



Design-Build Partner for Custom Commercial Greenhouses Serving
Community, Institutional, Hospitality, and Development Projects.



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About Us

For over 75 years, **BC Greenhouse Builders** has partnered with architects, developers, contractors, institutions, and municipalities to create custom greenhouse environments across North America.



As the manufacturer behind **Cross Country Greenhouses**, **Cross Country Commercial Greenhouses**, and **Meridian Estate Greenhouses**, we create climate-controlled environments that combine refined architectural aesthetics with durable, long-lasting construction.

Our portfolio includes rooftop amenity spaces, educational greenhouses, conservatories, hospitality venues, wellness spaces, and community gathering hubs. Each structure is thoughtfully designed to complement its surroundings while creating inviting spaces that inspire connection, growth, and year-round use.

From contemporary urban developments to institutional and residential projects, our structures are recognized for their craftsmanship, adaptability, and timeless design. With decades of experience in greenhouse manufacturing and specialty glazing systems, we bring a deep understanding of both architectural integration and controlled-environment construction.



The front cover features our **Century City Presentation Centre** project, showcased on **page 16**.

This custom **Traditional Cross Country Greenhouse Frame** measures 44' x 100' with a 5/12 roof slope and a 13' sidewall height.

Contact our **Technical Sales Team** today to schedule a discovery call or virtual site visit.

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BC Greenhouse Builders leads a family of specialized brands including **Charley's Greenhouse & Garden Supply** and the **Polycarbonate Store**, expanding our expertise across greenhouse systems, glazing solutions, and growing environments for both commercial and residential applications.

Who We Serve



BC Greenhouse Builders partners with teams creating spaces designed to do more than simply function. They bring people together, support wellness, inspire learning, and create meaningful experiences that leave a lasting impact.

WE COLLABORATE WITH:

- Architects & General Contractors
- Developers & Mixed-Use Community Managers
- Municipal & Community Organizations
- Retail, Hospitality & Restaurant Groups
- Healthcare & Therapeutic Wellness Facilities
- Rooftop Amenity & Urban Agriculture Developers
- All levels of Academia



Our Approach

We take the time to understand the vision behind each project including how the space will be used, how it needs to perform, and how it should feel within the broader environment.

Through our integrated design-build process, we provide coordinated support across design consultation, engineering, fabrication, delivery, and installation. This streamlined approach helps simplify communication, reduce coordination challenges, and keep projects moving forward efficiently.

Our primary greenhouse systems are designed specifically for applicable site conditions and intended application. Our greenhouse systems

can be customized to accommodate demanding wind and snow loads, seismic requirements, thermal-performance upgrades, specialized glazing assemblies, HVAC integration, low-profile structural configurations, and custom finish specifications.

Our dedicated Project Managers remain closely involved throughout the process, helping clients navigate technical details, schedules, and evolving project needs with confidence.

The result is more than a greenhouse structure. It is a thoughtfully integrated architectural environment designed to perform beautifully, support meaningful experiences, and endure for generations.



FULL SERVICE CAPABILITIES

Phase	What We Deliver
Design Consultation	Collaborative design development, feasibility analysis, preliminary budgeting, code review guidance.
Engineering	Structural analysis and load calculations supervised and reviewed by in-house P.Eng. Stamped and sealed drawings for all U.S. States and Provinces coordinated with the regional engineer of record.
Fabrication	Precision manufacturing at our Surrey, BC facility with rigorous QA/QC protocols.
Delivery	Wood-crated shipment with detailed packing lists and freight coordination across North America.
Installation Support Options	Factory-trained Project Supervisors, installation partnership options, or technical field support. Installation does not include site prep, foundation work, electrical or plumbing.
Post-Installation	Commissioning guidance, climate control optimization, warranty support.

Designed To Meet Future Expectations

From concept through installation, BC Greenhouse Builders provides in-house integrated engineering support, structural documentation, and project coordination for commercial greenhouse projects across North America.

Every Cross Country Commercial Greenhouse is engineered to perform in demanding real-world environments from hurricane-prone coastlines and mountain snow zones to rooftop amenity spaces and institutional campuses.

Going beyond the limitations of standard greenhouse lightweight kits, our systems are designed with heavy-duty aluminum framing, engineered loads, and project-specific structural calculations to meet modern commercial building standards across the United States and Canada.

Whether your project is a rooftop conservatory, educational greenhouse, hospitality venue, therapeutic garden, or mixed-use development amenity, our Technical Design team collaborates directly with architects, contractors, and engineers to deliver a greenhouse system that is beautiful, durable, and compliant.

WHY OUR STRUCTURES PERFORM BETTER

- **Heavy-Duty Framing:** Our structural framing bars are 60% heavier than our competitors and are engineered for high-load commercial applications.
- **Engineered Load Paths:** Every structure is designed to transfer wind, snow, and seismic forces safely through the complete building system and foundation.
- **Thermally Improved Systems:** Optional Superior Frame and Meridian systems reduce condensation and improve thermal efficiency in climate-controlled environments.
- **Commercial-Grade Fasteners & Finishes:** 6063-T5/T6 aluminum framing, stainless steel fasteners, and AAMA-certified finishes provide exceptional corrosion resistance and long-term durability.
- **Climate-Specific Engineering:** Each project can be customized for local environmental loads, occupancy requirements, and coordinated jurisdictional code compliance.



CROSS COUNTRY FRAME STRUCTURAL PERFORMANCE

Parameter	Standard System	Enhanced Engineering Options
Wind Load	85 mph (137 km/h)	Up to 140 mph (225 km/h)
Snow Load	32 PSF (1.53 kPa)	Up to 100+ PSF (4.79+ kPa)
Seismic Design	Engineered per site requirements	Suitable for all seismic categories
Structural Review	Included	Site-specific engineering available
Building Code Compliance	IBC / NBC	Jurisdiction-specific compliance

ENGINEERING DOCUMENTATION AVAILABLE

- Critical components reviewed by our in-house P.Eng.
- Structural calculations
- Foundation reaction loads
- Anchorage specifications
- Permit submission packages
- Shop drawings and installation documentation
- Coordinated structural authentication. Stamped and sealed drawings available via licensed regional professionals for the required jurisdiction.



QUICK REFERENCE SPECIFICATIONS

Structural System:

- Frame Material: 6063-T5/T6 Aluminum
- Fasteners: 304 Stainless Steel
- Standard Finish: AAMA certified wet baked enamel coatings

System Features:

- Heavy-duty and extruded profiles
- Proprietary glazing bar extrusions with internal/external weep channels
- Positive drainage design directs moisture to exterior
- Energy code compliant options available for climate controlled applications
- Prefabricated venting components for efficient field assembly

Glazing Options:

- 3mm lapped and 6mm one sheet tempered single pane glass
- 6mm and 16mm polycarbonate
- 16mm Double Pane Insulated Glass
- High-Performance Low-E Glass, Laminated, Tinted, Reflective Options

Glazing System Features:

- PVC Gaska double-sided adhesive tape
- Rubber gaskets for tubular frame systems
- Weep channel design prevents moisture intrusion

Standard Frame Colors:

- Arctic White | Hartford Green | Rideau Brown | Black and Custom Color Matching

Documentation Provided:

- Structural calculations
- Sealed documents via licensed regional professionals (for all required jurisdictions)
- Project Specific Shop drawings
- Equipment specifications
- Installation instructions
- O&M manuals and Lifetime structural warranty
- Equipment warranties per manufacturer

BC Greenhouse Builders Ltd. is a registered Permit to Practice holder with EGBC

Which Framing System Is Right For Your Project?

