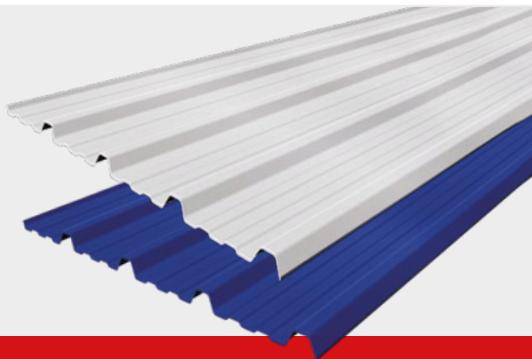


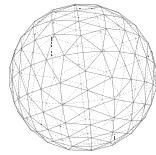
klar



THE BEST SOLUTIONS FOR COVERINGS AND CONSTRUCTION APPLICATIONS

Polycarbonate Twinwall Sheets
Polycarbonate Profiles & Connectors
PVC Ribbed & Corrugated Panels
Solid Polycarbonate Sheet





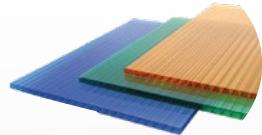
klar®

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.

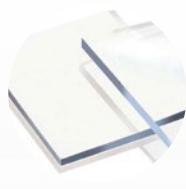
OUR PRODUCT LINES



Polycarbonate
Twinwall
sheets



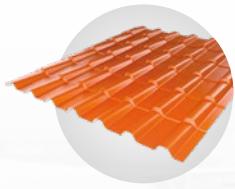
Polycarbonate
Profiles &
Connectors



Solid
Polycarbonate

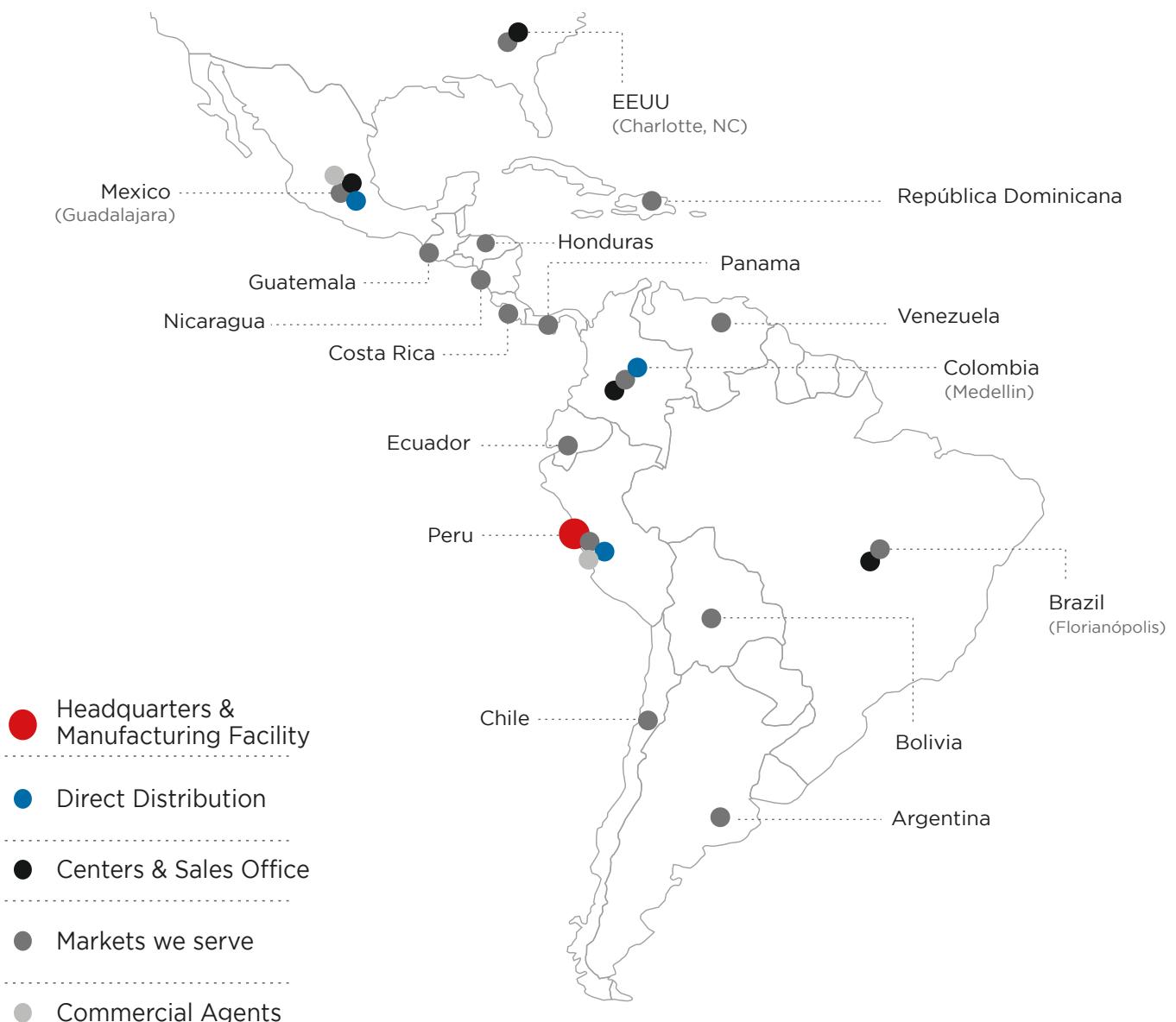


PVC Ribbed
& Corrugated
Panels



Colonial Tile

INTERNATIONAL PRESENCE



SUCCESS FACTORS

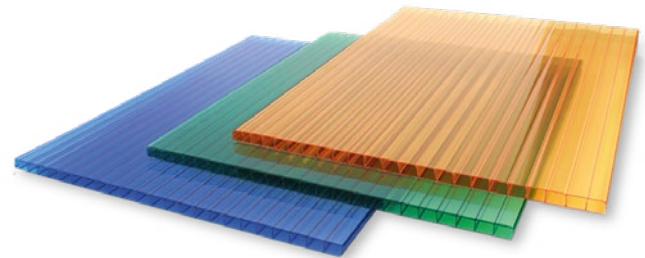
SUPERIOR QUALITY PRODUCTS AND EXCELLENT CUSTOMER SERVICE

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

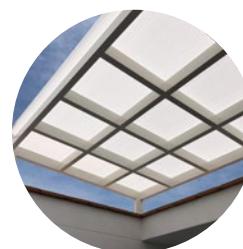
KLAR Polycarbonate twinwall sheets are used as coverings in greenhouses, edifications and warehouses, horizontal and vertical enclosures, coliseums, malls, industrial and commercial buildings, and residential applications that require natural illumination.



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 flection	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

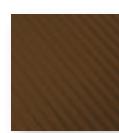
(1) SC (Shadow coefficient): Amount of sun heat transmitted through a window compared to a standard single glass 1/8 inch-width window under the same conditions. (2) SHGC (Solar Heat Gain Coefficient): Percentage of solar radiation incident transmitted through an object that comprises a direct solar 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



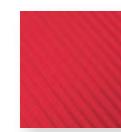
Blue



Green



Orange



Red



Smoke Gray



Light Blue

REFLECTIVE COLORS



Reflective Pearl



Reflective Gray



Reflective Blue



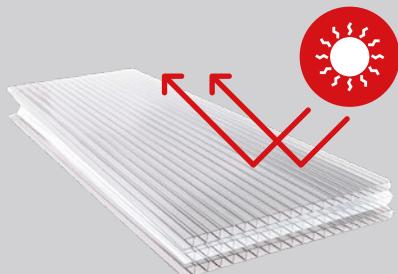
Reflective Green

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.



