

FINISH SCHEDULE					
Abreviation		Manufacturer	Product	Color/Finish	Comments
BV-1	Brick	Glen Gery, Hanley PA Plant	Thin Brick Veneer	In-House Sample, To Be Reviewed In Person w Historic Committee	Associated façade vents and penetrations to be color matched to brick. Modular 2 5/8 x 8"
BV-2	Brick	Glen Gery, Hanley PA Plant	Thin Brick Veneer	In-House Sample, To Be Reviewed In Person w Historic Committee	Associated façade vents and penetrations to be color matched to brick . Modular 2 5/8 x 8" Nominal.
CD-1	Composite Decking	Trex	Trex Transcend	Saddle/Treehouse	
CD-2	Composite Decking	Trex	Trex Transcend	Gravel Patch/Pebble Gray	
FC-1	Fiber Cement Panel	James Hardie	HardieReveal	Aged Pewter Smooth	Aluminum Trim, painted to match panel color.
FC-2	Fiber Cement Plank	James Hardie	HardiePlank	Timber Bark	Clapboard Horizontal - Cedar, Trim To Match
GL-1	Storefront Glazing	Vitro	Solarban 60	Clear	Low E, Kawneer System
GL-2	Window/Door Glazing	Cardinal	366 Low-E	Clear	Low E, See Windows Below
MP-1	Metal Panel	Alcoa	Reynobond	Colorweld 300 - Classic Bronze	Location: Cornice
MP-2	Metal Panel	Alcoa	Reynobond	Colorweld 300 - Classic Bronze	Location: Entry Portal, Storefront Infill
MTL-1A	Aluminum Rail System	Custom Fabrication	Balcony Rail	Aluminum - Powder Coat - RAL 7022	See Documents For Design Intent, 2"x2" Frame, 1/2" Pickets
MTL-1B	Aluminum Rail System	Custom Fabrication	Juliet Balcony Rail	Aluminum - Powder Coat - RAL 7022	See Documents For Design Intent, Mount To Inside Of Window Jamb, 2"x2" Frame, 1/2" Pickets
MTL-2	Exterior Hardware Finish	C.R.Laurence	Powder Coat	695 Powder Coat	
PC-1	Precast Sills	Arriscast	Window Sill	Ryegrass	5 1/4" Masonry Unit Sill
PC-2	Precast Sills	Arriscast	Window Sill	Ryegrass	5 1/4" Masonry Unit Sill
PC-3	Masonry Unit	Arriscraft	Renaissance Unit	Ryegrass	12" x 24" Nominal Smooth Face Unit
SF-1	Storefront	Kawneer	Permaflour - UC 109850	Classic Bronze	
W-1	Fiberglass Window	Fiber Frame	Comfort Line	Match to SW 7515 Homestead Brown	Custom Color, Patio doors to match SW sample
W-2	Fiberglass Window	Fiber Frame	Comfort Line	Match to SW 7675 Sealskin	Custom Color, Patio doors to match SW sample
WD-1	Wood Door Frame	Custom Fabrication	Exterior Grade Door	Honey Brown Wood Finish match to in house Garapa Wood sample	Custom Entry door with MTL-2 Hardware
	Exterior Metal Awning	Custom Fabrication	Custom Fabrication	Custom Fabrication	See Submission Documents For Design Intent
	Rooftop Mech Screen	Morin Metals	Integrity X-12	Morin - Antique Bronze	

FINISH SCHEDULE  
 UPDATED 2019\_03\_28  
 SEE SUBMITTED ELEVATIONS AND  
 VIEW PACAKGE FOR REFERENCE TAGS



# BUILD YOUR DECK *in* FIVE EASY STEPS

CD-1&2  
CD-1 COLOR: SADDLE/TREEHOUSE  
CD-2 COLOR: GRAVEL PATCH/  
PEBBLE GRAY



# THE LOOK OF WOOD

WITHOUT  
ALL THE  
WORRY

CD-1&2  
CD-1 COLOR: SADDLE/TREEHOUSE  
CD-2 COLOR: GRAVEL PATCH/  
PEBBLE GRAY

You could build your deck with any number of materials.

*But why would you, when Trex® decking and railing consistently outdeck wood and the wannabes?*

## — TREX WILL —



*Beautifully withstand years of sun, sleet & snow*  
**HIGH-PERFORMANCE TECHNOLOGY**



*Clean easily with soap & water*  
**LOW-MAINTENANCE PROPRIETARY SHELL**



*Make good on its promises*  
**25-YEAR LIMITED RESIDENTIAL AND FADE & STAIN WARRANTIES**

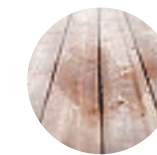


*Let forestfuls of trees grow and grow*  
**MADE OF 95% RECYCLED MATERIALS**

## — TREX WON'T —



*Rot, warp or splinter*  
**UNLIKE WOOD**



*Fade or stain*  
**UNLIKE WOOD**



*Need seasonal painting, sealing or staining*  
**UNLIKE WOOD**



*Become food for termites*  
**UNLIKE WOOD**

Even better, Trex has engineered cost out of the equation with its newest collection of composite decking. So, the question is—**can you afford *not* to build with Trex?**

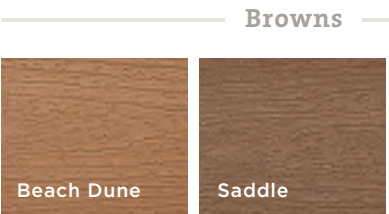
... Read why Trex also outdecks PVC & early-gen composite at [trex.com/compare](https://www.trex.com/compare)

JUST ENOUGH COLORS TO MAKE CHOOSING FUN...

AND RIGHT FOR YOU.

**NEW!** *GOOD*  
**Trex Enhance®**  
BASICS

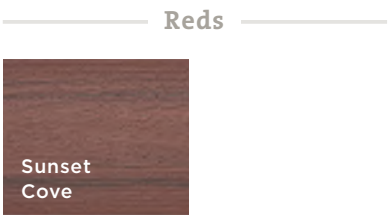
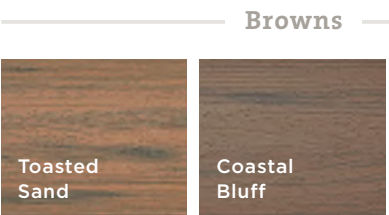
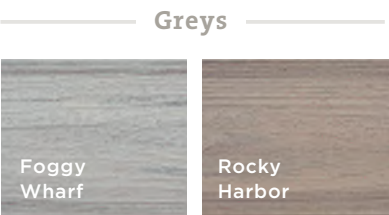
Priced to put the pressure on treated lumber.



CD-1&2  
CD-1 COLOR: SADDLE/TREEHOUSE  
CD-2 COLOR: GRAVEL PATCH/  
PEBBLE GRAY

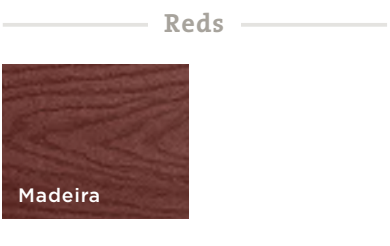
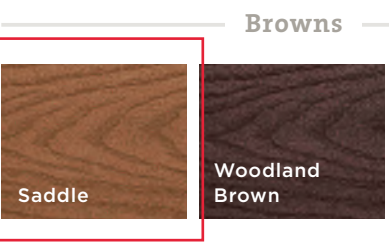
**NEW!** *BETTER*  
**Trex Enhance®**  
NATURALS

The beauty of wood with the ease of composite.



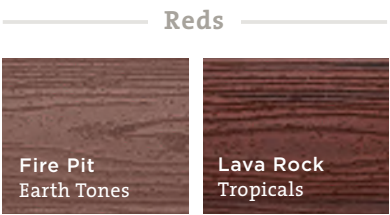
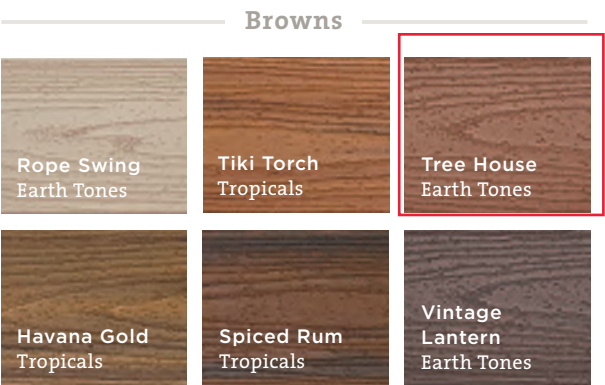
*BETTER*  
**Trex Select®**  
EARTH TONES

The perfect pairing of price and minimal maintenance.



*BEST*  
**Trex Transcend®**  
EARTH TONES  
& TROPICALS

Elevated aesthetics paired with the highest level of performance.



[📍 FIND A RETAILER »](#)

[🛒 ORDER A SAMPLE »](#)

CD-1&2  
CD-1 COLOR: SADDLE/TREEHOUSE  
CD-2 COLOR: GRAVEL PATCH/  
PEBBLE GRAY



## 1" GROOVED EDGE BOARD

### ACTUAL DIMENSIONS

- » .94 in x 5.5 in x 12 ft (24 mm x 140 mm x 365 cm)
- » .94 in x 5.5 in x 16 ft (24 mm x 140 mm x 487 cm)
- » .94 in x 5.5 in x 20 ft (24 mm x 140 mm x 609 cm)

Our grooved edge boards install with our Hidden Fastening System beneath the deck surface, leaving a tidy finish free of screw holes.

## FEATURED COLLECTIONS



**JamesHardie**

Siding | Trim

FC-1 & FC-2  
Fibercement Panels/Plank



Achieve authentic character and  
**UNCOMPROMISING PERFORMANCE.**



**NORTHEAST**  
Product  
Catalog

FC-1  
Fibercement Panel  
COLOR: AGED PEWTER

# Hardie® Reveal® Panel System

## Embody a modern aesthetic

Get the look you are after with the solution that offers design flexibility. The Hardie® Reveal® Panel system can be utilized to create an effective modern, durable, panelized look.

A system of components specifically developed for multi-family and light commercial construction. If your project calls for a panelized look — the Hardie Reveal Panel system offers the design flexibility you need.

Beginning with a commercial grade panel developed for multi-family and light commercial applications, the Hardie Reveal Panel system is a complete solution for creating a panelized look. Eliminate the guesswork in creating this look with the Hardie Reveal Panel system, with all parts including panels and trims supplied by James Hardie. Check for availability and call us to request a James Hardie Preferred Installer when specifying the Hardie Reveal Panel system.

**For details about technical  
information and specs, visit  
[JamesHardieCommercial.com](http://JamesHardieCommercial.com)**



# Hardie® Reveal® Panel System

## Design Freedom

- Horizontal or vertical application
- 7/16" thick, commercial grade panels
- Cleaner look with fewer fasteners (approximately 14-21 per 4' x 8' panel)
- Standard panel size is nominal 4' x 8' and can be cut on-site to desired size
- Panels available with ColorPlus® Technology
- Panels can be cut on-site to desired size

## Unique Aesthetic

- Sharp express joint look with deep shadow lines
- Smooth panel look with exposed fasteners
- Trims and fasteners can be field painted or left with a metal finish
- Off-stud jointing solution provides design flexibility

## Proven James Hardie Durability

- Engineered for Climate® to stand up to the demands of your project's specific climate
- Commercial panel developed specifically for use in multi-family, mixed use, senior living and light commercial facilities
- Ventilated rain screen assembly incorporates best practices for moisture management
- Proven performance with James Hardie fiber cement panels coupled with durable aluminum trims

## Embody a modern aesthetic

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**For details about technical information and specs, visit [JamesHardieCommercial.com](http://JamesHardieCommercial.com)**



**HardiePlank®**

Sleek and strong, HardiePlank® lap siding is not just our best-selling product – it's the most popular brand of siding in America.

With a full spectrum of colors and textures, homeowners can enjoy protection from the elements and the versatility to make their dream home a reality. From Victorians to Colonials, HardiePlank lap siding sets the standard in exterior cladding.

HardieTrim®  
5/4 x 3.5 in.  
Arctic White

FC-2  
Fibercement Plank  
COLOR: TIMBER BARK

HardiePlank®  
6.25 in. Smooth  
Arctic White

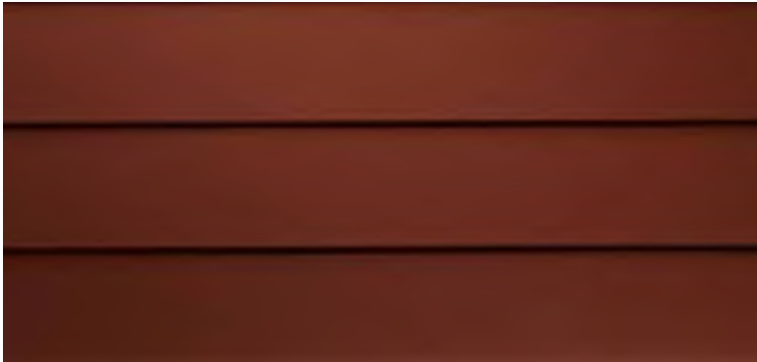
A classic look for  
**THE HOME OF THEIR DREAMS.**



### SELECT CEDARMILL®

*Khaki Brown*

Thickness	5/16 in.			
Length	12 ft. planks			
Width	5.25 in.	6.25 in.	7.25 in.	8.25 in.
Exposure	4 in.	5 in.	6 in.	7 in.
ColorPlus Pcs./Pallet	324	280	252	210
Prime Pcs./Pallet	360	308	252	230
Pcs./Sq.	25.0	20.0	16.7	14.3



### SMOOTH

*Countrylane Red*

Thickness	5/16 in.			
Length	12 ft. planks			
Width	5.25 in.	6.25 in.	7.25 in.	8.25 in.
Exposure	4 in.	5 in.	6 in.	7 in.
ColorPlus Pcs./Pallet	324	280	252	210
Prime Pcs./Pallet	360	308	252	230
Pcs./Sq.	25.0	20.0	16.7	14.3



### BEADED CEDARMILL®\*

*Light Mist*

Thickness	5/16 in.			
Length	12 ft. planks			
Width	8.25 in.			
Exposure	7 in.			
ColorPlus Pcs./Pallet	210			
Prime Pcs./Pallet	240			
Pcs./Sq.	14.3			



### BEADED SMOOTH\*

*Heathered Moss*

Thickness	5/16 in.			
Length	12 ft. planks			
Width	8.25 in.			
Exposure	7 in.			
ColorPlus Pcs./Pallet	210			
Prime Pcs./Pallet	240			
Pcs./Sq.	14.3			

\*Beaded Cedarmill® and Beaded Smooth are available exclusively with ColorPlus Technology in Pittsburgh, Philadelphia and New England districts.

**HardieTrim®**

Form meets function at every angle with HardieTrim® boards. With an authentic look, HardieTrim boards provide design flexibility for columns, friezes, doors, windows and other accent areas.

Better than wood, it will complement your long-lasting, lower maintenance James Hardie siding – adding punctuation to your design statement.

FC-1 & FC-2 ACCESSORIES

HardieTrim®  
5/4 x 3.5 in.  
Khaki Brown

HardiePlank®  
6.25 in. Smooth  
Navajo Beige

The performance you require  
**THE DISTINCTIVENESS YOU DESIRE.**

HARDIETRIM® BOARDS



4/4 NT3® SMOOTH

Arctic White

Thickness	.75 in.				
Length	12 ft. boards				
Width	3.5 in.	5.5 in.	7.25 in.	9.25 in.	11.25 in.
Pcs./Pallet	312	208	156	104	104



5/4 NT3® SMOOTH

Arctic White

Thickness	1 in.					
Length	12 ft. boards					
Width	3.5 in.	4.5 in.	5.5 in.	7.25 in.	9.25 in.	11.25 in.
Pcs./Pallet	240	200	160	120	80	80



CROWN MOULDING

Arctic White

Thickness	.75 in.	
Length	12 ft. boards	
Width	3.25 in.	5.25 in.
Pcs./Pallet	50	48

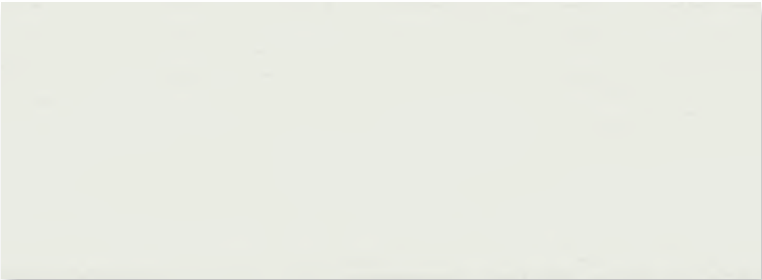
HARDIETRIM® BATTEN BOARDS



RUSTIC GRAIN®

Arctic White

Thickness	.75 in.
Length	12 ft. boards
Width	2.5 in.
Pcs./Pallet	437



SMOOTH

Arctic White

Thickness	.75 in.
Length	12 ft. boards
Width	2.5 in.
Pcs./Pallet	437

HardieTrim Boards are available primed or with ColorPlus Technology in DC/Baltimore and Virginia districts. For other districts, HardieTrim Boards are exclusively available with ColorPlus Technology. HardieTrim Batten Boards are available primed or with ColorPlus Technology. HardieTrim Crown Mouldings are available exclusively in ColorPlus Technology.

# Product Data Sheet



## Aesthetic Description

*Solarban® 60* solar control, low-e glass by Vitro Architectural Glass (formerly PPG Glass) was engineered to control solar heat gain, which is essential to minimizing cooling costs. In a standard one-inch insulating glass unit (IGU), *Solarban® 60* glass offers an exterior appearance similar to clear, uncoated glass.

With a very good Solar Heat Gain Coefficient (SHGC) of 0.39, *Solarban® 60* glass blocks 66 percent of the total solar energy while allowing 70 percent of the visible light to pass through. This combination produces an excellent Light to Solar Gain (LSG) ratio of 1.79, along with exceptional insulating performance, as evidenced by its 0.29 winter nighttime U-value.

## Aesthetic Options

*Solarban® 60* glass can be coated on *Starphire®* glass and paired with *Starphire®* glass to produce an IGU with exceptional clarity and solar control characteristics. For even more color and performance options, it can be coated on the second (#2) surface of nearly all Vitro's wide range of tinted glasses. It can also be combined in an IGU with any Vitro tinted glass, *Solarcool®* reflective glass or *Vistacool®* subtly reflective, color-enhanced glass (see performance data on back page).

## Solarban® 60 Glass and Sustainable Design

An energy modeling study conducted by an independent energy design and consulting firm showed that architects and building owners can potentially save millions of dollars during a building's lifetime by specifying *Solarban® 60* glass instead of less advanced architectural glazings.

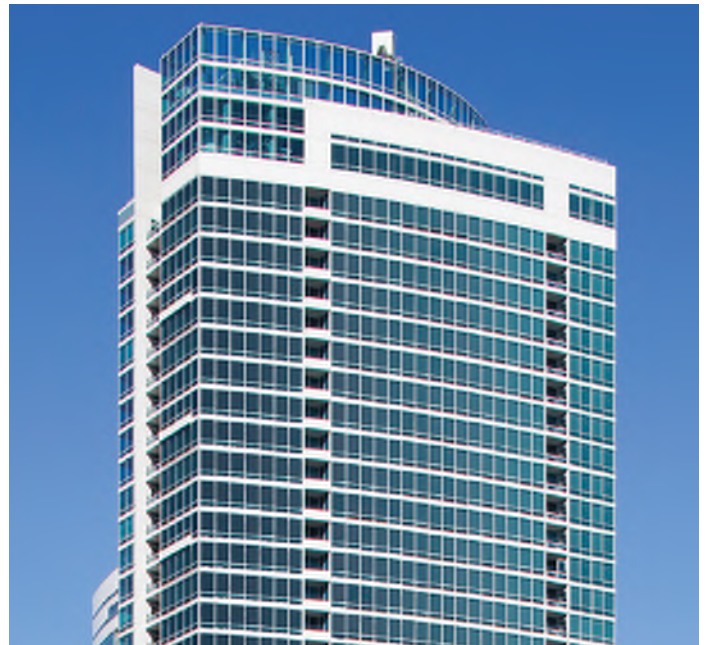
For instance, the study showed that, by substituting *Solarban® 60* glass in place of dual-pane tinted glass, the owners of a typical glass-walled, eight-story office building in Boston could lower their initial HVAC equipment costs by nearly \$350,000 while realizing annual energy savings of more than \$80,000. Corresponding carbon emissions from the same building were also reduced by more than 300 tons per year, eclipsing the total carbon emissions generated by 31,000 gallons of gasoline.

In addition to making products that support sustainable design, Vitro has pioneered innovative technologies that reduce energy consumption during the glass-making process. Vitro promotes environmentally responsible manufacturing by recovering and reusing virtually all of its glass manufacturing by-products and by shipping its materials on reusable steel racks. Vitro also facilitates regional sourcing through its nationwide network of certified glass fabricators and laminators.



**Prudential Center**

Location: Newark, NJ | Product: *Solarban® 60* Glass | Architect: Morris Adjmi Architects | Glass Contractor: Josloff Glass | Glass Fabricator: J.E. Berkowitz, LP



**Streeter Place**

Location: Chicago, IL | Product: *Solarban® 60* Glass | Architect: Solomon Cordwell Buenz and Associates | Owner/Developer: Golub and Company | Glass Fabricator: Northwestern Industries, Inc. | Glazing Contractor: Custom Windows and J&D Erectors



## Solarban® 60 Glass

## Fabrication and Availability

Solarban® 60 glass is available exclusively through the *Vitro Certified™* Network. *Vitro Certified™* Fabricators can meet tight construction deadlines and accelerate the delivery of replacement glass before, during and after construction. Solarban® 60 glass is manufactured using the sputter-coating process and is available for annealed, heat-strengthened and tempered applications.

## Additional Resources

Solarban® 60 glass is *Cradle to Cradle Certified™*. For more information or to obtain samples of any Vitro Glass product, call **1-855-VTRO-GLS (887-6457)** or visit **vitroglazings.com**.

Vitro Architectural Glass is the first U.S. float glass manufacturer to have its products recognized by the *Cradle to Cradle Certified™* program, and offers more C2C-certified architectural glasses than any other float glass manufacturer.