Every greenhouse structure begins with a framing system engineered for the unique goals of the project. Rather than a traditional good, better, best approach, each system is purpose-built for specific applications. Our **Cross Country Commercial** framing system is used in approximately 85% of the projects we build each year. Its versatility, competitive price, and verified wind and snow load ratings make it ideal for residential, institutional, and commercial applications. For projects where architectural design takes priority, many clients choose our Meridian tubular framing system. It offers great design flexibility and refined aesthetics while maintaining exceptional structural performance.



The **Cross Country Greenhouse Frame** is our most versatile greenhouse system. Built for functionality, flexibility, and value.

■ **KEY ADVANTAGES**

- Supports glass and polycarbonate glazing options including mix and match
- Integrated bolt-track system for accessories and growing equipment
- Cost-effective solution
- Designed to provide a productive growing environment

■ **IDEAL APPLICATIONS**

Schools → Community Gardens → Urban Agriculture → Research Facilities → Commercial Growing



The **Meridian Superior Frame** is engineered for projects where people and plants share the same environment.

■ **KEY ADVANTAGES**

- Thermally improved framing system
- Enhanced condensation management
- Supports advanced double-glazed systems
- Improved environmental control and occupant comfort
- Refined exterior architectural appearance

■ **IDEAL APPLICATIONS**

Rooftop Greenhouses → Educational Research Facilities → Amenity Spaces → Solariums → Mixed-Use Environments



The **Meridian Luxury and Grand Meridian Frames** represent the highest level of architectural integration.

■ **KEY ADVANTAGES**

- Premium tubular framing system
- Minimal visible fasteners
- Supports larger spans and custom designs
- Seamless integration with HVAC and building systems
- Exceptional craftsmanship and architectural design

■ **IDEAL APPLICATIONS**

Estate Conservatories → Luxury Residential Pool Enclosures → Hospitality Spaces → Architectural Glass Structures



	CROSS COUNTRY	MERIDIAN SUPERIOR	LUXURY & GRAND MERIDIAN
Greenhouse Function	★★★★★	★★★★★	★★★★★
Living Space Comfort	★★★	★★★★★	★★★★★
Building Envelope Performance	★★★	★★★★★	★★★★★
Architectural Detailing	★★★	★★★★★	★★★★★
Thermal Performance	★★★	★★★★★	★★★★★
Cost	\$	\$\$	\$\$\$



CROSS COUNTRY FRAME



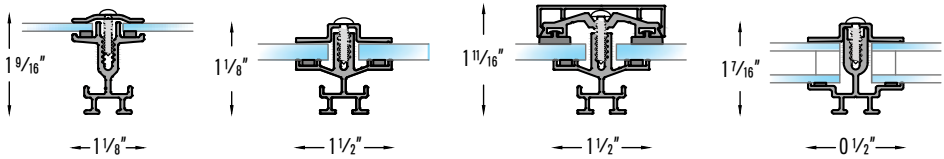
MERIDIAN SUPERIOR FRAME



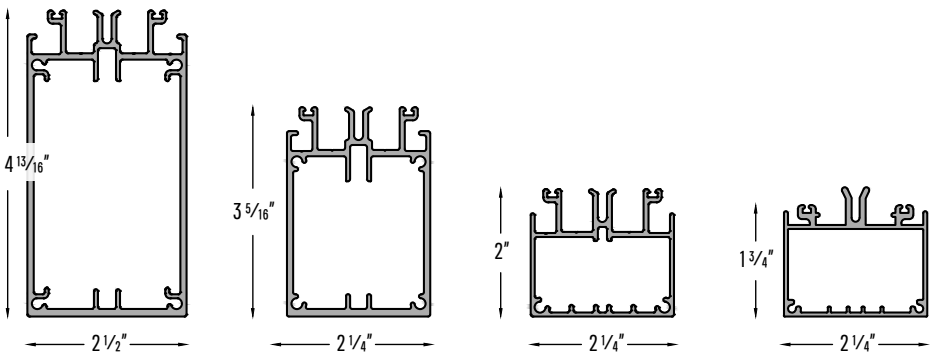
MERIDIAN LUXURY & GRAND MERIDIAN FRAMES

Sample Configurations, Framing, and Sills

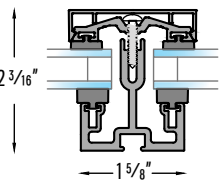
CROSS COUNTRY FRAMING



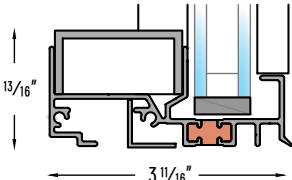
MERIDIAN FRAMING



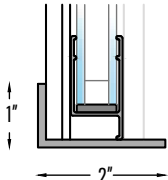
MERIDIAN SUPERIOR FRAMING



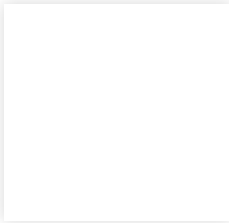
MERIDIAN SILL



CROSS COUNTRY SILL



STANDARD FRAME COLOR OPTIONS – ASK OUR TEAM ABOUT CUSTOM COLOR



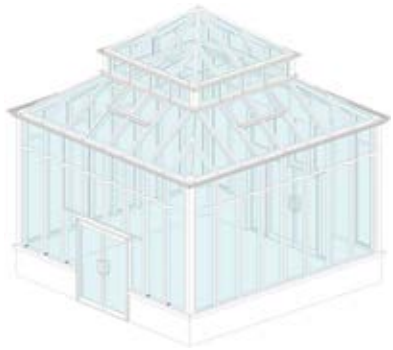
ARCTIC WHITE



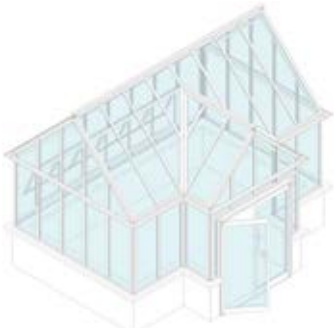
HARTFORD GREEN



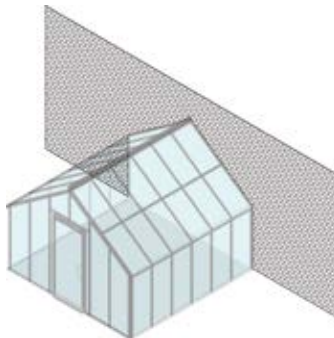
RIDEAU BROWN



LANTERN



VESTIBULE



GABLE ATTACHED



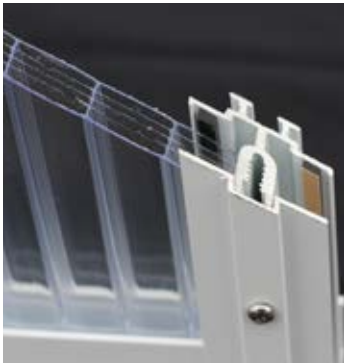
GRAND MERIDIAN

Glazing Options

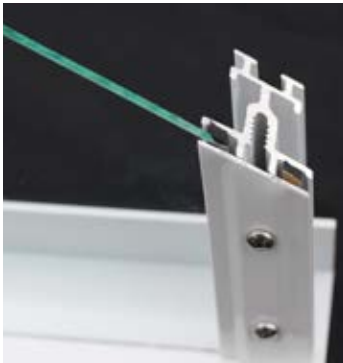
Achieving the right climate-controlled environment begins with selecting the right glazing system. We offer one of the industry's broadest selections of commercial glazing options, including tempered glass, insulated glass, polycarbonate, Low-E, laminated, and specialty glazing. Mix and match glazing systems throughout the structure to optimize daylight, insulation, solar gain, light diffusion, and occupant comfort, creating the precise climate your project requires.



