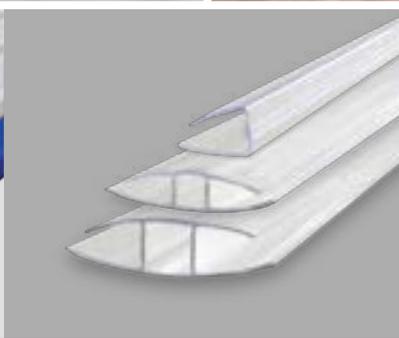
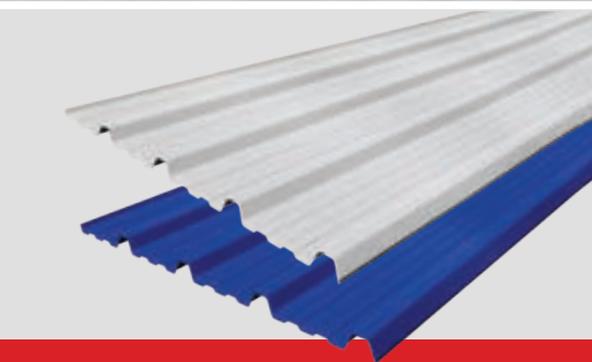
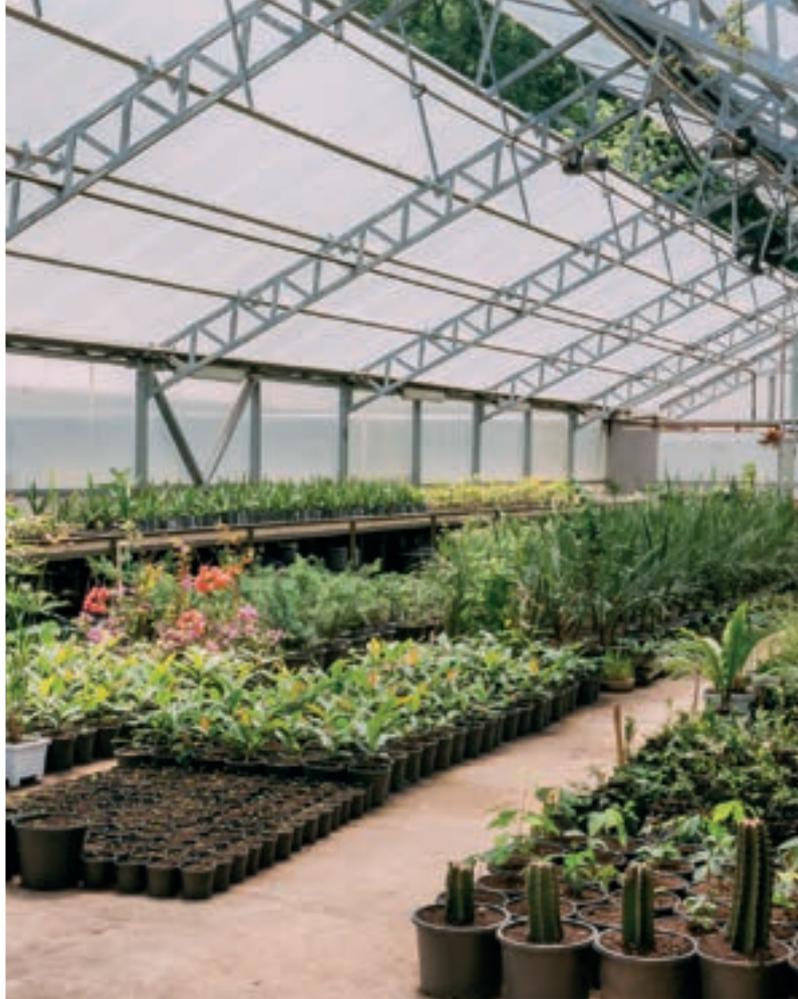




klar[®]



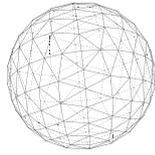
THE BEST SOLUTIONS FOR COVERINGS AND CONSTRUCTION APPLICATIONS

Polycarbonate Twinwall Sheets

Polycarbonate Profiles & Connectors

PVC Ribbed & Corrugated Panels





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.