## Insulating Glass Unit Performance Comparisons | 1-inch (25mm) units with 1/2-inch (13mm) airspace and two 1/4-inch (6mm) lites

Outdoor Lite: Coating if Any (Surface) Glass	Glass Type + Indoor Lite: Coating if Any (Surface) Glass	Visible Light Transmittance (VLT)	Visible Light Reflectance		(BTU/hr·ft²·°F) NFRC U-Value		Solar Heat Gain Coefficient (SHGC)	Light to Solar Gain (LSG)
			Exterior %	Interior %	Winter Nighttime	Winter Argon		

## Solarban® 60 Solar Control Low-E Glass

Solarban® 60 (2) Clear + Clear	70	11	12	0.29	0.24	0.39	1.79
Solarban® 60 (2) Starphire® + Starphire®	74	11	12	0.29	0.24	0.41	1.80
Solarban® 60 (2) Solexia® + Clear	61	9	12	0.29	0.24	0.32	1.91
Solarban® 60 (2) Atlantica® + Clear	53	8	11	0.29	0.24	0.27	1.96
Solarban® 60 (2) Azuria® + Clear	54	8	11	0.29	0.24	0.28	1.93
Solarban® 60 (2) Solarblue® + Clear	45	7	11	0.29	0.24	0.28	1.61
Solarban® 60 (2) Pacifica® + Clear	34	6	10	0.29	0.24	0.22	1.55
Solarban® 60 (2) Solarbronze® + Clear	42	7	11	0.29	0.24	0.28	1.50
Solarban® 60 (2) Optigray® + Clear	50	8	11	0.29	0.24	0.30	1.67
Solarban® 60 (2) Solargray® + Clear	35	6	10	0.29	0.24	0.25	1.40
Solexia® + Solarban® 60 (3) Clear	61	10	10	0.29	0.24	0.37	1.65
Atlantica® + Solarban® 60 (3) Clear	53	9	10	0.29	0.24	0.31	1.71
Azuria® + Solarban® 60 (3) Clear	54	9	10	0.29	0.24	0.31	1.74
Solarblue® + Solarban® 60 (3) Clear	45	7	9	0.29	0.24	0.33	1.36
Pacifica® + Solarban® 60 (3) Clear	34	6	9	0.29	0.24	0.25	1.36
Solarbronze® + Solarban® 60 (3) Clear	42	7	9	0.29	0.24	0.32	1.31
Optigray® + Solarban® 60 (3) Clear	50	8	9	0.29	0.24	0.35	1.43
Solargray® + Solarban® 60 (3) Clear	35	7	9	0.29	0.24	0.29	1.21
GraylitE II + Solarban® 60 (3) Clear	7	4	8	0.29	0.24	0.13	0.54

## Vistacool® and Solarcool® with Solarban® 60 Solar Control Low-E (3)\*

Vistacool® (2) Azuria® + Solarban® 60 (3) Clear	42	20	24	0.29	0.24	0.26	1.62
Vistacool® (2) Pacifica® + Solarban® 60 (3) Clear	26	11	23	0.29	0.24	0.21	1.24
Solarcool® (2) Solexia® + Solarban® 60 (3) Clear	24	24	29	0.29	0.24	0.19	1.26
Solarcool® (2) Azuria® + Solarban® 60 (3) Clear	21	19	29	0.29	0.24	0.17	1.24
Solarcool® (2) Solarblue® + Solarban® 60 (3) Clear	17	14	29	0.29	0.24	0.18	0.94
Solarcool® (2) Pacifica® + Solarban® 60 (3) Clear	13	10	29	0.29	0.24	0.15	0.87
Solarcool® (2) Solarbronze® + Solarban® 60 (3) Clear	17	14	29	0.29	0.24	0.18	0.94
Solarcool® (2) Solargray® + Solarban® 60 (3) Clear	14	11	29	0.29	0.24	0.17	0.82

\* Data based on using Starphire® glass for both interior and exterior lites.

All performance data calculated using LBNL Window 6.3 software, except European U-value, which is calculated using WinDat version 3.0.1 software. For detailed information on the methodologies used to calculate the aesthetic and performance values in this table, please visit [www.ppgideascape.com](http://www.ppgideascape.com) or request our Architectural Glass Catalog.

For more information about Solarban® low-e glass and other *Cradle to Cradle Certified™* architectural glasses by Vitro Glass, visit **vitroglazings.com**, or call **1-855-VTRO-GLS (887-6457)**.

Cardinalcorp.com uses Flash and Javascript. Please navigate with [sitemap](#)[Sitemap EspaNo](#)

## LoE<sup>3</sup>-366 Glass

[< Products](#)[PDF Brochure \(1.3MB\)](#)SHGC: 0.27 / U-FACTOR: 0.24 / TDW: 0.43 / LIGHT TRANS: 66% / [All stats](#)

### A new standard

Cardinal introduces LoE<sup>3</sup>-366 (pronounced low E cubed-366), the ultimate performance glass. It just might make all other low-E glasses obsolete. LoE<sup>3</sup>-366 delivers the ideal balance of solar control and high visibility. And it provides the highest levels of year-round comfort and energy savings, making it the perfect glass no matter where you live. The secret? An unprecedented triple layer of silver. This is beyond ordinary low-E glass; LoE<sup>3</sup>-366 sets the new standard.

### Low-E times three makes the difference

Cardinal has for years worked with top-tier window manufacturers by providing energy-efficient LoE<sup>2</sup> glass. Now with three layers of year-round thermal protection, the benefits are exceptional.

The result: a clear coating that blocks even more solar gain than ever before, reflects heat and lets the light stream in. Notice the difference below between clear glass, regular low-E glass and new LoE<sup>3</sup>-366.

- This Application Requires JavaScript and Flash -

### Energy savings all year long

The full-year benefits of LoE<sup>3</sup>-366 can be clearly seen. When the temperature soars in the summer, ordinary window glass just can't beat the heat. And tinted glass spoils the view. LoE<sup>3</sup>-366 is formulated to reject solar heat while maintaining attractive visibility. So it keeps the heat out while letting light in. As a matter of fact, LoE<sup>3</sup>-366 glass is our ultimate in performance and clarity among all of Cardinal's clear coated products.

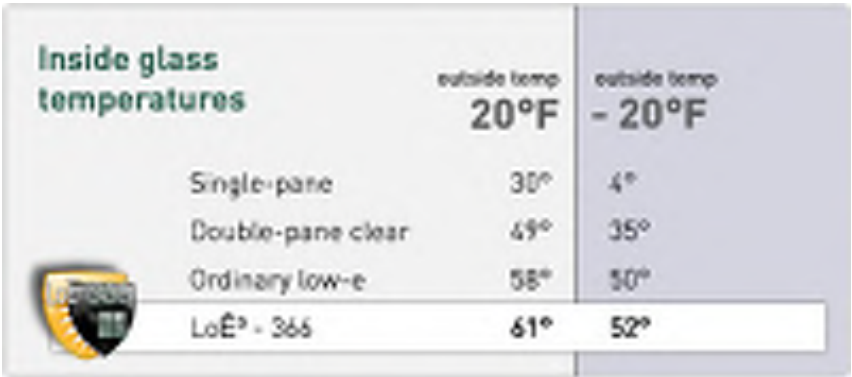
What is more, LoE<sup>3</sup>-366 provides the ultimate in fading protection. It blocks 95% of the sun's damaging ultraviolet rays - a leading cause of fading - so your furniture, carpets, curtains and wall coverings stay beautiful for years.

During the cold weather, the insulating effect of your windows has a direct impact on how your rooms feel. The better insulated the window glass, the warmer your room will feel. In fact, the [Efficient Windows Collaborative](#) suggests that when glass surface temperature falls below 52°F, there is a risk of thermal discomfort. To maintain the best comfort during the winter, select a glass product that produces surface temperatures that will stay above this point during the coldest outdoor conditions.

According to the chart below, the insulating properties of LoE<sup>3</sup>-366 coated glass product. This is a key factor in the control of indoor air can be controlled and maintained, and promote a healthier living environment.

GL-2 RESIDENTIAL WINDOW

by other  
the  
of the  
comfort



### Saving money and protecting the environment

According to the [Consumer Federation of America](#), the average American household spends \$1,500 per year on energy costs. But energy-efficient windows can help save a bundle. In fact, you can reduce your energy bills by one-third by simply using low-emissivity glass.

But not only does it make financial sense, it's smart to do in view of limited global resources. Conscious consumers are increasingly making purchasing decisions based current environmental realities. By using products that reduce energy consumption, one diminishes their environmental footprint, limiting usage of fossil fuels and lowering carbon emissions.

### Cardinal's new shield of protection

At Cardinal, our goal remains the same: to set the standard for high efficiency residential glazing products. Now, with LoE<sup>3</sup>-366, a new standard has been created. To gain more information about LoE<sup>3</sup>-366 coated glass, please contact your builder or architect, or the closest [Cardinal CG facility](#).

### Additional facts

- Can include hurricane-resistant lamination
- All residential sizes, thicknesses and shapes offered
- Custom configurations available

# Trifab™ VG (VersaGlaze™)

Trifab™ VG 450, 451 & 451T (Thermal) Framing Systems &  
Trifab™ 451UT (Ultra Thermal) Framing System

STOREFRONT GLAZING SYSTEM  
COLOR: CLASSIC BRONZE

Design + Performance Versatility with  
Unmatched Fabrication Flexibility



Preston Pointe, Louisville, KY  
Architect: Potter & Associates Architects PLLC, Louisville, KY  
Glazing Contractor: Kentucky Mirror & Plate Glass Company, Louisville, KY

Trifab™ VersaGlaze™ is built on the proven and successful Trifab™ platform – with all the versatility its name implies. There are enough framing system choices, fabrication methods, design options and performance levels to please the most discerning building owner, architect and installer. The Trifab™ VersaGlaze™ family's newest addition, Trifab™ 451UT (Ultra Thermal) framing system, is designed for the most demanding thermal performance and employs a "dual" Isolock™ Thermal Break.

## Aesthetics

Trifab™ VersaGlaze™ framing systems offer designers a choice of front-, center-, back- or multi-plane glass applications. Structural silicone glazing (SSG) and Weatherseal glazing options further expand the designers' choices, allowing for a greater range of design possibilities for specific project requirements and architectural styles. All systems have a 4-1/2" frame depth – Trifab™ VersaGlaze™ 450 has 1-3/4" sightlines, while Trifab™ VersaGlaze™ 451/451T and Trifab™ 451UT have 2" sightlines.

**STOREFRONT GLAZING SYSTEM**  
**COLOR: CLASSIC BRONZE**

With seamless incorporation of Kawneer entrances or windows, including GLASSvent™ visually frameless ventilators, Trifab™ VersaGlaze™ can be used on almost any project. These framing systems can also be packaged with Kawneer curtain walls and overhead glazing, thereby providing a full range of proven, and tested, quality products for the owner, architect and installer from a single source supplier.

## Economy

Trifab™ VersaGlaze™ 450/451/451T framing systems offer four fabrication choices to suit your project (Trifab™ 451UT available as screw spline fabrication only):

- **Screw Spline** – for economical continuous runs utilizing two piece vertical members that provide the option to pre-assemble units with controlled shop labor costs and smaller field crews for handling and installation.
- **Shear Block** – for punched openings or continuous runs using tubular moldings with shear block clips that provide tight joints for transporting large pre-assembled multi-lite units.
- **Stick** – for fast, easy field fabrication. Field measurements and material cuts can be done when metal is on the job.
- **Type B** – Same fabrication benefits as shear block except head and sill run through.

All systems can be flush glazed from either the inside or outside. The Weatherseal option provides an alternative to SSG vertical mullions for Trifab™ VersaGlaze™ 450/451/451T. This ABS/ASA rigid polymer



Brighton Landing, Cambridge, MA  
Architects: ADD Inc., Cambridge, MA  
Glazing Contractors: Ipswich Bay Glass Company, Inc., Rowley, MA

extrusion allows complete inside glazing and creates a flush glass appearance on the building exterior without the added labor of scaffolding or swing stages. Additionally, High-Performance (HP) Flashing options are engineered to eliminate perimeter sill fasteners and associated blind seals.

## For the Finishing Touch

Architectural Class I anodized aluminum finishes are available in clear and Permanodic™ color choices.

Painted finishes, including fluoropolymer, that meet AAMA 2605 are offered in many standard choices and an unlimited number of specially designed colors.

Solvent-free powder coatings add the green element with high performance, durability and scratch resistance that meet the standards of AAMA 2604.

## Performance

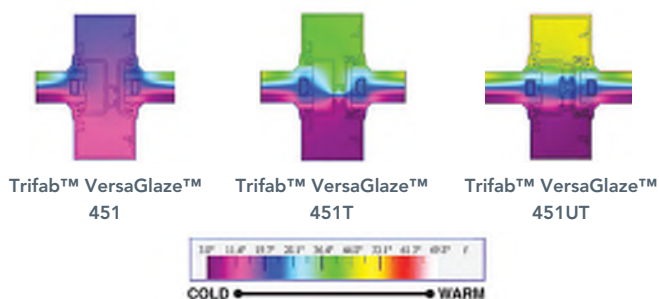
Kawneer's Isolock™ Thermal Break section, prevents dry shrinkage and is available on Trifab™ VersaGlaze™ 451T. For even greater thermal performance, a "dual" Isolock™ Thermal Break is used on Trifab™ 451UT.



Trifab™ 451UT uses a "dual" Isolock™ Thermal Break (right) and features a new HP (High Performance) sill design, which incorporates a screw-applied end dam (left), ensuring positive engagement and tight joints between the sill flashing and end dam.

U-factor, CRF values and STC ratings for Trifab™ VersaGlaze™ vary depending upon the glass plane application. Project specific U-factors can be determined for each individual project. (See the Kawneer Architectural Manual or Kawneer.com for additional information).

Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.

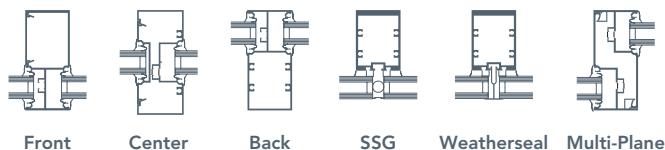


## PERFORMANCE TEST STANDARDS

Air Infiltration	ASTM E 283
Water	AAMA 501, ASTM E 331
Structural	ASTM E 330
Thermal	AAMA 1503
Thermal Break	AAMA 505, AAMA TIR-A8
Acoustical	AAMA 1801, ASTM E 1425

## Trifab™ VersaGlaze™ 450/451/451T glazing options

(note: Trifab™ 451UT available as center set glass plane only).



Kawneer Company, Inc.  
Technology Park / Atlanta  
555 Guthridge Court  
Norcross, GA 30092

kawneer.com  
770 . 449 . 5555

**KAWNEER**  
AN ARCONIC COMPANY



# Permafluor™ Architectural Finishes

High Performing Paints  
That Let You Design In  
Vibrant Living Color

STOREFRONT GLAZING SYSTEM  
COLOR: CLASSIC BRONZE



Black



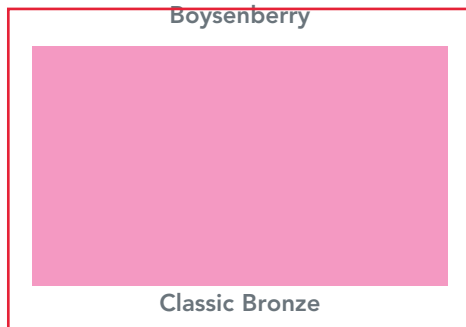
Boysenberry



Hartford Green



Sandstone



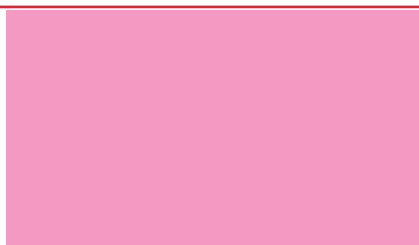
Classic Bronze



Military Blue



Bone White



Colonial White



Antique Bronze



Dove Gray



Dark Ivy



Charcoal



Redwood



Sea Wolf



Medium Bronze

# Superior Performance Coatings

## That Meet AAMA 2605 Requirements

STOREFRONT GLAZING SYSTEM  
COLOR: CLASSIC BRONZE

There's a painted finish as expressive and enduring as the buildings you design. Permafluor™ Architectural Coatings combine beauty and successful performance as only a 70% fluoropolymer based coating can.

Permafluor™ colors add life to your architectural expressions. Fifteen standard colors and a limitless pallet of custom colors can satisfy your creative needs. The standard colors are always in stock at Kawneer Paint Facilities for fast turn around while the Permafluor™ custom colors can be formulated to meet your needs.

This is a paint that endures along with your architectural statement. Permafluor™ is formulated to maintain integrity for years. Outstanding durability translates to substantial maintenance savings over the life of the building.

Thousands of buildings throughout the world are a testament to the lasting beauty and performance of Kawneer standard Permafluor™ Architectural Coatings.

### Kawneer #22 Stock Permafluor™ Architectural Coatings

The 15 standard Permafluor™ colors shown on this chart are Kawneer #22 stock coatings. They are stocked at Kawneer Paint Facilities for fast turn around of painted projects.

The following specifications are required for the proper application and end-use results of Permafluor™. Performance properties represent minimum results when Permafluor™ is applied according to specifications.

### Guide Specifications

Permafluor™ coating will meet or exceed test requirements of AAMA 2605, Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.

The following are guidelines for specifying and applying Permafluor™:

**Pretreatment** – The aluminum shall be thoroughly cleaned using a multi-stage cleaning process to remove organic and inorganic surface soils and residual oxides. Apply a chemical conversion coating to which organic coatings will firmly adhere.

**Primer** – The cleaned and treated substrate shall be primed to a thickness of 0.2 – 0.3 mils using approved factory application methods.

**Paint** – The Permafluor™ paint system shall contain 70% PVDF (Hylar 5000® or Kynar 500®) resin and durable ceramic pigments. It shall be factory applied and oven baked for a topcoat film thickness of 1.0 mil minimum. Clear topcoat, if required, shall be applied at 0.4 – 0.8 mils.

### Performance Table

Criteria	Performance
AAMA 2605	Meets or Exceeds
Substrate	Aluminum only
Pretreatment	Multi-Stage Cleaning and Conversion Coating
Dry Film Thickness (ASTM D 7091)	1.2 mil
Specular Gloss (ASTM D 523)	Low and Medium
Dry Film Hardness (ASTM D 3363)	F minimum
Impact Resistance	1/10" Deformation No Loss of Adhesion
Abrasion Resistance (ASTM D 968)	Coefficient of 40 minimum
Salt Spray (ASTM G85 Annex A5)	Hours: 2,000 Scribe or cut edges: Rating 7 Field: Rating 8
Humidity Resistance (ASTM D 2247 or ASTM D4585)	Hours: 4,000 Few #8 Blisters Max.
10 Years South Florida	Color Change: 5ΔE (Hunter) Units Max. Chalk Resistance: Rating 8 Max.
10% Muriatic Acid Spot Test	15 min. No Blistering or Visual Change
Mortar (Alkali) Resistance	24 Hour Spot Test, No Visual Change
72 Hour Detergent Immersion (@ 100° F)	No Loss of Adhesion
Boiling Water Adhesion	No removal of film after 20 min. exposure

Hylar 5000® is a registered trademark of Solvay Solexis, Inc., Kynar 500® is a registered trademark of Arkema Inc.

\* **Note:** These color samples are as close as possible to actual colors offered within the limitations of printing techniques. Final color specification shall be as per approved color samples. Permafluor™ finishes are formulated for Kawneer Company, Inc.

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STOREFRONT GLAZING SYSTEM  
COLOR: CLASSIC BRONZE

### **Features**

- Trifab™ VG 451/451T is 4-1/2" (114.3) deep with a 2" (50.8) sight line
- Front, Center, Back or Multi-Plane glass applications
- Flush glazed from either the inside or outside
- Screw Spline, Shear Block, Stick or Type-B fabrication
- SSG / Weatherseal option
- IsoLock™ lanced and debridged thermal break option with Trifab™ VG 451T
- Infill options up to 1-1/8" (28.6) thickness
- Permanodic™ anodized finishes in seven choices
- Painted finishes in standard and custom choices

### **Optional Features**

- Acoustical rating per AAMA 1801 and ASTM E 1425
- Project specific U-factors (See Thermal Charts)
- Integrates with Versoleil™ SunShade Outrigger System and Horizontal Single Blade System
- Profit\$Maker™ plus die sets available

### **Product Applications**

- Storefront, Ribbon Window or Punched Openings
- Single-span
- Integrated entrance framing allowing Kawneer standard entrances or other specialty entrances to be incorporated
- Kawneer windows or GLASSvent™ Windows for Storefront Framing are easily incorporated

For specific product applications,  
Consult your Kawneer representative.

STOREFRONT GLAZING SYSTEM  
COLOR: CLASSIC BRONZE

<b>PICTORIAL VIEWS.....</b>	<b>5-9</b>
<b>CENTER .....</b>	<b>11-21</b>
<b>CENTER (LARGE MISSILE IMPACT).....</b>	<b>22-24</b>
<b>FRONT .....</b>	<b>25-39</b>
<b>BACK .....</b>	<b>41-47</b>
<b>MULTI-PLANE .....</b>	<b>49-55</b>
<b>CHARTS (WIND LOAD, DEADLOAD, END REACTION &amp; THERMAL) ....</b>	<b>57-97</b>

LAWS AND BUILDING AND SAFETY CODES GOVERNING THE DESIGN AND USE OF GLAZED ENTRANCE, WINDOW, AND CURTAIN WALL PRODUCTS VARY WIDELY. KAWNEER DOES NOT CONTROL THE SELECTION OF PRODUCT CONFIGURATIONS, OPERATING HARDWARE, OR GLAZING MATERIALS, AND ASSUMES NO RESPONSIBILITY THEREFOR.

Metric (SI) conversion figures are included throughout these details for reference. Numbers in parentheses ( ) are millimeters unless otherwise noted.

