



from **MARVIN**
Windows and Doors

Built to perform.



WOOD-ULTREX[®]
S E R I E S

Strong values. Strong materials. And a strong commitment to your satisfaction.

Integrity from Marvin takes the values that made Marvin a leader and applies them to a line of popular styles. With an exterior of Ultrex®, a pultruded fiberglass material that outperforms and outlasts vinyl, vinyl clad, and roll-form aluminum, Integrity Windows and Doors are built to perform—under pressure, and over time.

And with an interior of carefully selected and handcrafted wood, the Integrity Wood-Ultrex Series is as beautiful as it is functional. Of course, they're easy-to-order, easy-to-install, delivered on time, and energy-efficient. In short, an exceptional value that is built to perform.



Contents

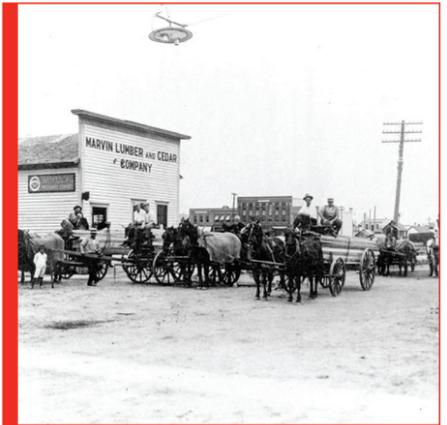
- 2 Integrity from Marvin
- 4 Ultrex Performance
- 8 Energy Efficiency
- 10 Product Options
- 14 Casement and Awning Windows
- 16 Double Hung Windows
- 18 Glider Windows
- 20 Bay and Bow Windows
- 22 Round Top Windows
- 24 Marvin Round Tops Made for Integrity®
- 26 Polygon Windows
- 28 Sliding Patio Door
- 30 Sliding French Door
- 32 Inswing French Door
- 34 Outswing French Door
- 37 Lite Cuts
- 84 Egress Openings
- 88 Thermal Performance
- 90 Altitude Guidelines
- 92 Design Pressure and WDMA
- 93 Warranty



The reputation lives on.

Since the 1930s, Marvin has brought a human touch and the very best materials to its windows and doors. So while they were building superior products, they were also building a reputation for quality materials, fine craftsmanship, remarkable innovation, and exceptional customer service. And all of that effort was directed at a single goal: ensuring that each customer received beautiful and long-lasting windows—and an extraordinary experience.

Our history was built on quality craftsmanship and a reputation for excellent service. Our future incorporates the unique innovation of Ultrex.®



So if you're selecting Integrity from Marvin, you can be assured that you're dealing with people who share your high standards for quality products and responsive service. We've been installing windows and doors – and exceeding expectations – for more than a decade now. And everything we install is backed by Marvin's 20/10 warranty.



Ultrex®

Stands up beautifully to the elements.

Stacks up impressively against other windows.

The exterior of Integrity products are made with Ultrex, a pultruded fiberglass material with a patented coating process which is weather-resistant, strong-stable, and long-lasting. Simply put, Ultrex is superior to vinyl, vinyl-clad and roll-form aluminum clad windows in virtually every category. And Integrity from Marvin has over a decade of field installations to prove it.

A part of every product.
Superior in every way.

The same amazing strength-to-weight ratio and tensile strength that make pultruded fiberglass perfect for use in ladders, bridge construction, and guard rails make it perfect for durable, low-maintenance windows and doors. It's eight times stronger than vinyl and almost twice as strong as steel. (It's actually used as a replacement for steel rebar.) That's why Ultrex forms the stiles and rails of every Integrity product that leaves our state of the art manufacturing facility. The result: superior strength, durability, performance, energy efficiency, and finish. And we've backed that breakthrough performance with outstanding delivery, support, service, and warranty protection.



One square inch of Ultrex could hold the weight of eleven cars—totalling 34,000 pounds!



Ultrex is 8x stronger than vinyl! Tough, dependable, non-corrosive and low-maintenance.



Ultrex® A foul weather friend

Ultrex windows stand up to rain, sun, wind, heat, time—looking beautiful and performing well long after other windows and doors have lost their luster. A patented high-performance coating process, superior to anything else on the market, puts down a heavy acrylic finish: resisting pin-holes, striations, chalking, fading, scratching, UV degradation—no worries.

Ultrex resists distortion even at temperatures up to 350°F. Rapid temperature change doesn't faze it: When the mercury climbed from -30°F to 70°F, a 6' stile changed less than 1/32" in length.

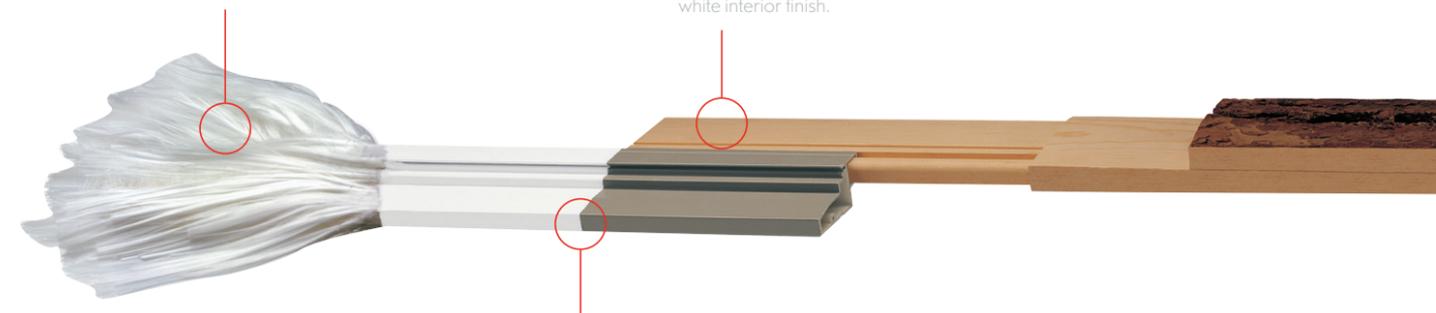
And Ultrex can be painted dark colors, even black, without compromising its structural integrity.

Pultruded fiberglass

Thin strands of strong glass cable, saturated with compounded resins to create a durable material.

Integrity Wood-Ultrex Series interior

Selected solid wood, classically detailed and milled to satin smoothness, ready for stain or paint. Also available with optional white interior finish.



Integrity Wood-Ultrex Series exterior

Impermeable factory finish is available in Stone White, Pebble Gray, Cashmere, Bronze or Evergreen. Can be painted with no impact on its protective properties.

Withstands our environment. Protects our environment.

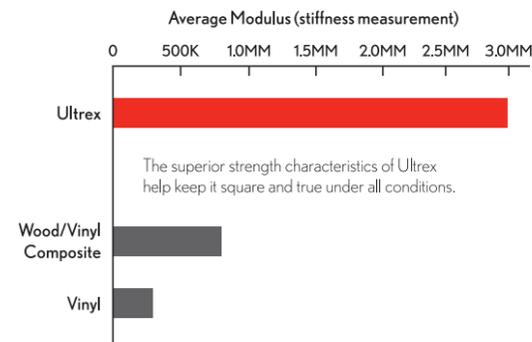
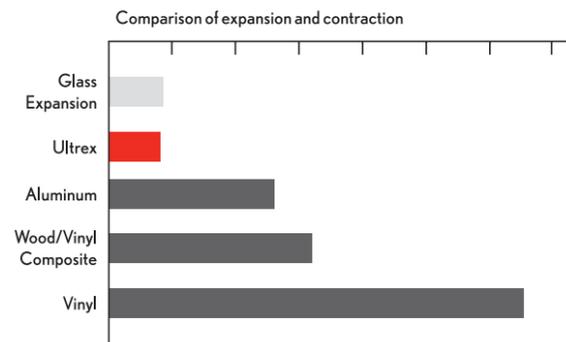
Thermal expansion: The undistorted truth about an important benefit.

Ultrex® can stand up to extreme heat, because it expands at virtually the same rate as glass, which means the entire window sash will stay tightly sealed—no cracks in the material or leakage around the glass.

On the other hand, vinyl can distort in extreme heat due to its high thermal expansion rate. So over time, it can spot, streak, and crack. And painting vinyl to mask the problems simply makes it worse by making the vinyl more brittle.

Making the grade: Time, rain, wind, heat and cold tested.

Our windows and doors are built to stand up to the elements and to look beautiful and perform flawlessly long after other windows and doors have lost their luster. A patented, high-performance coating process results in a thick acrylic finish on Ultrex that's thick and virtually resistant to scratches or dings. Once Integrity products are installed, there is virtually nothing left to do except enjoy the view.



The superior strength characteristics of Ultrex help keep it square and true under all conditions.



Over time, vinyl can spot, streak or crack. But Ultrex's patented coextrusion finishing process forms a .005"-thick intimate mechanical bond with the fiberglass that stays true under all conditions. Its UV-resistant uniform finish further separates Ultrex from other fiberglass.

Consistent performance. Consistent quality.

Integrity from Marvin takes our Built to perform philosophy to heart, and works diligently to ensure that we hold ourselves to the highest quality and environmental standards possible. That is why Integrity from Marvin is proud that our Fargo facility is both ISO-9001-2000 and ISO-14001-2004 certified.

The International Organization for Standardization (ISO) is a worldwide federation established in 1947 that defines standards for Quality Management Systems (ISO-9001-2000) and Environmental Management Systems (ISO-14001-2004). These universal standards allow companies to provide more streamlined and efficient transactions, and help companies facilitate quality and environmental sustainability throughout their organizations.

ISO certification is a voluntary undertaking and speaks to the depth of an organization's commitment to quality and the environment.

Integrity from Marvin willingly took on this challenge in an effort to raise our own high standards of quality and test our quality management systems against the world's highest standards. To receive certification Integrity underwent an extensive detailed audit process that requires an unwavering commitment to quality and the environment and continuous resolve for improved management systems. Integrity Windows and Doors is proud to have achieved both our ISO-9001-2000 and ISO-14001-2004 certification and will continue to focus our efforts to ensure consistent quality and environmental standards in serving you now and into the future.

For more information on the International Organization for Standardization (ISO) and their certifications, visit www.iso.org.



From the plant floor to your home, Wood-Ultrex® Windows and Doors reflect a commitment to the environment.



Everyday, Integrity from Marvin Windows and Doors approaches our business with one question, "How can we do it better?" From creating energy efficient windows with a life cycle that far outlasts the competition, to ensuring we lessen our impact in all steps of manufacturing, we provide windows that make the homes we build part of a greener and brighter future.

Our commitment begins with materials. Ultrex is primarily comprised of silica sand, an abundant natural resource, and recycled material, and the glass in our products contains 15%–33% recycled content. All-wood components use Sustainable Forestry Initiative (SFI) wood to ensure sound environmental stewardship, and our Fargo facility's environmental management system is ISO-14001-2004 certified.

In addition, the Ultrex manufacturing facility is the only pultrusion company to fully comply with the EPA's 1990 Clean Air Act and has been designated a Maximum Achievable Control Technology.

Marvin and Integrity have been and continue to be active participants in community, state and industry initiatives to improve environmental manufacturing practices. We've received several awards for excellence in manufacturing from state agencies, including the Greener North Dakota Award and Company of the Year Award for 2005—presented by North Dakota Solid Waste & Recycling Association (NDSWRA), and the Minnesota Governor's Award for innovative environmental preservation three times, most recently in February 2006.

Additionally, Ultrex requires 39% less energy to produce than vinyl. Integrity Windows and Doors all come standard with energy-saving LoE² insulated glass with Argon gas and durable Ultrex construction, ensuring sustainable, low-maintenance, ENERGY STAR qualified, NFRC and DP Rated performance for the long haul.

For more information on our environmental commitment, visit www.integritywindows.com and click on "green building."

Energy Efficiency. An Energy Star is Born.

Keeping it cool in summer.
Warming it up in winter.

ENERGY STAR qualified windows can save you fifteen percent of your total energy bill.¹ And Integrity from Marvin products don't simply qualify for the energy star rating; they exceed its performance requirements.

Why? Because Ultrex® is 500 times less conductive than aluminum. (In that, it resembles wood and PVC.) Compared to single-pane unglazed windows, Integrity's double-pane windows and LoE coatings can reduce window heat loss and cut costs by 34% in cold climates, and cut cooling costs by 38% in warm climates.² Argon gas, which has thermal conductivity 30% lower than that of air, and a warm-edge spacer also contributes to Integrity's energy efficient products. At the same time, UV rays are screened to reduce fading and damage to upholstery and carpets.

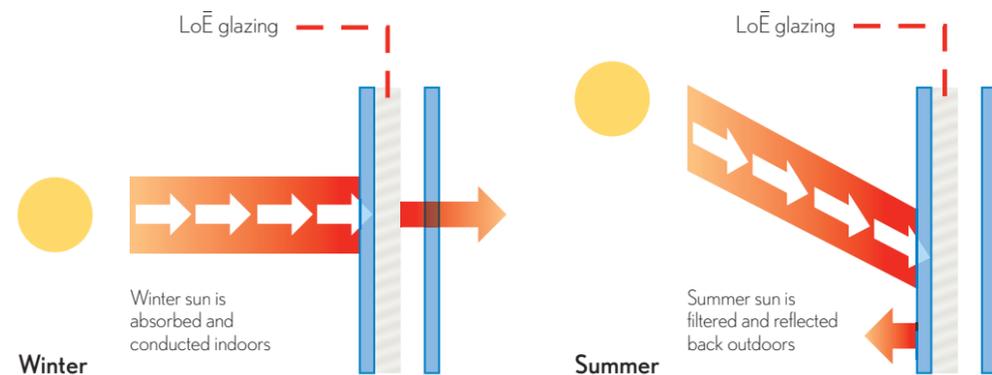


Industry leading performance. Impressing everyone.

The NFRC defined an energy performance rating system for the entire window and door industry. It rates:

- + U-factor, or how well a window keeps heat inside a building.
- + Solar heat gain, or a window's ability to block warming caused by sunlight.
- + Visible light transmittance, or how much light gets through a product.
- + Air leakage or heat loss and gain by infiltration through cracks in the window assembly.

Fortunately, Ultrex is far less conductive than aluminum (500x less) and is similar to wood and to PVC. It provides an insulated barrier against extreme weather temperatures, keeping homes comfortable, and reducing heating and cooling costs.



LoE and Argon gas means UV rays are screened to reduce fading and damage to upholstery and carpets. Integrity offers both LoE² and LoE³-366® glass for the ultimate in energy efficiency.

The National Fenestration Rating Council, the Department of Energy, and the U.S. Environmental Protection Agency were all impressed.

Integrity Windows and Doors received one of the highest performance ratings.



¹ ENERGY STAR at www.energystar.gov
² Sustainable Energy Coalition at www.sustainableenergy.org

Everything meets your standards.

These options suit your preferences.

Glazing

Energy efficiency, safety and privacy. Choose from Integrity's standard LoE² insulated glass with Argon gas* or LoE³-366[®] with Argon gas. Both tempered insulated glass with Argon gas (standard on larger units and doors, and available on most other units); or tempered obscure insulated glass with Argon gas (available on select products and sizes) are available in LoE² and LoE³-366.



LoE² (Standard) and LoE³-366 insulated glass with Argon gas; available in tempered



Tempered obscure insulated glass with Argon gas



Grilles-Between-the-Glass** shown in Bronze

Wood interior Grilles shown in Bare Wood

Simulated Divided Lite shown in Pebble Gray

Divided Lites

Simulated Divided Lites (SDL) are bars permanently adhered to both sides of the glass for a more authentic look. SDL is available in several popular lite cut options (see page 37) and is finished to match your interior and exterior finish options. **Profiled Grilles-Between-the-Glass (GBG)** offer all the style with no hassle by inserting the grille detail inside the two glass panels. GBG is available in several popular lite cut options (see page 37) and feature a white interior with a Stone White, Pebble Gray, Cashmere, Bronze or Evergreen exterior to match the exterior finish. (Not available in polygons except direct glaze rectangles.) **Wood Interior Grilles** feature easy removal for cleaning. Available in bare wood or with factory applied white finish on interior or exterior.



Pre-Finish White (interior)

Bare Wood (interior)

Finishes

Interior Finishes: Standard bare wood to stain or paint to match your interior; or a factory-applied white semi-gloss interior finish for reduced job site finishing time and labor.

Exterior Finishes: Stone White, Cashmere, Pebble Gray, Bronze or Evergreen. All are paintable without affecting the durability.



Stone White (exterior)



Cashmere (exterior)



Pebble Gray (exterior)



Bronze (exterior)



Evergreen (exterior)

Available with IMPACT

Integrity from Marvin is pleased to offer IMPACT rated products for East and Gulf Coast States for wind zones up to 140 mph. Integrity Wood-Ultrex Awnings, Casements, Double Hungs, Polygons, Sliding French Doors and Outswing French Doors are available with an IZ3 performance rating. What separates Integrity IMPACT products is their Ultrex construction. Ultrex is the perfect material to withstand the harshest coastal storm and everyday coastal living. Ultrex's strength, minimal expansion/contraction and superior resistance to heat, UV degradation and corrosion mean that IMPACT windows won't only stand up to the storm - they will stand up to time.



Find out more about IMPACT products from Integrity at integritywindows.com/impact.

INTEGRITY[®] FROM MARVIN
WOOD-ULTREX[®] SERIES

Integrity[®] Hardware Finish Options



French Door handle sets offer classic styling, keyed cylinders, multi-point locking systems and available PVD finishes for superior durability.

Windows feature classic low profile durable hardware for clean aesthetics, safety and security.

HARDWARE FINISHES	Sliding Patio Door		Sliding French Door	Inswing French Door	Outswing French Door	Windows
	Interior	Exterior	Interior and Exterior	Interior and Exterior	Interior and Exterior	Interior
White						
Pebble Gray						
Cashmere						
Bronze						
Evergreen						
Almond Frost						
Brass						
Brass PVD						
Satin Nickel						
Satin Nickel PVD						
Oil Rubbed Bronze						
Oil Rubbed Bronze PVD						
ADJUSTABLE HINGE FINISHES	Sliding Patio Door	Sliding French Door	Inswing French Door	Outswing French Door	Windows	
Goldtone						
White						
Pebble Gray						
Gray						
Cashmere						
Bronze						
Evergreen						
Coastal Brass						
Coast Satin Nickel						

* Argon gas not available in high elevations where capillary tubes are required.
** Not available in polygons except in direct glaze rectangles.

Like windows, installation should be worry-free.

Integrity Windows and Doors are constructed to make **installation simple and efficient.**

Delivered in 10 calendar days over 99% of the time for 10 years running. If you're a builder, you'll quickly see the value of these services. If you're a homeowner, you may not even notice them.

Integrity Windows and Doors make your job easier. Easy to order. Easy to install. Weather-tight, solid and durable which means virtually no call-backs. Designed to last for generations, backed by a 20/10 warranty. Delivered complete and when you need them, factory milled and ready to install. Now that's excellence.



The following standard features make **choosing Integrity even easier.**



Preattached nailing fin for easier installation.



Factory-installed screens are a standard offering with operating windows.



Factory-applied jamb extensions save time and labor. We supply 4-9/16," 6-9/16," and 6-13/16" standard width jambs in bare wood or white interior finish.



Integral corner key keeps window and door units square. Plus, we inject adhesive sealant to create corner joints that stay sealed and square.



The Ultrex® exterior is paintable, and holds dark colors better than vinyl or vinyl clad.



Create your own assemblies with available factory mulling or field mulling kits.

Builders, contractors, architects and homeowners all agree: Integrity® Windows and Doors are designed for excellence.



A selection of hardware finishes, divided lites, lite cuts and an available wood veneer screen surround provide an abundance of design options.



**CASEMENT
AND AWNING
WINDOWS**

Available with **IMPACT**



Remarkable engineering for a window that's sure to get a lot of use. Dual arm roto gear operation and sequential multi-point locking system ensure DP50 rated performance on all casement and awning windows so they will remain airtight, watertight, and secure even in driving rains and strong winds. Clean lines, a new folding handle and single lever lock enhance the beautiful wood interior, while factory mulling with casements, awnings, round tops, polygons, transoms and picture windows enable unique multiple configurations. Available with stainless steel coastal operating hardware.



- + Sequential multi-point locking system ensures DP50-rated performance on all sizes.
- + Reliable dual-arm roto gear hardware prevents sagging and allows for easy cleaning.
- + Available stainless steel hardware package for superior corrosion resistance.
- + Stationary, operating and transom picture units available.



CASEMENT AND AWNING

Designed for a great first impression.
Engineered for a great lasting impression.

DOUBLE HUNG

Every window's a performer.
This one's a star.



- + Low-profile sash locks provide smooth operation.
- + A positive detent reinforces when the window is locked.
- + Robust sill nose and 13.5 degree sloped sill ensure proper water management and create a more traditional appearance.
- + Take the design pressure (DP) up to 50. An optional field-applied wood sill liner kit increases water performance to a DP 50 rating, and installs easily on any Integrity double hung.

Self-sealing corner keys, weather stripping and jamb-sill gaskets mean a minimum design pressure rating of DP40. Add ergonomic hardware, a dramatic sloped sill, and more wood to the interior, and this double hung window not only performs great, it looks great doing it. Mull with picture windows, other double hungs, transoms, polygons or round tops to create almost any assembly imaginable. Factory mulling and field mulling kits are available.



Both sash tilt and remove easily, with no tools or strings to detach.

DOUBLE HUNG
WINDOWS

Available with **IMPACT**

Some companies treat their sliding window as a double hung on its side, compromising energy performance and shortening operating life. Our glider is designed to glider specifications and standards. Note the Ultrex® exterior, the generous amount of wood on the interior, the easy installation, the tilt-and-remove simplicity, and the sash-lock hardware. Jambs, weatherstripping, and sash interlock are specifically engineered to the unique performance requirements of the glider. No room for a swinging sash? The glider will fit right in, closely matching casement proportions and lines.



- + Hardware available in White, Almond Frost, Brass, Satin Nickel or Oil Rubbed Bronze.
- + Sash-lock hardware seals weatherstripping against the frame as well as offering security.
- + Our remarkable tilt latch makes removal and reinstallation of sash easy.
- + Operating sash slide effortlessly, and easily tilt and remove.

GLIDER WINDOWS

The windows slide.
The standards didn't.

GLIDER WINDOWS



Triple sash option provides the appearance of a picture unit assembly.

BAY | BOW WINDOWS

Turn your view into a **panorama.**

- + For maximum air circulation, choose the smooth arc of a Bay window with four or five operating casements.
- + Our head and seat boards use engineered wood for superior strength, stability, and durability. They can be factory-crafted and applied. Available in bare wood or white interior finish.
- + Choose from convenient factory mulling or order one of our mulling kits.



30° and 45° bays add dimension and light to a room.

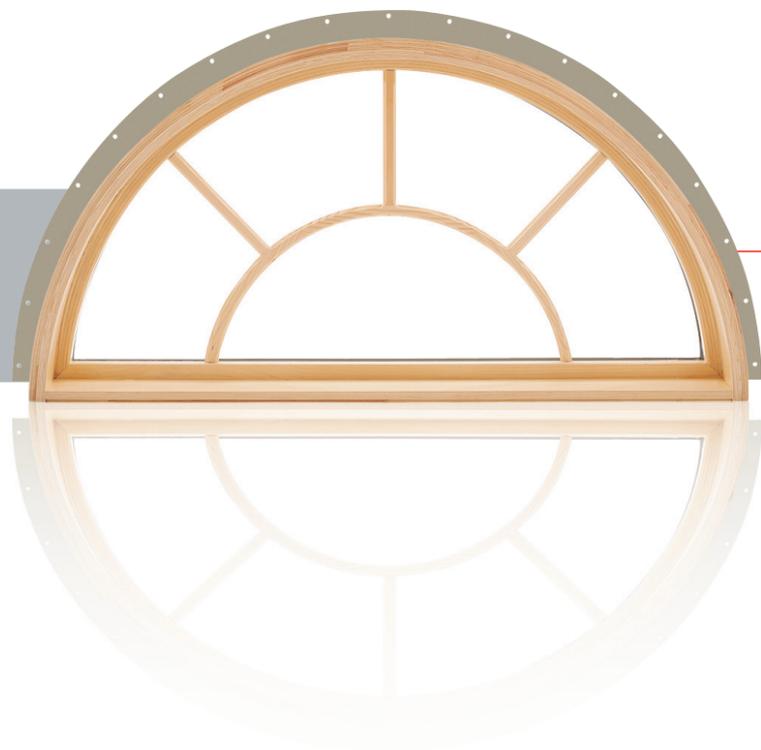


BAY AND BOW WINDOWS



Extend the feeling of living space without adding square footage. The view-enhancing appeal of a bay or bow window is irresistible, especially when it features the low-maintenance exterior and finely finished wood interior of an Integrity® Double Hung or Casement window.

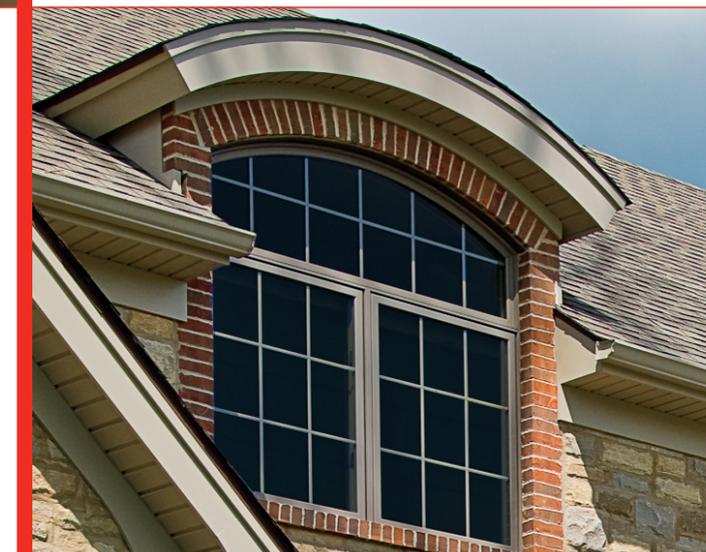
An integral Ultrex® nailing fin makes the unit exceedingly stable and extremely weather-tight. Available in full perimeter, radius only, or can be excluded.



ROUND TOP WINDOWS



Match a Round Top to just about every Integrity window or door. Choose from quarter rounds, half rounds or ellipticals. Standard Ultrex® exterior and backbone. Beautiful wood interiors. Multiple assemblies can add presence and value and make an ordinary room extraordinary.



- + Simulated Divided Lites, Grilles-Between-the-Glass or Wood Interior Grilles add an authentic look and feel.
- + Exterior profile is shaped to complement the entire Integrity® from Marvin line.

ROUND TOP WINDOWS

A dynamic complement
to top off your design.



MARVIN ROUND TOPS

Made for Integrity®

Marvin Round Tops Made for Integrity further expand your design possibilities. Designed to complement Integrity Windows and Doors. Available in a wide variety of sizes, shapes, and options. Extruded aluminum cladding protects against extreme weather conditions. Finish exceeds AAMA 2605-05 specifications. ENERGY STAR rated. The proven quality of Marvin Windows and Doors (including comprehensive Marvin warranty.) The quick lead times and reliable delivery of Integrity.

Easy options.

Easy installation.

With more sizes, shapes and design options to work with, Marvin Round Tops Made for Integrity make perfect sense for builders and homeowners.

Grilles-Between-the-Glass option is easy to clean and available in White interior with a Stone White, Pebble Gray, Cashmere, Bronze or Evergreen exterior. Wood Interior Grilles, featuring easy cleaning, are also available. Grilles come in bare wood or white finish.

On time installation and delivery. That's why we provide easy ordering and consistent delivery of your entire order—including Marvin Round Tops— at the same time, in perfect shape, and ready to go.



Grilles-Between-the-Glass



Simulated Divided Lites



Wood Interior Grilles



POLYGON WINDOWS

Extend your choices without missing your deadline.



Octagon



Isosceles Triangle



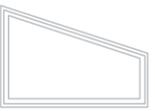
Pentagon



Rectangle



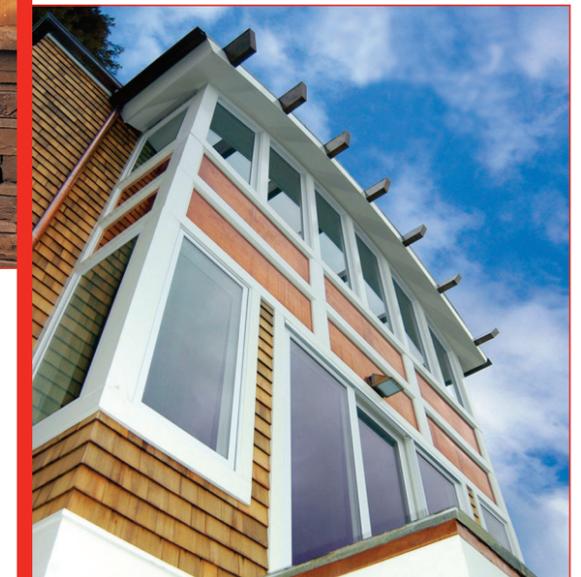
90° Triangle



Trapezoid

POLYGON WINDOWS

Big views beg for big windows.
Polygons are available with lengths
of 96" and overall dimension of 49
square feet.*



Eight shapes including rectangles, triangles, pentagons, and octagons. Exceptional Integrity performance. Use them as sidelights, transoms, and flankers for picture windows or create unique configurations.** Finally, a standard line of windows that look anything but standard.

- + Standard jambs of 4-9/16" (116 mm), 6-9/16" (167 mm), and 6 13/16" (173 mm) are available factory applied or as an extension kit.
- + Interior is your choice of a contemporary white semi-gloss or bare wood you can stain or paint to match your interior.

Available with **IMPACT**

* Polygons maximum size is 72" x 96". When the longest leg exceeds 72" the shortest leg cannot exceed 72".

** Grille, GBG, and SDL options not available on polygons except direct glaze rectangles.

SLIDING PATIO DOOR

Exceptional beauty meets
day-in, day-out performance.

Everything you want in a sliding door: Contemporary lines enhanced by a large daylight opening and a beautiful wood interior. The door glide is effortless and designed to withstand the elements with the exterior strength of Ultrex®. Debris stays out with the reliable top hung screen. Choose from two-panel or three-panel configurations in the most popular sizes. Factory-assembled for easy installation.



- + Top hung screen won't get locked up on dirt or pebbles.
- + Exterior handle available in White, Pebble Gray, Cashmere, Bronze or Evergreen.
- + Interior handle available in White, Almond Frost or Brass.
- + The strength and durability of Ultrex where you need it most: on the sill, standing up to traffic and weather.
- + For a seamless interior, we finished the sill with an enduring oak liner.

SLIDING
PATIO DOOR



Our doors come with standard tempered LoE² insulated glass with Argon gas or optional tempered LoE³-366[®] insulated glass with Argon gas.

Add an elegant, authentically French look to any home. A dramatic wide rail highlights this door's beautiful rich wood interior. And the Ultrex® exterior will stay beautiful and square for many years. Ultrex sill offers superior durability and energy performance. Available in two-panel and three-panel configurations and many popular sizes, including an 8' height for homes with taller ceilings. Comes with energy efficient standard LoE² tempered glass or optional LoE³-366® tempered glass. Top-hung screen won't get hung up on debris.



- + Thin, low-friction polycarbonate track combined with dual ball-bearing rollers provides smooth, easy operation.
- + For a seamless interior, we finished the sill with an enduring oak sill liner.
- + Delivered with factory-assembled frames and pre-hung panels for easier installation.

SLIDING FRENCH DOOR

Your picture window
doesn't have to be a window.

SLIDING FRENCH DOOR



Traditionally-styled, ergonomically-designed handles. Features a keyed cylinder and a dual point lock for added security and performance. Available in White, Almond Frost, Brass PVD, Satin Nickel PVD, and Oil Rubbed Bronze PVD.

Available with **IMPACT**

INSWING FRENCH DOOR

In this version of French,
the accent is on style.

- + Adjustable hinges mean that as a home settles and shifts over time, our swinging door will still open and close easily. Available in Goldtone, White, Gray and Bronze.
- + Traditionally-styled handles available in White, Almond Frost, Brass PVD, Satin Nickel PVD and Oil Rubbed Bronze PVD. PVD is the highest grade finish available and offers superior corrosion resistance.

Stainless steel multi-point locking system seals the door in four locations—head, sill, deadbolt, and keyed cylinder—for stability and security.



INSWING
FRENCH DOOR



Presenting an elegant way to say "welcome." The Inswing French Door features a rich wood interior, XX configuration, 8-0" heights, always beautiful Ultrex® exterior, wide stiles and rails, Ultrex sill with interior oak sill liner, and a classic lever and escutcheon handle set. Virtually maintenance-free Ultrex exterior and sill provides exceptional strength, stability, and durability. The clear, smooth pine interior readily accepts paint or stain. Energy saving LoE² tempered glass with Argon gas standard or select LoE³-366® tempered glass with Argon gas for enhanced performance.

Open your home with style and performance. Rich wood interiors, 8-0" heights, XX configurations and wide stiles and rails make this door stand out from the crowd. Standard DP50 performance, stainless steel handle activated multipoint locking system, stainless steel fasteners, available PVD handle sets and optional adjustable hinge finishes make it stand up to the elements. Energy saving LoE² tempered glass with Argon gas standard or select LoE³-366[®] tempered glass with Argon gas for enhanced performance.



