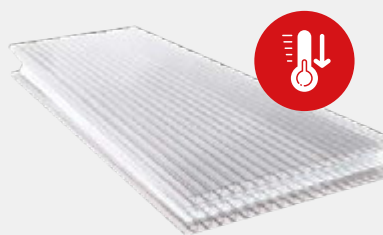
Our polycarbonate twinwall sheets with Klareflect® technology are suitable for warmer climates where excess of heat is quite a challenge. Klareflect® provides an effective solar heat control by reflecting sunlight away while keeping the internal temperature at low.



KLAR SMART® IR

Solar control IR:

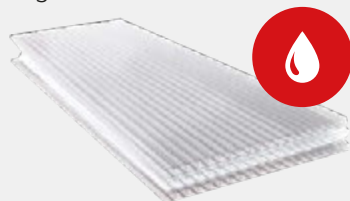
Klarsmart® IR technology is applied to our polycarbonate twinwall sheets to block undesirable near-infrared (IR) radiation permitting the highest levels of light transmission while avoiding interior heat buildup on surrounding objects and, thus, achieving energy efficiency.



KLARIFOG®

Antifog/anticondensation:

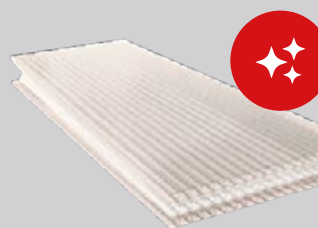
Our polycarbonate twinwall sheets with Klarifog® technology are designed for Greenhouse and other Agricultural applications where natural light transmission must be maximized for photosynthesis. Klarifog® effectively reduces droplets formation to a minimum while blocking harmful UV rays and excessive heat to obtain best crop efficiency and fewer biological diseases.



STYLISH KLAR®

Pearlshade:

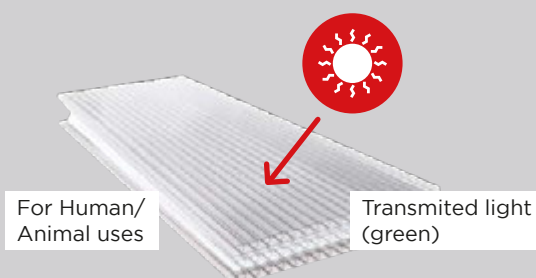
We recommend a selection of Stylish Klar® polycarbonate twinwall sheets for stylish, decorative applications where a sophisticated and refined look is desired. Our Stylish Klar® sheets provide elegance and style while keeping outstanding reflective qualities and light selectivity features.



KLAR® VISUAL COMFORT

Optical effects visual pleasing:

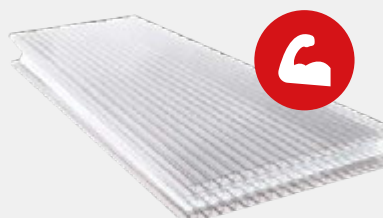
Klar® Visual Comfort technology provides a pleasing effect to the eyesight by reflecting selectively most of the near-IR solar radiation and transmitting a more visible, comfortable light.



FIBER KLAR®

Fiber glass:

Fiber Klar® sheets are ideal for interior designs and have the same optical and mechanical properties as our standard polycarbonate twinwall sheets, but with an improved abrasion resistance component obtained from fiber glass additives.



POLYCARBONATE PROFILES & CONNECTORS

PRODUCT DESCRIPTION AND CHARACTERISTICS

Klar's polycarbonate profiles and connectors are made with 100% virgin resin to meet the highest quality standards in the market. Our state-of-the-art technology allows for precision and flexibility to achieve a clean, professional finish when connecting panels together and sealing the ends securely.

Characteristics:

- UV protection
- Cold bending
- Easy installation
- Lightweight



CONNECTOR
H-shaped profile

CONNECTOR
Bottom & Cap connectors

PROFILE
U-shaped

USE
Polycarbonate Sheet Thickness
4, 6, 8, 10mm

USE
Polycarbonate Sheet Thickness
4, 6, 8, 10mm

USE
Polycarbonate Sheet Thickness
4, 6, 8, 10mm

DESCRIPTION
One-piece, lightweight and ideal for quick installations.