The following metric (SI ) units are found in these details:

m – meter  
cm – centimeter  
mm – millimeter  
s – second  
Pa – pascal  
MPa – megapascal

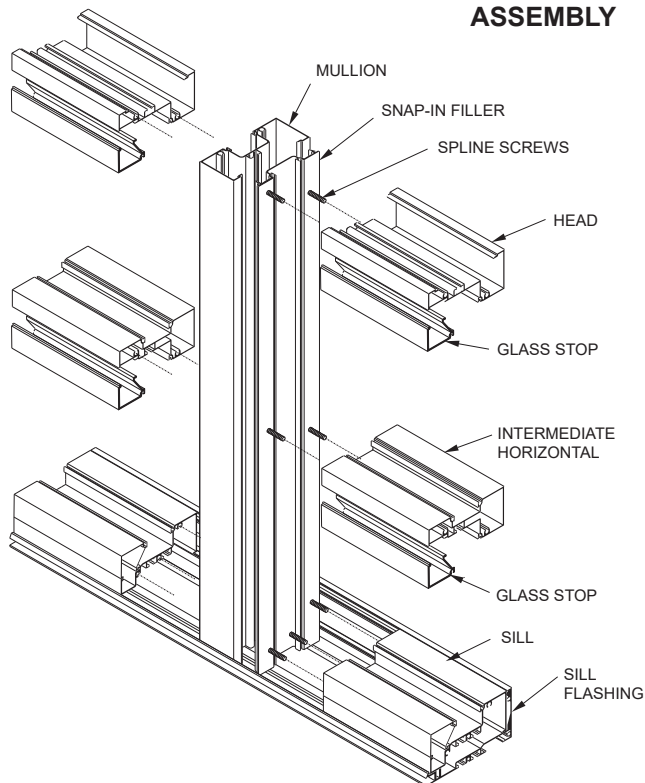
Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

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The split vertical in the **Screw Spline** system allows a frame to be installed from unitized assemblies. Screws are driven through the back of the verticals into splines extruded in the horizontal framing members. The individual units are then snapped together to form a complete frame.

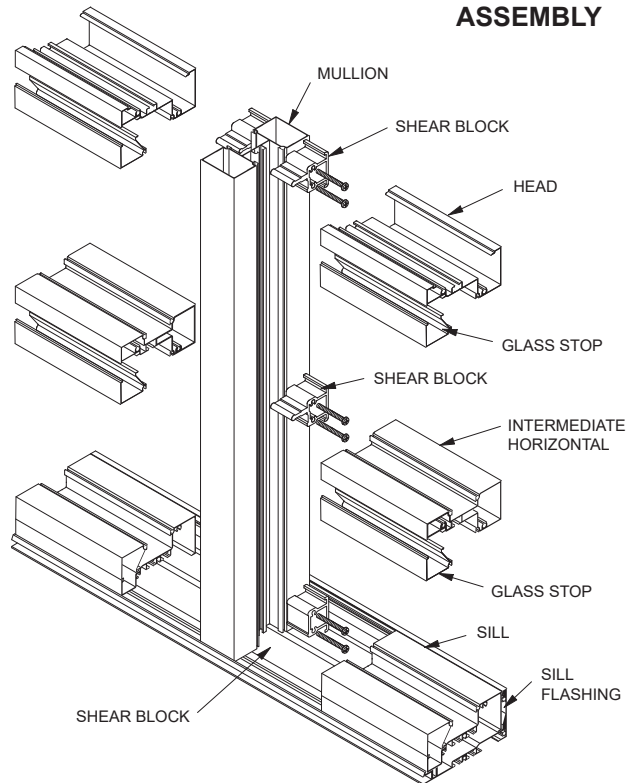
### SCREW SPLINE ASSEMBLY



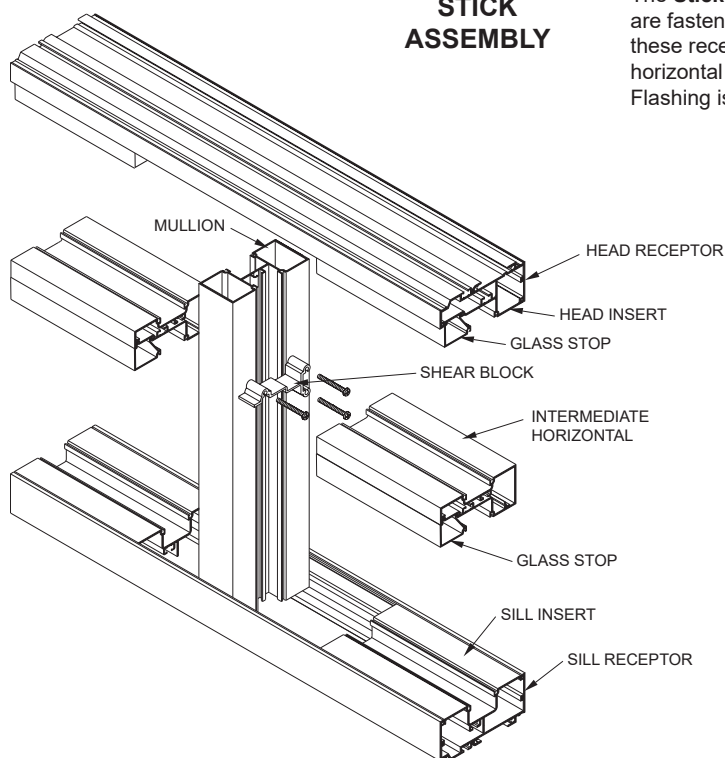
The **Shear Block** system of fasteners is assembled as a single unit. It is used to attach the verticals with shear blocks.

**STOREFRONT GLAZING SYSTEM**  
**COLOR: CLASSIC BRONZE**

### SHEAR BLOCK ASSEMBLY



### STICK ASSEMBLY

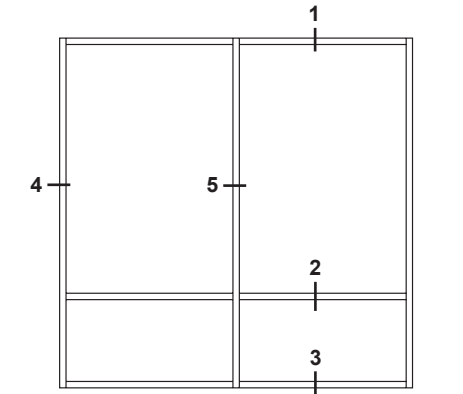


The **Stick** system allows on-site construction. Head and sill receptors are fastened to the surround. Vertical mullions are then installed in these receptors and are held in place by snap-in inserts. Intermediate horizontal members are attached to the verticals with shear blocks. Flashing is not required.

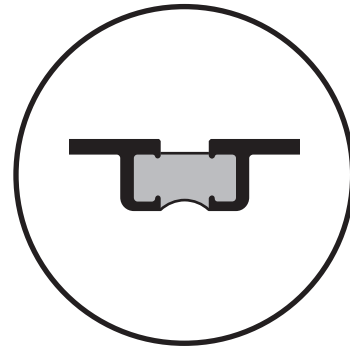
#### NOTE:

If the end reaction of the mullion (mullion spacing (ft.) times height (ft.) times specified wind load (psf) divided by two) is more than 500 lbs., the optional mullion anchors must be used. (See page 14)

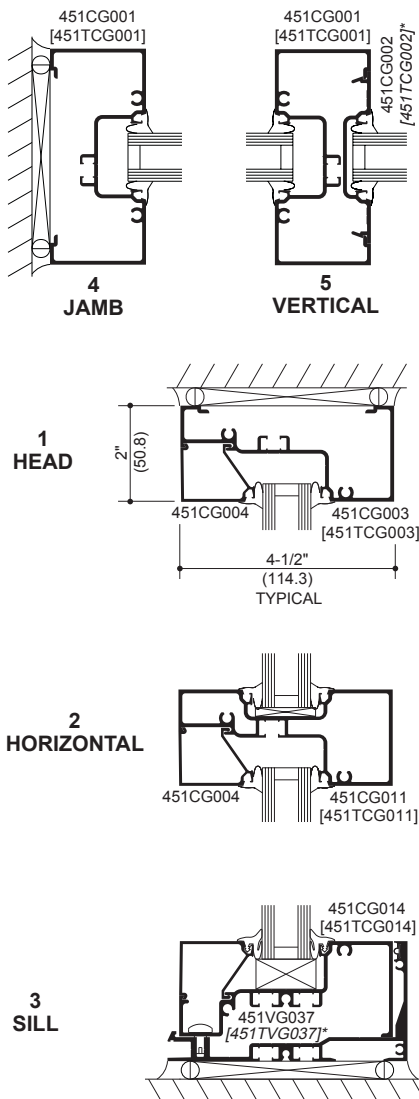
Additional information and CAD details are available at [www.kawneer.co](http://www.kawneer.co)



ELEVATION IS NUMBER KEYED TO DETAILS

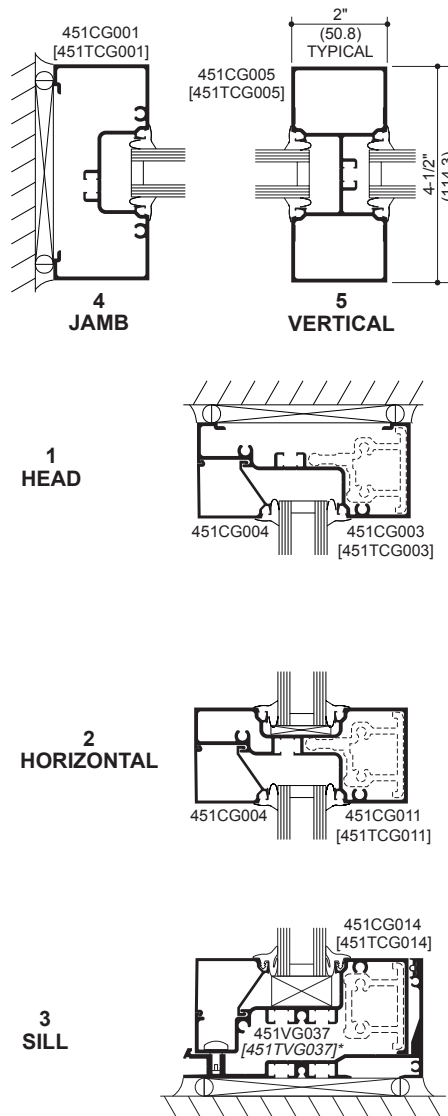
NUMBERS IN BRACKETS ARE  
THERMALLY BROKEN MEMBERS

## SCREW SPLINE



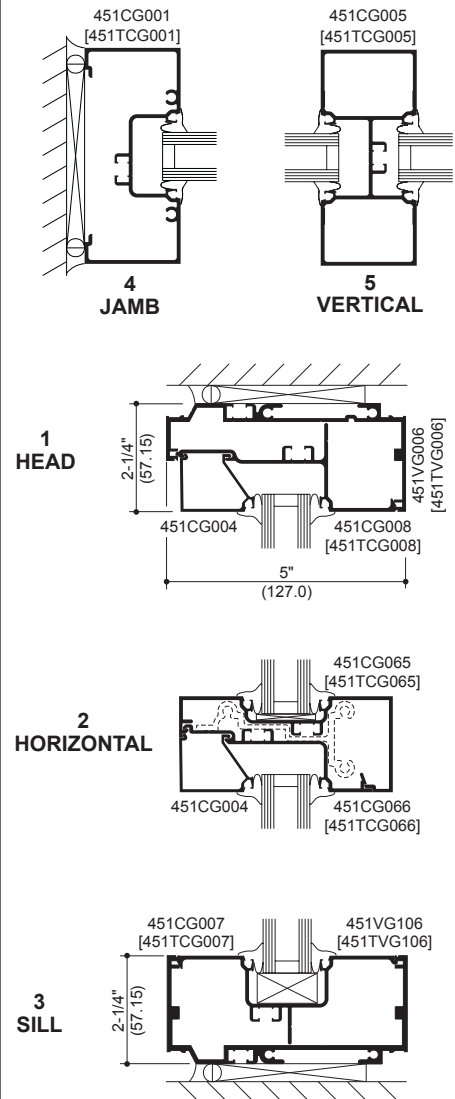
\* HP Sill Flashing shown with optional gasket.

## SHEAR BLOCK



\* HP Sill Flashing shown with optional gasket.

## STICK

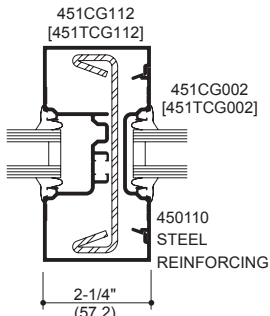
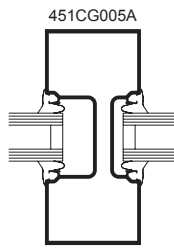
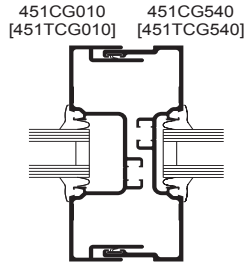
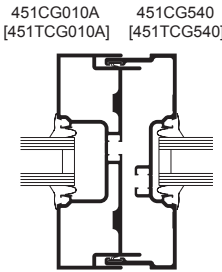
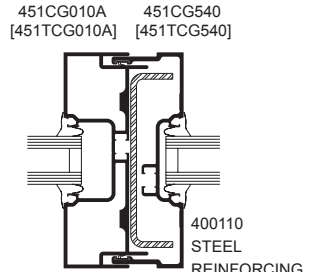
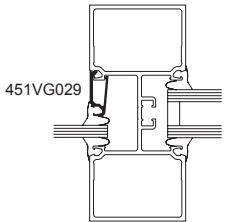
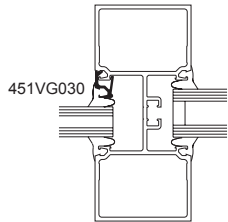
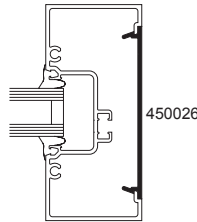
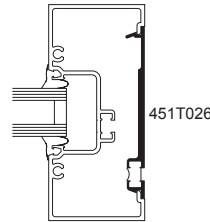
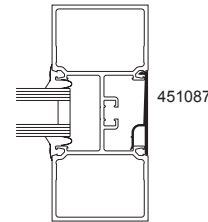
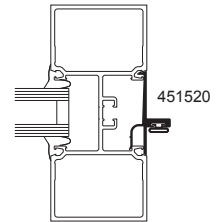


Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

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## MISCELLANEOUS FRAMING (CENTER)

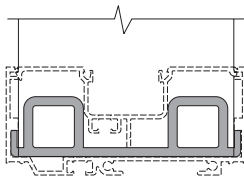
Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)STOREFRONT GLAZING SYSTEM  
COLOR: CLASSIC BRONZESPLIT MULLION  
W/ STEELTUBULAR  
MULLIONEXPANSION  
MULLIONTUBULAR  
EXPANSION MULLIONTUBULAR  
EXPANSION MULLION  
WITH OPTIONAL STEEL1/4" (6.4) INFILL  
SNAP-IN ADAPTOR5/8" (15.9) INFILL  
SNAP-IN ADAPTORSNAP-IN  
FLAT FILLERTHERMAL  
FLAT FILLERSNAP-IN  
FLAT POCKET  
FILLERSNAP-IN  
DOOR STOP

SHALLOW POCKET



DEEP POCKET

THERMAL POCKET FILLERS



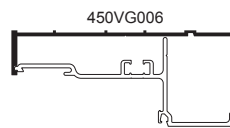
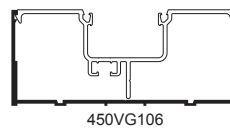
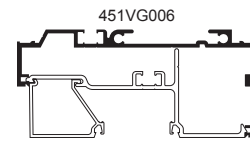
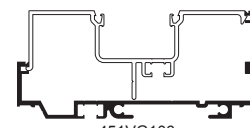
MULLION ANCHOR

**NOTE:**

If the end reaction of the mullion (mullion spacing (ft.) times height (ft) times specified wind load (psf), divided by two) is more than 500 LBS., the optional mullion anchor must be used. Consult Application Engineering.

**NOTE:**

Mullion Anchor not used with Lightweight Receptor.

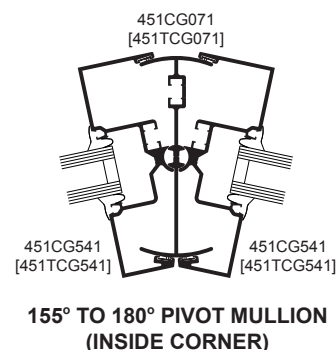
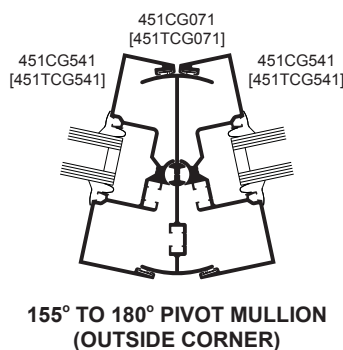
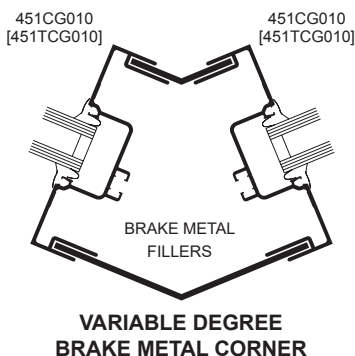
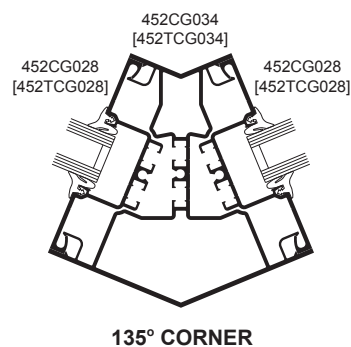
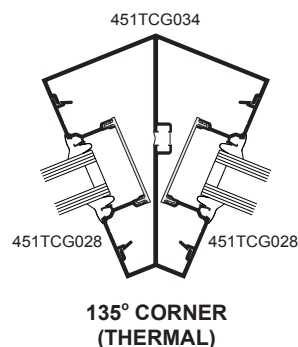
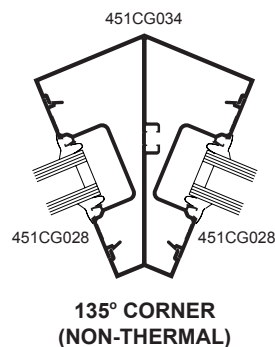
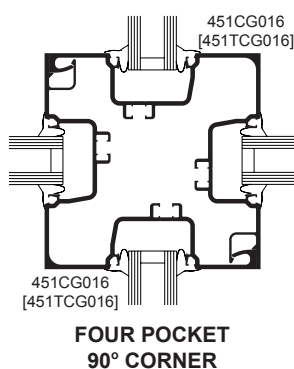
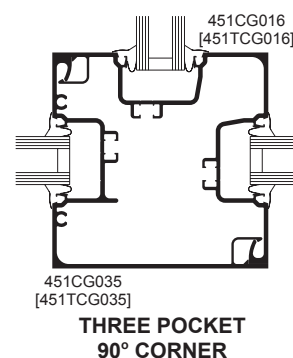
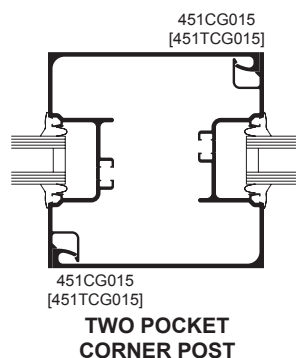
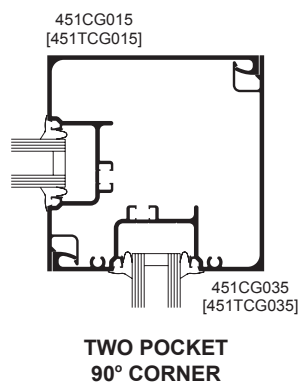
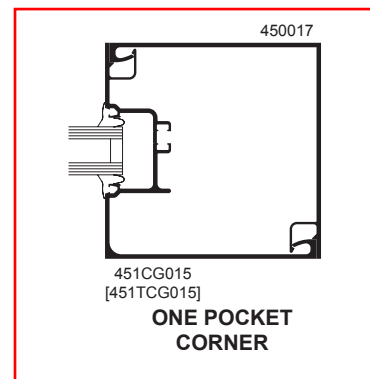
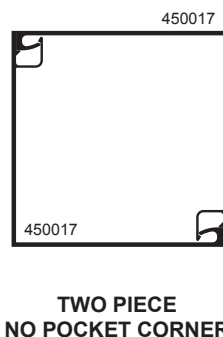
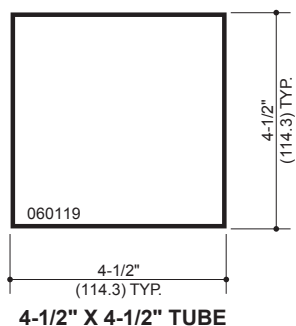
OPTIONAL LIGHTWEIGHT  
CAN RECEPTORSOPTIONAL UNEQUAL LEG  
CAN RECEPTORSOPTIONAL UNEQUAL LEG  
CAN RECEPTORSOPTIONAL UNEQUAL LEG  
CAN RECEPTORS

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

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## CORNERS (CENTER)

Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)STOREFRONT GLAZING SYSTEM -  
CONDITION AT STOREFRONT  
EDGES, COLOR: CLASSIC BRONZE

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

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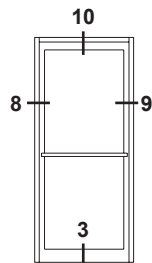
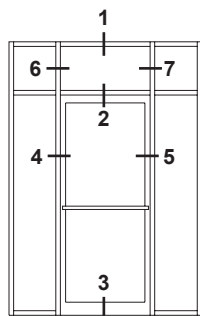
Additional information and CAD details are available at [www.kawneer.com](http://www.kawneer.com)

STOREFRONT GLAZING SYSTEM  
COLOR: CLASSIC BRONZE

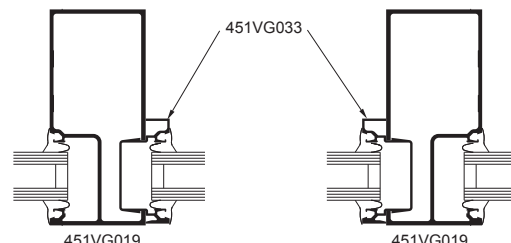
## Trifab™ VG 451 FRAMING INCORPORATING KAWNEER™ “19”

### DOOR FRAMING NON-THERMAL ONLY

**NOTE:** OTHER TYPES OF KAWNEER DOORS MAY BE USED WITH THIS FRAMING SYSTEM.  
SEE ENTRANCE DETAILS FOR ADDITIONAL INFORMATION.