KLARIFOG®

Antifog/anticondensation:

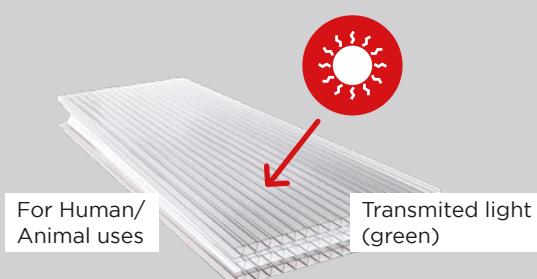
Our polycarbonate twinwall sheets with Klarifog® technology are designed for Greenhouse and other Agricultural applications where natural light transmission must be maximized for photosynthesis. Klarifog® effectively reduces droplets formation to a minimum while blocking harmful UV rays and excessive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



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.



KLAR SMART® IR

Solar control IR:

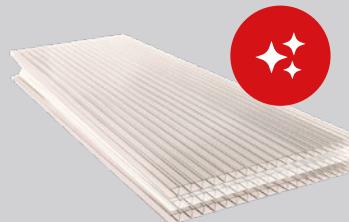
Klarsmart® IR technology is applied to our polycarbonate twinwall sheets to block undesirable near-infrared (IR) radiation permitting the highest levels of light transmission while avoiding interior heat buildup on surrounding objects and, thus, achieving energy efficiency.



STYLISH KLAR®

Pearldshade:

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.



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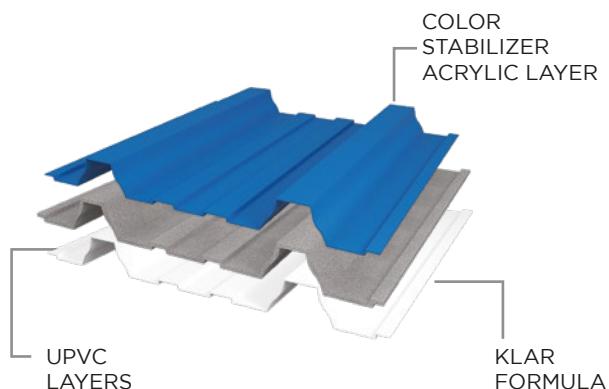
DESCRIPTION	Its main function is to connect sheets together without the need to pierce them and offering a firm and secure installation. It is used in flat and curved installations. It significantly reduces the installation time.
-------------	---

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.
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PVC RIBBED & CORRUGATED PANELS

THERMOACOUSTIC MULTILAYER TECHNOLOGY

Our PVC Ribbed Corrugated panels serve as 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.



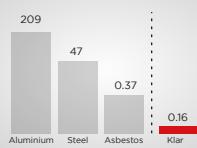
SAFE & EASY TO INSTALL



- 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



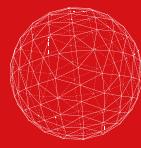
Manufacturing Facilities



Commercial & Municipal applications



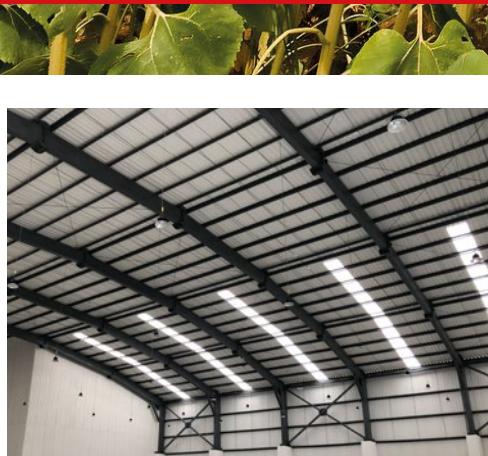
Agro-industrial Facilities



klar

PVC RIBBED & CORRUGATED PANELS

Klar Multilayer, Thermoacoustic Technology



BENEFITS



Great absorption of noise and vibrations



Great chemical resistance



Electric insulation or low conductivity



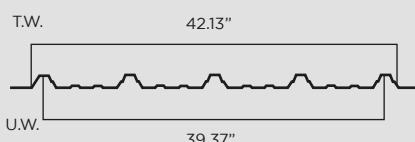
Excellent resistance to corrosion and thermal insulation

