FREQUENTLY ASK QUESTIONS
POLYCARBONATE PRODUCTS

PLASTX

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TECHNICALITIES

Question: What is the difference between corrugated and multiwall polycarbonate sheet profiles?
Answer: Corrugated polycarbonate is a single layer sheet with either a wave or box-type profile, similar in design to metal roofing sheets. Multiwall polycarbonate has a rectangular hollow structure “flutes” that run the length of the sheet.

Q. What is the difference between direct light and diffused light?
R. Direct light is intense, bright light from a single source creating sharply defined shadows that flatten out three-dimensional detail. Diffused light is a soft light that scatters in many different directions and does not cast harsh shadows.

Q. What is a daylighting system?
R. Daylighting systems, such as windows and skylights, illuminate interiors of buildings with natural light and help to offset the energy costs of artificial lighting.

Q. What is wind load and why is it important?
R. Wind load is the force or impact that wind exerts when blowing against a structure. Higher wind impact on a structure = higher wind load.) Calculating and understanding wind load helps ensure that a structure will withstand high winds.

Q. What is the difference between solar heat gain and heat loss?
R. Heat gain is the increase of thermal energy within a space from the sun’s radiant energy. Indoor heat that escapes through and around a building’s windows, doors, and skylights is heat loss (air leakage).

Q. What is the difference between a rafter, a purlin, and a girt?
R. A rafter is a sloped framing member supporting the roof deck, running diagonally from the ridge of the roof to the plates of the exterior walls. A purlin is a horizontal beam that directly supports the roof covering, running perpendicular to the slope of the roof. A girt is a horizontal structural member in a framed wall, providing lateral support.

Q. Are there any panels that can help keep heat out?
R. Opaque panels reflect heat while clear panels allow heat to come through. In general, panels with multiple layers retain room temperature better than single layer sheets.

Q. How to store and handle Polycarbonate and PVC panels during the winter months?
R. Always keep sheets out of direct contact with sunlight, cement, and paint. Do not store polycarbonate and PVC panels in contact with one another. Panels should be laid flat, stacked on a raised platform, and covered with an opaque material in a dry, well-ventilated, shaded area. Panels may be stored outside temporarily in rain or snow.

Q. Do polycarbonate sheets need to acclimate to the room temperature where they will be installed?
R. Yes! Prior to installation, lay the panels flat and uncovered in the room in which they will be installed (or a room with the same climate conditions). Allow the sheets to acclimate to the room temperature for at least 48 hours.

Q. Why choose multiwall polycarbonate for a pool enclosure?
R. Light in weight, polycarbonate is easy to handle and install. Panels are incredibly strong and will not shatter like glass if damaged. Thermal insulation properties keep the enclosed pool area warmer. The UV-treated outer surface provides sun protection, reducing the risk of sunburn.

PROPERTIES, DIMENSIONS AND COLORS

Q. Can Polycarbonate or PVC be recycled?
R. Yes, Polycarbonate and PVC are recyclable materials.

Q. In the case of a fire, what would happen to a polycarbonate sheet?
R. Polycarbonate has a low flammability rate, does not release toxic fumes, burns at a much slower rate than many other plastics, and is self-extinguishing.

Q. Are multiwall polycarbonate panels strong?
R. Multiwall panels are extremely durable and virtually unbreakable; 10-times stronger than acrylic and 200-times stronger than glass.

Q. Are multiwall polycarbonate panels flexible?
R. Yes, polycarbonate panels are highly flexible and may be curved or bent using common forming processes. The structure and thickness of the panel will impact the extent of radius bending.

Q. What is the longest length multiwall polycarbonate sheet in stock?
R. The longest sheet is 48'. Every order is custom cut per customer's specifications.

Q. What is the widest width multiwall polycarbonate sheet in stock?
R. The widest sheet is 48", 71.25", or 72" depending on product.

Q. In what colors are multiwall polycarbonate sheets available?
R. Clear, Bronze, Opal, White, and Softlite. Additional colors are available by special order and have minimum order requirements.

PROTECTION FILM

Q. Why is there film on the polycarbonate sheets?
R. The masking film prevents scratching and damage of the polycarbonate sheet during transport, fabrication, and installation.

Q. Should the masking film be removed before cutting a polycarbonate sheet?
R. No, the masking film indicates the UV-protected side and provides protection during fabrication and installation. Note: Installing sheets with the wrong side out voids the warranty.