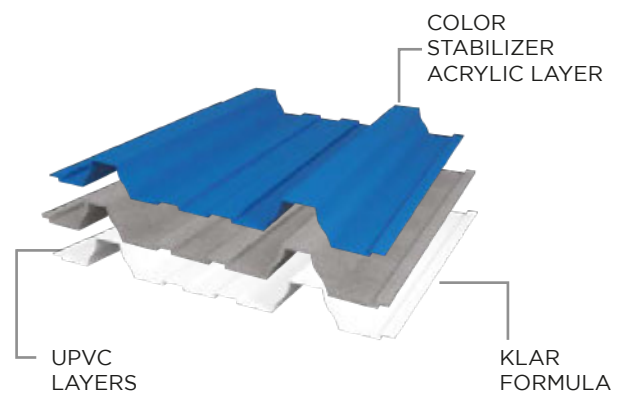
DESCRIPTION
Its main function is to connect sheets together without the need to pierce them and offering a firm and secure installation. It is used in flat and curved installations. It significantly reduces the installation time.

DESCRIPTION
Avoids the entry of undesirable agents such as water, dust or insects. It is placed at the endings of the sheet, over the aluminum tape to ensure a correct installation.

PVC RIBBED & CORRUGATED PANELS

THERMOACOUSTIC MULTILAYER TECHNOLOGY

Our PVC Ribbed Corrugated panels serve as a better alternative to metal corrugated and fiber-cement roofing panels. They are six times better than conventional roofing because they reduce noise; do not rust; do not generate fungus; protect us from cold, heat and humidity; It's safe to install and easy to maintain; they are resistant to fire and have up to 20 years of lifetime.



BENEFITS



20-YEAR LIFETIME



- Raw materials of the highest quality.
- Durability and resistance.
- UV protection.



NON CORROSIVE MATERIAL



- Ideal for areas near the sea and humidity.
- Great resistance to different types of corrosion: Saline, microbiological and chemical.



FIRE RESISTANT



- B1 Classification B1, not combustible. (DIN 4102 standard, Euroclass validation).
- Does not spread fire.
- Does not drip.



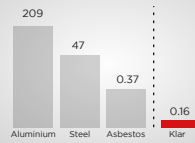
SAFE & EASY TO INSTALL



- It's easy to cut and does not need to be heated.



THERMO INSULATION



- Klar's PVC Ribbed & Corrugated panels have better thermo insulation performance over metal roofing.



ACOUSTIC REDUCTION



- Great acoustic performance over metal roofing. Reduces noise up to 12 decibels.



MINIMUM MAINTENANCE



- Only requires water and soap

USES

Most benefited applications include roofing & siding for:



Residential



Small & Mobile Buildings



Port & Distribution Warehousing



Farms applications



Manufacturing Facilities



Commercial & Municipal applications



Agro-industrial Facilities



klar

PVC RIBBED & CORRUGATED PANELS

Klar Multilayer, Thermoacoustic Technology



BENEFITS



Great absorption of noise and vibrations



Great chemical resistance




Electric insulation or low conductivity



Excellent resistance to corrosion and thermal insulation

PRESENTATIONS





TK5


42.13"

T.W. 42.13"

U.W. 39.37"

Available colors: Red and white 	Customized Colors upon request*: Blue and green 
---	---

*Subject to minimum quantity





TK6

44.49"

T.W. 44.49"

U.W. 41.34"

Available colors: White 	Customized Colors upon request*: Red, blue, green 
--	---

*Subject to minimum quantity



TK6S


37.00"

T.W. 37.00"

U.W. 34.65"

Available colors: Red and white 	Customized Colors upon request*: Blue, gray, green 
---	--

*Subject to minimum quantity





TK ONDA

43.30"

T.W. 43.30"

U.W. 40.75"


Available colors: Red 	Customized Colors upon request*: White, Blue, Gray, Green 
--	---

*Subject to minimum quantity

*UW: Usable Width / TW: Total Width

Thickness in mm: 1.5 mm / 2 mm / 2.5 mm

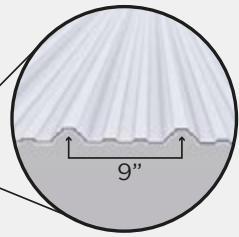
PRESENTATIONS

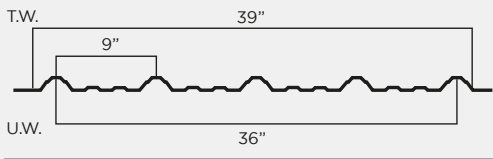






TK9

9 INCHES BETWEEN
MAIN CORRUGATIONS

IDEAL FOR
RETROFITTING





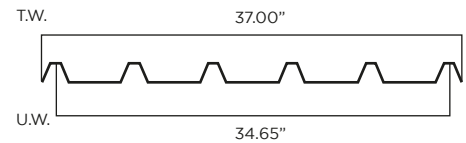
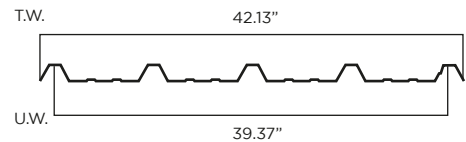
Available colors: White 	Customized Colors upon request*: Red, blue, green   
---	---

*Subject to minimum quantity

ACCESORIES

Translucent panels:

Klar translucent coverings are monolithic, manufactured with the highest extrusion technology that presents an excellent resistance to diverse and extreme climates. They are nonflammable and also have UV protection ensuring a long useful life. They are an effective solution for illumination, transparency and resistance.