- + Traditionally styled lever and escutcheon handle set available in White, Almond Frost, Brass PVD, Satin Nickel PVD and Oil Rubbed Bronze PVD.
- + Stainless steel multi-point locking system seals the door in four locations—head, sill, deadbolt, and keyed cylinder—for stability and security.
- + An oak sill liner can be painted or stained to match the solid wood interior.

OUTSWING FRENCH DOOR

Step out with style.
Step up with performance.

OUTSWING FRENCH DOOR



Adjustable hinges available in White, Pebble Gray, Cashmere, Bronze, Evergreen, Coastal Brass and Coastal Satin Nickel.

Available with **IMPACT**

ORDERING INTEGRITY® WINDOWS AND DOORS

Each product section offers product codes for ordering under each unit. Codes do not necessarily indicate product size. Metric millimeter measurements are in parentheses.

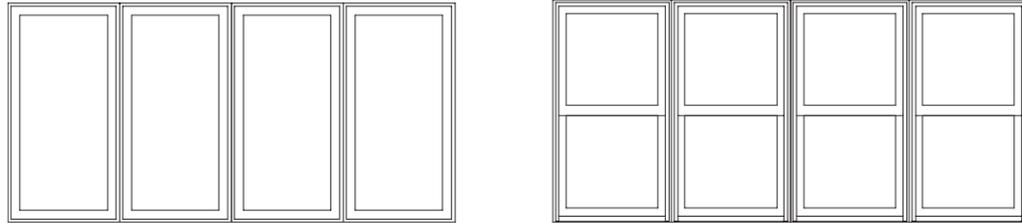
You'll notice four measurements for each window or door: masonry opening, rough opening, frame size and glass size. The masonry opening is for a home built with brick or stone; rough openings are for houses with wood, vinyl or metal siding. Frame size measures from edge to edge of the unit; glass size indicates the dimensions of the total glass, both visible and covered, in a single sash.

Mas. Opg. (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	3-0 1/2 (927)	4-0 1/2 (1232)
Rgh. Opg. (mm)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)	4-1 (1245)
Frame Size (mm)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)	4-0 (1219)
Glass Size (mm)	19 13/16" (503)	23 13/16" (605)	27 13/16" (706)	31 13/16" (808)	43 3/16" (1113)

1-7 3/8 (492) 1-7 5/8 (498) 1-7 7/8 (504) 1-15 1/16" (379)					
	IAWN2519	IAWN2919	IAWN3319	IAWN3719	IAWN4919

Factory Mulling Options

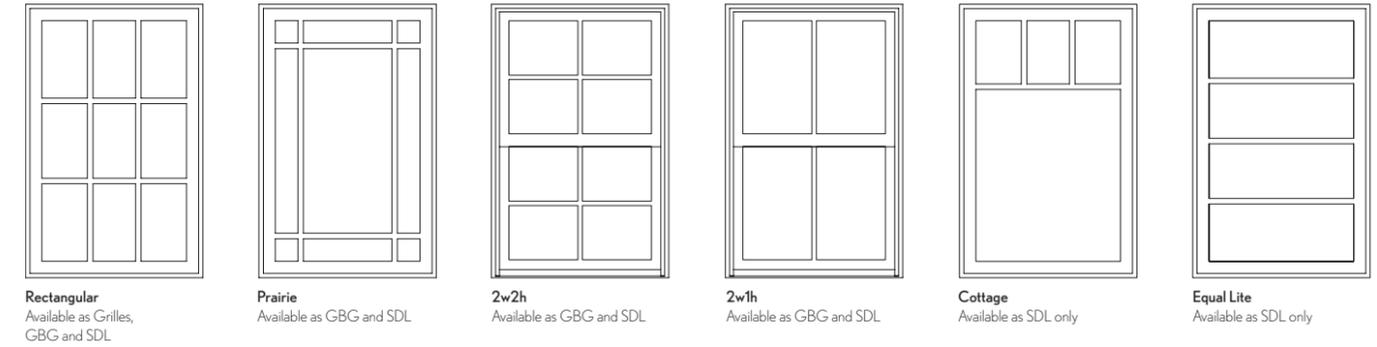
A variety of factory mullied combinations are available two units wide by two units high or four units wide by one unit high. Please contact your local *Integrity from Marvin* representative for more information.



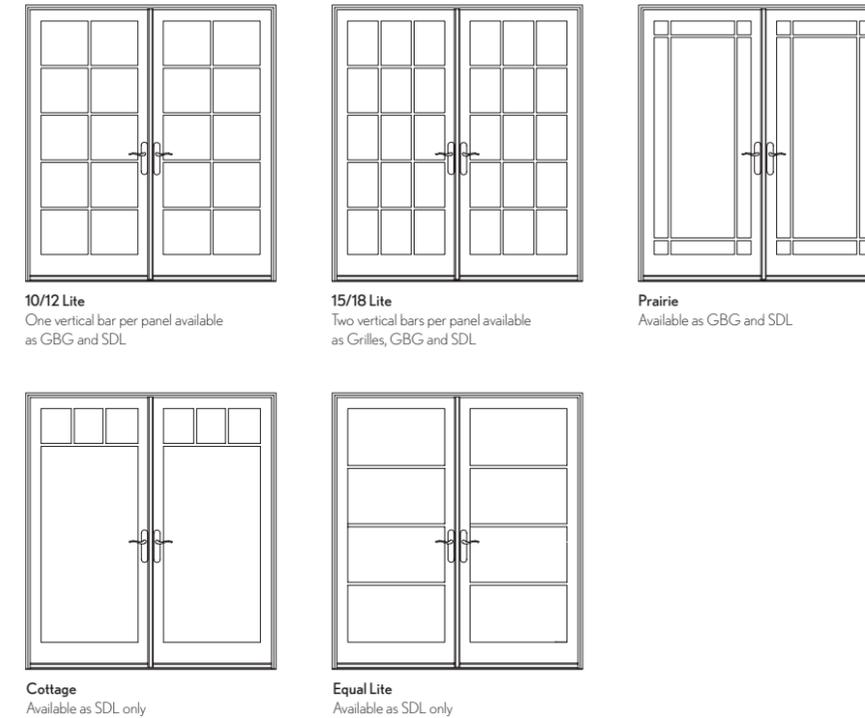
INTEGRITY LITE CUTS

INTEGRITY® FROM MARVIN
WOOD-ULTREX® SERIES

Windows



Doors



Cottage lite cut not available on Wood-Ultrex Double Hung.

Equal lite allows for the number of horizontal and vertical lites to be specified for a custom appearance.

Lite cuts are dependent on product type and size. Please consult your local Integrity from Marvin representative for details and availability.

CASEMENT

Operator/Stationary Units

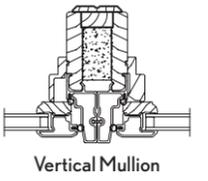
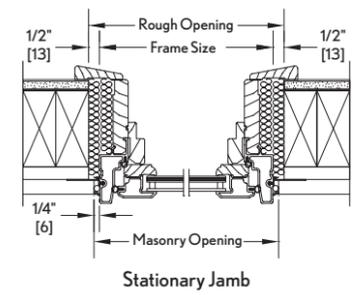
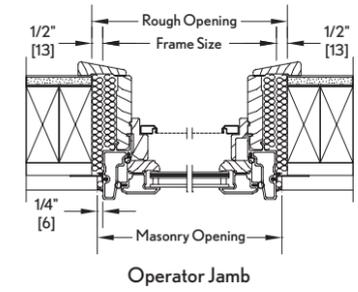
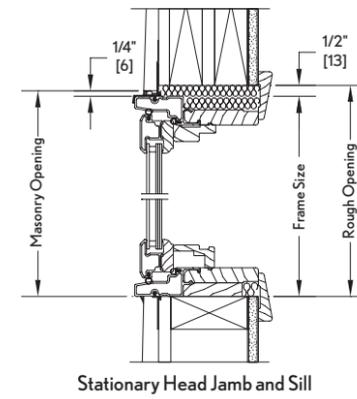
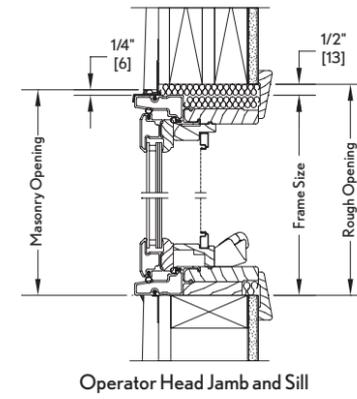
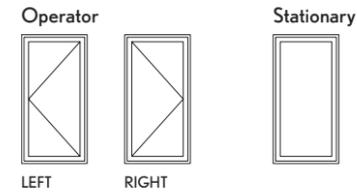
Mas. Opg. (mm)	1-4 1/2 (419)	1-8 1/2 (521)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	3-0 1/2 (927)
Rgh. Opg. (mm)	1-5 (432)	1-9 (533)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)
Frame Size (mm)	1-4 (406)	1-8 (508)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)
Glass Size (mm)	11 13/16" (300)	15 13/16" (402)	19 13/16" (503)	23 13/16" (605)	27 13/16" (706)	31 13/16" (808)

2-7 3/8 (797) 2-7 5/8 (803) 2-7 1/8 (791) 26 15/16" (684)		ICA2131	ICA2531	ICA2931		
2-11 3/8 (898) 2-11 5/8 (905) 2-11 1/8 (892) 30 15/16" (786)	ICA1735	ICA2135	ICA2535	ICA2935		
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 1/8 (994) 34 15/16" (887)	ICA1739	ICA2139	ICA2539	ICA2939	ICA3339**	ICA3739T**
3-7 1/2 (1105) 3-7 3/4 (1111) 3-7 1/4 (1099) 39 1/16" (992)	ICA1743	ICA2143	ICA2543	ICA2943*	ICA3343*	ICA3743T*
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 1/8 (1197) 42 15/16" (1091)	ICA1747	ICA2147	ICA2547	ICA2947*	ICA3347*	ICA3747T
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 1/8 (1400) 50 15/16" (1294)	ICA1755	ICA2155	ICA2555	ICA2955*	ICA3355*	ICA3755T*
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 1/8 (1502) 54 15/16" (1395)	ICA1759	ICA2159	ICA2559	ICA2959*	ICA3359*	ICA3759T*
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 1/8 (1603) 58 15/16" (1497)	ICA1763	ICA2163	ICA2563	ICA2963*	ICA3363*	ICA3763T*
5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 1/8 (1807) 66 15/16" (1700)	ICA2177T	ICA2171T	ICA2571T	ICA2971T*	ICA3371T*	ICA3771T*

CASEMENT

Construction Details

Casements available as an operator or stationary.
L or R hinging determined from exterior.



Details and Elevations not to scale.

T = Standard Tempered

Optional Casement Grilles, GBGs and SDLs are available in a standard Rectangular cut shown.

Other available lite cuts shown on page 37.

*These windows meet National Egress Codes for fire evacuation. Local codes may differ.

**3339 and 3739 meet Egress if installed at proper height from floor.

■ = Obscure Glass Available

CASEMENT

2 Wide Operator/Stationary Units

Mas. Opp. (mm)	2-8 1/2 (826)	3-4 1/2 (1029)	4-0 1/2 (1232)	4-8 1/2 (1435)
Rgh. Opp. (mm)	2-9 (838)	3-5 (1041)	4-1 (1245)	4-9 (1448)
Frame Size (mm)	2-8 (813)	3-4 (1016)	4-0 (1219)	4-8 (1422)

2-7 3/8 (797)				
		IICA21312W	ICA25312W	ICA29312W
2-11 3/8 (898)				
	ICA17352W	ICA21352W	ICA25352W	ICA29352W
3-3 3/8 (1000)				
	ICA17392W	ICA21392W	ICA25392W	ICA29392W
3-7 1/2 (1105)				
	ICA17432W	ICA21432W	ICA25432W	ICA29432W*
3-11 3/8 (1203)				
	ICA17472W	ICA21472W	ICA25472W	ICA29472W*
4-7 3/8 (1406)				
	ICA17552W	ICA21552W	ICA25552W	ICA29552W*
4-11 3/8 (1508)				
	ICA17592W	ICA21592W	ICA25592W	ICA29592W*
5-3 3/8 (1610)				
	ICA17632W	ICA21632W	ICA25632W	ICA29632W*
5-11 3/8 (1813)				
	ICA17712W	ICA21712WT	ICA25712WT	ICA29712WT*

CASEMENT

2 Wide Operator/Stationary Units

Mas. Opp. (mm)	5-4 1/2 (1638)	6-0 1/2 (1842)
Rgh. Opp. (mm)	5-5 (1651)	6-1 (1854)
Frame Size (mm)	5-4 (1626)	6-0 (1829)

2-7 3/8 (797)		
2-11 3/8 (898)		
3-3 3/8 (1000)		
3-7 1/2 (1105)		
3-11 3/8 (1203)		
4-7 3/8 (1406)		
4-11 3/8 (1508)		
5-3 3/8 (1610)		

Details and Elevations not to scale.

T = Standard Tempered

*These windows meet National Egress Codes for fire evacuation. Local codes may differ.

**3339 and 3739 meet Egress if installed at proper height from floor.

■ = Obscure Glass Available

Any unit in these combinations can be operating or stationary. Operating sash are viewed from the exterior.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied up to 4 units wide by 1 unit high,

MAXIMUM ROUGH OPENING not to exceed 113"x 71 5/8"; OR up to 2 units wide by 2 units high.

MAXIMUM ROUGH OPENING: not to exceed 73"x 94 3/4". Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.

4 Wide Operator/Stationary Units

Mas. Opp. (mm)	5-4 1/2 (1638)	6-8 1/2 (2045)	8-0 1/2 (2451)	9-4 1/2 (2858)
Rgh. Opp. (mm)	5-5 (1651)	6-9 (2057)	8-1 (2464)	9-5 (2870)
Frame Size (mm)	5-4 (1626)	6-8 (2032)	8-0 (2438)	9-4 (2845)

2-7 3/8 (797)			
2-7 5/8 (803)			
2-7 7/8 (791)			
2-11 3/8 (898)			
2-11 5/8 (905)			
2-11 7/8 (892)			
3-3 3/8 (1000)			
3-3 5/8 (1006)			
3-3 7/8 (994)			
3-7 1/2 (1105)			
3-7 3/4 (1111)			
3-7 1/4 (1099)			
3-11 3/8 (1203)			
3-11 5/8 (1210)			
3-11 7/8 (1197)			
4-7 3/8 (1406)			
4-7 5/8 (1413)			
4-7 7/8 (1400)			
4-11 3/8 (1508)			
4-11 5/8 (1514)			
4-11 7/8 (1502)			
5-3 3/8 (1610)			
5-3 5/8 (1616)			
5-3 7/8 (1603)			
5-11 3/8 (1813)			
5-11 5/8 (1819)			
5-11 7/8 (1807)			
6-6 15/16 (1700)			

In-Sash Transoms

Mas. Opp. (mm)	1-8 1/2 (521)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	3-0 1/2 (927)	6-0 1/2 (1842)
Rgh. Opp. (mm)	1-9 (533)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)	6-1 (1854)
Frame Size (mm)	1-8 (508)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)	6-0 (1829)
Glass Size (mm)	15 13/16" (402)	19 13/16" (503)	23 13/16" (605)	27 13/16" (706)	29 13/16" (757)	69 3/16" (1757)

1-4 (406)						
1-4 1/4 (413)						
1-3 3/4 (400)						
11 9/16" (294)						
1-4 (406)						
1-4 1/4 (413)						
1-3 3/4 (400)						
12 15/16" (329)						

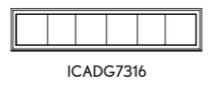
Picture Unit

Mas. Opp. (mm)	3-0 1/2 (927)	4-0 1/2 (1232)	4-8 1/2 (1435)	6-0 1/2 (1842)
Rgh. Opp. (mm)	3-1 (940)	4-1 (1245)	4-9 (1448)	6-1 (1854)
Frame Size (mm)	3-0 (914)	4-0 (1219)	4-8 (1422)	6-0 (1829)
Glass Size (mm)	31 13/16" (808)	43 13/16" (1113)	51 13/16" (1316)	67 13/16" (1722)

3-3 3/8 (1000)				
3-3 5/8 (1006)				
3-3 7/8 (994)				
3-7 1/2 (1105)				
3-7 3/4 (1111)				
3-7 1/4 (1099)				
38 15/16" (988)				
3-11 3/8 (1203)				
3-11 5/8 (1210)				
3-11 7/8 (1197)				
42 15/16" (1091)				
4-7 3/8 (1407)				
4-7 5/8 (1413)				
4-7 7/8 (1400)				
50 15/16" (1294)				
4-11 3/8 (1508)				
4-11 5/8 (1514)				
4-11 7/8 (1502)				
54 15/16" (1395)				
5-3 3/8 (1610)				
5-3 5/8 (1616)				
5-3 7/8 (1603)				
58 15/16" (1497)				
5-11 3/8 (1813)				
5-11 5/8 (1819)				
5-11 7/8 (1807)				
6-6 15/16" (1700)				

Details and Elevations not to scale.
T = Standard Tempered
Optional picture Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Also available in Prairie lite cuts shown on page 37.
*These windows meet National Egress Codes for fire evacuation. Local codes may differ.
= Obscure Glass Available
Any ICA unit in these combinations can be operating or stationary. Operating sash are viewed from the exterior.

Direct Glaze Transom



Optional transom grilles, GBG's and SDL's are available in standard Rectangular cut, as shown. Alternate lite cuts available to align with select lite cut options shown on page 37.

Unequal lite cuts on Direct Glaze Transoms. GBG and SDL in an ICADG 7316 will line up over a 25-3W ICA only. Direct Glaze Rectangles also available, see Polygons, pages 70 & 71.

Multiple Assemblies/21" Casement Flankers with Picture Center Unit

Mas. Opp. (mm)	7-4 1/2 (2248)
Rgh. Opp. (mm)	7-5 (2261)
Frame Size (mm)	7-4 (2235)

3-3 3/8 (1000)			
3-3 5/8 (1006)			
3-3 7/8 (994)			
3-11 3/8 (1203)			
3-11 5/8 (1210)			
3-11 7/8 (1197)			
4-7 3/8 (1406)			
4-7 5/8 (1413)			
4-7 7/8 (1400)			
4-11 3/8 (1508)			
4-11 5/8 (1514)			
4-11 7/8 (1502)			

Mas. Opp. (mm)	8-0 1/2 (2451)
Rgh. Opp. (mm)	8-1 (2464)
Frame Size (mm)	8-0 (2438)

4-11 3/8 (1508)			
4-11 5/8 (1514)			
4-11 7/8 (1502)			
5-3 3/8 (1610)			
5-3 5/8 (1616)			
5-3 7/8 (1603)			

Operator/Stationary Units

Mas. Opg. (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	3-0 1/2 (927)	4-0 1/2 (1232)
Rgh. Opg. (mm)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)	4-1 (1245)
Frame Size (mm)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)	4-0 (1219)
Glass Size (mm)	19 13/16" (503)	23 13/16" (605)	27 13/16" (706)	31 13/16" (808)	43 13/16" (1113)

1-7 3/8 (492)					
1-11 3/8 (594)					
2-3 3/8 (695)					
2-11 3/8 (899)					
3-3 3/8 (1000)					
3-11 3/8 (1203)					

Details and Elevations not to scale.

T = Standard Tempered

Optional Awning Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Other Available lite cuts shown on page 37.

= Obscure Glass Available

2 Wide Operator/Stationary Units

Mas. Opg. (mm)	4-0 1/2 (1232)	4-8 1/2 (1435)	5-4 1/2 (1638)
Rgh. Opg. (mm)	4-1 (1245)	4-9 (1448)	5-5 (1651)
Frame Size (mm)	4-0 (1219)	4-8 (1422)	5-4 (1626)

1-7 3/8 (492)			
1-11 3/8 (594)			
2-3 3/8 (695)			

Details and Elevations not to scale.

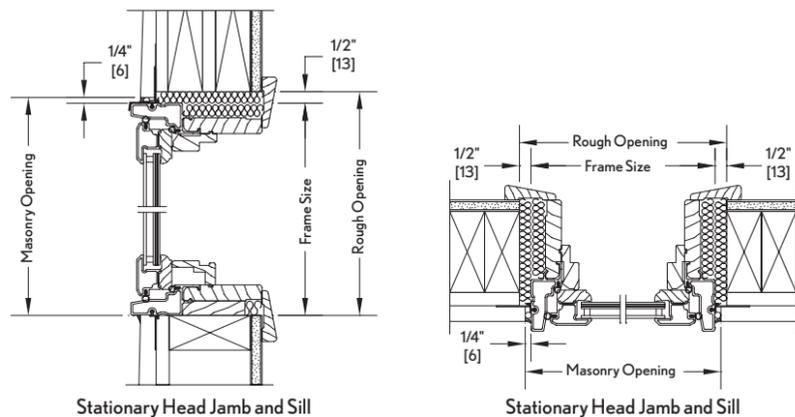
= Obscure Glass Available

Any unit in these combinations can be operating or stationary. Operating sash are viewed from the exterior.

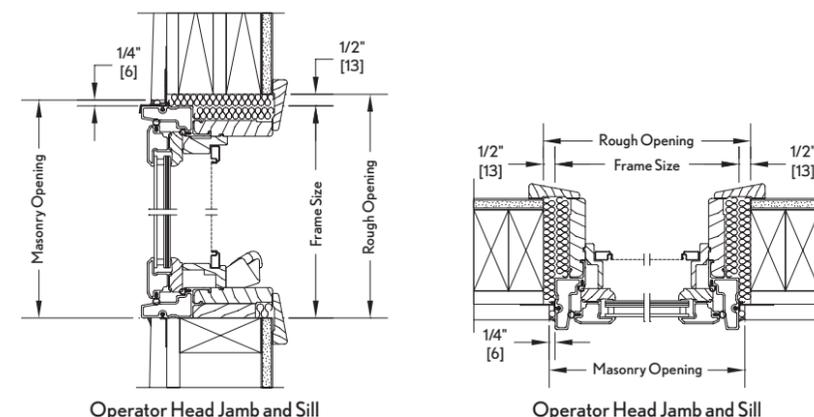
Mas. Opg. (mm)	6-0 1/2 (1842)	8-0 1/2 (2451)
Rgh. Opg. (mm)	6-1 (1854)	8-1 (2464)
Frame Size (mm)	6-0 (1829)	8-0 (2438)

1-7 3/8 (492)		
1-11 3/8 (594)		
2-3 3/8 (695)		
2-11 3/8 (899)		
3-3 3/8 (1000)		
3-11 3/8 (1203)		

Construction Details



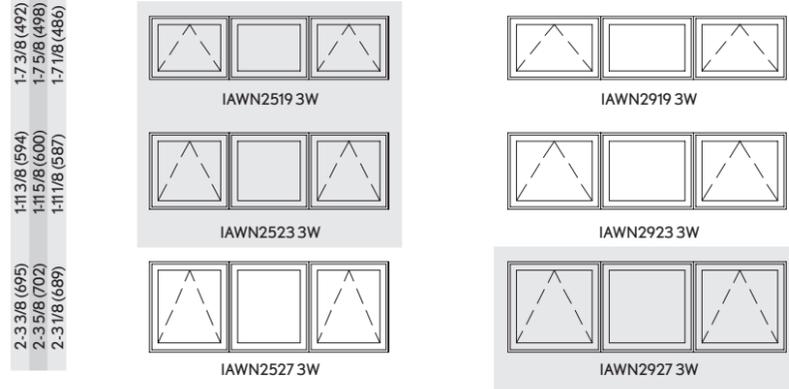
Construction Details



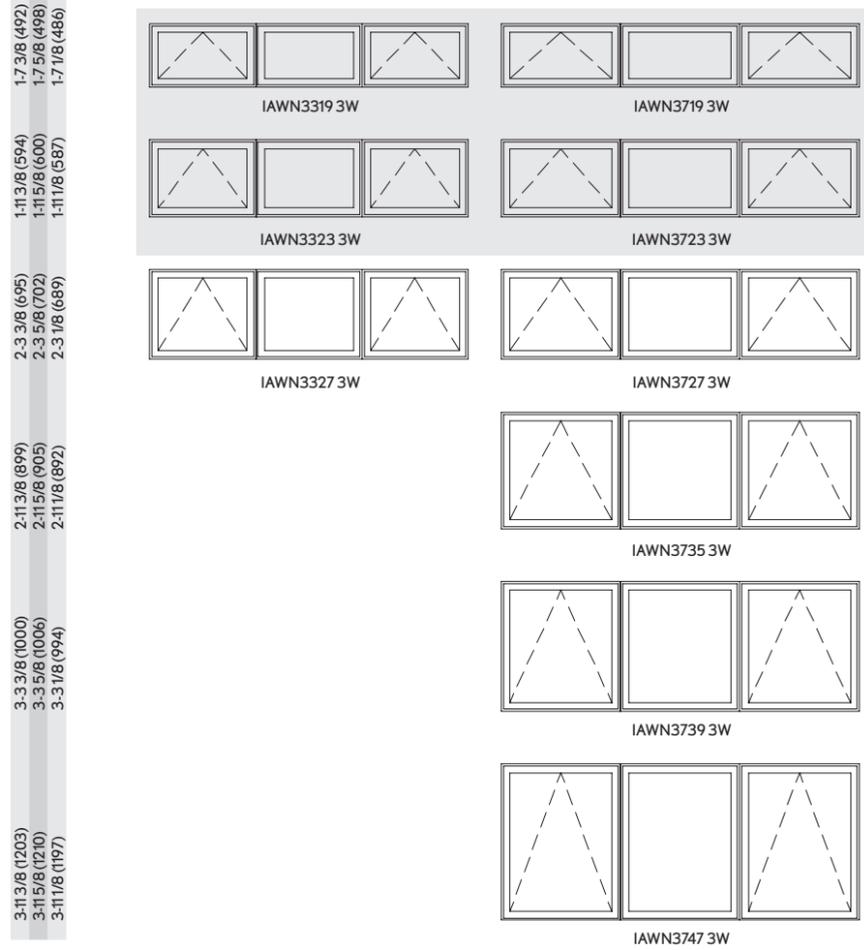
AWNING

3 Wide Operator/Stationary Units

Mas. Opp. (mm)	6-0 1/2 (1842)	7-0 1/2 (2146)
Rgh. Opp. (mm)	6-1 (1854)	7-1 (2159)
Frame Size (mm)	6-0 (1829)	7-0 (2134)



Mas. Opp. (mm)	8-0 1/2 (2451)	9-0 1/2 (2756)
Rgh. Opp. (mm)	8-1 (2464)	9-1 (2769)
Frame Size (mm)	8-0 (2438)	9-0 (2743)



Details and Elevations not to scale.

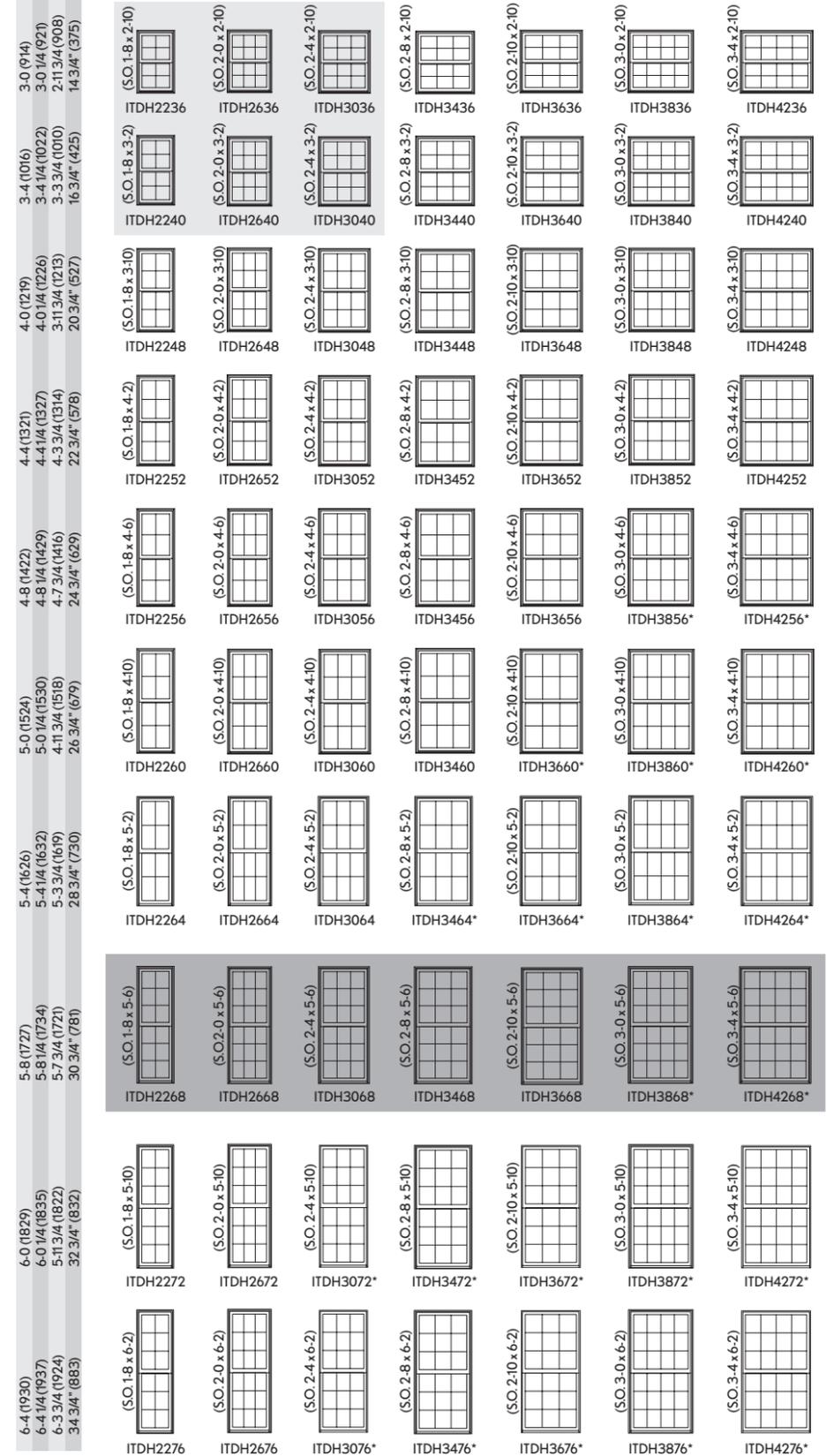
☐ = Obscure Glass Available

Any unit in these combinations can be operating or stationary. Operating sash are viewed from the exterior.

DOUBLE HUNG

Operator Units

Mas. Opp. (mm)	1-10 (559)	2-2 (660)	2-6 (762)	2-10 (864)	3-0 (914)	3-2 (965)	3-6 (1067)
Rgh. Opp. (mm)	1-10 1/2 (572)	2-2 1/2 (673)	2-6 1/2 (775)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-6 1/2 (1080)
Frame Size (mm)	1-9 1/2 (546)	2-1 1/2 (648)	2-5 1/2 (749)	2-9 1/2 (851)	2-11 1/2 (902)	3-1 1/2 (953)	3-5 1/2 (1054)
Glass Size (mm)	16 3/4" (425)	20 3/4" (527)	24 3/4" (629)	28 3/4" (730)	30 3/4" (781)	32 3/4" (832)	36 3/4" (933)



Details and Elevations not to scale.

Optional Double Hung Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Other available lite cuts shown on page 37.

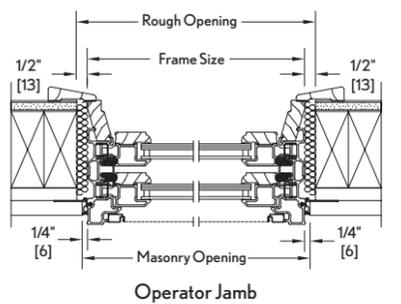
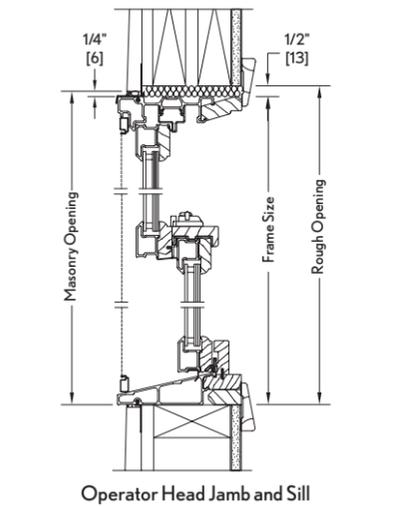
When ordering 6-9/16" (167 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

☐ = Obscure Glass Available

☐ = Available in Cottage Style with unequal sash. Cottage Style Glass size (min) 36-3/4" (933) / 24-3/4" (629).

