



Enhancing the Human Environment.

www.duxtonwindows.com

▼ EchoHaven Calgary, Alberta. One of CMHC's EQuilibrium™ demonstration projects. Photos courtesy of Canada Mortgage and Housing Corporation (CMHC).



Enhancing the Human Environment.

DUXTON Windows & Doors is a Winnipeg based family business, dedicated to the creation of beautiful, high performance windows and doors. We create the finest selection of fiberglass windows and doors using only the best possible materials and components.

DUXTON creates its unique range of products through a dedication to innovation. A full range of high performance glass features the exceptional Super Spacer Warm Edge, in configurations from Dual low e/Argon to Tripane double low e/Argon.



Why Fiberglass?

FIBERGLASS STRENGTH | the Difference of Pultrusion Windows

Pultruded fiberglass is an engineered material that is created through a process where strands of glass and glass matting are pulled through a heated die. The glass is bonded together with a matrix of "heat setting" resins as it passes through the die, at extremely high temperatures. The resulting lineals (customized to specific window component requirements) are cut to length and shipped to dedicated window manufacturers. Pultruded fiberglass lineals have a finish topcoat applied "in-line" during the pultrusion process or "off-line" at a later stage to suit the color/finish required.

Consider the important factors and compare the advantages of Pultruded Fiberglass:

STABILITY / PREDICTABLE PERFORMANCE

The material characteristics of pultruded fiberglass includes very low rates of expansion and contraction. This characteristic provides an excellent advantage in maintaining good seal contact in hot or cold weather due to reduced relative movement of frames, sash and glass relative to each other.

ENVIRONMENTAL CONSIDERATIONS

Fiberglass features the lowest embodied energy (low energy consumption in lineal production) when compared to other common window frame materials, as well as providing the longest life expectancy.

STRENGTH / DURABILITY

A well-engineered fiberglass window demonstrates vastly superior strength characteristics when compared to other windows, like PVC. Fiberglass provides eight times greater sheer strength when compared to PVC.

ENERGY EFFICIENCY / LOW CONDUCTIVITY

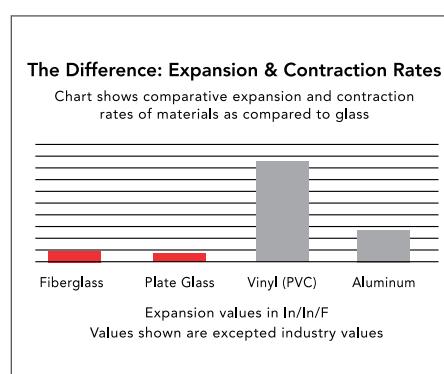
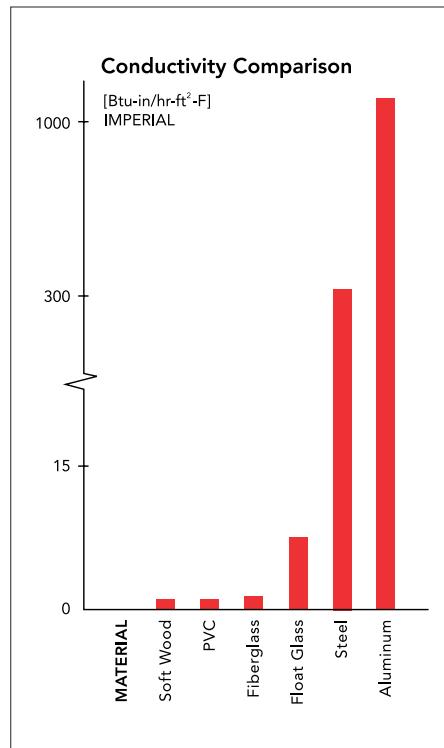
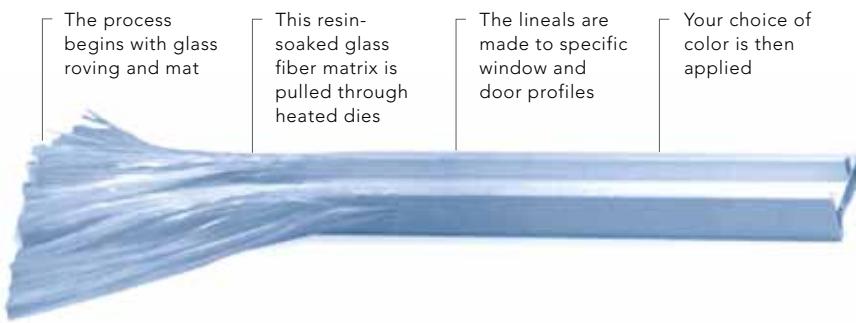
Pultruded fiberglass materials have MUCH lower conductivity than materials such as aluminum. Insulated frame and sash components reduce the conductivity, allowing for the creation of some of the most energy efficient details in the world.

LOW MAINTENANCE

Fiberglass is an extremely stable material. It provides an ideal base for a full range of finishes – ensuring unbelievable durability. Fiberglass will withstand extremes from Arctic cold to blazing desert heat or the rugged seacoast!

NON-CORROSIVE CHARACTERISTICS

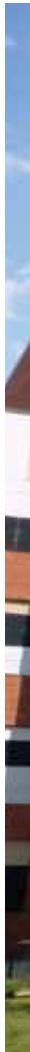
The non-corrosive characteristic of the material is an advantage when considering coastal applications, especially in hot or cold climates.