*UW: Usable Width / TW: Total Width

Ridges:

Klar's PVC ridge cappings are manufactured with the most advanced co-extrusion, multilayer technology, which provides excellent impact and extreme weather resistance.



STANDARD PRESENTATION

42.13" x 15.75" (length x width)
Angle: 135°

SPECIAL PRESENTATION

42.13" x 31.50" (length x width)
Angle: 171°

COLORS

White, red, blue, green, gray



STANDARD PRESENTATION

44.49" x 15.75" (length x width)
Angle: 135°

SPECIAL PRESENTATION

44.49" x 31.50" (length x width)
Angle: 172°

COLORS

White, red, blue, green, gray



STANDARD PRESENTATION

37.00" x 15.75" (length x width)
Angle: 135°

SPECIAL PRESENTATION

37.00" x 31.50" (length x width)
Angle: 172°

COLORS






White, red, blue, green, gray



ACCESSORIES

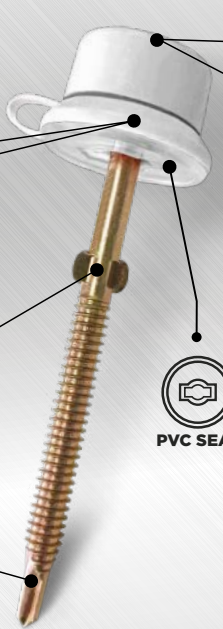
Fitting Sets Klar Use only with Klar thermoacoustic roofs

STRUCTURES FOR METAL

-  SAFETY CLIP
-  LASTING COLOR
-  UV PROTECTION
-  PRE-DRILLING WING
-  EXTRA DURABILITY

KLAR CAP COLOR

●
●
●
●
●



TRADEMARK

DETAILS:

- Self-drilling screw of 3". Head diameter of 13.5 mm
- Klar caps.

PVC SEAL

10 YEAR WARRANTY

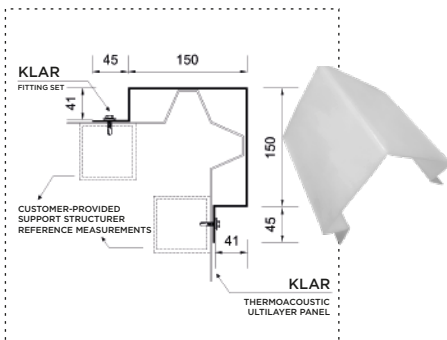
WARRANTED PRODUCT

ACCESSORIES AND COMPLEMENTS

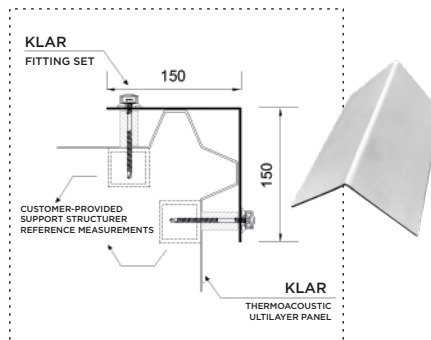
FINISHES:

PVC-based and manufactured using the same technology as Klar thermoacoustic panels.