Construction Details



2 Wide Operator Units

Mas. Opp. (mm)	3-7 1/2 (1105)	4-3 1/2 (1308)	4-11 1/2 (1511)	5-7 1/2 (1715)	5-11 1/2 (1816)	6-3 1/2 (1918)	6-11 1/2 (2121)
Rgh. Opp. (mm)	3-8 (1118)	4-4 (1321)	5-0 (1524)	5-8 (1727)	6-0 (1829)	6-4 (1930)	7-0 (2134)
Frame Size (mm)	3-7 (1092)	4-3 (1295)	4-11 (1499)	5-7 (1702)	5-11 (1803)	6-3 (1905)	6-11 (2108)

3-0 (914)							
3-0 1/4 (921)							
3-4 (1016)							
3-4 1/4 (1022)							
3-3 3/4 (1010)							
4-0 (1219)							
4-0 1/4 (1226)							
3-11 3/4 (1213)							
4-4 (1321)							
4-4 1/4 (1327)							
4-3 3/4 (1314)							
4-8 (1422)							
4-8 1/4 (1429)							
4-7 3/4 (1416)							
5-0 (1524)							
5-0 1/4 (1530)							
4-11 3/4 (1518)							
5-4 (1626)							
5-4 1/4 (1632)							
5-3 3/4 (1619)							
5-8 (1727)							
5-8 1/4 (1734)							
5-7 3/4 (1721)							
6-0 (1829)							
6-0 1/4 (1835)							
5-11 3/4 (1822)							
6-4 (1930)							
6-4 1/4 (1937)							
6-3 3/4 (1924)							

3 Wide Operator Units - 22", 26", 30" Widths

Mas. Opp. (mm)	5-5 (1651)	6-5 (1956)	7-5 (2261)
Rgh. Opp. (mm)	5-5 1/2 (1664)	6-5 1/2 (1969)	7-5 1/2 (2273)
Frame Size (mm)	5-4 1/2 (1638)	6-4 1/2 (1943)	7-4 1/2 (2248)

3-0 (914)			
3-0 1/4 (921)			
3-4 (1016)			
3-4 1/4 (1022)			
3-3 3/4 (1010)			
4-0 (1219)			
4-0 1/4 (1226)			
3-11 3/4 (1213)			
4-4 (1321)			
4-4 1/4 (1327)			
4-3 3/4 (1314)			
4-8 (1422)			
4-8 1/4 (1429)			
4-7 3/4 (1416)			
5-0 (1524)			
5-0 1/4 (1530)			
4-11 3/4 (1518)			
5-4 (1626)			
5-4 1/4 (1632)			
5-3 3/4 (1619)			
5-8 (1727)			
5-8 1/4 (1734)			
5-7 3/4 (1721)			
6-0 (1829)			
6-0 1/4 (1835)			
5-11 3/4 (1822)			
6-4 (1930)			
6-4 1/4 (1937)			
6-3 3/4 (1924)			

Details and Elevations not to scale.

* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

When ordering 6-9/16" (167 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

■ = Obscure Glass Available

■ = Available in Cottage Style with unequal sash. Cottage Style Glass size (min) 36-3/4" (933) / 24-3/4" (629).

See page 83 for specific DP ratings.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mulled up to 4 units wide by 1 unit high, **MAXIMUM ROUGH OPENING** not to exceed 113 1/2" x 76 1/4"; OR up to 2 units wide by 2 units high.

MAXIMUM ROUGH OPENING: not to exceed 84" x 96". Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.

DOUBLE HUNG

3 Wide Operator Units - 34", 36", 38" Widths

Mas. Opp. (mm)	8-5 (2565)	8-11 (2718)	9-5 (2870)
Rgh. Opp. (mm)	8-5 1/2 (2578)	8-11 1/2 (2731)	9-5 1/2 (2883)
Frame Size (mm)	8-4 1/2 (2553)	8-10 1/2 (2705)	9-4 1/2 (2858)

3-0 (914)			
3-0 (914)	ITDH3436 3W	ITDH3636 3W	ITDH3836 3W
3-4 (1016)			
3-4 (1016)	ITDH3440 3W	ITDH3640 3W	ITDH3840 3W
4-0 (1219)			
4-0 (1219)	ITDH3448 3W	ITDH3648 3W	ITDH3848 3W
4-4 (1321)			
4-4 (1321)	ITDH3452 3W	ITDH3652 3W	ITDH3852 3W
4-8 (1422)			
4-8 (1422)	ITDH3456 3W	ITDH3656 3W	ITDH3856 3W
5-0 (1524)			
5-0 (1524)	ITDH3460 3W	ITDH3660 3W	ITDH3860 3W
5-4 (1626)			
5-4 (1626)	ITDH3464 3W	ITDH3664 3W	ITDH3864 3W
5-8 (1727)			
5-8 (1727)	ITDH3468 3W	ITDH3668 3W	ITDH3868 3W
6-0 (1829)			
6-0 (1829)	ITDH3472 3W	ITDH3672 3W	ITDH3872 3W*
6-4 (1930)			
6-4 (1930)	ITDH3476 3W	ITDH3676 3W	ITDH3876 3W*

Details and Elevations not to scale.

* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

When ordering 6-9/16" (167 mm) or 6-13/16" (173 mm) jamb, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

■ = Available in Cottage Style with unequal sash. Cottage Style Glass size (min) 36-3/4" (933) / 24-3/4" (629).

See page 83 for specific DP ratings.

DOUBLE HUNG

4 Wide Operator Units - 22", 26" Widths

Mas. Opp. (mm)	7-2 1/2 (2197)	8-6 1/2 (2604)
Rgh. Opp. (mm)	7-3 (2210)	8-7 (2616)
Frame Size (mm)	7-2 (2184)	8-6 (2591)

3-0 (914)		
3-0 (914)	ITDH2236 4W	ITDH2636 4W
3-4 (1016)		
3-4 (1016)	ITDH2240 4W	ITDH2640 4W
4-0 (1219)		
4-0 (1219)	ITDH2248 4W	ITDH2648 4W
4-4 (1321)		
4-4 (1321)	ITDH2252 4W	ITDH2652 4W
4-8 (1422)		
4-8 (1422)	ITDH2256 4W	ITDH2656 4W
5-0 (1524)		
5-0 (1524)	ITDH2260 4W	ITDH2660 4W
5-4 (1626)		
5-4 (1626)	ITDH2264 4W	ITDH2664 4W
5-8 (1727)		
5-8 (1727)	ITDH2268 4W	ITDH2668 4W
6-0 (1829)		
6-0 (1829)	ITDH2272 4W	ITDH2672 4W
6-4 (1930)		
6-4 (1930)	ITDH2276 4W	ITDH2676 4W

In-Sash Transoms Mulled Over Double Hungs

Mas. Opp. (mm)	1-10 (559)	2-6 (762)
Rgh. Opp. (mm)	1-10 1/2 (572)	2-6 1/2 (775)
Frame Size (mm)	1-9 1/2 (546)	2-5 1/2 (749)

5-3 3/4 (1619)		
5-3 3/4 (1619)	ITDHTR2216 / ITDH2248	ITDHTR3016 / ITDH3048

Details and Elevations not to scale.

When ordering 6-9/16" (167 mm) or 6-13/16" (173 mm) jamb, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

■ = Obscure Glass Available

■ = Available in Cottage Style with unequal sash. Cottage Style Glass size (min) 36-3/4" (933) / 24-3/4" (629).

See page 83 for specific DP ratings.

DOUBLE HUNG PICTURE

Picture Units

Mas. Opp. (mm)	3-2 (965)	3-6 (1067)	4-2 (1270)	4-6 (1372)	5-2 (1575)
Rgh. Opp. (mm)	3-2 1/2 (978)	3-6 1/2 (1080)	4-2 1/2 (1283)	4-6 1/2 (1384)	5-2 1/2 (1588)
Frame Size (mm)	3-1 1/2 (953)	3-5 1/2 (1054)	4-1 1/2 (1257)	4-5 1/2 (1359)	5-1 1/2 (1562)
Glass Size (mm)	32 3/4" (832)	36 3/4" (933)	44 3/4" (1137)	48 3/4" (1238)	56 3/4" (1441)

3-4 (1016) 3-4 1/4 (1022) 3-3 3/4 (1010) 3-4 3/4 (883)					
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213) 4-2 3/4 (1086)					
4-4 (1321) 4-4 1/4 (1327) 4-3 3/4 (1314) 4-6 3/4 (1187)					
4-8 (1422) 4-8 1/4 (1429) 4-7 3/4 (1416) 5-0 3/4 (1289)					
5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518) 5-4 3/4 (1391)					
5-4 (1626) 5-4 1/4 (1632) 5-3 3/4 (1619) 5-8 3/4 (1492)					
5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721) 6-2 3/4 (1594)					
6-0 (1829) 6-0 1/4 (1835) 5-11 3/4 (1822) 6-6 3/4 (1695)					
6-4 (1930) 6-4 1/4 (1937) 6-3 3/4 (1924) 7-0 3/4 (1797)					

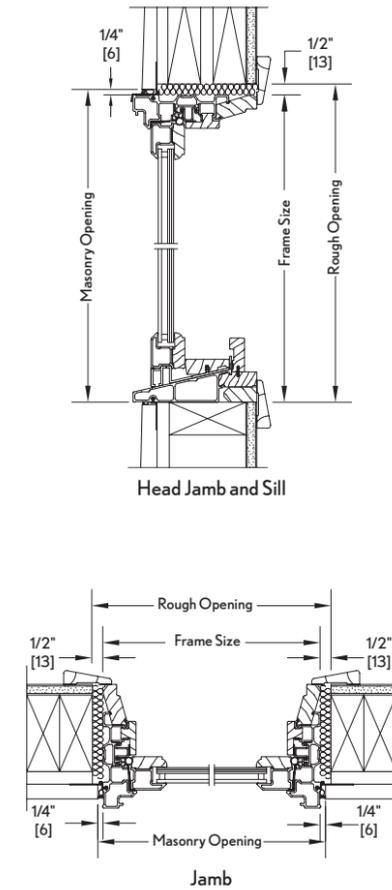
Details and Elevations not to scale.

T = Standard Tempered

Optional picture Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Also available in Prairie lite cuts shown on page 37.

See page 83 for specific DP ratings.

Construction Details



DOUBLE HUNG Transoms and Multiple Assemblies

INTEGRITY® FROM MARVIN
WOOD-ULTREX® SERIES

In-Sash Transom and Picture Units

Mas. Opp. (mm)	1-10 (559)	2-2 (660)	2-6 (762)	2-10 (864)	3-0 (914)	3-2 (965)	3-6 (1067)
Rgh. Opp. (mm)	1-10 1/2 (572)	2-2 1/2 (673)	2-6 1/2 (775)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-6 1/2 (1080)
Frame Size (mm)	1-9 1/2 (546)	2-1 1/2 (648)	2-5 1/2 (749)	2-9 1/2 (851)	2-11 1/2 (902)	3-1 1/2 (953)	3-5 1/2 (1054)
Glass Size (mm)	16 3/4" (425)	20 3/4" (527)	24 3/4" (629)	28 3/4" (730)	30 3/4" (781)	32 3/4" (832)	36 3/4" (933)

1-4 (406) 1-4 1/4 (413) 1-3 3/4 (400) 10 3/4" (273)							
--	--	--	--	--	--	--	--

22" Flankers with Picture Center Unit (Assemblies also available with 26 flankers.)

Mas. Opp. (mm)	6-9 (2057)	7-1 (2159)	7-9 (2362)	8-1 (2464)	8-9 (2667)
Rgh. Opp. (mm)	6-9 1/2 (2070)	7-1 1/2 (2172)	7-9 1/2 (2375)	8-1 1/2 (2477)	8-9 1/2 (2680)
Frame Size (mm)	6-8 1/2 (2045)	7-0 1/2 (2146)	7-8 1/2 (2350)	8-0 1/2 (2451)	8-8 1/2 (2654)

4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213)												
4-4 (1321) 4-4 1/4 (1327) 4-3 3/4 (1314)												
4-8 (1422) 4-8 1/4 (1429) 4-7 3/4 (1416)												
5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518)												
5-4 (1626) 5-4 1/4 (1632) 5-3 3/4 (1619)												

Cottage Style Flankers with Picture Center Unit

Mas. Opp. (mm)	8-1 (2464)	8-9 (2667)	9-5 (2870)
Rgh. Opp. (mm)	8-1 1/2 (2477)	8-9 1/2 (2680)	9-5 1/2 (2883)
Frame Size (mm)	8-0 1/2 (2451)	8-8 1/2 (2654)	9-4 1/2 (2858)

5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721)									
--	--	--	--	--	--	--	--	--	--

Details and Elevations not to scale.

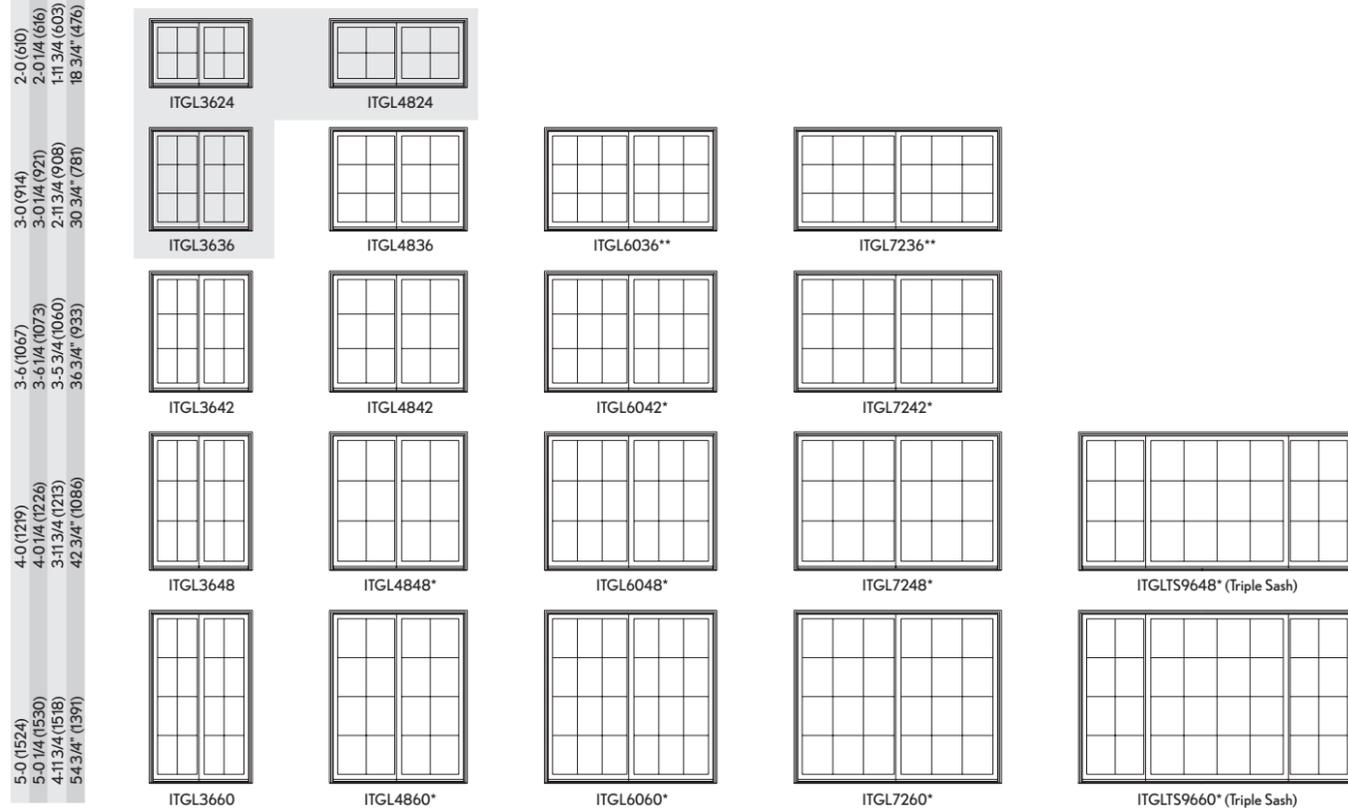
When ordering 6-9/16" (167 mm) or 6-13/16" (173 mm) jamb, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

Optional transom Grilles, GBGs and SDLs are available in a standard Rectangular cut. Alternate transom lite cuts available to align with select lite cut options shown on page 37.

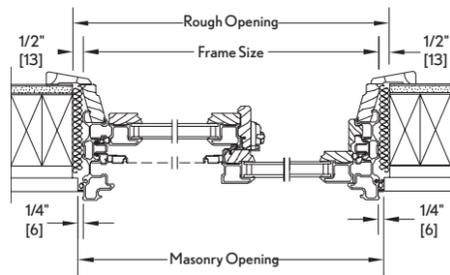
See page 83 for specific DP ratings.

XO Operator Units

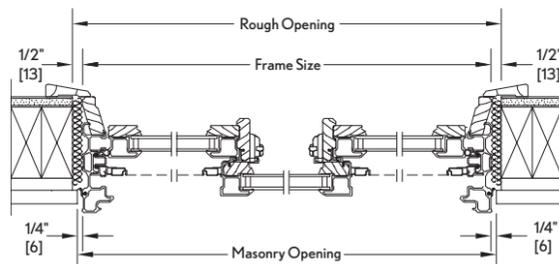
Mas. Opp. (mm)	3-0 (914)	4-0 (1219)	5-0 (1524)	6-0 (1829)	8-0 (2438)
Rgh. Opp. (mm)	3-0 1/2 (927)	4-0 1/2 (1232)	5-0 1/2 (1537)	6-0 1/2 (1842)	8-0 1/2 (2451)
Frame Size (mm)	2-11 1/2 (902)	3-11 1/2 (1207)	4-11 1/2 (1511)	5-11 1/2 (1816)	7-11 1/2 (2426)
Glass Size (mm)	14 3/4" (375)	20 3/4" (527)	26 3/4" (679)	32 3/4" (832)	46 3/4" (1187) / 20 3/4" (527)



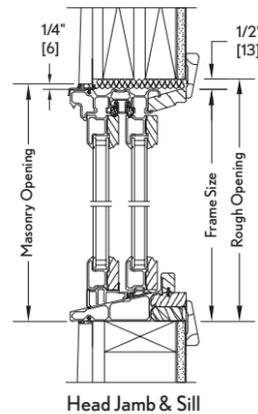
Construction Details



XO Operator Jamb



Triple Sash XOX Operator Jamb



Head Jamb & Sill

Details and Elevations not to scale.

* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

** These windows meet National Egress Codes for fire evacuation if floor to sill height does not exceed 44" (118 mm). Local codes may differ.

■ = Obscure Glass Available

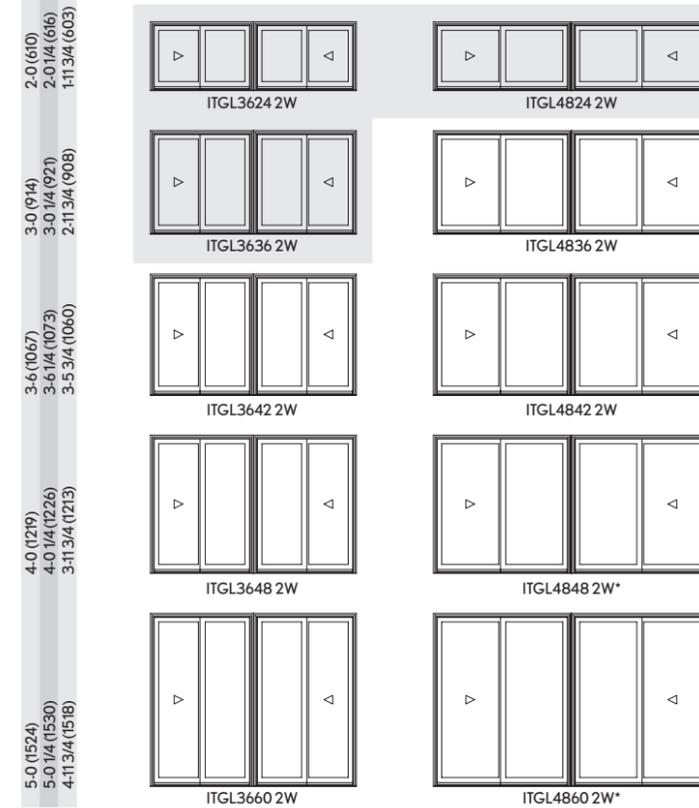
XO operation standard, OX operation optional.

Optional Glider Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Other available lite cuts shown on page 37.

When ordering 6-9/16" (167 mm) or 6-13/16" (173 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

2 Wide XO-OX Operator Units

Mas. Opp. (mm)	5-11 1/2 (1816)	7-11 1/2 (2426)
Rgh. Opp. (mm)	6-0 (1829)	8-0 (2438)
Frame Size (mm)	5-11 (1803)	7-11 (2413)



Details and Elevations not to scale.

* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

■ = Obscure Glass Available

XO operation standard, OX operation optional. Optional Glider Grilles and GBGs are available in a standard cut, as shown.

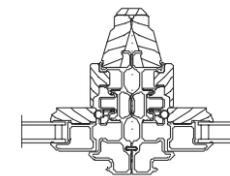
When ordering 6-9/16" (167 mm) or 6-13/16" (173 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

Individual or mullied units with jamb extension: ADD 1/4" (6 mm) to WIDTH and 1/8" (3 mm) to HEIGHT of Frame, Rough, and Masonry Opening sizes.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied up to 2 units wide by 2 units high, MAXIMUM ROUGH OPENING not to exceed 113 1/2" x 60 1/4".

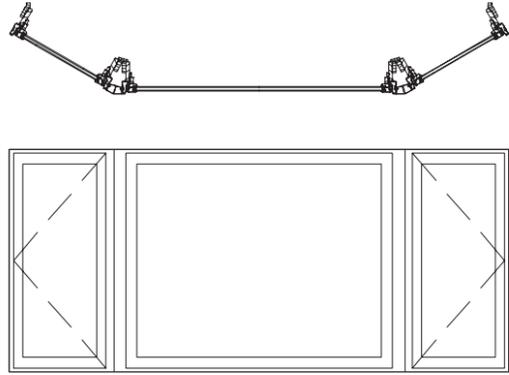
Mullion Detail



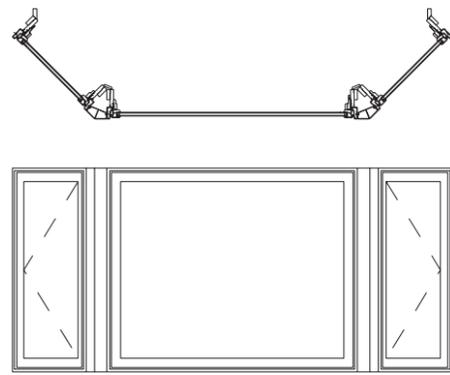
Vertical Mullion XO-OX Operator Unit

CASEMENT BAYS

30° Bays



45° Bays

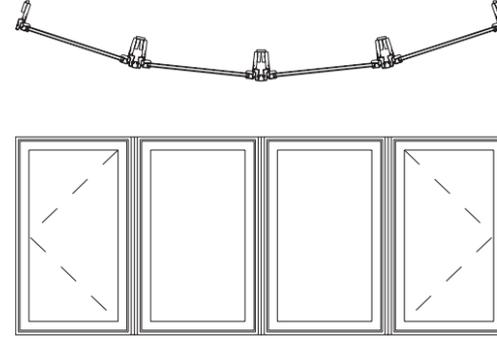


ROUGH OPENING		
CN Width	Width	Projection
17-17-17	4-0 21/32" (1236 mm)	8 5/8" (219 mm)
17-21-17	4-4 21/32 (1337)	8 5/8" (219)
17-25-17	4-8 21/32 (1439)	8 5/8" (219)
17-29-17	5-0 21/32 (1541)	8 5/8" (219)
17-33-17	5-4 21/32 (1642)	8 5/8" (219)
17-37-17	5-8 21/32 (1744)	8 5/8" (219)
17-49-17	6-8 21/32 (2049)	8 5/8" (219)
21-21-21	4-11 9/32 (1514)	10 5/8 (270)
21-25-21	5-3 19/32 (1615)	10 5/8 (270)
21-29-21	5-7 19/32 (1717)	10 5/8 (270)
21-33-21	5-11 19/32 (1818)	10 5/8 (270)
21-37-21	6-3 19/32 (1920)	10 5/8 (270)
21-49-21	7-3 19/32 (2225)	10 5/8 (270)
21-57-21	7-11 19/32 (2428)	10 5/8 (270)
21-73-21	9-3 19/32 (2834)	10 5/8 (270)
25-25-25	5-10 1/2 (1791)	12 5/8 (321)
25-29-25	6-2 1/2 (1892)	12 5/8 (321)
25-33-25	6-6 1/2 (1994)	12 5/8 (321)
25-37-25	6-10 1/2 (2096)	12 5/8 (321)
25-49-25	7-10 1/2 (2400)	12 5/8 (321)
25-57-25	8-6 1/2 (2604)	12 5/8 (321)
29-29-29	6-9 7/16 (2069)	14 5/8 (371)
29-33-29	7-1 7/16 (2170)	14 5/8 (371)
29-37-29	7-5 7/16 (2272)	14 5/8 (371)
29-49-29	8-5 7/16 (2577)	14 5/8 (371)
29-57-29	9-1 7/16 (2780)	14 5/8 (371)
33-33-33	7-8 3/8 (2346)	16 5/8 (422)
33-37-33	8-0 3/8 (2448)	16 5/8 (422)
33-49-33	9-0 3/8 (2753)	16 5/8 (422)

ROUGH OPENING		
CN Width	Width	Projection
17-17-17	3-9 11/32 (1152)	12 5/8 (321)
17-21-17	4-1 11/32 (1253)	12 5/8 (321)
17-25-17	4-5 11/32 (1355)	12 5/8 (321)
17-29-17	4-9 11/32 (1457)	12 5/8 (321)
17-33-17	5-1 11/32 (1558)	12 5/8 (321)
17-37-17	5-5 11/32 (1660)	12 5/8 (321)
17-49-17	6-5 11/32 (1965)	12 5/8 (321)
21-21-21	4-7 (1397)	15 1/2 (394)
21-25-21	4-11 (1499)	15 1/2 (394)
21-29-21	5-3 (1600)	15 1/2 (394)
21-33-21	5-7 (1702)	15 1/2 (394)
21-37-21	5-11 (1803)	15 1/2 (394)
21-49-21	6-11 (2108)	15 1/2 (394)
21-57-21	7-7 (2311)	15 1/2 (394)
21-73-21	8-11 (2718)	15 1/2 (394)
25-25-25	5-4 21/32 (1642)	18 5/16 (465)
25-29-25	5-8 21/32 (1744)	18 5/16 (465)
25-33-25	6-0 21/32 (1845)	18 5/16 (465)
25-37-25	6-4 21/32 (1947)	18 5/16 (465)
25-49-25	7-4 21/32 (2252)	18 5/16 (465)
25-57-25	8-0 21/32 (2455)	18 5/16 (465)
25-73-25	9-4 21/32 (2861)	18 5/16 (465)
29-29-29	6-2 5/16 (1888)	21 1/8 (537)
29-33-29	6-6 5/16 (1989)	21 1/8 (537)
29-37-29	6-10 5/16 (2091)	21 1/8 (537)
29-49-29	7-10 5/16 (2396)	21 1/8 (537)
29-57-29	8-6 5/16 (2599)	21 1/8 (537)

CASEMENT BAYS/BOWS

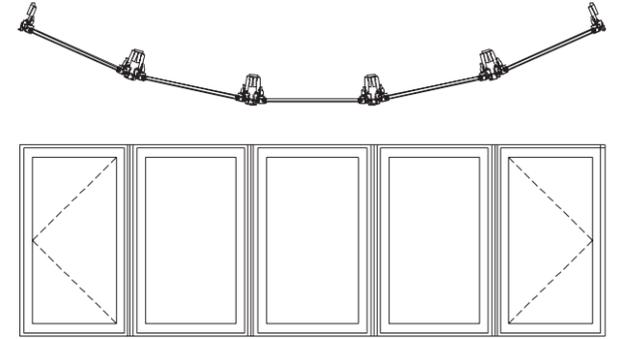
4 Wide Bows



ROUGH OPENING		
CN Width	Width	Projection
17-4W	5-5 15/32 (1663)	6 7/8 (175)
21-4W	6-9 1/32 (2058)	8 1/2 (216)
25-4W	8-0 9/16 (2453)	10 3/16 (259)
29-4W	9-4 5/32 (2848)	11 27/32 (301)

BAY/BOW HEIGHT DIMENSIONS	
Unit #	Rough Opening Height
31	2-7 13/16 (808)
35	2-11 13/16 (910)
39	3-3 13/16 (1011)
43	3-7 13/16 (1113)
47	3-11 13/16 (1214)
55	4-7 13/16 (1418)
59	4-11 13/16 (1519)
63	5-3 13/16 (1621)
71	5-11 13/16 (1824)

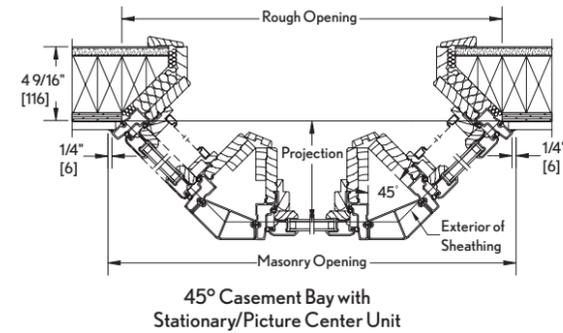
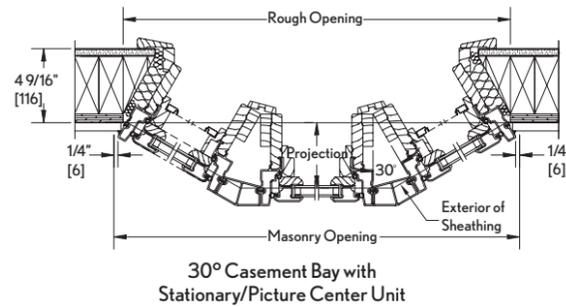
5 Wide Bows



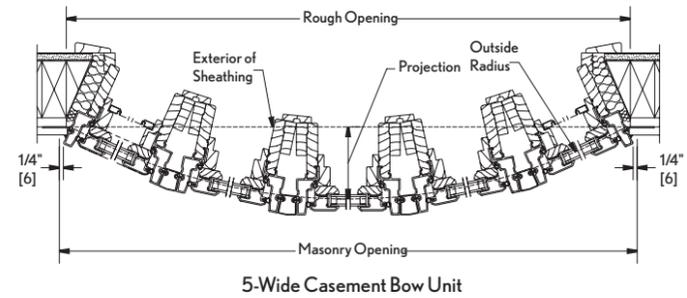
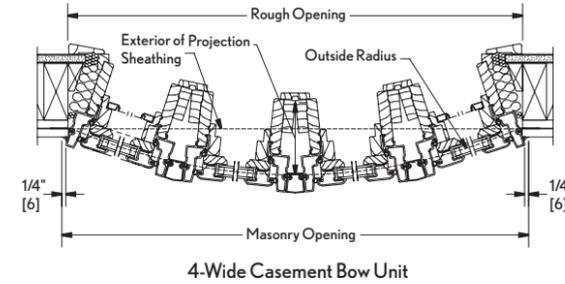
ROUGH OPENING		
CN Width	Width	Projection
17-5W	6-8 5/8 (2048)	10 1/4 (260)
21-5W	8-3 3/4 (2534)	12 11/16 (322)
25-5W	9-10 7/8 (3019)	15 5/32 (385)

Details and Elevations not to scale.
For rough opening height of a Bay or Bow, add 3/16" to Casement rough opening height.

