Klar® PVC Corrugated Panels

Q. What does "TK" stand for?
A. "TK" stands for Thermo-Acoustic Klar®.

Q. What colors are available for TK9 & TK6?
A. TK9 & TK6 are stocked in white. Special order colors include Red Tile, Traffic Red, Green, Grey, and Blue. To request the special order color chart, please contact AmeriLux International.

Q. Are other TK profiles available?
A. Additional profiles, colors, lengths, and thicknesses are available for special order. Please contact AmeriLux International for more details.

Q. Why do the colored panels have an acrylic coating?
A. Colors other than white are coated with an acrylic layer for advanced UV protection to prevent fading and deterioration. The white Klar® panels are manufactured with titanium dioxide that is pigmented white, eliminating the need for an additional coating.

Q. What is the intermediate layer made of, and what does it do?
A. The intermediate layer is a thermal stabilizer that improves span performance. It can be customized with additives for specific environmental needs, such as increased resistance to extreme temperatures.

Q. What is the longest Klar® sheet in stock?
A. 24'4". Sheets can be custom-cut to order.

Q. Are Klar® PVC panels strong?
A. Klar® panels offer superior rigidity, durability, and are impact and rust resistant, ideal for the most demanding roofing, siding, and interior applications.

Q. Is Klar® corrosion resistant?
A. Yes. Klar® panels can be exposed to saline, alkaline, or acidic solutions (under 60% concentration) for 24 hours without rusting, making them ideal for water-exposed environments.

Q. Are Klar® panels flexible?
A. Klar® panels offer a degree of flexibility, allowing them to conform to slight curves or uneven surfaces. This makes them suitable for a variety of cladding and roofing applications where minor bending is required during installation.

Q. What is the maximum impact resistance of each Klar® panel?
A. 15 ft-lbf.

Q. What temperatures can Klar® panels withstand?
A. Klar® PVC panels can withstand temperatures between 14°F (-10°C) and 113°F (45°C).

Q. Should I be concerned about thermal expansion and contraction during installation?
A. Klar® PVC panels are a thermoplastic and will expand and contract with temperature changes. However, Klar® PVC panels exhibit a lower coefficient of thermal expansion compared to traditional PVC panels. Proper installation allowances for expansion and contraction are essential to maintain panel integrity and prevent stress-related damage.

Q. How does Klar® PVC panel compare to steel?
A. Klar® offers better insulation than steel, does not corrode, and performs well in weather conditions ranging from 14°F (-10°C) and 113°F (45°C).

Q. What happens to Klar® in the event of a fire?
A. Klar® is B1 flame-retardant, does not produce flaming droplets, and does not propagate fire. Panels will char under prolonged burning.

Q. Is Klar® PVC panels ICC (International Code Council) certified?
A. Not currently.

Q. How do you handle and store Klar® panels?
A. Yes. Refer to the install guide page 4 >>> KLAR INSTALL GUIDE

Q. What equipment do I need to unload Klar® panels?
A. A forklift or crane is recommended.

Q. Can I walk on Klar® panels during installation?
A. If you must walk or kneel on panels during installation, use a sturdy board long enough to span three structural supports. Never walk on installed sheets or leave unfastened sheets unattended.

Q. What is the recommended cutting tool for Klar®?
A. Use a side grinder or cut-off tool with an abrasive wheel or a circular saw with a multi-tooth blade running backward.

Q. Is it necessary to pre-drill holes?
A. Pre-drilling is necessary to prevent cracking or stress on the panel during installation, accommodate thermal expansion and contraction, and ensure precise alignment of fasteners—especially when working with harder substrates or multi-layer overlaps.

Q. What tool should I use for installing screws?
A. A cordless drill with a clutch to control torque. Do not overtighten the fasteners; doing so could cause warping.

Q. What is the minimum required slope for a Klar® roof application?
A. To ensure proper drainage of roofing systems, a minimum slope of 1:10 or about 6° (10%) is recommended.

Q. Are foam closures required for exterior installations of Klar® panels?
A. Foam closures are recommended when a higher level of air and moisture infiltration control is required. Closures provide airtightness and weather sealing, particularly at eave and ridge terminations, panel ends, and side laps. The necessity depends on the building's performance specifications and environmental exposure.