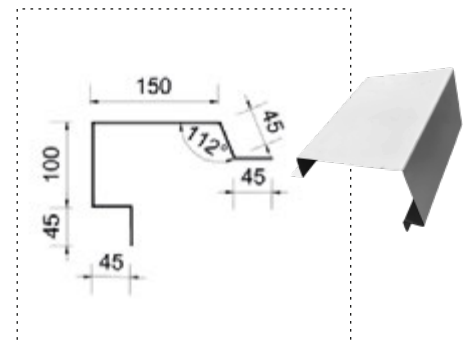
CORNER TYPE 1



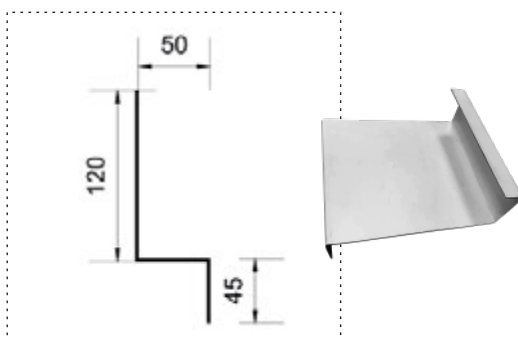
CORNER TYPE 2



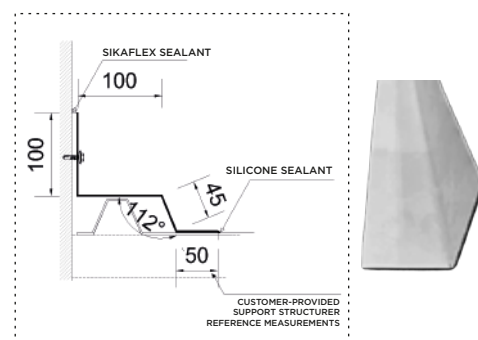
BORDER



BASEBOARD



FLASHING



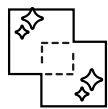


SOLID POLYCARBONATE SHEET

When we plan our projects, we want them to last. Klar® solid polycarbonate sheets combine 100% virgin resin, top quality additives and UV co-extruded coating to guarantee superior quality and durability. Our advanced technology allow us to obtain high impact resistance, excellent light transmission and glass-like clarity at less than half the weight of glass.



Great impact resistance



Great clarity & brightness



Available with 2-side UV protection*



Fire resistance



Thermo-formable



Great Noise absorption

APPLICATION AND USE

Architecture: Transparent noise barriers, sports facilities, skylights, shopping malls and covered walkways.

Construction: Terraces, pergolas and covered patios.

Protective Guards: Bus stops and telephone booths, glazing in public transport, protective windshields for automobiles, visors for helmets and security shields.

Signs and graphic materials: Illuminated signs and lettering.

PRESENTATIONS

Finish: Smooth / Prismatic

UV Protection: 2 sides

Widths (m): 1.22 / 2.05

Lengths (m): 2.44 / 3.00 / 6.00

Thickness (mm): 2, 3, 4, 5, 6, 8, 10 y 12

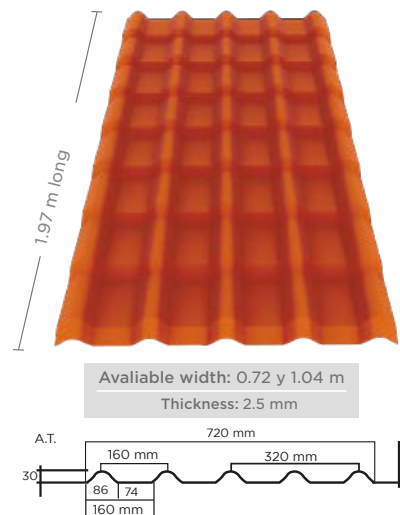
Colors*: Clear, White, Bronze, Fume, Blue.

*Other dimensions and colors are available subject to minimum order.



THERMOACOUSTIC MULTILAYER TILE ROOFING SHEETS - COLONIAL STYLE

An excellent solution for roofing that provides protection against ultraviolet light, humidity, cold, hot, and other weather conditions, such as hail, rain, snow, frost, etc., while preserving its color and physical properties for many years.



They do not rust or generate mold



they protect against heat, cold and humidity



They reduce noise



10-year warranty



Fire resistant



100% recyclable and eco-friendly

Available width: 0.72 y 1.04 m
Thickness: 2.5 mm

COLORS

Available colors: ● Tile Red / Orange

Other colors: Please consult with your specialized advisor.

Compared to conventional roofing materials, Klar tile roofing sheets have several physical and visual benefits. Their special function makes them **suitable for all types of applications** and detailed solutions in the construction industry, especially in the building sector.

