

WOOD-ULTREX®
S E R I E S



NEW
4 PANEL
SLIDING
FRENCH DOOR



NEW
INSERT
REPLACEMENT
CASEMENT &
AWNING

**BUILT TO
PERFORM.**

Built to Perform[®].



“At Integrity[®] from Marvin[®] Windows and Doors, we didn’t join the fiberglass window and door industry – we pioneered it. In 1994, Integrity was born from The Marvin Companies’ century-long heritage of service, craftsmanship and quality with a focus on all-out performance.”

Juan Marvin

Integrity windows and doors are made with Ultrex[®], a pultruded fiberglass with a patented acrylic capping that outperforms and outlasts vinyl, roll-form aluminum and other fiberglass composites. We use Ultrex and our proprietary pultrusion process to manufacture high-demand windows and doors that endure all elements without showing age or wear.

Though we are dedicated to leading the way in innovation, we never forget the cornerstones of our business. We are highly selective in choosing our business partners – including independently-owned dealers and distributors – to ensure our customers have the best experience possible. We use an efficient manufacturing and delivery system so our products are received when expected. We create products to be easily installed and operated with virtually no maintenance required.

Our values and work ethic are forged by the communities where we’re proud to make our quality products. When you choose Integrity windows and doors, you support a small-town, family-owned and operated company with deep roots in the community; some Marvin employees are fourth-generation, following the family tradition. We share profits with our employees; we support our communities; we treat our dealers and customers fairly and with respect.

At Integrity, we believe it is essential to live up to our name.





20+
YEARS OF
ADVANCED
FIBERGLASS
EXPERTISE



Integrity from Marvin was the first major window and door manufacturer to offer ENERGY STAR® qualified performance on all of its standard windows and doors.

- 5 Integrity® from Marvin®
- 6 Ultrex® Performance
- 10 Energy Efficiency
- 12 Delivery and Features
- 14 Product Options
- 20 Exterior Trim
- 22 Casement and Awning
- 24 Insert Casement and Awning
- 26 Double Hung
- 28 Insert Double Hung
- 30 Glider
- 32 Bow and Bay
- 34 Round Top
- 36 Marvin Round Tops Made for Integrity
- 38 Polygon
- 40 Sliding Patio
- 42 Sliding French
- 44 Inswing French
- 46 Outswing French
- 48 Ordering Integrity Windows and Doors
- 49 Lite Cuts
- 50 Specifications
- 105 Egress Openings
- 113 Thermal Performance
- 117 WDMA and Performance Grade
- 118 Sound Transmission
- 119 Altitude Guidelines

Overachieve

THE REPUTATION LIVES ON.

One hundred years of innovation and uncompromising product performance standards: that's the legacy of Marvin Windows and Doors.

Our history was built on quality craftsmanship, a reputation for excellent service and a commitment to community. Today, third- and fourth-generation Marvin family members remain actively involved in the company, keeping the original spirit of corporate responsibility alive.

So when you specify Integrity, you can rest assured that every window and door is protected by a company renowned for standing behind its products with world class service and support for nearly a century.

In the end, our promise to you is simple: durable, high-performance products that bring lasting value to your home.



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



8X
STRONGER
THAN VINYL

Get tough

ULTREX® OFFERS UNMATCHED PERFORMANCE AND UNBEATABLE SATISFACTION.

Durable doesn't begin to describe how tough Ultrex is. Strong, stable, and virtually indestructible, Ultrex is quite possibly the perfect building material, creating windows and doors that leave other materials in the dust.

Made from pultruded fiberglass, Ultrex outperforms the competition on nearly every measure. Non-conductive and non-corrosive, Ultrex resists the ravages of heat, cold, time and pressure to provide the most worry-free windows and doors available today.

Pioneered by Marvin®, Ultrex has what it takes – from its durability and performance characteristics, to its first-to-market ingenuity – to create products of incomparable value.

Low-maintenance and high-durability. Everything you want your home to be, and everything that Ultrex delivers.

Pultruded fiberglass is made of thin strands of strong glass cables that are saturated with specially compounded resins to create a remarkably durable material.

The patented finishing process applies an impermeable and AAMA verified factory finish up to 3x thicker than competitive finishes, making Ultrex 5x more resistant to ultraviolet (UV) degradation over time. Available in Stone White, Pebble Gray, Cashmere, Bronze Evergreen or Ebony. It can be painted with no impact on its protective properties.

The patented and advanced thin wall construction technologies of Ultrex allow for detailed profiles and component optimization.



Temperatures may fluctuate, but Ultrex® won't.

Ultrex has an extremely low rate of thermal contraction and expansion. In fact, it expands and contracts at virtually the same miniscule amount as glass, maintaining a tight seal with no leaks, seal failures or stress cracks that can compromise energy-efficiency and long-term performance.

This is especially so when compared to vinyl, which can distort in extreme heat and crack in fluctuating temperatures. But Integrity® windows and doors can withstand temperature extremes while maintaining a tight seal.

3x less expansion than wood/vinyl composites.

Ultrex resists distortion even at temperatures up to 285°F. Rapid temperature change doesn't faze Ultrex: When the mercury climbs from -30°F to 70°F, a 6' stile changes less than 1/32" in length.

Designed for beauty. Engineered for life.

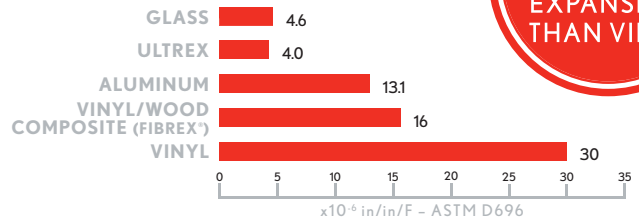
Our 20+ years of experience in the composite fenestration industry led us to ensure that every part is optimized for the ultimate in performance and fit, including detailed radius profiles and clean, balanced sightlines.

Windows and doors made with Ultrex won't get scratched, dinged or marred as easily as vinyl. Our patented, mechanically bonded acrylic finish is up to three times thicker than competitive finishes, and it resists UV degradation up to five times longer than vinyl – even on dark colors.

This material pioneered by Marvin® has what it takes – from its durability and performance characteristics, to its first-to-market ingenuity.

EXPANSION MEASUREMENT

Comparison of expansion and contraction



**ULTREX:
87% LESS
EXPANSION
THAN VINYL**

**JUST ONE
SQUARE INCH OF
ULTREX CAN HOLD
41,000
POUNDS!**



The tensile strength of Ultrex means one square inch can support up to 41,000 lbs. So, one elephant? No problem.

So now imagine how much your entire window can handle!

And Ultrex is so tough, we have to use diamond-edge blades just to cut it to size.

Premium Finish.

Ultrex is the *first and only* fiberglass finish to be verified to 624-10, AAMA's voluntary finish specifications for fiber reinforced thermoset profiles (fiberglass). The Ultrex patented acrylic cap finish is verified AAMA 623-10 and 624-10, and has passed the AAMA 625-10 lab based performance test protocols; 625-10 outdoor weathering test protocols are in process.

**PATENTED FINISH
FIRST AND
ONLY
AAMA VERIFIED
624-10**

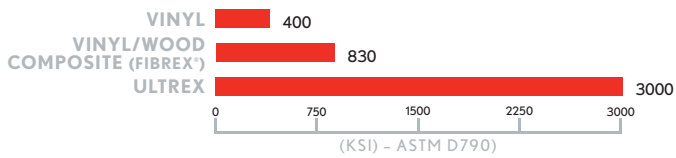
to create products of
incomparable value.



Stay true

Ultrex® also stands up mightily to rain, wind, heat and time, looking beautiful and performing well long after other window and door materials have lost their luster.

FLEXURAL MODULUS



38%
FIBERGLASS WINDOWS
HAVE A 38% LONGER
USEFUL LIFE EXPECTANCY
THAN VINYL*

8X
STRONGER
THAN VINYL

Stability.

The strength of Ultrex also translates into superior stability. Ultrex is more rigid than vinyl and vinyl/wood composites. So issues of instability and less-than-perfect alignment that can complicate installation – and long-term performance – are not a concern with Integrity® windows and doors.

The exceptional strength and stability of Ultrex eases installation and establishes a secure, long-lasting fit that stays square and true even under the most punishing conditions.

Built to Perform®

It's more than our tagline, it is our promise to you. Ultrex is so resilient, it outperforms and outlasts vinyl and vinyl/wood composites, time and time again. Strong yet light, Ultrex provides sturdy, reliable support from top to bottom, end to end.

ULTREX

VINYL



Integrity windows have a clean glazing bead profile and have solid, square, weathertight joints. Vinyl corners can arrive with messy welded corners and joints that aren't square.

ULTREX

COMPOSITES



With a finish up to 3x thicker than competitive finishes Integrity products won't dent, crack, chip, or peel. Its unmatched detailed profiles and superior tooling capabilities provide for a cleaner fit and finish.

ULTREX

COMPOSITES



Integrity windows use a patented, mechanically bonded finish, shown on the left, compared to the competitive finishes that are painted on and can be unsightly.

* "Life cycle assessment of windows for the North American residential market: Case Study" by the University of British Columbia Scandinavian Journal of Forest Research, 2008.

"We are always striving to be better, more efficient, and of course more sustainable. It's a proud part of our culture and will continue to be for generations to come."

Susan Marvin, President,
Marvin® Windows and Doors

Pioneers



Eighty years of innovation and uncompromising product performance standards: that's the legacy of Marvin Windows and Doors. And it's why we build energy efficiency into every Integrity® from Marvin product.

A history of integrity.

Marvin has a long history of product innovations, industry firsts and commitment to community. Integrity Windows and Doors takes pride in the fact that our corporation is green-minded with recycling efforts and employee awareness. In addition, we incorporate green components into our product packaging and even our distribution process.

Beyond that, being green is also about conserving energy – and Integrity is energy efficient. Not only are the products extremely durable, Integrity from Marvin was the first major window and door manufacturer to offer its ultra durable Ultrex® energy-efficient Low E2 insulated glass with Argon and ENERGY STAR® qualified performance on all of its standard windows and doors.

Today, Marvin is credited with several industry firsts and is recognized for innovative products and uncompromising product performance standards. Third- and fourth-generation Marvin family members remain actively involved in the company and keep the original spirit of corporate responsibility alive today.

Superior performance you can feel good about.

At Integrity, sustainability is part of the manufacturing philosophy: make a product able to withstand the power of the great outdoors, while preserving the natural resources from which it was made.

- Ultrex is made from silica sand, a safe and renewable natural resource.
- The Ultrex manufacturing facility captures and destroys 95% of all VOCs.
- The Ultrex manufacturing facility fully complies with the 1990 Clean Air Act and has been designated as a Maximum Achievable Control Technology (MACT) facility as outlined by the Environmental Protection Agency (EPA).
- The glass in our products contains 15%-33% recycled content.
- Integrity products offer ENERGY STAR qualified performance.
- Even more green awards and information at integritywindows.com.



Shine on



CREATE A MORE COMFORTABLE INTERIOR AND LOWER ENERGY BILLS – REGARDLESS OF THE SEASON.

REDUCE
COOLING
COSTS BY
7-15%

Keep heat inside during cooler weather and block the sun's rays during warmer weather with double-pane windows with Low E coating.

Ultrex® resembles materials like wood that create an insulated barrier – keeping extreme weather outside.



Stellar energy performance ratings.

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 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.

The National Fenestration Rating Council, the Department of Energy, and the U.S. Environmental Protection Agency were all impressed, **so much so that Integrity® Windows and Doors received one of the highest performance ratings.**

Environmentally sound, in more ways than one.

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 9001:2008 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 9001:2008) 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 9001:2008 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.

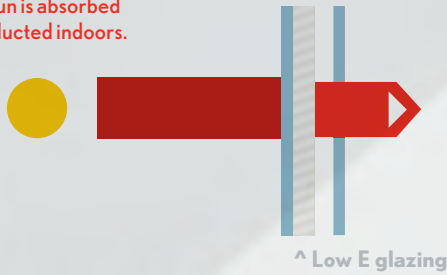


Low E and Argon gas means UV rays are screened to reduce fading and damage to upholstery and carpets. Integrity® offers both Low E2 and Low E3 glass for the ultimate in energy efficiency.

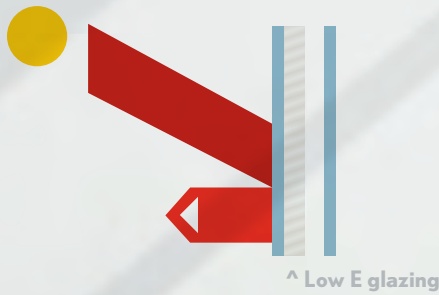


5000x
LESS CONDUCTIVE
THAN ALUMINUM =
REDUCED ENERGY COSTS

Winter sun is absorbed and conducted indoors.



Summer sun is filtered and reflected back outdoors.



Save energy costs without sacrificing comfort.

Integrity from Marvin® offers a complete line of ENERGY STAR® qualified windows and doors. ENERGY STAR qualified windows can save you 15% of your total energy bill.*

First, Ultrex® is 5000 times less conductive than aluminum.

Next, we were the first major window and door manufacturer to offer energy-efficient Low E2 glass and ENERGY STAR qualified performance on all of our standard windows and doors. Compared to non-qualified products, ENERGY STAR qualified windows and doors cut heating and cooling costs by 7-15%.*

And now Integrity offers Tripane, Low E1, Low E2, Low E3 insulated glass with Argon gas, which has thermal conductivity 30% lower than that of air. It adds improved solar and thermal protection by distinguishing between visible light and damaging UV and near-infrared rays to offer the ultimate glass performance, and provides a selection of energy-efficient solutions depending on your climate and needs.



* ENERGY STAR at energystar.gov



Limitless options mean remodeling bliss.

Wanting a window or door that adds to the overall aesthetic of your home while keeping with its general character isn't easy during a remodel. Fortunately, Wood-Ultrex® from Integrity® can help.

From sustainable Ultrex construction and ENERGY STAR® qualification, to special sizing (to 1/64") and proven on-time delivery – you can be confident that Integrity is the right choice now and for the future of your home.

For more than 20 years, we have been the go-to product for building professionals. From commercial to residential and new construction, to remodeling and replacement, Wood-Ultrex has the solution for your project.

No matter the project,
Ultrex has you covered.





On-time delivery, every time.

Managing a project can be difficult enough without worrying about your window or door order. Integrity's 10 day delivery to local distributors has been consistently providing complete defect-free window and door orders for over 10 years.

Pro's choice

Condos, townhouses, public housing, schools, businesses, banks, retail, churches...
whatever your project, Integrity® has the experience to meet your needs.

Perfect fit and built to last.

Every commercial project has its own unique requirements and Integrity is equipped to meet those challenges. Our unique Ultrex® fiberglass construction, available factory services, unmatched delivery and network of dedicated service and support personnel make Integrity the perfect choice for any project.



Easy to specify, easy to order – our short lead times, consistent delivery and remarkable quality make your life easier.

Weather-tight, solid and durable Ultrex® material means there are virtually no call-backs. Plus, we ensure that every part is optimized for the ultimate in performance and fit, including detailed radius profiles and clean, balanced sightlines for an architecturally inspired appearance.

Designed to last for generations, Integrity® is backed by a fully transferable 20/10 warranty (10 year coverage on manufacturing materials and workmanship, and 20 year coverage on glass).



Rest assured

WE MAKE INSTALLATION SIMPLE AND EFFICIENT.

Builders, contractors, architects and homeowners all agree: Integrity windows and doors are designed for excellence.



HOMEOWNERS APPRECIATE THE PEACE OF MIND OF INTEGRITY® PRODUCTS



10 DAY DELIVERY TO THE LOCAL DISTRIBUTOR

Your Integrity products are delivered to the distributor in 10 days to make your project run smoother. Ten years of an on-time record is something you can count on.



1



2



3



4



5



6



7

The following standard features make choosing Integrity even easier.

- 1 Preattached folding nailing fin for easier installation.
- 2 Factory-installed screens are a standard offering with operating windows. At no extra cost, we can ship your screens separately to reduce damage caused on site prior to installation.
- 3 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.
- 4 Integral corner keys keeps window and door units square. Plus, we inject sealant to create corner joints that stay sealed and square.
- 5 Design your own assemblies with available factory mulling or field mulling kits.
- 6 The Ultrex® exterior is paintable, and holds dark colors better than vinyl or vinyl clad.
- 7 Special sizes are available on windows and doors in 1/64" increments for the perfect fit.

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, Evergreen or Ebony. All are paintable without affecting the durability.



Bare Wood
(interior)



Pre-Finish White
(interior)



Stone White
(exterior)



Cashmere
(exterior)



Pebble Gray
(exterior)



Bronze
(exterior)



Evergreen
(exterior)



Ebony
(exterior)

Divided Lites.

Simulated Divided Lites: (SDL) Bars permanently adhered to both sides of the glass for a more authentic look. SDL is available with or without spacer bar and in several popular lite cut options (see page 49). 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 between the two glass panels. GBG are available in several popular lite cut options (see page 49) and features a white or bronze interior with a Stone White, Pebble Gray, Cashmere, Bronze, Evergreen or Ebony exterior to match the exterior finish.*

Wood Interior Grilles: (WIG) Feature easy removal for cleaning.

Available in bare wood or factory applied white pre-finish on interior or exterior.



Grilles-Between-the-Glass shown in Bronze*



Wood Interior Grilles shown in bare wood



Simulated Divided Lite in Pebble Gray (with or without spacer bar)

* Not available in polygons except in direct glaze rectangles.

** Argon gas not available in high elevations where capillary tubes are required.

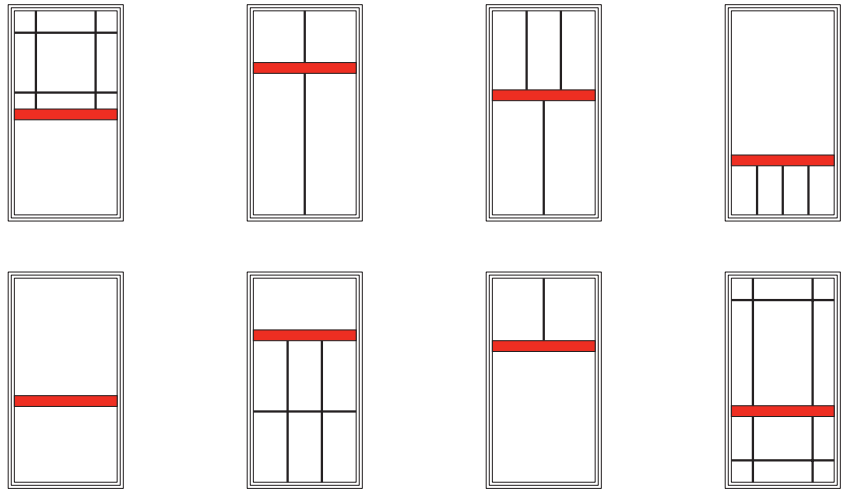
*** Obscure not available on Doors, Round Tops or with GBG.