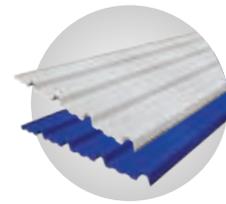
OUR PRODUCT LINES



Polycarbonate
Twinwall
sheets



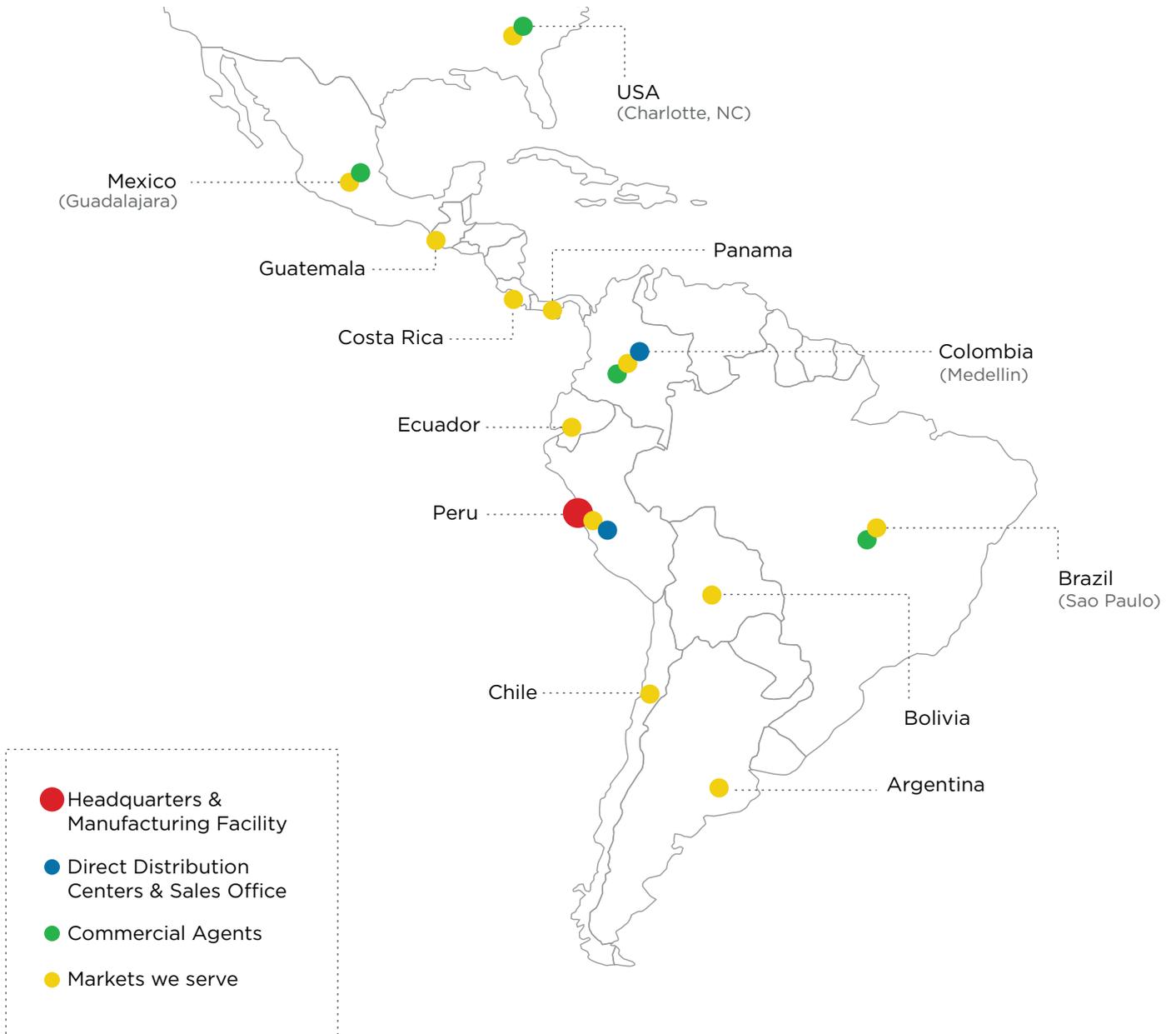
Polycarbonate
Profiles &
Connectors



PVC Ribbed
& Corrugated
Panels



INTERNATIONAL PRESENCE



SUCCESS FACTORS

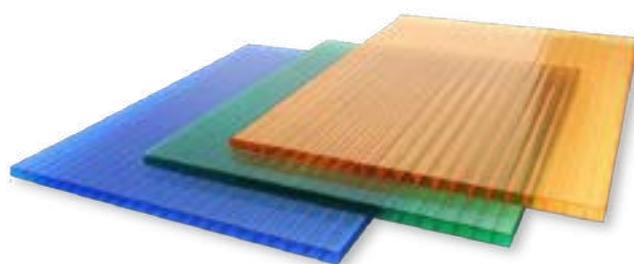
SUPERIOR QUALITY PRODUCTS AND EXCELLENT CUSTOMER SERVICE

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	Feet	Inches	Feet	Inches
4, 6, 8, 10	4	48	8	96
	6	72	10	120
	6.89	82.68	12	144
			16	192
			24	288
			36	432

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	J/m	ASTM D5628	770	790	830	900
Module of flection*	Mpa	ASTM D790	22,000			
Resistance to traction*	N/mm ²	ASTM D638	640			
Flammability	Classification	ASTM D-635	CC - 1			
K thermal conductivity	W/m ² k	ISO 10077	4	4	3	3
Accelerated aging (QUV)	Years	ASTM G154	10			
Acoustic isolation	dB	DIN 52210	15	17	18	19
Minimum curvature radius	m	STD	0.750	1.000	1.250	1.500
Dimension	m	STD	± 0.01*			

* Tolerance ±0.01 depending on the thickness

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



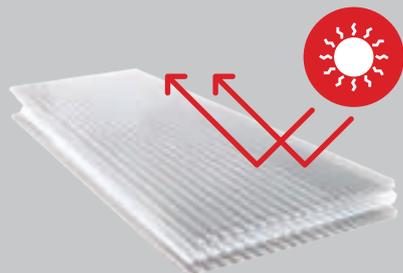
Reflective Pearl Reflective Gray Reflective Blue Reflective Green

SPECIALTIES

KLAREFLECT®

Reflective:

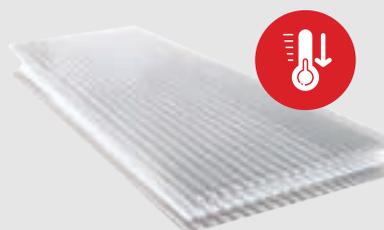