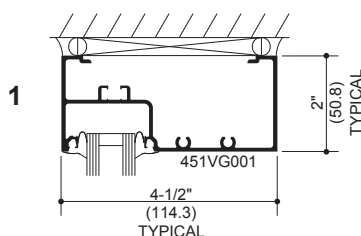


ELEVATIONS ARE NUMBER KEYED TO DETAILS

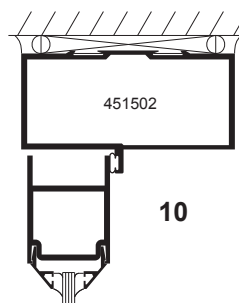
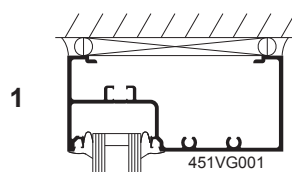


6 TRANSOM JAMBS 7

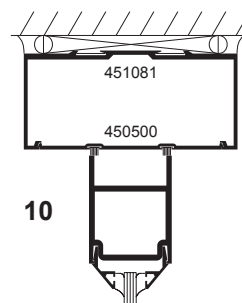
Transom area for both double or single acting doors with glass surround. Jams above transom bar are routed out to accept glass holding insert.



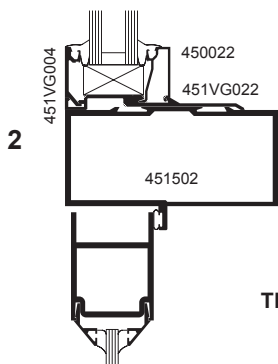
TRANSOM HEAD



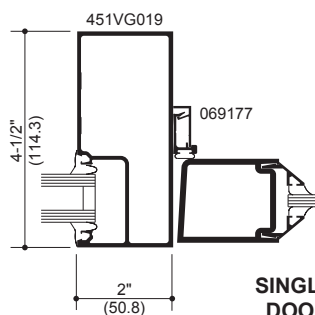
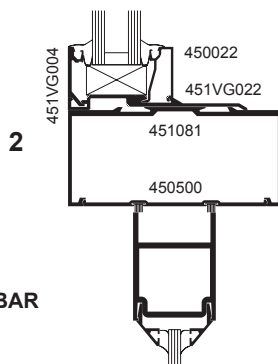
SINGLE ACTING  
HEADER



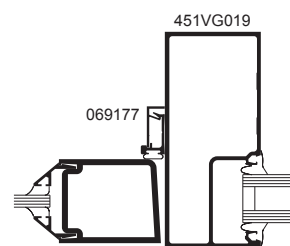
DOUBLE ACTING  
HEADER



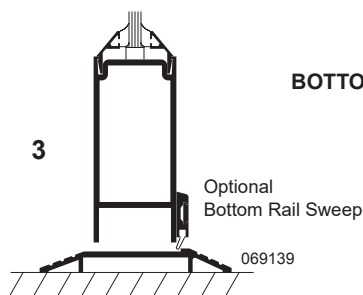
TRANSOM BAR



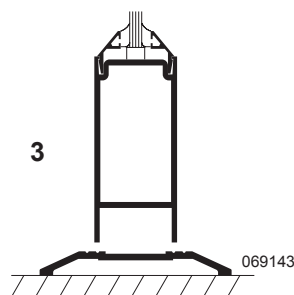
SINGLE ACTING  
DOOR JAMBS



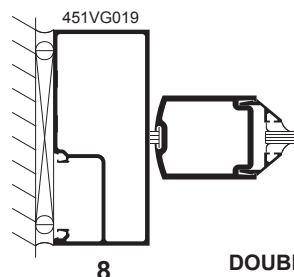
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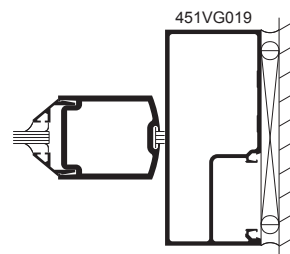
SINGLE ACTING



DOUBLE ACTING



8



DOUBLE ACTING  
DOOR JAMBS

9

Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wall products vary widely. Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.  
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# Reynobond® ACM

## Common applications



Recessed Windowsill



Rainscreen Installation System  
*Compliments of Riverside Group Ltd.*



Outside Corner



Parapet Cap



Curved Wall Panel



Dry Seal Installation System  
*Compliments of NOW Specialties, Inc.*



### Alcoa Architectural Products

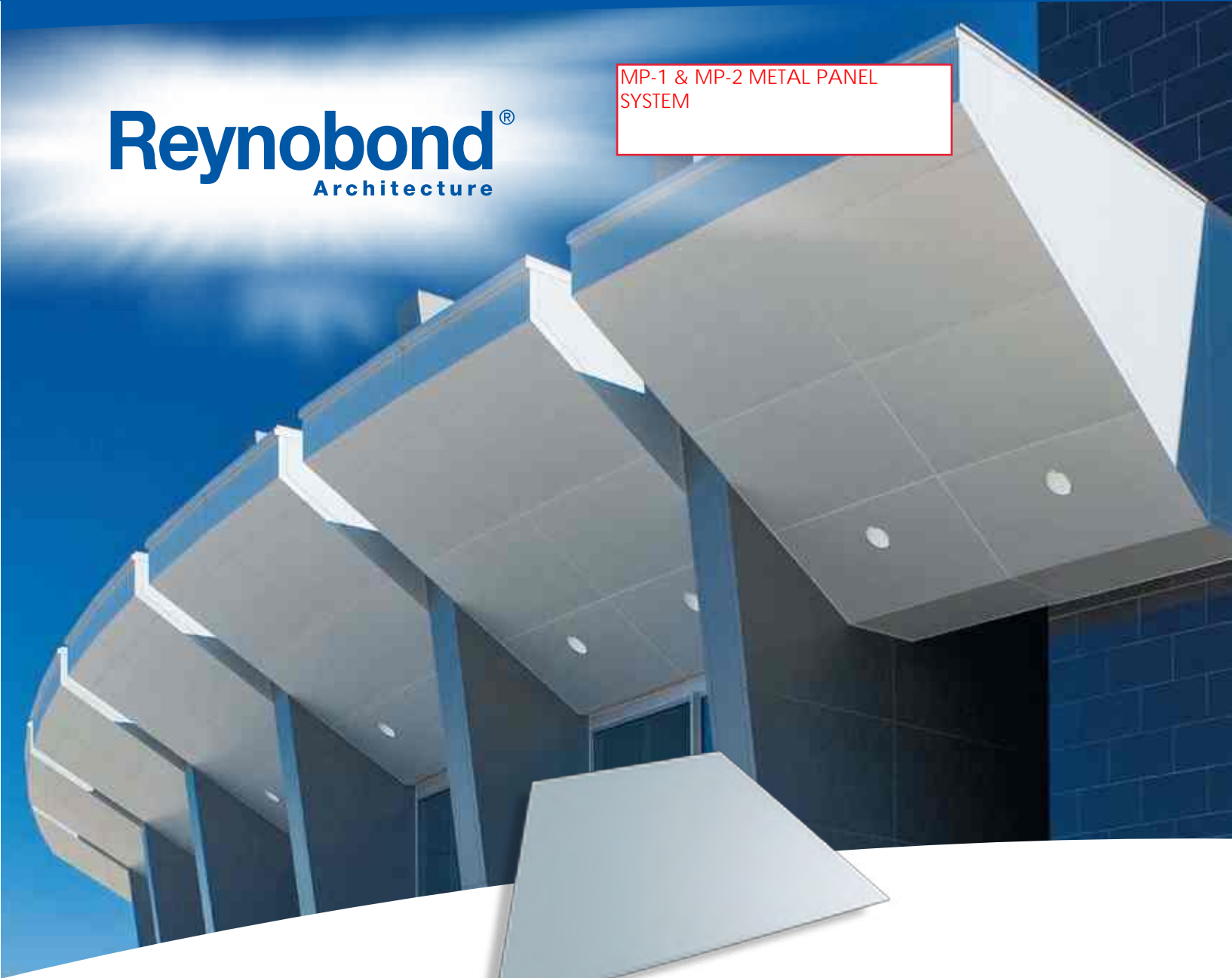
50 Industrial Boulevard  
Eastman, GA 31023-4129  
Tel. 478 374 4746  
[reynobond.com](http://reynobond.com)



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AAP-0458-9/09 20000

Reynobond®  
Architecture

MP-1 & MP-2 METAL PANEL  
SYSTEM



Aluminum  
Composite Material



*Dedicated to your Success*

## Dedicated to your Success

Alcoa Architectural Products understands that architects, designers, fabricators and installers share one common trait: *you're only as good as your current project*. Every new job presents a fresh set of challenges. And your ability to meet those unique challenges is the basis by which your clients will measure your work.

That's why we've built our company to provide comprehensive architectural solutions that enhance your ability to succeed. Everything we do is centered on making the design, specification and installation of our building panels as easy, as fast and as affordable as possible.

We develop and deliver innovative cladding products for both interior and exterior applications. Through our popular Reynobond® Aluminum Composite Material, our Reynobond Natural Metal Composite Material, our groundbreaking Reynobond with KEVLAR® hurricane impact panels and our new Anodized Reynobond, we provide durability, design flexibility and enduring performance while ensuring consistency of quality and color from project to project.

And our dedication to your success goes far beyond our products. By offering a wide range of support services such as comprehensive CAD drawings, custom design solutions, on-site consultation and more, the people of Alcoa Architectural Products work to ensure that your next project – *and every project* – is a success.

MP-1 & MP-2 METAL PANEL  
SYSTEM

# Reynobond® – wrap your imagination around it



## Product Information

**When you want to make a design statement, Reynobond is the natural choice, allowing you the flexibility to achieve whatever your mind can conceive.**

### Exceptionally Flat

The strong, rigid construction of Reynobond composite material consists of a compound core between two sheets of aluminum, brushed aluminum, zinc, stainless steel, copper or titanium. This creates a flat surface that virtually eliminates dimpling, buckling and oil canning.



### Daringly Formable

Reynobond is easily routed, drilled, punched, cut, bent, curved and precisely formed via these and other fabrication techniques to achieve small-radius curves, reverse curves, angles and other shapes, to create dramatic and distinctive designs.



### Surprisingly Light

The light weight of Reynobond allows a wide variety of design options. Installation is quick and easy. For renovation work, cladding can often be installed with little or no alteration to existing structural elements.



### Distinctively Colorful

The high-performance coating systems available for Reynobond provide outstanding color and gloss retention in a virtually limitless range of hues. Standard and custom finishes are available, including anodic colors. Continuous coil application ensures consistent, long-lasting color.



New Century BMW,  
Engineered Wall Systems



### Easily Integrated

Reynobond integrates easily with the curtain wall provided by most manufacturers. The result is a seamless look for a building's façade – with the added design characteristics that only Reynobond can offer.

### Beautiful Accents

Reynobond's family of Natural Metal products allows every element of the structure to become an element of design – through shaping, color and more. Reynobond's strength, weight and formability allow you to achieve designs that are not feasible with other materials.

### Made for Each Other

Alcoa's Aluminum Wall Panels are the perfect complement to our family of Reynobond Aluminum Composite Material. The ability to combine these high-quality products in pre-matched or custom colors creates a number of distinct design advantages.

### Guaranteed Safe

Reynobond is fully tested and environmentally safe, with building code approvals throughout the world. It is available with either a polyethylene (PE) core or a fire-resistant (FR) core material. Both products offer the flatness and formability required for demanding applications.

# Reynobond® with KEVLAR®

## Stop hurricane-propelled debris in its tracks



### Lightweight. Flexible. And now impact resistant.

Reynobond with KEVLAR® panels combine all the weight and flexibility benefits and new, sustainable paint finishes of Reynobond with the impact-resistant strength that can only come from KEVLAR®.

Celebrated around the world as the lifesaving material in bullet-resistant vests and body armor, DuPont™ KEVLAR® fabric is five times stronger than steel on an equal weight basis. By adding it to Reynobond's polyethylene core, the panel can withstand hurricane-propelled debris and similar types of impact – without the use of heavy backer materials.

### Easy to use. Easy to maintain. Affordable to install.

When installed with Alcoa-designed extrusions, Reynobond with KEVLAR® eliminates the need for protective backer materials such as plywood, steel or concrete. Panel modules can be shop-fabricated and quickly installed onto structural steel studs on the jobsite. This decreases the material cost of installation and on-site labor requirements – leading to faster installation, with costs comparable to, and often less than, those of brick, EFIS and stucco.

### Designed to meet Miami-Dade County standards.

Reynobond with KEVLAR® is the only standalone aluminum composite material that meets the stringent requirements of the Miami-Dade County Building Code. Installed utilizing Alcoa-designed extrusions, it is engineered to sustain hurricane-force winds while passing small and large missile impact tests.

#### Miami-Dade County Approved

**Reynobond with KEVLAR® is the only standalone aluminum composite material that meets the stringent requirements of the Miami-Dade County Building Code\*. Installed utilizing Alcoa-designed extrusions, it is engineered to sustain hurricane-force winds while passing small and large missile impact tests in Alcoa-sponsored trials. (Miami-Dade County, Florida NOA No. 06-1025.03 and No. 09-0625.01)**

\* The Miami-Dade County Building Code stipulates that panel systems withstand the impact of a 9-pound 2x4 timber traveling at 50 feet per second.

# Reynobond Architectural Finishes



### Colorweld® 500 – Introducing the industry's first 30-year finish.

Reynobond Aluminum Composite Material is protected and colored with enhanced, high-performance Colorweld 500 coatings. These finishes feature 70% Kynar 500®/Hylar 5000® polyvinylidene fluoride (PVDF) resins with Fluoropolymer technology, coil coated to ensure the highest color uniformity and quality. They provide excellent flexibility and film adhesion for forming and offer superior resistance to humidity, impact, salt spray, pollution and abrasion. With a 30-year finish warranty, Colorweld 500 coatings exhibit outstanding color and gloss retention and improved hardness and durability, and they are considered the premier architectural coatings for metal.



### DURAGLOSS® 5000 Wood grain finish. Save a tree.

Introducing the first aluminum composite panel with a surface almost indistinguishable from real wood, thanks to our patented DURAGLOSS 5000 paint process. Reynobond Wood Grain offers all the advantages of standard Reynobond – remarkable strength and exceptional flatness. These panels are resistant to all environmental influences and remain unaffected by UV rays. They are designed and warranted for exterior or interior applications and are available in three attractive colors: Honey Pear, Colonial Red and Mahogany Brown.



### Anodized Reynobond. A striking finish is only the beginning of the story.

Strong, flat, formable Reynobond ACM panels are available in eye-catching anodized finishes. And the beauty of Anodized Reynobond is more than skin deep. The anodized layer integrates with the aluminum for total bonding, creating a harder, smoother surface with superior resistance to abrasion and corrosion. Unaffected by ultraviolet rays and environmentally friendly, Anodized Reynobond is designed for exterior or interior use. It is available in a variety of standard and custom colors.

# General data, facts & figures

## Reynobond® ACM Technical Overview

Property	Units	RB120PE-3 mm	RB160PE-4 mm	RB240PE-6 mm	RB160FR-4 mm	Reynobond with KEVLAR®
Thickness	Inches mm	0.118 3.0	0.157 4.0	0.236 6.0	0.157 4.0	0.157 4.0
Weight	lb/ft² Kg/m²	0.94 4.59	1.12 5.47	1.51 7.37	1.53 7.48	1.10 5.37
BOND INTEGRITY	Min. Bond Strength ASTM D1781	in-lb/in Nm/m	40 178	40 178	40 178	22.5 100
	Flatwise Shear ASTM D1002	lb/in² Mpa	1,297 8.94	1,221 8.42	2,055 14.17	928 6.4
	Allowable Bending Stress (1)	lb/in² Mpa	11,500 79.3	11,500 79.3	11,500 79.3	11,500 79.3
	Coefficient of Expansion ASTM E228	in/in/F mm/mm/C	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>	1.31x10 <sup>-5</sup> 2.36x10 <sup>-5</sup>
Stiffness (EI)	lb in²/in Mpa cm⁴/m	807 9.1x10³	1,140 12.8x10³	1,896 21.4x10³	1,262 14.3x10³	776 8.7x10³
Flexural Modulus Aged per ASTM C393 (2)	lb/in² Mpa	8.3x10⁶ 57.2x10³	6.0x10⁶ 41.4x10³	4.0x10⁶ 27.6x10³	6.7x10⁶ 46.2x10³	4.08x10⁶ 28.2x10⁶
Moment of Inertia	in⁴/in cm⁴/m	0.97x10 <sup>-4</sup> 0.159	1.89x10 <sup>-4</sup> 0.310	4.58x10 <sup>-4</sup> 0.751	1.89x10 <sup>-4</sup> 0.310	1.89x10 <sup>-4</sup> 0.310
Section Modulus	in³/in cm³/m	1.65x10 <sup>-3</sup> 1.065	2.41x10 <sup>-3</sup> 1.555	3.88x10 <sup>-3</sup> 2.503	2.41x10 <sup>-3</sup> 1.555	2.41x10 <sup>-3</sup> 1.555
Tensile Yield ASTM D638	lb/in² Mpa	8,300 57.23	6,405 44.16	5,314 36.64	6,367 43.90	15,700 108.25
Flatwise Tensile ASTM C297	lb/in² Mpa	1,483 10.22	1,371 9.45	1,099 7.58	961 6.62	513 3.53

(1) Allowable stress may be increased by 33% for wind load.  
(2) Reynobond with KEVLAR® flex modulus fabric side up.

Information contained herein or related hereto is intended only for evaluation by technically skilled persons, with any use thereof to be at their independent discretion and risk. Such information is believed to be reliable, but Alcoa Architectural Products (“Alcoa”) shall have no responsibility or liability for results obtained or damages resulting from such use. Alcoa grants no license under, and shall have no responsibility or liability for infringement of, any patent or other proprietary right. Nothing in this document should be construed as a warranty or guarantee by Alcoa, and the only applicable warranties will be those set forth in Alcoa acknowledgement or in any printed warranty documents issued by Alcoa. The foregoing may be waived or modified only in writing by an Alcoa officer.

## Paint Finish Quick Specification Reference

	CW 500/CW 500XL	DURAGLOSS® 5000	DURAGLOSS® 3000	CORAFロン®	FLUOROBRITE™	COLORWELD® 100
Warranty	30 yrs.	15 yrs.	10 yrs.	20 yrs.	5 yrs.	5 yrs.
Resin Type	70% PVDF	Modified Polyester	Modified Polyester	FEVE	FEVE	Polyester
UV Performance	*****	****	***	***	**	*
Gloss Range	20% – 35%	25% – 35%	20% – 80%	20% – 35%	20% – 80%	20% – 80%
Colors	Opaques Metallics	Opaques Metallics	Opaques Metallics Bright Colors	Opaques Metallics	Bright Colors	Opaques Metallics Bright Colors
Economics	\$\$\$\$	\$\$\$	\$	\$\$\$\$\$	\$\$\$\$\$	\$

## Safety/Class A Rating Per ASTM E84

	Flame Spread	Smoke Developed
Reynobond PE w/o Joint	PASS* CLASS A	PASS* CLASS A
Reynobond PE w/ Joint	PASS* CLASS A	PASS* CLASS A
Reynobond FR w/ Joint	PASS* CLASS A	PASS* CLASS A
Reynobond with KEVLAR®	PASS* CLASS A	PASS* CLASS A

\*Flame spread ≤ 25, smoke developed ≤ 450.

## Building Code Recognition

Intertek Design Listing	No. AAP/CWP 30-01
New York City M.E.A.	MEA 75-91-M, MEA 390-99-M
Los Angeles Research Report	Pending
State of Wisconsin Approval	No. 990033-I
Miami-Dade N.O.A.	No. 06-1025.03 and No. 09-0625.01
Florida Product Approval	FL10220 Validated
Canadian Fire Test	CAN S101
Canadian Fire Test	CAN S102
Canadian Fire Test	CAN S134 Pending

Chicago • Canada • United Kingdom • Singapore  
Australia • New Zealand • Malaysia • France  
Germany • China • Hong Kong • Poland • Israel

## Product Availability

	Thickness	Standard Widths**	Standard Lengths*
RB120PE-3 mm	3 mm (0.118")	Consult for program widths including: 1000 mm (39.37") 1220 mm (48") 1270 mm (50") 1295 mm (51") 1524 mm (60") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")
RB160PE-4 mm	4 mm (0.157")	1270 mm (50") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")
RB240PE-6 mm	6 mm (0.236")	1270 mm (50") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")
RB160FR-4 mm	4 mm (0.157")	1270 mm (50") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")
Reynobond with KEVLAR®	4 mm (0.157")	1270 mm (50") 1575 mm (62")	1220 mm (48") to 6172 mm (20' 3")

\*Consult for standard lengths.    \*\*Consult for color & finish availability.



Colorchart



# ARCHITECTURE

## STANDARD FINISHES

# Bold Ideas Require Bold Finishes

MP-1 & MP-2 METAL PANEL  
SYSTEM

In the architecture and building market, nothing's more important than a bold idea being implemented successfully. That's why around the world, architects rely on Reynobond® and Reynolux® panels to amplify the visual impact of their ideas. Offering long-term, cost-effective, consistent solutions, these panels are durable, weather resistant, lightweight, flexible, and easy to fabricate and maintain. They're available in a nearly limitless array of stock and custom finish options.

Use this color chart for a closer look at our standard color offerings (stocked as Reynobond panel inventory, pre-finished coil\* and 0.40" Reynolux flat sheet), and envision a world of possibilities for making your next bold idea even bolder. Plus, if you don't immediately see the color you need, our custom color matching will get you exactly where you need to be.