PRESENTATIONS

TK5



42.13"



Available colors:
Red and white



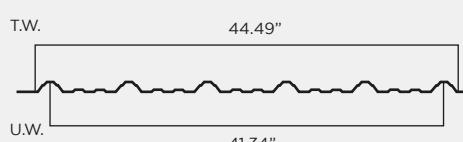
Customized Colors
upon request*:
Blue and green



TK6



44.49"



Available colors:
White



Customized Colors
upon request*:
Red, blue, green



TK6S



37.00"



Available colors:
Red and white



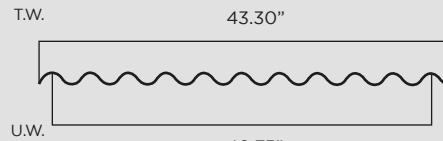
Customized Colors
upon request*:
Blue, gray, green



TK ONDA



43.30"



Available colors:
Red



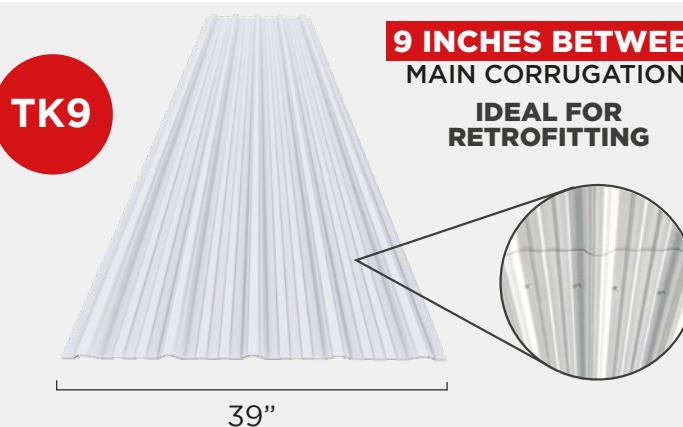
Customized Colors
upon request*:
White, Blue, Gray, Green



*UW: Usable Width / TW: Total Width

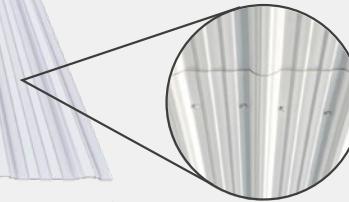
Thickness in mm: 1.5 mm / 2 mm / 2.5 mm

PRESENTATIONS



TK9

**9 INCHES BETWEEN
MAIN CORRUGATIONS**
**IDEAL FOR
RETROFITTING**



T.W. 39"
U.W. 36"

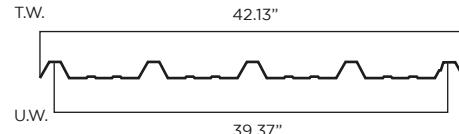
Available colors: White
Customized Colors upon request*: Red, blue, green

*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.