ACCESSORIES



Ridge



Hip



3-way ridge



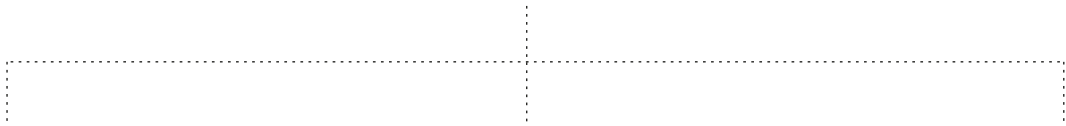
End

APPLICATIONS





OUR BRANDS



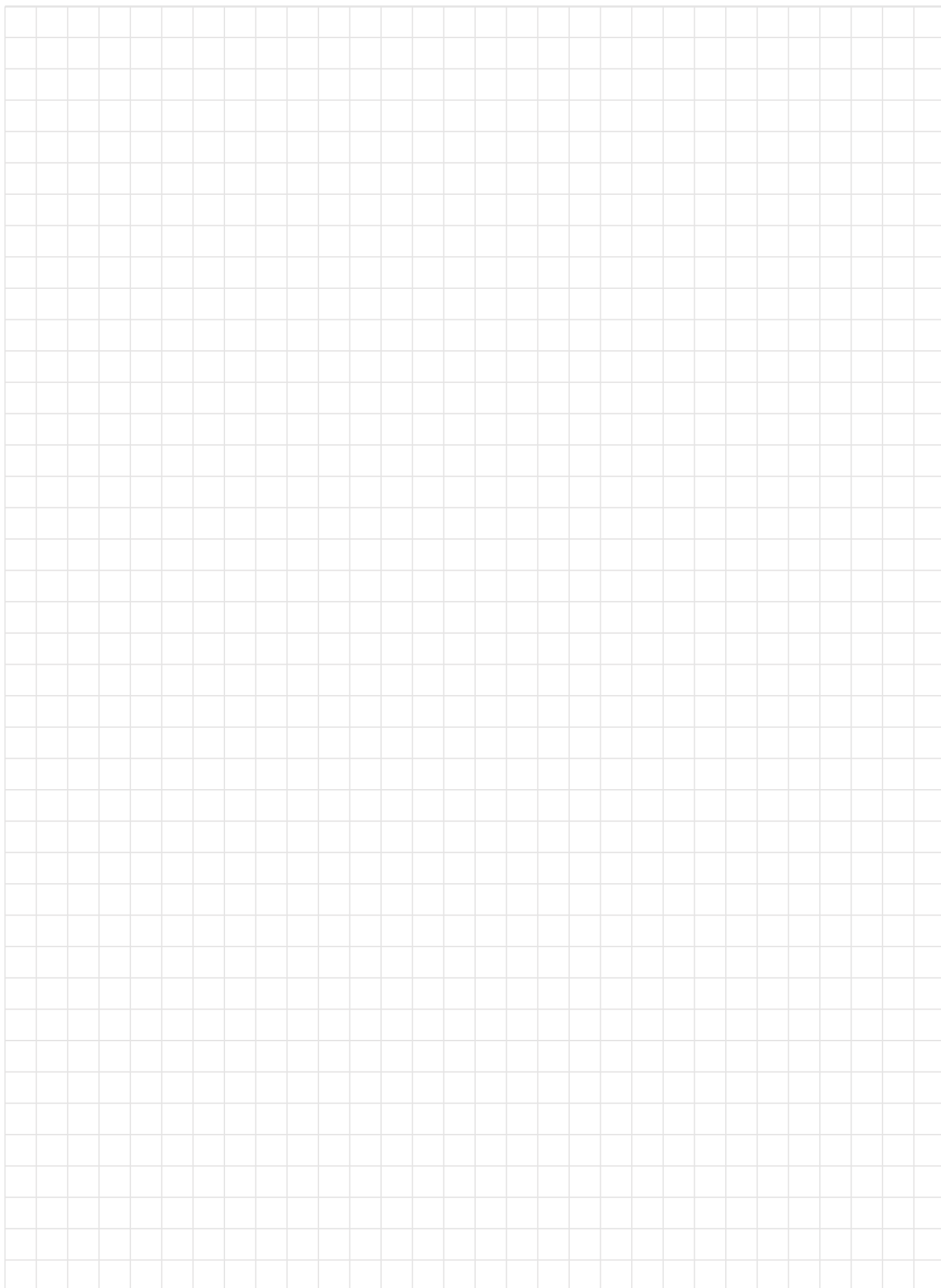
Polycarbonate Profiles & Connectors

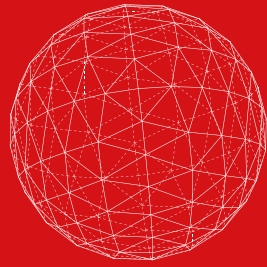


Polycarbonate Profiles & Connectors



PVC Ribbed & Corrugated Panels





klar[®]



CONTACT

sales@klar.com.pe

www.klar.us.com

Advice is provided and orders accepted in accordance with the terms of our current General Sales and Supply Contract. Users should be aware of and use the latest and updated version of the product data sheet concerned, of which they will be sent to whom the request.

For more information, please consult our technical department or consult our corresponding technical sheets on our website: www.klar.us.com