## Colorweld® 500/500XL Finishes

High-performing, coil-coated Colorweld 500 and Colorweld 500XL finishes allow color matching at the highest uniformity and quality. They feature 70% Kynar 500®/Hylar 5000® polyvinylidene fluoride (PVDF) resins with fluoropolymer technology, providing excellent flexibility and film adhesion for forming, with superior resistance to humidity, impact, salt spray, pollution and abrasion. With a 30-year finish warranty, they're considered the premier architectural coatings for metal. And, because Colorweld 500XL finishes are compatible with PPG's DURAPREP® Prep™ 400 graffiti remover system, your designs can be protected from graffiti and vandalism in any environment.

## Design Line™ Nature-Inspired Finishes

Inspired by Mother Nature, our Design Line finish system offers a variety of striking, natural-material-based design choices that feature all the benefits of Reynobond aluminum composite material. These 3-coat advanced polymer coatings resist sun, extreme temperatures and even saltwater, making them ideal for outdoor applications.

## PrismFX™ Color-Shifting Finishes

PrismFX finishes can give your building a look as dynamic as your design. This 3-coat innovative coating creates subtle color shifts in different lighting conditions when viewed from different angles, so a building that appears green, blue or silver in the morning can shift to copper, violet or gold in the afternoon. Excellent flexibility and film adhesion for forming are delivered by this high-performance paint system, while also being resistant to humidity, impact, salt spray, pollution and abrasion, making it suitable for all outdoor architectural applications and a wide range of other specialty uses.

## Natural Metal Offerings

Our natural metal composite panels give you all the functional benefits of Reynobond panels along with the aesthetic impact that can only come from nature's finest elements. Our brushed aluminum and stainless steel give you bold options for interior and exterior walls and accents, while allowing you to incorporate curves, angles and other design elements not possible with heavy plate and sheet.

### Stay Up to Date on Stock

Visit [reynobond.com/stockinglist](http://reynobond.com/stockinglist) for our current listing of standard color offerings. Check back often as we adjust our finishes and sizes to meet your demands.

### Custom Color Matching Services

Don't see the color you're looking for? We can help match any color you desire. Email your custom color match request to [color.matching@arconic.com](mailto:color.matching@arconic.com) and see the possibilities of high-performing color matches for Reynobond and Reynolux panels.

### Request a Sample

To receive a sample of any of the finishes shown within this booklet, please call 800.841.7774 and ask for our Sample & Literature Department. If you prefer, you can email your request to [samples.literature@arconic.com](mailto:samples.literature@arconic.com).

\*Used to produce Reynobond panels

## Colorweld® 500

30-year warranty

AAMA 2605

### SERIES ONE

Standard Solid Finishes

All Colorweld 500 Series One finishes, with the exception of Eastman Blue, are stocked in 62"-wide coil and are available in 0.040" x 48" Reynolux flat sheet.



Bone White

25-35\*  
68.7<sup>1</sup>, 82<sup>2</sup>, 74<sup>3</sup>



Brite Red

25-35\*  
39.4<sup>1</sup>, 42<sup>2</sup>, 10<sup>3</sup>



Cadet Gray

25-35\*  
35<sup>1</sup>, 36<sup>2</sup>, 34<sup>3</sup>



Castle Gray

25-35\*  
49.4<sup>1</sup>, 56<sup>2</sup>, 41<sup>3</sup>



Pueblo Tan

25-35\*  
51.7<sup>1</sup>, 60<sup>2</sup>, 48<sup>3</sup>



Deep Black

20-30\*  
4.5<sup>1</sup>, 0<sup>2</sup>, 5<sup>3</sup>



Frisco White

25-35\*  
69.1<sup>1</sup>, 83<sup>2</sup>, 75<sup>3</sup>



Eastman Blue

45-55\*  
37<sup>1</sup>, 36.2<sup>2</sup>, 17<sup>3</sup>



Oyster White

25-35\*  
67.4<sup>1</sup>, 81<sup>2</sup>, 67<sup>3</sup>



Classic Bronze

20-30\*  
9.8<sup>1</sup>, 2<sup>2</sup>, 7<sup>3</sup>



Pure White

25-35\*  
69.4<sup>1</sup>, 83<sup>2</sup>, 75<sup>3</sup>



Charcoal

25-35\*  
28.6<sup>1</sup>, 28<sup>2</sup>, 8<sup>3</sup>



Limestone

25-35\*  
66<sup>1</sup>, 56.5<sup>2</sup>, 73.99<sup>3</sup>



Sandstone

25-35\*  
82<sup>1</sup>, 68.6<sup>2</sup>, 73.7<sup>3</sup>

MP-1 & MP-2 METAL PANEL SYSTEM

## Colorweld® 500

30-year warranty

AAMA 2605

### SERIES TWO

Premium Mica Finishes

All Colorweld 500 Series Two finishes are stocked in 62"-wide coil and are available in 0.040" x 48" Reynolux flat sheet.



Pewter

15-25\*  
14.6<sup>1</sup>, 10<sup>2</sup>, 19<sup>3</sup>



Platinum

20-30\*  
59.3<sup>1</sup>, 70<sup>2</sup>, 57<sup>3</sup>



Silversmith

15-30\*  
58.1<sup>1</sup>, 68<sup>2</sup>, 52<sup>3</sup>



Vancouver Copper

15-25\*  
47.4<sup>1</sup>, 53<sup>2</sup>, 28<sup>3</sup>



Daybreak Mica

15-25\*  
35.9<sup>1</sup>, 38<sup>2</sup>, 38<sup>3</sup>



Medium Bronze

15-25\*  
63<sup>1</sup>, 75<sup>2</sup>, 57<sup>3</sup>



Champagne Mica

15-25\*  
29.5<sup>1</sup>, 30<sup>2</sup>, 21<sup>3</sup>



Driftwood Mica

15-25\*  
9.2<sup>1</sup>, 3<sup>2</sup>, 7<sup>3</sup>



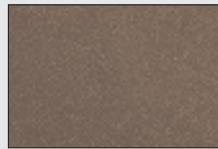
Anodic Satin

20-30\*  
53.6<sup>1</sup>, 61<sup>2</sup>, 39<sup>3</sup>



Anodic Clear

20-30\*  
56.2<sup>1</sup>, 65<sup>2</sup>, 54<sup>3</sup>



Anodic Bronze

15-25\*  
42.9<sup>1</sup>, 47<sup>2</sup>, 23<sup>3</sup>

Anodic finishes are formulated to closely resemble popular anodized colors used on curtain wall profiles.

## Colorweld® 500XL

30-year warranty

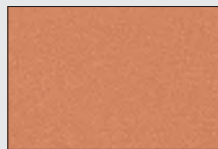
AAMA 2605

### SERIES THREE

Premium 3-coat Metallic Finishes

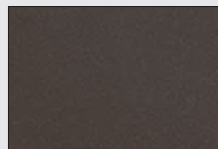
Compatible with PPG's DURAPREP® Prep™ 400 graffiti-resistant coating.

All Colorweld 500XL Series Three finishes are stocked in 62"-wide coil and are available in 0.040" x 48" Reynolux flat sheet.



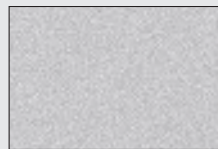
Copper Penny

25-35\*  
44.4<sup>1</sup>, 48<sup>2</sup>, 24<sup>3</sup>



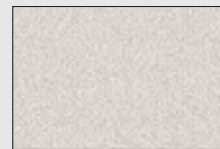
Nightfall Metallic

20-30\*  
11.1<sup>1</sup>, 2<sup>2</sup>, 8<sup>3</sup>



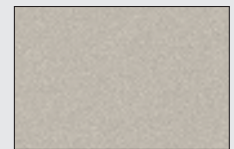
Bright Silver Metallic

15-30\*  
61<sup>1</sup>, 70<sup>2</sup>, 61<sup>3</sup>



Champagne Metallic

25-35\*  
54.3<sup>1</sup>, 61<sup>2</sup>, 52<sup>3</sup>



Titanium

25-35\*  
44.2<sup>1</sup>, 47<sup>2</sup>, 44<sup>3</sup>

Environment-friendly cool-pigment finish.

\* Specular Gloss Reading

<sup>1</sup> Solar Reflectivity Value (SRV); ASTM C1549

<sup>2</sup> Solar Reflective Index (SRI); ASTM E1980

<sup>3</sup> Light Reflectance Value (LRV); ASTM E1477

reynobond.com  
reynobond.com/stockinglist



A General Shale Company



1-800-265-8123  
[www.arriscraft.com](http://www.arriscraft.com)  
[techservices@arriscraft.com](mailto:techservices@arriscraft.com)

ARRIS.cast

Natural Edge® 

Selection

Solutions

Education

Innovation

Cast stone with the Arriscraft advantage

## About Arriscraft

Arriscraft manufactures a vast range of premium stone for commercial and residential projects, including full-bed Building Stone, Renaissance® Masonry Units, thin-clad adhered and clipped veneers, Adair® Limestone, and ARRIS.cast accessories.

### Cambridge, Ontario Plant

875 Speedsville Road  
Cambridge, Ontario, Canada  
N3H 4S8  
Toll Free: 800-265-8123  
Email: [solutions@arriscraft.com](mailto:solutions@arriscraft.com)

### Fort Valley, Georgia Plant

6054 Zenith Mill Road, Arriscraft Lane  
Fort Valley, Georgia, USA  
31030  
Phone: 478-827-1896  
Fax: 478-827-1897

PC-1&2 PRECAST MASONRY UNIT



Snellville Memorial; CAS Architecture; ARRIS.cast Caps, Words, Fountain Cap & Base

### PHYSICAL PROPERTIES

ARRIS.cast units are manufactured stone fabricated from Portland cement, coarse and fine aggregates, granulated blast furnace slag, select admixtures and natural oxide pigments. The units are formed using the vibrant dry tamped (VDT) casting method, resulting in high-density, severe-weathering masonry units, with one or more finished faces. They may be site cut, trimmed and finished to custom lengths, shapes or sizes, as necessitated by site conditions.

### IMPORTANT NOTES

Colors and textures have been reproduced as closely as the printing process allows. Final selection should be made from actual samples. ARRIS.cast units must be installed using industry recommended materials and techniques and conform to all related building code requirements. Proper care, installation and cleaning are required for warranty validation.

Please visit [www.arriscraft.com](http://www.arriscraft.com), and refer to Product Data Sheet 04 72 00-2US for complete technical details, and Arriscraft•CARE for Storage and Handling recommendations.

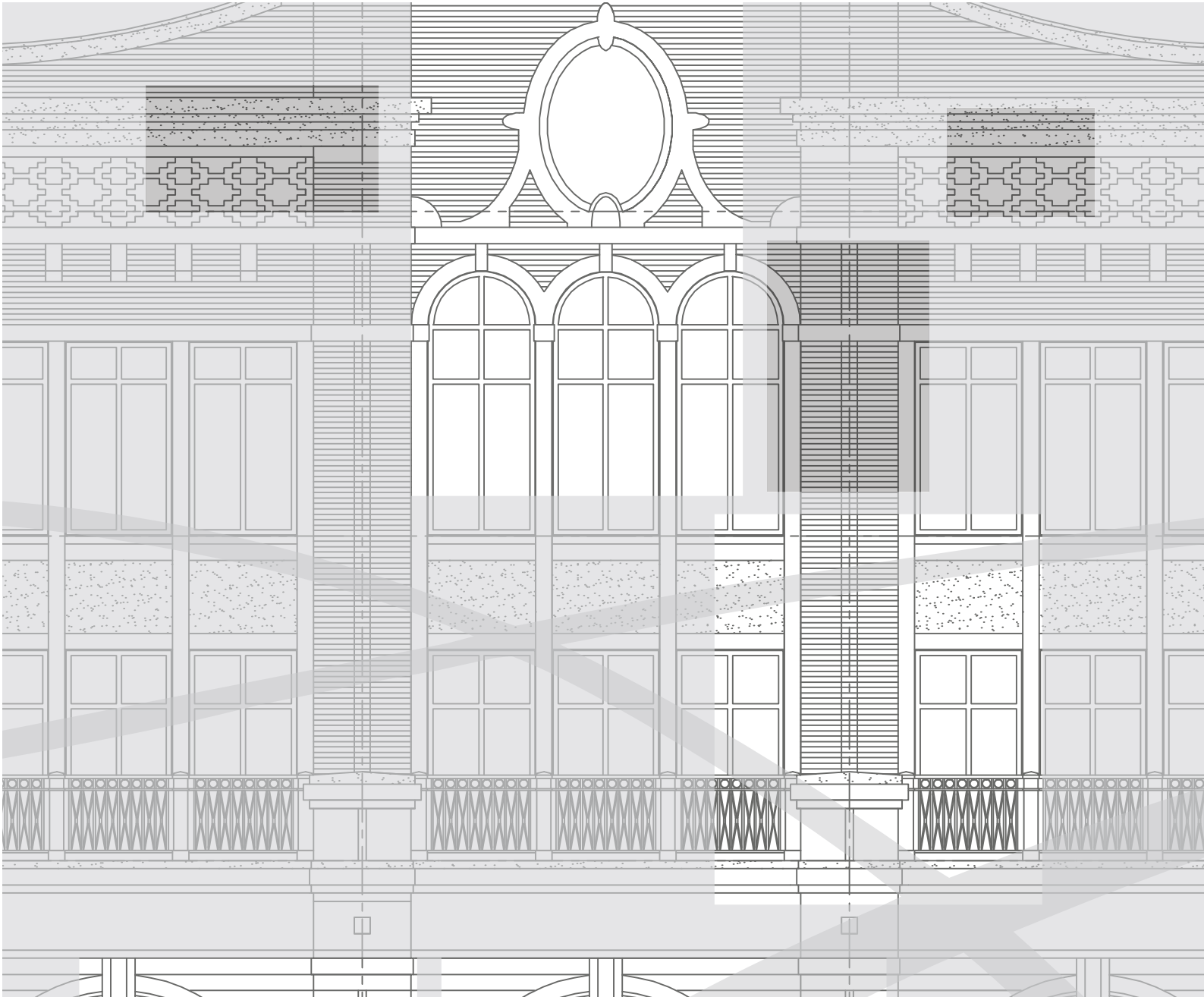


Arriscraft is the stone products group of General Shale, the North American subsidiary of Wienerberger AG and a leading manufacturer of brick, one of the world's oldest green building materials.

### ON THE COVER

TriSummit Bank; Thomas Weems;  
ARRIS.cast Headers, Arches and Keystones

PC-1&2 PRECAST MASONRY UNIT  
COLOR: REYGRASS



# ARRIS■cast

## Products Guide

May 2013

# Notes

PC-1&2 PRECAST MASONRY UNIT

ABBREVIATION LEGEND	
BN	Bullnose
BNS	Bullnose Sill
WT	Watertable
SL	Sill
LUG	Lug Sill
RT	Return Corner Right
LT	Return Corner Left
CHAM	Chamfer
WC	Wall Cap
CAP	Pier Cap
QN	Quoin
STR	Stretcher Unit
FIN	Finished End Units

## Shapes and Sizes

In addition to the products illustrated in this guide, ARRIS.cast Units can be fabricated in various custom shapes and sizes to suit project requirements.

## Colors and Finishes

ARRIS.cast Units are available with a fine-grained smooth texture similar to that of smooth Renaissance® Masonry Units or dressed quarried stone. ARRIS.cast units are available to complement all standard Renaissance® colors (Fort Valley, GA and Cambridge, ON plant). Custom colors are available.

## General Notes

**Finished faces are indicated on the section drawings by a bold line.**

Certain applications may require an engineered anchoring system for support. Refer to Arriscraft.NOTE series Connectors, Part I and II.

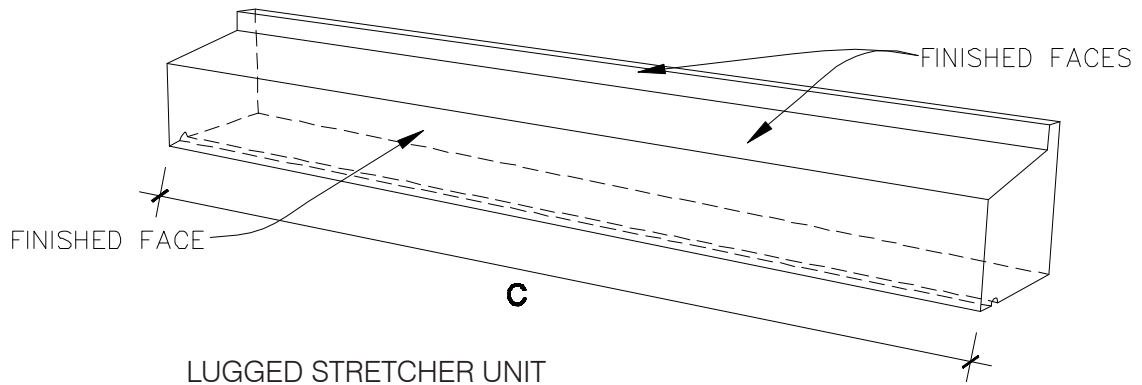
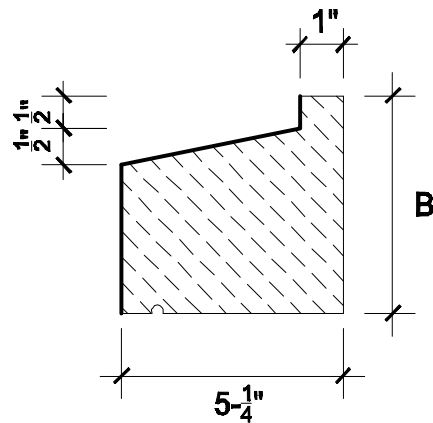
ARRIS.cast units must be installed using industry recommended materials and techniques that conform to all related building code requirements.

Proper care, installation and cleaning are required for warranty validation.

For applicable tolerances and further information, refer to **Arriscraft.DATA 04720** for ARRIS.cast Units.

# Lugged Sills

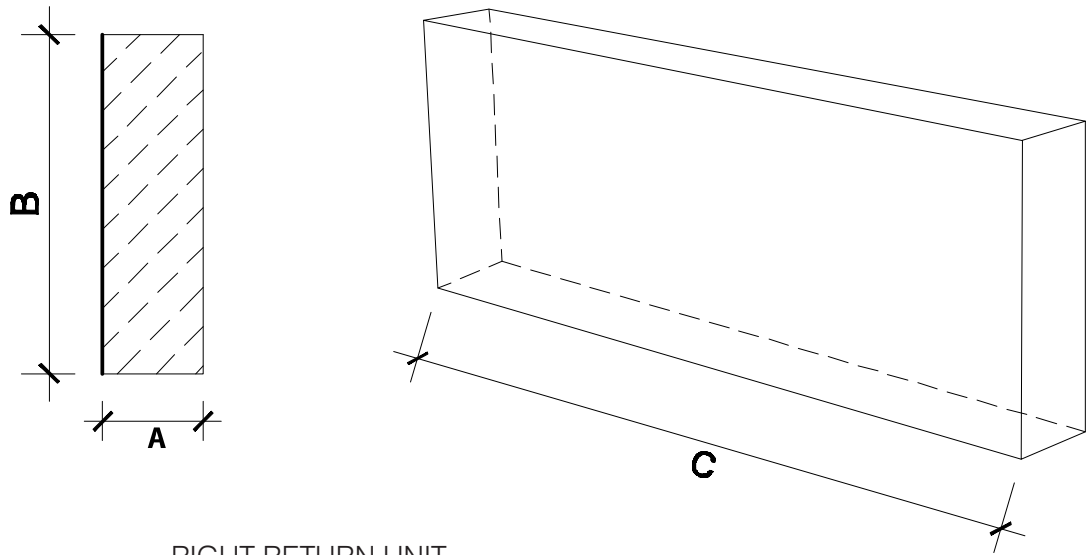
PC. MK	A	B	C
LUG 33	5 - 1/4"	3 - 5/8"	31 - 5/8"
LUG 34	5 - 1/4"	3 - 5/8"	47 - 5/8"
LUG 53	5 - 1/4"	5 - 1/4"	31 - 5/8"
LUG 54	5 - 1/4"	5 - 1/4"	47 - 5/8"
LUG 73	5 - 1/4"	7 - 5/8"	31 - 5/8"
LUG 74	5 - 1/4"	7 - 5/8"	47 - 5/8"
LUG 103	5 - 1/4"	10 - 1/4"	31 - 5/8"
LUG 104	5 - 1/4"	10 - 1/4"	47 - 5/8"
LUG 113	5 - 1/4"	11 - 5/8"	31 - 5/8"
LUG 114	5 - 1/4"	11 - 5/8"	47 - 5/8"
LUG 153	5 - 1/4"	15 - 5/8"	31 - 5/8"
LUG 154	5 - 1/4"	15 - 5/8"	47 - 5/8"



# Stretchers

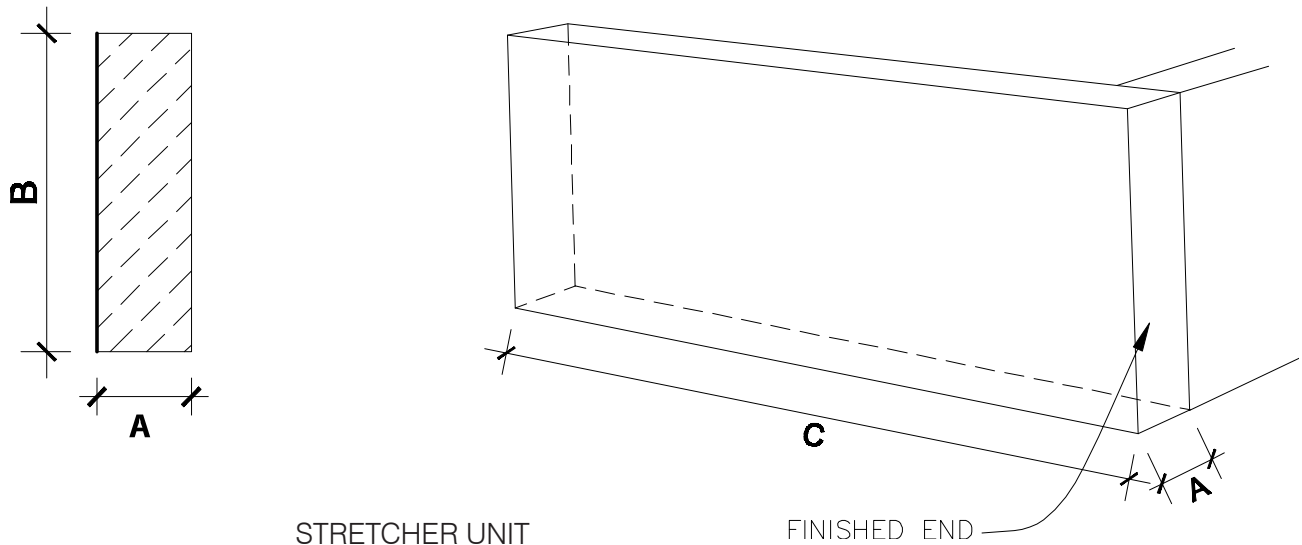
PC-1&2 PRECAST MASONRY UNIT

PC. MK	A	B	C
STR 153	3 - 5/8"	15 - 5/8"	31 - 5/8"
STR 154	3 - 5/8"	15 - 5/8"	47 - 5/8"
STR 4153	4 - 5/8"	15 - 5/8"	31 - 5/8"
STR 4154	4 - 5/8"	15 - 5/8"	47 - 5/8"



## Stretcher Finished End Unit

PC. MK	A	B	C
STR FIN 153	3 - 5/8"	15 - 5/8"	31 - 5/8"
STR FIN 154	3 - 5/8"	15 - 5/8"	47 - 5/8"
STR FIN 4153	4 - 5/8"	15 - 5/8"	31 - 5/8"
STR FIN 4154	4 - 5/8"	15 - 5/8"	47 - 5/8"



PC-3 BASE MASONRY UNIT  
COLOR: REYGRASS

Design with freedom.