Simulated Checkrail.

A Simulated Checkrail is the perfect solution when aesthetics call for the beauty of a double hung, but operation, egress or performance demand another solution.

You specify placement of the horizontal simulated checkrail bar, and the lite cut patterns above and below.

These illustrations offer a sampling of $\frac{7}{8}$ " Simulated Divided Lite (SDL) patterns that can be selected in combination with the $2\frac{11}{32}$ " Simulated Checkrail on Casement, Awning, Glider, Direct Glaze Rectangle and Picture units.



Glazing.

Energy efficiency, safety and privacy. Choose from Integrity® Windows and Doors' standard Low E2 insulated glass with Argon gas,** Low E1 or Low E3 with Argon gas. Both tempered insulated glass with Argon gas (standard on larger units and doors, and available on most other units); and obscure*** insulated glass with Argon gas are available in Low E1, Low E2 and Low E3.



Low E2 (Standard), Low E1 and Low E3 insulated glass with Argon gas**; available intempered



Low E2 (Standard), Low E1 and Low E3 obscure insulated glass with Argon gas**



Variable thickness glass provides enhanced STC and OITC sound abatement performance. Available in Low E1, Low E2 or Low E3, tempered and obscure.



Tripane glass delivers superior energy efficiency. Available in a combination Low E2 and Low E1 configuration, tempered and obscure.





Available with IMPACT.

Integrity® from Marvin® is pleased to offer impact-rated products that meet Impact Zone 3 requirements, wind zones up to 140 mph. Integrity Wood-Ultrex® Awnings, Casements, Double Hungs, Polygons, Round Tops*, Sliding French Doors and Outswing French Doors are available with an IZ3 performance rating and are a perfect solution for homeowners anywhere who are concerned about Mother Nature or security.

What separates Integrity IMPACT products is their Ultrex construction. Ultrex fiberglass 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.

Hardware Finish Options.

French Door handle sets offer two styles, keyed cylinders, multi-point locking systems and available PVD finishes for superior durability.** Select interior and exterior handle finish and optional keyed alike locking cylinders.

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



Cambridge Collection


















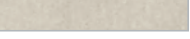
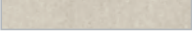
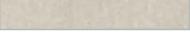
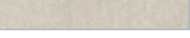
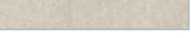
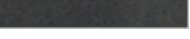


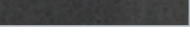
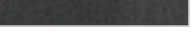
Northfield Collection



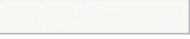
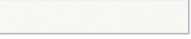



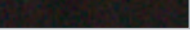
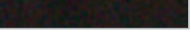



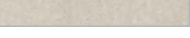
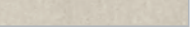


Window hardware options

* Round Tops material is fiberglass reinforced composite material.

** Physical Vapor Deposition – highest grade corrosion resistance finish.

HARDWARE FINISHES	Sliding Patio Door	Sliding French Door	Inswing French Door	Outswing French Door	Windows
	Interior and Exterior	Interior and Exterior	Interior and Exterior	Interior and Exterior	Interior
White					
Almond Frost					
Brass					
Brass PVD					
Satin Nickel					
Satin Nickel PVD					
Oil Rubbed Bronze					
Oil Rubbed Bronze PVD					

ADJUSTABLE HINGE FINISHES	Inswing French Door	Outswing French Door
Almond Frost		
Goldtone		
White		
Pebble Gray		
Gray		
Cashmere		
Dark Brown		
Evergreen		
Brass PVD		
Satin Nickel PVD		

Integrity® Exterior Trim solutions offer builders and remodelers easy installation for both windows and doors from a company they can trust. And homeowners can take advantage of the consistent low maintenance, superior durability and premium performance of Ultrex®.

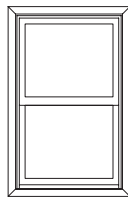


Exterior Trim

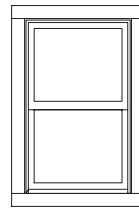
THE STRONGEST CHOICE IN EXTERIOR TRIM.

Configurations

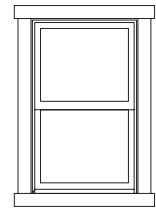
Multiple configurations are available in lineal lengths and factory pre-cut kits to meet your needs, install in minutes and are available in all of Integrity's exterior colors.



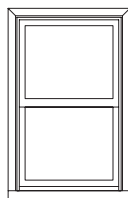
Brick Mould Casing



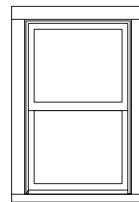
Flat Casing



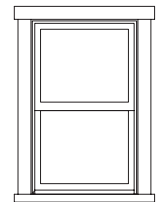
Flat Ranch



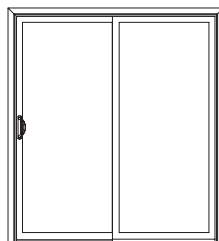
Brick Mould Casing with Sill Nose



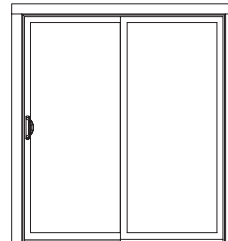
Flat Casing with Sill Nose



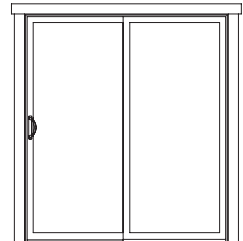
Flat Ranch with Sill Nose



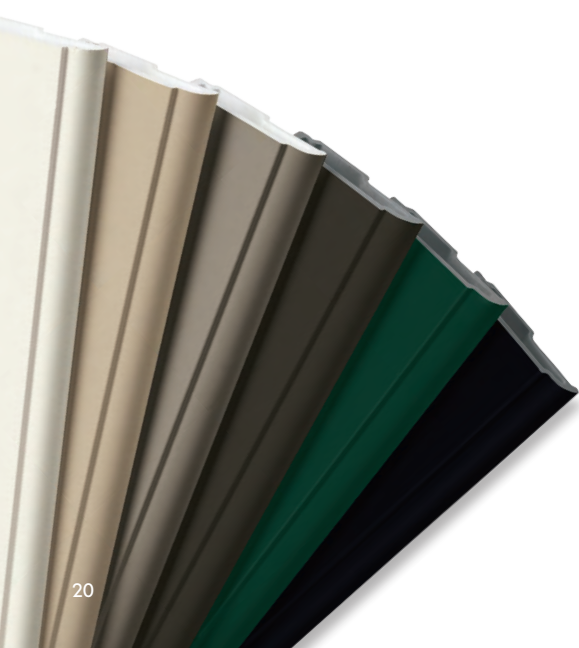
Brick Mould Casing*

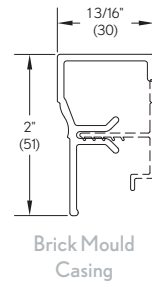


Flat Casing*



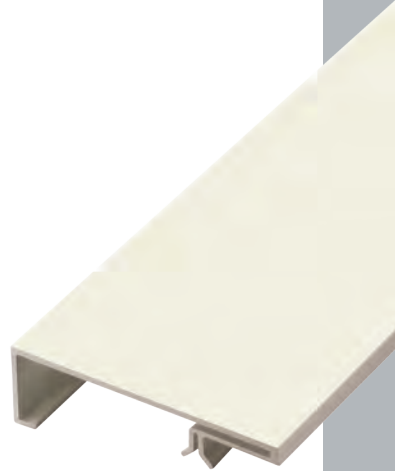
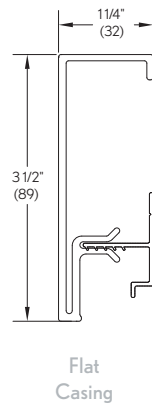
Flat Ranch*





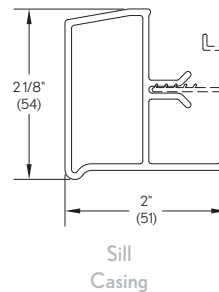
Flat Casing

For a more contemporary look, select our 3.5" Flat Casing available in Flat, Flat Ranch, Flat with thick sill nosing and Flat Ranch with thick sill nosing.

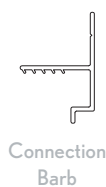


Brick Mould Casing

Integrity® 2" Brick Mould Casing is available with or without a thick sill nosing. This style will enhance the look of the entire house.



Ultrex® Exterior Trim is now offered with all rectangular Wood-Ultrex and All Ultrex products. Which means the same durability, performance and look you get in your Integrity windows and doors can be extended to your trim.



Casement & Awning

DESIGNED FOR A GREAT FIRST IMPRESSION. ENGINEERED FOR A GREAT LASTING IMPRESSION.



Sequential multi-point locking system ensures PG50 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.

Peace of mind with Window Opening Control Device option.

Stationary, operating, transom, and picture units available.

Available with Tripane.

Dual arm roto gear operation and sequential multi-point locking system ensure PG50 rated performance on all Casement and Awning windows so they will remain airtight, watertight, and secure even in driving rains and strong winds. And with a unique Tripane glazing option, these windows offer even more remarkable thermal performance.

Clean lines, a 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 configurations. Available with stainless steel coastal operating hardware.

The Integrity® Casement and Awning are available with Tripane Glass offering a remarkable U-Value of .20 on operating units.





Insert Casement & Awning

THERE'S NOTHING TOUGHER. CASEMENT CLOSED.



3 1/4" insert replacement frame with a flat sill and through-jamb installation.

Performance Grade 50 rating on all sizes.

Precision built in 1/64" increments to fit every replacement need.

Available as operator, picture and transom windows.

Optional stainless steel hardware package for superior corrosion resistance.

Window Opening Control Device available for Casement.

The Wood-Ultrex® Insert Casement and Awning are Built to Perform® with a performance rating of PG50 and provide long-lasting virtually maintenance-free replacement window solutions. Rich wood interiors and Ultrex fiberglass exteriors deliver beauty and toughness while narrow profiles and clean lines look stunning in your home.

Our proven Casement sequential multi-point locking system with dual-arm roto gear hardware ensures performance at even our largest sizes. Factory mulling with Insert Casement, Awning, Picture or Transom windows provides design flexibility to match your unique home design.



NEW
INSERT
REPLACEMENT
CASEMENT &
AWNING



Double Hung

TIMELESS STYLE MEETS SUPERIOR PERFORMANCE. AND CREATES A NEW CLASSIC.



Any size up to 4.5' wide and 7' tall down to 1/64" increments.

Robust sill nose and 13.5° sloped sill ensure proper water management and create a more traditional appearance.

Take the Performance Grade (PG) up to 50. An optional factory-applied wood sill liner kit increases water performance.

A positive detent reinforces when the window is locked.

Available Window Opening Control Device option.

Self-sealing corner keys, weather-stripping and jamb-sill gaskets mean performance grades up to PG50. 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.

AVAILABLE IN
COTTAGE &
REVERSE COTTAGE
CONFIGURATIONS





Insert Double Hung

QUITE POSSIBLY THE PERFECT REPLACEMENT WINDOW.



3/4" insert replacement frame with through-jamb installation.

8° sloped sill for a traditional appearance.

Precision built in 1/64" increments up to a stunning 4.5' wide and 7' tall.

Sash lift hardware available.

Dual operating sash open at top or bottom as well as tilt and remove for easy cleaning.

The Wood-Ultrex Insert Double Hung window's frame-in-frame design is precision built to each unique window opening, allowing for a clean replacement without disturbing the existing interior or exterior trim. Rich wood interiors are complemented by Ultrex® pultruded fiberglass exteriors and a wide array of options for superior performance and durability that blend seamlessly with any home design. With Performance Grade ratings of 35-40, this window is Built to Perform® in the toughest replacement projects.

Ergonomic low profile sash lock, tilt-latch, and available sash lift hardware.



INSERT
REPLACEMENT
DOUBLE HUNG



Glider

THE WINDOWS SLIDE. THE STANDARDS DIDN'T.



Hardware available in White, Almond Frost, Brass, Satin Nickel or Oil Rubbed Bronze.

Sash-lock hardware seals weather-stripping against the frame as well as offers security.

Our tilt latch makes removal and reinstallation of sash easy.

Operating sash slides effortlessly, and is easy to tilt and remove.

Available Window Opening Control Device option.

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, weather-stripping, 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.

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





Bow and Bay

TURN YOUR VIEW INTO A PANORAMA.



For maximum air circulation, choose the smooth arc of a bow 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.

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.

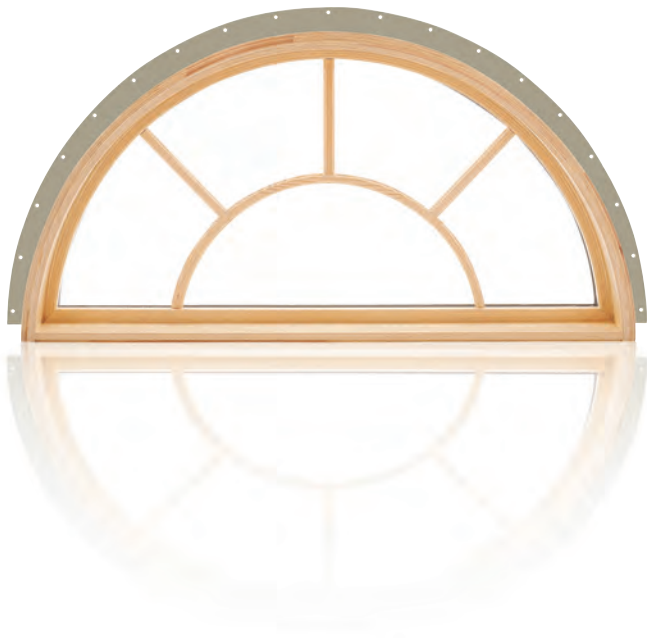
30° and 45°
bays add dimension
and light to a room.





Round Top

A DYNAMIC COMPLEMENT TO TOP OFF YOUR DESIGN.



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.

Match a Round Top to just about every Integrity window or door. Choose from quarter rounds, half rounds or ellipsicals. Beautiful wood interiors. Multiple assemblies can add presence and value and make an ordinary room extraordinary. An integral nailing fin makes the unit exceedingly stable and extremely weathertight. Nailing fins available in full perimeter, radius only, or can be excluded.

We only cut corners when building a Round Top window.

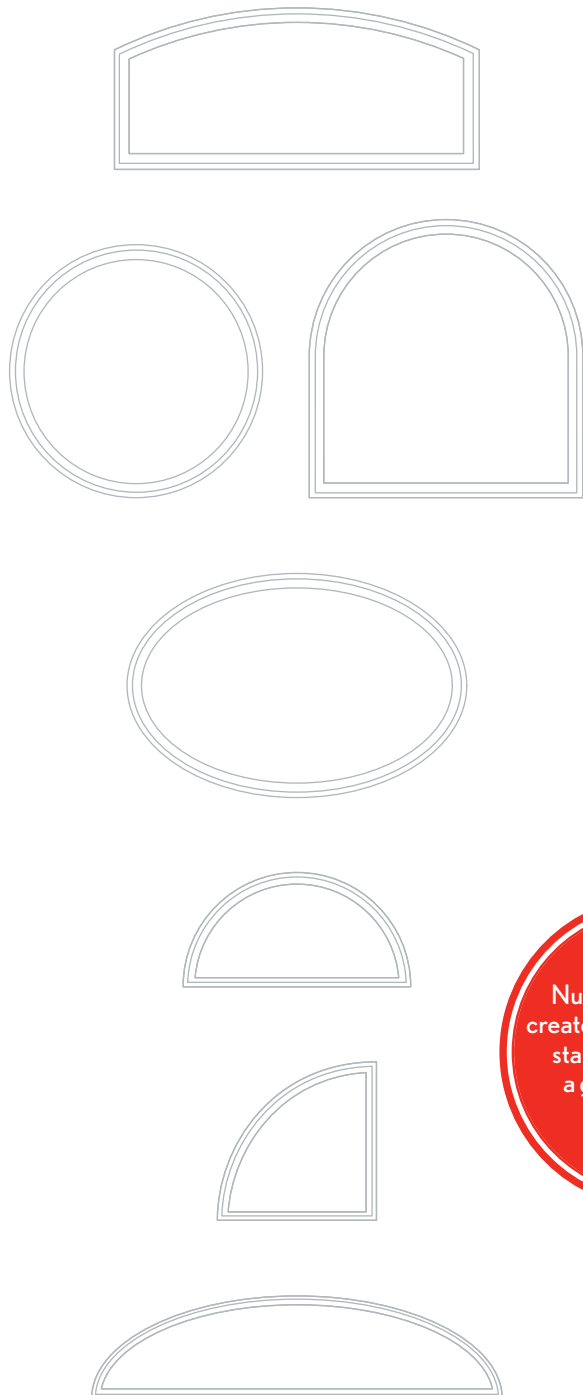




Made for Integrity®

Marvin® Round Tops

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, Evergreen or Ebony exterior. Removable Wood Interior Grilles, featuring easy cleaning, are also available. Grilles come in bare wood or white finish.

On time 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.

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® qualified. The proven quality of Marvin Windows and Doors (including comprehensive Marvin warranty). The quick lead times and reliable delivery of Integrity.

Numerous shapes to create a custom look with standard products – a great feature for homeowners.





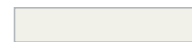
Grilles-Between-the-Glass



Simulated Divided Lites
(with or without spacer bar)



Removable Wood
Interior Grilles



Stone White



Pebble Gray



Cashmere



Bronze



Evergreen



Ebony

Polygon

EXTEND YOUR CHOICES WITHOUT MISSING YOUR DEADLINE.



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 finish is your choice of a contemporary white semi-gloss pre-finish or bare wood you can stain or paint to match your interior.

Available with Tripane.

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 look anything but standard.

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



Octagon



Isosceles Triangle



Pentagon



Rectangle



90° Triangle



Trapezoid



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

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



Sliding Patio

EXCEPTIONAL BEAUTY MEETS DAY-IN, DAY-OUT PERFORMANCE.



Available in special sizes in 1/64" increments.

Top hung screen won't get locked up on dirt or pebbles.

Handles available in White, Almond Frost, Brass PVD, Satin Nickel PVD, or Oil Rubbed Bronze PVD. PVD is the highest grade finish available and offers superior corrosion resistance.

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.

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 popular standard or special sizes. Factory-assembled for easy installation.