TWINWALL GLAZING



FIVEWALL GLAZING



SINGLE PANE GLAZING



DOUBLE PANE GLAZING



STANDARD 3MM OVERLAP SINGLE PANE GLASS



PREMIUM 6MM ONE-PIECE SINGLE PANE GLASS



LAMINATED AND TINTED GLASS



INSULATED 16MM DOUBLE PANE GLASS

Greenhouse Glazing Comparisons

Product	Nominal Thickness (mm)	VLT(%)	SHGC	U-Value (BTU/Hr·ft²·°F)	R-Value (Calc)
■ 3mm Glass	3.0	90.0	0.85	1.04	1.0
6mm Glass					
■ 6mm Tempered	6.0	89.0	0.82	1.04	1.0
■ 6mm Laminated	6.0	87.0	0.79	1.04	1.0
■ 6mm Tinted - Solexia	6.0	77.0	0.62	1.02	1.0
■ 6mm Tinted - Azuria	6.0	68.0	0.52	1.02	1.0
■ 6mm Tinted - Solarbronze	6.0	53.0	0.63	1.02	1.0
■ 6mm Tinted - Solargray	6.0	44.0	0.58	1.02	1.0
16mm Double Glass					
■ 16mm DG Tempered	16.0	81.0	0.76	0.50	2.0
■ 16mm DG Tempered / Laminated	16.0	80.0	0.72	0.54	1.9
■ 16mm Low-E Tempered - Solarban 60	16.0	70.0	0.39	0.29	3.4
■ 16mm Low-E Laminated - Solarban 60	16.0	71.0	0.40	0.40	2.5
22mm Double Glass					
■ 22mm Low-E Tempered	22.0	71.0	0.39	0.29	3.4
■ 22mm Low-E Tempered / Laminated	22.0	71.0	0.40	0.30	3.3
Twinwall Polycarbonate					
■ Twinwall Polycarbonate	6.0	80.0	0.80	0.51	2.0
■ Twinwall Polycarbonate - Bronze	6.0	42.0	66.00	0.58	1.7
■ Twinwall Polycarbonate - Opal	6.0	57.0	66.00	0.58	1.7
Fivewall Polycarbonate					
■ Fivewall Polycarbonate	16.0	62.0	0.65	0.34	3.0
■ Fivewall Polycarbonate - Bronze	16.0	30.0	50.00	0.36	2.8
■ Fivewall Polycarbonate - Opal	16.0	40.0	45.00	0.36	2.8

Parasol Park



PROJECT OVERVIEW:

The project features a Custom Slope Freestanding 16' x 27' greenhouse within the Great Park Neighborhoods community, developed by FivePoint Communities and constructed with support from Slater Builders. The greenhouse supports seedling production, tropical plant growth, and year-round food cultivation tied to adjacent raised beds

and orchards. Residents actively harvest herbs and vegetables using designated "Harvest Me" zones, participate in workshops, and engage in weekly garden programming, reinforcing shared food production and community interaction.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Freestanding lean-to greenhouse
- **Size:** 16' x 27' Cross Country Frame with eave overhang
- Custom roof slope 3/12 and 6'9" sidewall height
- Custom 8' x 8' tubular opening for rollup door and custom jog
- Partition wall in twinwall opal
- **Roof and Sidewall Mixed Glazing:** Single pane 6mm and twinwall opal
- **Environmental Controls:**
 - Continuous sidewall vents with motorized vent drive
 - Electronic four-stage controller
 - 10" exhaust fan package with motorized intake shutter & thermostat
 - Manual single glass louvres 24" x 28"



Century City Presentation Centre



PROJECT OVERVIEW:

Century Group's Presentation Centre integrates a purpose-built community greenhouse as part of its broader master plan in Surrey City Centre built in conjunction with BlueCity Construction. The greenhouse supports urban agriculture and shared food-growing experiences for residents. It was initially introduced as part of a greenhouse-style presentation center showcasing residential suites and amenity spaces. As the community evolves, the structure transitions into a resident-focused garden hub, reinforcing connections between housing, food production, and public green space.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Custom Traditional Cross Country Frame
- **Size:** 44' x 100' Cross Country Frame with 5/12 roof slope
- 13' Sidewall height
- Custom jog in wall with solid panel/spandrel
- **Roof And Wall Glazing:** Mixed 16mm double pane Low-E and fivewall polycarbonate
- Custom tubular door opening spanning multiple bays
- **Environmental Controls:**
 - 18" exhaust fan: 3200 cfm
 - Continuous roof vents with motorized vent drives
 - Bartlett Climate Boss touch screen control with weather station
 - Motorized shade system

The Drakestone

PROJECT OVERVIEW:

The Drakestone features a 20' x 40' solarium designed as a rooftop conservatory atop a historic high-rise in downtown Dallas. Acting as a shared residential clubhouse, the structure provides panoramic city views while offering a climate-controlled environment for relaxation, gatherings, and year-round enjoyment. Engineered with enhanced wind-load capacity for rooftop conditions, the greenhouse combines luxury finishes with durable aluminum framing, transforming underutilized roof space into a functional, light-filled amenity for residents.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Custom rooftop Meridian Superior Frame
- **Size:** 20' x 40' Cross Country Frame with 5/12 roof slope
- 22'3" Sidewall height
- Custom jog in wall with solid panel/spandrel
- **Roof and Wall Glazing:** 16mm double pane Low-E
- Increased wind loads to 110mph
- Post & beam 4 x 4 with interior glazed window profiles and decorative gutter
- **Environmental Controls:**
 - Continuous roof vents with motorized vent drives
 - Ceiling-PowerPull shade system: 86% shade, 72% energy retention
 - EnviroSTEP Computer Control including weather station
 - Bartlett Natural Ventilation controller including wind/ rain weather station