Construction Details

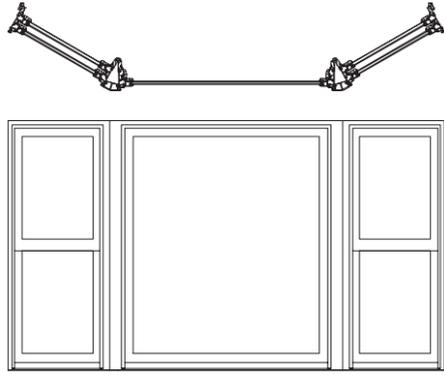


Construction Details



DOUBLE HUNG BAYS

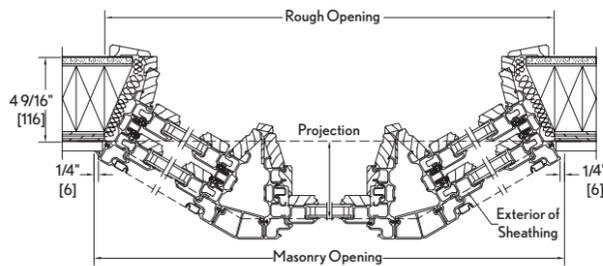
30° Bay Picture Center Unit



ROUGH OPENING		
CN Width	Width	Projection
22-42-22	6-11 1/16 (2126)	11 3/8 (289)
22-50-22	7-7 11/16 (2329)	11 3/8 (289)
22-54-22	7-11 1/16 (2430)	11 3/8 (289)
22-62-22	8-7 11/16 (2634)	11 3/8 (289)
26-42-26	7-6 19/32 (2301)	13 3/8 (340)
26-50-26	8-2 19/32 (2504)	13 3/8 (340)
26-54-26	8-6 19/32 (2606)	13 3/8 (340)
26-62-26	9-2 19/32 (2809)	13 3/8 (340)
30-42-30	8-1 17/32 (2477)	15 3/8 (391)
30-50-30	8-9 17/32 (2680)	15 3/8 (391)
30-54-30	9-1 17/32 (2782)	15 3/8 (391)
34-42-34	8-8 15/32 (2654)	17 3/8 (441)
34-50-34	9-4 15/32 (2857)	17 3/8 (441)
36-42-36	8-11 15/16 (2742)	18 3/8 (467)
38-42-38	9-3 3/8 (2829)	19 3/8 (492)

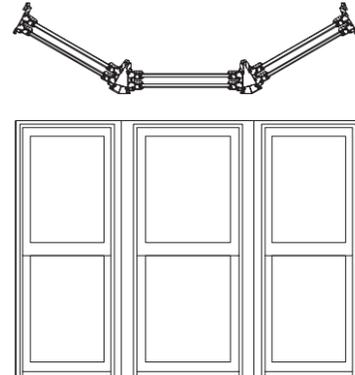
BAY HEIGHT DIMENSIONS		
Double Hung Unit	Rough Opening Height	Picture Unit
36	3-11 1/16 (957)	N/A
40	3-5 11/16 (1059)	N/A
48	4-1 11/16 (1262)	48
52	4-5 11/16 (1364)	52
56	4-9 11/16 (1465)	56
60	5-1 11/16 (1567)	60
64	5-5 11/16 (1668)	64
68	5-9 11/16 (1770)	68
72	6-1 11/16 (1872)	N/A
76	6-5 11/16 (1973)	N/A

Construction Details

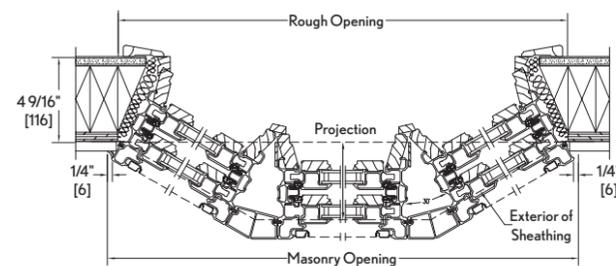


30° Bay with Picture Center Unit Jamb

30° Bay Operator Center Unit



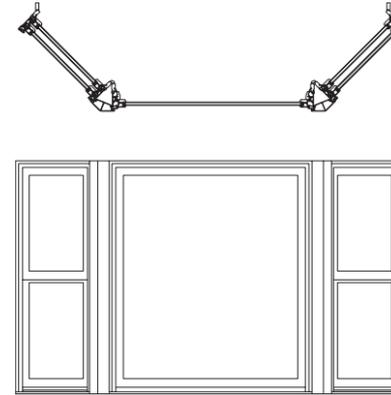
ROUGH OPENING		
CN Width	Width	Projection
22-22-22	5-3 11/16 (1618)	11 3/8 (289)
22-26-22	5-7 11/16 (1719)	11 3/8 (289)
22-30-22	5-11 11/16 (1821)	11 3/8 (289)
22-34-22	6-3 11/16 (1922)	11 3/8 (289)
22-36-22	6-5 11/16 (1973)	11 3/8 (289)
22-38-22	6-7 11/16 (2024)	11 3/8 (289)
22-42-22	6-11 11/16 (2126)	11 3/8 (289)
26-26-26	6-2 19/32 (1895)	13 3/8 (340)
26-30-26	6-6 19/32 (1996)	13 3/8 (340)
26-34-26	6-10 19/32 (2098)	13 3/8 (340)
26-36-26	7-0 19/32 (2149)	13 3/8 (340)
26-38-26	7-2 19/32 (2199)	13 3/8 (340)
26-42-26	7-6 19/32 (2301)	13 3/8 (340)
30-30-30	7-1 17/32 (2172)	15 3/8 (391)
30-34-30	7-5 17/32 (2274)	15 3/8 (391)
30-36-30	7-7 17/32 (2325)	15 3/8 (391)
30-38-30	7-9 17/32 (2376)	15 3/8 (391)
30-42-30	8-1 17/32 (2477)	15 3/8 (391)
34-34-34	8-0 15/32 (2450)	17 3/8 (441)
34-36-34	8-2 15/32 (2501)	17 3/8 (441)
34-38-34	8-4 15/32 (2552)	17 3/8 (441)
34-42-34	8-8 15/32 (2654)	17 3/8 (441)
36-36-36	8-5 15/16 (2589)	18 3/8 (467)
36-38-36	8-7 15/16 (2640)	18 3/8 (467)
36-42-36	8-11 15/16 (2742)	18 3/8 (467)
38-38-38	8-11 3/8 (2727)	19 3/8 (492)
38-42-38	9-3 3/8 (2829)	19 3/8 (492)



30° Bay with Operator Center Unit Jamb

DOUBLE HUNG BAYS

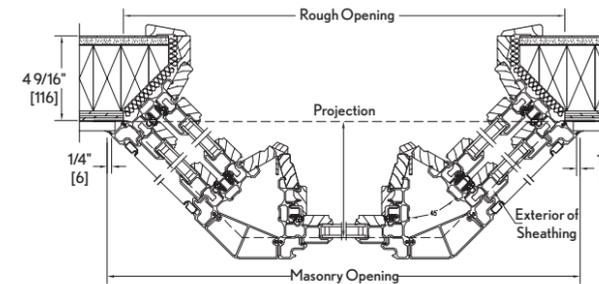
45° Bay Picture Center Unit



ROUGH OPENING		
CN Width	Width	Projection
22-42-22	6-6 19/32 (1996)	16 9/16 (421)
22-50-22	7-2 19/32 (2199)	16 9/16 (421)
22-54-22	7-6 19/32 (2301)	16 9/16 (421)
22-62-22	8-2 19/32 (2504)	16 9/16 (421)
26-42-26	7-0 9/32 (2141)	19 3/8 (492)
26-50-26	7-8 9/32 (2344)	19 3/8 (492)
26-54-26	8-0 9/32 (2446)	19 3/8 (492)
26-62-26	8-8 9/32 (2649)	19 3/8 (492)
30-42-30*	7-5 15/16 (2284)	22 7/32 (564)
30-50-30*	8-1 15/16 (2488)	22 7/32 (564)
30-54-30*	8-5 15/16 (2589)	22 7/32 (564)
30-62-30*	9-1 15/16 (2792)	22 7/32 (564)

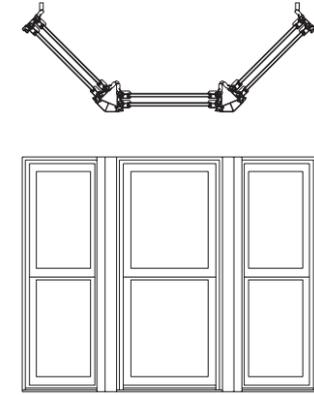
BAY HEIGHT DIMENSIONS		
Double Hung Unit	Rough Opening Height	Picture Unit
36	3-1 11/16 (957)	N/A
40	3-5 11/16 (1059)	N/A
48	4-1 11/16 (1262)	48
52	4-5 11/16 (1364)	N/A
56	4-9 11/16 (1465)	56
60	5-1 11/16 (1567)	60
64	5-5 11/16 (1668)	64
68	5-9 11/16 (1770)	68
72	6-1 11/16 (1872)	N/A
76	6-5 11/16 (1973)	N/A

Construction Details



45° Bay with Stationary/Picture Center Unit Jamb

45° Bay Operator Center Unit

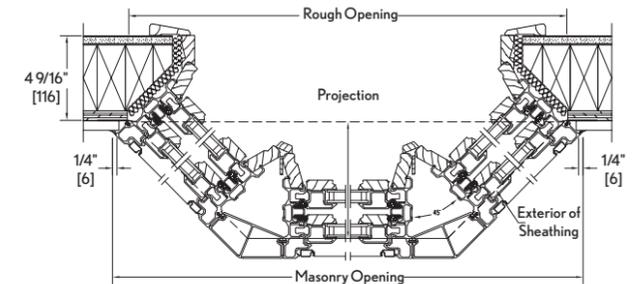


ROUGH OPENING		
CN Width	Width	Projection
22-22-22	4-10 19/32 (1488)	16 9/16 (421)
22-26-22	5-2 19/32 (1590)	16 9/16 (421)
22-30-22	5-6 19/32 (1691)	16 9/16 (421)
22-34-22	5-10 19/32 (1793)	16 9/16 (421)
22-36-22	6-0 19/32 (1844)	16 9/16 (421)
22-38-22	6-2 19/32 (1895)	16 9/16 (421)
22-42-22	6-6 19/32 (1996)	16 9/16 (421)
26-26-26	5-8 9/32 (1734)	19 3/8 (492)
26-30-26	6-0 9/32 (1836)	19 3/8 (492)
26-34-26	6-4 9/32 (1938)	19 3/8 (492)
26-36-26	6-6 9/32 (1988)	19 3/8 (492)
26-38-26	6-8 9/32 (2039)	19 3/8 (492)
26-42-26	7-0 9/32 (2141)	19 3/8 (492)
30-30-30*	6-5 15/16 (1980)	22 7/32 (564)
30-34-30*	6-9 15/16 (2081)	22 7/32 (564)
30-36-30*	6-11 15/16 (2132)	22 7/32 (564)
30-38-30*	7-1 15/16 (2183)	22 7/32 (564)
30-42-30*	7-5 15/16 (2284)	22 7/32 (564)

Details and Elevations not to scale.

For rough opening height of a Bay, add 17/16" to the Double Hung rough opening height.

* Not available with 6-9/16" (167 mm) or 6-13/16" (173 mm) jambs.



45° Bay with Operator Center Unit Jamb

CASEMENT ROUND TOPS

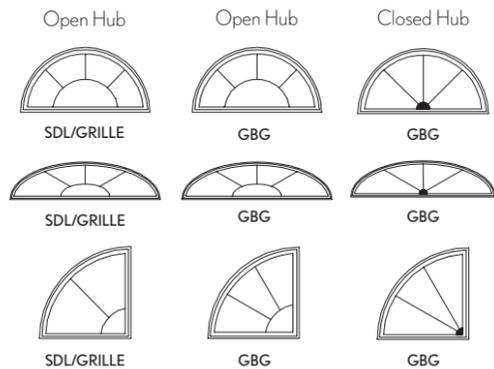
Casement Round Tops

Mas. Opg. (mm) 2-4 1/2 (724) Rgh. Opg. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)	Mas. Opg. (mm) 3-4 1/2 (1029) Rgh. Opg. (mm) 3-5 (1041) Frame Size (mm) 3-4 (1016)	Mas. Opg. (mm) 4-0 1/2 (1232) Rgh. Opg. (mm) 4-1 (1245) Frame Size (mm) 4-0 (1219)	Mas. Opg. (mm) 2-4 1/2 (724) Rgh. Opg. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)
1-2 1/4 (362) 1-2 1/2 (368) 1-2 (356)	1-8 1/4 (514) 1-8 1/2 (521) 1-8 (508)	2-0 1/4 (616) 2-0 1/2 (622) 2-0 (610)	2-4 1/4 (718) 2-4 1/2 (724) 2-4 (711)
IRT29-1W CA	IRT21-2W CA	IRT25-2W CA	IQCIR29-1W CA
Mas. Opg. (mm) 4-8 1/2 (1435) Rgh. Opg. (mm) 4-9 (1448) Frame Size (mm) 4-8 (1422)	Mas. Opg. (mm) 6-0 1/2 (1842) Rgh. Opg. (mm) 6-1 (1854) Frame Size (mm) 6-0 (1829)	Mas. Opg. (mm) 6-0 1/2 (1842) Rgh. Opg. (mm) 6-1 (1854) Frame Size (mm) 6-0 (1829)	
2-4 1/4 (718) 2-4 1/2 (724) 2-4 (711)	3-0 1/4 (921) 3-0 1/2 (927) 3-0 (914)	1-6 1/4 (464) 1-6 1/2 (470) 1-6 (457)	
IRT29-2W CA	IRT25-3W CA	IRTCA7318	

Multiple Assemblies

Mas. Opg. (mm) 6-0 1/2 (1842) Rgh. Opg. (mm) 6-1 (1854) Frame Size (mm) 6-0 (1829)	Mas. Opg. (mm) 6-0 1/2 (1842) Rgh. Opg. (mm) 6-1 (1854) Frame Size (mm) 6-0 (1829)	Mas. Opg. (mm) 6-0 1/2 (1842) Rgh. Opg. (mm) 6-1 (1854) Frame Size (mm) 6-0 (1829)
7-7 3/8 (2321) 7-7 5/8 (2327) 7-7 1/8 (2315)	7-11 3/8 (2423) 7-11 5/8 (2429) 7-11 1/8 (2416)	8-3 3/8 (2524) 8-3 5/8 (2530) 8-3 1/8 (2518)
IRT25-3W / ICA2555-3W	IRT25-3W / ICA2559-3W	IRT25-3W / ICA2563-3W
Mas. Opg. (mm) 2-4 1/2 (724) Rgh. Opg. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)	Mas. Opg. (mm) 2-4 1/2 (724) Rgh. Opg. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)	Mas. Opg. (mm) 2-4 1/2 (724) Rgh. Opg. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)
6-3 3/8 (1915) 6-3 5/8 (1921) 6-3 1/8 (1908)	6-11 3/8 (2118) 6-11 5/8 (2124) 6-11 1/8 (2111)	7-3 3/8 (2219) 7-3 5/8 (2226) 7-3 1/8 (2213)
IQCIR29-1W / ICA2947*	IQCIR29-1W / ICA2955*	IQCIR29-1W / ICA2959*

Lite Patterns



MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied up to 3 units wide by 2 units high, **MAXIMUM ROUGH OPENING** not to exceed 113 1/2" x 91 1/16" OR 85" x 107 9/16". Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.

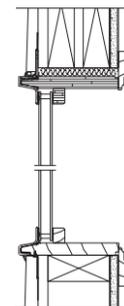
Details and Elevations not to scale.
* These windows meet National Egress Codes for fire evacuation. Local codes may differ.
Casements available as an operator or stationary.
Optional Round Top SDL, Grilles and GBG are available in a standard cut, as shown. (Round Top divided lites not available in other lite cuts.)
Optional Casement Grilles, GBGs and SDLs are available in several lite cut variations, standard Rectangular cut shown.

CASEMENT ROUND TOPS

Multiple Assemblies

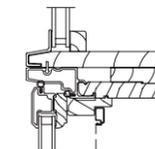
Mas. Opg. (mm) 2-4 1/2 (724) Rgh. Opg. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)	Mas. Opg. (mm) 3-4 1/2 (1029) Rgh. Opg. (mm) 3-5 (1041) Frame Size (mm) 3-4 (1016)	Mas. Opg. (mm) 4-0 1/2 (1232) Rgh. Opg. (mm) 4-1 (1245) Frame Size (mm) 4-0 (1219)	Mas. Opg. (mm) 4-8 1/2 (1435) Rgh. Opg. (mm) 4-9 (1448) Frame Size (mm) 4-8 (1422)
4-1 3/8 (1254) 4-1 5/8 (1260) 4-1 1/8 (1248)	4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 1/8 (1502)	5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 1/8 (1807)	6-11 3/8 (2118) 6-11 5/8 (2124) 6-11 1/8 (2111)
IRT29-1W / ICA2935	IRT21-2W / ICA2139-2W	IRT25-2W / ICA2547-2W	IRT29-2W / ICA2955-2W
4-5 3/8 (1356) 4-5 5/8 (1362) 4-5 1/8 (1349)	5-7 3/8 (1711) 5-7 5/8 (1718) 5-7 1/8 (1705)	6-7 3/8 (2016) 6-7 5/8 (2022) 6-7 1/8 (2010)	7-3 3/8 (2219) 7-3 5/8 (2226) 7-3 1/8 (2213)
IRT29-1W / ICA2939	IRT21-2W / ICA2147-2W	IRT25-2W / ICA2555-2W	IRT29-2W / ICA2959-2W
5-1 3/8 (1559) 5-1 5/8 (1565) 5-1 1/8 (1553)	6-3 3/8 (1915) 6-3 5/8 (1921) 6-3 1/8 (1908)	7-3 3/8 (2219) 7-3 5/8 (2226) 7-3 1/8 (2213)	7-7 3/8 (2321) 7-7 5/8 (2327) 7-7 1/8 (2315)
IRT29-1W / ICA2947*	IRT21-2W / ICA2155-2W	IRT25-2W / ICA2563-2W	IRT29-2W / ICA2963-2W
5-9 3/8 (1762) 5-9 5/8 (1768) 5-9 1/8 (1756)	6-7 3/8 (2016) 6-7 5/8 (2022) 6-7 1/8 (2010)	6-7 3/8 (2016) 6-7 5/8 (2022) 6-7 1/8 (2010)	7-7 3/8 (2321) 7-7 5/8 (2327) 7-7 1/8 (2315)
IRT29-1W / ICA2955*	IRT21-2W / ICA2159-2W	IRT25-2W / ICA294955	IRT29-2W / ICA295763

Construction Detail



Casement Head Jamb & Sill

Horizontal Mullion Detail



Casement Round Top Over Casement

Details and Elevations not to scale.

* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

Any Casement unit in these combinations can be operating or stationary. Operating sash are viewed from the exterior.

Optional Round Top SDL, Grilles and GBG are available in a standard cut, as shown on page 2. (Round Top divided lites not available in other lite cuts.)

Optional Casement Grilles, GBGs and SDLs are available in several lite cut variations, standard Rectangular cut shown.

DOUBLE HUNG ROUND TOPS

Double Hung Round Tops

Mas. Opg. (mm)	2-6 (762)
Rgh. Opg. (mm)	2-6 1/2 (775)
Frame Size (mm)	2-5 1/2 (749)

1-3 (381)
1-3 1/4 (387)
1-2 3/4 (375)



IRT30-1W DH

Mas. Opg. (mm)	2-10 (864)
Rgh. Opg. (mm)	2-10 1/2 (876)
Frame Size (mm)	2-9 1/2 (851)

1-5 (432)
1-5 1/4 (438)
1-4 3/4 (425)



IRT34-1W DH

Mas. Opg. (mm)	3-2 (965)
Rgh. Opg. (mm)	3-2 1/2 (978)
Frame Size (mm)	3-1 1/2 (953)

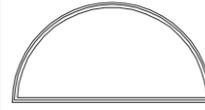
1-7 (483)
1-7 1/4 (489)
1-6 3/4 (476)



IRT38-1W DH

Mas. Opg. (mm)	5-7 1/2 (1715)
Rgh. Opg. (mm)	5-8 (1727)
Frame Size (mm)	5-7 (1702)

2-9 3/4 (857)
2-10 (864)
2-9 1/2 (851)

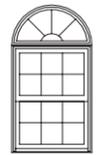


IRT34-2W DH

Multiple Assemblies

Mas. Opg. (mm)	2-6 (762)
Rgh. Opg. (mm)	2-6 1/2 (775)
Frame Size (mm)	2-5 1/2 (749)

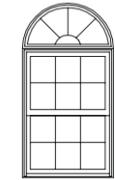
4-6 3/4 (1391)
4-7 (1397)
4-6 1/2 (1384)



IRT30-1W / ITDH3040

Mas. Opg. (mm)	2-10 (864)
Rgh. Opg. (mm)	2-10 1/2 (876)
Frame Size (mm)	2-9 1/2 (851)

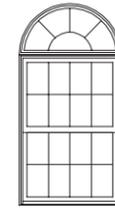
5-4 3/4 (1645)
5-5 (1651)
5-4 1/2 (1638)



IRT34-1W / ITDH3448

Mas. Opg. (mm)	3-2 (965)
Rgh. Opg. (mm)	3-2 1/2 (978)
Frame Size (mm)	3-1 1/2 (953)

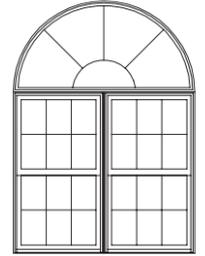
6-2 3/4 (1899)
6-3 (1905)
6-2 1/2 (1892)



IRT38-1W / ITDH3856*

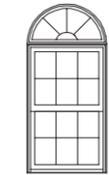
Mas. Opg. (mm)	5-7 1/2 (1715)
Rgh. Opg. (mm)	5-8 (1727)
Frame Size (mm)	5-7 (1702)

7-9 1/2 (2375)
7-9 3/4 (2381)
7-9 1/4 (2369)



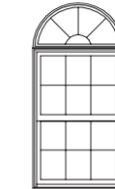
IRT34-2W / ITDH3460-2W

5-8 3/4 (1594)
5-9 (1600)
5-8 1/2 (1588)



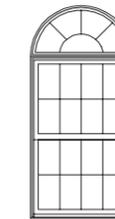
IRT30-1W / ITDH3048

5-8 3/4 (1746)
5-9 (1753)
5-8 1/2 (1740)



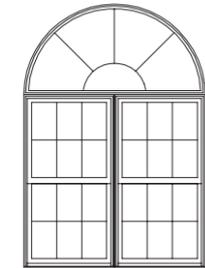
IRT34-1W / ITDH3452

6-6 3/4 (2000)
6-7 (2007)
6-6 1/2 (1994)



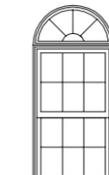
IRT38-1W / ITDH3860*

8-11/2 (2477)
8-13/4 (2483)
8-11/4 (2470)



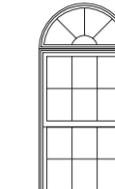
IRT34-2W / ITDH3464-2W*

5-6 3/4 (1695)
5-7 (1702)
5-6 1/2 (1689)



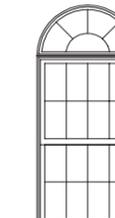
IRT30-1W / ITDH3052

6-0 3/4 (1848)
6-1 (1854)
6-0 1/2 (1842)



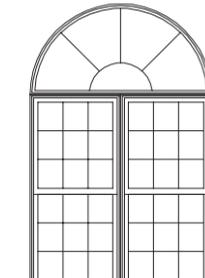
IRT34-1W / ITDH3456

6-10 3/4 (2102)
6-11 (2108)
6-10 1/2 (2096)



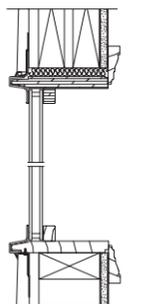
IRT38-1W / ITDH3864*

8-9 1/2 (2680)
8-9 3/4 (2686)
8-9 1/4 (2673)



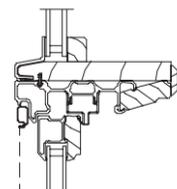
IRT34-2W / ITDH3472-2W*

Construction Detail



Double Hung/Door Head Jamb & Sill

Horizontal Mullion Detail



Double Hung Round Top Over Double Hung Operator

Details and Elevations not to scale.

* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

When ordering 6-9/16" (167 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

Optional Round Top SDL, Grilles and GBG are available in a standard cut, as shown on page 2. (Round Top divided lites not available in other lite cuts.)

Optional Casement Grilles, GBGs and SDLs are available in several lite cut variations, standard Rectangular cut shown.

DOOR ROUND TOPS

Door Round Tops

Mas. Opg. (mm)	5-11 1/2 (1816)
Rgh. Opg. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

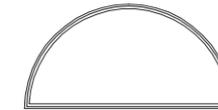
1-6 1/4 (464)
1-6 1/2 (470)
1-6 (457)



IRTDR7218

Mas. Opg. (mm)	5-11 1/2 (1816)
Rgh. Opg. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

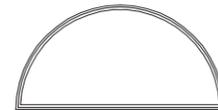
2-11 3/4 (908)
3-0 (914)
2-11 1/2 (902)



IRTDR7236

Mas. Opg. (mm)	5-11 1/2 (1816)
Rgh. Opg. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

2-11 3/4 (908)
3-0 (914)
2-11 1/2 (902)

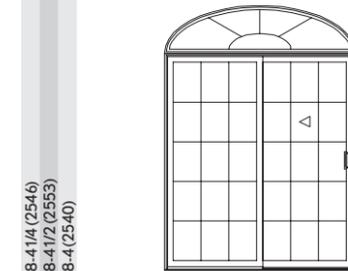


IRT36-2W DH

Multiple Assemblies

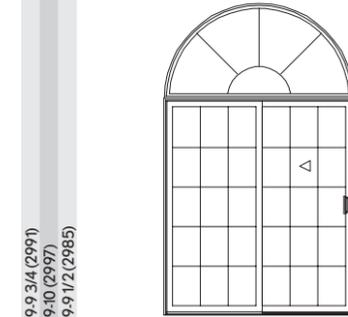
Sliding Patio Doors

Mas. Opg. (mm)	5-11 1/2 (1816)
Rgh. Opg. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



IRTDR7218 / ISPD6068 OX

8-4 1/4 (2546)
8-4 1/2 (2553)
8-4 (2540)

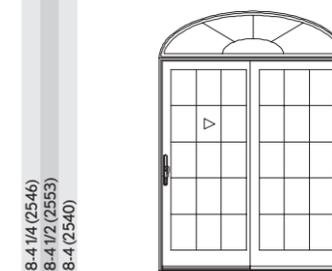


IRTDR7236* / ISPD6068 OX

9-9 3/4 (2991)
9-10 (2997)
9-9 1/2 (2985)

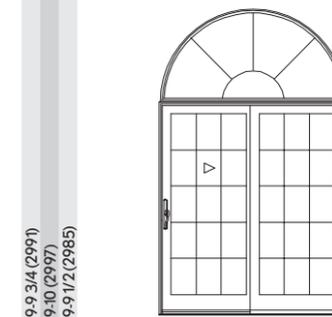
Sliding French Doors

Mas. Opg. (mm)	5-11 1/2 (1816)
Rgh. Opg. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



IRTDR7218 / ISFD6068 XO

8-4 1/4 (2546)
8-4 1/2 (2553)
8-4 (2540)

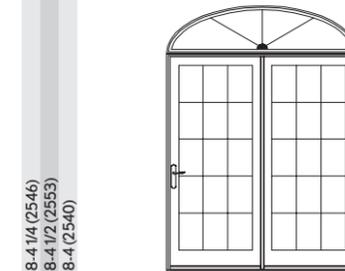


IRTDR7236* / ISFD6068 XO

9-9 3/4 (2991)
9-10 (2997)
9-9 1/2 (2985)

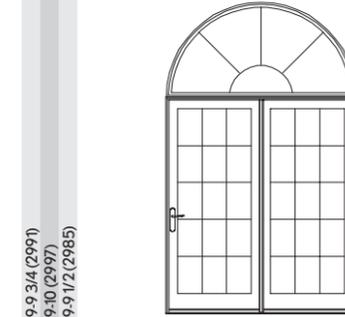
Inswing French Doors

Mas. Opg. (mm)	5-11 1/2 (1816)
Rgh. Opg. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



IRTDR7218 / IIFD6068 XO

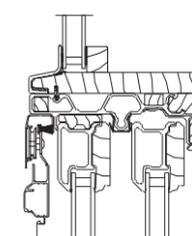
8-4 1/4 (2546)
8-4 1/2 (2553)
8-4 (2540)



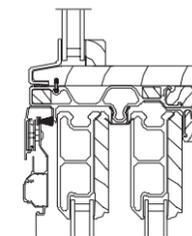
IRTDR7236* / IIFD6068 XO

9-9 3/4 (2991)
9-10 (2997)
9-9 1/2 (2985)

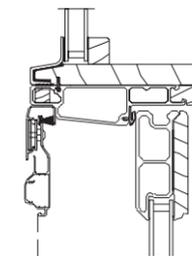
Horizontal Mullion Details



Round Top Over Sliding Patio Door



Round Top Over Sliding French Door



Round Top Over Inswing French Door

Details and Elevations not to scale.

* Assembly available field mullied only.

Optional Round Top SDL, Grilles and GBG are available in a standard cut, as shown on page 2. (Round Top divided lites not available in other lite cuts.)

Optional Casement Grilles, GBGs and SDLs are available in several lite cut variations, standard Rectangular cut shown.

IRTDR7236 and IRTDR7218 can be mullied above a CN 36 width 2W Integrity Double Hung. Grilles may not line up in multiple assemblies. For more information, please contact your Integrity representative.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied up to 3 units wide by 2 units high, MAXIMUM ROUGH OPENING not to exceed 113 1/2" x 911/16" OR 85" x 107 9/16". Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.

MARVIN ROUND TOPS

Casement Round Tops

Quarter Circle, True Half

Mas. Opp. (mm)	2-0 1/2 (622)
Rgh. Opp. (mm)	2-1 (635)
Frame Size (mm)	2-0 (610)



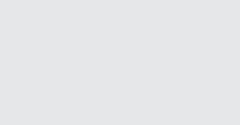
Mas. Opp. (mm)	6-0 1/2 (1842)
Rgh. Opp. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)



Mas. Opp. (mm)	2-8 1/2 (826)
Rgh. Opp. (mm)	2-9 (838)
Frame Size (mm)	2-8 (813)



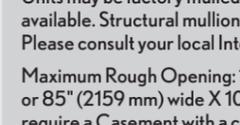
Mas. Opp. (mm)	3-0 1/2 (927)
Rgh. Opp. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)



Mas. Opp. (mm)	3-0 1/2 (927)
Rgh. Opp. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)



Mas. Opp. (mm)	5-4 1/2 (1638)
Rgh. Opp. (mm)	5-5 (1651)
Frame Size (mm)	5-4 (1626)



Mas. Opp. (mm)	5-4 1/2 (1638)
Rgh. Opp. (mm)	5-5 (1651)
Frame Size (mm)	5-4 (1626)



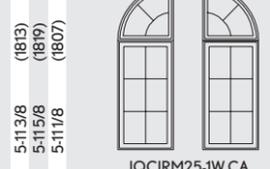
MULTIPLE ASSEMBLIES

Units may be factory mullied up to 3 units wide by 2 units high. Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity representative for more information.

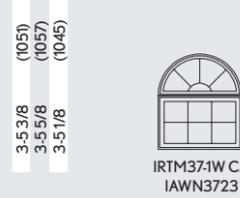
Maximum Rough Opening: 113 1/2" (2883 mm) wide X 91 1/16" (2313 mm) high or 85" (2159 mm) wide X 107 9/16" (2732 mm) high. Quarter Circle shapes require a Casement with a continuous head jamb.

Multiple Assemblies

Mas. Opp. (mm)	2-0 1/2 (622)
Rgh. Opp. (mm)	2-1 (635)
Frame Size (mm)	2-0 (610)



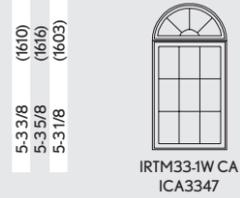
Mas. Opp. (mm)	3-0 1/2 (927)
Rgh. Opp. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)



Mas. Opp. (mm)	3-0 1/2 (927)
Rgh. Opp. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)



Mas. Opp. (mm)	2-8 1/2 (826)
Rgh. Opp. (mm)	2-9 (838)
Frame Size (mm)	2-8 (813)



Mas. Opp. (mm)	8-4 1/2 (2553)
Rgh. Opp. (mm)	8-5 (2565)
Frame Size (mm)	8-4 (2540)



Mas. Opp. (mm)	7-8 1/2 (2350)
Rgh. Opp. (mm)	7-9 (2362)
Frame Size (mm)	7-8 (2337)



Mas. Opp. (mm)	6-4 1/2 (1943)
Rgh. Opp. (mm)	6-5 (1956)
Frame Size (mm)	6-4 (1930)



Mas. Opp. (mm)	7-4 1/2 (2248)
Rgh. Opp. (mm)	7-5 (2261)
Frame Size (mm)	7-4 (2235)



Mas. Opp. (mm)	8-0 1/2 (2451)
Rgh. Opp. (mm)	8-1 (2464)
Frame Size (mm)	8-0 (2438)



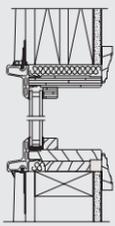
Mas. Opp. (mm)	8-0 1/2 (2451)
Rgh. Opp. (mm)	8-1 (2464)
Frame Size (mm)	8-0 (2438)



Mas. Opp. (mm)	6-0 1/2 (1842)
Rgh. Opp. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)

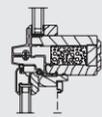


Construction Detail



Casement Round Top Head Jamb & Sill

Horizontal Mullion Detail



Casement Round Top Over Casement

Contact your sales representative for multiple assembly lite alignment. Certain assemblies do not allow for exact lite alignment.

Not to scale. Optional Round Top SDL/Grilles are available in standard cut shown above. GBG patterns shown on page 13. (Round Top divided lites not available in other lite cuts.) Optional Casement and Double Hung Grilles, GBGs and SDLs are available in several lite variations, standard Rectangular cut shown.