Our doors come with standard tempered Low E2 insulated glass with Argon gas or optional Low E1 or tempered Low E3 insulated glass with Argon gas.





Sliding French

YOUR PICTURE WINDOW DOESN'T HAVE TO BE A WINDOW.



Available in special sizes in 1/64" increments up to 16' wide and 8' tall.

Thin, low-friction polycarbonate track combined with dual ball-bearing rollers provides smooth, easy operation.

For a seamless interior, we finish the sill with an enduring oak sill liner.

Delivered with factory-assembled frames for easier installation.

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, three, and now four-panel configurations and many popular sizes, including an 8' height for homes with taller ceilings. Comes with energy efficient standard Low E2 tempered glass or optional Low E3 tempered glass. Top-hung screen won't get hung up on debris.

Traditionally styled handles. Features a keyed cylinder and a dual point lock for added security and performance. Available in PVD Finishes.



NEW
4 PANEL
SLIDING
FRENCH DOOR



Inswing French

IN THIS VERSION OF FRENCH, THE ACCENT IS ON STYLE.



Available in special sizes in 1/64" increments.

Adjustable hinges mean that as a home settles and shifts over time, our swinging door will still open and close easily. Available in Almond Frost, Goldtone, White, Gray, Dark Brown, Brass PVD, Satin Nickel PVD.

Handle sets 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.

Presenting an elegant way to say 'welcome.' The Inswing French Door features a rich wood interior, XX configuration, 8' heights, always beautiful Ultrex® exterior, wide stiles and rails, Ultrex sill with interior oak sill liner, and lever and escutcheon handle sets. 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 Low E2 tempered glass with Argon gas standard or select Low E3 tempered glass with Argon gas for enhanced performance.

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





Outswing French

STEP OUT WITH STYLE. STEP UP WITH PERFORMANCE.



Available in special sizes in 1/64" increments.

Lever and escutcheon handle sets 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.

Open your home with style and performance. Rich wood interiors, 8' heights, XX configurations and wide stiles and rails make this door stand out from the crowd. Standard PG50 performance, stainless steel handle activated multi-point locking system, stainless steel fasteners, available PVD handle sets and optional adjustable hinge finishes make it stand up to the elements. Energy saving Low E2 tempered glass with Argon gas standard or select Low E3 tempered glass with Argon gas for enhanced performance.

Adjustable hinges
available in
seven finishes.





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. Opp. (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. Opp. (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 1/8 (486)
14 15/16" (379)



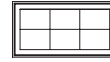
IAWN2519



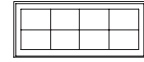
IAWN2919



IAWN3319



IAWN3719



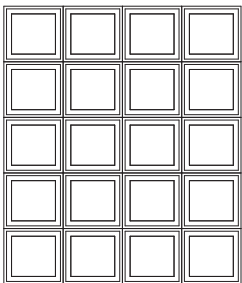
IAWN4919

Mulling Options - A variety of factory mulled combinations are available.

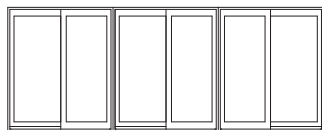
Wood Ultrex® Mulling Configurations	Maximum Overall Rough Opening not to exceed:	Maximum Units Wide by High
Casement / Awning Picture / Transom / Direct Glaze	113" (2870) X 71 5/8" (1819)	7 Wide X 1 High
	85" (2159) X 94 3/4" (2407)	4 Wide X 5 High
Double Hung Picture / Transom / Direct Glaze	113 1/2" (2883) X 76 1/4" (1936)	5 Wide X 1 High
	84" (2134) X 92" (2337)	3 Wide X 5 High
Glider Picture / Transom / Direct Glaze	113 1/2" (2883) X 60 1/4" (1530)	3 Wide X 1 High

Field mulling kits available to create your own unique multiple assemblies. Please contact your local Integrity from Marvin® representative for more information.

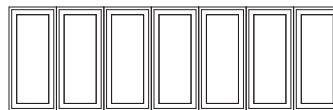
Examples of Possible Configurations



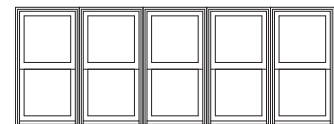
Casement Picture
4 Wide 5 High



Glider
3 Wide 1 High

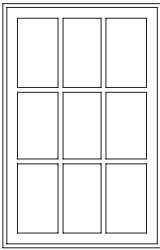


Casement
7 Wide 1 High

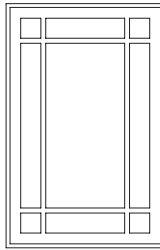


Double Hung
5 Wide 1 High

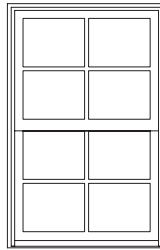
Windows



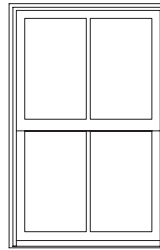
Rectangular
Available as GBG and SDL*



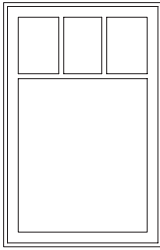
Prairie
Available as GBG and SDL*



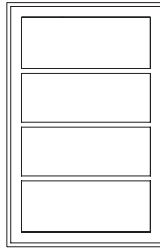
2w2h
Available as SDL*



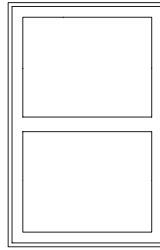
2w1h
Available as SDL*



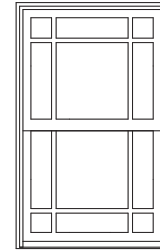
Cottage
Available as SDL*



Equal Lite
Available as SDL*

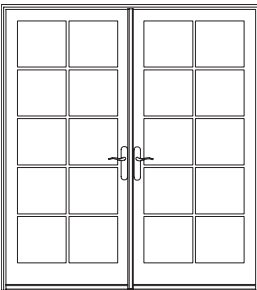


Simulated Checkrail
Available as SDL**
See page 17 for more details

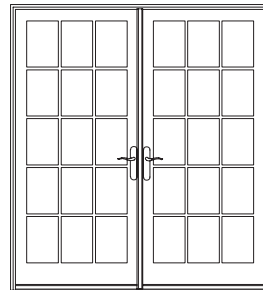


6 Lite Prairie
Available as GBG and SDL*

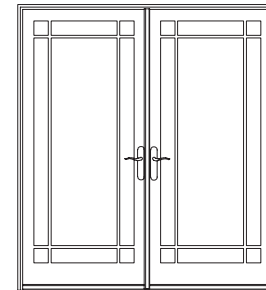
Doors



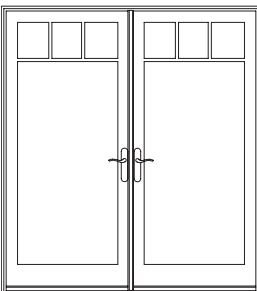
10/12 Lite
One vertical bar per panel available as GBG and SDL*



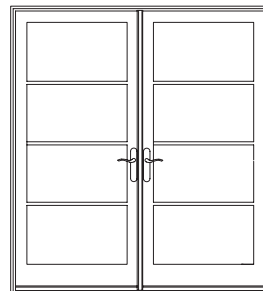
15/18 Lite
Two vertical bars per panel available as Grilles, GBG and SDL*



Prairie
Available as GBG and SDL*



Cottage
Available as SDL*



Equal Lite
Available as SDL*

* SDL available with or without Spacer Bar.

** 2 11/32" (59) Simulated Checkrail available with or without spacer bar. Compatible with SDL and SDL with spacer bar. Horizontal bar only. Vertical location can be specified. Available on Casement, Awning, Glider, Direct Glaze Rectangles and Double Hung Picture units.

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

M.O. (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)
R.O. (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)

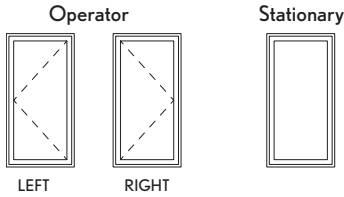
2-7 3/8 (797) 2-7 5/8 (803) 2-7 1/8 (791) 26 15/16" (684)						
ICA1731	ICA2131	ICA2531	ICA2931	ICA3331	ICA3731	
2-11 3/8 (898) 2-11 5/8 (905) 2-11 1/8 (892) 30 15/16" (786)						
ICA1735	ICA2135	ICA2535	ICA2935	ICA3335	ICA3735 E	
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 1/8 (994) 34 15/16" (887)						
ICA1739	ICA2139	ICA2539	ICA2939	ICA3339	ICA3739 E	
3-7 1/2 (1105) 3-7 3/4 (1111) 3-7 1/4 (1099) 39 1/16" (992)						
ICA1743	ICA2143	ICA2543	ICA2943 E	ICA3343 E	ICA3743 E	
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 1/8 (1197) 42 15/16" (1091)						
ICA1747	ICA2147	ICA2547	ICA2947 E	ICA3347 E	ICA3747 E	
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 1/8 (1400) 50 15/16" (1294)						
ICA1755	ICA2155	ICA2555	ICA2955 E	ICA3355 E	ICA3755 E	
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 1/8 (1502) 54 15/16" (1395)						
ICA1759	ICA2159	ICA2559	ICA2959 E	ICA3359 E	ICA3759 E	
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 1/8 (1603) 58 15/16" (1497)						
ICA1763	ICA2163	ICA2563	ICA2963 E	ICA3363 E	ICA3763 E	
5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 1/8 (1807) 66 15/16" (1700)						
ICA1771T	ICA2171T	ICA2571T	ICA2971ET	ICA3371ET	ICA3771ET	

CASEMENT

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

Construction Details

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



Details and Elevations not to scale.

Special sized units available within product size matrix. See your Integrity retailer.

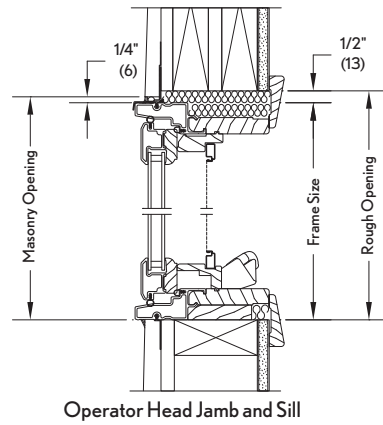
E = These windows meet National Egress Codes for fire evacuation. Local codes may differ.

T = Standard Tempered

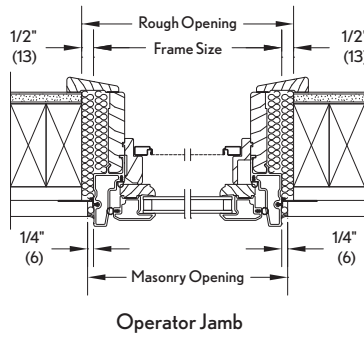
Optional Casement Grilles, GBGs and SDLs are available in a standard Rectangular cut shown.

Other available lite cuts shown on page 49.

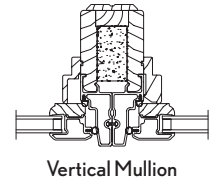
*3735 and 3739 meet Egress if installed at proper height from floor.



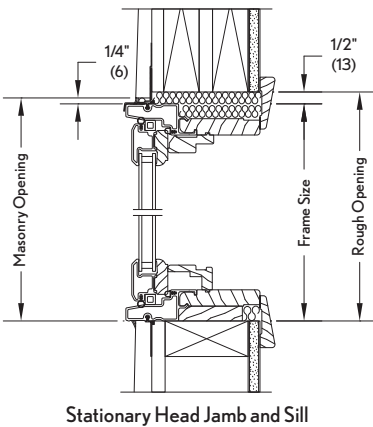
Operator Head Jamb and Sill



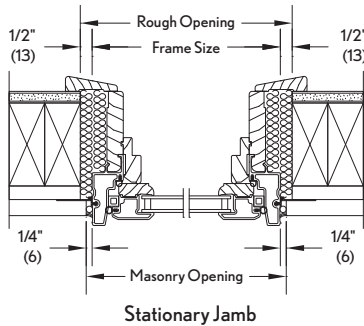
Operator Jamb



Vertical Mullion



Stationary Head Jamb and Sill



Stationary Jamb

CASEMENT

2 Wide Operator/Stationary Units

M.O. (mm)	2-8 1/2 (826)	3-4 1/2 (1029)	4-0 1/2 (1232)	4-8 1/2 (1435)	5-4 1/2 (1638)	6-0 1/2 (1842)
R.O. (mm)	2-9 (838)	3-5 (1041)	4-1 (1245)	4-9 (1448)	5-5 (1651)	6-1 (1854)
Frame Size (mm)	2-8 (813)	3-4 (1016)	4-0 (1219)	4-8 (1422)	5-4 (1626)	6-0 (1829)

2-7 3/8 (797) 2-7 5/8 (803) 2-7 1/8 (791)						
ICA17312W	ICA21312W	ICA25312W	ICA29312W	ICA33312W	ICA37312W	
2-11 3/8 (898) 2-11 5/8 (905) 2-11 1/8 (892)						
ICA1735 2W	ICA2135 2W	ICA2535 2W	ICA2935 2W	ICA3335 2W	ICA3735 2W E*	
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 1/8 (994)						
ICA1739 2W	ICA2139 2W	ICA2539 2W	ICA2939 2W	ICA3339 2W	ICA3739 2W E*	
3-7 1/2 (1105) 3-7 3/4 (1111) 3-7 1/4 (1099)						
ICA1743 2W	ICA2143 2W	ICA2543 2W	ICA2943 2W E	ICA3343 2W E	ICA3743 2W E	
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 1/8 (1197)						
ICA1747 2W	ICA2147 2W	ICA2547 2W	ICA2947 2W E	ICA3347 2W E	ICA3747 2W E	
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 1/8 (1400)						
ICA1755 2W	ICA2155 2W	ICA2555 2W	ICA2955 2W E	ICA3355 2W E	ICA3755 2W E	
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 1/8 (1502)						
ICA1759 2W	ICA2159 2W	ICA2559 2W	ICA2959 2W E	ICA3359 2W E	ICA3759 2W E	
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 1/8 (1603)						
ICA1763 2W	ICA2163 2W	ICA2563 2W	ICA2963 2W E	ICA3363 2W E	ICA3763 2W E	
5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 1/8 (1807)						
ICA1771 2W T	ICA2171 2W T	ICA2571 2W T	ICA2971 2W ET	ICA3371 2W ET	ICA3771 2W ET	

Details and Elevations not to scale.

Special sized units available within product size matrix. See your Integrity® retailer.

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

T = Standard Tempered

* 3735 and 3739 meet Egress if installed at proper height from floor.

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.

MAXIMUM ROUGH OPENING not to exceed 113" x 71 5/8"
Maximum up to 7 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 85" x 94 3/4"
Maximum up to 4 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity from Marvin® representative for more information.

3 Wide Operator/Stationary Units

M.O. (mm)	4-0 1/2 (1232)	5-0 1/2 (1537)	6-0 1/2 (1842)	7-0 1/2 (2146)	8-0 1/2 (2451)	9-0 1/2 (2756)
R.O. (mm)	4-1 (1245)	5-1 (1549)	6-1 (1854)	7-1 (2159)	8-1 (2464)	9-1 (2769)
Frame Size (mm)	4-0 (1219)	5-0 (1524)	6-0 (1829)	7-0 (2134)	8-0 (2438)	9-0 (2743)

2-7 3/8 (797) 2-7 5/8 (803) 2-7 7/8 (791)						
ICA1731 3W	ICA2131 3W	ICA2531 3W	ICA2931 3W	ICA3331 3W	ICA3731 3W	
2-11 3/8 (898) 2-11 5/8 (905) 2-11 7/8 (892)						
ICA1735 3W	ICA2135 3W	ICA2535 3W	ICA2935 3W	ICA3335 3W	ICA3735 3W E*	
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 7/8 (994)						
ICA1739 3W	ICA2139 3W	ICA2539 3W	ICA2939 3W	ICA3339 3W	ICA3739 3W E*	
3-7 1/2 (1105) 3-7 3/4 (1111) 3-7 1/4 (1099)						
ICA1743 3W	ICA2143 3W	ICA2543 3W	ICA2943 3W E	ICA3343 3W E	ICA3743 3W E	
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 7/8 (1197)						
ICA1747 3W	ICA2147 3W	ICA2547 3W	ICA2947 3W E	ICA3347 3W E	ICA3747 3W E	
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 7/8 (1400)						
ICA1755 3W	ICA2155 3W	ICA2555 3W	ICA2955 3W E	ICA3355 3W E	ICA3755 3W E	
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 7/8 (1502)						
ICA1759 3W	ICA2159 3W	ICA2559 3W	ICA2959 3W E	ICA3359 3W E	ICA3759 3W E	
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 7/8 (1603)						
ICA1763 3W	ICA2163 3W	ICA2563 3W	ICA2963 3W E	ICA3363 3W E	ICA3763 3W E	
5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 7/8 (1807)						
ICA1771 3W T	ICA2171 3W T	ICA2571 3W T	ICA2971 3W ET	ICA3371 3W ET	ICA3771 3W ET	

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled.

MAXIMUM ROUGH OPENING not to exceed 113" x 71 5/8"
Maximum up to 7 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 85" x 94 3/4"
Maximum up to 4 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity from Marvin representative for more information.

CASEMENT

4 Wide Operator/Stationary Units

M.O. (mm)	5-4 1/2 (1638)	6-8 1/2 (2045)	8-0 1/2 (2451)	9-4 1/2 (2858)
R.O. (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)				
ICA17314W	ICA21314W	ICA25314W	ICA29314W	
2-11 3/8 (898) 2-11 5/8 (905) 2-11 7/8 (892)				
ICA17354W	ICA21354W	ICA25354W	ICA29354W	
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 7/8 (994)				
ICA17394W	ICA21394W	ICA25394W	ICA29394W	
3-7 1/2 (1105) 3-7 3/4 (1111) 3-7 1/4 (1099)				
ICA17434W	ICA21434W	ICA25434W	ICA29434W E	
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 7/8 (1197)				
ICA17474W	ICA21474W	ICA25474W	ICA29474W E	
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 7/8 (1400)				
ICA17554W	ICA21554W	ICA25554W	ICA29554W E	
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 7/8 (1502)				
ICA17594W	ICA21594W	ICA25594W	ICA29594W E	
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 7/8 (1603)				
ICA17634W	ICA21634W	ICA25634W	ICA29634W E	
5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 7/8 (1807)				
ICA17714W T	ICA21714W T	ICA25714W T	ICA29714W E T	

Details and Elevations not to scale.

Special sized units available within product size matrix. See your Integrity® retailer.

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

T = Standard Tempered

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.