Pavilion Park



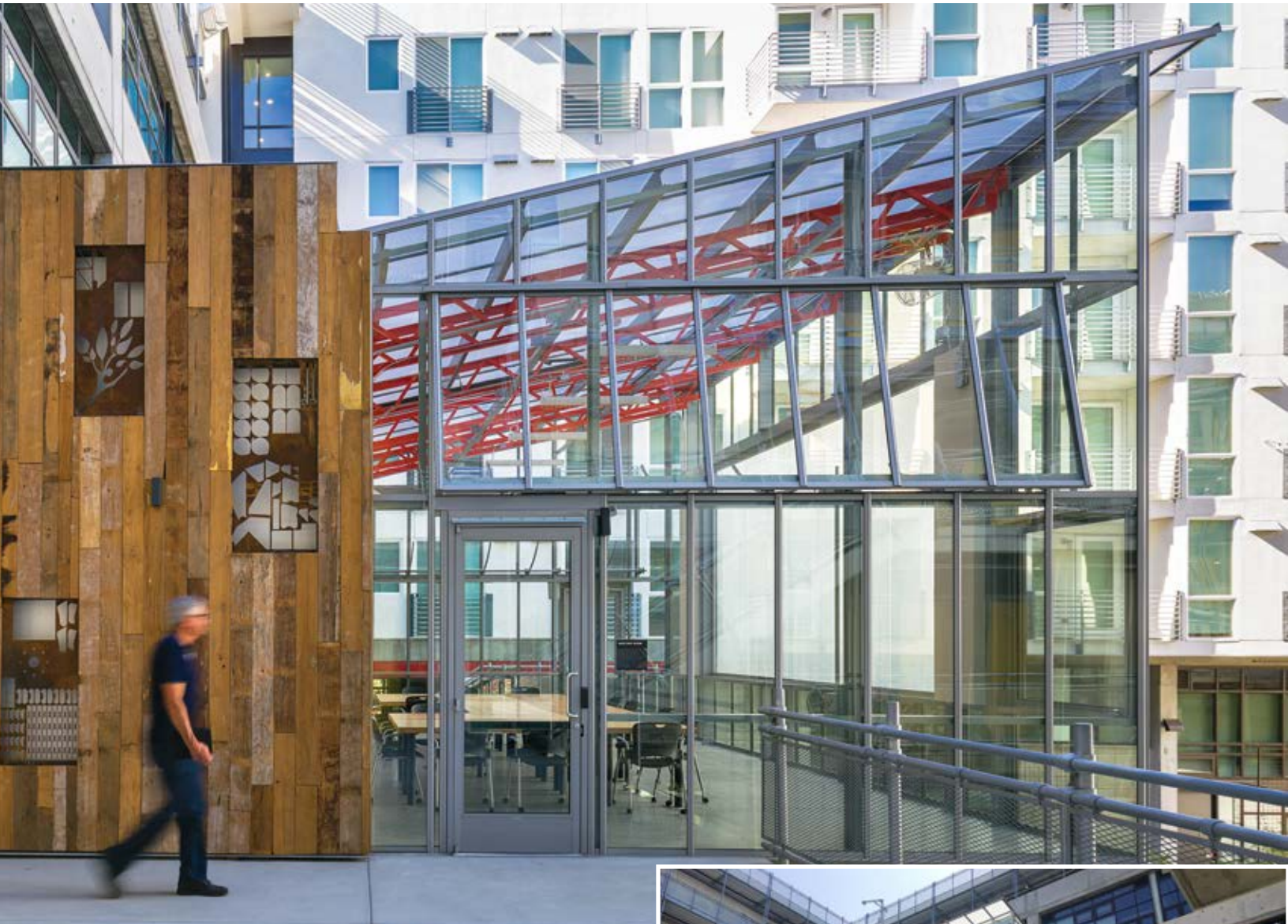
GREENHOUSE SPECIFICATIONS:

- **Structure:** Custom height Traditional Freestanding Greenhouse
- **Size:** 28' x 30' Cross Country Frame
- 14' Sidewall height
- Decorative ridge cresting and transoms
- **Roof and Sidewall Mixed Glazing:** Fivewall Polycarbonate
- **Environmental Controls:**
 - Continuous roof vent with motorized vent drive
 - 12" Horizontal airflow fan
 - 18" Exhaust fan package with two intake shutters and thermostat

PROJECT OVERVIEW:

The project includes a Traditional 28' x 30' greenhouse at Pavilion Park within Great Park Neighborhoods, developed by FivePoint Communities and built by Slater Builders. Located within an expansive community garden setting, the greenhouse supports propagation, seasonal crop rotation, and resident-led planting initiatives. It works in tandem with outdoor plots, citrus groves, and educational programming, where residents learn pruning, composting, and planting techniques. The space also anchors workshops and volunteer days, encouraging neighborhood participation and deeper engagement with sustainable food systems.

IDEA1 Hub



PROJECT OVERVIEW:

The project features an 18' x 30' Cross Country Commercial Greenhouse integrated within IDEA1, a mixed-use development in San Diego constructed by Swinerton Builders. Positioned within The Hub courtyard, the greenhouse, repurposed as the "Idea Box," functions as a flexible event and learning space with smart glass walls that transform into a projection screen. Supporting over 350 annual events, it enables workshops, screenings, and community programming, blending urban agriculture, education, and social activation within a dynamic public environment.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Custom freestanding lean-to greenhouse
- **Size:** 18' x 30' Cross Country Frame with 2.5/12 roof slope
- 18' Sidewall height
- Custom opening with flashing
- **Roof Glazing:** 16mm fivewall polycarbonate opal
- **Sidewall Glazing:** 16mm double pane Low-E
- Custom painted trusses
- Exterior smart glass with projection film



PS 216 Outdoor Classroom



PROJECT OVERVIEW

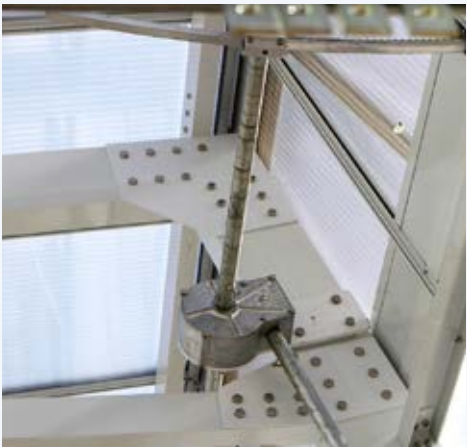
BC Greenhouse Builders supplied a custom educational greenhouse for PS 216 in Brooklyn, New York. The project is part of a broader initiative focused on integrating urban agriculture into everyday learning. Developed in collaboration with **The Edible Schoolyard** and **WORKac**, designers focused on sustainable food education, the greenhouse supports a campus that includes outdoor gardens and teaching spaces.

"What we are calling for is a revolution in public education – the Delicious Revolution. When the hearts and minds of our children are captured by a school lunch curriculum, enriched with experience in the garden, sustainability will become the lens through which they see the world."

– **Alice Waters**



- GREENHOUSE SPECIFICATIONS:**
- **Structure:** Freestanding reverse slope greenhouse
 - **Size:** 17' x 46' Cross Country Frame
 - **Sidewalls:** 15'
 - **Glazing:** Fivewall polycarbonate
 - **Environmental Controls:**
 - Automated climate control system for temperature and ventilation
 - Integrated heating and ventilation systems for year-round growing
 - Environmental sensors for monitoring temperature and humidity
 - Automated irrigation and nutrient delivery system



Brooklyn School of Inquiry Greenhouse



PROJECT OVERVIEW:

The Brooklyn School of Inquiry (BSI) features a 20' x 80' custom rooftop STEMLab greenhouse, designed by Kiss + Cathcart and installed by Oudaz Contracting along with BC Greenhouse Builders. As the NYC Department of Education's largest learning lab greenhouse, it produces 5,000 lbs of organic produce annually. The facility integrates hydroponics and aquaponics, supporting hands-on education in agriculture and sustainability. Serving as a year-round classroom, it enables students to experiment, cultivate crops, and explore food systems while advancing environmental science curriculum.