SERIES 325

Casement, Awning
and Fixed Series

▼ ft3 Architects Regina, SK



Elegance and Functionality.

DUXTON's Casement/Awning Series is the most elegant and functional window system available today. It offers unobstructed views and its smooth, elegant lines blend perfectly with the surrounding casement.

DESIGN TIP

Unlike some manufacturers, DUXTON offers Hi Profile Fixed windows that optimize sight lines when paired with operable windows. Conversely, to maximize viewing area and solar light gain, choose Lo Profile windows.

SERIES 325 | Casement, Awning & Fixed Windows



CASEMENT

Truth Hardware opens sash to 90 degrees. Multi-point locking system compresses sash to weatherstripping for tight air and water seal.



LO PROFILE / FIXED

Narrow frame profile maximizes glass area for optimal viewing, light and passive solar gain.



HI PROFILE / FIXED

Integral, wide frame profile elegantly matches sight lines as well as decorative grilles of flanking operable windows.



AWNING

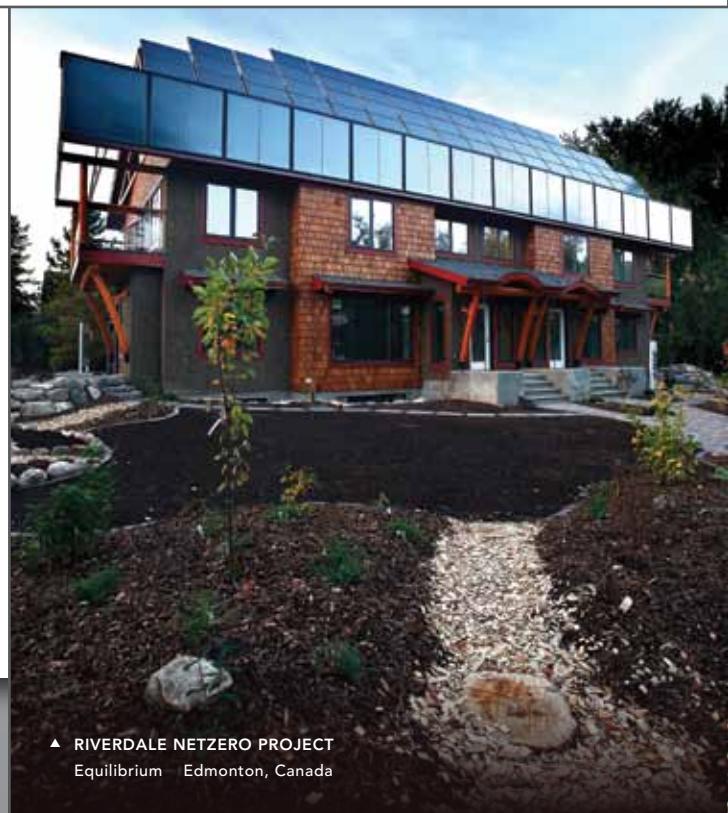
Truth Roto Hardware opens bottom of sash outward, keeping rain out and allowing fresh air in. Two camlocks securely lock sash to weatherstripping.

DESIGN TIP

Choose your ideal exterior color while choosing a different color or real wood laminate for the interior to suit your room-by-room decor.

Standard Features: Windows and Doors

- Custom sizes (fixed or operable)
- Custom shapes (round, curved, angled, etc.)
- Insulated fiberglass frame and sash
- Frame and sash corners mechanically secured with a shear block
- High performance glass (dual, triple, etc.)
- High performance weather-stripping
- Wide range of perimeter, brickmould and panning accessories
- Factory-applied jamb extensions
- Standard and custom colors (in and out)
- Wide range of grill choices (IG or SDL)
- Insect screen on all operable windows



**SERIES 800,
850 & 900**
Slider, Single and
Double Hung Tilt



Tradition and Quality.

DUXTON Slider, Single Hung Tilt and Double Hung Tilt represent traditional operating windows. Choosing fiberglass delivers superior performance while meeting aesthetic goals.

Features

- Sash can be tilted or removed for cleaning
- Easily combined with lo or hi profile fixed windows

DESIGN TIP

Simple frame-only installation may be ideal to retain original heritage details, where full frame replacements are not desirable.



SERIES 800, 850 & 900 | Horizontal Slider, Single & Double Hung Tilt



800 SERIES SLIDER

Sliding sash (left or right) with fixed window provides fresh air access while delivering greater weather-tightness.



850 SERIES SINGLE HUNG TILT

Lower sash slides upward with lift hardware designed for smooth operation. Tilts inward for cleaning.



900 SERIES DOUBLE HUNG TILT

Two vertical sliding sashes accommodate both dual and triple pane glass. Adaptable to both IG and SDL grills.

▼ TILT-N-TURN WINDOWS AND DOORS

European style windows and doors swing and tilt INWARD. Option for a passive flanking window that allows a large area to fully open.



SPECIALTY

▼ Manasc Isaac Architects Edmonton, Canada



8

Large Frames

Unlike vinyl windows, the stability and strength of fiberglass allows for the creation of large frames and frame assemblies. Close coordination between project design, DUXTON CAD, engineering support and site construction ensures the best results.

DESIGN TIP

Advance planning can allow for modular design and factory glazing to reduce and simplify site work.



SERIES 458 / 658

Deeper 4 $\frac{5}{8}$ " and 6 $\frac{5}{8}$ " insulated fiberglass frames achieves a more robust performance level. The 458 / 658 system accommodates a wider range of insulating glass with a fiberglass glazing stop.



