







Cross Country Greenhouses

Heavy Duty Aluminum Framing Systems and Glazing Options

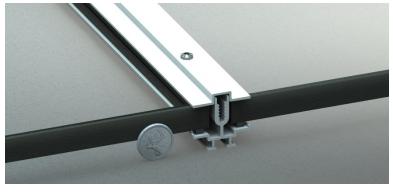
Our standard, functional greenhouse aluminum frame is ideal for hobby residential greenhouses and commercial applications that require a permanent structure that complements an existing landscape. The Cross Country greenhouse frame designs carry a wind load of 85 mph winds and 32 pounds per square foot and these can be upgraded to meet local loads.



SINGLE TEMPERED SAFETY GLASS

3MM, Insulating R-Value .96
Approximately 90% light transmission

Options: Bronze, green or silver tints available as well as laminated glass



INSULATED DOUBLE GLASS

16MM, Insulating R-Value 2.1
Approximately 82% light transmission

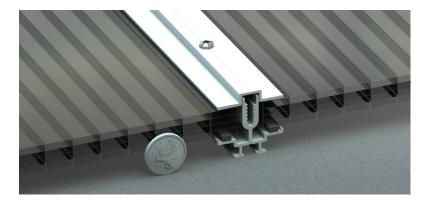
Options: High Performance Low E, tinted, or laminated



TWINWALL POLYCARBONATE

6MM, Insulating R-Value 1.62 Approximately 80% light transmission

Options: clear, opal, bronze tint available



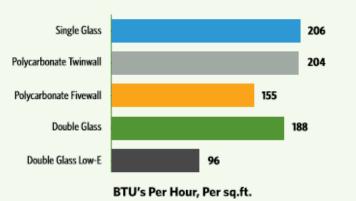
FIVEWALL POLYCARBONATE

16MM, Insulating R-Value 3.0
Approximately 62% light transmission

Options: clear, opal, bronze tint available

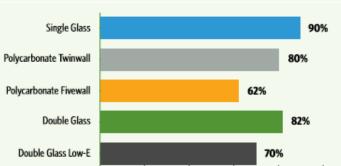
RELATIVE HEAT GAIN

Greenhouse glazing effectively functions as a heater when solar energy is available. The more BTU's, the warmer the greenhouse. Typically a lower number is preferred for keeping greenhouses from overheating in the warm months. The exception would be for greenhouses in cold but sunny climates, where higher heat gain will reduce winter heating costs.



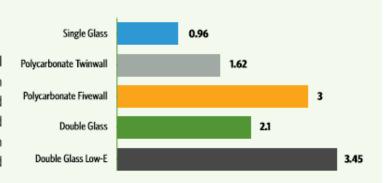
VISIBLE LIGHT TRANSMISSION

Light Transmission is the amount of visible light transmitted through each glazing. Plants have varying light requirements; whether diffused light to mimic undergrowth of a forest canopy or maximum light exposure. The **angle of incidence** in which light transmits through the glazing is also a factor. Maximum light transmission happens at 90 degrees perpendicular to the glazing.



INSULATING R-VALUE

Higher insulating R-value means more heat will be held inside the greenhouse. Heat transfers from warm to cool through conduction, convection, and radiation. Conduction happens through a solid material. Convection happens as warm air mixes with cool air. Radiation happens when infrared is reflected from surfaces.

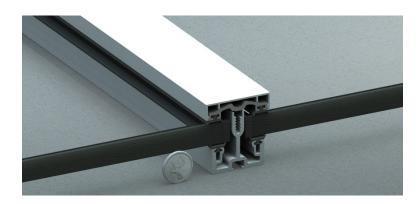


- MULTIPLE LAYERS WITH AIR GAPS REDUCE CONVECTION AND CONDUCTION.
- LOW-E COATING REDUCES INFRARED TRANSMISSION AND REDUCES HEAT LOSS VIA RADIATION

Meridian Estate Greenhouses

Superior Frame System

The Superior frame offers a more substantial appearance as well as structural strength without the look of exposed exterior fasteners. This impressive frame is offered with insulated double glass panels or highly energy efficient fivewall polycarbonate. Thermally upgraded, the framing system allows for enjoyment in every season. The Superior frame is a popular choice with homeowners who wish to match the design of their home and create a beautiful living and growing space. Our proprietary glazing bars offer multiple advantages to the homeowner which include a weather tight seal which helps to maintains the optimum temperatures inside the greenhouse as well as reduce condensation. Additionally, our interior bolt track provides endless shelving and staging opportunities.



Meridian Superior Frame

Deep internal weep system to expel moisture to outside, interior bolt track for shelving and baskets, vinyl modified gaskets for optimum seal.

Options: High Performance Low E double glass, tinted or laminated glass

Luxury Frame Collection

Our Luxury Frame Collection is the ultimate in elegant design while maintaining all the functionality of a full greenhouse environment. Three different sizes of tubular aluminum glazing bars guarantee the design of your dreams. In this collection, the frame is the strength as well as the beauty. Without an internal track bolt system, the interior of the greenhouse is emphasized with minimal lines for a truly clean and contemporary look.

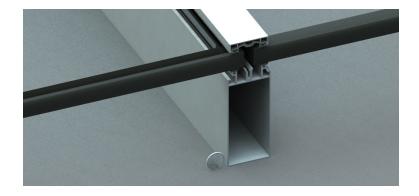
Great care is taken to create a finished appearance with limited exposed fasteners providing a clean, high style effect. This collection affords the choice of any glass or polycarbonate glazing option including high performance, tinted and double glass.



Meridian Luxury Collection 3" Bar

3" tubular frame offers potential for larger spans and the ability to hide wiring or conduit inside of the tubular extrusion.

Options: Any glazing option including high performance, tinted and laminated glass.



Meridian Luxury Collection 5" Bar

Spans of glass up to 32" wide or more. Trussing includes tubular webbing with hidden fasteners and wiring or channels with gusset plates for a "stronger look".

Options: Any glazing option including high performance, tinted and laminated glass.

Technical Details:

Aluminum: Alloy and temper framework is 6063-TB, ASTMB 221 for extrusions and 209 for sheet/plates.

Paint: All finishes and trim is semi-glass baked on Duracron enamel finish to comply with 2603 specification.

Gaskets: Vinyl-Rubber modified gaskets for improved cold temperature flexibility.

Extrusions: The glazing bars are proprietary solid extrusions that incorporate an internal and external weep/condensation channels to direct moisture, which could collect on the interior of the glazing, to the exterior of the greenhouse.