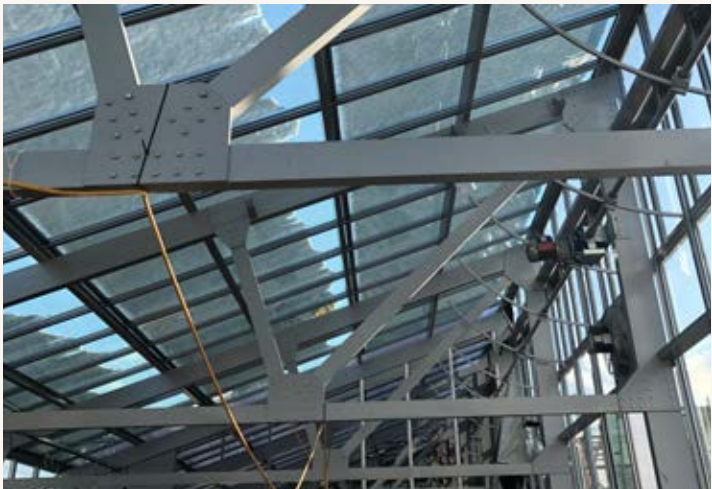
EDUCATIONAL IMPACT:

The BSI greenhouse is more than a growing space; it's a living laboratory. Students use the facility to explore topics such as plant biology, climate science, and sustainable agriculture. The integrated control systems and environmental monitoring tools provide opportunities for data collection, analysis, and experimentation, reinforcing core STEM principles. By embedding this infrastructure into the school's curriculum, BSI empowers students to develop critical thinking skills while fostering environmental stewardship and a deeper understanding of food systems.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Attached rooftop greenhouse with custom valleys and J-Shape design
- **Size:** 20' x 80' Meridian Superior Frame
- **Partition Wall:** Three separate grow zones
- **Roof Glazing:** Low-E laminated double glass & fivewall polycarbonate
- **Sidewall Glazing:** Double glass 16mm, insulated, tempered
- **Environmental Controls:**
 - Continuous side wall vent with motorized vent drive included
 - Misting and fogging system
 - Evaporative cooling wall with continuous side vent; 10' x 3' x 4" pad
 - Wadsworth PowerPull shade system
 - VersiSTEP Control & Satellites for 3-zone operation
 - Weather station, aspirator module for temp & humidity



Douglas College



PROJECT OVERVIEW:

This custom rooftop-attached greenhouse features two distinct grow zones designed to support diverse research and teaching needs. The Urban Ecology program at Douglas College advances sustainable urban ecosystems through applied research, education, and community engagement. This greenhouse strengthens that mission by providing a year-round, hands-on learning environment. It serves as a hub for research, student training, and community outreach, while fostering innovation, ecological literacy, and resilient urban community.

GREENHOUSE SPECIFICATIONS:

- **Structure:** Rooftop lean-to greenhouse
- **Size:** 30' x 60' Cross Country Frame
- Partition wall with commercial storefront doors with ADA panic bars
- Decorative gutter with downspouts
- **Roof and Sidewall Glazing:** Double pane glass, insulated and laminated
- **Environmental Controls:**
 - Continuous roof vents with motorized drives
 - EnviroSTEP computer control
 - Weather Station with speed/direction, temperature, humidity, light
 - CanArm 48" high performance ceiling fans

Langara College



GREENHOUSE SPECIFICATIONS:

- **Structure:** Two gutter connect rooftop greenhouses
- **Size:** 32' x 30' Cross Country Greenhouse Frame
- **Roof Glazing:** Double glass 16mm, insulated, tempered, Low-E
- **Sidewall Glazing:** Double glass 16mm, insulated, tempered
- **Environmental Controls:**
 - Continuous roof vents with motorized vent drives
 - Modine HER electric forced air heater, 7.5kw 208v (3 phase)
 - EnviroSTEP computer control (1 Zone, 12 Outputs)
 - 18" Exhaust fan system



PROJECT OVERVIEW:

Langara College's sustainability initiatives include advanced greenhouse facilities supporting applied learning and food production. The project integrates two Traditional 32' x 30' Fivewall Gutter Connect greenhouses within a broader campus designed by Proscenium Architecture and constructed by Bird Construction along with BC Greenhouse Builders. These facilities complement a LEED Gold academic environment emphasizing energy efficiency, renewable systems, and hands-on education. Together, the greenhouse installations and surrounding infrastructure reinforce Langara's commitment to reducing emissions, enhancing biodiversity, and creating a living laboratory for sustainable practices.

Indiana Wesleyan University



PROJECT OVERVIEW:

BC Greenhouse Builders supplied a custom 28' x 75' rooftop greenhouse for IWU and their Division of Natural Sciences. The project is part of a broader initiative focused on integrating urban agriculture into everyday learning and serves as a space for plant education, sustainability projects, and collaboration with the "Making an Impact" program. Inside, it contains four different plant environments (tropical, temperate, desert, and hydroponic/aquaponic systems), which are used for hands-on learning, class projects, and experiments.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Attached rooftop greenhouse
- **Size:** 28' x 75' Cross Country Frame
- **Sidewalls:** 20'
- **Partition Wall:** The greenhouse contains four separate grow zones
- **Glazing:** Fivewall polycarbonate
- **Environmental Controls:**
 - Automated climate control system for temperature and ventilation
 - Misting and fogging system
 - Supplemental grow lights
 - Horizontal airflow fans
 - Environmental sensors for monitoring temperature and humidity

Hood River Permaculture Program



PROJECT OVERVIEW:

The project features a 20' x 46' Gable Attached Greenhouse integrated into an educational facility modeled on net-zero design principles. This Outdoor Classroom greenhouse directly supports activities in science and agriculture. Students use the space to grow vegetables, monitor plant growth, and study ecosystems tied to adjacent outdoor gardens. Harvests from the greenhouse supplement school programs, while systems like rainwater collection and natural ventilation are incorporated into lessons, allowing students to observe real-time resource cycles and sustainable growing practices.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Gable attached greenhouse
- **Size:** 20' x 46' Cross Country Frame
- Custom potting shed
- Double storefront doors with additional truss
- Increased wind and snow loads
- **Roof and Sidewall Glazing:** Double glass, insulated
- **Environmental Controls Outsourced:**
 - Ground-source (geothermal) heat pumps
 - Radiant floor heating
 - Dedicated outdoor air system (DOAS)
 - Rainwater harvesting and reuse systems

Sonora Resort



PROJECT OVERVIEW:

The Sonora Resort Meridian Estate Greenhouse serves as a luxury conservatory and gathering space within the remote wilderness resort on Sonora Island, British Columbia. Designed in the Grand Meridian style, the structure provides a climate-controlled garden environment where guests relax with herbal tea and enjoy panoramic rainforest and ocean surroundings. The greenhouse also functions as an elegant venue for weddings and private events, complementing Sonora Resort's broader collection of wellness, culinary, and eco-adventure amenities while reinforcing the property's connection to nature and elevated hospitality experiences.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Meridian Estate Greenhouse
- **Size:** 23' x 43' Grand Meridian 6" wide frame
- 23' x 12' Vestibule with 6' 6" sidewalls
- **Roof and Sidewall Glazing:** 16mm Double pane laminated glass
- Double stacked Victorian gutter
- Custom gable end design with clerestory windows at top of sidewall
- **Environmental Control Systems**
 - Continuous motorized ridge vents
 - Automatic rack and pinion openers
 - Vent control motors
 - Casement windows w/roto-crank openers



Almquist Family Event Space



GREENHOUSE SPECIFICATIONS:

- **Structure:** Meridian Estate Greenhouse
- **Size:** 18' x 30' Meridian Superior Frame
- 12' Breezeway connector

- **Roof and Sidewall Glazing:** Custom double pane glass with 4mm tempered safety sidewalls and Low-E high performance glass in the roof

- 5 sets of double storefront doors

- Double profile Victorian gutter with downspouts

- 2 sets of double casement windows

■ **Environmental Controls:**

- Continuous automatic ridge vents with rack and pinion openers
- Four stage controllers with custom motorized air intake shutters

PROJECT OVERVIEW:

The Almquist Family private event space in Seattle features an 18' x 30' Meridian Estate greenhouse manufactured by BC Greenhouse Builders as a refined conservatory venue for weddings, receptions, and private gatherings. The structure combines classic greenhouse architecture with an elegant hospitality setting, creating a light-filled indoor garden atmosphere for year-round events. The custom glass venue serves as a focal point for dining, celebrations, and curated experiences, blending architectural character with the warmth and openness of a traditional conservatory environment.