▲ Will Richard Architect Winnipeg, Canada

Bays and Bows

The strength and stability of pultruded fiberglass provides distinct advantages in the creation of custom size Bay or Bow windows for new construction or retrofit. Hi or lo profile windows can be combined with any operating windows at custom angles.

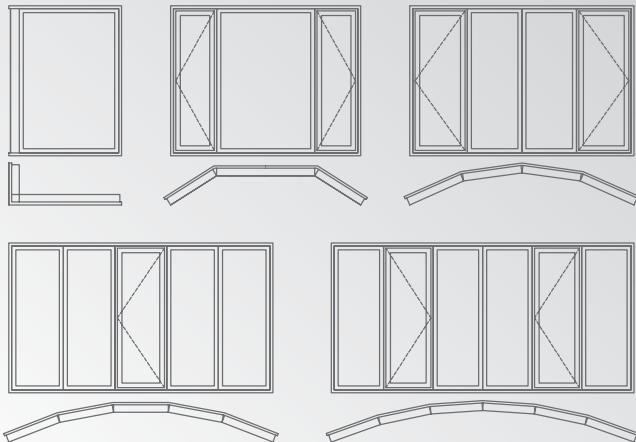
Options

- Head and/or seat
- Factory installed jamb extensions
- Site glazing for larger assemblies

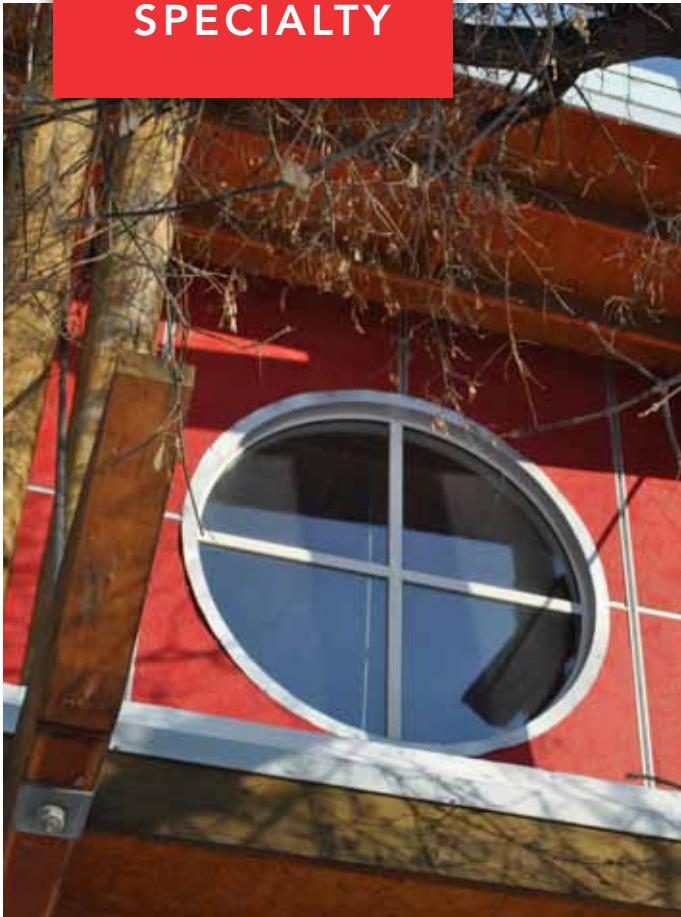


Custom Style

Whether retrofit or new construction, DUXTON ensures the perfect look and fit for Bays and Bows.



SPECIALTY



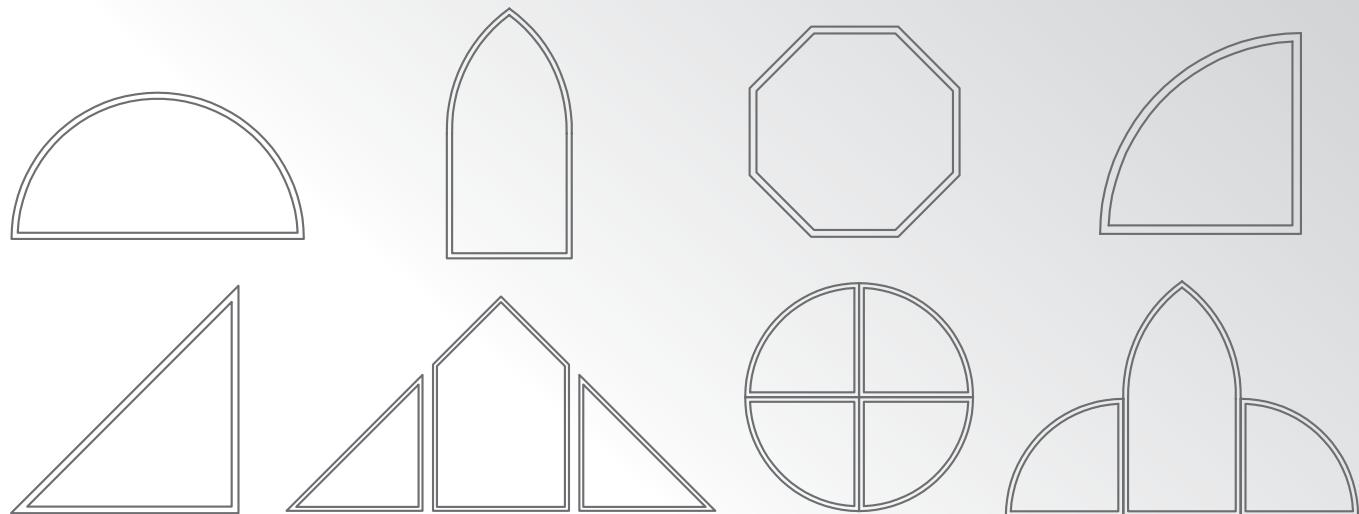
▲ Prairie Architects Winnipeg, Canada

Complementary Custom Shapes

Fiberglass has not typically been used in the manufacturing of rounded windows due to the rigidity of the material. However, when an engineer requested a round window for the Atlantic coast, DUXTON became the first window manufacturer to offer the product. DUXTON strives to meet customer needs, whatever the project requirements.