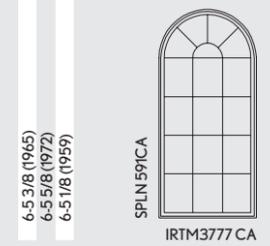
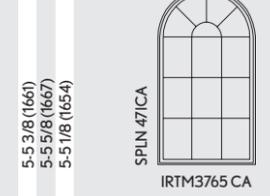
Built around you.™

MARVIN ROUND TOPS

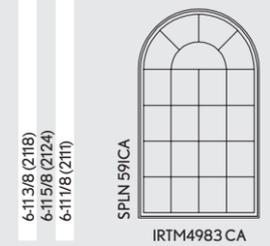
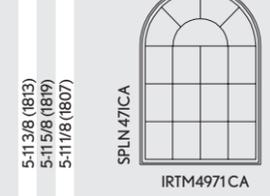
Casement Round Tops

True Half above Springline

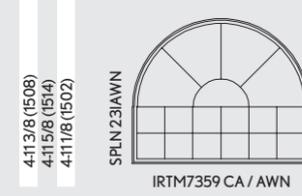
Mas. Opp. (mm)	3-0 1/2 (927)
Rgh. Opp. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)



Mas. Opp. (mm)	4-0 1/2 (1232)
Rgh. Opp. (mm)	4-1 (1245)
Frame Size (mm)	4-0 (1219)



Mas. Opp. (mm)	6-0 1/2 (1842)
Rgh. Opp. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)



Eyebrow above Springline

Mas. Opp. (mm)	1-8 1/2 (521)
Rgh. Opp. (mm)	1-9 (533)
Frame Size (mm)	1-8 (508)



Mas. Opp. (mm)	2-0 1/2 (622)
Rgh. Opp. (mm)	2-1 (635)
Frame Size (mm)	2-0 (610)



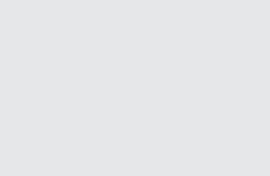
Mas. Opp. (mm)	2-4 1/2 (724)
Rgh. Opp. (mm)	2-5 (737)
Frame Size (mm)	2-4 (711)



Mas. Opp. (mm)	2-8 1/2 (826)
Rgh. Opp. (mm)	2-9 (838)
Frame Size (mm)	2-8 (813)



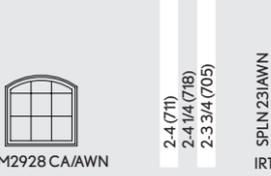
Mas. Opp. (mm)	1-6 3/16 (462)
Rgh. Opp. (mm)	1-6 7/16 (468)
Frame Size (mm)	1-5 15/16 (456)



Mas. Opp. (mm)	1-7 1/4 (488)
Rgh. Opp. (mm)	1-7 1/2 (495)
Frame Size (mm)	1-7 (482)



Mas. Opp. (mm)	1-8 1/2 (521)
Rgh. Opp. (mm)	1-8 3/4 (528)
Frame Size (mm)	1-8 1/4 (515)



Mas. Opp. (mm)	1-8 5/8 (524)
Rgh. Opp. (mm)	1-8 7/8 (530)
Frame Size (mm)	1-8 3/8 (518)



Mas. Opp. (mm)	3-4 1/2 (1029)
Rgh. Opp. (mm)	3-5 (1041)
Frame Size (mm)	3-4 (1016)



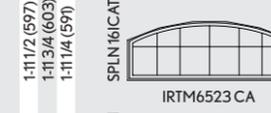
Mas. Opp. (mm)	4-0 1/2 (1232)
Rgh. Opp. (mm)	4-1 (1245)
Frame Size (mm)	4-0 (1219)



Mas. Opp. (mm)	4-8 1/2 (1435)
Rgh. Opp. (mm)	4-9 (1448)
Frame Size (mm)	4-8 (1422)



Mas. Opp. (mm)	5-4 1/2 (1638)
Rgh. Opp. (mm)	5-5 (1651)
Frame Size (mm)	5-4 (1626)



Mas. Opp. (mm)	2-4 3/4 (730)
Rgh. Opp. (mm)	2-5 (737)
Frame Size (mm)	2-4 1/2 (724)



Mas. Opp. (mm)	1-9 5/8 (549)
Rgh. Opp. (mm)	1-9 7/8 (556)
Frame Size (mm)	1-9 3/8 (543)



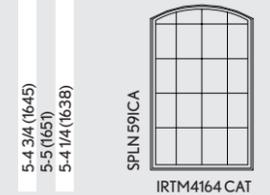
Mas. Opp. (mm)	1-11 1/16 (605)
Rgh. Opp. (mm)	1-11 3/4 (603)
Frame Size (mm)	1-11 1/4 (591)



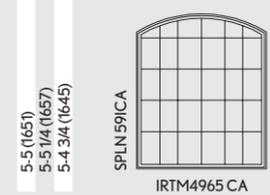
Mas. Opp. (mm)	2-6 7/8 (784)
Rgh. Opp. (mm)	2-7 1/8 (791)
Frame Size (mm)	2-6 5/8 (778)



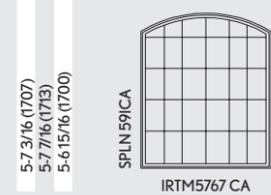
Mas. Opp. (mm)	2-5 (737)
Rgh. Opp. (mm)	2-5 1/4 (743)
Frame Size (mm)	2-4 3/4 (730)



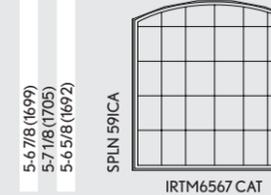
Mas. Opp. (mm)	2-5 (737)
Rgh. Opp. (mm)	2-5 1/4 (743)
Frame Size (mm)	2-4 3/4 (730)



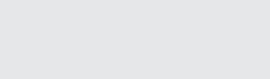
Mas. Opp. (mm)	2-7 3/16 (793)
Rgh. Opp. (mm)	2-7 7/16 (799)
Frame Size (mm)	2-6 15/16 (786)



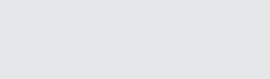
Mas. Opp. (mm)	1-11 1/2 (597)
Rgh. Opp. (mm)	1-11 3/4 (603)
Frame Size (mm)	1-11 1/4 (591)



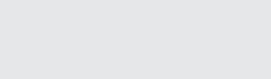
Mas. Opp. (mm)	5-4 3/4 (1645)
Rgh. Opp. (mm)	5-5 (1651)
Frame Size (mm)	5-4 1/4 (1638)



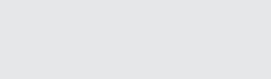
Mas. Opp. (mm)	1-9 5/8 (549)
Rgh. Opp. (mm)	1-9 7/8 (556)
Frame Size (mm)	1-9 3/8 (543)



Mas. Opp. (mm)	5-7 3/16 (1707)
Rgh. Opp. (mm)	5-7 7/16 (1713)
Frame Size (mm)	5-6 15/16 (1700)



Mas. Opp. (mm)	5-6 7/8 (1699)
Rgh. Opp. (mm)	5-7 1/8 (1705)
Frame Size (mm)	5-6 5/8 (1692)

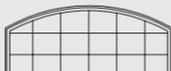
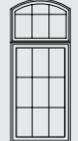
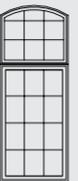


MARVIN ROUND TOPS

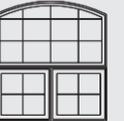
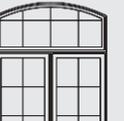
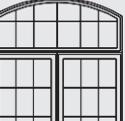
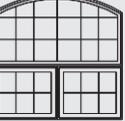
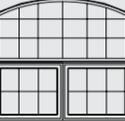
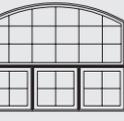
Casement Round Tops

Eyebrow above Springline

Multiple Assemblies

<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>6-0 1/2 (1842)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>6-1 (1854)</td></tr> <tr><td>Frame Size (mm)</td><td>6-0 (1829)</td></tr> </table>	Mas. Opg. (mm)	6-0 1/2 (1842)	Rgh. Opg. (mm)	6-1 (1854)	Frame Size (mm)	6-0 (1829)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>2-4 1/2 (724)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>2-5 (737)</td></tr> <tr><td>Frame Size (mm)</td><td>2-4 (711)</td></tr> </table>	Mas. Opg. (mm)	2-4 1/2 (724)	Rgh. Opg. (mm)	2-5 (737)	Frame Size (mm)	2-4 (711)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>2-8 1/2 (826)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>2-9 (838)</td></tr> <tr><td>Frame Size (mm)</td><td>2-8 (813)</td></tr> </table>	Mas. Opg. (mm)	2-8 1/2 (826)	Rgh. Opg. (mm)	2-9 (838)	Frame Size (mm)	2-8 (813)
Mas. Opg. (mm)	6-0 1/2 (1842)																			
Rgh. Opg. (mm)	6-1 (1854)																			
Frame Size (mm)	6-0 (1829)																			
Mas. Opg. (mm)	2-4 1/2 (724)																			
Rgh. Opg. (mm)	2-5 (737)																			
Frame Size (mm)	2-4 (711)																			
Mas. Opg. (mm)	2-8 1/2 (826)																			
Rgh. Opg. (mm)	2-9 (838)																			
Frame Size (mm)	2-8 (813)																			
<table border="0"> <tr><td>2-15/8 (651)</td><td>2-17/8 (697)</td><td>2-13/8 (645)</td></tr> <tr><td>2-9 (838)</td><td>2-9 1/4 (845)</td><td>2-8 3/4 (832)</td></tr> <tr><td>5-9 (1753)</td><td>5-9 1/4 (1759)</td><td>5-8 3/4 (1747)</td></tr> </table>	2-15/8 (651)	2-17/8 (697)	2-13/8 (645)	2-9 (838)	2-9 1/4 (845)	2-8 3/4 (832)	5-9 (1753)	5-9 1/4 (1759)	5-8 3/4 (1747)	<table border="0"> <tr><td>5-7 5/8 (1718)</td><td>5-7 7/8 (1724)</td><td>5-7 3/8 (1711)</td></tr> </table>	5-7 5/8 (1718)	5-7 7/8 (1724)	5-7 3/8 (1711)	<table border="0"> <tr><td>6-11 1/8 (2111)</td><td>6-11 3/8 (2118)</td><td>6-10 7/8 (2105)</td></tr> </table>	6-11 1/8 (2111)	6-11 3/8 (2118)	6-10 7/8 (2105)			
2-15/8 (651)	2-17/8 (697)	2-13/8 (645)																		
2-9 (838)	2-9 1/4 (845)	2-8 3/4 (832)																		
5-9 (1753)	5-9 1/4 (1759)	5-8 3/4 (1747)																		
5-7 5/8 (1718)	5-7 7/8 (1724)	5-7 3/8 (1711)																		
6-11 1/8 (2111)	6-11 3/8 (2118)	6-10 7/8 (2105)																		
 <p>IRTM7325 CA</p>  <p>IRTM7333 CA / AWN</p>  <p>IRTM7369 CAT</p>	 <p>IRTM2920 CA ICA2947</p>	 <p>IRTM3328 CA ICA3355</p>																		

Multiple Assemblies (continued)

<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>4-0 1/2 (1232)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>4-1 (1245)</td></tr> <tr><td>Frame Size (mm)</td><td>4-0 (1219)</td></tr> </table>	Mas. Opg. (mm)	4-0 1/2 (1232)	Rgh. Opg. (mm)	4-1 (1245)	Frame Size (mm)	4-0 (1219)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>4-8 1/2 (1435)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>4-9 (1448)</td></tr> <tr><td>Frame Size (mm)</td><td>4-8 (1422)</td></tr> </table>	Mas. Opg. (mm)	4-8 1/2 (1435)	Rgh. Opg. (mm)	4-9 (1448)	Frame Size (mm)	4-8 (1422)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>5-4 1/2 (1638)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>5-5 (1651)</td></tr> <tr><td>Frame Size (mm)</td><td>5-4 (1626)</td></tr> </table>	Mas. Opg. (mm)	5-4 1/2 (1638)	Rgh. Opg. (mm)	5-5 (1651)	Frame Size (mm)	5-4 (1626)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>6-0 1/2 (1842)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>6-1 (1854)</td></tr> <tr><td>Frame Size (mm)</td><td>6-0 (1829)</td></tr> </table>	Mas. Opg. (mm)	6-0 1/2 (1842)	Rgh. Opg. (mm)	6-1 (1854)	Frame Size (mm)	6-0 (1829)
Mas. Opg. (mm)	4-0 1/2 (1232)																										
Rgh. Opg. (mm)	4-1 (1245)																										
Frame Size (mm)	4-0 (1219)																										
Mas. Opg. (mm)	4-8 1/2 (1435)																										
Rgh. Opg. (mm)	4-9 (1448)																										
Frame Size (mm)	4-8 (1422)																										
Mas. Opg. (mm)	5-4 1/2 (1638)																										
Rgh. Opg. (mm)	5-5 (1651)																										
Frame Size (mm)	5-4 (1626)																										
Mas. Opg. (mm)	6-0 1/2 (1842)																										
Rgh. Opg. (mm)	6-1 (1854)																										
Frame Size (mm)	6-0 (1829)																										
<table border="0"> <tr><td>4-4 1/8 (1324)</td><td>4-4 3/8 (1330)</td><td>4-3 7/8 (1318)</td></tr> <tr><td>6-4 3/4 (1949)</td><td>6-5 (1956)</td><td>6-4 1/2 (1943)</td></tr> </table>	4-4 1/8 (1324)	4-4 3/8 (1330)	4-3 7/8 (1318)	6-4 3/4 (1949)	6-5 (1956)	6-4 1/2 (1943)	<table border="0"> <tr><td>6-6 15/16 (2005)</td><td>6-7 3/16 (2011)</td><td>6-6 11/16 (1999)</td></tr> </table>	6-6 15/16 (2005)	6-7 3/16 (2011)	6-6 11/16 (1999)	<table border="0"> <tr><td>4-10 (1473)</td><td>4-10 1/4 (1480)</td><td>4-9 3/4 (1467)</td></tr> </table>	4-10 (1473)	4-10 1/4 (1480)	4-9 3/4 (1467)	<table border="0"> <tr><td>4-8 1/8 (1425)</td><td>4-8 3/8 (1432)</td><td>4-7 7/8 (1419)</td></tr> <tr><td>6-8 3/4 (2051)</td><td>6-9 (2057)</td><td>6-8 1/2 (2045)</td></tr> </table>	4-8 1/8 (1425)	4-8 3/8 (1432)	4-7 7/8 (1419)	6-8 3/4 (2051)	6-9 (2057)	6-8 1/2 (2045)						
4-4 1/8 (1324)	4-4 3/8 (1330)	4-3 7/8 (1318)																									
6-4 3/4 (1949)	6-5 (1956)	6-4 1/2 (1943)																									
6-6 15/16 (2005)	6-7 3/16 (2011)	6-6 11/16 (1999)																									
4-10 (1473)	4-10 1/4 (1480)	4-9 3/4 (1467)																									
4-8 1/8 (1425)	4-8 3/8 (1432)	4-7 7/8 (1419)																									
6-8 3/4 (2051)	6-9 (2057)	6-8 1/2 (2045)																									
 <p>IRTM4929 CA / AWN IAWN2523-2W</p>  <p>IRTM4921 CA ICA2555-2W</p>	 <p>IRTM5724 CA ICA2955-2W</p>  <p>IRTM6531 CA / AWN IAWN3327-2W</p>	 <p>IRTM7369 CA ICA2159</p>	 <p>IRT7333 CA / AWN IAWN2523-3W</p>  <p>IRT7325 CA ICA2555-3W</p>																								

MULTIPLE ASSEMBLIES

Units may be factory mulled up to 3 units wide by 2 units high. Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity representative for more information.

Maximum Rough Opening: 113 1/2" (2883 mm) wide X 91 1/16" (2313 mm) high or 85" (2159 mm) wide X 107 9/16" (2732 mm) high. Quarter Circle shapes require a Casement with a continuous head jamb.

T = Standard Tempered

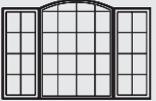
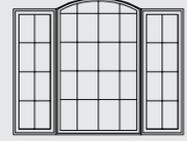
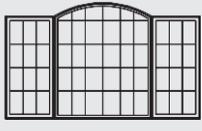
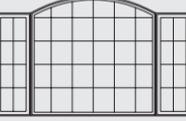
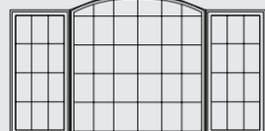
Contact your sales representative for multiple assembly lite alignment. Certain assemblies do not allow for exact lite alignment.

Not to scale. Optional Round Top SDL/Grilles are available in standard cut shown above. GBG patterns shown on page 13. (Round Top divided lites not available in other lite cuts.) Optional Casement and Double Hung Grilles, GBGs and SDLs are available in several lite variations, standard Rectangular cut shown.

MARVIN ROUND TOPS

Casement Round Tops

Eyebrow above Springline

<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>7-4 1/2 (2248)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>7-5 (2261)</td></tr> <tr><td>Frame Size (mm)</td><td>7-4 (2235)</td></tr> </table>	Mas. Opg. (mm)	7-4 1/2 (2248)	Rgh. Opg. (mm)	7-5 (2261)	Frame Size (mm)	7-4 (2235)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>9-0 1/2 (2756)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>9-1 (2769)</td></tr> <tr><td>Frame Size (mm)</td><td>9-0 (2743)</td></tr> </table>	Mas. Opg. (mm)	9-0 1/2 (2756)	Rgh. Opg. (mm)	9-1 (2769)	Frame Size (mm)	9-0 (2743)							
Mas. Opg. (mm)	7-4 1/2 (2248)																			
Rgh. Opg. (mm)	7-5 (2261)																			
Frame Size (mm)	7-4 (2235)																			
Mas. Opg. (mm)	9-0 1/2 (2756)																			
Rgh. Opg. (mm)	9-1 (2769)																			
Frame Size (mm)	9-0 (2743)																			
<table border="0"> <tr><td>1-8 5/8 (524)</td><td>1-8 7/8 (530)</td><td>1-8 3/8 (518)</td></tr> </table>	1-8 5/8 (524)	1-8 7/8 (530)	1-8 3/8 (518)	<table border="0"> <tr><td>2-5 3/8 (746)</td><td>2-5 5/8 (752)</td><td>2-5 1/8 (740)</td></tr> </table>	2-5 3/8 (746)	2-5 5/8 (752)	2-5 1/8 (740)													
1-8 5/8 (524)	1-8 7/8 (530)	1-8 3/8 (518)																		
2-5 3/8 (746)	2-5 5/8 (752)	2-5 1/8 (740)																		
 <p>IRTM3320 CA ICA2916</p>	 <p>IRTM3729 CA ICA3723</p>																			
<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>8-0 1/2 (2451)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>8-1 (2464)</td></tr> <tr><td>Frame Size (mm)</td><td>8-0 (2438)</td></tr> </table>	Mas. Opg. (mm)	8-0 1/2 (2451)	Rgh. Opg. (mm)	8-1 (2464)	Frame Size (mm)	8-0 (2438)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>6-8 1/2 (2045)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>6-9 (2057)</td></tr> <tr><td>Frame Size (mm)</td><td>6-8 (2032)</td></tr> </table>	Mas. Opg. (mm)	6-8 1/2 (2045)	Rgh. Opg. (mm)	6-9 (2057)	Frame Size (mm)	6-8 (2032)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>9-4 1/2 (2858)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>9-5 (2870)</td></tr> <tr><td>Frame Size (mm)</td><td>9-4 (2845)</td></tr> </table>	Mas. Opg. (mm)	9-4 1/2 (2858)	Rgh. Opg. (mm)	9-5 (2870)	Frame Size (mm)	9-4 (2845)
Mas. Opg. (mm)	8-0 1/2 (2451)																			
Rgh. Opg. (mm)	8-1 (2464)																			
Frame Size (mm)	8-0 (2438)																			
Mas. Opg. (mm)	6-8 1/2 (2045)																			
Rgh. Opg. (mm)	6-9 (2057)																			
Frame Size (mm)	6-8 (2032)																			
Mas. Opg. (mm)	9-4 1/2 (2858)																			
Rgh. Opg. (mm)	9-5 (2870)																			
Frame Size (mm)	9-4 (2845)																			
<table border="0"> <tr><td>5-5 (1651)</td><td>5-5 1/4 (1657)</td><td>5-4 3/4 (1645)</td></tr> </table>	5-5 (1651)	5-5 1/4 (1657)	5-4 3/4 (1645)	<table border="0"> <tr><td>5-4 3/4 (1645)</td><td>5-5 (1651)</td><td>5-4 1/2 (1638)</td></tr> </table>	5-4 3/4 (1645)	5-5 (1651)	5-4 1/2 (1638)	<table border="0"> <tr><td>5-7 3/16 (1707)</td><td>5-7 7/16 (1715)</td><td>5-6 15/16 (1700)</td></tr> </table>	5-7 3/16 (1707)	5-7 7/16 (1715)	5-6 15/16 (1700)									
5-5 (1651)	5-5 1/4 (1657)	5-4 3/4 (1645)																		
5-4 3/4 (1645)	5-5 (1651)	5-4 1/2 (1638)																		
5-7 3/16 (1707)	5-7 7/16 (1715)	5-6 15/16 (1700)																		
 <p>IRTM4965 CA ICA2559</p>	 <p>IRTM4164 CA ICA2159</p>	 <p>IRTM5767 CA ICA2959</p>																		
<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>9-4 1/2 (2858)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>9-5 (2870)</td></tr> <tr><td>Frame Size (mm)</td><td>9-4 (2845)</td></tr> </table>	Mas. Opg. (mm)	9-4 1/2 (2858)	Rgh. Opg. (mm)	9-5 (2870)	Frame Size (mm)	9-4 (2845)	<table border="0"> <tr><td>Mas. Opg. (mm)</td><td>10-0 1/2 (3061)</td></tr> <tr><td>Rgh. Opg. (mm)</td><td>10-1 (3073)</td></tr> <tr><td>Frame Size (mm)</td><td>10-0 (3048)</td></tr> </table>	Mas. Opg. (mm)	10-0 1/2 (3061)	Rgh. Opg. (mm)	10-1 (3073)	Frame Size (mm)	10-0 (3048)							
Mas. Opg. (mm)	9-4 1/2 (2858)																			
Rgh. Opg. (mm)	9-5 (2870)																			
Frame Size (mm)	9-4 (2845)																			
Mas. Opg. (mm)	10-0 1/2 (3061)																			
Rgh. Opg. (mm)	10-1 (3073)																			
Frame Size (mm)	10-0 (3048)																			
<table border="0"> <tr><td>5-9 (1753)</td><td>5-9 1/4 (1759)</td><td>5-8 3/4 (1747)</td></tr> </table>	5-9 (1753)	5-9 1/4 (1759)	5-8 3/4 (1747)	<table border="0"> <tr><td>5-6 7/8 (1699)</td><td>5-7 1/8 (1705)</td><td>5-6 5/8 (1692)</td></tr> </table>	5-6 7/8 (1699)	5-7 1/8 (1705)	5-6 5/8 (1692)													
5-9 (1753)	5-9 1/4 (1759)	5-8 3/4 (1747)																		
5-6 7/8 (1699)	5-7 1/8 (1705)	5-6 5/8 (1692)																		
 <p>IRTM7369 CA ICA2159</p>	 <p>IRTM6567 CA ICA2959</p>																			

MULTIPLE ASSEMBLIES

Units may be factory mulled up to 3 units wide by 2 units high. Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity representative for more information.

Maximum Rough Opening: 113 1/2" (2883 mm) wide X 91 1/16" (2313 mm) high or 85" (2159 mm) wide X 107 9/16" (2732 mm) high. Quarter Circle shapes require a Casement with a continuous head jamb.

Contact your sales representative for multiple assembly lite alignment. Certain assemblies do not allow for exact lite alignment.

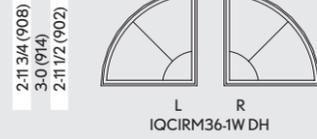
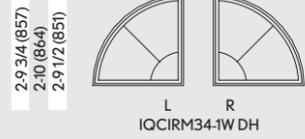
Not to scale. Optional Round Top SDL/Grilles are available in standard cut shown above. GBG patterns shown on page 13. (Round Top divided lites not available in other lite cuts.) Optional Casement and Double Hung Grilles, GBGs and SDLs are available in several lite variations, standard Rectangular cut shown.

MARVIN ROUND TOPS

Double Hung Round Tops

Quarter Circle, True Half, Full Circle, Ellipse

Mas. Opp. (mm)	2-6 (762)	Mas. Opp. (mm)	2-10 (864)	Mas. Opp. (mm)	3-0 (914)
Rgh. Opp. (mm)	2-6 1/2 (775)	Rgh. Opp. (mm)	2-10 1/2 (876)	Rgh. Opp. (mm)	3-0 1/2 (927)
Frame Size (mm)	2-5 1/2 (749)	Frame Size (mm)	2-9 1/2 (851)	Frame Size (mm)	2-11 1/2 (902)



Mas. Opp. (mm)	3-0 (914)	Mas. Opp. (mm)	3-6 (1067)	Mas. Opp. (mm)	4-3 1/2 (1308)	Mas. Opp. (mm)	4-11 1/2 (1511)
Rgh. Opp. (mm)	3-0 1/2 (927)	Rgh. Opp. (mm)	3-6 1/2 (1080)	Rgh. Opp. (mm)	4-4 (1321)	Rgh. Opp. (mm)	5-0 (1524)
Frame Size (mm)	2-11 1/2 (902)	Frame Size (mm)	3-5 1/2 (1054)	Frame Size (mm)	4-3 (1295)	Frame Size (mm)	4-1 (1499)

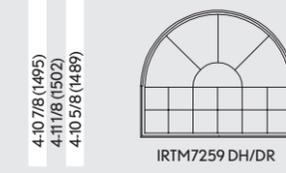
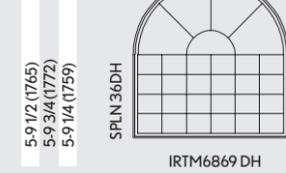


MARVIN ROUND TOPS

Double Hung Round Tops

True Half above Springline

Mas. Opp. (mm)	5-7 1/2 (1715)	Mas. Opp. (mm)	5-11 1/2 (1816)
Rgh. Opp. (mm)	5-8 (1727)	Rgh. Opp. (mm)	6-0 (1829)
Frame Size (mm)	5-7 (1702)	Frame Size (mm)	5-11 (1803)



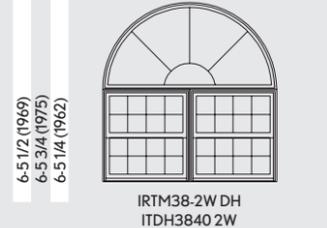
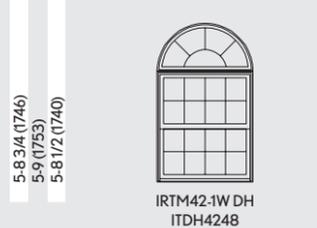
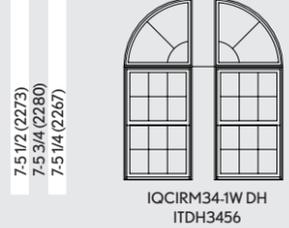
Eyebrow above Springline

Mas. Opp. (mm)	2-2 (660)	Mas. Opp. (mm)	2-6 (762)	Mas. Opp. (mm)	2-10 (864)	Mas. Opp. (mm)	3-0 (914)
Rgh. Opp. (mm)	2-2 1/2 (673)	Rgh. Opp. (mm)	2-6 1/2 (775)	Rgh. Opp. (mm)	2-10 1/2 (876)	Rgh. Opp. (mm)	3-0 1/2 (927)
Frame Size (mm)	2-1 1/2 (648)	Frame Size (mm)	2-5 1/2 (749)	Frame Size (mm)	2-9 1/2 (851)	Frame Size (mm)	2-11 1/2 (902)

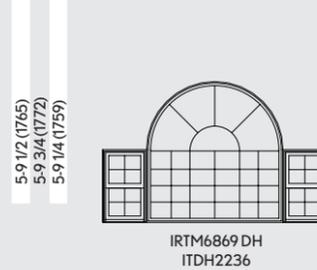
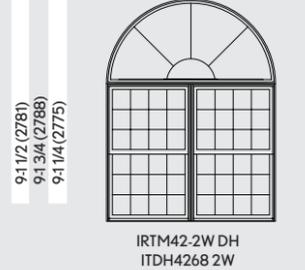
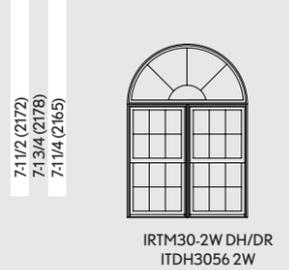


Multiple Assemblies

Mas. Opp. (mm)	2-10 (864)	Mas. Opp. (mm)	3-0 (914)	Mas. Opp. (mm)	3-6 (1067)	Mas. Opp. (mm)	6-3 1/2 (1918)
Rgh. Opp. (mm)	2-10 1/2 (876)	Rgh. Opp. (mm)	3-0 1/2 (927)	Rgh. Opp. (mm)	3-6 1/2 (1080)	Rgh. Opp. (mm)	6-4 (1930)
Frame Size (mm)	2-9 1/2 (851)	Frame Size (mm)	2-11 1/2 (902)	Frame Size (mm)	3-5 1/2 (1054)	Frame Size (mm)	6-3 (1905)



Mas. Opp. (mm)	4-11 1/2 (1511)	Mas. Opp. (mm)	6-11 1/2 (2121)	Mas. Opp. (mm)	9-2 1/2 (2807)
Rgh. Opp. (mm)	5-0 (1524)	Rgh. Opp. (mm)	7-0 (2134)	Rgh. Opp. (mm)	9-3 (2819)
Frame Size (mm)	4-11 (1499)	Frame Size (mm)	6-11 (2108)	Frame Size (mm)	9-2 (2794)



Mas. Opp. (mm)	5-7 1/2 (1715)	Mas. Opp. (mm)	5-11 1/2 (1816)	Mas. Opp. (mm)	6-3 1/2 (1918)	Mas. Opp. (mm)	6-11 1/2 (2121)
Rgh. Opp. (mm)	5-8 (1727)	Rgh. Opp. (mm)	6-0 (1829)	Rgh. Opp. (mm)	6-4 (1930)	Rgh. Opp. (mm)	7-0 (2134)
Frame Size (mm)	5-7 (1702)	Frame Size (mm)	5-11 (1803)	Frame Size (mm)	6-3 (1905)	Frame Size (mm)	6-11 (2108)

Mas. Opp. (mm)	3-2 (965)	Mas. Opp. (mm)	3-6 (1067)	Mas. Opp. (mm)	4-3 1/2 (1308)	Mas. Opp. (mm)	4-11 1/2 (1511)
Rgh. Opp. (mm)	3-2 1/2 (978)	Rgh. Opp. (mm)	3-6 1/2 (1080)	Rgh. Opp. (mm)	4-4 (1321)	Rgh. Opp. (mm)	5-0 (1524)
Frame Size (mm)	3-1 1/2 (953)	Frame Size (mm)	3-5 1/2 (1054)	Frame Size (mm)	4-3 (1295)	Frame Size (mm)	4-1 (1499)

Mas. Opp. (mm)	1-8 5/8 (525)	Mas. Opp. (mm)	1-9 13/16 (554)	Mas. Opp. (mm)	1-10 3/8 (569)	Mas. Opp. (mm)	2-0 3/4 (629)
Rgh. Opp. (mm)	1-8 7/8 (531)	Rgh. Opp. (mm)	1-10 1/16 (560)	Rgh. Opp. (mm)	1-10 5/8 (575)	Rgh. Opp. (mm)	2-1 (636)
Frame Size (mm)	1-8 3/8 (518)	Frame Size (mm)	1-9 9/16 (548)	Frame Size (mm)	1-10 1/8 (563)	Frame Size (mm)	2-0 1/2 (623)

Mas. Opp. (mm)	5-7 1/2 (1715)	Mas. Opp. (mm)	5-11 1/2 (1816)	Mas. Opp. (mm)	6-3 1/2 (1918)	Mas. Opp. (mm)	6-11 1/2 (2121)
Rgh. Opp. (mm)	5-8 (1727)	Rgh. Opp. (mm)	6-0 (1829)	Rgh. Opp. (mm)	6-4 (1930)	Rgh. Opp. (mm)	7-0 (2134)
Frame Size (mm)	5-7 (1702)	Frame Size (mm)	5-11 (1803)	Frame Size (mm)	6-3 (1905)	Frame Size (mm)	6-11 (2108)

Mas. Opp. (mm)	2-0 1/4 (616)	Mas. Opp. (mm)	2-1 3/8 (645)	Mas. Opp. (mm)	2-2 1/2 (674)	Mas. Opp. (mm)	2-5 1/8 (741)
Rgh. Opp. (mm)	2-0 1/2 (622)	Rgh. Opp. (mm)	2-1 5/8 (651)	Rgh. Opp. (mm)	2-2 3/4 (680)	Rgh. Opp. (mm)	2-5 3/8 (747)
Frame Size (mm)	2-0 (610)	Frame Size (mm)	2-1 1/8 (638)	Frame Size (mm)	2-2 1/4 (668)	Frame Size (mm)	2-4 7/8 (734)

Mas. Opp. (mm)	4-3 1/2 (1308)	Mas. Opp. (mm)	4-11 1/2 (1511)	Mas. Opp. (mm)	5-7 1/2 (1715)	Mas. Opp. (mm)	6-3 1/2 (1918)
Rgh. Opp. (mm)	4-4 (1321)	Rgh. Opp. (mm)	5-0 (1524)	Rgh. Opp. (mm)	5-8 (1727)	Rgh. Opp. (mm)	6-4 (1930)
Frame Size (mm)	4-3 (1295)	Frame Size (mm)	4-1 (1499)	Frame Size (mm)	5-7 (1702)	Frame Size (mm)	6-3 (1905)

Mas. Opp. (mm)	5-6 3/8 (1687)	Mas. Opp. (mm)	5-8 3/4 (1747)	Mas. Opp. (mm)	5-8 1/4 (1734)	Mas. Opp. (mm)	5-10 1/2 (1791)
Rgh. Opp. (mm)	5-6 5/8 (1693)	Rgh. Opp. (mm)	5-9 (1753)	Rgh. Opp. (mm)	5-8 1/2 (1744)	Rgh. Opp. (mm)	5-10 3/4 (1798)
Frame Size (mm)	5-6 1/8 (1680)	Frame Size (mm)	5-8 1/2 (1744)	Frame Size (mm)	5-8 (1728)	Frame Size (mm)	5-10 1/4 (1785)

Mas. Opp. (mm)	6-11 1/2 (2121)	Mas. Opp. (mm)	6-11 1/2 (2121)
Rgh. Opp. (mm)	7-0 (2134)	Rgh. Opp. (mm)	7-0 (2134)
Frame Size (mm)	6-11 (2108)	Frame Size (mm)	6-11 (2108)

MULTIPLE ASSEMBLIES

Units may be factory mulled up to 3 units wide by 2 units high. Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity representative for more information.