Willow Pond Lodge



GREENHOUSE SPECIFICATIONS:

- **Structure:** Meridian Estate Greenhouse
- **Size:** 20' x 23' Meridian Luxury 3" Frame
- Substantial 4' x 6' truss and purlin tubular support system
- Custom 6/12 roof slope with 8' sidewalls from raised foundation wall
- **Roof Glazing:** Custom double glazed panels w/6mm tempered Solarban 80 high performance, Low-E
- **Sidewall Glazing:** 4mm high performance Solarban 60 Low-E

■ **Environmental Control Systems**

- Continuous automatic ridge vents with rack and pinion openers
- VC 2000 vent machines with thermostatic four stage controllers
- Custom 24" x 16" intake shutters
- Side-hung casement windows

PROJECT OVERVIEW:

Willow Pond Lodge features a 20' x 23' Gable Attached Meridian Estate Greenhouse designed as a luxury conservatory overlooking the natural landscape of Whidbey Island. Connected directly to the lodge, the glass structure creates a year-round gathering space where guests experience panoramic forest and waterfront views within a climate-controlled environment. Built with custom double-glazed low-E glass, oversized roof rafters, and commercial-grade framing, the greenhouse blends hospitality and architecture, extending indoor living into the surrounding environment while enhancing the property's tranquil retreat experience.

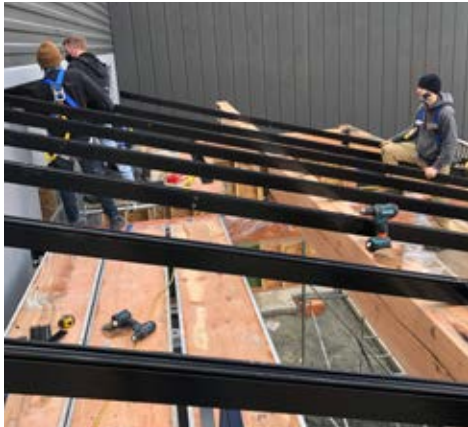


Smugglers Trail Canopy



PROJECT OVERVIEW:

Smugglers Trail Caskworks features a custom 18' x 43' patio roof canopy manufactured by BC Greenhouse Builders to extend the brewery's hospitality space with year-round weather protection. Installed on a customer-supplied wood post-and-beam structure, the canopy creates a bright, durable covered patio supporting tasting events, dining, and expanded guest seating throughout all seasons.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Meridian Estate Frame Greenhouse Canopy
- **Size:** 18' x 43' Meridian Luxury 3 Frame Cap
- 4' Gutters and downspouts
- **Roof and Sidewall Glazing:** 6mm Solarban 70 for sidewalls and 6mm bronze laminated in the roof



Art's Nursery Cactarium



GREENHOUSE SPECIFICATIONS:

- **Structure:** Freestanding Cottage slope greenhouse
- **Size:** 16' x 36' Cross Country Frame
- Double storm doors with additional single door
- **Roof and Sidewall Glazing:** 3mm lapped tempered glass
- **Environmental Controls:**
 - 18" Exhaust fan package
 - Two intake shutters with thermostat



PROJECT OVERVIEW:

Art's Nursery Cactarium features a Cottage 16' x 36' greenhouse designed as an immersive retail and event space within the Surrey garden centre. The structure showcases curated collections of cacti, succulents, tropical plants, and specialty pottery in a bright, climate-controlled environment that encourages year-round browsing.

Beyond retail use, the greenhouses hosts workshops, seasonal displays, private gatherings, and community events. This allows Art's to create a flexible destination that blends horticulture, education, and experiential shopping within one of Metro Vancouver's largest independent nurseries.



Banff Community Greenhouse



PROJECT OVERVIEW:

The Banff Community Greenhouse features a Traditional 20' x 40' Fivewall greenhouse designed to help residents overcome Banff's difficult growing conditions, including short summers, harsh mountain weather, hungry elk, and limited backyard space. The energy-efficient structure was developed through the efforts of the Banff Greenhouse Gardening Society after more than a year of planning and community fundraising. Installed with support from the Town of Banff, the greenhouse now provides shared growing space, gardening education, and year-round access to fresh produce for local residents.



GREENHOUSE SPECIFICATIONS:

- **Structure:** Cross Country Frame greenhouse
- **Size:** Traditional 20' x 40'
- Structural upgrades for 100 mph winds and 64 psf snow loads
- **Roof and Sidewall Glazing:** Fivewall polycarbonate
- Custom door opening



Thunder Bay Production Greenhouses



GREENHOUSE SPECIFICATIONS:

- **Structure:** Cross Country Frame gutter connect greenhouse
- **Size:** Traditional 78' x 104'
- Structural upgrades for 100 mph winds and 64 psf snow loads
- **Roof and Sidewall Glazing:** Fivewall polycarbonate
- Partial gable attachment and partial partition wall
- **Environmental Controls:**
 - SEED Environmental Control with touchscreen interface
 - Weather Station, Sphere software, control design drawings, 3-zone operation
 - 110 Watt high Intensity LED grow light, 4' x 4' x 4' spread
 - Modine HD125 natural gas heater 100K BTU
 - Jaybird GT 500 fog fan
 - Drip irrigation system & controller



PROJECT OVERVIEW:

Developed to support year-round local food production in Northern Ontario's challenging climate, the gutter connect greenhouses were designed as commercial-scale growing facilities. The interconnected greenhouse structures improve operational efficiency, environmental control, and crop consistency while reducing dependence on imported produce. The project was advanced through municipal planning initiatives focused on food security, economic diversification, and sustainable agriculture. Engineered for heavy snow loads and extreme seasonal temperatures, the greenhouses provide a durable controlled-environment agriculture solution that extends growing capacity and strengthens regional access to fresh produce throughout the year.