Custom Shapes

Design possibilities are limitless. Contact your DUXTON Sales Representative for more information.



▲ St. Joseph Church Winnipeg, Manitoba



Extraordinary Fiberglass Customization.

Designers frequently challenge DUXTON to create exceptional combinations of windows in both straight and curved lines. DUXTON's window specialists have the capability to meet a wide range of highly specialized project needs, ranging from edgy contemporary to traditional.

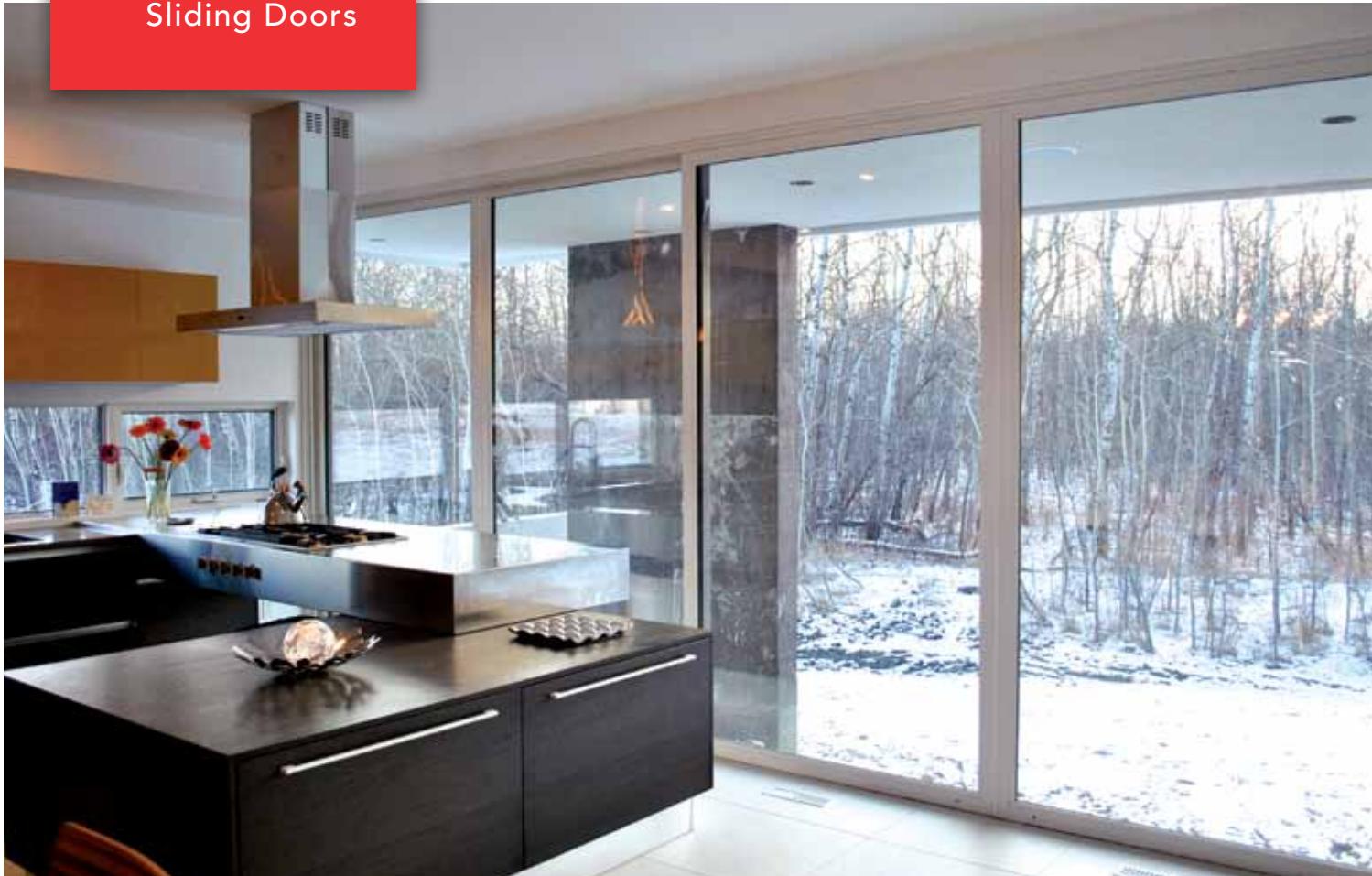


▼ EchoHaven Calgary, Alberta

SERIES 600

Sliding Doors

▼ House 5 Inc. Winnipeg, Canada



Fiberglass Sliding Doors

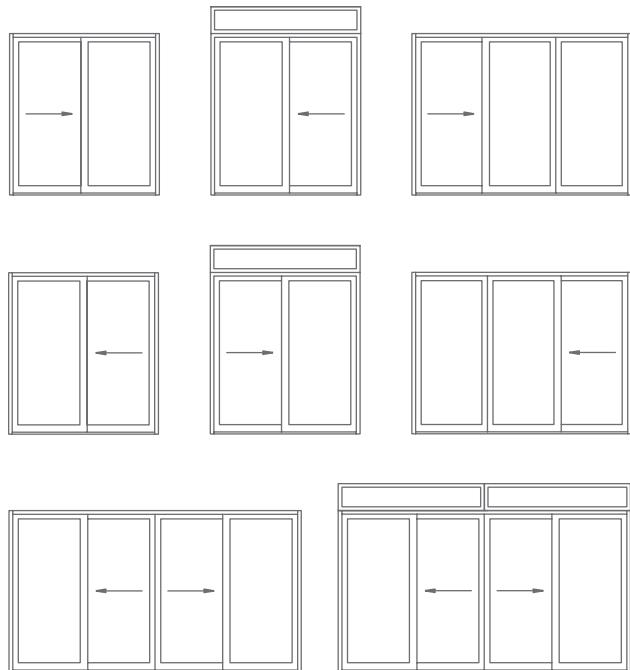
Fiberglass is an ideal material for the creation of sliding doors, providing a wide range of sizes and combinations. DUXTON has built doors over 8 feet tall and 16 feet wide; many imaginative designs are possible.

The raised stainless steel track ensures that a long lasting, ease of operation remains in place for either dual or triple pane glass. Specially designed interlocking components ensure exceptional sealing capabilities against the weather.



Custom Configurations

Patio Doors customized to your specifications.
Visit www.duxtonwindows.com for more information.



▼ Sector and Associates Winnipeg, Canada



Standard Features

- 5 3/4" insulated fiberglass frame
- 7/8" dual or 1 3/8" tripane insulating glass
- Two point locking system with foot lock option available
- Heavy duty sliding insect screen