Natural Edge® 

Selection

Solutions

Education

Innovation

Renaissance® Collection

 **Arriscraft**  
Building Stone · Brick · Limestone



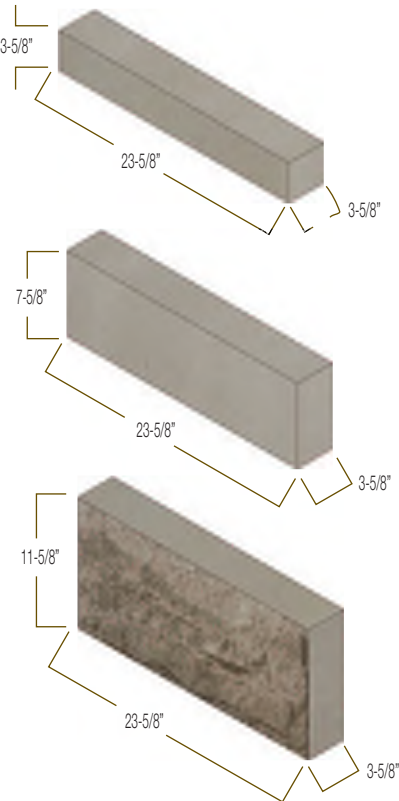
Robert D. Love Downtown YMCA - Wichita, KS | Schaefer Johnson Cox Frey Architecture | Sandrift Sandblasted

# Why Renaissance®?

Arriscraft Renaissance® Masonry Units offer architects, builders and property owners a premium stone with exceptional performance, beauty and flexibility. Our unique Natural Process technology mimics how stone is created in the earth – yielding cement-free stone products with the aesthetic, strength and durability benefits of quarried stone, plus cost effective installation.

Renaissance® units are offered in standard sizes and colors, yet offer tremendous flexibility through custom colors, blends, shapes and sizes - in rocked, smooth, satin, or sandblasted finishes . Discover the unparalleled beauty and design opportunities of Renaissance® Masonry Units, backed by an industry-unique lifetime product warranty.

## Standard Masonry Units



## NATURAL EDGE®

Our Natural Process technology replicates how stone is formed in the earth and creates products with the aesthetics and durability of quarried stone, plus the benefits of standard installation and unlimited supply.



## SELECTION

Our comprehensive product range includes: the classic Renaissance® stone, a robust Building Stone collection, three versatile thin-clad options, various brick styles (including our long, contemporary option), Adair® limestone, and a full offering of cast accessories.



## SOLUTIONS

We lead the industry in premier product support, including an extensive technical library, complimentary Masonry Envelope Review services, personal technical support, and renowned custom color and blend development. Our on-site technical services can provide historical matching, unique colors and custom blends, as required.



## INNOVATION

Product innovation at Arriscraft continues to meet market demands for modern stone designs and lightweight, thin stone solutions, as well as matching processes to replicate historical stone as quarries close after decades of use. We also continuously improve our manufacturing process to lead the industry in green and sustainability initiatives.



## EDUCATION

We educate daily through our technical support, AIA credit courses, and an ever-broadening information base. Our website offers high-res color sheets, data sheets, seamless texture images, a Building Stone Calculator, plus our growing blog of articles and tips. For decades we've provided complimentary mason training and student tours, and sponsored the University of Waterloo Architecture Lecture Series.



Arriscraft Renaissance to our modern design. The best products, the best service, the best results.

**MILAN MALINOVIC, PRINCIPAL**  
Design Cooperative, LLC



# Versatile Design and Installation

PC-3 BASE MASONRY UNIT  
COLOR: REYGRASS

Like any artist's raw material, Renaissance® puts design into your hands. Enjoy absolute flexibility with a stone product that you can shape, color, size, and install as you like. Here are a few examples of the creative options with Renaissance®.

## Custom Colors

In addition to an array of standard colors, we can provide custom blends or entirely custom colors. This flexibility allows you to co-ordinate seamlessly with other structures and even match historical projects.



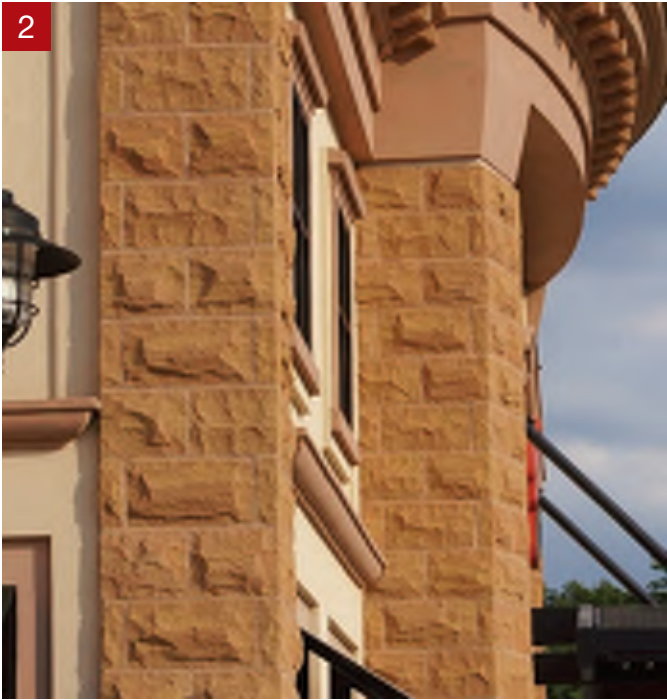
## Installation Options

Standardized sizes allow for unique bond patterns, such as repeating or vertical installations, as well as traditional bond patterns.



## Custom Shapes

The through-body color and texture of Renaissance® stone makes shaping and detailing possible and is an ideal way to make designs absolutely unique. Custom shapes can be created on-site by the mason or on spec at our manufacturing facility.



1. & 2. Colors were created to the architect's specification.

1. Stone installed in a vertical quarter bond pattern | 2. Blend of standard colors (Suede, Café, Garnet) installed in an ashlar pattern.

1. Custom Arch and Post units, Bullnose | 2. Bullnose and custom detail | 3. Notches to emulate large panels

PC-3 BASE MASONRY UNIT  
COLOR: REYGRASS



Visions Healthcare - Boston, MA | SMOOK Architecture & Urban Design | Ginger Smooth and Suede Satin

## About Arriscraft

Arriscraft manufactures a vast range of premium stone for commercial and residential projects, including full-bed Building Stone, Renaissance® Masonry Units, thin-clad adhered and clipped veneers, Adair® Limestone, and cast accessories.

**Cambridge, Ontario Plant**  
875 Speedville Road  
Cambridge, Ontario, Canada  
N3H 4S8

**Toll Free: 800-265-8123**  
**Email: [solutions@arriscraft.com](mailto:solutions@arriscraft.com)**

**Fort Valley, Georgia Plant**  
6054 Zenith Mill Road, Arriscraft Lane  
Fort Valley, Georgia, USA  
31030

**Phone: 478-827-1896**  
**Fax: 478-827-1897**

### IMPORTANT NOTES

Colors and textures have been reproduced as closely as the printing process allows. Final selection should be made from actual samples.

Renaissance® Masonry Units' compressive strength, durability and dimensional tolerances are within the range of those of quality limestone (ASTM C568) and sandstone products (ASTM C616).

Renaissance® Masonry Units meet the severe-weathering requirements of ASTM C73 for Calcium Silicate units.

Renaissance® Masonry Units must be installed using industry recommended materials and techniques and conform to all related building code requirements. All masonry products are intended for above-grade installations. Proper care, installation and cleaning are required for warranty validation. Please refer to Arriscraft•DATA Renaissance® Masonry Units and Arriscraft•CARE Storage and Handling at: [www.arriscraft.com](http://www.arriscraft.com)

### ON THE COVER

**Project:** Black Sheep Restaurant - Jacksonville, FL

**Architect:** Design Cooperative, LLC

**Color:** Limestone Satin

FPO  
FSC Logo



Arriscraft is the stone products group of General Shale, the North American subsidiary of Wienerberger AG and a leading manufacturer of brick, one of the world's oldest green building materials.

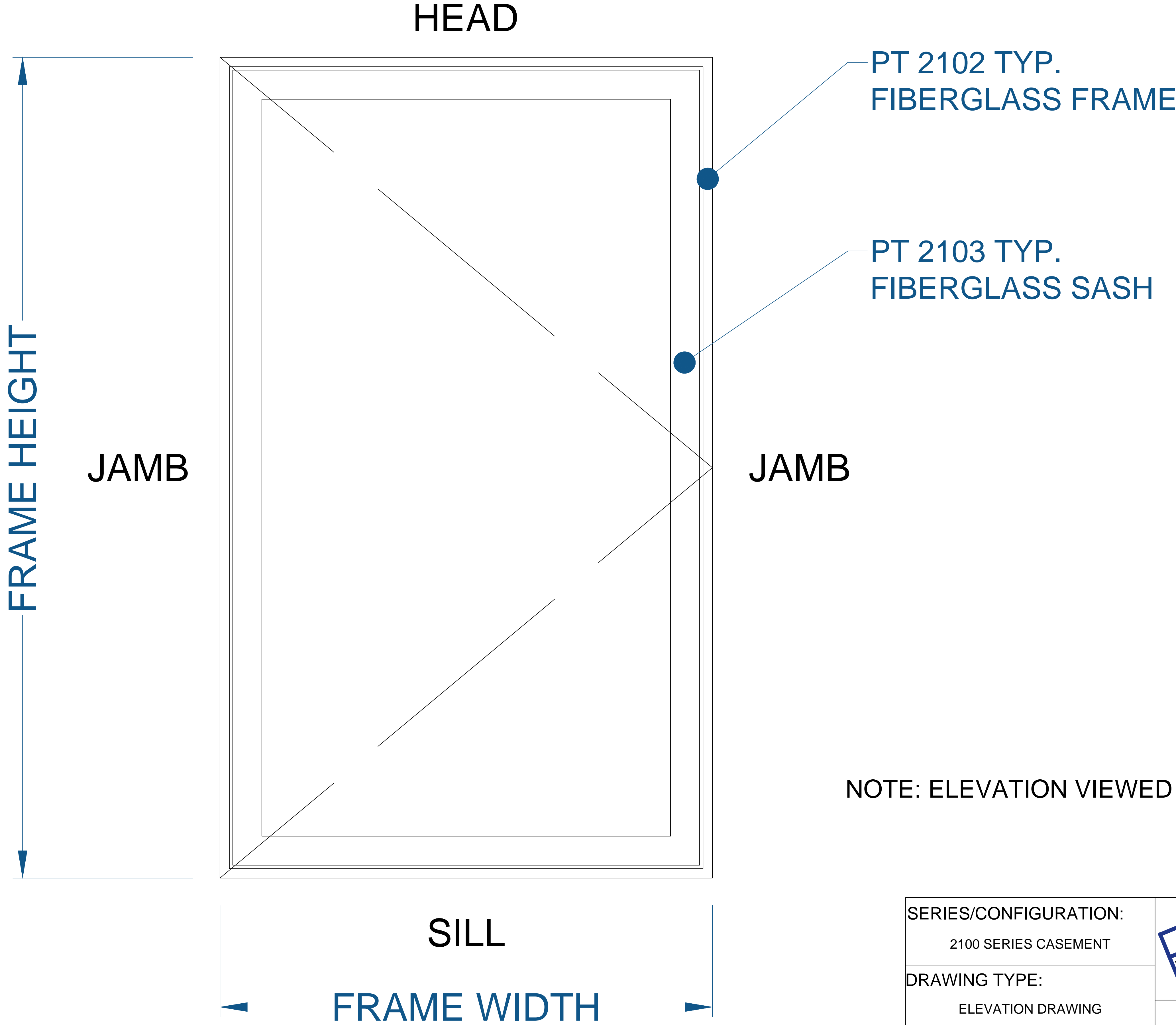
[www.arriscraft.com](http://www.arriscraft.com)

**Arriscraft**  
Building Stone · Brick · Limestone

# 2100 SERIES CASEMENT


(ELEVATION DRAWING)

W-1 & W-2 RESIDENTIAL WINDOW -  
CASEMENT  
CUSTOM COLORS



NOTE: ELEVATION VIEWED FROM THE OUTSIDE LOOKING IN.

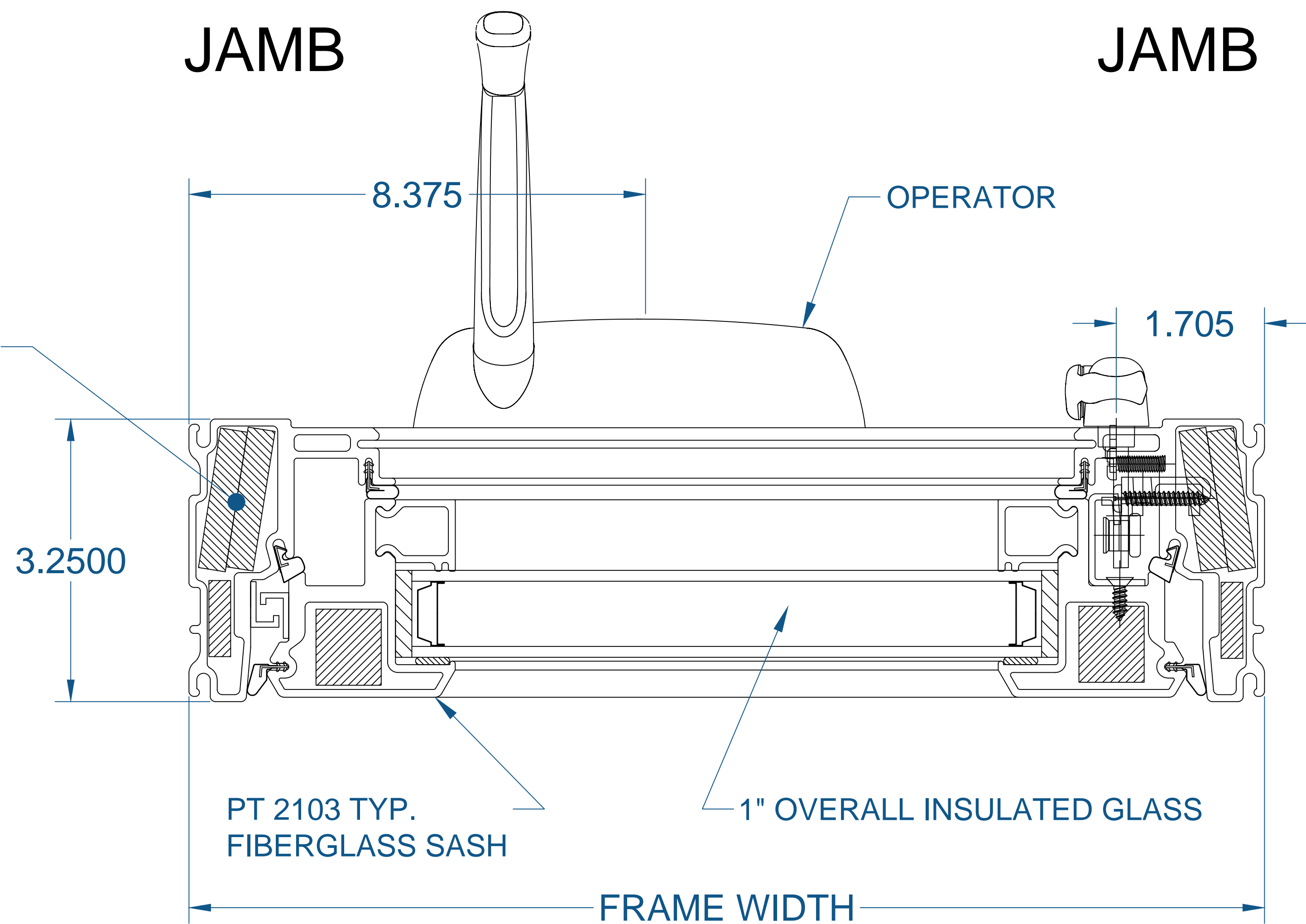
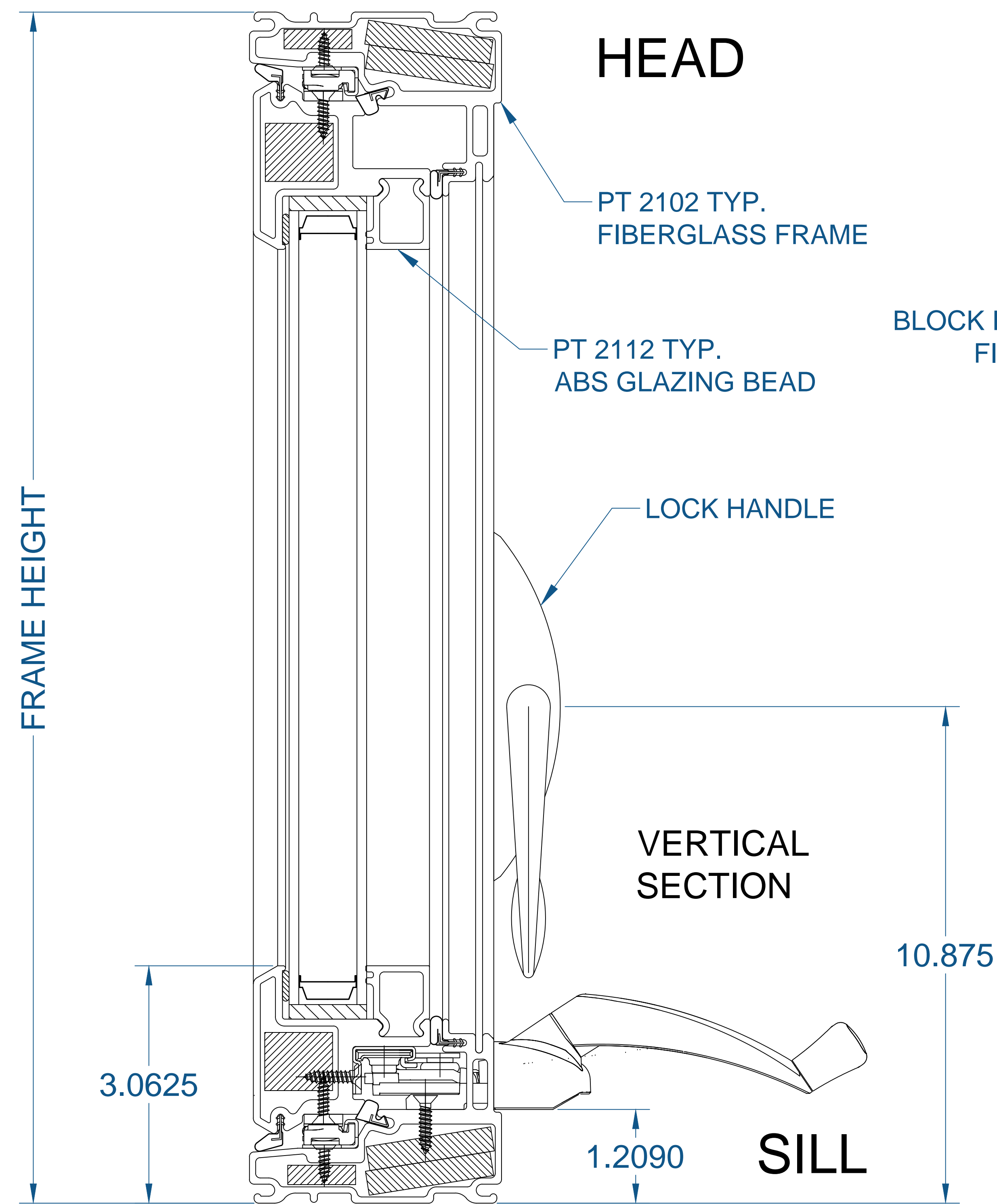
SEE PRODUCT SPECIFICATIONS PAGE FOR COMPLETE PRODUCT DESCRIPTION.

SERIES/CONFIGURATION:			 <div><b>FiberFrame</b>™ <b>Comfort Line</b>® <small>FIBERGLASS WINDOWS, PATIO DOORS, SUNROOMS &amp; STOREFRONT</small></div>	COMFORT LINE LTD. 5500 ENTERPRISE BLVD. TOLEDO, OH 43612 419-729-8520	
2100 SERIES CASEMENT					
DRAWING TYPE:			THIS DRAWING IS THE PROPERTY OF COMFORT LINE LTD. DESIGN CONCEPTS AND INFORMATION MAY NOT BE REPRODUCED USED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF COMFORT LINE LTD.		
ELEVATION DRAWING					
			PROJECT: 2100 CASEMENT		
			SCALE: 6" = 1' - 0"		
			DATE: 2/13/17		
DATE	REVISION	BY	QUOTE: #####		SHEET: CA1
			DRAWN BY: AJL		

# 2100 SERIES CASEMENT

(SECTION PROFILE)

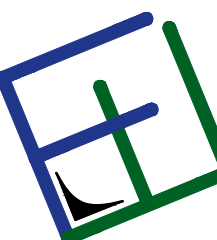
W-1 & W-2 RESIDENTIAL WINDOW -  
CASEMENT CUSTOM COLORS



HORIZONTAL  
SECTION

NOTE: OPERATION VIEWED FROM THE OUTSIDE LOOKING IN.  
LEFT HINGED SHOWN, RIGHT HINGED MIRROR IMAGE.