MAXIMUM ROUGH OPENING not to exceed 113" x 71 5/8"
Maximum up to 7 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 85" x 94 3/4"
Maximum up to 4 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity from Marvin® representative for more information.

Picture Unit

M.O. (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)	3-4 1/2 (1029)	4-0 1/2 (1232)	4-8 1/2 (1435)	6-0 1/2 (1842)
R.O. (mm)	1-5 (432)	1-9 (533)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)	3-5 (1041)	4-1 (1245)	4-9 (1448)	6-1 (1854)
Frame Size (mm)	1-4 (406)	1-8 (508)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)	3-4 (1016)	4-0 (1219)	4-8 (1422)	6-0 (1829)
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)	35 13/16" (910)	43 13/16" (1113)	51 13/16" (1316)	67 13/16" (1722)

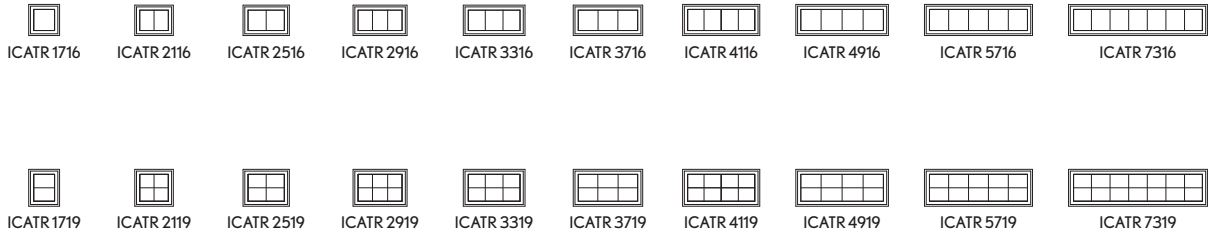
1-11 3/8 (492)										
1-11 3/8 (594)										
1-11 3/8 (695)										
1-11 3/8 (702)										
1-11 3/8 (687)										
1-11 3/8 (797)										
2-7 3/8 (797)										
2-7 3/8 (899)										
2-7 3/8 (905)										
2-7 3/8 (892)										
2-7 1/8 (791)										
2-7 1/8 (892)										
2-7 1/8 (994)										
2-7 1/8 (892)										
30 15/16 (786)										
3-3 3/8 (1000)										
3-3 3/8 (1006)										
3-3 3/8 (994)										
34 15/16 (887)										
3-7 1/2 (1105)										
3-7 1/2 (1111)										
3-7 1/2 (1099)										
38 15/16 (988)										
3-11 3/8 (1203)										
3-11 3/8 (1210)										
3-11 3/8 (1197)										
42 15/16 (1091)										
4-7 3/8 (1407)										
4-7 3/8 (1413)										
4-7 1/8 (1400)										
50 15/16 (1294)										
4-11 3/8 (1508)										
4-11 3/8 (1514)										
4-11 3/8 (1502)										
54 15/16 (1395)										
5-3 3/8 (1610)										
5-3 3/8 (1616)										
5-3 1/8 (1603)										
58 15/16 (1497)										
5-11 3/8 (1813)										
5-11 3/8 (1819)										
5-11 3/8 (1807)										
66 15/16 (1700)										

CASEMENT/PICTURE/TRANSOM

In-Sash Transoms

M.O. (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)	3-4 1/2 (1029)	4-0 1/2 (1232)	4-8 1/2 (1435)	6-0 1/2 (1842)
R.O. (mm)	1-5 (432)	1-9 (533)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)	3-5 (1041)	4-1 (1245)	4-9 (1448)	6-1 (1854)
Frame Size (mm)	1-4 (406)	1-8 (508)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)	3-4 (1016)	4-0 (1219)	4-8 (1422)	6-0 (1829)
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)	35 13/16" (910)	43 13/16" (1113)	51 13/16" (1316)	67 13/16" (1722)

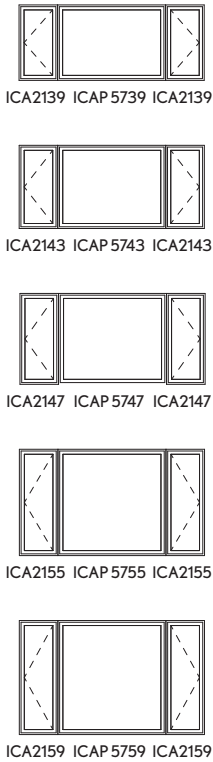
1-4 (406)
1-4 1/4 (413)
1-7 5/8 (498)
1-3 3/4 (400)
1-7 1/8 (486)
14 15/16" (379)



Multiple Assemblies/21 Casement Flankers with Picture Center Unit

M.O. (mm)	8-0 1/2 (2451)
R.O. (mm)	8-1 (2464)
Frame Size (mm)	8-0 (2438)

3-3 3/8 (1000)
3-3 5/8 (1006)
3-3 1/8 (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 1/8 (1197)
4-7 3/8 (1406)
4-7 5/8 (1413)
4-7 1/8 (1400)
4-11 3/8 (1508)
4-11 5/8 (1514)
4-11 1/8 (1502)



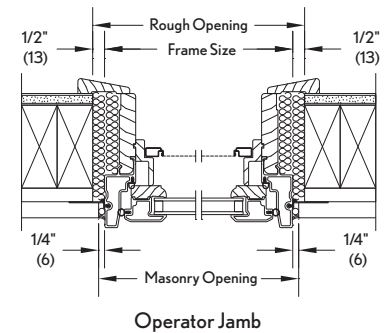
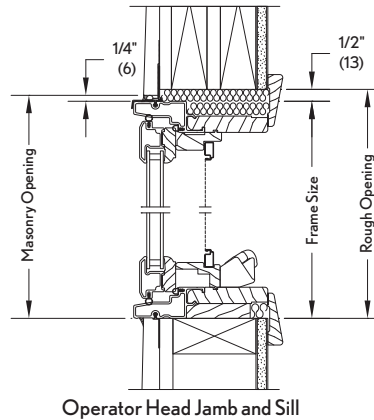
Direct Glaze Transom

M.O. (mm)	6-0 1/2 (1842)
R.O. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)
Glass Size (mm)	69 3/16" (1757)

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



Construction Details



Details and Elevations not to scale.

Special sized units available within product size matrix. See your Integrity® retailer.

Optional picture Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Also available in Prairie lite cuts shown on page 49.

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

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 92 and 93.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 113" x 71 5/8"
Maximum up to 7 units wide by 1 unit high.





































MAXIMUM ROUGH OPENING not to exceed 85" x 94 3/4"
Maximum up to 4 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity from Marvin® representative for more information.

Operator/Stationary Units





























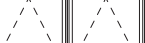







M.O. (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	3-0 1/2 (927)	3-4 1/2 (1029)	4-0 1/2 (1232)
R.O. (mm)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)	3-5 (1041)	4-1 (1245)
Frame Size (mm)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)	3-4 (1016)	4-0 (1219)
Glass Size (mm)	19 13/16" (503)	23 13/16" (605)	27 13/16" (706)	31 13/16" (808)	35 13/16" (910)	43 13/16" (1113)

1-7 3/8 (492)						
1-7 5/8 (498)						
1-7 1/8 (486)						
1-4 15/16" (379)						
1-11 3/8 (594)						
1-11 5/8 (600)						
1-11 1/8 (587)						
1-8 15/16" (481)						
2-3 3/8 (695)						
2-3 5/8 (702)						
2-3 1/8 (689)						
2-2 15/16" (583)						
2-11 3/8 (699)						
2-11 5/8 (905)						
2-11 1/8 (892)						
3-0 15/16" (786)						
3-3 3/8 (1000)						
3-3 5/8 (1006)						
3-3 1/8 (994)						
3-4 15/16" (887)						
3-11 3/8 (1203)						
3-11 5/8 (1210)						
3-11 1/8 (1197)						
4-2 15/16" (1091)						

AWNING

2 Wide Operator/Stationary Units

M.O. (mm)	4-0 1/2 (1232)	4-8 1/2 (1435)	5-4 1/2 (1638)	6-0 1/2 (1842)	6-8 1/2 (2057)	8-0 1/2 (2451)
R.O. (mm)	4-1 (1245)	4-9 (1448)	5-5 (1651)	6-1 (1854)	6-9 (2051)	8-1 (2464)
Frame Size (mm)	4-0 (1219)	4-8 (1422)	5-4 (1626)	6-0 (1829)	6-8 (2032)	8-0 (2438)

1-7 3/8 (492) 1-7 5/8 (498) 1-7 1/8 (486)	 IAWN 2519 2W	 IAWN 2919 2W	 IAWN 3319 2W	 IAWN 3719 2W	 IAWN 4119 2W	 IAWN 4919 2W
1-11 3/8 (594) 1-11 5/8 (600) 1-11 1/8 (587)	 IAWN 2523 2W	 IAWN 2923 2W	 IAWN 3323 2W	 IAWN 3723 2W	 IAWN 4123 2W	 IAWN 4923 2W
2-3 3/8 (695) 2-3 5/8 (702) 2-3 1/8 (689)	 IAWN 2527 2W	 IAWN 2927 2W	 IAWN 3327 2W	 IAWN 3727 2W	 IAWN 4127 2W	 IAWN 4927 2W
2-11 3/8 (699) 2-11 5/8 (705) 2-11 1/8 (692)	 IAWN 2535 2W	 IAWN 2935 2W	 IAWN 3335 2W	 IAWN 3735 2W	 IAWN 4135 2W	 IAWN 4935 2W
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 1/8 (994)	 IAWN 2539 2W	 IAWN 2939 2W	 IAWN 3339 2W	 IAWN 3739 2W	 IAWN 4139 2W	 IAWN 4939 2W
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 1/8 (1197)	 IAWN 2547 2W	 IAWN 2947 2W	 IAWN 3347 2W	 IAWN 3747 2W	 IAWN 4147 2W	 IAWN 4947 2W

Details and Elevations not to scale.

Special sized units available within product size matrix. See your Integrity® retailer.

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.

MAXIMUM ROUGH OPENING not to exceed 113" x 71 5/8"
Maximum up to 7 units wide by 1 unit high.

























MAXIMUM ROUGH OPENING not to exceed 85" x 94 3/4"
Maximum up to 4 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity from Marvin® representative for more information.





































































































3 Wide Operator/Stationary Units

M.O. (mm)	6-0 1/2 (1842)	7-0 1/2 (2146)	8-0 1/2 (2451)	9-0 1/2 (2756)
R.O. (mm)	6-1 (1854)	7-1 (2159)	8-1 (2464)	9-1 (2769)
Frame Size (mm)	6-0 (1829)	7-0 (2134)	8-0 (2438)	9-0 (2743)

1-7 3/8 (492) 1-7 5/8 (498) 1-7 1/8 (486)	 IAWN 2519 3W	 IAWN 2919 3W	 IAWN 3319 3W	 IAWN 3719 3W
1-11 3/8 (594) 1-11 5/8 (600) 1-11 1/8 (587)	 IAWN 2523 3W	 IAWN 2923 3W	 IAWN 3323 3W	 IAWN 3723 3W
2-3 3/8 (695) 2-3 5/8 (702) 2-3 1/8 (689)	 IAWN 2527 3W	 IAWN 2927 3W	 IAWN 3327 3W	 IAWN 3727 3W
2-11 3/8 (899) 2-11 5/8 (905) 2-11 1/8 (892)	 IAWN 2535 3W	 IAWN 2935 3W	 IAWN 3335 3W	 IAWN 3735 3W
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 1/8 (994)	 IAWN 2539 3W	 IAWN 2939 3W	 IAWN 3339 3W	 IAWN 3739 3W
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 1/8 (1197)	 IAWN 2547 3W	 IAWN 2947 3W	 IAWN 3347 3W	 IAWN 3747 3W

DOUBLE HUNG

Operator Units

M.O. (mm)	1-10 (559)	2-2 (660)	2-6 (762)	2-8 (813)	2-10 (864)
R.O. (mm)	1-10 1/2 (572)	2-2 1/2 (673)	2-6 1/2 (775)	2-8 1/2 (826)	2-10 1/2 (876)
Frame Size (mm)	1-9 1/2 (546)	2-1 1/2 (648)	2-5 1/2 (749)	2-7 1/2 (800)	2-9 1/2 (851)
Glass Size (mm)	16 3/4" (425)	20 3/4" (527)	24 3/4" (629)	26 3/4" (679)	28 3/4" (730)
3-0 (914)					
3-0 1/4 (928)					
3-0 1/4 (928)					
3-3 3/4 (908)					
14 3/4" (375)					
3-4 (1016)					
3-4 1/4 (1022)					
3-3 3/4 (1010)					
16 3/4" (425)					
3-8 (1176)					
3-8 1/4 (1124)					
3-7 3/4 (1111)					
18 3/4" (476)					
4-0 (1219)					
4-0 1/4 (1226)					
3-11 3/4 (1213)					
20 3/4" (527)					
4-4 (1321)					
4-4 1/4 (1327)					
4-3 3/4 (1314)					
22 3/4" (578)					
4-8 (1422)					
4-8 1/4 (1429)					
4-7 3/4 (1416)					
24 3/4" (629)					
5-0 (1524)					
5-0 1/4 (1530)					
4-11 3/4 (1518)					
26 3/4" (679)					
5-4 (1626)					
5-4 1/4 (1632)					
5-3 3/4 (1619)					
28 3/4" (730)					
5-8 (1727)					
5-8 1/4 (1734)					
5-7 3/4 (1721)					
30 3/4" (781)					
6-0 (1829)					
6-0 1/4 (1835)					
5-11 3/4 (1822)					
32 3/4" (832)					
6-4 (1930)					
6-4 1/4 (1937)					
6-3 3/4 (1924)					
34 3/4" (883)					

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.






















































MAXIMUM ROUGH OPENING not to exceed 113 1/2" x 76 1/4" Maximum up to 5 units wide by 1 unit high or 2 units wide by 2 units high.

MAXIMUM ROUGH OPENING not to exceed 84" x 92" Maximum up to 3 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity® from Marvin® representative for more information.

Operator Units

M.O. (mm)	3-0 (914)	3-2 (965)	3-6 (1067)	4-0 (1219)	4-6 (1372)														
R.O. (mm)	3-0 1/2 (927)	3-2 1/2 (978)	3-6 1/2 (1080)	4-0 1/2 (1232)	4-6 1/2 (1384)														
Frame Size (mm)	2-11 1/2 (902)	3-1 1/2 (953)	3-5 1/2 (1054)	3-11 1/2 (1207)	4-5 1/2 (1359)														
Glass Size (mm)	30 3/4" (781)	32 3/4" (832)	36 3/4" (933)	42 3/4" (1086)	48 3/4" (1238)														
3-0 (914)	3-0 1/4 (920)	3-0 1/4 (920)	2-11 3/4 (908)	14 3/4 (375)	(S.O. 2-10 x 2-10)		ITDH3636	(S.O. 3-0 x 2-10)		ITDH3836	(S.O. 3-4 x 2-10)		ITDH4236	(S.O. 3-8 x 2-10)		ITDH4836	(S.O. 4-4 x 2-10)		ITDH5436
3-4 (1016)	3-4 1/4 (1022)	3-3 3/4 (1010)	16 3/4 (425)	(S.O. 2-10 x 3-2)		ITDH3640	(S.O. 3-0 x 3-2)		ITDH3840	(S.O. 3-4 x 3-2)		ITDH4240	(S.O. 3-8 x 3-2)		ITDH4840	(S.O. 4-4 x 3-2)		ITDH5440	
3-8 (1176)	3-8 1/4 (1124)	3-7 3/4 (1111)	18 3/4 (476)	(S.O. 2-10 x 3-6)		ITDH3644	(S.O. 3-0 x 3-6)		ITDH3844	(S.O. 3-4 x 3-6)		ITDH4244	(S.O. 3-8 x 3-6)		ITDH4844	(S.O. 4-4 x 3-6)		ITDH5444	
4-0 (1219)	4-0 1/4 (1226)	3-11 3/4 (1213)	20 3/4 (527)	(S.O. 2-10 x 3-10)		ITDH3648	(S.O. 3-0 x 3-10)		ITDH3848	(S.O. 3-4 x 3-10)		ITDH4248	(S.O. 3-8 x 3-10)		ITDH4848	(S.O. 4-4 x 3-10)		ITDH5448	
4-4 (1321)	4-4 1/4 (1327)	4-3 3/4 (1314)	22 3/4 (578)	(S.O. 2-10 x 4-2)		ITDH3652	(S.O. 3-0 x 4-2)		ITDH3852	(S.O. 3-4 x 4-2)		ITDH4252	(S.O. 3-8 x 4-2)		ITDH4852	(S.O. 4-4 x 4-2)		ITDH5452	
4-8 (1422)	4-8 1/4 (1429)	4-7 3/4 (1416)	24 3/4 (629)	(S.O. 2-10 x 4-6)		ITDH3656	(S.O. 3-0 x 4-6)		ITDH3856	(S.O. 3-4 x 4-6)		ITDH4256	(S.O. 3-8 x 4-6)		ITDH4856	(S.O. 4-4 x 4-6)		ITDH5456	
5-0 (1524)	5-0 1/4 (1530)	4-11 3/4 (1518)	26 3/4 (679)	(S.O. 2-10 x 4-10)		ITDH3660 E	(S.O. 3-0 x 4-10)		ITDH3860 E	(S.O. 3-4 x 4-10)		ITDH4260 E	(S.O. 3-8 x 4-10)		ITDH4860 E	(S.O. 4-4 x 4-10)		ITDH5460 E	
5-4 (1626)	5-4 1/4 (1632)	5-3 3/4 (1619)	28 3/4 (730)	(S.O. 2-10 x 5-2)		ITDH366 E	(S.O. 3-0 x 5-2)		ITDH3864 E	(S.O. 3-4 x 5-2)		ITDH4264 E	(S.O. 3-8 x 5-2)		ITDH4864 E	(S.O. 4-4 x 5-2)		ITDH5464 E	
5-8 (1727)	5-8 1/4 (1734)	5-7 3/4 (1721)	30 3/4 (781)	(S.O. 2-10 x 5-6)		ITDH3668 E	(S.O. 3-0 x 5-6)		ITDH3868 E	(S.O. 3-4 x 5-6)		ITDH4268 E	(S.O. 3-8 x 5-6)		ITDH4868 E	(S.O. 4-4 x 5-6)		ITDH5468 E	
6-0 (1829)	6-0 1/4 (1835)	5-11 3/4 (1822)	32 3/4 (832)	(S.O. 2-10 x 5-10)		ITDH3672 E	(S.O. 3-0 x 5-10)		ITDH3872 E	(S.O. 3-4 x 5-10)		ITDH4272 E	(S.O. 3-8 x 5-10)		ITDH4872 E	(S.O. 4-4 x 5-10)		ITDH5472 E	
6-4 (1930)	6-4 1/4 (1937)	6-3 3/4 (1924)	34 3/4 (883)	(S.O. 2-10 x 6-2)		ITDH3676 E	(S.O. 3-0 x 6-2)		ITDH3876 E	(S.O. 3-4 x 6-2)		ITDH4276 E							