DESIGN TIP:

Many of DUXTON's customers have chosen to create a "wall of glass" with custom sliding doors. The design allows natural sunlight to light your space, plus creates a beautiful, unobstructed view of the outdoors. When sidelights and transoms are added, window walls are given extraordinary luminance and ventilation qualities.



SERIES 458/658

Swinging Doors & Frames



▲ House 5 Inc. Winnipeg, Canada

Fiberglass Swinging Doors

DUXTON uniquely combines 4 $\frac{5}{8}$ " or 6 $\frac{5}{8}$ " fiberglass frames with insulated fiberglass door panels. The door frames can accommodate a wide range of configurations including in- or out-swing, double french doors, fixed or operable sidelites as well as transoms.

The fiberglass door frames are also available in a wide range of factory applied finishes, including a real wood interior option.

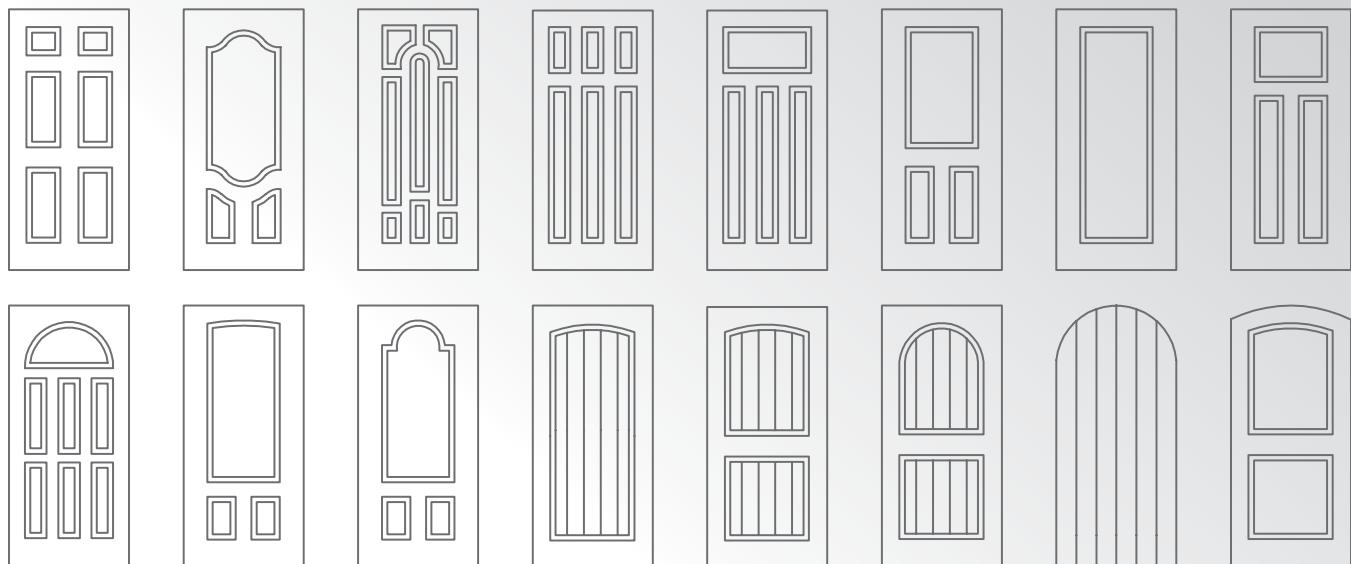
Standard Features and Options

- Frame can be constructed for 4 $\frac{1}{2}$ ", 6 $\frac{1}{2}$ ", and 8 $\frac{1}{2}$ " jamb
- Glazing units to accommodate 7/8" depths
- Standard and multi-point locking systems available
- Polyurethane foam compression weather-stripping
- Hardware available in black, brass, and satin nickel finishes
- Selection of stainable wood grain available, including oak, walnut, edge grain fir and mahogany
- Narrow or wide perimeters with installation nailing fin, brickmould and/or expanders for retrofit

▼ Sputnik Architecture, Winnipeg, Manitoba



Personality and Style.