Newfoundland Government House

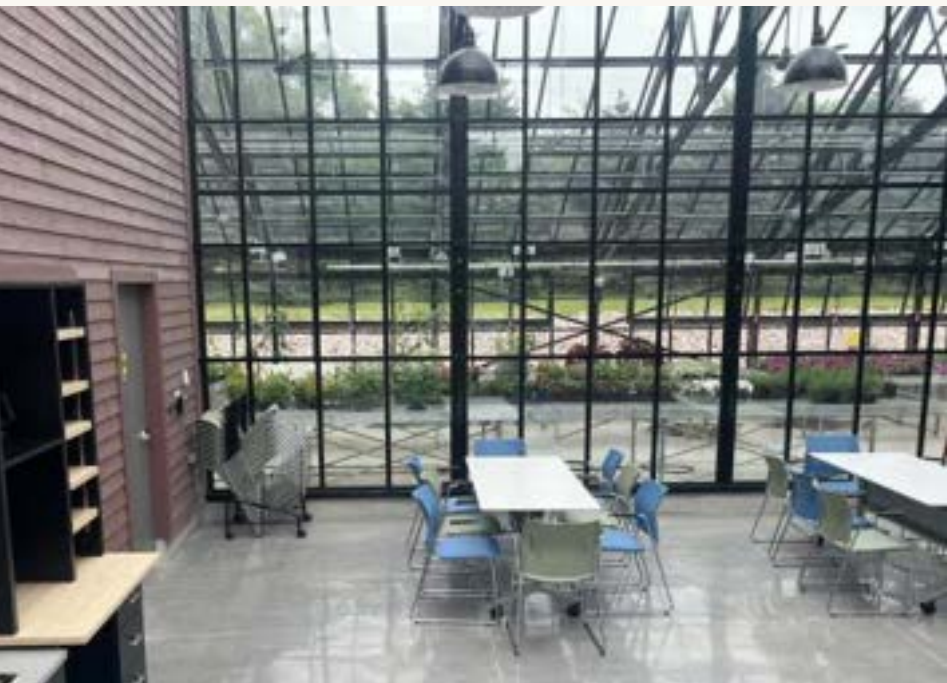


PROJECT OVERVIEW:

The Newfoundland Government House was developed as a community-focused conservatory and gathering space on the grounds of the historic Lieutenant Governor's residence. Designed to support local food initiatives, wellness programming, and educational outreach, the greenhouse functions alongside an attached 56-square-metre Community Room equipped with accessible washrooms, Wi-Fi, and a kitchenette for non-profit community use. Rather than serving commercial production, the project emphasizes therapeutic gardening, arts programming, youth and senior engagement, and community connection while continuing Government House's long-standing tradition of public gardens and horticulture.

GREENHOUSE SPECIFICATIONS:

- **Structure:** Cross Country Attached Frame greenhouse with offset roof slope
- **Size:** Custom 50' x 98'
- Stepped roof with custom trusses for oversized width
- **Roof and Sidewall Glazing:** Double pane insulated Low-E glass
- Decorative pressure cap
- **Environmental Controls:**
 - Bartlett Climate Boss touch screen control w/ weather station & mast
 - 18" Variable speed exhaust fan with speed controls & motorized shutters
 - 110 Watt high intensity LED grow light, 4' x 4' x 4' spread
 - Continuous roof and side vents with motorized vent drives (36' length)
 - Canarm 60" ceiling fan with bracket & (2) speed controls



Installation & Project Supervision Services for Architectural & Commercial Greenhouse Projects

Services for Architectural & Commercial Greenhouse Projects



BC Greenhouse Builders provides comprehensive installation support and project supervision services tailored specifically for architects, developers, contractors, institutions, and commercial construction teams. Our integrated engineering-design-build approach delivers a single point of accountability from concept through commissioning, helping reduce coordination gaps and streamline project delivery.

For projects throughout the U.S. and Canada, our Project Supervisors work directly alongside local contractors and trades to ensure proper assembly and installation standards are maintained.

While BC Greenhouse Builders provides expert installation supervision and greenhouse assembly support, installation services do not include site preparation, foundations, electrical work, or plumbing. These utilities are typically coordinated with local contractors and consultants during project planning.

With decades of experience across various commercial greenhouse applications, in-house engineering expertise, and factory-trained installation professionals, BC Greenhouse Builders delivers a seamless experience for even the most complex custom commercial greenhouse projects.



INSTALLATION SUPERVISION & FIELD SUPPORT

We offer flexible installation support options based on project complexity, site conditions, and construction team requirements.

Services may include:

- Dedicated Project Managers
- Factory-trained Project Supervisors
- Certified factory installation crews
- On-site technical field support
- Coordinate with local installation crews
- Installation partnership programs
- Construction sequencing coordination
- Greenhouse assembly oversight
- Glazing and structural installation supervision
- Climate control system coordination
- Final commissioning guidance



NEW! Solvera Pro Glazing System

Professional Glazing Made Simple



SOLVERA/Pro



Polycarbonate
Glazing Options:
6mm, 16mm and Triple Wall*



Available Frame Colors:
White, Black and Brown



Standard Rafter Lengths:
8 ft, 10 ft, 12 ft, 16 ft

The **Solvera Pro Glazing System** is a premium architectural glazing solution designed for homeowners, contractors, and commercial builders who want professional results without complicated installation or sourcing challenges. Exclusively available through the **Polycarbonate Store**, **Solvera Pro** combines high-performance weather protection with a clean architectural finish.

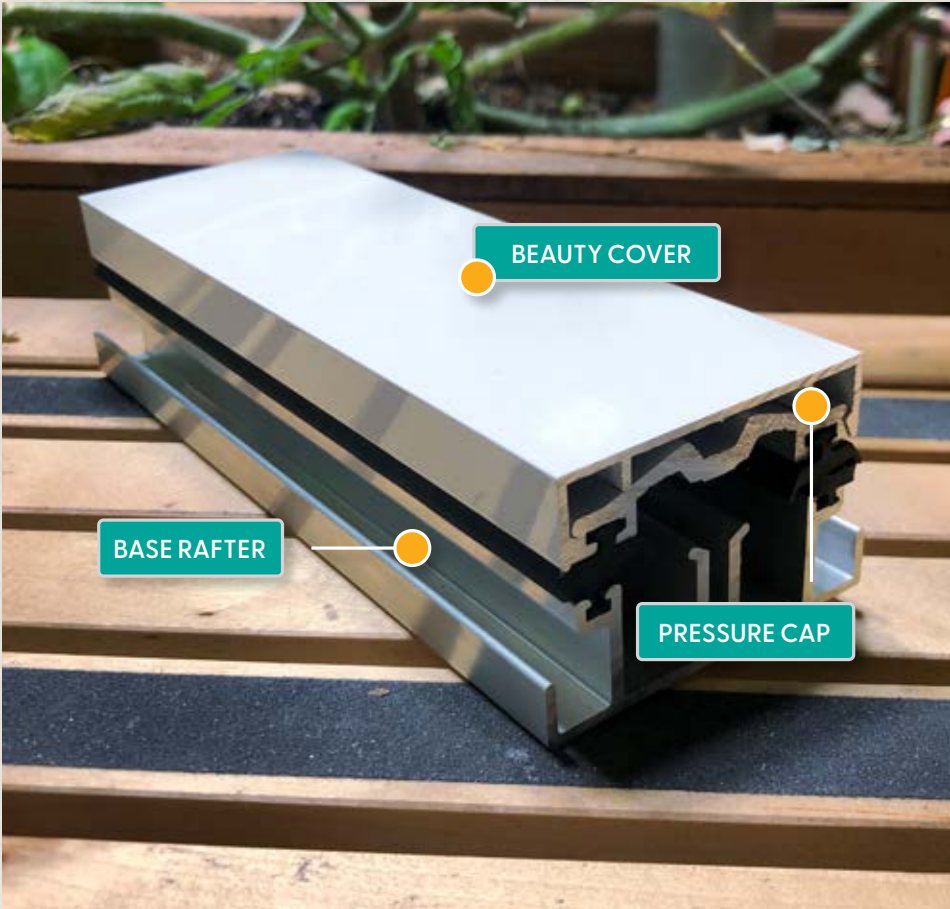


Designed for Versatility:

- Commercial outdoor enclosures
- Patio covers, canopies, and pergolas
- Greenhouses and conservatories
- Timber frame structures

Unlike traditional screw-through-panel systems, **Solvera Pro** features an advanced concealed fastening system that helps protect your structure from moisture damage and premature deterioration.