DOUBLE HUNG























2 Wide Operator Units

M.O. (mm)	3-7 1/2 (1105)	4-3 1/2 (1308)	4-11 1/2 (1511)	5-3 1/2 (1613)	5-7 1/2 (1715)	5-11 1/2 (1816)	6-3 1/2 (1918)	6-11 1/2 (2121)
R.O. (mm)	3-8 (1118)	4-4 (1321)	5-0 (1524)	5-4 (1626)	5-8 (1727)	6-0 (1829)	6-4 (1930)	7-0 (2134)
Frame Size (mm)	3-7 (1092)	4-3 (1295)	4-11 (1499)	5-3 (1600)	5-7 (1702)	5-11 (1803)	6-3 (1905)	6-11 (2108)

3-0 (914) 3-0 1/4 (921) 2-11 3/4 (908)								
3-4 (1016) 3-4 1/4 (1022) 3-3 3/4 (1010)								
3-8 (1116) 3-8 1/4 (1124) 3-7 3/4 (1111)								
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)								

2 Wide Operator Units









































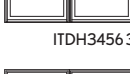

























M.O. (mm)	7-11 1/2 (2426)	8-11 1/2 (2731)
R.O. (mm)	8-0 (2438)	9-0 (2743)
Frame Size (mm)	7-11 (2413)	8-11 (2718)

3-0 (914) 3-0 1/4 (921) 2-11 3/4 (908)		
ITDH 4836 2W		ITDH 5436 2W
3-4 (1016) 3-4 1/4 (1022) 3-3 3/4 (1010)		
ITDH 4840 2W		ITDH 5440 2W
3-8 (1176) 3-8 1/4 (1124) 3-7 3/4 (1111)		
ITDH 4844 2W		ITDH 5444 2W
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213)		
ITDH 4848 2W		ITDH 5448 2W
4-4 (1321) 4-4 1/4 (1327) 4-3 3/4 (1314)		
ITDH 4852 2W		ITDH 5452 2W
4-8 (1422) 4-8 1/4 (1429) 4-7 3/4 (1416)		
ITDH 4856 2W		ITDH 5456 2W
5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518)		
ITDH 4860 2W E		ITDH 5460 2W E
5-4 (1626) 5-4 1/4 (1632) 5-3 3/4 (1619)		
ITDH 4864 2W E		ITDH 5464 2W E
5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721)		
ITDH 4868 2W E		ITDH 5468 2W E
6-0 (1829) 6-0 1/4 (1835) 5-11 3/4 (1822)		
ITDH 4872 2W E		ITDH 5472 2W E
6-4 (1930) 6-4 1/4 (1937) 6-3 3/4 (1924)		
ITDH 4876 2W E		ITDH 5476 2W E

DOUBLE HUNG

3 Wide Operator Units

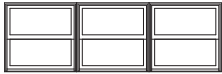




















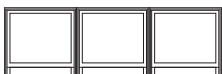


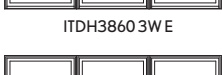

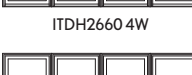



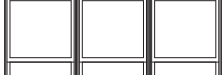


M.O. (mm)	5-5 (1651)	6-5 (1956)	7-5 (2261)	7-11 (2413)	8-5 (2565)	8-11 (2718)
R.O. (mm)	5-5 1/2 (1664)	6-5 1/2 (1969)	7-5 1/2 (2273)	7-11 1/2 (2426)	8-5 1/2 (2578)	8-11 1/2 (2731)
Frame Size (mm)	5-4 1/2 (1638)	6-4 1/2 (1943)	7-4 1/2 (2248)	7-10 1/2 (2400)	8-4 1/2 (2553)	8-10 1/2 (2705)

3-0 (914) 3-0 1/4 (921) 2-11 3/4 (908)	 ITDH2236 3W	 ITDH2636 3W	 ITDH3036 3W	 ITDH3236 3W	 ITDH3436 3W	 ITDH3636 3W
3-4 (1016) 3-4 1/4 (1022) 3-3 3/4 (1010)	 ITDH2240 3W	 ITDH2640 3W	 ITDH3040 3W	 ITDH3240 3W	 ITDH3440 3W	 ITDH3640 3W
3-8 (1176) 3-8 1/4 (1124) 3-7 3/4 (1111)	 ITDH2244 3W	 ITDH2644 3W	 ITDH3044 3W	 ITDH3244 3W	 ITDH3444 3W	 ITDH3644 3W
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213)	 ITDH2248 3W	 ITDH2648 3W	 ITDH3048 3W	 ITDH3248 3W	 ITDH3448 3W	 ITDH3648 3W
4-4 (1321) 4-4 1/4 (1327) 4-3 3/4 (1314)	 ITDH2252 3W	 ITDH2652 3W	 ITDH3052 3W	 ITDH3252 3W	 ITDH3452 3W	 ITDH3652 3W
4-8 (1422) 4-8 1/4 (1429) 4-7 3/4 (1416)	 ITDH2256 3W	 ITDH2656 3W	 ITDH3056 3W	 ITDH3256 3W	 ITDH3456 3W	 ITDH3656 3W
5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518)	 ITDH2260 3W	 ITDH2660 3W	 ITDH3060 3W	 ITDH3260 3W	 ITDH3460 3W	 ITDH3660 3W E
5-4 (1626) 5-4 1/4 (1632) 5-3 3/4 (1619)	 ITDH2264 3W	 ITDH2664 3W	 ITDH3064 3W	 ITDH3264 3W	 ITDH3464 3W	 ITDH3664 3W E
5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721)	 ITDH2268 3W	 ITDH2668 3W	 ITDH3068 3W	 ITDH3268 3W	 ITDH3468 3W E	 ITDH3668 3W E
6-0 (1829) 6-0 1/4 (1835) 5-11 3/4 (1822)	 ITDH2272 3W	 ITDH2672 3W	 ITDH3072 3W	 ITDH3272 3W E	 ITDH3472 3W E	 ITDH3672 3W E
6-4 (1930) 6-4 1/4 (1937) 6-3 3/4 (1924)	 ITDH2276 3W	 ITDH2676 3W	 ITDH3076 3W E	 ITDH3276 3W E	 ITDH3476 3W E	 ITDH3676 3W E

3 Wide and Operator Units

4 Wide Operator Units

M.O. (mm)	9-5 (2870)	7-2 1/2 (2197)	8-6 1/2 (2604)
R.O. (mm)	9-5 1/2 (2883)	7-3 (2210)	8-7 (2616)
Frame Size (mm)	9-4 1/2 (2858)	7-2 (2184)	8-6 (2591)

3-0 (914) 3-0 1/4 (921)			
ITDH3836 3W	ITDH2236 4W	ITDH2636 4W	
3-4 (1016) 3-4 1/4 (1022) 3-3 3/4 (1010)			
ITDH3840 3W	ITDH2240 4W	ITDH2640 4W	
3-8 (1176) 3-8 1/4 (1124) 3-7 3/4 (1111)			
ITDH3844 3W	ITDH2244 4W	ITDH2644 4W	
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213)			
ITDH3848 3W	ITDH2248 4W	ITDH2648 4W	
4-4 (1321) 4-4 1/4 (1327) 4-3 3/4 (1314)			
ITDH3852 3W	ITDH2252 4W	ITDH2652 4W	
4-8 (1422) 4-8 1/4 (1429) 4-7 3/4 (1416)			
ITDH3856 3W	ITDH2256 4W	ITDH2656 4W	
5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518)			
ITDH3860 3W E	ITDH2260 4W	ITDH2660 4W	
5-4 (1626) 5-4 1/4 (1632) 5-3 3/4 (1619)			
ITDH3864 3W E	ITDH2264 4W	ITDH2664 4W	
5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721)			
ITDH3868 3W	ITDH2268 4W	ITDH2668 4W	
6-0 (1829) 6-0 1/4 (1835) 5-11 3/4 (1822)			
ITDH3872 3W E	ITDH2272 4W	ITDH2672 4W	
6-4 (1930) 6-4 1/4 (1937) 6-3 3/4 (1924)			
ITDH3876 3W E	ITDH2276 4W	ITDH2676 4W	

Details and Elevations not to scale.

Special sized units available within and outside of CN matrix. Please contact your Integrity Dealer

Minimum frame size: 17.5" x 27.75"

Maximum frame size: 53.5" x 83.75"

Optional Double Hung Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Other available lite cuts shown on page 49.

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.

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

Available in equal, cottage, and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available below CN 36 height and above CN 68 height.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled.

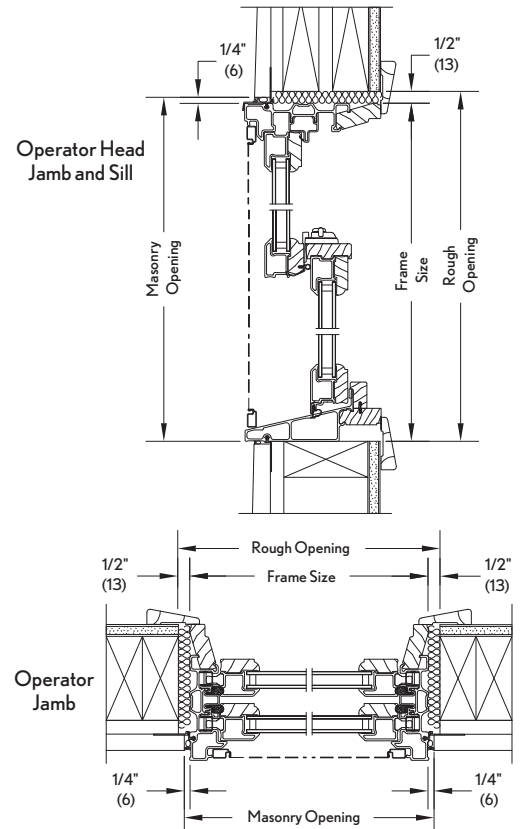
MAXIMUM ROUGH OPENING not to exceed 113 1/2" x 76 1/4" Maximum up to 5 units wide by 1 unit high or 2 units wide by 2 units high.

MAXIMUM ROUGH OPENING not to exceed 84" x 92" Maximum up to 3 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity from Marvin representative for more information.























































Construction Details



DOUBLE HUNG PICTURE

Picture Units

M.O. (mm)	1-10 (559)	2-2 (660)	2-6 (762)	2-8 (813)	2-10 (864)	3-0 (914)	3-2 (965)	3-6 (1067)	4-2 (1270)
R.O. (mm)	1-10 1/2 (572)	2-2 1/2 (673)	2-6 1/2 (775)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-6 1/2 (1080)	4-2 1/2 (1283)
Frame Size (mm)	1-9 1/2 (546)	2-1 1/2 (648)	2-5 1/2 (749)	2-7 1/2 (800)	2-9 1/2 (851)	2-11 1/2 (902)	3-1 1/2 (953)	3-5 1/2 (1054)	4-1 1/2 (1257)
Glass Size (mm)	16 3/4" (425)	20 3/4" (527)	24 3/4" (629)	26 3/4" (679)	28 3/4" (&31)	30 3/4" (781)	32 3/4" (832)	36 3/4" (933)	44 3/4" (1137)



















3-0 (914) 3-0 1/4 (921) 2-11 3/4 (908)									
ITDHP2236	ITDHP2636	ITDHP3036	ITDHP3236	ITDHP3436	ITDHP3636	ITDHP3836	ITDHP4236	ITDHP4836	
3-4 (1016) 3-4 1/4 (1022) 3-3 3/4 (1010) 3-4 3/4" (883)									
ITDHP2240	ITDHP2640	ITDHP3040	ITDHP3240	ITDHP3440	ITDHP3640	ITDHP3840	ITDHP4240	ITDHP4840	
3-8 (1176) 3-8 1/4 (1124) 3-7 3/4 (1111) 3-8 3/4" (984)									
ITDHP2244	ITDHP2644	ITDHP3044	ITDHP3244	ITDHP3444	ITDHP3644	ITDHP3844	ITDHP4244	ITDHP4844	
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213) 4-2 3/4" (1086)									
ITDHP2248	ITDHP2648	ITDHP3048	ITDHP3248	ITDHP3448	ITDHP3648	ITDHP3848	ITDHP4248	ITDHP4848	
4-4 (1321) 4-4 1/4 (1327) 4-3 3/4 (1314) 4-6 3/4" (1187)									
ITDHP2252	ITDHP2652	ITDHP3052	ITDHP3252	ITDHP3452	ITDHP3652	ITDHP3852	ITDHP4252	ITDHP4852	
4-8 (1422) 4-8 1/4 (1429) 4-7 3/4 (1416) 5-0 3/4" (1289)									
ITDHP2256	ITDHP2656	ITDHP3056	ITDHP3256	ITDHP3456	ITDHP3656	ITDHP3856	ITDHP4256	ITDHP4856	

DOUBLE HUNG PICTURE

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

Picture Units

M.O. (mm)	4-2 (1270)	4-6 (1372)	5-2 (1575)
R.O. (mm)	4-2 1/2 (1283)	4-6 1/2 (1384)	5-2 1/2 (1588)
Frame Size (mm)	4-1 1/2 (1257)	4-5 1/2 (1359)	5-1 1/2 (1562)
Glass Size (mm)	44 3/4" (1137)	48 3/4" (1238)	56 3/4" (1441)

3-0 (914) 3-0 1/4 (921) 2-11 3/4 (908)			
ITDHP5036	ITDHP5436	ITDHP6236	
3-4 (1016) 3-4 1/4 (1022) 3-3 3/4 (1010) 3-4 3/4 (883)			
ITDHP5040	ITDHP5440	ITDHP6240	
3-8 (1176) 3-8 1/4 (1124) 3-7 3/4 (1111) 3-8 3/4 (984)			
ITDHP5044	ITDHP5444	ITDHP6244	
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213) 4-2 3/4 (1086)			
ITDHP5048	ITDHP5448	ITDHP6248	
4-4 (1321) 4-4 1/4 (1327) 4-3 3/4 (1314) 4-6 3/4 (1187)			
ITDHP5052	ITDHP5452	ITDHP6252	
4-8 (1422) 4-8 1/4 (1429) 4-7 3/4 (1416) 5-0 3/4 (1289)			
ITDHP5056	ITDHP5456	ITDHP6256	

DOUBLE HUNG PICTURE

Picture Units

M.O. (mm)	1-10 (559)	2-2 (660)	2-6 (762)	2-8 (813)	2-10 (864)	3-0 (914)	3-2 (965)	3-6 (1067)	4-0 (1219)
RO. (mm)	1-10 1/2 (572)	2-2 1/2 (673)	2-6 1/2 (775)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-6 1/2 (1080)	4-0 1/2 (1232)
Frame Size (mm)	1-9 1/2 (546)	2-1 1/2 (648)	2-5 1/2 (749)	2-7 1/2 (800)	2-9 1/2 (851)	2-11 1/2 (902)	3-1 1/2 (953)	3-5 1/2 (1054)	3-11 1/2 (1207)
Glass Size (mm)	16 3/4" (425)	20 3/4" (527)	24 3/4" (629)	26 3/4" (679)	28 3/4" (831)	30 3/4" (781)	32 3/4" (832)	36 3/4" (933)	42 3/4" (1086)

5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518) 54 3/4" (1391)									
ITDHP2260	ITDHP2660	ITDHP3060	ITDHP3260	ITDHP3460	ITDHP3660	ITDHP3860	ITDHP4260	ITDHP4860	
5-4 (1626) 5-4 1/4 (1632) 5-3 3/4 (1619) 58 3/4" (1492)									
ITDHP2264	ITDHP2664	ITDHP3064	ITDHP3264	ITDHP3464	ITDHP3664	ITDHP3864	ITDHP4264	ITDHP4864	
5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721) 62 3/4" (1594)									
ITDHP2268	ITDHP2668	ITDHP3068	ITDHP3268	ITDHP3468	ITDHP3668	ITDHP3868	ITDHP4268	ITDHP4868	
6-0 (1829) 6-0 1/4 (1835) 5-11 3/4 (1822) 66 3/4" (1695)									
ITDHP2272	ITDHP2672	ITDHP3072	ITDHP3272	ITDHP3472	ITDHP3672	ITDHP3872	ITDHP4272	ITDHP4872	
6-4 (1930) 6-4 1/4 (1937) 6-3 3/4 (1924) 70 3/4" (1797)									
ITDHP2276	ITDHP2676	ITDHP3076	ITDHP3276	ITDHP3476	ITDHP3676	ITDHP3876	ITDHP4276	ITDHP4876	

Details and Elevations not to scale.

Special sized units available within and outside of CN matrix.
Please contact your Integrity Dealer

Minimum frame size: 17.5" x 27.75"

Maximum frame size: 53.5" x 83.75"

Optional picture Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Also available in Prairie lite cuts shown on page 49.

