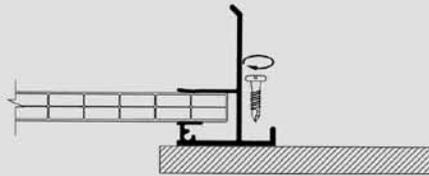
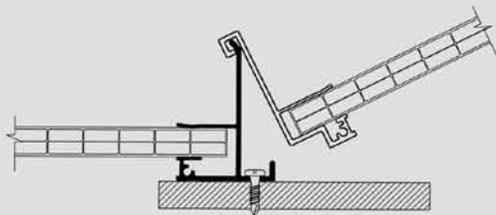


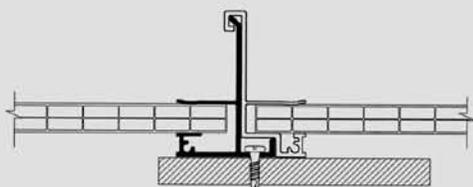
MULTI-LINK PANEL



FIX



AND



LINK

Multi-Link Glazing Systems

The Multi-Link Panel is a modular, pitched roof glazing system manufactured in a controlled environment by Starlight Glazing Systems. Each individual panel consists of a 16 mm ($\frac{5}{8}$ inches) multiwall polycarbonate glazing sheet with integral, extruded aluminum glazing bars.

The unique, interlocking design of the glazing bar, which allows rapid "Fix and Link" installation of the panel, also incorporates a water management system to ensure effective external drainage of the roofing system.

Factory manufactured to individual specifications ensures quality controlled panel assembly. This is impossible to achieve in on-site conditions. After cutting to size, the multiwall glazing sheets are blown out with refrigerated, de-ionized air to remove any dust and the edges are immediately taped to seal against ingress of dust and dirt.

By combining the lightweight characteristics of multiwall polycarbonate sheet and aluminum glazing bars, the Multi-Link Panel is particularly light and easy to handle. The patented "Fix and Link" design, together with the pre-assembled nature of the panel, can cut installation time by two thirds or more as compared with traditional glazing methods.

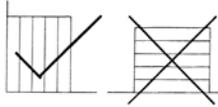
Glazing Material

Multiwall polycarbonate glazing sheets offer remarkable impact resistance, high levels of light transmission, and long term weather durability.

In addition, they have excellent heat insulation characteristics, providing further cost savings through energy conservation. White and bronze tinted versions are available for use where levels of light transmission and/or solar gain need to be restricted. Backed by a 10 year warranty, multiwall polycarbonate glazing is ideal for pitched and vertical applications.

Storage and Handling

Multi-Link Panels are supplied from the factory in protective packaging and shrink wrapped in pairs. Following delivery they should be stored on their edges and never laid flat or stacked.



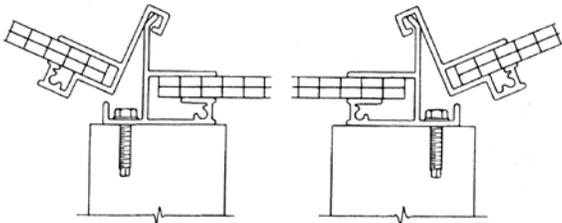
Prior to, and during, installation they should be handled with care to avoid damage and scratching.

Getting Started

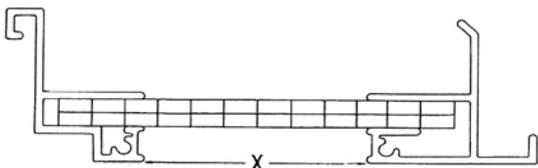
Panels are marked, labeled and, if necessary, numbered, particularly if the installation is sequence critical. The Starter Panel is manufactured with two 'male' glazing bars. It is usually packed separately and will be clearly identified.



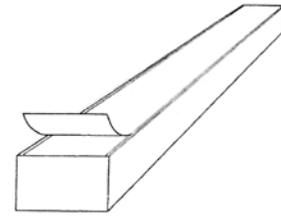
Panels are manufactured for installation in one direction only (right to left or left to right), which is pre-determined by site conditions or the customer's instructions.



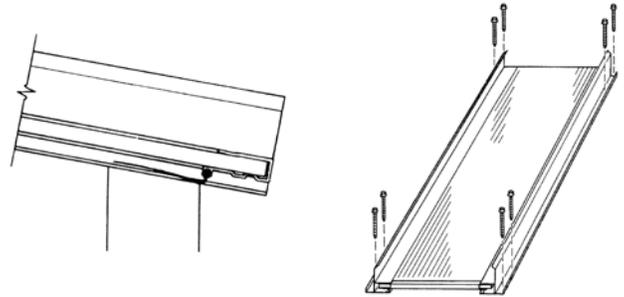
Multi-Link Panels are supplied with an Eaves Filler. This is used to fill the gap left between the glazing sheet in the panel and the eaves structure. It should be fixed to the underside of the panels (not the eaves structure) just prior to installation. Cut the filler to the exact length as determined by the distance between the glazing bars ('x' on the diagram).