Maximum Rough Opening: 113 1/2" (2883 mm) wide X 91 1/16" (2313 mm) high or 85" (2159 mm) wide X 107 9/16" (2732 mm) high. Quarter Circle shapes require a Casement with a continuous head jamb.

Contact your sales representative for multiple assembly lite alignment. Certain assemblies do not allow for exact lite alignment.

Not to scale. Optional Round Top SDL/Grilles are available in standard cut shown above. GBG patterns shown on page 13. (Round Top divided lites not available in other lite cuts.) Optional Casement and Double Hung Grilles, GBGs and SDLs are available in several lite variations, standard Rectangular cut shown.

Double Hung Round Top construction details on page 12.

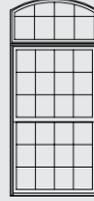
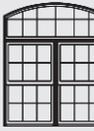
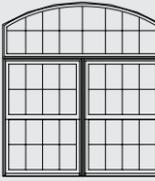
T = Standard Tempered

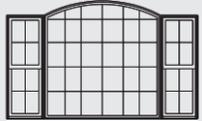
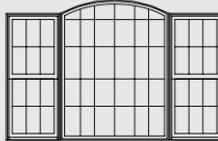
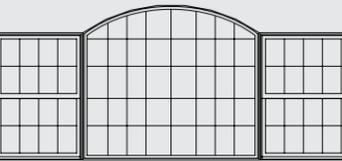
Not to scale. Optional Round Top SDL/Grilles are available in standard cut shown above. GBG patterns shown on page 13. (Round Top divided lites not available in other lite cuts.) Optional Casement and Double Hung Grilles, GBGs and SDLs are available in several lite variations, standard Rectangular cut shown.

MARVIN ROUND TOPS

Double Hung Round Tops

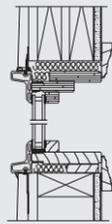
Eyebrow above Springline Multiple Assemblies

Mas. Opp. (mm) 3-0 (914) Rgh. Opp. (mm) 3-0 1/2 (927) Frame Size (mm) 2-11 1/2 (902)	Mas. Opp. (mm) 3-6 (1067) Rgh. Opp. (mm) 3-6 1/2 (1080) Frame Size (mm) 3-5 1/2 (1054)	Mas. Opp. (mm) 5-7 1/2 (1715) Rgh. Opp. (mm) 5-8 (1727) Frame Size (mm) 5-7 (1702)	Mas. Opp. (mm) 6-3 1/2 (1918) Rgh. Opp. (mm) 6-4 (1930) Frame Size (mm) 6-3 (1905)
 IRTM3622 DH ITDH3660	 IRTM4222 DH ITDH4272	 IRTM6824 DH IDH3456-2W	 IRTM7626 DH ITDH3856-2W

Mas. Opp. (mm) 8-6 1/2 (2604) Rgh. Opp. (mm) 8-7 (2616) Frame Size (mm) 8-6 (2591)	Mas. Opp. (mm) 9-2 1/2 (2807) Rgh. Opp. (mm) 9-3 (2819) Frame Size (mm) 9-2 (2794)	Mas. Opp. (mm) 13-10 1/2 (4229) Rgh. Opp. (mm) 13-11 (4242) Frame Size (mm) 13-10 (4216)
 IRTM5266 DH ITDH2660	 IRTM6868 DH ITDH2260	 IRTM8473T DH ITDH4260

Mas. Opp. (mm) 6-1 (1854) Rgh. Opp. (mm) 6-1 1/2 (1867) Frame Size (mm) 6-0 1/2 (1842)
 IRTM3021 DH ITDHTR2216

Construction Detail



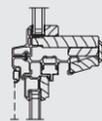
Double Hung/Door Round Top Head Jamb & Sill

T = Standard Tempered

Contact your sales representative for multiple assembly lite alignment. Certain assemblies do not allow for exact lite alignment.

Not to scale. Optional Round Top SDL/Grilles are available in standard cut shown above. GBG patterns shown on page 13. (Round Top divided lites not available in other lite cuts.) Optional Casement and Double Hung Grilles, GBGs and SDLs are available in several lite variations, standard Rectangular cut shown.

Horizontal Mullion Detail



Double Hung Round Top Over Double Hung

MULTIPLE ASSEMBLIES

Units may be factory mullered up to 3 units wide by 2 units high. Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity representative for more information.

Maximum Rough Opening: 113 1/2" (2883 mm) wide X 91 1/16" (2313 mm) high or 85" (2159 mm) wide X 107 9/16" (2732 mm) high. Quarter Circle shapes require a Casement with a continuous head jamb.

MARVIN ROUND TOPS

Door Round Tops

Half Round above Springline

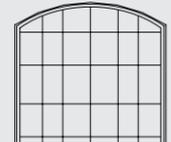
Mas. Opp. (mm) 4-11 1/2 (1511) Rgh. Opp. (mm) 5-0 (1524) Frame Size (mm) 4-11 (1499)
 IRTM30-2W DH/DR

Mas. Opp. (mm) 5-11 1/2 (1816) Rgh. Opp. (mm) 6-0 (1829) Frame Size (mm) 5-11 (1803)
 IRTM7259 DH/DR

Mas. Opp. (mm) 4-11 1/2 (1511) Rgh. Opp. (mm) 5-0 (1524) Frame Size (mm) 4-11 (1499)
 IRTM6025 DH/DR

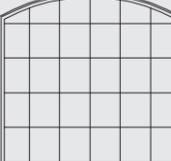
Eyebrow above Springline

Mas. Opp. (mm) 4-11 1/2 (1511) Rgh. Opp. (mm) 5-0 (1524) Frame Size (mm) 4-11 (1499)
 IRTM6032 DH/DR

Mas. Opp. (mm) 5-11 1/2 (1816) Rgh. Opp. (mm) 6-0 (1829) Frame Size (mm) 5-11 (1803)
 IRTM6069 DH/DR

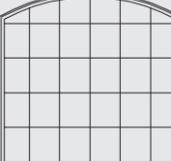
Mas. Opp. (mm) 5-11 1/2 (1816) Rgh. Opp. (mm) 6-0 (1829) Frame Size (mm) 5-11 (1803)
 IRTM7225 DH/DR

Mas. Opp. (mm) 5-11 1/2 (1816) Rgh. Opp. (mm) 6-0 (1829) Frame Size (mm) 5-11 (1803)
 IRTM7233 DH/DR

Mas. Opp. (mm) 5-11 1/2 (1816) Rgh. Opp. (mm) 6-0 (1829) Frame Size (mm) 5-11 (1803)
 IRTM7269 DH/DR

Mas. Opp. (mm) 5-11 1/2 (1816) Rgh. Opp. (mm) 6-0 (1829) Frame Size (mm) 5-11 (1803)
 IRTM7225 DH/DR

Mas. Opp. (mm) 5-11 1/2 (1816) Rgh. Opp. (mm) 6-0 (1829) Frame Size (mm) 5-11 (1803)
 IRTM7233 DH/DR

Mas. Opp. (mm) 5-11 1/2 (1816) Rgh. Opp. (mm) 6-0 (1829) Frame Size (mm) 5-11 (1803)
 IRTM7269 DH/DR

T = Standard Tempered

Contact your sales representative for multiple assembly lite alignment. Certain assemblies do not allow for exact lite alignment.

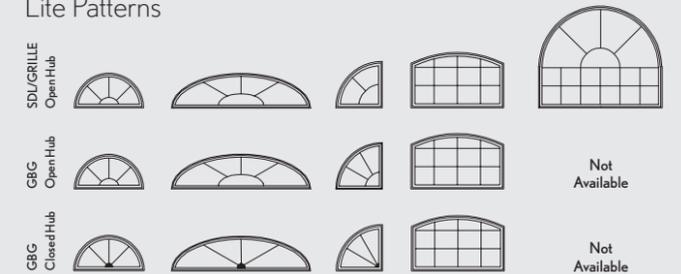
Not to scale. Optional Round Top SDL/Grilles are available in standard cut shown above. GBG patterns shown on page 13. (Round Top divided lites not available in other lite cuts.) Optional Casement and Double Hung Grilles, GBGs and SDLs are available in several lite variations, standard Rectangular cut shown.

Double Hung Round Top construction details on page 12.

Note: IRTM7225, IRTM7233, and IRTM7269 can be mullered above a CN 36 width 2W Integrity Double Hung. Grilles and/or GBGs may not line up in multiple assemblies. For more information, please contact your Integrity representative.

IRTM7259 can be mullered above a CN 36 width 2W Integrity Double Hung. Grilles may not line up in multiple assemblies. For more information, please contact your Integrity representative.

Lite Patterns



THERMAL PERFORMANCE

Marvin Casement Round Tops for Integrity®

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/Low E II - Air	0.33	3.03	0.37	0.64	N, NC, SC, S
Insulating Glass/Low E II - Argon	0.29	3.45	0.37	0.64	N, NC, SC, S
Insulating Glass/Low E II - Air - GBG	0.33	3.03	0.34	0.57	N, NC, SC, S
Insulating Glass/Low E II - Argon - GBG	0.29	3.45	0.33	0.57	N, NC, SC, S
Insulating Glass/Low E II - Air - SDL	0.33	3.03	0.34	0.57	N, NC, SC, S
Insulating Glass/Low E II - Argon - SDL	0.29	3.45	0.33	0.57	N, NC, SC, S

Marvin Double Hung Round Tops for Integrity®

ENERGY DATA	U-Value	R-Value	SHGC	VT	ENERGY STAR
Insulating Glass/Low E II - Air	0.33	3.03	0.36	0.61	N, NC, SC, S
Insulating Glass/Low E II - Argon	0.29	3.45	0.36	0.61	N, NC, SC, S
Insulating Glass/Low E II - Air - GBG	0.32	3.16	0.32	0.55	N, NC, SC, S
Insulating Glass/Low E II - Argon - GBG	0.32	3.16	0.32	0.55	N, NC, SC, S
Insulating Glass/Low E II - Air - SDL	0.32	3.16	0.32	0.55	N, NC, SC, S
Insulating Glass/Low E II - Argon - SDL	0.29	3.45	0.32	0.55	N, NC, SC, S

Thermal and solar values are subject to update. Values are generated in accordance with NFRC 100-2004 and other applicable NFRC procedures.

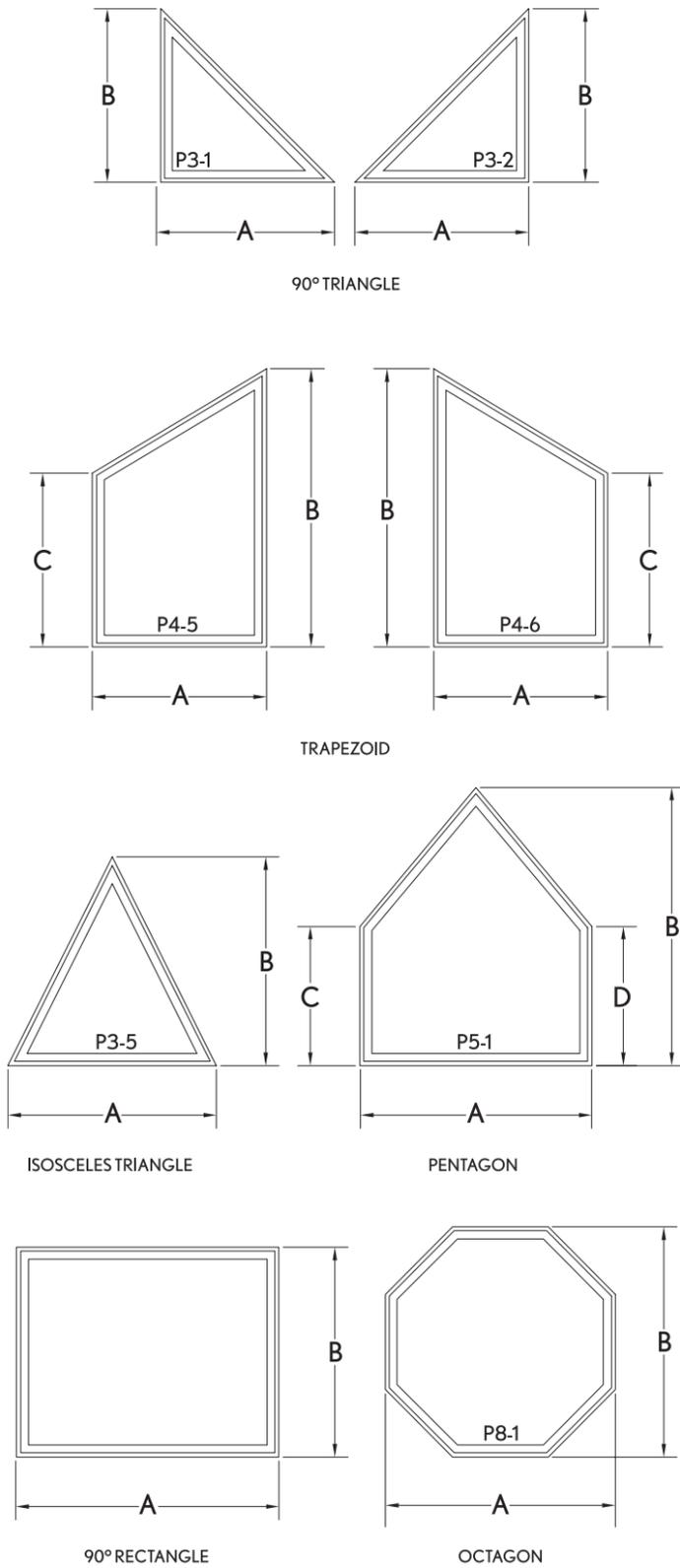
DESIGN PRESSURE

Round Top Windows

DP 50

WARRANTY

Refer to the Marvin product warranty for complete warranty information on Marvin Round Tops made for Integrity.



How to Specify

When ordering a Trapezoid, Triangle, or Rectangle window, provide a sketch of the unit as viewed from the exterior, also include key Rough Opening dimensions.

Example: To order a window of a Trapezoid opening provide the measurements of A, B, and C as indicated. For other shapes, give the dimensions shown.

To ensure the proper unit for field mulling applications, specify CA/AWN or DH/DR frame type.

SPECIFICATION NOTES:

Maximum rough opening: 48 sq. ft. (44,593 sq. cm.)

Maximum 97" (2464 mm) rough opening width.

Maximum 96 1/2" (2451 mm) rough opening height.

Minimum 13 7/8" (352 mm) rough opening width rectangular; P3-1, P3-2, P3-5, P4-5, P4-6, P5-1 units.

Minimum 13 3/8" (340 mm) rough opening height rectangular; P3-1, P3-2, P3-5, P4-5, P4-6, P5-1 units.

Minimum 19 1/8" (486 mm) rough opening width & height P8-1 units

Minimum 8" (203 mm) rough opening for shortest leg— P3-1, P3-2, P3-5, P4-5, P4-6, P5-1, and P8-1 units

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied:

For ICA/AWN direct glaze unit: up to 4 units wide by 1 unit high. **MAXIMUM ROUGH OPENING:** not to exceed 113" x 71 5/8" OR up to 2 units wide by 2 units high. **MAXIMUM ROUGH OPENING:** not to exceed 73" x 94 3/4".

For ITDH/ITGL direct glaze unit: up to 4 units wide by 1 unit high. **MAXIMUM ROUGH OPENING:** not to exceed 113 1/2" x 76 1/4" OR up to 2 units wide by 2 units high. **MAXIMUM ROUGH OPENING:** not to exceed 84" x 92".

For ISPD/ISFD direct glaze unit: up to 1 unit wide by 2 units high. **MAXIMUM ROUGH OPENING:** not to exceed 72" x 100 1/2".

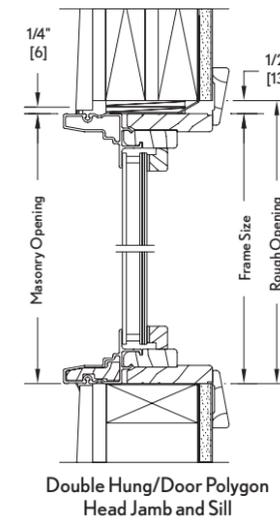
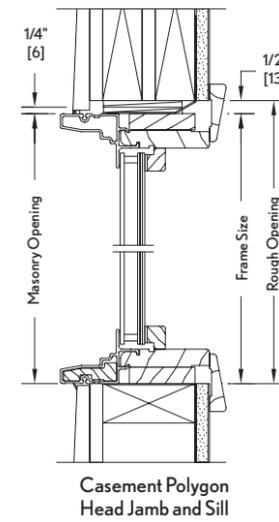
For IIFD direct glaze unit: up to 3 unit wide by 1 units high. **MAXIMUM ROUGH OPENING:** not to exceed 109 15/16" x 96" OR up to 2 units wide by 2 units high. **MAXIMUM ROUGH OPENING:** not to exceed 73 5/8" x 102 1/2".

NOTE: Rectangular field assemblies with jamb extension: ADD 1/4" (6 mm) to WIDTH, and 1/8" (3 mm) to HEIGHT of Frame, Rough, and Masonry Opening sizes with exception of assemblies including casement or awning.

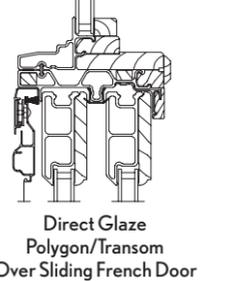
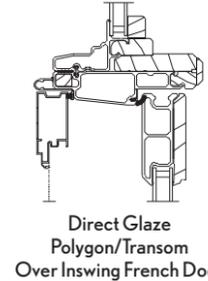
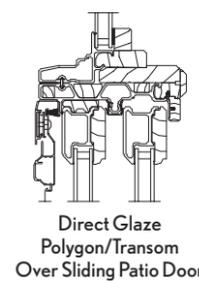
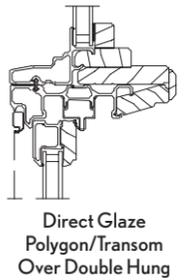
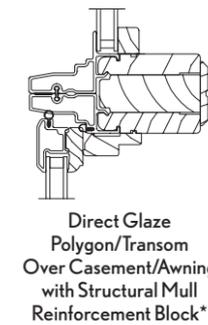
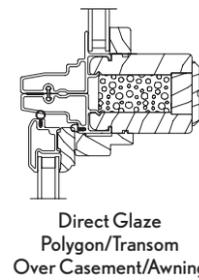
Field mulling window assemblies beyond the above limitations is not recommended.

Field mulling door assemblies beyond 110" x 112" is not recommended.

Construction Details



Mullion Details



Details not to scale.

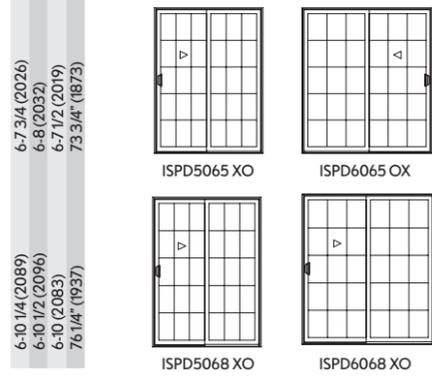
Note: Drip cap supplied on direct glaze rectangles only.

* To be used on 2 wide by 2 high assemblies.

SLIDING PATIO DOOR

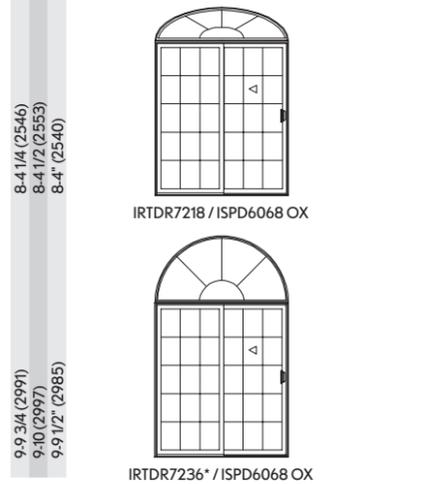
2 Panel Sliding Patio Doors

Mas. Opp. (mm)	4-11 1/2 (1511)	5-11 1/2 (1816)
Rgh. Opp. (mm)	5-0 (1524)	6-0 (1829)
Frame Size (mm)	4-11 (1499)	5-11 (1803)
Glass Size (mm)	26 1/4" (667)	32 1/4" (819)



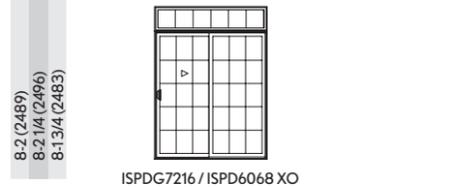
Round Top Over Sliding French Door

Mas. Opp. (mm)	5-11 1/2 (1816)
Rgh. Opp. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



Direct Glaze Transom Over Sliding Patio Door

Mas. Opp. (mm)	5-11 1/2 (1816)
Rgh. Opp. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



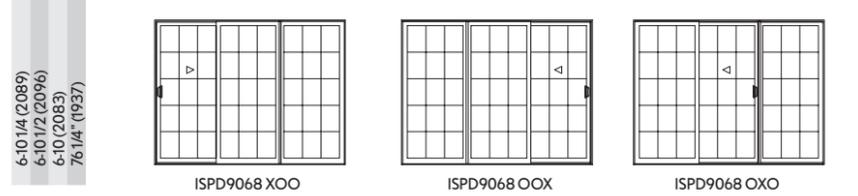
Sliding Patio Door Direct Glaze Transom

Mas. Opp. (mm)	5-11 1/2 (1816)	8-11 (2718)
Rgh. Opp. (mm)	6-0 (1829)	8-11 1/2 (2730)
Frame Size (mm)	5-11 (1803)	8-10 1/2 (2705)
Glass Size (mm)	68 3/16" (1732)	103 11/16" (2634)

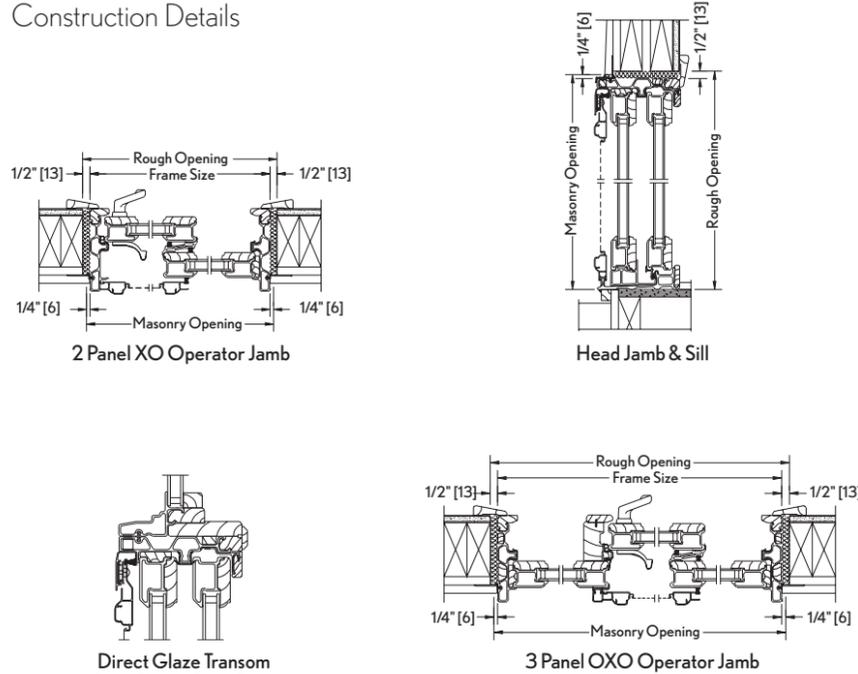


3 Panel Sliding Patio Doors

Mas. Opp. (mm)	8-11 (2718)	8-11 (2718)	8-11 (2718)
Rgh. Opp. (mm)	8-11 1/2 (2731)	8-11 1/2 (2731)	8-11 1/2 (2731)
Frame Size (mm)	8-10 1/2 (2705)	8-10 1/2 (2705)	8-10 1/2 (2705)
Glass Size (mm)	32 1/4" (819)	32 1/4" (819)	32 1/4" (819)



Construction Details



Details and Elevations not to scale.

Optional Sliding Door Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Other available lite cuts shown on page 37.

XO operation shown, OX operation optional. When ordering 6-9/16" (167 mm) or 6-13/16" (173 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

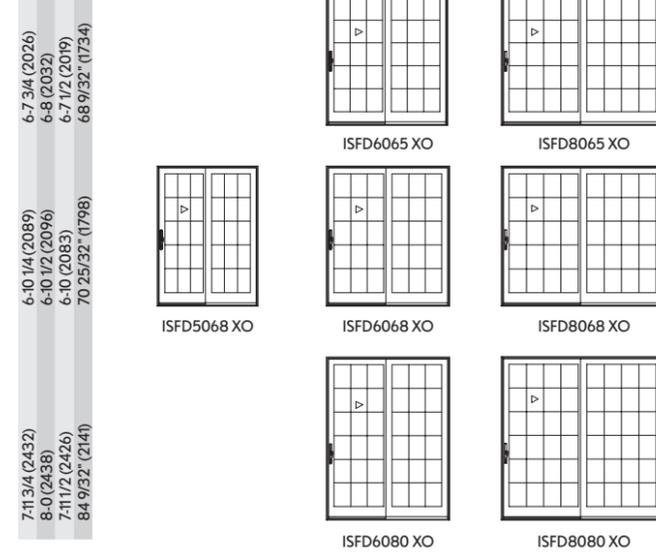
Optional Direct Glaze transom Grilles, GBGs and SDLs are available in a standard Rectangular cut, as shown. Alternate transom lite cuts available to align with select lite cut options shown on page 37. Optional Round Top SDL/Grilles are available in a standard cut, as shown. Round Top GBG cuts are shown on page 61. (Round Top divided lites not available in other lite cuts.)

* This product is only available field mullied.

SLIDING FRENCH DOOR

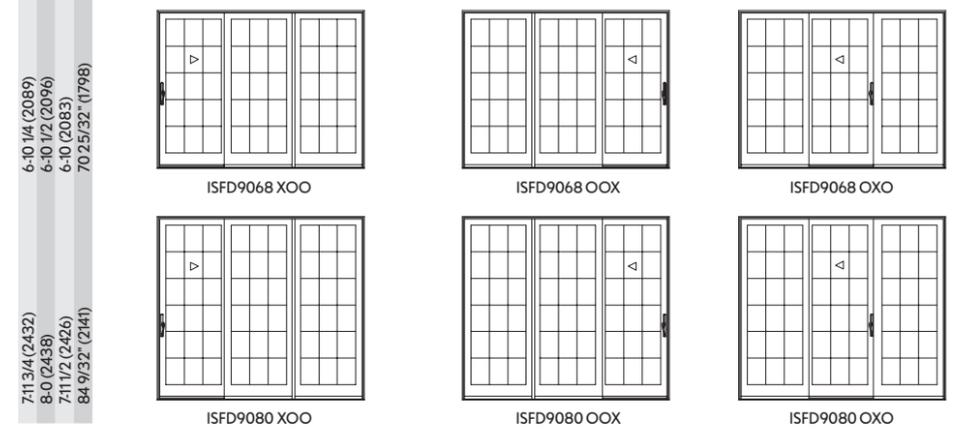
2 Panel Sliding French Doors

Mas. Opp. (mm)	4-11 1/2 (1511)	5-11 1/2 (1816)	7-11 1/2 (2426)
Rgh. Opp. (mm)	5-0 (1524)	6-0 (1829)	8-0 (2438)
Frame Size (mm)	4-11 (1499)	5-11 (1803)	7-11 (2413)
Glass Size (mm)	23 9/16" (598)	29 9/16" (751)	41 9/16" (1056)

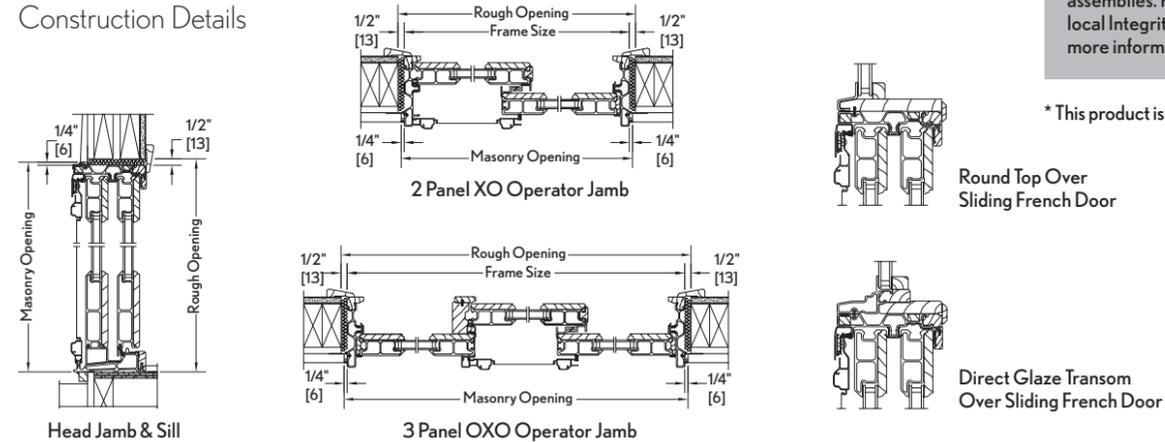


3 Panel Sliding French Doors

Mas. Opp. (mm)	8-11 (2718)	8-11 (2718)	8-11 (2718)
Rgh. Opp. (mm)	8-11 1/2 (2731)	8-11 1/2 (2731)	8-11 1/2 (2731)
Frame Size (mm)	8-10 1/2 (2705)	8-10 1/2 (2705)	8-10 1/2 (2705)
Glass Size (mm)	29 9/16" (751)	29 9/16" (751)	29 9/16" (751)



Construction Details



* This product is only available field mullied.

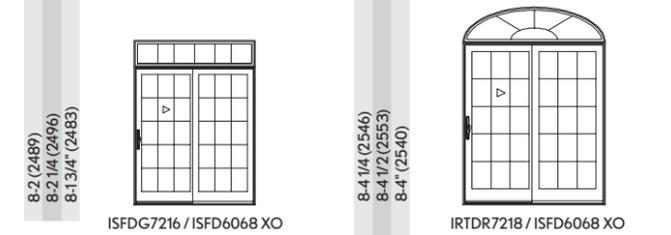
Sliding French Door Direct Glaze Transom

Mas. Opp. (mm)	5-11 1/2 (1816)	8-11 (2718)
Rgh. Opp. (mm)	6-0 (1829)	8-11 1/2 (2730)
Frame Size (mm)	5-11 (1803)	8-10 1/2 (2705)
Glass Size (mm)	68 3/16" (1732)	103 11/16" (2634)



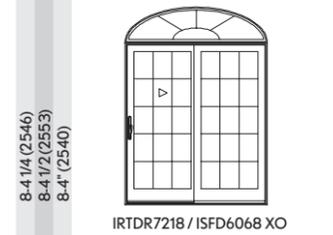
Direct Glaze Transom Over Sliding French Door

Mas. Opp. (mm)	5-11 1/2 (1816)
Rgh. Opp. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



Round Top Over Sliding French Door

Mas. Opp. (mm)	5-11 1/2 (1816)
Rgh. Opp. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



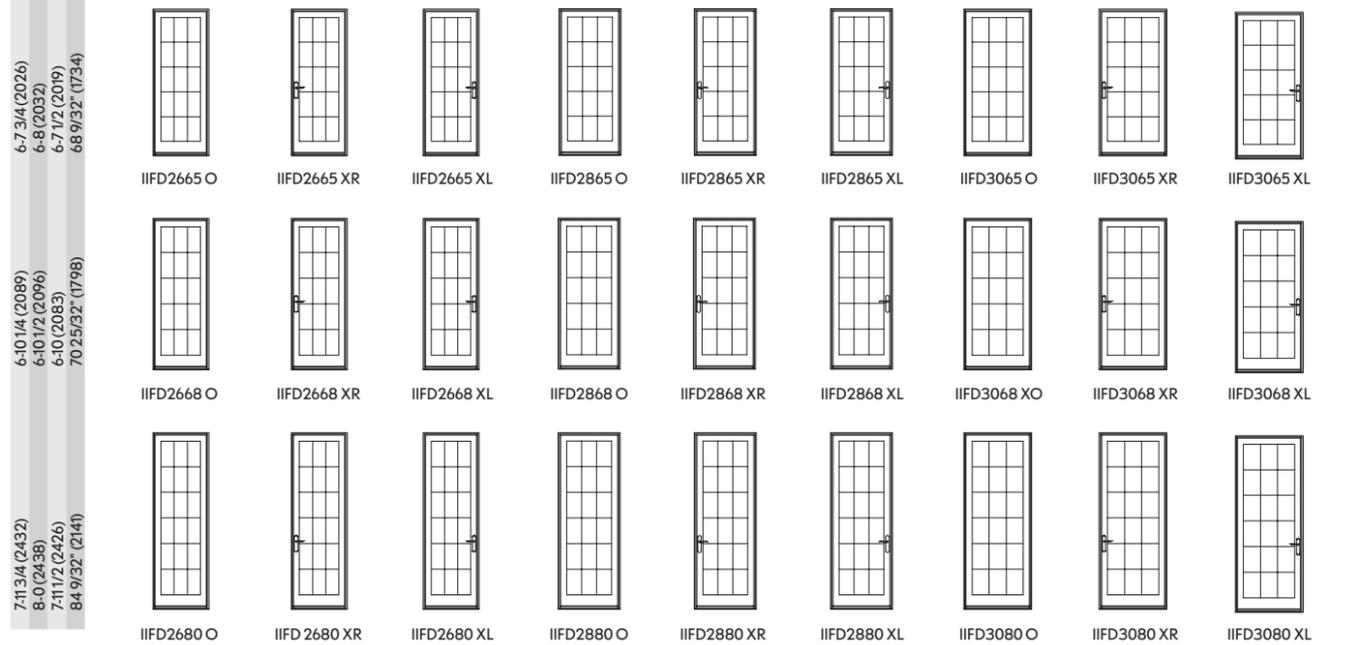
MULTIPLE ASSEMBLIES

Multiple assembly units can be factory mullied up to 1 unit wide by 2 units high. Maximum Rough Opening not to exceed 72" x 100 1/2". Field mull kits available for up to 3 units wide by 2 units high not to exceed 110" x 112". True Half Round transoms are available field mullied only. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity representative for more information.