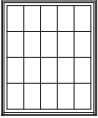
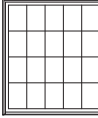
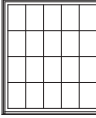
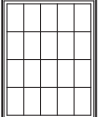
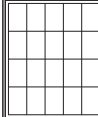
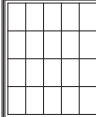
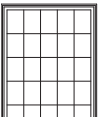
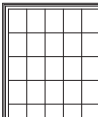
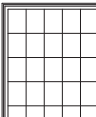
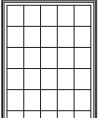
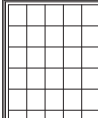
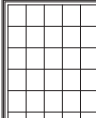
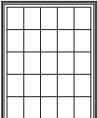
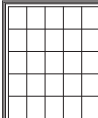
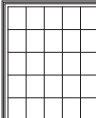
When ordering 6 9/16" (167 mm) or 6 13/16" (173 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

DOUBLE HUNG PICTURE

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

Picture Units

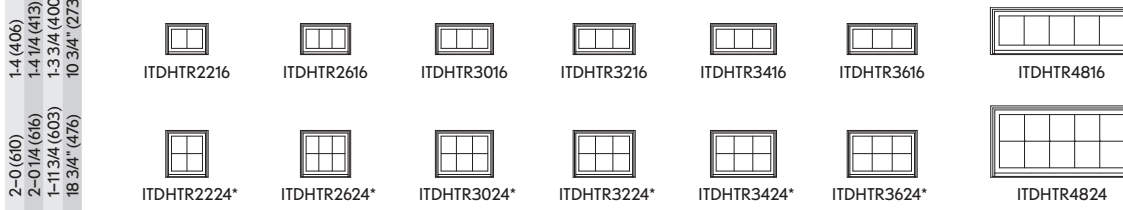
M.O. (mm)	4-2 (1270)	4-6 (1372)	5-2 (1575)
R.O. (mm)	4-2 1/2 (1283)	4-6 1/2 (1384)	5-2 1/2 (1588)
Frame Size (mm)	4-1 1/2 (1257)	4-5 1/2 (1359)	5-1 1/2 (1562)
Glass Size (mm)	44 3/4" (1137)	48 3/4" (1238)	56 3/4" (1441)

5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518) 5-4 3/4 (1391)			
ITDHP5060	ITDHP5460	ITDHP6260	
5-4 (1626) 5-4 1/4 (1632) 5-3 3/4 (1619) 58 3/4 (1492)			
ITDHP5064	ITDHP5464	ITDHP6264	
5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721) 62 3/4 (1594)			
ITDHP5068	ITDHP5468	ITDHP6268	
6-0 (1829) 6-0 1/4 (1835) 5-11 3/4 (1822) 66 3/4 (1695)			
ITDHP5072	ITDHP5472	ITDHP6272	
6-4 (1930) 6-4 1/4 (1937) 6-3 3/4 (1924) 70 3/4 (1797)			
ITDHP5076	ITDHP5476	ITDHP6276	

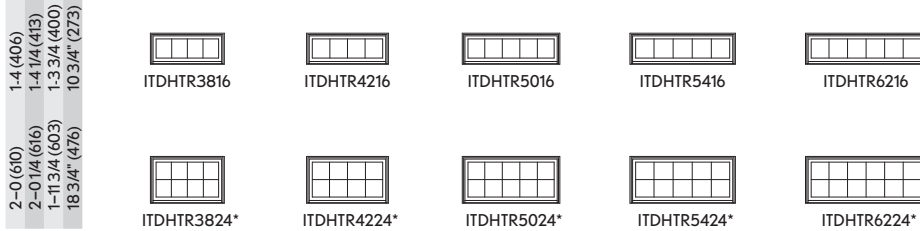
DOUBLE HUNG TRANSOM

Transom Units

M.O. (mm)	1-10 (559)	2-2 (660)	2-6 (762)	2-8 (813)	2-10 (864)	3-0 (914)	4-0 (1219)
R.O. (mm)	1-10 1/2 (572)	2-2 1/2 (673)	2-6 1/2 (775)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	4-0 1/2 (1232)
Frame Size (mm)	1-9 1/2 (546)	2-1 1/2 (648)	2-5 1/2 (749)	2-7 1/2 (800)	2-9 1/2 (851)	2-11 1/2 (902)	3-11 1/2 (1207)
Glass Size (mm)	16 3/4" (425)	20 3/4" (527)	24 3/4" (629)	26 3/4" (679)	28 3/4" (831)	30 3/4" (781)	42 3/4" (1086)

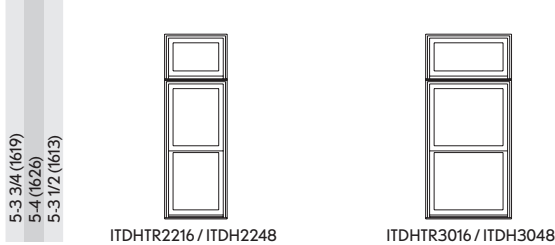


M.O. (mm)	3-2 (965)	3-6 (1067)	4-2 (1270)	4-6 (1372)	5-2 (1575)
R.O. (mm)	3-2 1/2 (978)	3-6 1/2 (1080)	4-2 1/2 (1283)	4-6 1/2 (1384)	5-2 1/2 (1588)
Frame Size (mm)	3-1 1/2 (953)	3-5 1/2 (1054)	4-1 1/2 (1257)	4-5 1/2 (1359)	5-1 1/2 (1562)
Glass Size (mm)	32 3/4" (832)	36 3/4" (933)	44 3/4" (1137)	48 3/4"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

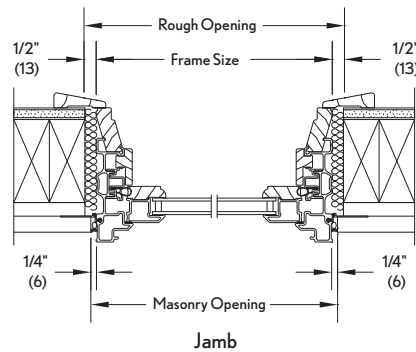
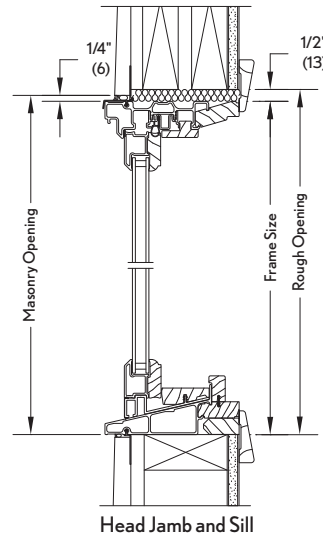


In-Sash Transoms Mullered Over Double Hungs

M.O. (mm)	1-10 (559)	2-6 (762)
R.O. (mm)	1-10 1/2 (572)	2-6 1/2 (775)
Frame Size (mm)	1-9 1/2 (546)	2-5 1/2 (749)



Construction Details



MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullered.

MAXIMUM ROUGH OPENING not to exceed 113 1/2" x 76 1/4" Maximum up to 5 units wide by 1 unit high, or 2 units wide by 2 units high.

MAXIMUM ROUGH OPENING not to exceed 84" x 92" Maximum up to 3 units wide by 5 units high.

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.

Special sized units available within product size matrix and available down to 17.5" frame width. See your Integrity® retailer.

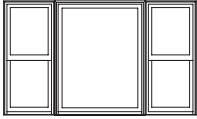
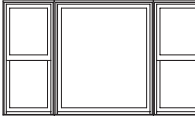
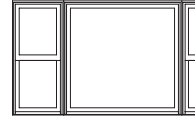
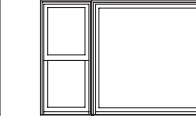




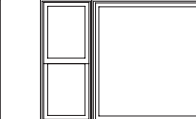

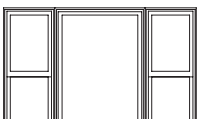

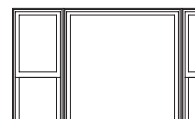
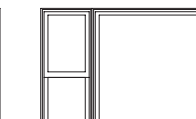

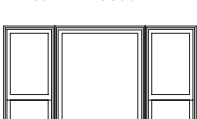
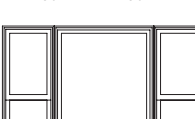

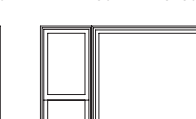


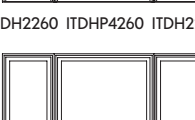
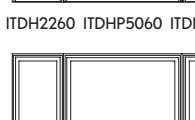

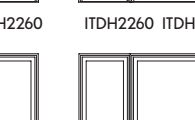
Optional picture Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Also available in Prairie Style cuts shown on page 49.

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.

* Size available in picture unit also.




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

M.O. (mm)	6-9 (2057)	7-1 (2159)	7-9 (2362)	8-1 (2464)	8-9 (2667)
R.O. (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)					
	ITDH2248 ITDHP3848 ITDH2248	ITDH2248 ITDHP4248 ITDH2248	ITDH2248 ITDHP5048 ITDH2248	ITDH2248 ITDHP5448 ITDH2248	ITDH2248 ITDHP6248 ITDH2248
4-4 (1321) 4-4 1/4 (1327) 4-3 3/4 (1314)					
	ITDH2252 ITDHP3852 ITDH2252	ITDH2252 ITDHP4252 ITDH2252	ITDH2252 ITDHP5052 ITDH2252	ITDH2252 ITDHP5452 ITDH2252	ITDH2252 ITDHP6252 ITDH2252
4-8 (1422) 4-8 1/4 (1429) 4-7 3/4 (1416)					
	ITDH2256 ITDHP3856 ITDH2256	ITDH2256 ITDHP4256 ITDH2256	ITDH2256 ITDHP5056 ITDH2256	ITDH2256 ITDHP5456 ITDH2256	ITDH2256 ITDHP6256 ITDH2256
5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518)					
	ITDH2260 ITDHP3860 ITDH2260	ITDH2260 ITDHP4260 ITDH2260	ITDH2260 ITDHP5060 ITDH2260	ITDH2260 ITDHP5460 ITDH2260	ITDH2260 ITDHP6260 ITDH2260
5-4 (1626) 5-4 1/4 (1632) 5-3 3/4 (1619)					
	ITDH2264 ITDHP3864 ITDH2264	ITDH2264 ITDHP4264 ITDH2264	ITDH2264 ITDHP5064 ITDH2264	ITDH2264 ITDHP5464 ITDH2264	ITDH2264 ITDHP6264 ITDH2264

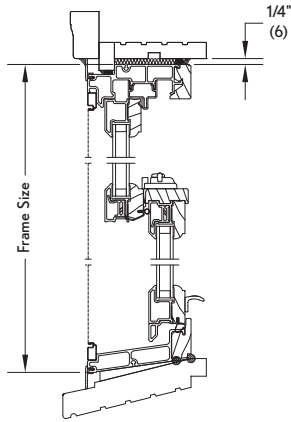
Cottage Style Flankers with Picture Center Unit

M.O. (mm)	8-1 (2464)	8-9 (2667)	9-5 (2870)
R.O. (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)

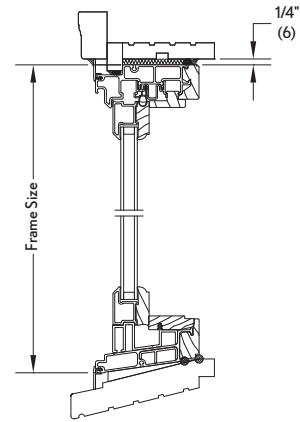
5-8 (1727) 5-8 1/4 (1734) 5-7 3/4 (1721)			
	ITDH2268 ITDHP5468 ITDH2268	ITDH2668 ITDHP5468 ITDH2668	ITDH3068 ITDHP5468 ITDH3068

INSERT DOUBLE HUNG/TRANSOM/PICTURE

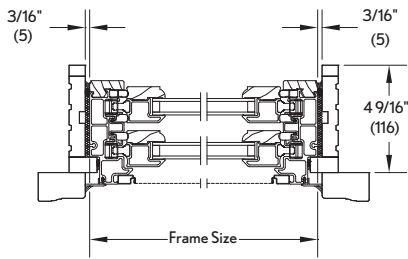
Construction Details



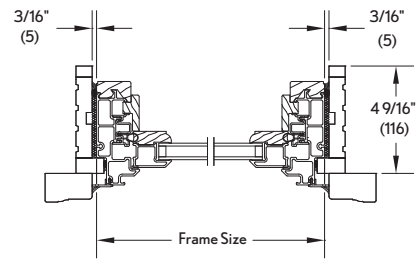
Operator
Head Jamb and Sill



Transom and Picture
Head Jamb and Sill



Operator
Jamb



Transom and Picture
Jamb

Details and Elevations not to scale.

Special sized units available within product size matrix. See your Integrity retailer.

Optional Double Hung Grilles, GBGs and SDLs are available in a standard Rectangular cut shown. Other available lite cuts shown on page 49.

Cottage and Reverse Cottage sash configurations are available between 35.5" and 67.75" frame heights

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled.

MAXIMUM ROUGH OPENING not to exceed 112 7/8" x 84 1/4" Maximum up to 5 units wide by 1 unit high.

Field mull kits are available.

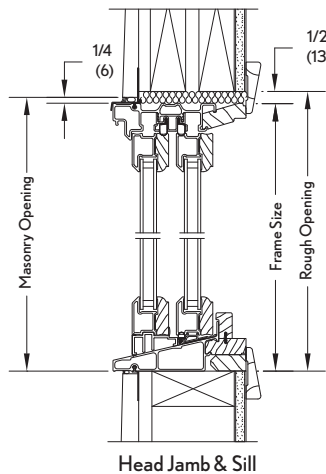
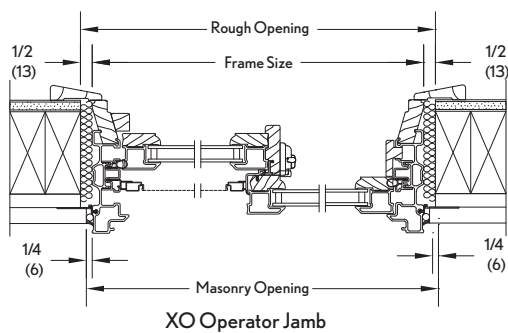
Please consult your local Integrity® from Marvin® representative for more information.

1 Wide XO and 2 Wide XO-OX Operator Units

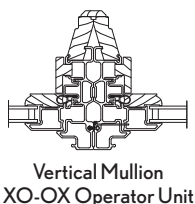
M.O. (mm)	3-0 (914)	4-0 (1219)	5-0 (1524)	6-0 (1829)	5-11/2 (1816)	7-11/2 (2426)
R.O. (mm)	3-0 1/2 (927)	4-0 1/2 (1232)	5-0 1/2 (1537)	6-0 1/2 (1842)	6-0 (1829)	8-0 (2438)
Frame Size (mm)	2-11/2 (902)	3-11/2 (1207)	4-11/2 (1511)	5-11/2 (1816)	5-11 (1803)	7-11 (2413)
Glass Size (mm)	14 3/4" (375)	20 3/4" (527)	26 3/4" (679)	32 3/4" (832)	14 3/4" (375)	20 3/4" (527)

2-0 (610) 2-0 1/4 (616) 1-11 3/4 (603) 18 3/4" (476)						
ITGL3624	ITGL4824	ITGL6024	ITGL7224	ITGL3624 2W	ITGL4824 2W	
3-0 (914) 3-0 1/4 (921) 2-11 3/4 (908) 30 3/4" (781)						
ITGL3636	ITGL4836	ITGL6036 E*	ITGL7236 E*	ITGL3636 2W	ITGL4836 2W	
3-6 (1067) 3-6 1/4 (1073) 3-5 3/4 (1060) 36 3/4" (933)						
ITGL3642	ITGL4842	ITGL6042 E	ITGL7242 E	ITGL3642 2W	ITGL4842 2W	
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213) 42 3/4" (1086)						
ITGL3648	ITGL4848 E	ITGL6048 E	ITGL7248 E	ITGL3648 2W	ITGL4848 E 2W	
5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518) 54 3/4" (1391)						
ITGL3660	ITGL4860 E	ITGL6060 E	ITGL7260 E	ITGL3660 2W	ITGL4860 E 2W	

Construction Details



Mullion Detail



Details and Elevations not to scale.

Special sized units available within product size matrix. See your Integrity® retailer.

E = 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.

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 49.

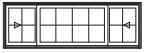
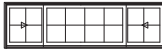

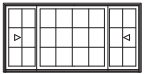
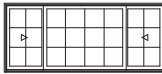
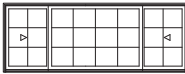
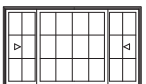
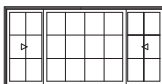
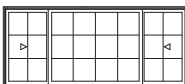
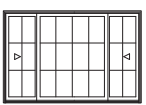
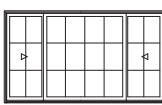
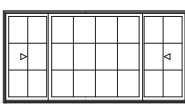
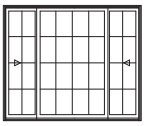
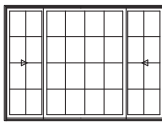
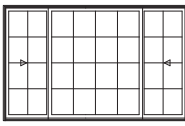
When ordering 6 9/16" (167 mm) or 6 13/16" (173 mm) jambs, add 1/4" (6 mm) to width and 1/8" (3 mm) to height for Rough Opening, Frame Size and Masonry Opening.

MULTIPLE ASSEMBLIES

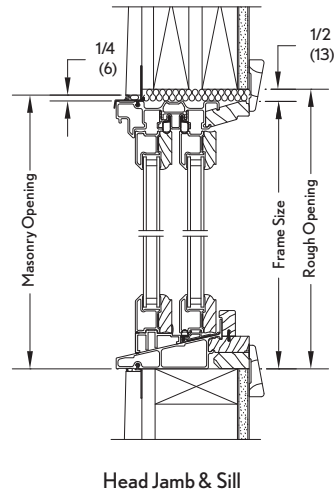
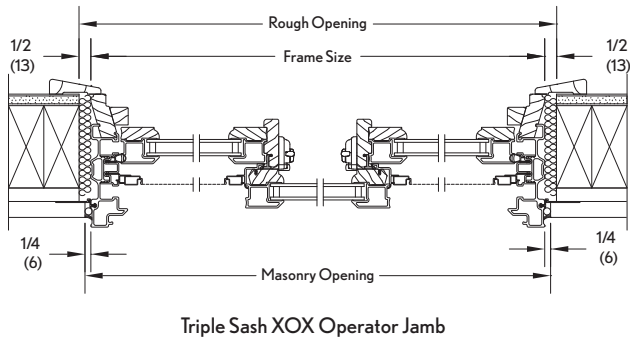
Multiple assemblies can be factory mulled. **MAXIMUM ROUGH OPENING** not to exceed 113 1/2" x 60 1/4" Maximum up to 3 units wide by 1 unit high. Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity from Marvin representative for more information.