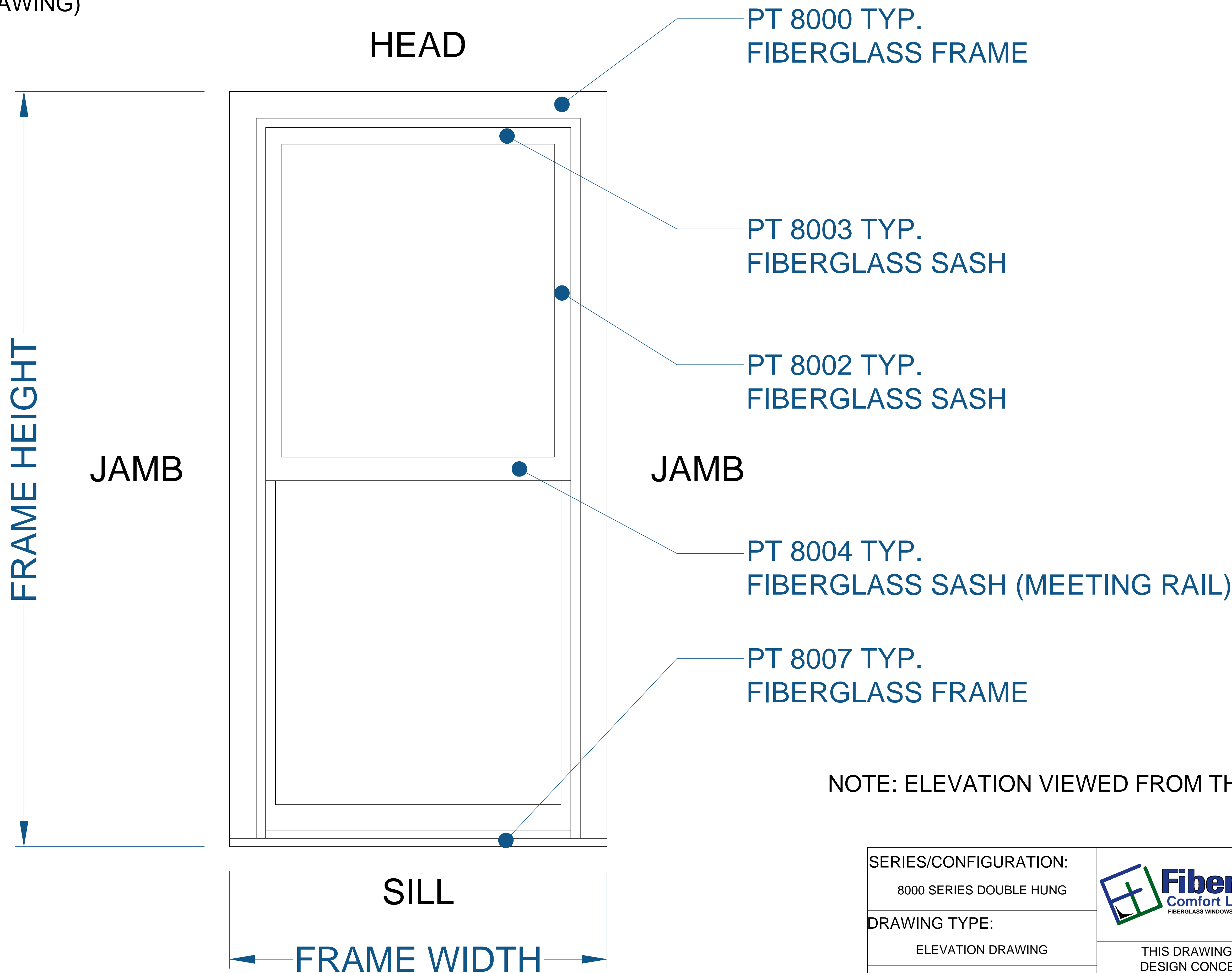
SEE PRODUCT SPECIFICATIONS PAGE FOR COMPLETE PRODUCT DESCRIPTION.

SERIES/CONFIGURATION:			<div><div><b>FiberFrame</b><sup>TM</sup> Comfort Line® <small>FIBERGLASS WINDOWS, PATIO DOORS, SUNROOMS &amp; STOREFRONT</small></div></div> <div>COMFORT LINE LTD. 5500 ENTERPRISE BLVD. TOLEDO, OH 43612 419-729-8520</div>		
2100 SERIES CASEMENT					
DRAWING TYPE:					
DETAIL WINDOW PROFILES			THIS DRAWING IS THE PROPERTY OF COMFORT LINE LTD. DESIGN CONCEPTS AND INFORMATION MAY NOT BE REPRODUCED USED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF COMFORT LINE LTD.		
			PROJECT:		2100 CASEMENT
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DATE	REVISION	BY	QUOTE:		####
			DRAWN BY:		AJL
			SHEET:		CA2

# 8000 SERIES DOUBLE HUNG


(ELEVATION DRAWING)

W-1 & W-2 RESIDENTIAL WINDOW -  
CASEMENT CUSTOM COLORS



NOTE: ELEVATION VIEWED FROM THE OUTSIDE LOOKING IN.

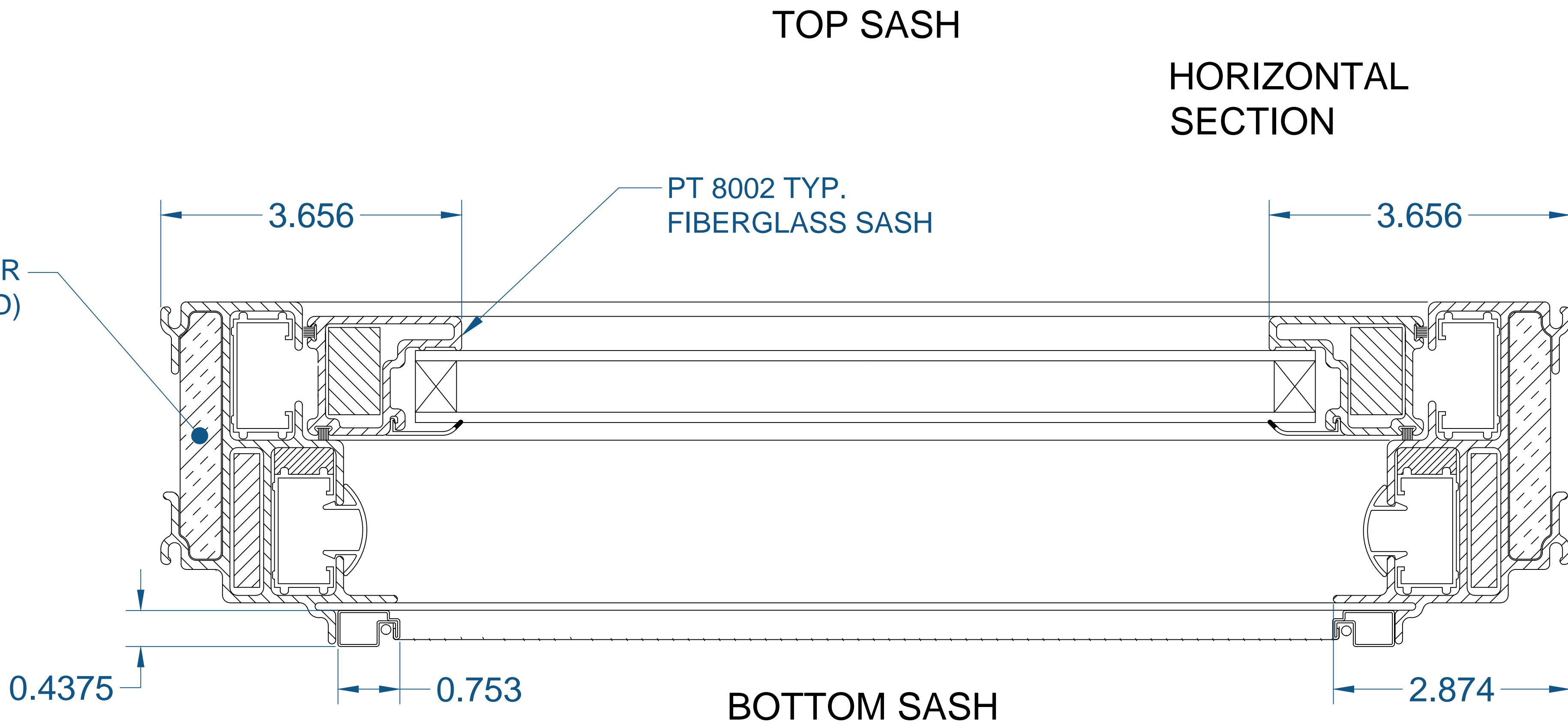
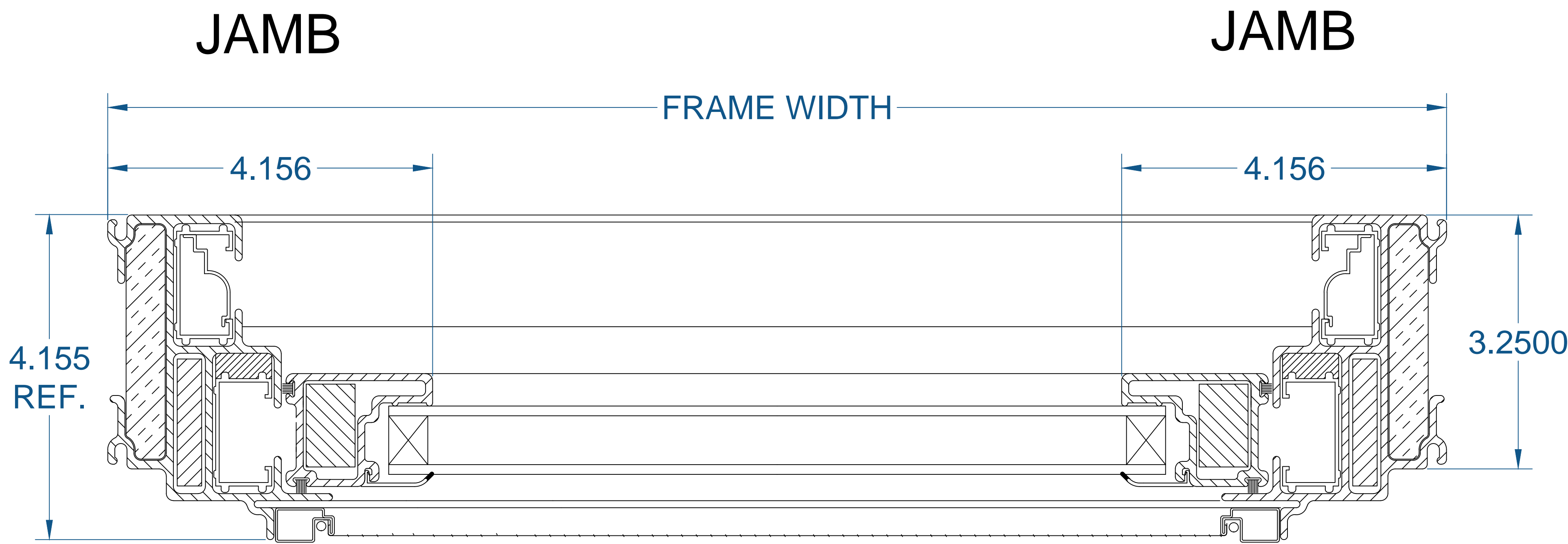
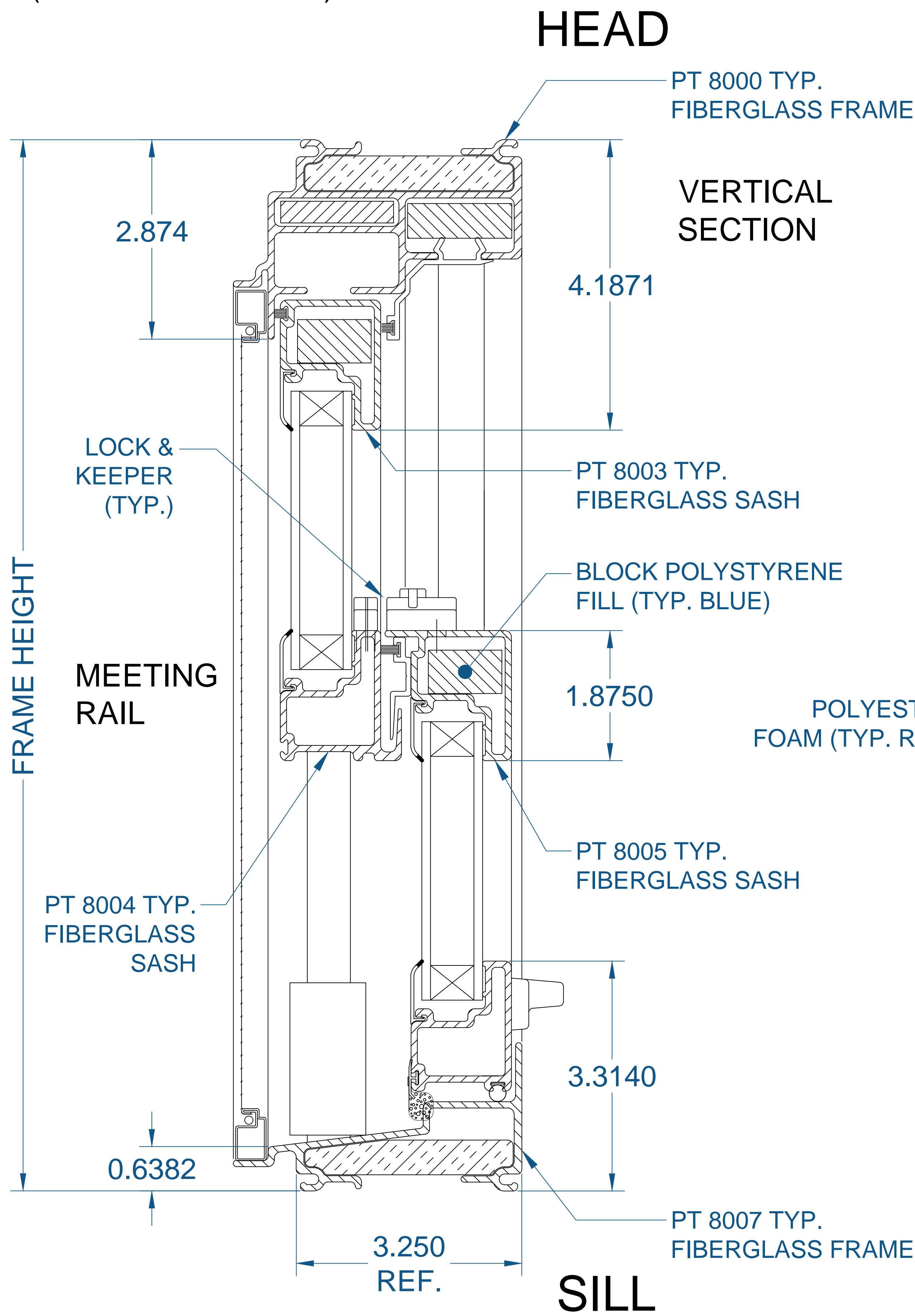
SEE PRODUCT SPECIFICATIONS PAGE FOR COMPLETE PRODUCT DESCRIPTION.

SERIES/CONFIGURATION:  8000 SERIES DOUBLE HUNG			 <div><b>FiberFrame</b>™ <b>Comfort Line</b>® <small>FIBERGLASS WINDOWS, PATIO DOORS, SUNROOMS &amp; STOREFRONT</small></div>	COMFORT LINE LTD. 5500 ENTERPRISE BLVD. TOLEDO, OH 43612 419-729-8520		
DRAWING TYPE:  ELEVATION DRAWING				THIS DRAWING IS THE PROPERTY OF COMFORT LINE LTD. DESIGN CONCEPTS AND INFORMATION MAY NOT BE REPRODUCED USED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF COMFORT LINE LTD.		
			PROJECT: 8000 DOUBLE HUNG			
			SCALE: 3" = 1' - 0"			
			DATE: 2/13/17			
DATE	REVISION	BY	DRAWN BY: AJL		QUOTE: #####	SHEET: DH1.1

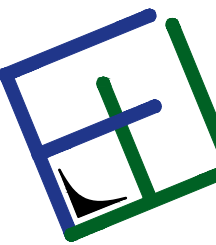
# 8000 SERIES DOUBLE HUNG

(SECTION PROFILE)

W-1 & W-2 RESIDENTIAL WINDOW -  
CASEMENT CUSTOM COLORS



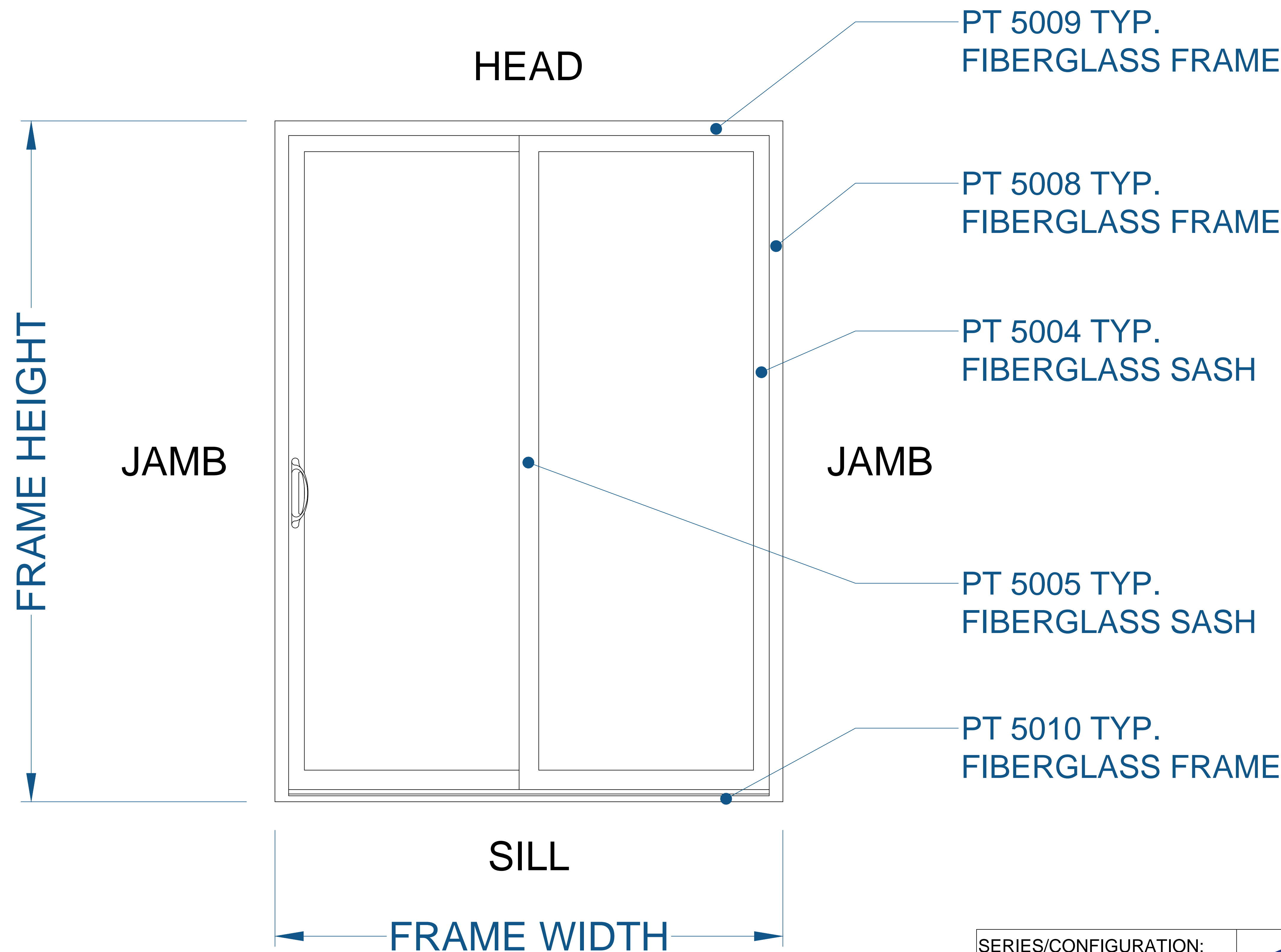
SEE PRODUCT SPECIFICATIONS PAGE FOR COMPLETE PRODUCT DESCRIPTION.

SERIES/CONFIGURATION:  8000 SERIES DOUBLE HUNG			 <div><b>FiberFrame</b>™ Comfort Line® <small>FIBERGLASS WINDOWS, PATIO DOORS, SUNROOMS &amp; STOREFRONT</small></div>		COMFORT LINE LTD. 5500 ENTERPRISE BLVD. TOLEDO, OH 43612 419-729-8520	
DRAWING TYPE:  DETAIL WINDOW PROFILES					THIS DRAWING IS THE PROPERTY OF COMFORT LINE LTD. DESIGN CONCEPTS AND INFORMATION MAY NOT BE REPRODUCED USED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF COMFORT LINE LTD.	
			PROJECT: 8000 DOUBLE HUNG			
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DATE	REVISION	BY	DRAWN BY: AJL			

# 5000 SERIES PATIO DOOR - 2 LITE

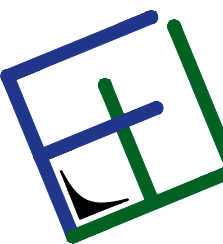
(ELEVATION DRAWING)

RESIDENTIAL PATIO DOOR



NOTE: ELEVATION VIEWED FROM THE OUTSIDE LOOKING IN.