Our polycarbonate twinwall sheets with Klareflect® technology are suitable for warmer climates where excess of heat is quite a challenge. Klareflect® provides an effective solar heat control by reflecting sunlight away while keeping the internal temperature at low.



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:

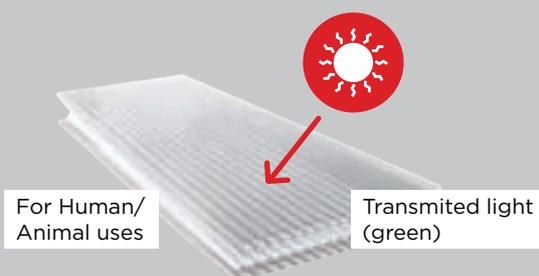
We recommend a selection of Stylish Klar® polycarbonate twinwall sheets for stylish, decorative applications where a sophisticated and refined look is desired. Our Stylish Klar® sheets provide elegance and style while keeping outstanding reflective qualities and light selectivity features.



KLAR® VISUAL COMFORT

Optical effects visual pleasing:

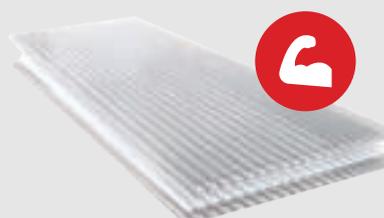
Klar® Visual Comfort technology provides a pleasing effect to the eyesight by reflecting selectively most of the near-IR solar radiation and transmitting a more visible, comfortable light.



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

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

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

CONNECTOR
Bottom & Cap connectors

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

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.