1 Wide XOX Operator Units

M.O. (mm)	6-0 (1829)	7-0 (2134)	8-0 (2438)
R.O. (mm)	6-0 1/2 (1842)	7-0 1/2 (2146)	8-0 1/2 (2451)
Frame Size (mm)	5-11 1/2 (1816)	6-11 1/2 (2121)	7-11 1/2 (2426)

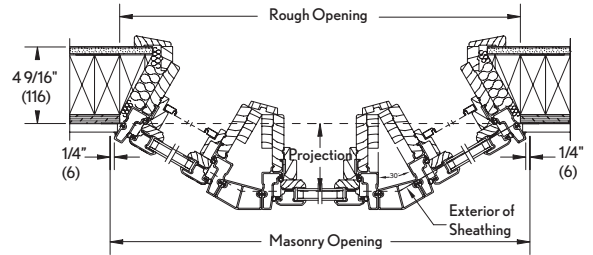
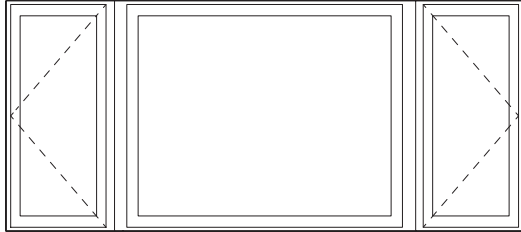
2-0 (610) 2-0 1/4 (616) 1-11 3/4 (603)	 ITGLTS7224	 ITGLTS8424	 ITGLTS9624
3-0 (914) 3-0 1/4 (921) 2-11 3/4 (908)	 ITGLTS7236	 ITGLTS8436	 ITGLTS9636
3-6 (1067) 3-6 1/4 (1073) 3-5 3/4 (1060)	 ITGLTS7242	 ITGLTS8442	 ITGLTS9642
4-0 (1219) 4-0 1/4 (1226) 3-11 3/4 (1213)	 ITGLTS7248	 ITGLTS8448	 ITGLTS9648 E
5-0 (1524) 5-0 1/4 (1530) 4-11 3/4 (1518)	 ITGLTS7260	 ITGLTS8460	 ITGLTS9660 E

Construction Details



CASEMENT BAYS

30° Bays



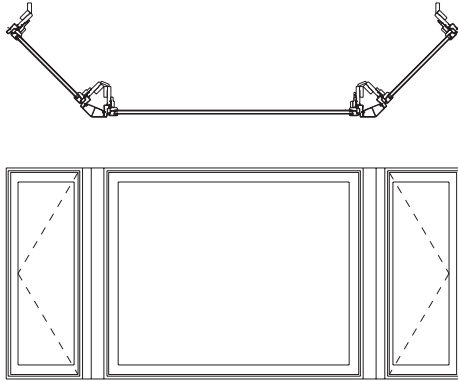
30° Casement Bay with Stationary/Picture Center Unit

CN Width	Rough Opening Width		Projection	
	ft-in	(mm)	in	(mm)
22-22-22	5-4 27/64	(1636)	11 3/8	(289)
22-26-22	5-8 27/64	(1738)	11 3/8	(289)
22-30-22	6-0 27/64	(1839)	11 3/8	(289)
22-32-22	6-2 27/64	(1890)	11 3/8	(289)
22-34-22	6-4 27/64	(1941)	11 3/8	(289)
22-36-22	6-6 27/64	(1992)	11 3/8	(289)
22-38-22	6-8 27/64	(2043)	11 3/8	(289)
22-42-22	7-0 27/64	(2144)	11 3/8	(289)
22-50-22	7-8 27/64	(2347)	11 3/8	(289)
22-54-22	8-0 27/64	(2449)	11 3/8	(289)
22-62-22	8-8 27/64	(2652)	11 3/8	(289)
26-22-26	5-11 11/32	(1812)	13 3/8	(340)
26-26-26	6-3 11/32	(1914)	13 3/8	(340)
26-30-26	6-7 11/32	(2015)	13 3/8	(340)
26-32-26	6-9 11/32	(2066)	13 3/8	(340)
26-34-26	6-11 11/32	(2117)	13 3/8	(340)
26-36-26	7-1 11/32	(2168)	13 3/8	(340)
26-38-26	7-3 11/32	(2219)	13 3/8	(340)
26-42-26	7-7 11/32	(2320)	13 3/8	(340)
26-50-26	8-3 11/32	(2523)	13 3/8	(340)
26-54-26	8-7 11/32	(2625)	13 3/8	(340)
26-62-26	9-3 11/32	(2828)	13 3/8	(340)
30-22-30	6-6 9/32	(1988)	15 3/8	(391)
30-26-22	6-10 9/32	(2090)	15 3/8	(391)
30-30-30	7-2 9/32	(2191)	15 3/8	(391)
30-32-30	7-4 9/32	(2242)	15 3/8	(391)
30-34-30	7-6 9/32	(2293)	15 3/8	(391)
30-36-30	7-8 9/32	(2344)	15 3/8	(391)
30-38-30	7-10 9/32	(2395)	15 3/8	(391)
30-42-30	8-2 9/32	(2496)	15 3/8	(391)
30-50-30	8-10 9/32	(2699)	15 3/8	(391)
30-54-30	9-2 9/32	(2801)	15 3/8	(391)
30-62-30	-	-	-	-
32-22-32	6-9 47/64	(2076)	16 3/8	(416)
32-26-32	7-1 47/64	(2178)	16 3/8	(416)
32-30-32	7-5 47/64	(2279)	16 3/8	(416)
32-32-32	7-7 47/64	(2330)	16 3/8	(416)
32-34-32	7-9 47/64	(2381)	16 3/8	(416)
32-36-32	7-11 47/64	(2432)	16 3/8	(416)
32-38-32	8-1 47/64	(2483)	16 3/8	(416)
32-42-32	8-5 47/64	(2584)	16 3/8	(416)
32-50-32	9-1 47/64	(2787)	16 3/8	(416)

CN Width	Rough Opening Width		Projection	
	ft-in	(mm)	in	(mm)
34-22-34	7-1 13/64	(2164)	17 3/8	(441)
34-26-34	7-5 13/64	(2266)	17 3/8	(441)
34-30-34	7-9 13/64	(2367)	17 3/8	(441)
34-32-34	7-11 13/64	(2418)	17 3/8	(441)
34-34-34	8-1 13/64	(2469)	17 3/8	(441)
34-36-34	8-2 13/64	(2494)	17 3/8	(441)
34-38-34	8-5 13/64	(2571)	17 3/8	(441)
34-42-34	8-9 13/64	(2672)	17 3/8	(441)
34-50-34	9-5 13/64	(2875)	17 3/8	(441)
36-22-36	7-4 43/64	(2252)	18 3/8	(467)
36-26-36	7-8 43/64	(2354)	18 3/8	(467)
36-30-36	8-0 43/64	(2455)	18 3/8	(467)
36-32-36	8-2 43/64	(2506)	18 3/8	(467)
36-34-36	8-4 43/64	(2557)	18 3/8	(467)
36-36-36	8-6 43/64	(2608)	18 3/8	(467)
36-38-36	8-8 43/64	(2659)	18 3/8	(467)
36-42-36	9-0 43/64	(2760)	18 3/8	(467)
38-22-38	7-8 1/8	(2340)	19 3/8	(492)
38-26-38	8-0 1/8	(2442)	19 3/8	(492)
38-30-38	8-4 1/8	(2543)	19 3/8	(492)
38-32-38	8-6 1/8	(2594)	19 3/8	(492)
38-34-38	8-8 1/8	(2645)	19 3/8	(492)
38-36-38	8-10 1/8	(2696)	19 3/8	(492)
38-38-38	9-0 1/8	(2747)	19 3/8	(492)
38-42-38	9-4 1/8	(2848)	19 3/8	(492)
42-22-42	8-3 1/16	(2516)	21 3/8	(543)
42-26-42	8-7 1/16	(2618)	21 3/8	(543)
42-30-42	8-11 1/16	(2719)	21 3/8	(543)
42-32-42	9-1 1/16	(2770)	21 3/8	(543)
42-34-42	9-3 1/16	(2821)	21 3/8	(543)
42-36-42	9-5 1/16	(2872)	21 3/8	(543)
42-38-42	9-7 1/16	(2923)	21 3/8	(543)

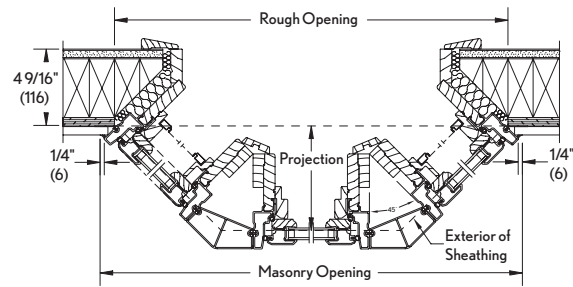
CASEMENT BAYS

45° Bays



CN Width	Rough Opening Width		Projection	
	ft-in	(mm)	in	(mm)
22-22-22	4-11 29/64	(1510)	16 9/16	(421)
22-26-22	5-3 29/64	(1612)	16 9/16	(421)
22-30-22	5-7 29/64	(1713)	16 9/16	(421)
22-32-22	5-9 29/64	(1764)	16 9/16	(421)
22-34-22	5-11 29/64	(1815)	16 9/16	(421)
22-36-22	6-1 29/64	(1866)	16 9/16	(421)
22-38-22	6-3 29/64	(1917)	16 9/16	(421)
22-42-22	6-7 29/64	(2018)	16 9/16	(421)
22-50-22	7-3 29/64	(2221)	16 9/16	(421)
22-54-22	7-7 29/64	(2323)	16 9/16	(421)
22-62-22	8-3 29/64	(2526)	16 9/16	(421)
26-22-26	5-5 7/64	(1654)	19 25/64	(492)
26-26-26	5-9 7/64	(1755)	19 25/64	(492)
26-30-26	6-1 7/64	(1857)	19 25/64	(492)
26-32-26	6-3 7/64	(1908)	19 25/64	(492)
26-34-26	6-5 7/64	(1959)	19 25/64	(492)
26-36-26	6-7 7/64	(2009)	19 25/64	(492)
26-38-26	6-9 7/64	(2060)	19 25/64	(492)
26-42-26	7-1 7/64	(2162)	19 25/64	(492)
26-50-26	7-9 7/64	(2365)	19 25/64	(492)
26-54-26	8-1 7/64	(2467)	19 25/64	(492)
26-62-26	8-9 7/64	(2670)	19 25/64	(492)
30-22-30	5-10 49/64	(1797)	22 7/32	(564)
30-26-30	6-2 49/64	(1899)	22 7/32	(564)
30-30-30	6-6 49/64	(2001)	22 7/32	(564)
30-32-30	6-10 49/64	(2102)	22 7/32	(564)
30-34-30	7-2 49/64	(2204)	22 7/32	(564)
30-36-30	7-6 49/64	(2305)	22 7/32	(564)
30-38-30	7-10 49/64	(2407)	22 7/32	(564)
30-42-30	8-2 49/64	(2509)	22 7/32	(564)
30-50-30	8-6 49/64	(2610)	22 7/32	(564)
30-54-30	8-10 49/64	(2712)	22 7/32	(564)
30-62-30	9-2 49/64	(2813)	22 7/32	(564)

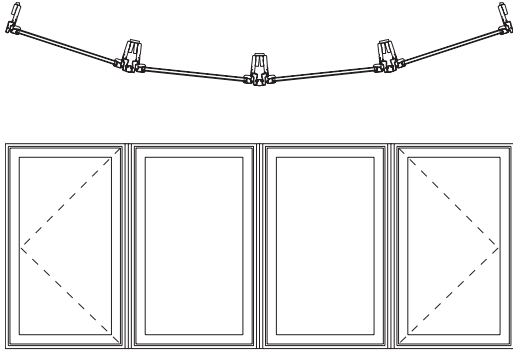
Construction Details



45° Casement Bay with Stationary/Picture Center Unit

CASEMENT BAYS/BOWS

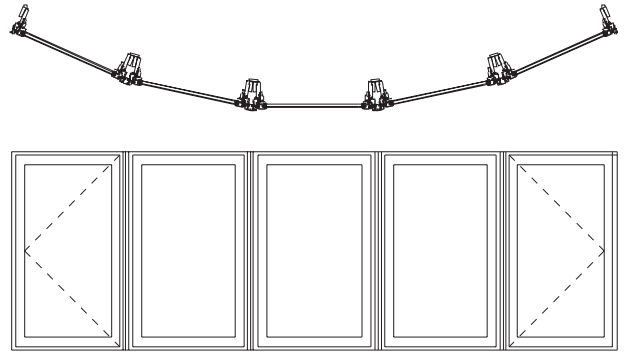
4 Wide Bows



CN Width	Rough Opening Width		Projection	
	ft-in	(mm)	in	(mm)
17-4W	5-6 17/64	(1683)	6 7/8	(175)
21-4W	6-9 53/64	(2078)	8 17/32	(217)
25-4W	8-1 25/64	(2474)	10 3/16	(259)
29-4W	9-4 61/64	(2869)	11 27/32	(301)

CN Width	Rough Opening Width	
	ft-in	(mm)
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

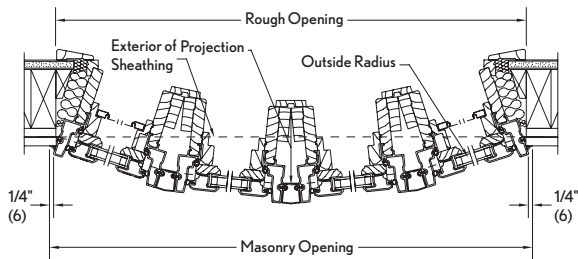


CN Width	Rough Opening Width		Projection	
	ft-in	(mm)	in	(mm)
17-5W	6-9 31/64	(2070)	10 1/4	(260)
21-5W	8-4 5/8	(2556)	12 23/32	(323)
25-5W	9-11 3/4	(3042)	15 11/64	(385)
29-5W	-	-	-	-

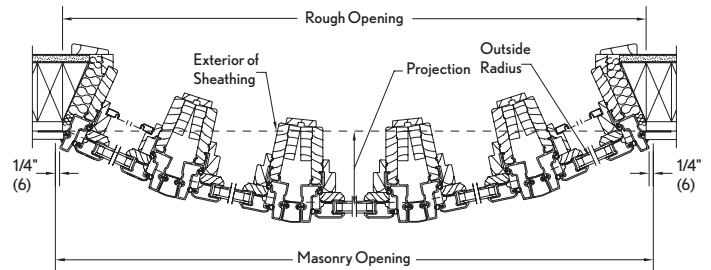
Details and Elevations not to scale.

For rough opening height of a Bay or Bow, add 3/16" to Casement rough opening height.

Construction Details



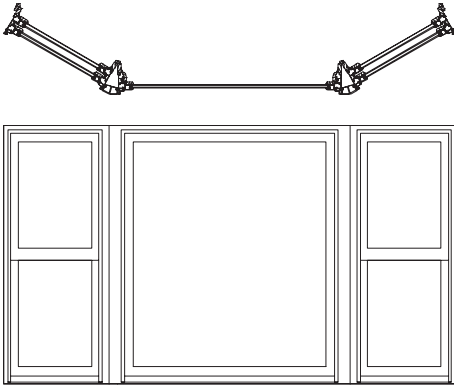
4-Wide Casement Bow Unit



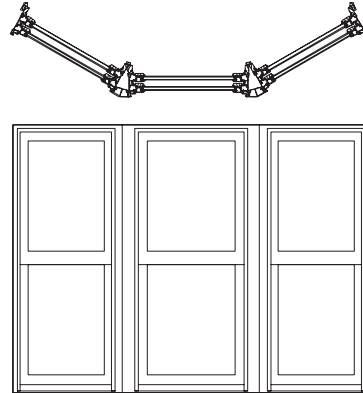
5-Wide Casement Bow Unit

DOUBLE HUNG BAYS

30° Bay Picture Center Unit



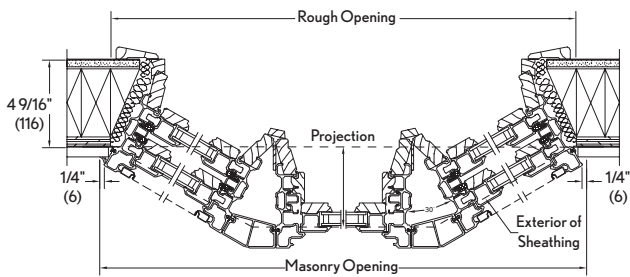
30° Bay Operator Center Unit



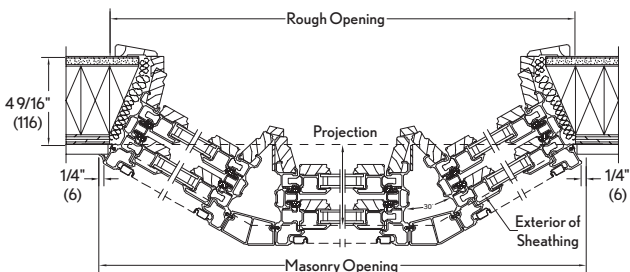
CN Width	Rough Opening Width		Projection	
	ft-in	(mm)	in	(mm)
22-22-22	5-4 27/64	(1636)	11 3/8	(289)
22-26-22	5-8 27/64	(1738)	11 3/8	(289)
22-30-22	6-0 27/64	(1839)	11 3/8	(289)
22-32-22	6-2 27/64	(1890)	11 3/8	(289)
22-34-22	6-4 27/64	(1941)	11 3/8	(289)
22-36-22	6-6 27/64	(1992)	11 3/8	(289)
22-38-22	6-8 27/64	(2043)	11 3/8	(289)
22-42-22	7-0 27/64	(2144)	11 3/8	(289)
22-50-22	7-8 27/64	(2347)	11 3/8	(289)
22-54-22	8-0 27/64	(2449)	11 3/8	(289)
22-62-22	8-8 27/64	(2652)	11 3/8	(289)
26-22-26	5-11 11/32	(1812)	13 3/8	(340)
26-26-26	6-3 11/32	(1914)	13 3/8	(340)
26-30-26	6-7 11/32	(2015)	13 3/8	(340)
26-32-26	6-9 11/32	(2066)	13 3/8	(340)
26-34-26	6-11 11/32	(2117)	13 3/8	(340)
26-36-26	7-1 11/32	(2168)	13 3/8	(340)
26-38-26	7-3 11/32	(2219)	13 3/8	(340)
26-42-26	7-7 11/32	(2320)	13 3/8	(340)
26-50-26	8-3 11/32	(2523)	13 3/8	(340)
26-54-26	8-7 11/32	(2625)	13 3/8	(340)
26-62-26	9-3 11/32	(2828)	13 3/8	(340)