SEE PRODUCT SPECIFICATIONS PAGE FOR COMPLETE PRODUCT DESCRIPTION.

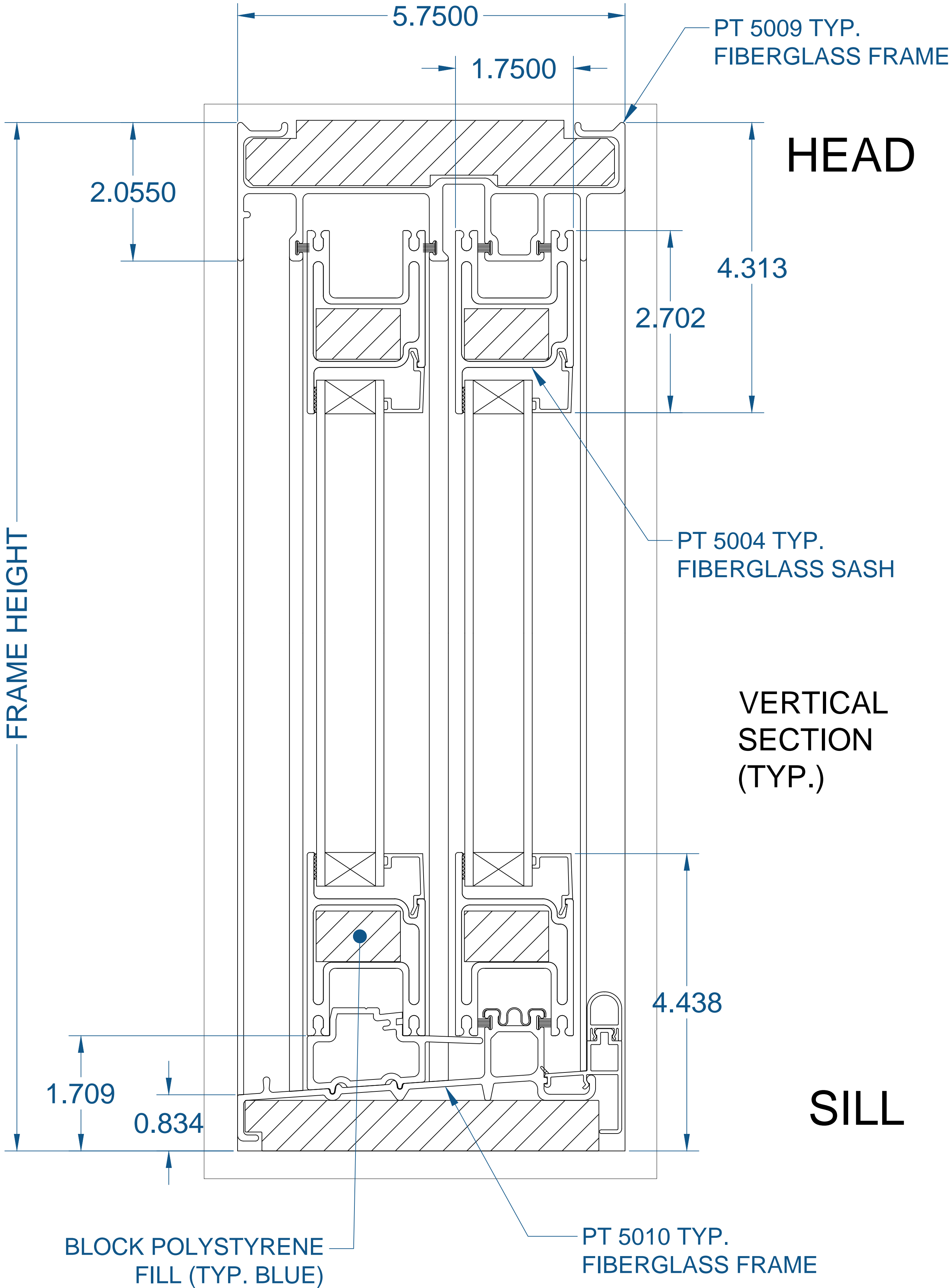
SERIES/CONFIGURATION:  5000 SERIES PATIO DOOR			 <div><b>FiberFrame</b>™ <b>Comfort Line</b>® <small>FIBERGLASS WINDOWS, PATIO DOORS, SUNROOMS &amp; STOREFRONT</small></div>	COMFORT LINE LTD. 5500 ENTERPRISE BLVD. TOLEDO, OH 43612 419-729-8520	
DRAWING TYPE:  ELEVATION DRAWING				THIS DRAWING IS THE PROPERTY OF COMFORT LINE LTD. DESIGN CONCEPTS AND INFORMATION MAY NOT BE REPRODUCED USED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF COMFORT LINE LTD.	
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DATE	REVISION	BY	DRAWN BY:	QUOTE:	#### SHEET: PD1.1
			AJL		

# 5000 SERIES PATIO DOOR - 2 LITE

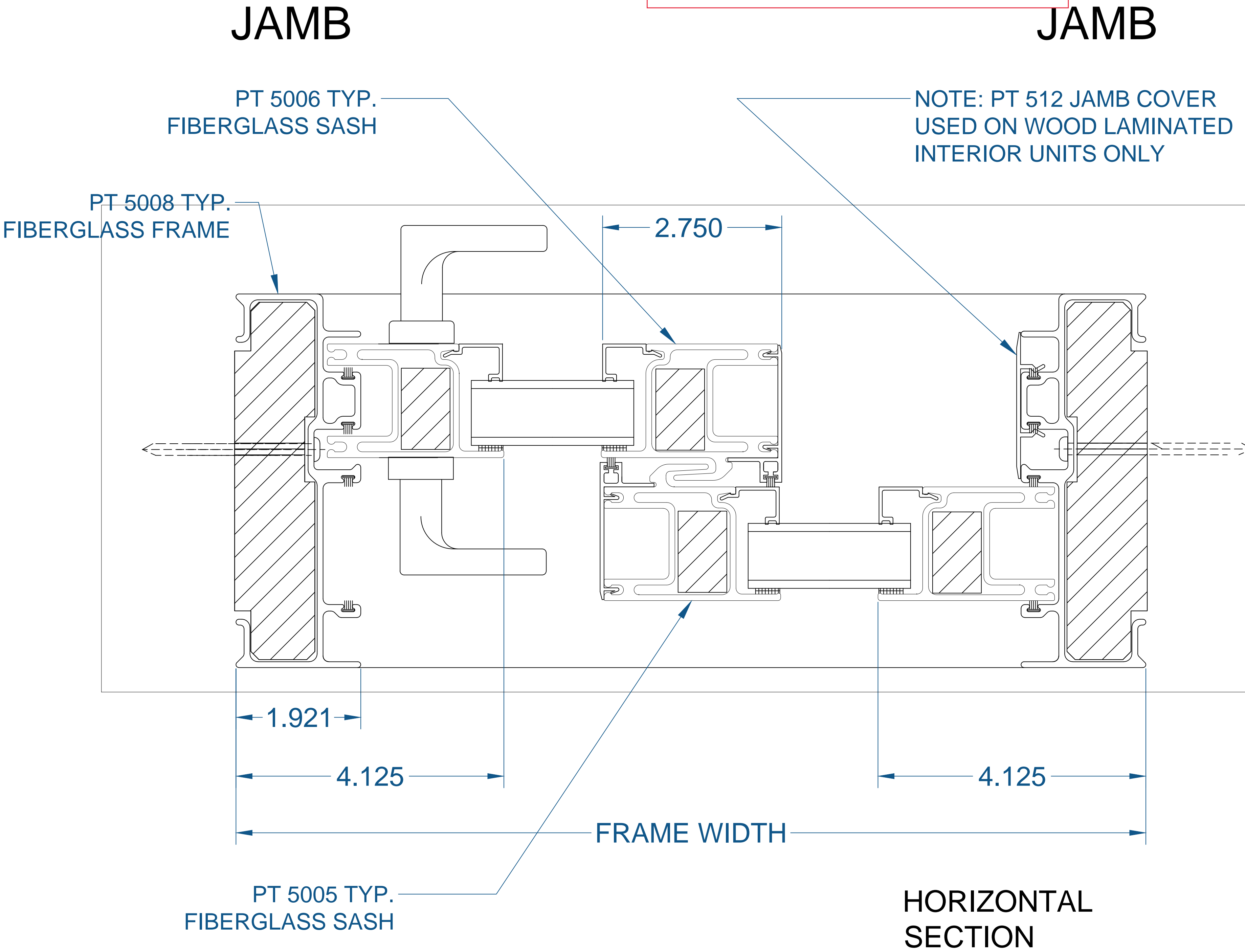
(SECTION PROFILE)

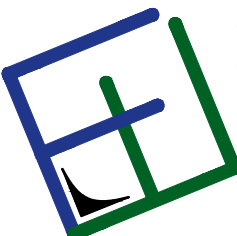
5000 SERIES PATIO DOOR  
2 WIDE HORIZONTAL / VERTICAL SECTION  
LH XO SHOWN (RH OX OPPOSITE)

RESIDENTIAL PATIO DOOR  
CUSTOM COLOR



SEE PRODUCT SPECIFICATIONS PAGE FOR COMPLETE PRODUCT DESCRIPTION.

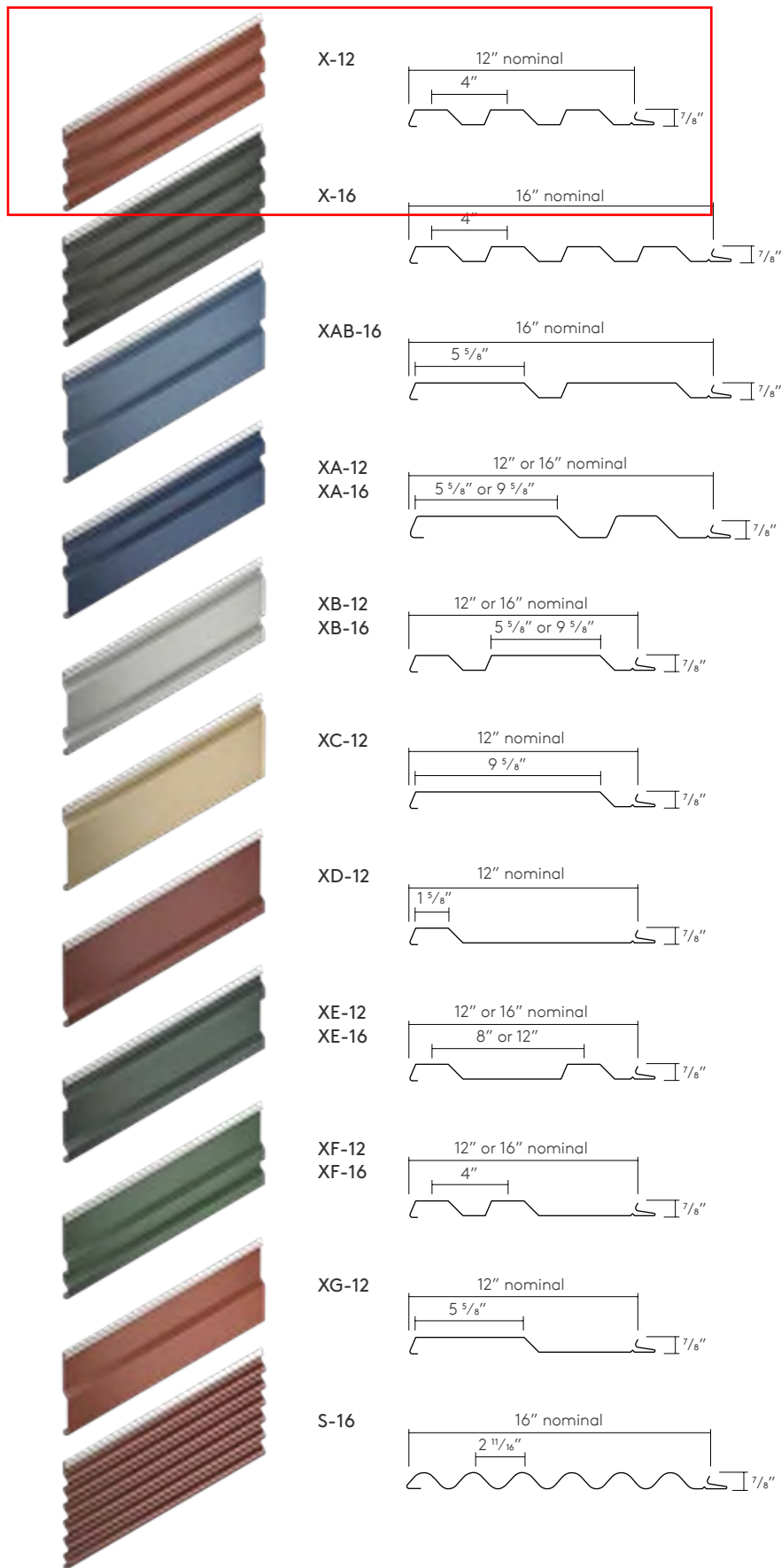


SERIES/CONFIGURATION:			<div><div><b>FiberFrame</b><sup>TM</sup> Comfort Line® <small>FIBERGLASS WINDOWS, PATIO DOORS, SUNROOMS &amp; STOREFRONT</small></div></div> <div>COMFORT LINE LTD. 5500 ENTERPRISE BLVD. TOLEDO, OH 43612 419-729-8520</div>		
DRAWING TYPE:					
DETAIL DOOR PROFILES			THIS DRAWING IS THE PROPERTY OF COMFORT LINE LTD. DESIGN CONCEPTS AND INFORMATION MAY NOT BE REPRODUCED USED OR DISCLOSED WITHOUT THE WRITTEN PERMISSION OF COMFORT LINE LTD.		
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			SCALE:		1' - 0" = 1' - 0"
			DATE:		2/13/17
DATE	REVISION	BY	DRAWN BY:		AJL
			QUOTE:		####
			SHEET:		PD2.1

# Integrity Wall Series

Integrity Series is an integrated, concealed fastener, rainscreen, wall panel system featuring fifteen unique profiles.





The asymmetrical shape of the X-12 panel was created in the early 1990's, since then it has become one of the most popular profiles selected by architects for use on buildings of all types.

- Concealed clip and fastener design
- Weather resistant or rainscreen rear ventilated application
- Ideal for new or retrofit projects
- Smooth surface standard, stucco embossed texture optional
- All PVDF painted finishes available
- Perforated options available
- Optional factory caulking available

#### Panel Depth:

$\frac{7}{8}$ " (22mm)

#### Cover Width:

12" (305mm) or 16" (406mm)

#### Lengths:

5' (1.52m) to 30' (9.14m) standard.  
Shorter and longer lengths available

#### Galvalume / Zincolume Painted Steel Options:

18 GA (.119mm) / 20 GA (.91mm) /  
22 GA (.76mm) / 24 GA (.60mm)

#### Aluminum Options:

.050 GA (1.27mm) / .040 GA (1mm)

#### Stainless Steel Options:

20 GA (.91mm) / 22 GA (.76mm) / 24 GA (.60mm)

#### Zinc Options:

18 GA (1.19mm) / 20 GA (1.0mm) / 22 GA (.91mm)

#### Natural Copper Options:

20 oz. / 16 oz.

#### Application:

Horizontal or vertical



**Easy Integration**  
Common joint allows multiple panel integration with Pulse Series® and Matrix Series®

HQ / East 685 Middle Street, Bristol, CT 06010 T: 1-800-640-9501  
West 10707 Commerce Way, Fontana, CA 92337 T: 1-800-700-6140  
South 1975 Eidson Drive, DeLand, FL 32724 T: 1-800-640-9501

www.morincorp.com

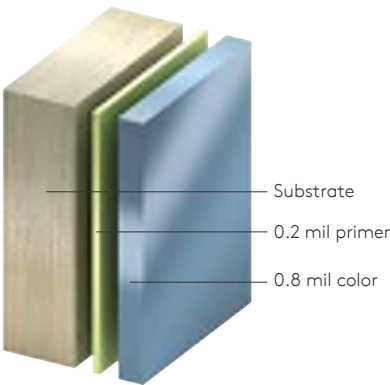
**Morin**®  
A Kingspan Group Company

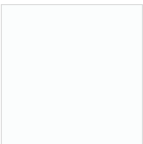
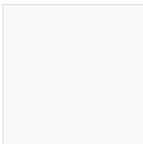
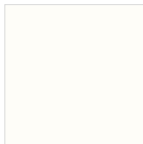
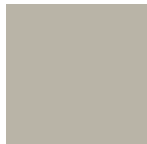






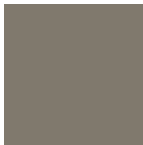


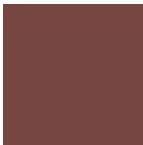







# Color Options

Our range of color options provide you with the most durable surfaces and longest warranties, with custom color matching available there are unlimited design options available.

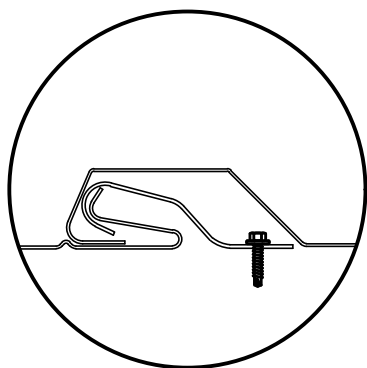
## Standard Colors

**Fluoropon® PVDF – Kynar500®**  
Formulated with 70% Kynar 500® proprietary resin, Fluoropon® is a premium fluoropolymer coating. Factory applied and baked on, it provides excellent adhesion and flexibility properties with aluminum, HDG steel or Galvalume® components.

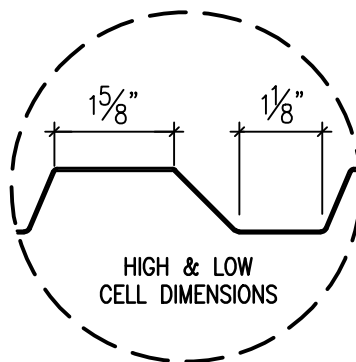


			
Regal White SR:0.70 E:0.86 SRI:85	Ascot White SR:0.69 E:0.85 SRI:83	Bone White SR:0.69 E:0.84 SRI:83	Sandstone SR:0.61 E:0.85 SRI:72
			
Dove Gray SR:0.47 E:0.86 SRI:53	Zinc Gray SR:0.35 E:0.86 SRI:37	Chromium Gray SR:0.56 E:0.86 SRI:65	Surrey Beige SR:0.48 E:0.86 SRI:54
			
Sierra Tan SR:0.38 E:0.85 SRI:40	Parchment SR:0.53 E:0.85 SRI:61	Antique Bronze SR:0.43 E:0.86 SRI:48	Spartan Bronze SR:0.31 E:0.85 SRI:31
			
Dark Bronze SR:0.27 E:0.85 SRI:26	Redwood SR:0.38 E:0.86 SRI:41	Colonial Red SR:0.32 E:0.86 SRI:33	Patina Green SR:0.41 E:0.84 SRI:44
			
Evergreen SR:0.26 E:0.85 SRI:24	Slate Blue SR:0.28 E:0.85 SRI:27	Bristol Black SR:0.26 E:0.86 SRI:25	Blue Gray SR:0.27 E:0.85 SRI:26
			
Regal Blue SR:0.26 E:0.85 SRI:24			

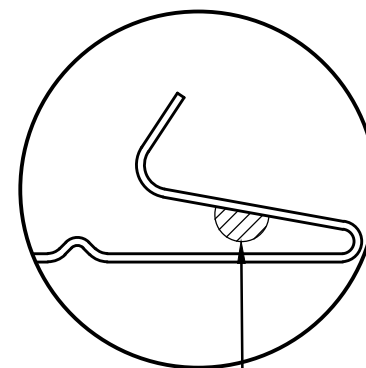




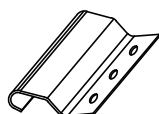
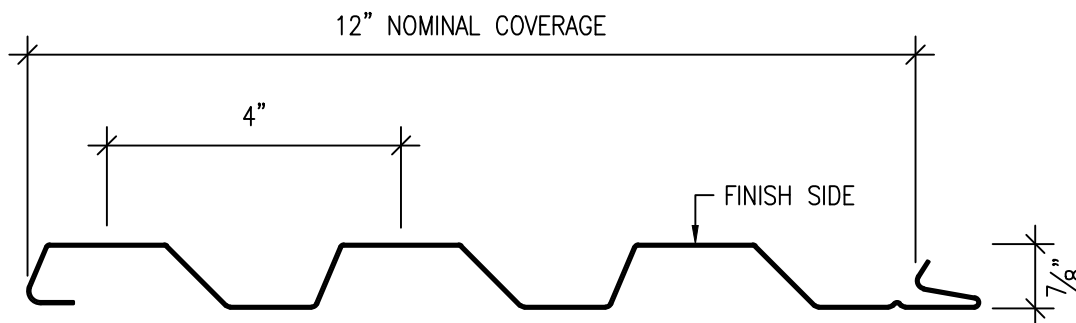
CLIP ENGAGEMENT



HIGH & LOW  
CELL DIMENSIONS



OPTIONAL FACTORY SEALANT  
(BUTYL PLACEMENT)



INTEGRITY SERIES CLIP  
GALVANIZED OR STAINLESS STEEL

**NOTES:**

1. ALL DIMENSIONS ARE NOMINAL. PANEL PROFILES MAY NOT BE TO SCALE.
2. DIMENSIONS AND ANGLES MAY VARY SLIGHTLY BETWEEN GAUGES.
3. THE CUSTOMER IS RESPONSIBLE FOR ALL INFORMATION ON THIS DOCUMENT.

**Morin**  
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	<b>APPROVED BY:</b>		DATE:	JOB NO.:	X-12
	CUSTOMER:			JOB NAME:	
	COLOR:	GAUGE:		SMOOTH <input type="checkbox"/> EMBOSSED <input type="checkbox"/> PERF. <input type="checkbox"/>	P.N: 1001
	BACKSIDE EXPOSED:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	<b>INSTALLATION:</b> HORIZ. <input type="checkbox"/> VERT. <input type="checkbox"/> OTHER <input type="checkbox"/>	REV.: 11/17
	BACKSIDE COLOR:			FACTORY CAULK: YES <input type="checkbox"/> NO <input type="checkbox"/>	