INSWING FRENCH DOOR

Inswing French Doors

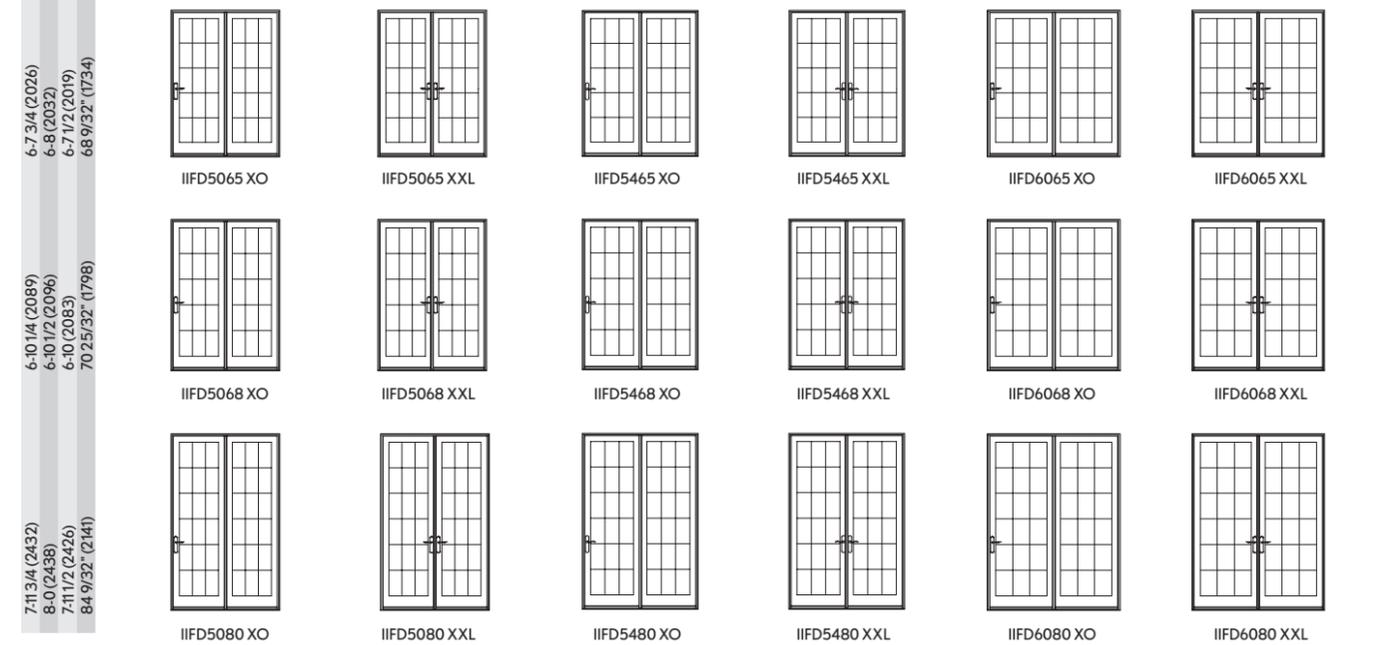
Mas. Opg. (mm)	2-6 13/16 (783)	2-8 13/16 (834)	3-0 13/16 (935)
Rgh. Opg. (mm)	2-7 5/16 (796)	2-9 5/16 (846)	3-1 5/16 (948)
Frame Size (mm)	2-6 5/16 (770)	2-8 5/16 (821)	3-0 5/16 (923)
Glass Size (mm)	22 19/32" (574)	24 19/32" (625)	28 19/32" (726)



INSWING FRENCH DOOR

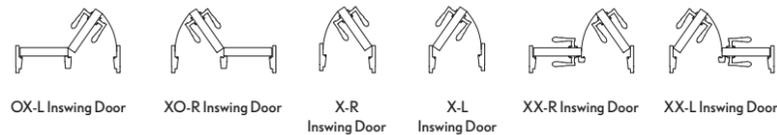
Inswing French Doors

Mas. Opg. (mm)	4-11 1/2 (1511)	5-3 1/2 (1613)	5-11 1/2 (1816)
Rgh. Opg. (mm)	5-0 (1524)	5-4 (1626)	6-0 (1829)
Frame Size (mm)	4-11 (1499)	5-3 (1600)	5-11 (1803)
Glass Size (mm)	22 19/32" (574)	24 19/32" (625)	28 19/32" (726)



Inswing Door Operation

X signifies an operating door panel, O means stationary. Listing the panels in a door starts from the left to the right, looking from the exterior.



Details and Elevations not to scale.

*2 panel XO also available in OX

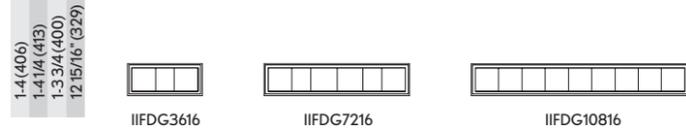
**2 and 3 panel XX configurations also available in XX R.

O = Stationary X = Operator
L = Left Hand Panel R = Right Hand Panel

Optional Inswing French Door Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Other available lite cuts on page 37.

Inswing French Door Direct Glaze Transoms

Mas. Opg. (mm)	3-0 13/16 (935)	5-11 1/2 (1816)	8-11 13/16 (2738)
Rgh. Opg. (mm)	3-15/16 (948)	6-0 (1829)	9-0 5/16 (2751)
Frame Size (mm)	3-0 5/16 (923)	5-11 (1803)	8-11 5/16 (2726)
Glass Size (mm)	33 1/2" (851)	68 3/16" (1732)	104 1/2" (2654)



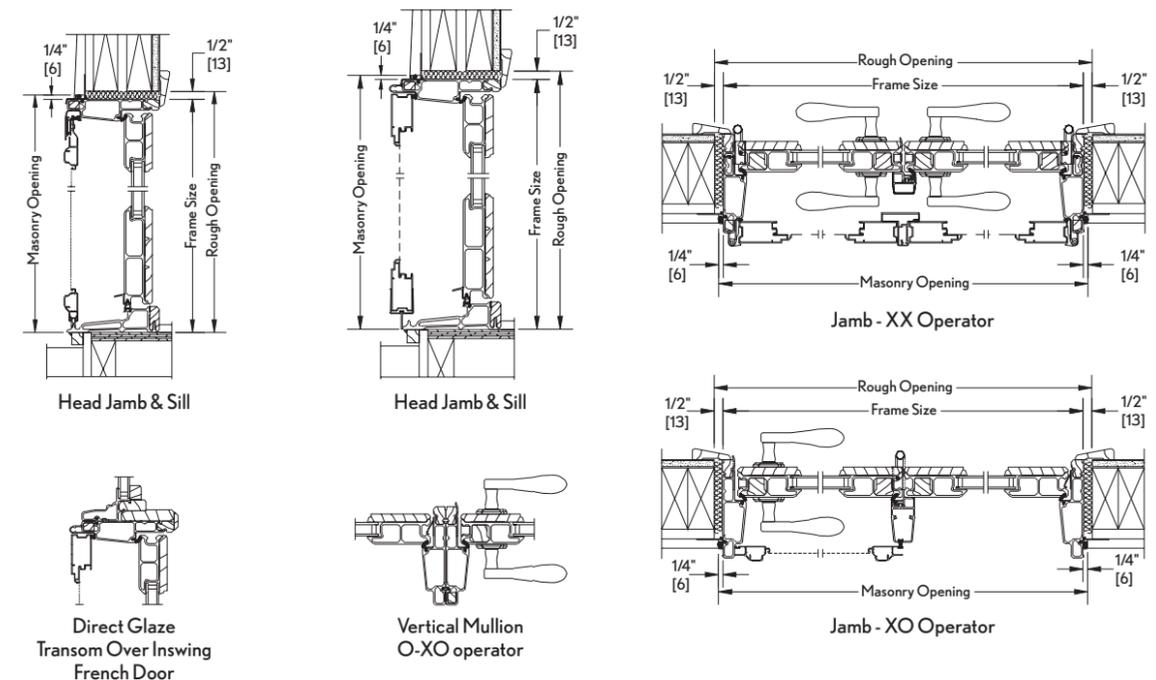
Transom units have a 2" jamb extension for 6-9/16" jombs or a 2-1/4" jamb extension for 6-13/16" jombs. When ordering 6-9/16" or 6-13/16" jombs, add 1/4" to width and 1/8" to height of Frame Size (FS), Rough Opening (RO), or Masonry Opening (MO).

Optional Direct Glaze transom Grilles, GBGs and SDLs are available in a standard Rectangular cut, as shown. Alternate transom lite cuts available to align with select lite cut options shown on page 37.

MULTIPLE ASSEMBLIES

Multiple assembly units can be factory mulled up to 3 units wide by 1 unit high, Maximum Rough Opening not to exceed 109 15/16" x 96"; or 2 units wide by 2 units high, maximum Rough Opening not to exceed 73 5/8" x 100 1/2". Field mull kits available for up to 3 units wide by 2 units high not to exceed 110" x 112". True Half Round transoms are available field mulled only. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.

Construction Details



INSWING FRENCH DOOR

Multiple Assemblies - 3 Panel

Mas. Opp. (mm)	7-5 13/16 (2281)	7-5 13/16 (2281)	7-7 7/16 (2323)	7-5 13/16 (2281)
Rgh. Opp. (mm)	7-6 5/16 (2294)	7-6 5/16 (2294)	7-7 15/16 (2335)	7-6 5/16 (2294)
Frame Size (mm)	7-5 5/16 (2269)	7-5 5/16 (2269)	7-6 15/16 (2310)	7-5 5/16 (2269)

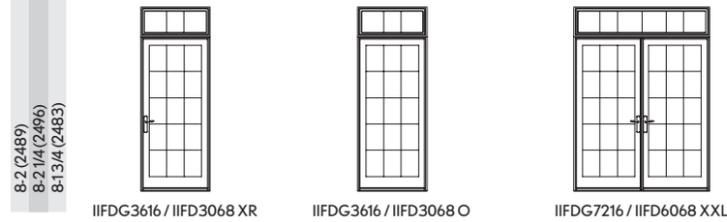


Mas. Opp. (mm)	8-11 13/16 (2738)	8-11 13/16 (2738)	9-17/16 (2780)	8-11 13/16 (2738)
Rgh. Opp. (mm)	9-0 5/16 (2751)	9-0 5/16 (2751)	9-11 5/16 (2792)	9-0 5/16 (2751)
Frame Size (mm)	8-11 5/16 (2726)	8-11 5/16 (2726)	9-0 15/16 (2767)	8-11 5/16 (2726)



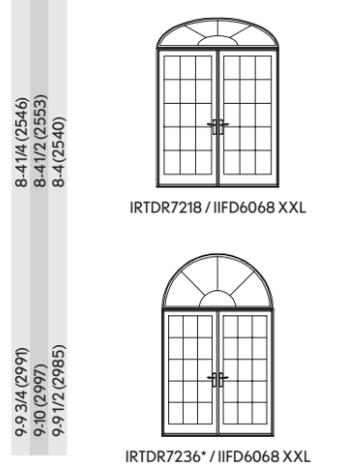
Direct Glaze Transom Over Inswing French Door

Mas. Opp. (mm)	3-0 13/16 (935)	3-0 13/16 (935)	5-11 1/2 (1816)
Rgh. Opp. (mm)	3-1 5/16 (948)	3-1 5/16 (948)	6-0 (1829)
Frame Size (mm)	3-0 5/16 (923)	3-0 5/16 (923)	5-11 (1803)



Round Top Over Inswing French Door

Mas. Opp. (mm)	5-11 1/2 (1816)
Rgh. Opp. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



Details and Elevations not to scale.

*This product is only available field mullled.

**2 and 3 panel XX configurations also available in XX R.

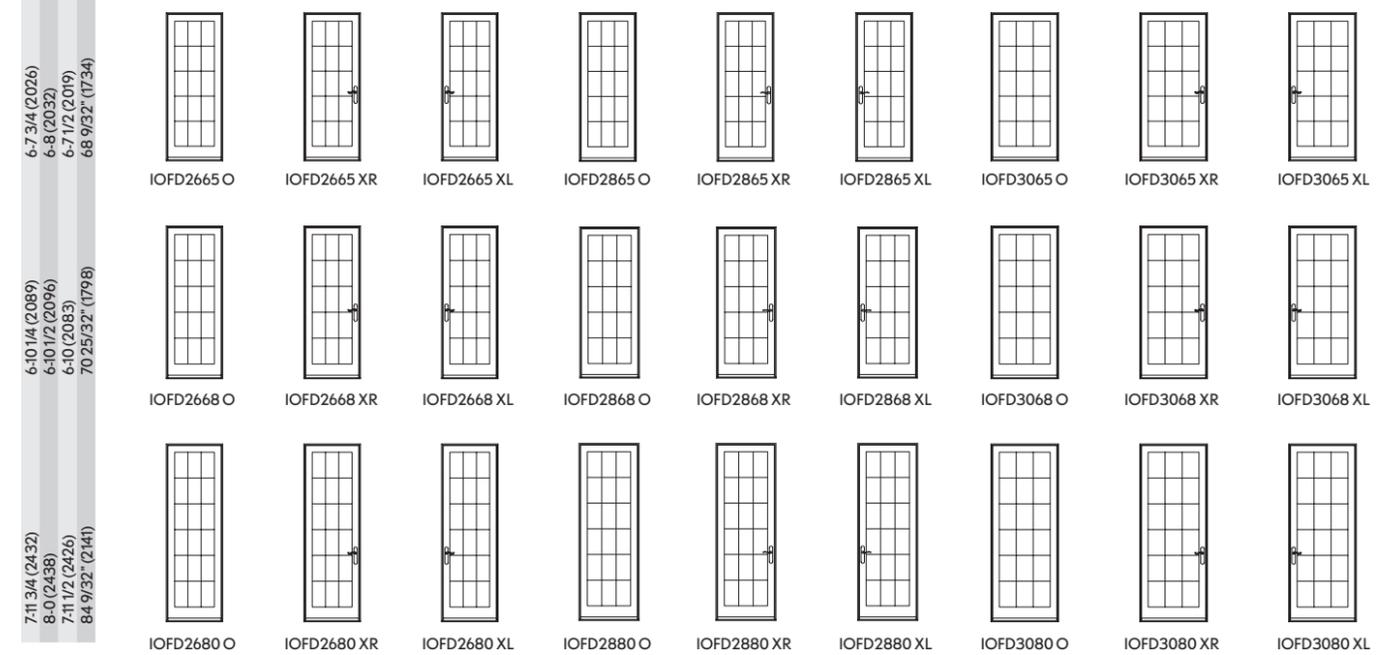
O = Stationary X = Operator

Optional Round Top SDL/Grilles are available in a standard cut, as shown. Round Top GBG cuts are shown on page 58. (Round Top divided lites only available in standard lite cut.)

OUTSWING FRENCH DOOR

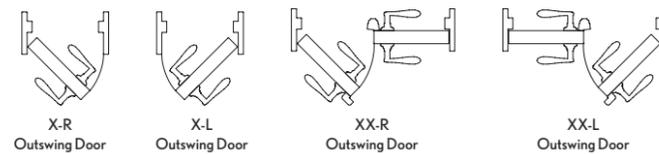
Outswing French Doors

Mas. Opp. (mm)	2-6 13/16 (783)	2-8 13/16 (834)	3-0 13/16 (935)
Rgh. Opp. (mm)	2-7 5/16 (796)	2-9 5/16 (846)	3-1 5/16 (948)
Frame Size (mm)	2-6 5/16 (770)	2-8 5/16 (821)	3-0 5/16 (923)
Glass Size (mm)	22 19/32" (574)	24 19/32" (625)	28 19/32" (726)



Outswing Door Operation

X signifies an operating door panel, O means stationary. Listing the panels in a door starts from the left to the right, looking from the exterior.



Details and Elevations not to scale.

O = Stationary X = Operator
L = Left Hand Panel R = Right Hand Panel

Optional Outswing French Door Grilles, GBGs and SDLs are available in a standard Rectangular cut, as shown. Other available lite cuts on page 37.

Transom units have a 2" jamb extension for 6-9/16" jamba or a 2-1/4" jamb extension for 6-13/16" jamba. When ordering 6-9/16" or 6-13/16" jamba, add 1/4" to width and 1/8" to height of Frame Size (FS), Rough Opening (RO), or Masonry Opening (MO).

Optional Direct Glaze transom Grilles, GBGs and SDLs are available in a standard Rectangular cut, as shown. Alternate transom lite cuts available to align with select lite cut options shown on page 37.

Outswing French Door Direct Glaze Transoms

Mas. Opp. (mm)	3-0 13/16 (935)	5-11 1/2 (1816)	8-11 13/16 (2738)
Rgh. Opp. (mm)	3-1 5/16 (948)	6-0 (1829)	9-0 5/16 (2751)
Frame Size (mm)	3-0 5/16 (923)	5-11 (1803)	8-11 5/16 (2726)
Glass Size (mm)	33 1/2" (851)	68 3/16" (1732)	104 1/2" (2654)



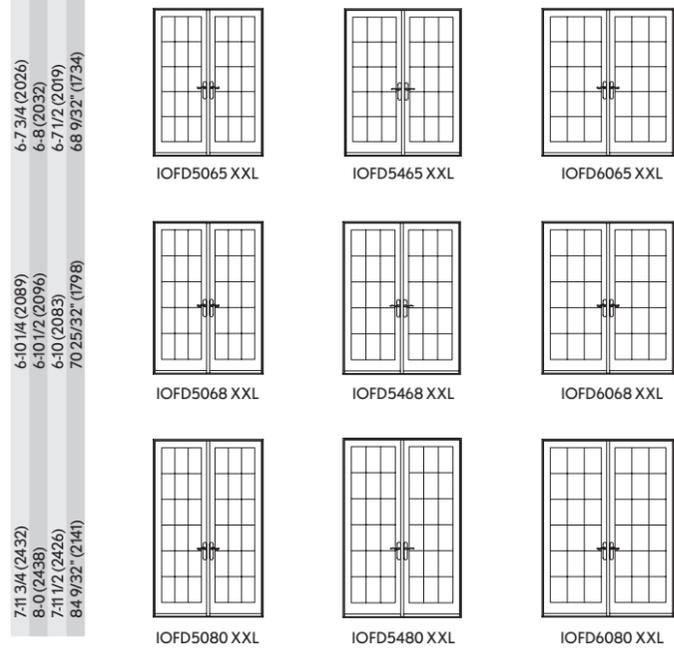
MULTIPLE ASSEMBLIES

Multiple assembly units can be factory mullled up to 3 units wide by 1 unit high, Maximum Rough Opening not to exceed 109 15/16" x 96"; or 2 units wide by 2 units high, maximum Rough Opening not to exceed 73 5/8" x 100 1/2". Field mull kits available for up to 3 units wide by 2 units high not to exceed 110" x 112". True Half Round transoms are available field mullled only. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.

OUTSWING FRENCH DOOR

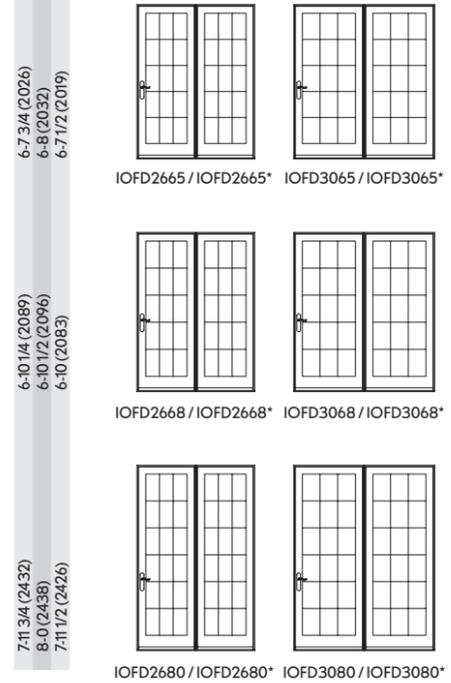
Outswing French Doors

Mas. Opg. (mm)	2-6 13/16 (783)	5-3 1/2 (1613)	5-11 1/2 (1816)
Rgh. Opg. (mm)	2-7 5/16 (796)	5-4 (1626)	6-0 (1829)
Frame Size (mm)	2-6 5/16 (770)	5-3 (1600)	5-11 (1803)
Glass Size (mm)	22 19/32" (574)	24 19/32" (625)	28 19/32" (726)



Multiple Assemblies - 2 Panel

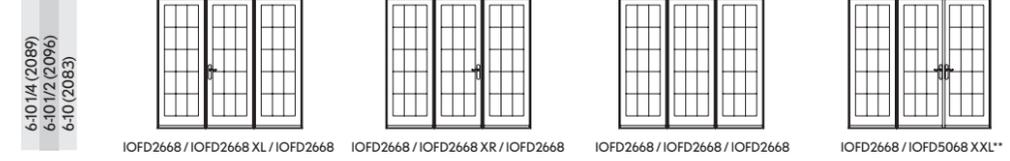
Mas. Opg. (mm)	5-1 1/8 (1553)	6-1 1/8 (1857)
Rgh. Opg. (mm)	5-1 5/8 (1565)	6-1 5/8 (1870)
Frame Size (mm)	5-0 5/8 (1540)	6-0 5/8 (1845)



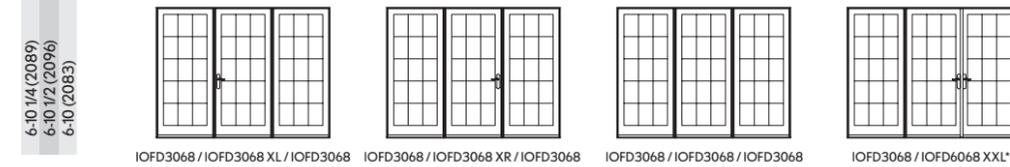
OUTSWING FRENCH DOOR

Multiple Assemblies - 3 Panel

Mas. Opg. (mm)	7-7 7/16 (2323)	7-7 7/16 (2323)	7-7 7/16 (2323)	7-5 13/16 (2281)
Rgh. Opg. (mm)	7-7 15/16 (2335)	7-7 15/16 (2335)	7-7 15/16 (2335)	7-6 5/16 (2294)
Frame Size (mm)	7-6 15/16 (2310)	7-6 15/16 (2310)	7-6 15/16 (2310)	7-5 5/16 (2269)

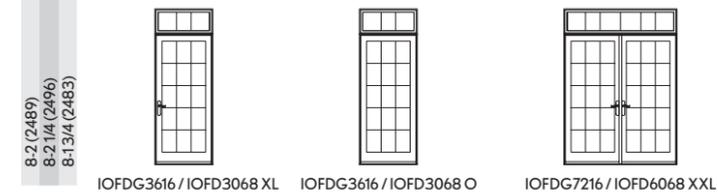


Mas. Opg. (mm)	9-1 7/16 (2780)	9-1 7/16 (2780)	9-1 7/16 (2780)	8-11 13/16 (2738)
Rgh. Opg. (mm)	9-1 15/16 (2792)	9-1 15/16 (2792)	9-1 15/16 (2792)	9-0 5/16 (2751)
Frame Size (mm)	9-0 15/16 (2767)	9-0 15/16 (2767)	9-0 15/16 (2767)	8-11 5/16 (2726)



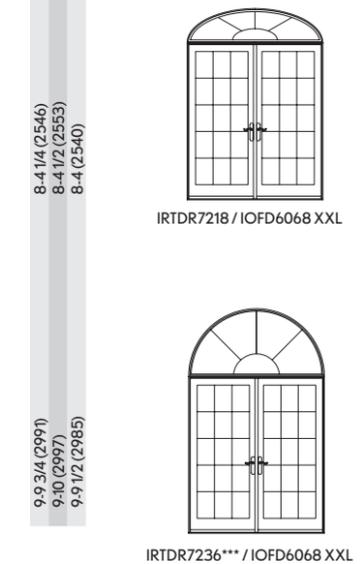
Direct Glaze Transom Over Outswing French Door

Mas. Opg. (mm)	3-0 13/16 (935)	3-0 13/16 (935)	5-11 1/2 (1816)
Rgh. Opg. (mm)	3-1 5/16 (948)	3-1 5/16 (948)	6-0 (1829)
Frame Size (mm)	3-0 5/16 (923)	3-0 5/16 (923)	5-11 (1803)

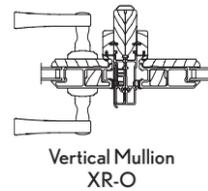
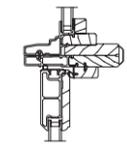
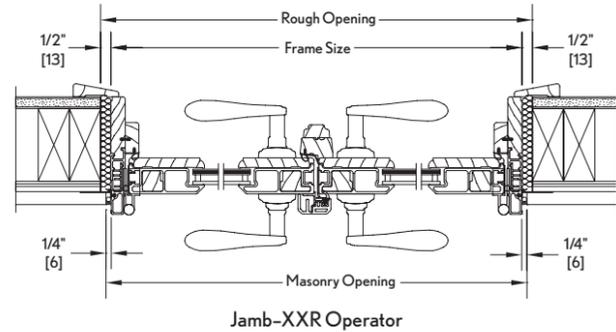
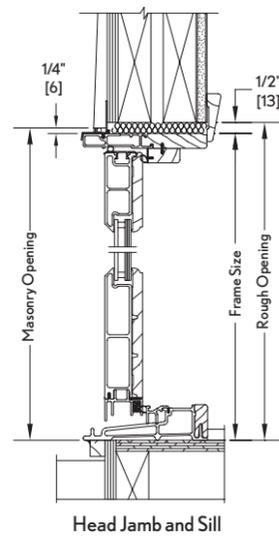


Round Top Over Outswing French Door

Mas. Opg. (mm)	5-11 1/2 (1816)
Rgh. Opg. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



Construction Details



MULTIPLE ASSEMBLIES

Multiple assembly units can be factory mullied up to 3 units wide by 1 unit high, Maximum Rough Opening not to exceed 109 15/16" x 96"; or 2 units wide by 2 units high, maximum Rough Opening not to exceed 73 5/8" x 100 1/2". Field mull kits available for up to 3 units wide by 2 units high not to exceed 110" x 112". True Half Round transoms are available field mullied only. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.

Details and Elevations not to scale.

O = Stationary X = Operator
L = Left Hand Panel R = Right Hand Panel

*2 panel mullied assembly

**2 and 3 panel XX configurations also available in XX R.

***This product is only available field mullied.

Optional Outswing French Door Grilles, GBGs and SDLs are available in a standard Rectangular cut, as shown. Other available lite cuts on page 37.

Transom units have a 2" jamb extension for 6-9/16" jambs or a 2-1/4" jamb extension for 6-13/16" jambs. When ordering 6-9/16" or 6-13/16" jambs, add 1/4" to width and 1/8" to height of Frame Size (FS), Rough Opening (RO), or Masonry Opening (MO).

Optional Direct Glaze transom Grilles, GBGs and SDLs are available in a standard Rectangular cut, as shown. Alternate transom lite cuts available to align with select lite cut options shown on page 37.

Optional Round Top SDL/Grilles are available in a standard cut, as shown. Round Top GBG cuts are shown on page 58. (Round Top divided lites only available in standard lite cut.)