Q. Is a ridge cap available for Klar® panels?
A. Yes, ridge cap and flashing options are available. Please call AmeriLux for more information at 888-602-4441.

Q. Do I need mastic tape for Klar® installation?
A. Mastic tape is recommended for low-sloped roofs to enhance the weather seal and prevent potential water infiltration at panel overlaps and joints.

Q. How do I install Klar® panels when an overlap is needed?
A.

1. End-Lap: Overlap by 2" minimum. Start with the lower panels and overlap with the upper panels.
2. Side-Lap: One corrugation.
   For detailed installation information, please refer to the Klar® Installation Guide.

Q. What type of fasteners should be used for Klar® panels?
A. Self-drilling screws with wings for pre-drilling.

Q. What fastener should I use in wet applications?
A. Use a self-drilling screw with wings to allow for pre-drilling, paired with a larger-diameter washer to improve sealing and prevent water infiltration.

Q. What fastener should I use in confinement areas?
A. Use a self-drilling screw with wings to allow for pre-drilling, paired with a larger-diameter washer.

Q. What fasteners should be used for overlapping three or more layers?
A. Use self-drilling screws with wings to ensure proper pre-drilling through all layers. The screw length should be increased as needed—up to 4 inches—depending on the total panel thickness and profile geometry.

Q. What is the maximum purlin spacing for Klar® in general?
A. Up to 6 feet, depending on slope, thickness, and corrugation. Always install purlins and space them according to local building codes.

Q. What is the maximum purlin spacing for TK9 2.0 mm on a roof?
A. 3’ span, for higher loads or specific code requirements, reduced spacing may be necessary. Always install purlins and space them according to local building codes.

Q. What is the maximum purlin spacing for TK9 1.5 mm on a ceiling application?
A. 4’ span, for higher loads or specific code requirements, reduced spacing may be necessary. Always install purlins and space them according to local building codes.

Q. What Klar® panel thickness is recommended for an exterior wall?
A. 2.00–2.50 mm.

Q. What Klar® panel thickness is recommended for a roof?
A. 2.50–3.50 mm.

Q. What is the recommended panel thickness for exterior applications?
A. The appropriate thickness depends on the span, support spacing, and loading requirements of the roofing or cladding system. As a general guideline, Klar® panels between 2.50–3.00 mm are recommended for roofing applications, while 2.00–2.50 mm is typically suitable for wall cladding. Geometric profile and environmental factors should also be considered when determining final specifications.

Q. What is the snow load capacity?
A. Snow load capacity depends on the panel thickness and profile. Please contact AmeriLux International for project-specific load data.

Q. What is the wind load capacity?
A. Wind load depends on panel thickness and profile. Please contact AmeriLux International for project-specific load data.

Q. When do I need flashing?
A. It depends on your specific roof design and application. Flashing is used to direct water away from critical areas of a structure, such as joints, edges, and transitions between different roof levels or between walls and roofs.

Q. What type of flashing should I use?
A. The type of flashing required depends on the specific roof configuration, slope, and transition points. Common options include ridge, valley, and edge flashings. For optimal performance and compatibility, refer to the Klar Installation Guide for recommended flashing profiles based on your application.

Q. What sealants are compatible with Klar® panels?
A. Butyl tape, double-sided tape, and polyurethane sealants. For more information, contact AmeriLux International.

Q. How can I cover the gap at the peak of a post-frame building?
A. Use a flat ridge cap (10’ long, 48” wide) or a notched ridge cap for a tighter seal.

Q. What color trims are available?
A. Trims are stocked in white and available in special-order colors. For trim color and availability, please contact AmeriLux International.

Q. How do I clean Klar® sheets?
A. Use mild soap, water, and a soft cloth or sponge. Avoid abrasives or harsh chemicals.

Q. Can I pressure wash Klar® sheets?
A. Yes, always test a small area of the sheet before using the pressure washer. Use the pressure washer at max. 100bar or 1,450psi.

Q. What is the warranty on Klar® panels?
A. 10-year Warranty.