Lay the first panel in place temporarily to measure and mark the optimum position for the filler and use this measurement for each subsequent panel.



Fit the Eaves Filler in the determined position by peeling back the protective masking and pressing into place on the underside of the panel between the glazing bars.

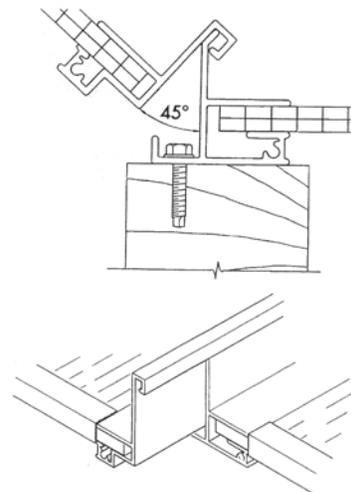


Having established the fitting direction and fixed the eaves filler, the Starter Panel is placed into position and secured by placing screws through the fixing channel into the structure in all four corners.

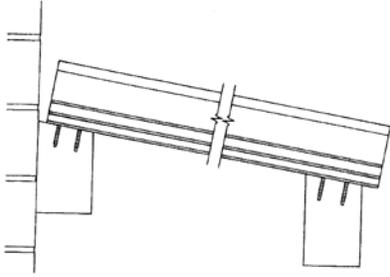
NOTE: Special care should be taken to ensure that the Starter Panel is correctly positioned square and true in order that subsequent panels run parallel and true.

Fixing Second and Subsequent Panels

After fixing the Starter Panel the second panel is linked into position as shown. Linking is easier if the panel is located on the Starter Panel at an angle of at least 45 degrees.

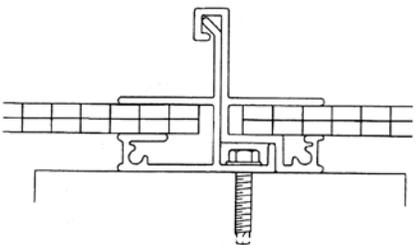
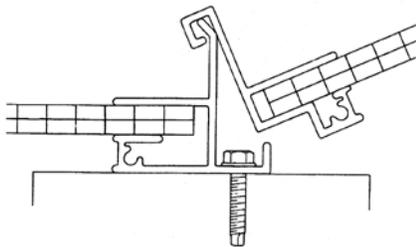
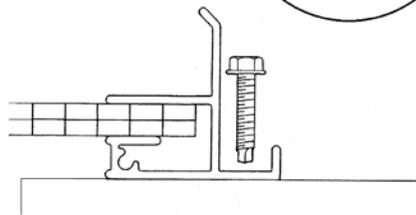
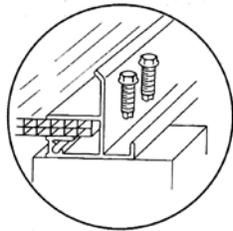


Linking can be started anywhere along the axis of the glazing bar should obstructions at the wall end need to be avoided. The panel will slide up easily into its final position.



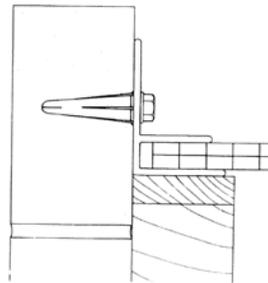
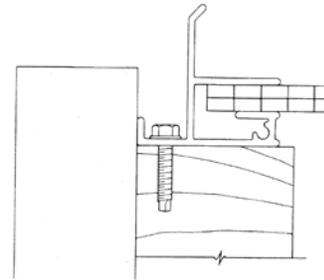
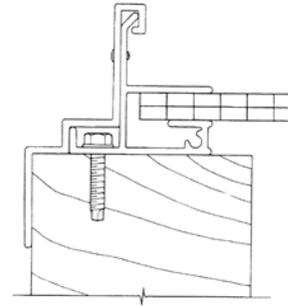
Having linked the panel, lower it into position and fix securely through the fixing channel on the 'male' bar with two screws at the top and the bottom of the panel. Repeat this procedure for each remaining panel.

It is strongly recommended that two appropriate screws are used at each fixing point. The actual type required will be determined by the structure on which the panels will be installed. Only stainless steel screws should be used.

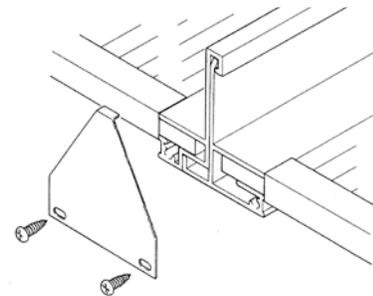


Finishing Off

The final stage of the installation will depend on the roof structure. Some sample details are shown below.