ACCESSORIES



NARROW PERIMETER

Narrow perimeters (c/w Nailing fin or OSM perimeter): ideal for new construction. Aluminum nailing fin to attach to building envelope. Narrow perimeter without nailing can be an option for retrofit installation. Consider installation clips where suitable.

Narrow perimeter with RetroSnap Brickmould (or RetroSnap Expander): Installation with nailing fin first allows on-site installation of the RetroSnap Brickmould or expander. Allows ordering and installation of window to OSM Brickmould for full frame replacements.



WIDE PERIMETER

Wide perimeter (c/w Nailing fin or OSM perimeter) - Similar to Narrow perimeter but "sets window in" to create a base frame of 4 5/8" from fin to fiberglass frame. Moves glass further into the building envelope and creates deeper shadow lines.

Wide perimeter with RetroSnap Brickmould (or RetroSnap Expander) - Also allows ordering and installation of window to OSM Brickmould for full frame replacements. Brickmould and expander can be doubled up to add to width of new brickmould. Sill detail can be created to custom order detail.

Perimeter Details

Select from a variety of perimeters (attached to the outside of window frames) to achieve a number of technical objectives and visual effects. A basic perimeter with nailing fin allows a straightforward installation. A wide perimeter "pushes the window into the wall" such that there are deeper shadow lines and the glass is located toward the warm interior of the building. A panning accessory is more suitable where additional rigid insulation is added to the exterior. Lastly, expander and brickmould details are ideal in cases where traditional or "west coast" style brickmoulds are desirable.





BOX UNIT

Ideal for narrow setting box unit window replacement.



250 PANNING WITH NAILING FIN

Incorporates nailing fin at face of window frame with protruding trim. Allows placement of window frame while allowing addition of rigid insulation to exterior.

Adaptor port could allow use of RetroSnap or expander in certain applications.



350 PANNING WITH NAILING FIN

Similarly incorporates nailing fin at face of window frame with protruding trim.

Wider trim to exterior allows wide range of installation details.



▲ Manasc Isaac Architect Athabasca, Alberta

ACCESSORIES



Simulated Divided Lites and Grills

Simulated Divided Lites (SDLs) and IG Grills are a great way to maintain a traditional look without compromising energy efficiency.

Simulated Divided Lites

Available in all Standard Colors and Oak.

$\frac{7}{8}$ " Profiled

1" Flat

2" Flat

IG Grills

Available in White, Brass, and Pewter

$\frac{5}{16}$ " Square

$\frac{5}{8}$ " Rectangle

$\frac{5}{8}$ " Profiled *

* Other colors available.

Factory Installed Interior Frame Options

Jamb extensions and drywall return are available to suit a wide range of jamb depths.

Pacific Coast Hemlock (stain-grade): A west coast wood with a lighter base which is easily stained to lighter or darker finishes, creating a natural component with the fiberglass finishes.

Cellular (solid) PVC: A pre-finished, low-maintenance material which is easily adapted to custom jamb depths and is site friendly for the addition of interior casing trims.

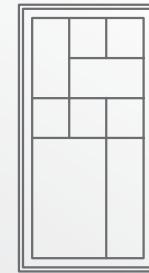
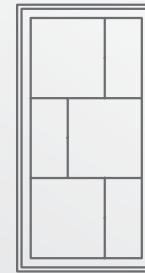
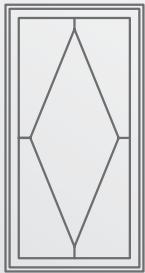
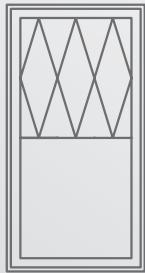
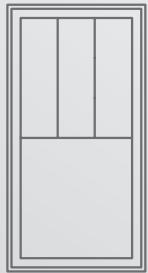
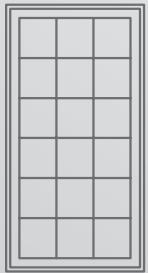
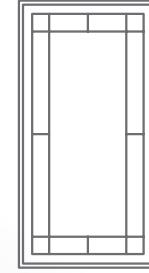
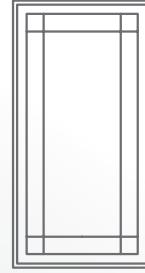
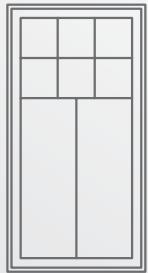
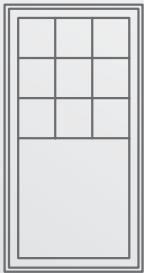
Solid Oak or Maple: Ready for site finishing to suit décor.

Drywall return: 1/2" or 3/4" applied in the factory.