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°

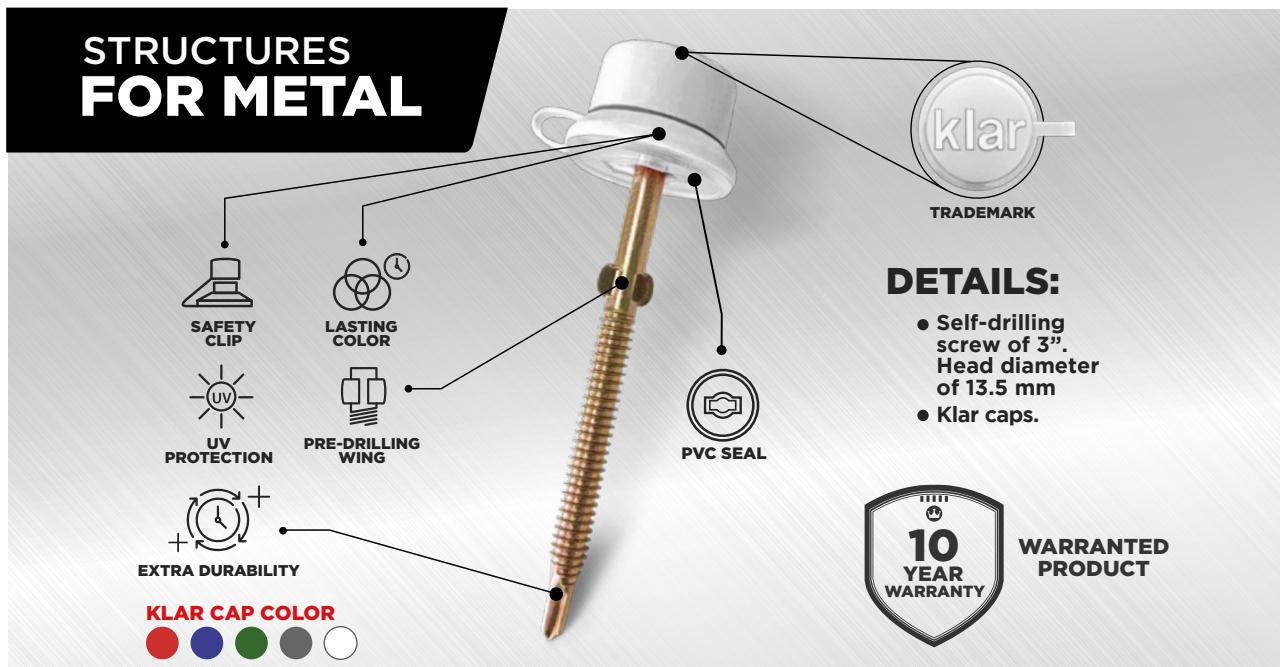
SPECIAL PRESENTATION
37.00" x 31.50" (length x width)
Angle: 172°

COLORS
White, red, blue, green, gray


ACCESORIES

Fitting Sets Klar

Use only with Klar thermoacoustic roofs

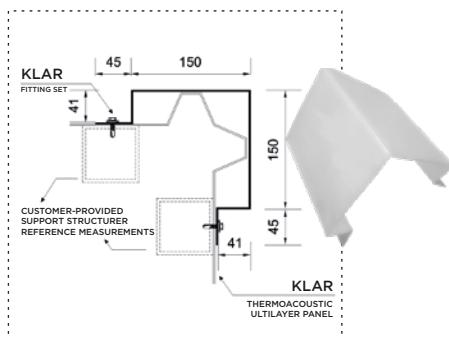


ACCESSORIES AND COMPLEMENTS

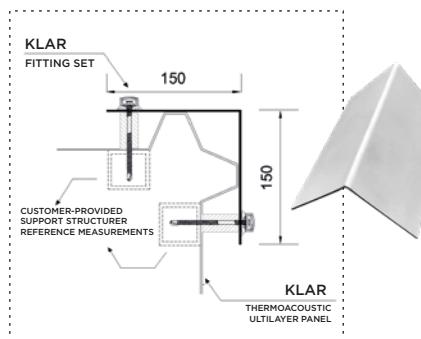
FINISHES:

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

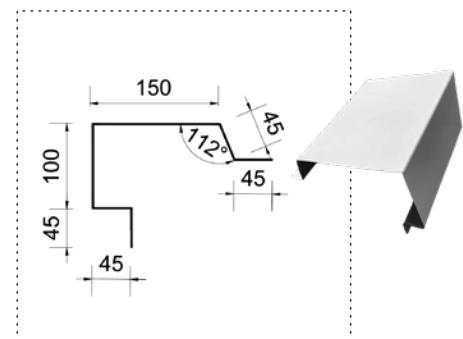
CORNER TYPE 1



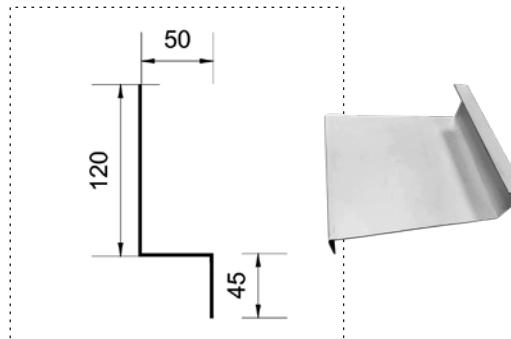
CORNER TYPE 2



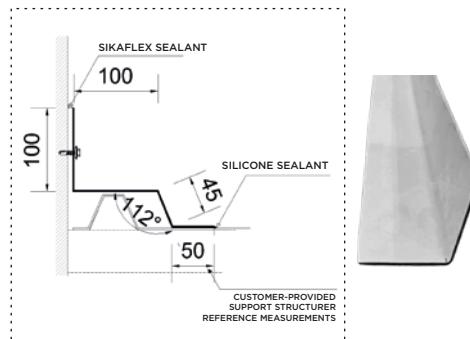
BORDER

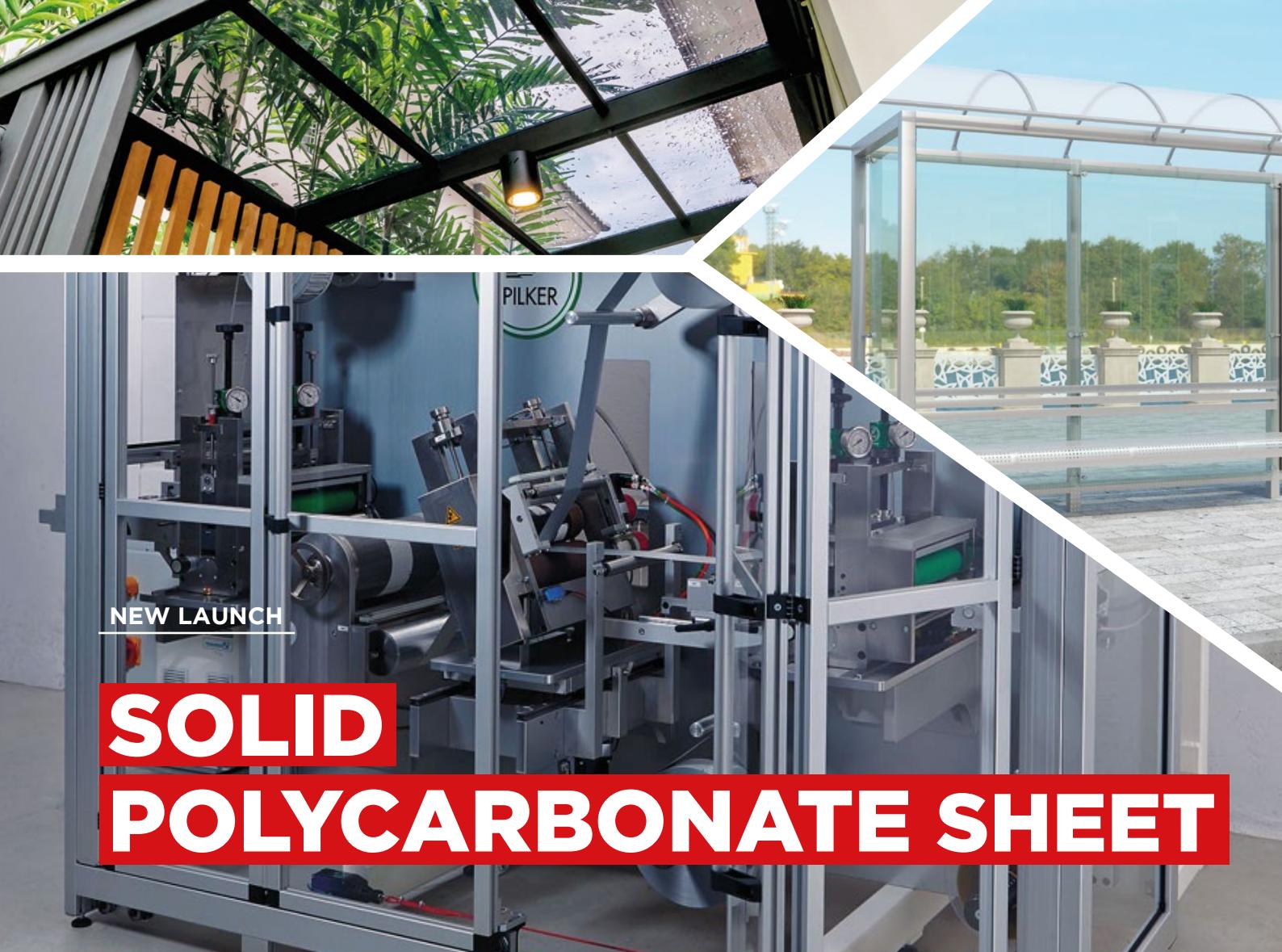


BASEBOARD



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.



VENTAJAS DEL MATERIAL

**Great impact
resistance**



**Available
with 2-side
UV protection***



**Great clarity
& brightness**



**Fire
resistance**



Thermo-formable



**Great Noise
absorption**



APPLICATIONS



POSTERS AND GRAPHIC MATERIAL

MANUFACTURING



SEGURIDAD Y PROTECCIÓN

CONSTRUCTION AND ARCHITECTURE

PRESENTATIONS

COLORS

Finish	Liso / Prismático
UV Protection	Ambos lados
Widths	1.22 / 2.05
Lengths (m)	2.44 / 3.05 / 6.00