Q. How can you tell which side of a polycarbonate sheet is UV-protected if the masking film or product label is missing?
R. An iodine test can be performed to determine which side of the sheet has a UV coating. Simply put a few drops of iodine on one side of the sheet and try wiping it off. If the iodine wipes off easily, that is the UV-side. The iodine will stick to the side of the sheet that is not UV-protected. Iodine can be purchased over the counter at most drugstores or big-box retailers.

Q. What can I do if the film is stuck to the polycarbonate sheet?
R. Stuck on masking film can be gently scrubbed with a soft cloth wetted with Fels-Naphtha (available at most hardware stores) or isopropyl alcohol and pulled off. Follow with a mild soap cleaning and water rinse. Do not use chemicals or sharp objects to remove the masking.

Q: What is the recommended method for removing a 'stuck-on product label' from a polycarbonate sheet?
R: **Method #1** : Try saturating the label with soapy lukewarm water to loosen the adhesive. The label should remove easily after about 15 minutes of soaking.
Method #2 : Wet a soft cloth with rubbing alcohol (isopropyl alcohol). Place the cloth on the label face. Leave it sit until the rubbing alcohol has soaked through the label (approx. 15 minutes). Starting at one corner, carefully peel off label. For stubborn labels, spray Goo Gone on the face of the label and let it sit for roughly 15 minutes to completely penetrate the label. Begin at one corner of the label and slowly peel off. If you use Goo Gone, MAKE SURE to clean the area where the label was with soapy lukewarm water and rinse thoroughly to remove any oily residue.

INSTALLATION

Q. Do I need to be concerned about thermal expansion and contraction when installing my polycarbonate panels?
R. Most definitely! Polycarbonate expands in hot weather and contracts in cold - about 1/32» per foot for 100° of temperature change with the greatest amount of movement during the spring and fall seasons.

Q. What is the best way to cut multiwall polycarbonate sheets?
R. This depends on the length of the cut and width of the panel. Sheets may be cut using a utility knife, circular saw, or table saw. A fine-tooth blade is recommended. Please reference the multiwall installation guide for detailed cutting information.

Q. What can I use to cover the gap at the peak of a post frame building?
R. A polycarbonate ridge cap may be used to cover the point where two roofing panels meet, keeping snow and rain out of the building while allowing natural daylight to come through at the peak.

Q. What size cross purlins should be used on a wood frame?
R. When building a wood frame use at least a 2" x 2" for cross purlins.

Q. How are Multiwall panels cut?
R. Use a razor knife or a circular saw with a fine-tooth blade that has at least 10 teeth per inch.

Q. Which tools to cut corrugated panels?
R. Use a circular saw at high speed but low advance rate. For curved cutting, use a jigsaw or metal cutting sheers.

Q. Is it necessary to pre-drill holes before installing polycarbonate sheets?
R. Pre-drilling is a must, allowing the sheets to expand and contract due to changes in temperature. Failure to pre-drill can result in the sheet warping and/or cracking around the screw.

Q. Can panels be nailed into place instead of screwing?
R. Do not nail sheets. Nailing panels does not allow for panel expansion and contraction with temperature changes. It is recommended to pre-drill and screw panels..

Q. What type of screw should I use when installing polycarbonate panels?
R. It is important to choose the correct fastener for your specific application. AmeriLux recommends using a #10 or #12 wood mate screw for wood and a #10 or #12 self-drilling screw for metal, such as aluminum or steel (fasteners should penetrate the roof or wall of the structure by at least one inch).

Q. Do I need to use a washer with the screws?
R. Yes, use at least a 10mm or larger neoprene bonded washer with screws.

Q. What type of sealant should be used on polycarbonate sheets?
R. It is highly recommended to use 100% silicone sealant on polycarbonate sheets.

Q. How can I bond two pieces of polycarbonate sheet together?
R. Polycarbonate sheets can be bonded using adhesive or solvent bonding, or mechanical fastening (recommended method). If optics are not a concern, GE Silicone RTV108 or GE Silicone Construction Grade 1200 are recommended adhesives. Use a Urethane Laminating Film if optics is a concern.

Q. How do you keep dust and dirt out of the flutes of a multiwall polycarbonate sheet?
R. Before installation, apply sealing tape to both ends of the polycarbonate sheet to prevent dust, bugs, and other debris from entering the flutes. We recommend using a high-quality vent tape on the bottom edge of the sheet to allow for moisture drainage.