PROFILE
U-shaped

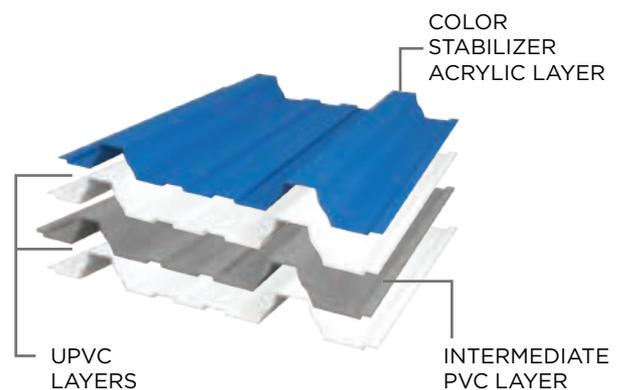
USE
Polycarbonate Sheet Thickness
4, 6, 8, 10mm

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

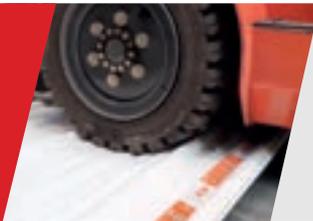
Our PVC Ribbed Corrugated panels serve as a better alternative to metal corrugated and fiber-cement roofing panels. They are six times better than conventional roofing because they reduce noise; do not rust; do not generate fungus; protect us from cold, heat and humidity; It's safe to install and easy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



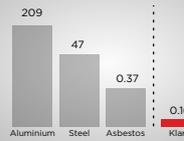
**SAFE & EASY
TO INSTALL**



- 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



Electric insulation or low conductivity



Great chemical resistance



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 
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*Subject to minimum quantity



TK6

44.49"

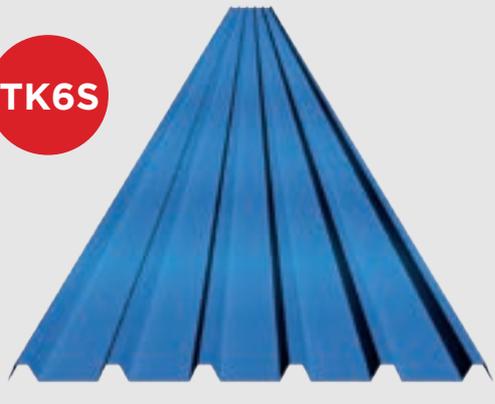
T.W. 44.49"



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 
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*Subject to minimum quantity

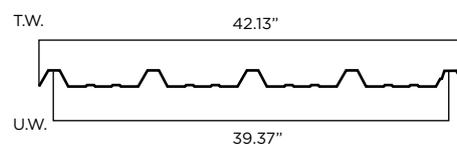
*UW: Usable Width / TW: Total Width

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

ACCESSORIES

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.

TK5	TK6	TK6S
STANDARD PRESENTATION 42.13" x 15.75" (length x width) Angle: 135°	STANDARD PRESENTATION 44.49" x 15.75" (length x width) Angle: 135°	STANDARD PRESENTATION 37.00" x 15.75" (length x width) Angle: 135°
SPECIAL PRESENTATION 42.13" x 31.50" (length x width) Angle: 171°	SPECIAL PRESENTATION 44.49" x 31.50" (length x width) Angle: 172°	SPECIAL PRESENTATION 37.00" x 31.50" (length x width) Angle: 172°
COLORS White, red, blue, green, gray 	COLORS White, red, blue, green, gray 	COLORS White, red, blue, green, gray 

Fitting sets (fasteners):

Roofing fitting sets

Self-drilling bolts zinc plated # 14 of 3" + cap.



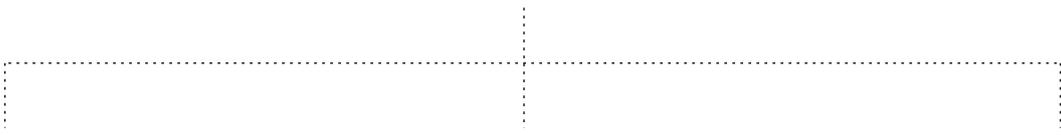
Enclosures and finishes fitting sets

Ruspert® Self-drilling bolts of ¾" + washer 16mm + EPDM.





OUR BRANDS



Polycarbonate Profiles & Connectors



Polycarbonate Profiles & Connectors



PVC Ribbed & Corrugated Panels



Lima, Perú

CONTACT

sales@klar.com.pe

www.klar.com.pe

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.com.pe