Thickness(mm)	2 - 3 - 4 - 5 6 - 8 - 10 - 12



* Other lengths and colors are available subject to minimum order and open request.

* Check color availability with your Klar consultant.



Klar

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



10-year warranty



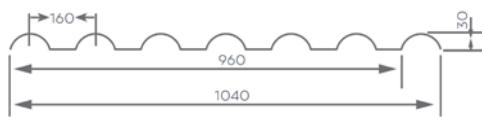
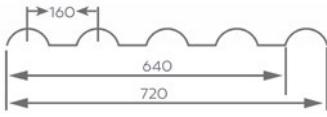
Fire resistant



100% recyclable and eco-friendly



They reduce noise



1.97m / 5.70m / 5.90m / 11.80m



Available width: 0.72 y 1.04 m
Thickness: 2.5 mm

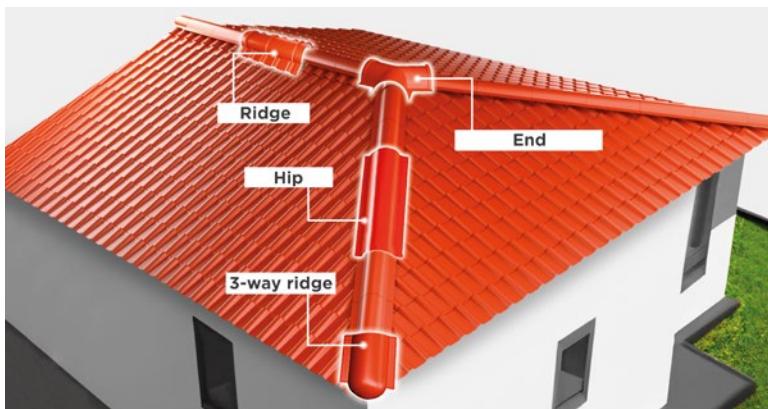
COLORS

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



APPLICATIONS





OUR BRANDS



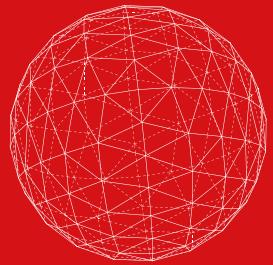
Polycarbonate Profiles
& Connectors



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