Polycarbonate End Caps should always be fitted to the panels to provide security for the glazing and add the finishing touch.

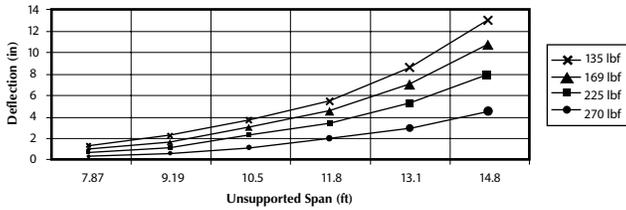


Cleaning

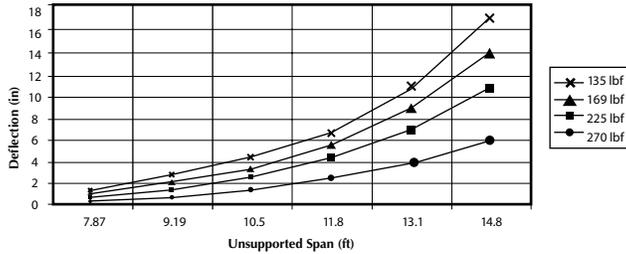
Multi-Link Panels should NEVER be cleaned with a brush, a dry cloth or ammonia based cleaners (e.g. Windex), as this is likely to scratch or mar the surface of the polycarbonate glazing, causing permanent damage. To remove dust or other debris, the panels should be hosed down and and/or cleaned with ample quantities of warm, soapy water in conjunction with a soft, wet sponge where absolutely necessary.

DEFLECTION DATA

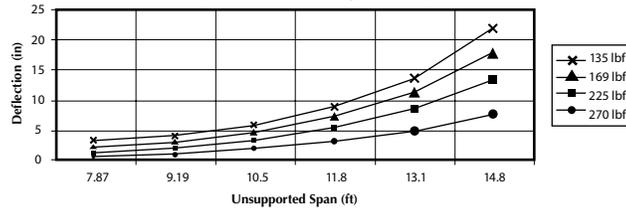
16mm Glazing on 24 inch Centers



16mm Glazing on 31 1/2 inch Centers



16mm Glazing on 39 1/2 inch Centers
Note: Requires Patented Glazing Restraint System



Availability

Multi-Link Panels are available in a variety of sizes and specifications. Each project is made to the individual requirements of each project and Customer.

Panel Sizes: Panels can be up to 24 feet in length with bar centers of 3 feet standard and up to 4 feet with the patented Glazing Retention System. See the chart for spanning capabilities.

Bar Finishes: Mill finish, white or bronze polyester enamel are standard. Custom finishes are available (anodized, Kynar, powder coated, etc.) but are subject to minimum order requirements.

Glazing Material: 16mm multiwall polycarbonate is available in transparent clear, transparent bronze or translucent white. Non-glazing infill panels, such as aluminum composite panels, can be fitted as an alternative.

OSHA Fall Guard Compliant: Multi-Link Panels can be ordered with the patented Glazing Retention System that exceeds OSHA Fall Guard requirements without the use of unappealing metal cages.

Hurricane Protection: COMING SOON!
Multi-Link Panels are in the Hurricane Protection certification process now.

TYPICAL PROPERTIES				
Multiwall Polycarbonate Type		Triple Wall		
Thickness		16mm (5/8 inches)		
U Value - ASHRAE		Btu/hr x ft ² x degF W/m ² degK		0.37 2.3
Light Transmission - ASTM D1003		Clear 74%	Bronze 37%	White 32% Opal 48%
Shading Coefficient - ASRAE		Clear 0.95	Bronze 0.78	White 0.53 Opal 0.66
Solar Transmission - ASRAE		Clear 82%	Bronze 60%	White 30% Opal 71%
UV Blockage		99%		
Weight		0.57 Lbs/ft ² 2.7 kg/m ²		
Flammability Rating		ASTM D1929 ASTM D635 ASTM E-84		Flash Ignition: 940 degF Self Ignition: >1000 degF CC1/CC2 Class A
Free Spanning Ability		12 Ft		
Maximum Glazing Centers		4 Ft		
Standard Glazing Center		3 Ft		
Minimum Recommended Installed Pitch		10 deg (2/12)		
Warranty	MWP - Fading & Yellowing: 10 Years	MWP - Hail Damage: 10 Years	Extrusions: 10 Years	Finish: 10 Years
STARLIGHT GLAZING SYSTEMS <small>PRODUCT OF ORCA MANUFACTURING, INC.</small>		P.O. BOX 992 HURLOCK, MD 21643 866-242-5774 www.starlightglazing.com		