Casement

EGRESS OPENING										Vent		DLO	
Unit #	Egress Width		Egress Height		Egress Clear Opp.		Floor To Clear Opp.**		Sq. Ft.	cm ²	Sq. Ft.	cm ²	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	cm ²	Inches	(mm)					
1735	7-1/4	184	30-11/16	780	1.54	1431	49-1/4	1250	2.53	2350	2.24	2081	
1739	7-1/4	184	30-11/16	780	1.75	1626	45-3/4	1149	2.86	2657	2.54	2360	
1743	7-1/4	184	38-13/16	986	1.95	1812	41-1/8	1044	3.20	2973	2.85	2648	
1747	7-1/4	184	42-11/16	1085	2.15	1997	37-1/4	946	3.52	3270	3.14	2917	
1755	7-1/4	184	50-11/16	1288	2.55	2369	29-1/4	742	4.18	3883	3.74	3475	
1759	7-1/4	184	54-11/16	1390	2.75	2555	25-1/4	641	4.51	4190	4.04	3753	
1763	7-1/4	184	58-11/16	1491	2.95	2741	21-1/4	539	4.84	4497	4.34	4032	
1771	7-1/4	184	66-11/16	1694	3.35	3112	13-1/4	336	5.50	5110	4.94	4589	
2131	11-1/4	285	26-11/16	678	2.08	1932	53-1/4	1352	2.94	2731	2.66	2471	
2135	11-1/4	285	30-11/16	780	2.4	2230	49-1/4	1250	3.38	3140	3.07	2852	
2139	11-1/4	285	34-11/16	882	2.71	2518	45-1/4	1149	3.83	3558	3.48	3233	
2143	11-1/4	285	38-13/16	986	3.03	2815	41-1/8	1044	4.28	3976	3.91	3633	
2147	11-1/4	285	42-11/16	1085	3.33	3094	37-1/4	946	4.71	4376	4.30	3995	
2155	11-1/4	285	50-11/16	1288	3.96	3679	29-1/4	742	5.59	5193	5.13	4766	
2159	11-1/4	285	54-11/16	1390	4.27	3967	25-1/4	641	6.03	5602	5.54	5147	
2163	11-1/4	285	58-11/16	1491	4.58	4255	21-1/4	539	6.47	6011	5.95	5528	
2171	11-1/4	285	66-11/16	1694	5.21	4840	13-1/4	336	7.35	6828	6.77	6290	
2531	15-1/4	387	26-11/16	678	2.83	2629	53-1/4	1352	3.69	3428	3.38	3140	
2535	15-1/4	387	30-11/16	780	3.25	3019	49-1/4	1250	4.24	3939	3.90	3623	
2539	15-1/4	387	34-11/16	882	3.67	3410	45-1/4	1149	4.79	4450	4.43	4116	
2543	15-1/4	387	38-13/16	986	4.11	3818	41-1/8	1044	5.36	4980	4.96	4608	
2547	15-1/4	387	42-11/16	1085	4.52	4199	37-1/4	946	5.89	5472	5.47	5082	
2555	15-1/4	387	50-11/16	1288	5.37	4989	29-1/4	742	7.00	6503	6.51	6048	
2559	15-1/4	387	54-11/16	1390	5.79	5379	25-1/4	641	7.55	7014	7.03	6531	
2563	15-1/4	387	58-11/16	1491	6.21	5769	21-1/4	539	8.10	7525	7.56	7023	
2571	15-1/4	387	66-11/16	1694	7.06	6559	13-1/4	336	9.21	8556	8.60	7990	
2931	21-14/16	555	26-11/16	678	4.06	3772	53-1/4	1352	4.43	4116	4.10	3809	
2935	21-14/16	555	30-11/16	780	4.66	4329	49-1/4	1250	5.09	4729	4.73	4394	
2939	21-14/16	555	34-11/16	882	5.27	4896	45-1/4	1149	5.75	5342	5.37	4989	
*2943	21-14/16	555	38-13/16	986	5.9	5481	41-1/8	1044	6.44	5983	6.02	5593	
*2947	21-14/16	555	42-11/16	1085	6.48	6020	37-1/4	946	7.08	6578	6.63	6159	
*2955	21-14/16	555	50-11/16	1288	7.7	7154	29-1/4	742	8.41	7813	7.90	7339	
*2959	21-14/16	555	54-11/16	1390	8.31	7720	25-1/4	641	9.07	8426	8.53	7925	
*2963	21-14/16	555	58-11/16	1491	8.91	8278	21-1/4	539	9.73	9039	9.17	8519	
*2971	21-14/16	555	66-11/16	1694	10.13	9411	13-1/4	336	11.06	10275	10.43	9690	
**3339	24-1/8	613	34-11/16	882	5.81	5398	45-1/4	1149	6.72	6243	6.31	5862	
*3343	23-1/4	590	38-13/16	986	6.27	5825	41-1/8	1044	7.52	6986	7.08	6578	
*3347	23-1/4	590	42-11/16	1085	6.89	6401	37-1/4	946	8.27	7683	7.80	7246	
*3355	23-1/4	590	50-11/16	1288	8.18	7599	29-1/4	742	9.81	9114	9.29	8631	
*3359	23-1/4	590	54-11/16	1390	8.83	8203	25-1/4	641	10.59	9838	10.03	9318	
*3363	23-1/4	590	58-11/16	1491	9.48	8807	21-1/4	539	11.36	10554	10.77	10006	
*3371	23-1/4	590	66-11/16	1694	10.77	10006	13-1/4	336	12.91	11994	12.26	11390	
**3739	27-1/4	692	34-11/16	882	6.57	6104	45-1/4	1149	7.68	7135	7.25	6735	
*3743	27-1/4	692	38-13/16	986	7.35	6828	41-1/8	1044	8.59	7980	8.13	7553	
*3747	27-1/4	692	42-11/16	1085	8.08	7507	37-1/4	946	9.45	8779	8.96	8324	
*3755	27-1/4	692	50-11/16	1288	9.59	8909	29-1/4	742	11.22	10424	10.67	9913	
*3759	27-1/4	692	54-11/16	1390	10.35	9615	25-1/4	641	12.11	11251	11.53	10712	
*3763	27-1/4	692	58-11/16	1491	11.11	10322	21-1/4	539	12.99	12068	12.38	11501	
*3771	27-1/4	692	66-11/16	1694	12.62	11724	13-1/4	336	14.76	13712	14.09	13090	

Awning

EGRESS OPENING				
Unit #	Vent		DLO	
	Sq. Ft.	cm ²	Sq. Ft.	cm ²
2519	2.05	1905	1.82	1687
2523	2.60	2415	2.34	2172
2527	3.15	2926	2.86	2656
2919	2.46	2285	2.20	2046
2923	3.12	2899	2.84	2634
2927	3.79	3521	3.47	3222
3319	2.87	2666	2.59	2405
3323	3.64	3382	3.33	3096
3327	4.42	4106	4.08	3787
3719	3.28	3047	2.97	2764
3723	4.17	3874	3.83	3558
3727	5.05	4692	4.69	4353
3735	6.82	6336	6.40	5942
3739	7.71	7163	7.25	6737
3747	9.48	8807	8.96	8326
4919	4.52	4199	4.13	3841
4923	5.74	5333	5.32	4945
4927	6.96	6466	6.51	6050
4935	9.39	8724	8.89	8258
4939	10.61	9857	10.08	9362
4947	13.05	12124	12.45	11571

* These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

** See page 80.

Double Hung

EGRESS OPENING												
Unit #	Egress Width		Egress Height		Egress Clear Opp.		Floor To Clear Opp.**		Vent		DLO	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	cm ²	Inches	(mm)	Sq. Ft.	cm ²	Sq. Ft.	cm ²
2236	18-3/8	467	13-11/32	339	1.70	1582	48-19/32	1234	1.70	1582	2.98	2769
2240	18-3/8	467	15-11/32	390	1.96	1819	44-19/32	1133	1.96	1819	3.42	3177
2248	18-3/8	467	19-11/32	491	2.47	2293	36-19/32	929	2.47	2293	4.29	3986
2252	18-3/8	467	21-11/32	542	2.72	2530	32-19/32	828	2.72	2530	4.73	4394
2256	18-3/8	467	23-11/32	593	2.98	2767	28-19/32	726	2.98	2767	5.16	4794
2260	18-3/8	467	25-11/32	644	3.23	3004	24-19/32	625	3.23	3004	5.6	5203
2264	18-3/8	467	27-11/32	695	3.49	3241	20-19/32	523	3.49	3241	6.47	6011
2268	18-3/8	467	29-1/4	745	3.74	3475	16-19/32	421	3.74	3475	6.47	6011
2268C	18-3/8	467	24-1/32	611	3.07	2849	16-19/32	421	3.07	2849	6.03	5602
2272	18-3/8	467	31-11/32	796	4.00	3715	12-19/32	320	4.00	3715	6.9	5410
2276	18-3/8	467	33-11/32	847	4.25	3952	8-19/32	218	4.25	3952	7.34	6819
2636	22-3/8	568	13-11/32	339	2.07	1926	48-19/32	1234	2.07	1926	3.74	3475
2640	22-3/8	568	15-11/32	390	2.38	2215	44-19/32	1133	2.38	2215	4.29	3986
2648	22-3/8	568	19-11/32	491	3.01	2792	36-19/32	929	3.01	2792	5.38	4998
2652	22-3/8	568	21-11/32	542	3.32	3081	32-19/32	828	3.32	3081	5.93	5509
2656	22-3/8	568	23-11/32	593	3.63	3369	28-19/32	726	3.63	3369	6.48	6020
2660	22-3/8	568	25-11/32	644	3.94	3658	24-19/32	625	3.94	3658	7.02	6522
2664	22-3/8	568	27-11/32	695	4.25	3947	20-19/32	523	4.25	3947	8.12	7544
2668	22-3/8	568	29-1/4	745	4.56	4236	16-19/32	421	4.56	4236	8.12	7544
2668C	22-3/8	568	24-1/32	611	3.73	3469	16-19/32	421	3.73	3469	7.57	7033
2672	22-3/8	568	31-11/32	796	4.87	4524	12-19/32	320	4.87	4524	8.66	8045
2676	22-3/8	568	33-11/32	847	5.18	4813	8-19/32	218	5.18	4813	9.21	8556
3036	26-3/8	670	13-11/32	339	2.44	2270	48-19/32	1234	2.44	2270	4.5	4181
3040	26-3/8	670	15-11/32	390	2.81	2610	44-19/32	1133	2.81	2610	5.16	4794
3048	26-3/8	670	19-11/32	491	3.54	3291	36-19/32	929	3.54	3291	6.48	6020
3052	26-3/8	670	21-11/32	542	3.91	3631	32-19/32	828	3.91	3631	7.14	6633
3056	26-3/8	670	23-11/32	593	4.28	3972	28-19/32	726	4.28	3972	7.79	7237
3060	26-3/8	670	25-11/32	644	4.64	4312	24-19/32	625	4.64	4312	8.45	7850
3064	26-3/8	670	27-11/32	695	5.01	4652	20-19/32	523	5.01	4652	9.77	9077
3068	26-3/8	670	29-1/4	745	5.37	4989	16-19/32	421	5.37	4989	9.77	9077
3068C	26-3/8	670	24-1/32	611	4.40	409						

Glider

EGRESS OPENING												
Unit #	Egress Width		Egress Height		Egress Clear Oppg.		Floor To Clear Oppg.**		Vent		DLO	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	cm ²	Inches	(mm)	Sq. Ft.	cm ²	Sq. Ft.	cm ²
3624	14-1/8	359	19-23/32	501	1.93	1793	60-19/32	1539	1.93	1793	3.36	3122
3636	14-1/8	359	31-23/32	805	3.10	2880	48-19/32	1234	3.10	2880	5.64	5240
3642	14-1/8	359	37-23/32	958	3.69	3428	42-19/32	1082	3.69	3428	6.78	6299
3648	14-1/8	359	43-23/32	1110	4.28	3976	36-19/32	929	4.28	3976	7.93	7367
3660	14-1/8	359	55-23/32	1415	5.45	5063	24-19/32	625	5.45	5063	10.21	9485
4824	20-1/8	511	19-23/32	501	2.75	2555	60-19/32	1539	2.75	2555	4.84	4497
4836	20-1/8	511	31-23/32	805	4.43	4116	48-19/32	1234	4.43	4116	8.12	7544
4842	20-1/8	511	37-23/32	958	5.26	4887	42-19/32	1082	5.26	4887	9.76	9067
*4848	20-1/8	511	43-23/32	1110	6.10	5667	36-19/32	929	6.10	5667	11.40	10591
*4860	20-1/8	511	55-23/32	1415	7.78	7228	24-19/32	625	7.78	7228	14.68	13638
***6036	26-1/8	664	31-23/32	805	5.75	5342	48-19/32	1234	5.75	5342	10.59	9838
*6042	26-1/8	664	37-23/32	958	6.83	6345	42-19/32	1082	6.83	6345	12.73	11827
*6048	26-1/8	664	43-23/32	1110	7.92	7358	36-19/32	929	7.92	7358	14.87	13815
*6060	26-1/8	664	55-23/32	1415	10.10	9383	24-19/32	625	10.10	9383	19.15	17791
***7236	32-1/8	816	31-23/32	805	7.07	6568	48-19/32	1234	7.07	6568	13.07	12142
*7242	32-1/8	816	37-23/32	958	8.41	7813	42-19/32	1082	8.41	7813	15.71	14595
*7248	32-1/8	816	43-23/32	1110	9.74	9049	36-19/32	929	9.74	9049	18.35	17048
*7260	32-1/8	816	55-23/32	1415	12.42	11539	24-19/32	625	12.42	11539	23.63	21953
*9648	21-11/16	551	43-23/32	1110	6.44	5983	36-19/32	929	13.36	1242	24.63	22878
*9660	21-11/16	551	55-23/32	1415	8.21	7627	24-19/32	625	16.67	15487	31.71	29464

Sliding Patio Door

EGRESS OPENING												
Unit #	Egress Width		Egress Height		Egress Clear Oppg.		Floor To Clear Oppg.**		Vent		DLO	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	cm ²	Inches	(mm)	Sq. Ft.	cm ²	Sq. Ft.	cm ²
5065	23-1/2	597	75-11/32	1915	12.29	11418	N/A	N/A	12.29	11418	25.20	23410
5068	23-1/2	597	77-11/32	1977	12.70	11799	N/A	N/A	12.70	11799	26.07	24215
6065	29-1/2	749	75-11/32	1915	15.43	14059	N/A	N/A	15.43	14059	31.24	29027
6068	29-1/2	749	77-27/32	1977	15.95	14818	N/A	N/A	15.95	14818	32.32	30026
9068	29-1/2	749	77-27/32	1977	19.95	14818	N/A	N/A	15.95	14818	48.48	45039

Sliding French Door

EGRESS OPENING												
Unit #	Egress Width		Egress Height		Egress Clear Oppg.		Floor To Clear Oppg.**		Vent		DLO	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	cm ²	Inches	(mm)	Sq. Ft.	cm ²	Sq. Ft.	cm ²
5068	23-9/32	592	77-9/16	1971	12.57	11675	N/A	N/A	12.57	11675	21.63	20093
6065	29-9/32	744	75-1/16	1907	15.29	14205	N/A	N/A	15.29	14205	26.44	24566
6068	29-9/32	744	77-9/16	1971	15.80	14678	N/A	N/A	15.80	14678	27.43	25481
9068	29-9/32	744	77-9/16	1971	15.80	14678	N/A	N/A	15.80	14678	41.14	38222
6080	29-9/32	744	91-1/16	2314	18.55	17232	N/A	N/A	18.55	17232	32.75	30424
9080	29-9/32	744	91-1/16	2314	18.55	17232	N/A	N/A	18.55	17232	49.12	45636
8065	41-9/32	1062	75-1/16	1907	21.55	20020	N/A	N/A	21.55	20020	37.63	34955
8068	41-9/32	1062	77-9/16	1971	22.27	20686	N/A	N/A	22.27	20686	39.03	36257
8080	41-9/32	1062	91-1/16	2314	26.14	24285	N/A	N/A	26.14	24285	46.60	43290

* These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

** Floor to clear opening is calculated using 6'-10 1/4" from finished floor to rough opening header.

*** These units do not meet the requirement of not exceeding a floor to sill height of 44" if the floor to sill height is calculated using 6'-10 1/4" from finished floor to rough opening header. Please contact your local Integrity representative for adjustment calculations on meeting egress.

Inswing French Door

EGRESS OPENING												
Unit #	Egress Width		Egress Height		Egress Clear Oppg.		Floor To Clear Oppg.**		Vent		DLO	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	cm ²	Inches	(mm)	Sq. Ft.	cm ²	Sq. Ft.	cm ²
2665 X	25-5/8	651	76-9/16	1944	13.63	12663	N/A	N/A	13.63	12663	9.95	9244
2865 X	27-5/8	702	76-9/16	1944	14.69	13647	N/A	N/A	14.69	13647	10.88	10105
3065 X	31-5/8	804	76-9/16	1944	16.81	15617	N/A	N/A	16.81	15617	12.74	11836
2668 X	25-5/8	651	79-1/16	2007	14.07	13071	N/A	N/A	14.07	13071	10.32	9588
2868 X	27-5/8	702	79-1/16	2007	15.17	14093	N/A	N/A	15.17	14093	11.28	10479
3068 X	31-5/8	804	79-1/16	2007	17.36	16128	N/A	N/A	17.36	16128	13.22	12282
2680 X	25-5/8	651	92-9/16	2350	16.47	15301	N/A	N/A	16.47	15301	12.32	11446
2880 X	27-5/8	702	92-9/16	2350	17.76	16500	N/A	N/A	17.76	16500	13.47	12514
3080 X	31-5/8	804	92-9/16	2350	20.33	18887	N/A	N/A	20.33	18887	15.78	14660
5065 XO, OX	25-9/16	650	76-9/16	1944	13.38	12430	N/A	N/A	13.38	12430	19.89	18478
5465 XO, OX	27-9/16	700	76-9/16	1944	14.43	13406	N/A	N/A	14.43	13406	21.75	20206
6065 XO, OX	31-9/16	802	76-9/16	1944	16.52	15348	N/A	N/A	16.52	15348	25.48	23672
5068 XO, OX	25-9/16	650	79-1/16	2007	13.83	12848	N/A	N/A	13.83	12848	20.63	19166
5468 XO, OX	27-9/16	700	79-1/16	2007	14.91	13852	N/A	N/A	14.91	13852	22.56	20959
6068 XO, OX	31-9/16	802	79-1/16	2007	17.07	15859	N/A	N/A	17.07	15859	26.43	24554
5080 XO, OX	25-9/16	650	92-9/16	2350	16.22	15069	N/A	N/A	16.22	15069	24.63	22882
5480 XO, OX	27-9/16	700	92-9/16	2350	17.49	16249	N/A	N/A	17.49	16249	26.94	25028
6080 XO, OX	31-9/16	802	92-9/16	2350	20.03	18608	N/A	N/A	20.03	18608	31.56	29320
5065 XX	52-5/16	1329	76-9/16	1944	27.81	25836	N/A	N/A	27.81	25836	19.89	18478
5465 XX	53-5/16	1354	76-9/16	1944	28.34	26329	N/A	N/A	28.34	26329	21.75	20206
6065 XX	64-5/16	1634	76-9/16	1944	34.19	31764	N/A	N/A	34.19	31764	25.48	23672
5068 XX	52-5/16	1329	79-1/16	2007	28.72	26682	N/A	N/A	28.72	26682	20.63	19166
5468 XX	53-5/16	1354	79-1/16	2007	29.27	27193	N/A	N/A	29.27	27193	22.56	20959
6068 XX	64-5/16	1634	79-1/16	2007	35.30	32795	N/A	N/A	35.30	32795	26.43	24554
5080 XX	52-5/16	1329	92-9/16	2350	33.62	31234	N/A	N/A	33.62	31234	24.63	22882
5480 XX	53-5/16	1354	92-9/16	2350	34.27	31838	N/A	N/A	34.27	31838	26.94	25028
6080 XX	64-5/16	1634	92-9/16	2350	41.33	38397	N/A	N/A	41.33	38397	31.56	29320

Outswing French Door

EGRESS OPENING												
Unit #	Egress Width		Egress Height		Egress Clear Oppg.		Floor To Clear Oppg.**		Vent		DLO	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	cm ²	Inches	(mm)	Sq. Ft.	cm ²	Sq. Ft.	cm ²
2665 X	25-5/8	651	76-9/16	1944	13.62	12650	N/A	N/A	13.62	12650	9.95	9239
2865 X	27-5/8	701	76-9/16	1944	14.68	13638	N/A	N/A	14.68	13638	10.88	10105
3065 X	31-5/8	803	76-9/16	1944	16.81	15613	N/A	N/A	16.81	15613	12.74	11837
2668 X	25-5/8	651	79-1/16	2008	14.06	13063	N/A	N/A	14.06	13063	10.32	9584
2868 X	27-5/8	701	79-1/16	2008	15.16	14084	N/A	N/A	15.16	14084	11.28	10479
3068 X	31-5/8	803	79-1/16	2008	17.35	16123	N/A	N/A	17.35	16123	13.22	12278
2680 X	25-5/8	651	92-9/16	2351	16.46	15294	N/A	N/A	16.46	15294	12.32	11443
2880 X	27-5/8	701	92-9/16	2351	17.75	16490	N/A	N/A	17.75	16490	13.47	12514
3080 X	31-5/8	803	92-9/16	2351	20.32	18877	N/A	N/A	20.32	18877	15.78	14659
5065 XX	52-5/16	1328	76-9/16	1944	27.79	25819	N/A	N/A	27.79	25819	19.89	18479
5465 XX	56-4/16	1430	76-9/16	1944	29.92	27797	N/A	N/A	29.92	27797	21.75	20206
6065 XX	64-5/16	1633	76-9/16	1944	34.17	31745	N/A	N/A	34.17	31745	25.48	23673
5068 XX	52-5/16	1328	79-1/16	2008	28.70	26662	N/A	N/A	28.70	26662	20.63	19167
5468 XX	56-4/16	1430	79-1/16	2008	30.89	28698	N/A	N/A	30.89	28698	22.56	20959
6068 XX	64-5/16	1633	79-1/16	2008	35.29	32782	N/A	N/A	35.29	32782	26.43	24555
5080 XX	52-5/16	1328	92-9/16	2351	33.60	31215	N/A	N/A	33.60	31215	24.63	22885
5480 XX	56-4/16	1430	92-9/16	2351	36.17	33603	N/A	N/A	36.17	33603	26.94	25028
6080 XX	64-5/16	1633	92-9/16	2351	41.31	38380	N/A	N/A	41.31	38380	31.56	29318

** Floor to clear opening is calculated using 6'-10 1/4" from finished floor to rough opening header.

ALTITUDE GUIDELINES

Integrity recommends the maximum altitude limitation for its seal insulated glass units. These limits do not account for glass deflection which may take on a pillowed appearance below these elevation. The limits may be affected by site, location, temperature and/or divided lites. Integrity does not recommend the use of IG units in excess of these specified guidelines. These limitations apply to Integrity units and should not be interpreted as an industry standard.

WOOD-ULTREX

Casement

ALTITUDE LIMITS (FEET)

UNIT SIZE		17	21	25	29	33	37
31	Annealed	NA	5000	6000	7000	9000	10000
	Tempered	NA	9000	10000	10000	10000	10000
35	Annealed	4000	5000	6000	7000	9000	10000
	Tempered	7000	10000	10000	10000	10000	10000
39	Annealed	4000	5000	6000	7000	9000	10000
	Tempered	8000	10000	10000	10000	10000	10000
43	Annealed	4000	5000	6000	8000	9000	10000
	Tempered	8000	10000	10000	10000	10000	10000
47	Annealed	4000	5000	6000	8000	9000	10000
	Tempered	8000	10000	10000	10000	10000	10000
55	Annealed	4000	5000	6000	8000	9000	10000
	Tempered	9000	10000	10000	10000	10000	10000
59	Annealed	4000	5000	6000	8000	9000	10000
	Tempered	9000	10000	10000	10000	10000	10000
63	Annealed	4000	5000	6000	8000	9000	10000
	Tempered	9000	10000	10000	10000	10000	10000
71	Annealed	NA	NA	NA	NA	NA	NA
	Tempered	9000	10000	10000	10000	10000	10000

WOOD-ULTREX

Awning

ALTITUDE LIMITS (FEET)

UNIT SIZE		25	29	33	37	49
19	Annealed	4000	5000	5000	6000	5000
	Tempered	7000	8000	9000	10000	10000
23	Annealed	5000	6000	6000	7000	6000
	Tempered	9000	10000	10000	10000	10000
27	Annealed	6000	7000	7000	9000	7000
	Tempered	10000	10000	10000	10000	10000
35	Annealed	NA	NA	NA	10000	10000
	Tempered	NA	NA	NA	10000	10000
39	Annealed	NA	NA	NA	10000	10000
	Tempered	NA	NA	NA	10000	10000
43	Annealed	NA	NA	NA	10000	10000
	Tempered	NA	NA	NA	10000	10000
47	Annealed	NA	NA	NA	10000	10000
	Tempered	NA	NA	NA	10000	10000

WOOD-ULTREX

Glider

ALTITUDE LIMITS (FEET)

UNIT SIZE		36	48	60	72	96
24	Annealed	4000	5000	NA	NA	NA
	Tempered	7000	9000	NA	NA	NA
36	Annealed	5000	6000	8000	9000	NA
	Tempered	9000	10000	10000	10000	NA
42	Annealed	5000	7000	8000	10000	NA
	Tempered	10000	10000	10000	10000	NA
48	Annealed	5000	7000	9000	10000	10000
	Tempered	10000	10000	10000	10000	10000
60	Annealed	5000	7000	9000	10000	10000
	Tempered	10000	10000	10000	10000	10000

WOOD-ULTREX

Double Hung

ALTITUDE LIMITS (FEET)

UNIT SIZE		22	26	30	34	36	38	42
36	Annealed	4000	4000	4000	5000	5000	5000	5000
	Tempered	6000	7000	8000	9000	9000	9000	10000
40	Annealed	5000	5000	5000	5000	5000	5000	5000
	Tempered	7000	8000	9000	10000	10000	10000	10000
48	Annealed	5000	6000	6000	6000	6000	6000	7000
	Tempered	8000	9000	10000	10000	10000	10000	10000
52	Annealed	5000	6000	7000	7000	7000	7000	7000
	Tempered	8000	10000	10000	10000	10000	10000	10000
56/68TC	Annealed	5000	6000	7000	7000	8000	8000	8000
	Tempered	9000	10000	10000	10000	10000	10000	10000
60	Annealed	5000	6000	7000	8000	8000	8000	8000
	Tempered	9000	10000	10000	10000	10000	10000	10000
64	Annealed	5000	6000	7000	8000	9000	9000	9000
	Tempered	10000	10000	10000	10000	10000	10000	10000
72	Annealed	5000	6000	8000	9000	9000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000
76	Annealed	5000	6000	8000	9000	9000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000
68BC	Annealed	5000	7000	8000	9000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000

WOOD-ULTREX

Casement Picture

ALTITUDE LIMITS (FEET)

UNIT SIZE		ALL WIDTHS
ALL HEIGHTS	Annealed	10000
	Tempered	10000

WOOD-ULTREX

Casement Direct Glaze

ALTITUDE LIMITS (FEET)

UNIT SIZE		73
16	Annealed	4000
	Tempered	10000

WOOD-ULTREX

Double Hung Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		ALL WIDTHS
ALL HEIGHTS	Annealed	4000
	Tempered	NA

WOOD-ULTREX

Sliding French Door

Direct Glaze Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		72	107
16	Annealed	4000	4000
	Tempered	NA	NA

WOOD-ULTREX

Casement Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		ALL WIDTHS
ALL HEIGHTS	Annealed	4000
	Tempered	NA

WOOD-ULTREX

Double Hung Picture

ALTITUDE LIMITS (FEET)

UNIT SIZE		ALL WIDTHS
ALL HEIGHTS	Annealed	10000
	Tempered	10000

WOOD-ULTREX

Doors

ALTITUDE LIMITS (FEET)

UNIT SIZE		ALL WIDTHS
ALL HEIGHTS	Annealed	NA
	Tempered	10000

WOOD-ULTREX

Swinging French Door

Direct Glaze Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		36	72	108
16	Annealed	4000	4000	4000
	Tempered	NA	NA	NA

WOOD-ULTREX

Marvin Round Tops Made for Integrity

ALTITUDE LIMITS (FEET)

UNIT SIZE		
2118 (ICA)	Annealed	4000
	Tempered	NA
2499 (ICA)	Annealed	5000
	Tempered	NA
2500 (ICA)	Annealed	5000
	Tempered	NA
2519 (ICA)	Annealed	4000
	Tempered	NA
2526 (ICA)	Annealed	5000
	Tempered	NA
2920 (ICA)	Annealed	5000
	Tempered	NA
2928 (ICA)	Annealed	6000
	Tempered	NA
3301 (ICA)	Annealed	4000
	Tempered	NA
3302 (ICA)	Annealed	9000
	Tempered	NA
3320 (ICA)	Annealed	5000
	Tempered	NA
3328 (ICA)	Annealed	7000
	Tempered	NA
3701 (ICA)	Annealed	4000
	Tempered	NA
3702 (ICA)	Annealed	9000
	Tempered	NA
3722 (ICA)	Annealed	5000
	Tempered	NA
3729 (ICA)	Annealed	7000
	Tempered	NA
4121 (ICA)	Annealed	5000
	Tempered	NA
4128 (ICA)	Annealed	7000
	Tempered	10000
4164 (ICA)	Annealed	10000
	Tempered	10000
4921 (ICA)	Annealed	5000
	Tempered	NA
4929 (ICA)	Annealed	8000
	Tempered	10000
4965 (ICA)	Annealed	10000
	Tempered	10000
5724 (ICA)	Annealed	6000
	Tempered	NA
5731 (ICA)	Annealed	9000
	Tempered	10000

WOOD-ULTREX

Marvin Round Tops Made for Integrity

ALTITUDE LIMITS (FEET)

UNIT SIZE		
5767 (ICA)	Annealed	10000
	Tempered	10000
6523 (ICA)	Annealed	6000
	Tempered	NA
6531 (ICA)	Annealed	9000
	Tempered	10000
6567 (ICA)	Annealed	10000
	Tempered	10000
7325 (ICA)	Annealed	5000
	Tempered	NA
7369 (ICA)	Annealed	NA
	Tempered	10000
3765 (ICA)	Annealed	10000
	Tempered	10000
3777 (ICA)	Annealed	8000
	Tempered	10000
4971 (ICA)	Annealed	7000
	Tempered	10000
4983 (ICA)	Annealed	10000
	Tempered	10000
7359 (ICA)	Annealed	10000
	Tempered	10000
3601 (ITDH)	Annealed	4000
	Tempered	NA
2999/3000 (ITDH)	Annealed	7000
	Tempered	NA
2399/3400 (ITDH)	Annealed	8000
	Tempered	NA
2599/3600 (ITDH)	Annealed	9000
	Tempered	NA
2602 (ITDH)	Annealed	7000
	Tempered	NA
2619 (ITDH)	Annealed	5000
	Tempered	NA
3002 (ITDH)	Annealed	8000
	Tempered	NA
3021 (ITDH)	Annealed	5000
	Tempered	NA
3248 (ITDH)	Annealed	8000
	Tempered	NA
3421 (ITDH)	Annealed	5000
	Tempered	NA
3622 (ITDH)	Annealed	5000
	Tempered	NA
3636 (ITDH)	Annealed	8000
	Tempered	NA

WOOD-ULTREX

Marvin Round Tops Made for Integrity

ALTITUDE LIMITS (FEET)

UNIT SIZE		
3820 (ITDH)	Annealed	5000
	Tempered	NA
4222 (ITDH)	Annealed	5000
	Tempered	NA
4201 (ITDH)	Annealed	5000
	Tempered	NA
4202 (ITDH)	Annealed	10000
	Tempered	NA
3802 (ITDH)	Annealed	8000
	Tempered	NA

DESIGN PRESSURE AND WDMA

A design pressure rating, as defined by AAMA/WDMA 101/I.S.2 - 97, 101/I.S.2/NAFS-02 and AAMA/WDMA/CSA 101/I.S.2/A440-05, is an indication of the amount of wind load an individual window or door is intended to withstand when closed and locked. Please consult your local Integrity® from Marvin representative for more information.

Integrity products have gone through HUD's materials release process (Form No. 1280) which allows them to qualify under the WDMA Hallmark Certification Program for compliance with HUD use of materials bulletin requirements (Form No. 59b).

Casement Windows	DP 50	Gliders	DP 30
Casement Picture	DP 50	Round Top Windows	DP 40
Awning Windows	DP 50	Direct Glazed Windows	DP 50
Double Hung Windows	DP 40	Sliding Patio Doors	DP 30
		Inswing French Doors	DP 30
		Sliding French Doors	DP 40*
		Outswing French Doors	DP 50
Double Hung High Performance Kit: Optional high performance upgrade kit increases the design pressure rating of all double hung units to DP 50 .			

* ISFD 8080 has a WDMA Hallmark Design Pressure rating of DP30. All other ISFD units are DP40 rated.



WARRANTY

INTEGRITY® FROM MARVIN
WOOD-ULTREX® SERIES

Ten Year Limited Warranty

This limited warranty is extended to all end users of Integrity® Windows and Doors. Your Integrity products are warranted to be free from defects in manufacturing, materials and workmanship. If such a defect appears during the term of this warranty, Integrity will, at its option (1) repair the defective product, (2) replace the defective materials or (3) refund your purchase price. If replacement is elected, Integrity will not be responsible for installation or refinishing of replacement parts.

This limited warranty is valid for ten (10) years from the date your Integrity product was originally purchased and is subject to the further Conditions and Exclusions set forth below. The warranty of replacement products (including upgrades thereto) furnished pursuant to this warranty will be limited to the remainder of the warranty period of the original product.

Twenty (20) Year Insulating Glass Limited Warranty

The insulating glass in your Integrity products is warranted against visible obstruction thru the glass caused by a failure of the insulating glass air seal for a period of twenty (20) years from the date of original purchase. In the event visible obstruction occurs within the twenty (20) years, Integrity will, at its option, provide replacement insulating glass with or without associated sash. Integrity will not be responsible for installation or refinishing of these replacement parts.*

*Stress cracks are warranted against manufacturing defects for 10 years from original purchase date.

CLAIMS UNDER THESE WARRANTIES MUST BE MADE WITHIN 60 DAYS OF THE APPEARANCE OF A DEFECT.

Conditions and Exclusions

Integrity builds its windows and doors to be durable and long lasting. There are certain conditions or applications, however, over which Integrity has no control. Defects or problems as a result of such conditions or applications are not the responsibility of Integrity and are not covered by this warranty. They include:

- THIS LIMITED WARRANTY DOES NOT APPLY TO INTEGRITY WINDOWS AND DOORS INSTALLED IN STRUCTURES THAT DO NOT ALLOW FOR PROPER MANAGEMENT/ DRAINAGE OF MOISTURE. FOR EXAMPLE, EXTERIOR INSULATION AND FINISH SYSTEMS ("EIFS"), ALSO KNOWN AS "SYNTHETIC STUCCO," WITHOUT AN ENGINEERED DRAINAGE SYSTEM.
- Improper installation, field finishing or maintenance.
- Any misuse, modification or alteration.
- Application of paint to any Integrity factory prefinish.
- Corrosion, wear or failure of hardware in seacoast applications.
- Normal wear or discoloration of finishes, including the tarnishing of brass.
- Variations in the color and grain of natural wood parts.
- Environmental conditions or use exceeding design standards.
- Warpage of 1/4" (6) or less of door stiles and rails.
- Minor glass imperfections that do not affect normal vision or product performance, including curvature of glass due to atmospheric conditions.
- Condensation or frost on exposed surfaces of your Integrity windows or doors. Condensation or frost is not a defect in the product, but a result of excessive humidity. For more information about condensation and what you can do to keep it to a minimum, write to: Marvin Windows and Doors, P.O. Box 100, Warroad, Minnesota 56763.

YOUR EXCLUSIVE REMEDY WITH RESPECT TO ANY AND ALL LOSSES OR DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER SHALL BE AS SPECIFIED ABOVE. WE SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND, HOWEVER OCCASIONED, WHETHER BY NEGLIGENCE OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, AND NO PERSON (INCLUDING ANY AGENT, EMPLOYEE, DEALER, DISTRIBUTOR OR OTHER REPRESENTATIVE) IS AUTHORIZED TO MAKE ANY OTHER REPRESENTATION OR WARRANTY CONCERNING THIS PRODUCT. THIS WARRANTY IS NOT A WARRANTY OF FUTURE PERFORMANCE BUT ONLY A WARRANTY TO REPAIR/REPLACE OR REFUND.

If You Have a Warranty Claim

Your local Integrity distributor and dealer is equipped to handle your warranty claim quickly and efficiently. Because they are located near you, and familiar with your purchase and/or project, your local Integrity dealer or distributor can best expedite the solution to your claim. If you have a warranty claim with your Integrity window or door, call the dealer or distributor from whom the products were purchased. If you don't know the name of the dealer or distributor, call 1-800-346-5128 to locate the one nearest you. If, after 5 days, your local Integrity dealer or distributor has not responded to your complaint, send a written complaint to Marvin Windows and Doors, P.O. Box 100, Warroad, Minnesota 56763, Attn: Warranty Department. Include the following information in your letter: date you purchased your product; the dealer or distributor from whom your product was purchased; description of product; specific definition of problem or defect; action that you've taken or contacts you've made with your local dealer or distributor; and your name, address and phone number. Once we've received your letter, we'll respond to your claim within 2 working days.



Wood-Ultrex® Series



Call 1-888-419-0076 for the Integrity® dealer
nearest you, or visit www.integritywindows.com

© 2009 Marvin Windows and Doors. All rights reserved. Registered trademark of Marvin Windows and Doors.
ENERGY STAR, the ENERGY STAR mark and LoE³-366 are registered U.S. marks. Part #19971958