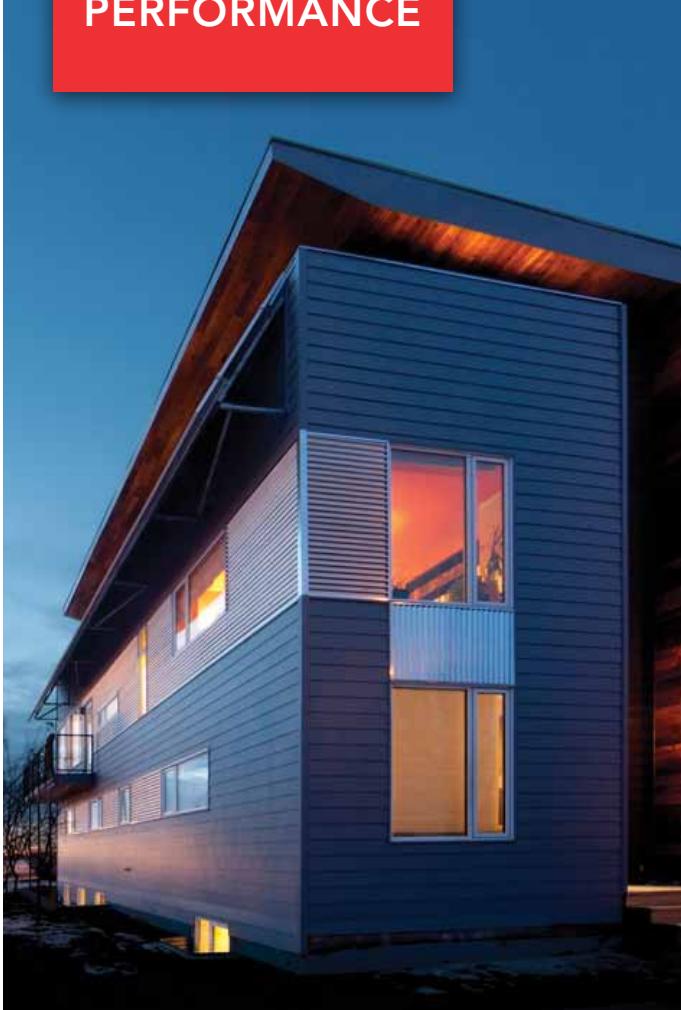


Endless Options.

DUXTON grills are available in a vast variety of designs, customized to suit any style. Contact your DUXTON Sales Representative for more information.



PERFORMANCE



Glass Detailing to Suit Specifications.

DUXTON offers a wide range of dual and multi-cavity insulating glass options produced by world class fabricators. Optional low e coatings range from high to low shading coefficient and mid to very low U-values. Warm edge spacers such as Super Spacer and stainless steel reduce heat loss, reduce edge condensation, and increase durability. This range of glass options can be extremely important when considering geographic location, project type, or pure aesthetic considerations.

Glass thickness:	3 mm to 6 mm
Inert gas:	Argon, krypton or xenon optional
Glass type:	Safety glass including Tempered and/or Laminate
Reduced breakage:	Lexan exterior, Tripane configuration
Aesthetics:	Colored glass including laminates Various types of obscure or patterned glass

Wavelength Selective Technology / Triple Pane Options

Qualified for Energy Star Rating

On-going refinement of low e coatings offers some unique capabilities with "wavelength selective" capabilities. Choose from combinations of high solar heat gain low or even consider low iron glass to maximize passive solar gain. Or, select low shading coefficient options to minimize excess heating/air conditioning concerns while minimizing overall window U values.

Energy Star qualified: The US National Fenestration Rating Council (NFRC) operates a program that oversees the testing, certification, and labelling of windows and doors. This process is based on energy performance ratings. Natural Resources Canada provides similar online access for qualified products.



Insulating Glass Performance Values

Glass Type	Spacer	Gas	R-Value	U-Value*	S.H.G.C.	Visible Light
AGC E2						
Dual	Super Spacer	Argon	3.33	0.32	0.63	73%
Tripane 1 Coating	Super Spacer	Argon	3.85	0.24	0.60	69%
Tripane 2 Coatings	Super Spacer	Argon	4.76	0.19	0.57	64%
AGC Ti-AC40						
Dual	Super Spacer	Argon	4.55	0.27	0.39	68%
Tripane 1 Coating	Super Spacer	Argon	4.55	0.21	0.37	64%
Tripane 2 Coatings	Super Spacer	Argon	6.25	0.15	0.34	55%
Cardinal 180						
Dual	SS XL Warm Edge	Argon	4.20	0.30	0.69	79%
Tripane 1 Coating	SS XL Warm Edge	Argon	5.88	0.22	0.56	70%
Tripane 2 Coatings	SS XL Warm Edge	Argon	8.33	0.17	0.51	63%
Cardinal 272						
Dual	SS XL Warm Edge	Argon	4.17	0.27	0.41	72%
Tripane 1 Coating	SS XL Warm Edge	Argon	7.69	0.22	0.37	63%
Tripane 2 Coatings	SS XL Warm Edge	Argon	9.09	0.16	0.34	57%
Cardinal 366						
Dual	SS XL Warm Edge	Argon	4.17	0.27	0.27	65%
Tripane 1 Coating	SS XL Warm Edge	Argon	7.69	0.21	0.24	57%
Tripane 2 Coatings	SS XL Warm Edge	Argon	9.09	0.15	0.22	51%
Heat Mirror 88/LoE 180						
1 HM88 Film / 1 Coating	Stainless Steel	Krypton	8.10		0.51	70%
2 HM88 Film / 1 Coating	Stainless Steel	Krypton	12.20		0.44	62%
3 HM88 Film / 1 Coating	Stainless Steel	Krypton	19.50	0.09	0.038	53%

SHGC: Solar Heat Gain Coefficient

Information is gleaned from best available industry sources. E2 is AGC's "hard coat" low E coating and generally used locally in tempered glass applications.