Q. Why should multiwall polycarbonate panels be installed with the flutes oriented vertically?
R. Vertical installation allows moisture that may accumulate in the flutes to drain out.

INSTALLATION (SUITE)

Q. Can you walk on sheets during installation?
R. Do not walk directly on sheets. Sheeting is not intended to support the weight of a person. Use stepping ladders or place crawling boards to create a path for walking.

Q. Que peut-on utiliser à la place d'une faîtière?
R. Vous pouvez utiliser un solin métallique avec des bandes de fermeture en mousse ou en plastique.

Q. What are polycarbonate H- and U-Channels used for?
R. A polycarbonate H-Channel joins two multiwall polycarbonate sheets together, providing a finished, professional look. A polycarbonate U-Channel caps off the top and bottom of a multiwall polycarbonate sheet, preventing dust and bugs entering the flutes.
Note: Drill holes in profile used to cap off bottom edge of sheet for moisture drainage.

Q. How can I get my H- or U-Channel to slide onto the sheet?
R. Try rubbing a bar of hand soap or squirt mild liquid dish detergent on the edge of the sheet. A putty knife may also be used to gently pry open the profile. After the profile has been installed, use a soft, wet cloth to remove any excess soap.

Q. What are closure strips?
R. Typically made of foam or plastic, closure strips are designed to match the profile of a corrugated panel and help seal the opening created where the panel meets a flat surface. This provides a finished, professional appearance and increases the weather-tightness of the structure.

CLEANING

Q. How do you clean polycarbonate sheets?
R. Use a mild household detergent with a soft rag or sponge. Never use abrasive cleaning agents or glass window cleaners. A pressure washer may be used for cleaning large areas using the 'mist' setting. Always test a small area of the sheet first.

Q. How do I clean out the debris that has built up in the flutes of a polycarbonate multiwall sheet?
R. Remove dirt, dust, and other particles with a vacuum or blow out with compressed air. We do not recommend flushing the flutes with water.

GREENHOUSES

Q. What are the benefits of using a polycarbonate panel with an anti-condensate coating?
R. Corrugated polycarbonate is a single layer sheet with either a wave or box-type profile, similar in design to metal roofing sheets. Multiwall polycarbonate has a rectangular hollow structure "flutes" that run the length of the sheet.

Q. Should I buy a greenhouse kit or build my own greenhouse structure?
R. Available in a range of sizes and styles, greenhouse kits typically provide a compromise of time, convenience, cost, and ease-of-assembly. Building your own greenhouse usually costs less and offers greater flexibility in size, shape, and materials used.

Q. What is the better polycarbonate choice for a hobby greenhouse: Multiwall or Corrugated Polycarbonate?
R. This depends on climate and style of greenhouse. Corrugated polycarbonate is less expensive, but the single wall construction offers less heat retention. If thermal properties are important, multiwall polycarbonate traps air between its layers, making the energy savings worth the extra investment.

Q. Is there a superior material that should be used for greenhouses?
R. Yes, THERMOCLEAR™ 15 is a high-performance polycarbonate sheet. The proprietary UV-coating on the exterior side of the sheet and a dripgard coating on the interior making it ideal for green house applications.

CORRUGATED POLYCARBONATE PANEL

Q. What is the longest length corrugated polycarbonate sheet in stock?
R. The longest corrugated sheet is 36'. Every special order is custom cut per customer's specifications.

Q. What is the widest width corrugated polycarbonate sheet in stock?
R. The widest sheet is 50" or 74" depending on product. Some width are on special order.

Q. In what colors are corrugated polycarbonate sheets available?
R. Clear, Bronze, Opal, and Softlite. Additional colors are available by special order and have minimum order requirements.

Q. Is corrugated polycarbonate strong enough to be used as a roofing material?
R. With proper structural support, corrugated polycarbonate panels will stand up against hailstorms, powerful winds, and wet snow accumulations.

Q. What is the best way to cut corrugated polycarbonate sheets?
R. This depends on the length of the cut and the width of the panel. Sheets may be cut using either a vertical band saw or hand-held jigsaw. A fine-tooth blade is recommended. Please reference the corrugated installation guide for detailed cutting information.

WHERE TO BUY POLYCARBONATE PANELS

Call us at 1 888 994-3130 or send an email to ventes@avenord.com.
A member of the Plast-X team will help you find the retailer closest to you.