*Ask us about glass options



BEAUTY COVER

BASE RAFTER

PRESSURE CAP

Each **Solvera Pro** package is a complete system that includes:

- Aluminum base rafters
- Pressure caps & beauty caps
- Rubber gasket sealing system
- End trims & cleats
- Panel sealing tape
- Installation fasteners

For complete specifications, glazing options, and pricing, visit the **Polycarbonate Store**, proudly owned and operated by **BC Greenhouse Builders**:
www.PolycarbonateStore.com

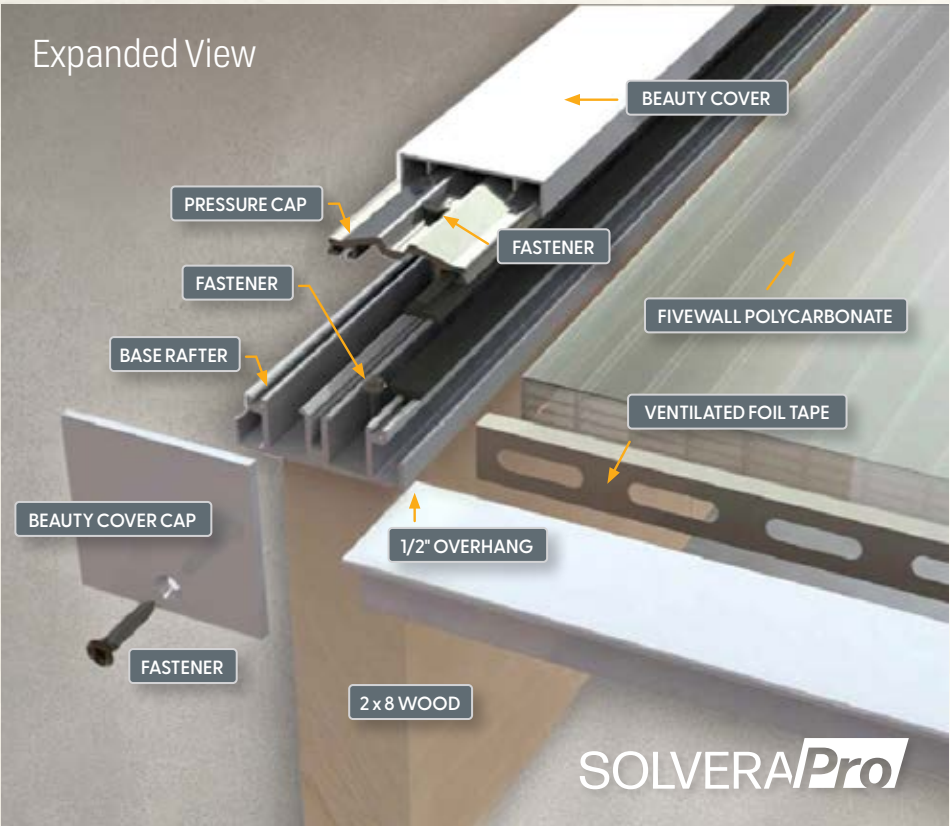
Solvera Pro was developed to remove the guesswork from glazing projects with our simple ordering process:

- 1 **Choose** your rafter length
- 2 **Select** your glazing material
- 3 **Order** by panel bay count
- 4 **Install** with confidence

Key features include:

- Integrated drainage channels
- Multiple rubber gasket seals
- Concealed pressure caps
- Moisture-management weeping design
- Reduced water exposure to wood framing
- Simplified Ordering & Installation

Expanded View

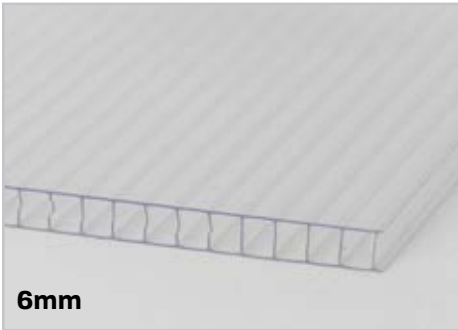




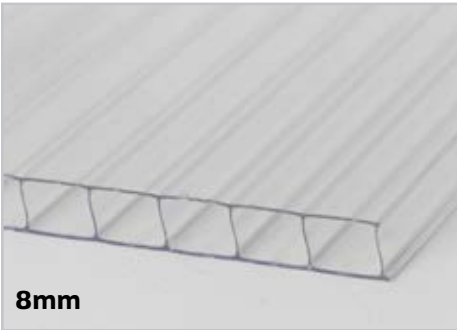
POLYCARBONATE STORE

Planning a commercial greenhouse, covered structure, canopy, or architectural glazing project? Need replacement polycarbonate for an existing greenhouse or facility?

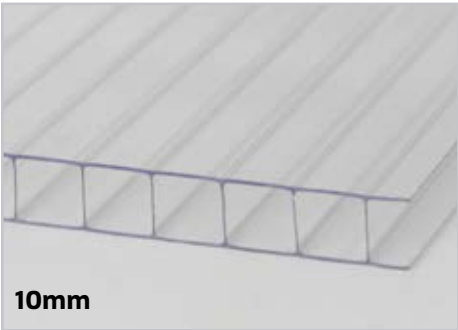
The Polycarbonate Store, owned by BC Greenhouse Builders, supplies durable, USA-made multi-wall polycarbonate sheets, capping, and installation accessories for commercial and institutional applications. Lightweight, UV-protected, and engineered for long-term performance, with support for contractors, architects, general contractors, and project teams.



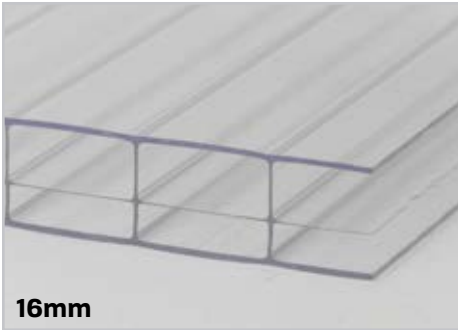
6mm



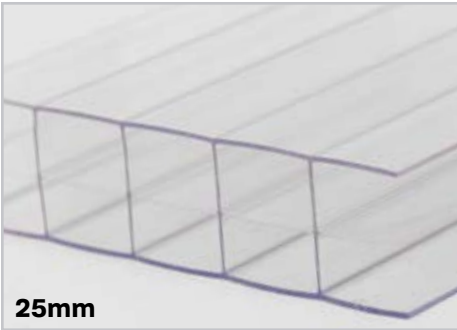
8mm



10mm



16mm



25mm

Need Help Choosing The Right Polycarbonate?

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Backed by Over 50 Years of
Growing Experience

Charley's Greenhouse & Garden Supply has been a trusted name among greenhouse gardeners for **over 50 years**, providing carefully selected **greenhouse equipment, gardening supplies, and growing accessories** for hobbyists, homeowners, and professional growers across North America. Today, Charley's proudly operates as a division of BC Greenhouse Builders, combining decades of gardening expertise with one of the most respected names in premium greenhouse manufacturing.



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- Pergolas and Grill Cover Roofs
- Solariums and Breezeways
- Retail and Commercial Partition Walls
- Do-It-Yourself Greenhouse
- Hot Tub Enclosure
- Wheelchair Ramp Cover
- Replacement Glazing
- Partition Walls

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Mars Hydro TSL-2000 LED Grow Light – 40"

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