Ti-AC 40 is AGC's Titanium "soft coat" low e product, targetted for mid-range SHGC and low U-value. The reader is cautioned that test results should be used for comparison purposes only. Results are size and installation dependent. In-service performance can be significantly different from those shown. Product tested indicates design potential. All values are Center of Glass except U-Value which is an overall value including the sealed unit and frame.

*Overall U-Value. Units utilized for U-Values are Btu/^F x sq.ft.

Window Performance

Test Report Summary by Product Type

Please contact DUXTON for additional testing details or check www.duxtonwindows.com.

Product	Air Tightness	Water Tightness	Wind Load Resistance
325 Casement/Awning	A3	B7	C5
325 Fixed	Fixed	B7	C4
458 / 658 Fixed	A3	B7	C5
800 Slider	A3	B7	C5
850 Single Hung	A3	B7	C5
900 Double Hung	A3	B7	C5
700 Casement/Awning	A3	B6	C4
700 Fixed	Fixed	B7	C4

DUXTON Limited Warranty

The strength of pultruded fiberglass leads to a high level of confidence backed by a **Limited 20 Year Warranty** on the frame components.

High quality glass, hardware and other components are also backed by confident warranties and after sales service.

COLOR OPTIONS

▼ ACC PARKLANDS Sputnik Architecture Dauphin, Manitoba



The Creativity of Color.

Color is what differentiates fiberglass from other materials. The expansion and softening of vinyl in direct heat mean it can be difficult to apply durable color solutions. The favorable characteristics of fiberglass – minimal expansion/contraction – mean excellent durability for high quality finishes. A wide range of light to dark colors are baked onto the frames.

Select from DUXTON's standard colors or opt for a custom color match.

DESIGN TIP

Consider the overall impact of a buildings elevation relative to other finish components such as brick or roofing before committing to an exterior window color to add real "rich look" to the final result.

Single Color

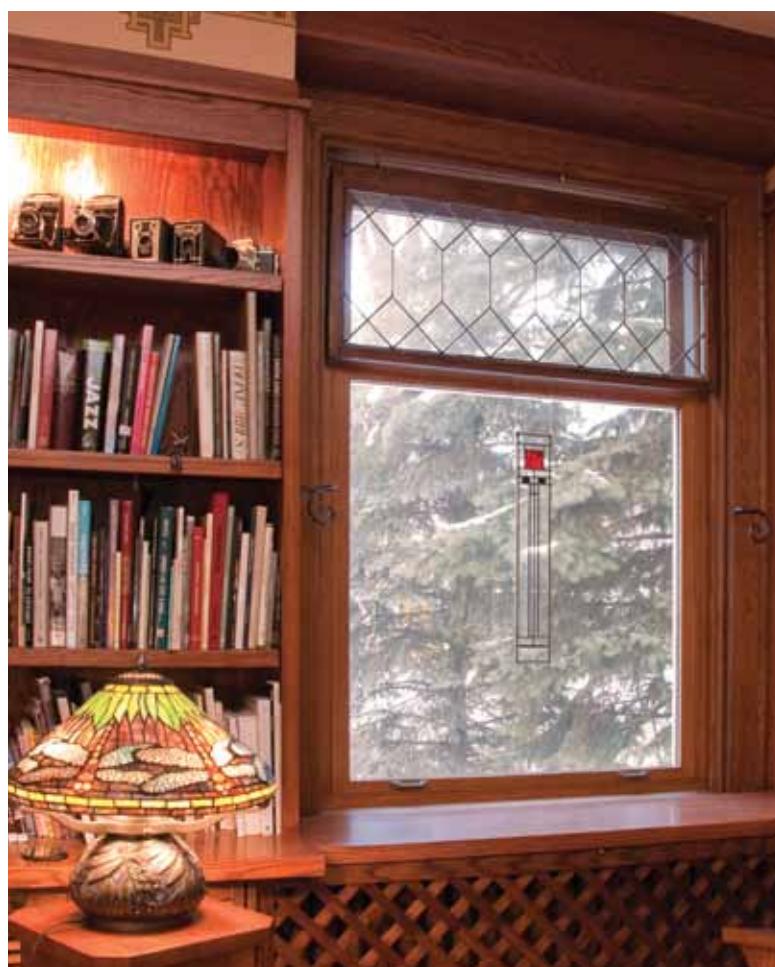
The most cost effective solution leaves the windows the same color inside and outside.

Multicolor: Brickmould & Frame

A cost-effective solution to add color to the border of your window, while leaving the frame a base color.

Split Finish

The most flexible solution allows for different colors to be applied both on the inside and outside.



Customize with Real Wood Interiors.

A wide range of DUXTON windows are available with a real wood interior, with options ranging from oak to edge grain fir. The real oak option can be a tremendous highlight within retrofit applications with original wood trims.

WOOD (INTERIOR ONLY):

Oak	
Edge Grain Fir	
Maple	
Mahogany	

STANDARD

White

Commercial Brown

SELECT

Almond

Brownstone

Slate Gray

PREMIUM

Bronze

Brick Red

Chestnut Brown

Cranberry

Cedar

Sage Green

Hartford Green

Deep Green

Steel Blue

Midnight Blue

Silver

Black

METALLIC

Silver

Champagne

Light Bronze

*Custom color match available.



DUXTON Windows & Doors

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