CN Width	Rough Opening Width		Projection	
	ft-in	(mm)	in	(mm)
30-22-30	6-6 9/32	(1988)	15 3/8	(391)
30-26-22	6-10 9/32	(2090)	15 3/8	(391)
30-30-30	7-2 9/32	(2191)	15 3/8	(391)
30-32-30	7-4 9/32	(2242)	15 3/8	(391)
30-34-30	7-6 9/32	(2293)	15 3/8	(391)
30-36-30	7-8 9/32	(2344)	15 3/8	(391)
30-38-30	7-10 9/32	(2395)	15 3/8	(391)
30-42-30	8-2 9/32	(2496)	15 3/8	(391)
30-50-30	8-10 9/32	(2699)	15 3/8	(391)
30-54-30	9-2 9/32	(2801)	15 3/8	(391)
30-62-30	-	-	-	-
32-22-32	6-9 47/64	(2076)	16 3/8	(416)
32-26-32	7-1 47/64	(2178)	16 3/8	(416)
32-30-32	7-5 47/64	(2279)	16 3/8	(416)
32-32-32	7-7 47/64	(2330)	16 3/8	(416)
32-34-32	7-9 47/64	(2381)	16 3/8	(416)
32-36-32	7-11 47/64	(2432)	16 3/8	(416)
32-38-32	8-1 47/64	(2483)	16 3/8	(416)
32-42-32	8-5 47/64	(2584)	16 3/8	(416)
32-50-32	9-1 47/64	(2787)	16 3/8	(416)
34-22-34	7-11 1/64	(2164)	17 3/8	(441)
34-26-34	7-5 13/64	(2266)	17 3/8	(441)
34-30-34	7-9 13/64	(2367)	17 3/8	(441)
34-32-34	7-11 13/64	(2418)	17 3/8	(441)
34-34-34	8-1 13/64	(2469)	17 3/8	(441)
34-36-34	8-2 13/64	(2494)	17 3/8	(441)
34-38-34	8-5 13/64	(2571)	17 3/8	(441)
34-42-34	8-9 13/64	(2672)	17 3/8	(441)
34-50-34	9-5 13/64	(2875)	17 3/8	(441)
36-22-36	7-4 43/64	(2252)	18 3/8	(467)
36-26-36	7-8 43/64	(2354)	18 3/8	(467)
36-30-36	8-0 43/64	(2455)	18 3/8	(467)
36-32-36	8-2 43/64	(2506)	18 3/8	(467)
36-34-36	8-4 43/64	(2557)	18 3/8	(467)
36-36-36	8-6 43/64	(2608)	18 3/8	(467)
36-38-36	8-8 43/64	(2659)	18 3/8	(467)
36-42-36	9-0 43/64	(2760)	18 3/8	(467)
38-22-38	7-8 1/8	(2340)	19 3/8	(492)
38-26-38	8-0 1/8	(2442)	19 3/8	(492)
38-30-38	8-4 1/8	(2543)	19 3/8	(492)
38-32-38	8-6 1/8	(2594)	19 3/8	(492)
38-34-38	8-8 1/8	(2645)	19 3/8	(492)
38-36-38	8-10 1/8	(2696)	19 3/8	(492)
38-38-38	9-0 1/8	(2747)	19 3/8	(492)
38-42-38	9-4 1/8	(2848)	19 3/8	(492)
42-22-42	8-3 1/16	(2516)	21 3/8	(543)
42-26-42	8-7 1/16	(2618)	21 3/8	(543)
42-30-42	8-11 1/16	(2719)	21 3/8	(543)
42-32-42	9-1 1/16	(2770)	21 3/8	(543)
42-34-42	9-3 1/16	(2821)	21 3/8	(543)
42-36-42	9-5 1/16	(2872)	21 3/8	(543)
42-38-42	9-7 1/16	(2923)	21 3/8	(543)

Construction Details



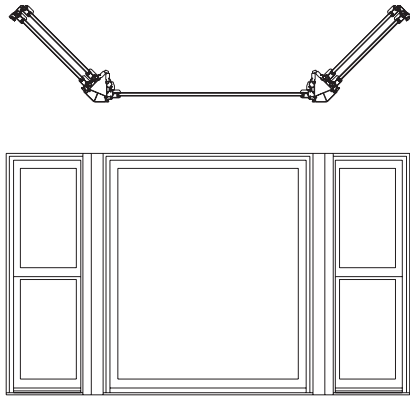
30° Bay with Picture Center Unit Jamb



30° Bay with Operator Center Unit Jamb

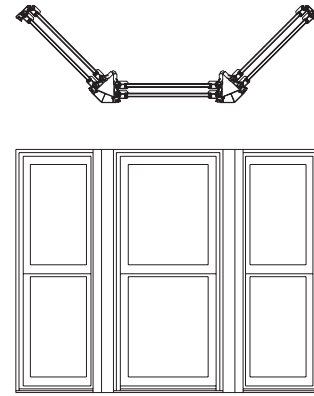
DOUBLE HUNG BAYS

45° Bay Picture Center Unit



CN Width	Rough Opening Width	
	ft-in	(mm)
24	2-11/16	(652)
36	3-11/16	(957)
40	3-5 11/16	(1059)
44	3-7 11/16	(1110)
48	4-11/16	(1262)
52	4-5 11/16	(1364)
56	4-9 11/16	(1465)
60	5-11/16	(1567)
64	5-5 11/16	(1668)
68	5-9 11/16	(1770)
72	6-11/16	(1872)
76	6-5 11/16	(1973)

45° Bay Operator Center Unit



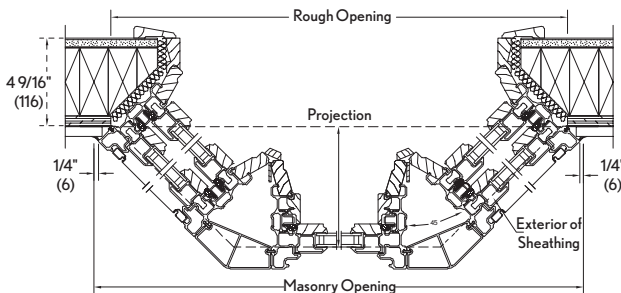
CN Width	Rough Opening Width		Projection	
	ft-in	(mm)	in	(mm)
22-22-22	4-11 29/64	(1510)	16 9/16	(421)
22-26-22	5-3 29/64	(1612)	16 9/16	(421)
22-30-22	5-7 29/64	(1713)	16 9/16	(421)
22-32-22	5-9 29/64	(1764)	16 9/16	(421)
22-34-22	5-11 29/64	(1815)	16 9/16	(421)
22-36-22	6-1 29/64	(1866)	16 9/16	(421)
22-38-22	6-3 29/64	(1917)	16 9/16	(421)
22-42-22	6-7 29/64	(2018)	16 9/16	(421)
22-50-22	7-3 29/64	(2221)	16 9/16	(421)
22-54-22	7-7 29/64	(2323)	16 9/16	(421)
22-62-22	8-3 29/64	(2526)	16 9/16	(421)
26-22-26	5-5 7/64	(1654)	19 25/64	(492)
26-26-26	5-9 7/64	(1755)	19 25/64	(492)
26-30-26	6-1 7/64	(1857)	19 25/64	(492)
26-32-26	6-3 7/64	(1908)	19 25/64	(492)
26-34-26	6-5 7/64	(1959)	19 25/64	(492)
26-36-26	6-7 7/64	(2009)	19 25/64	(492)
26-38-26	6-9 7/64	(2060)	19 25/64	(492)
26-42-26	7-1 7/64	(2162)	19 25/64	(492)
26-50-26	7-9 7/64	(2365)	19 25/64	(492)
26-54-26	8-1 7/64	(2467)	19 25/64	(492)
26-62-26	8-9 7/64	(2670)	19 25/64	(492)
30-22-30	5-10 49/64	(1797)	22 7/32	(564)
30-26-30	6-2 49/64	(1899)	22 7/32	(564)
30-30-30	6-6 49/64	(2001)	22 7/32	(564)
30-32-30	6-10 49/64	(2102)	22 7/32	(564)
30-34-30	7-2 49/64	(2204)	22 7/32	(564)
30-36-30	7-6 49/64	(2305)	22 7/32	(564)
30-38-30	7-10 49/64	(2407)	22 7/32	(564)
30-42-30	8-2 49/64	(2509)	22 7/32	(564)
30-50-30	8-6 49/64	(2610)	22 7/32	(564)
30-54-30	8-10 49/64	(2712)	22 7/32	(564)
30-62-30	9-2 49/64	(2813)	22 7/32	(564)

Details and Elevations not to scale.

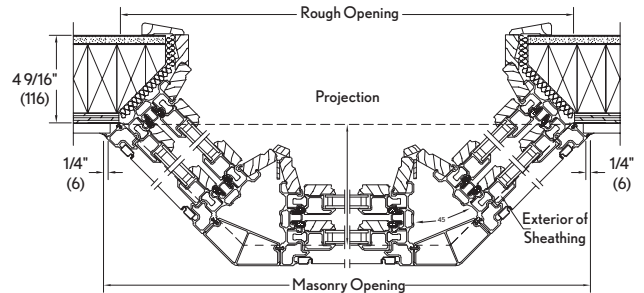
For rough opening height of a Bay, add 1 7/16" to the Double Hung rough opening height.

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

Construction Details










45° Bay with Stationary/Picture Center Unit Jamb



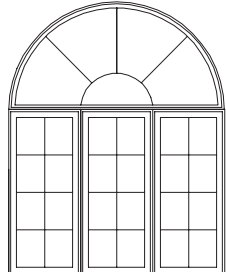
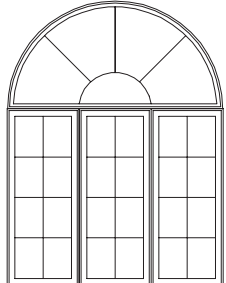
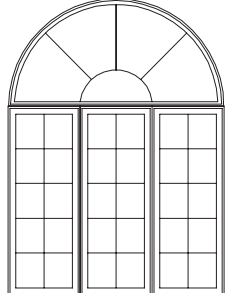
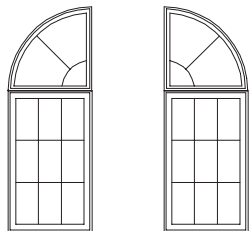
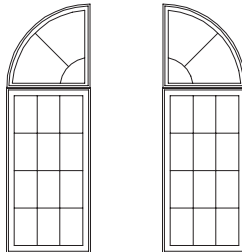
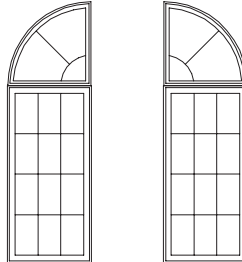
45° Bay with Operator Center Unit Jamb

CASEMENT ROUND TOPS

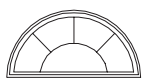
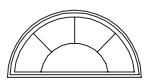
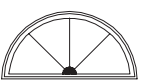



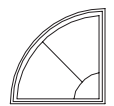
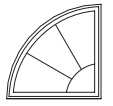
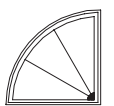
Casement Round Tops

M.O. (mm) 2-4 1/2 (724) R.O. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)	M.O. (mm) 3-4 1/2 (1029) R.O. (mm) 3-5 (1041) Frame Size (mm) 3-4 (1016)	M.O. (mm) 4-0 1/2 (1232) R.O. (mm) 4-1 (1245) Frame Size (mm) 4-0 (1219)	M.O. (mm) 2-4 1/2 (724) R.O. (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	 IOQIR29 1W CA
M.O. (mm) 4-8 1/2 (1435) R.O. (mm) 4-9 (1448) Frame Size (mm) 4-8 (1422)	M.O. (mm) 6-0 1/2 (1842) R.O. (mm) 6-1 (1854) Frame Size (mm) 6-0 (1829)	M.O. (mm) 6-0 1/2 (1842) R.O. (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

M.O. (mm) 6-0 1/2 (1842) R.O. (mm) 6-1 (1854) Frame Size (mm) 6-0 (1829)	M.O. (mm) 6-0 1/2 (1842) R.O. (mm) 6-1 (1854) Frame Size (mm) 6-0 (1829)	M.O. (mm) 6-0 1/2 (1842) R.O. (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
M.O. (mm) 2-4 1/2 (724) R.O. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)	M.O. (mm) 2-4 1/2 (724) R.O. (mm) 2-5 (737) Frame Size (mm) 2-4 (711)	M.O. (mm) 2-4 1/2 (724) R.O. (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)
 IOQIR29 1W / ICA2947 E	 IOQIR29 1W / ICA2955 E	 IOQIR29 1W / ICA2959 E

Lite Patterns

Open Hub	Open Hub	Closed Hub
		
SDL/GRILLE	GBG	GBG
		
SDL/GRILLE	GBG	GBG
		
SDL/GRILLE	GBG	GBG

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mulled 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 7/16". 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.

E = 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, SDL with Spacer Bar, Grilles and GBG are available in a standard cut, as shown to the left. (Round Top divided lites not available in other lite cuts.)

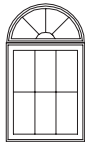
Optional Casement Grilles, GBGs and SDLs are available in several lite cut variations, standard Rectangular cut shown.

CASEMENT ROUND TOPS

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

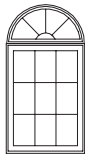
Multiple Assemblies

M.O. (mm)	2-4 1/2 (724)
R.O. (mm)	2-5 (737)
Frame Size (mm)	2-4 (711)



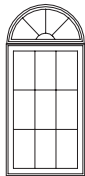
IRT29 1W / ICA2935

4-1 3/8 (1254)
4-1 5/8 (1260)
4-1 1/8 (1248)



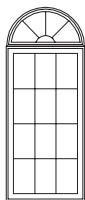
IRT29 1W / ICA2939

4-5 3/8 (1356)
4-5 5/8 (1362)
4-5 1/8 (1349)



IRT29 1W / ICA2947 E

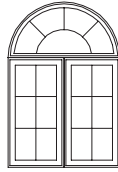
5-1 3/8 (1559)
5-1 5/8 (1565)
5-1 1/8 (1553)



IRT29 1W / ICA2955 E

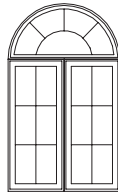
5-9 3/8 (1762)
5-9 5/8 (1768)
5-9 1/8 (1756)

M.O. (mm)	3-4 1/2 (1029)
R.O. (mm)	3-5 (1041)
Frame Size (mm)	3-4 (1016)



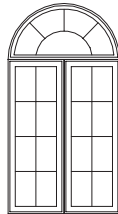
IRT21 2W / ICA2139 2W

4-11 3/8 (1508)
4-11 5/8 (1514)
4-11 1/8 (1502)



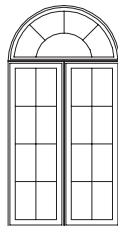
IRT21 2W / ICA2147 2W

5-7 3/8 (1711)
5-7 5/8 (1718)
5-7 1/8 (1705)



IRT21 2W / ICA2155 2W

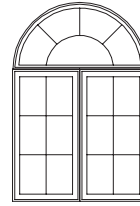
6-3 3/8 (1915)
6-3 5/8 (1921)
6-3 1/8 (1908)



IRT21 2W / ICA2159 2W

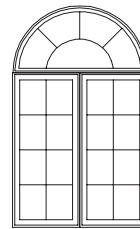
6-7 3/8 (2016)
6-7 5/8 (2022)
6-7 1/8 (2010)

M.O. (mm)	4-0 1/2 (1232)
R.O. (mm)	4-1 (1245)
Frame Size (mm)	4-0 (1219)



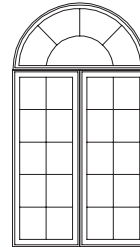
IRT25 2W / ICA2547 2W

5-11 3/8 (1813)
5-11 5/8 (1819)
5-11 1/8 (1807)



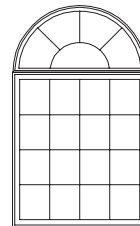
IRT25 2W / ICA2555 2W

6-7 3/8 (2016)
6-7 5/8 (2022)
6-7 1/8 (2010)



IRT25 2W / ICA2563 2W

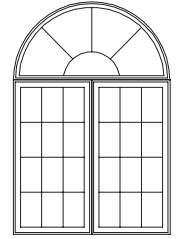
7-3 3/8 (2219)
7-3 5/8 (2226)
7-3 1/8 (2213)



IRT25 2W / ICAP4955

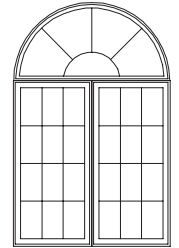
6-7 3/8 (2016)
6-7 5/8 (2022)
6-7 1/8 (2010)

M.O. (mm)	4-8 1/2 (1435)
R.O. (mm)	4-9 (1448)
Frame Size (mm)	4-8 (1422)



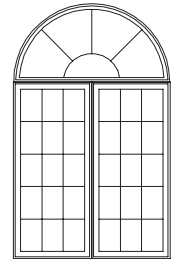
IRT29 2W / ICA2955 2W E

6-11 3/8 (2118)
6-11 5/8 (2124)
6-11 1/8 (2111)



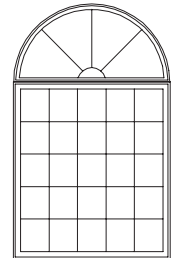
IRT29 2W / ICA2959 2W E

7-3 3/8 (2219)
7-3 5/8 (2226)
7-3 1/8 (2213)



IRT29 2W / ICA2963 2W E

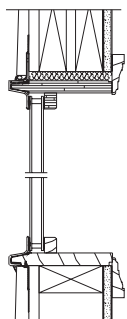
7-7 3/8 (2321)
7-7 5/8 (2327)
7-7 1/8 (2315)



IRT29 2W / ICAP5763 E

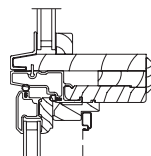
7-7 3/8 (2321)
7-7 5/8 (2327)
7-7 1/8 (2315)

Construction Detail



Casement
Head Jamb & Sill

Horizontal Mullion Detail



Casement Round Top
Over Casement

DOUBLE HUNG ROUND TOPS

Double Hung Round Tops

M.O. (mm)	2-6 (762)
R.O. (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

M.O. (mm)	2-10 (864)
R.O. (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

M.O. (mm)	3-2 (965)
R.O. (mm)	3-2 1/2 (978)
Frame Size (mm)	3-1 1/2 (953)

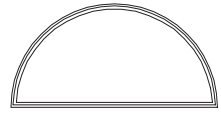
1-7 (483)
1-7 1/4 (489)
1-6 3/4 (476)



IRT38 1W DH

M.O. (mm)	5-7 1/2 (1715)
R.O. (mm)	5-8 (1727)
Frame Size (mm)	5-7 (1702)

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

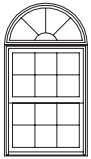


IRT34 2W DH

Multiple Assemblies

M.O. (mm)	2-6 (762)
R.O. (mm)	2-6 1/2 (775)
Frame Size (mm)	2-5 1/2 (749)

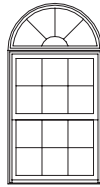
4-6 3/4 (1391)
4-7 (1397)
4-6 1/2 (1384)



IRT30 1W / ITDH3040

M.O. (mm)	2-10 (864)
R.O. (mm)	2-10 1/2 (876)
Frame Size (mm)	2-9 1/2 (851)

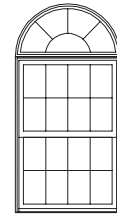
5-4 3/4 (1645)
5-5 (1651)
5-4 1/2 (1638)



IRT34 1W / ITDH3448

M.O. (mm)	3-2 (965)
R.O. (mm)	3-2 1/2 (978)
Frame Size (mm)	3-1 1/2 (953)

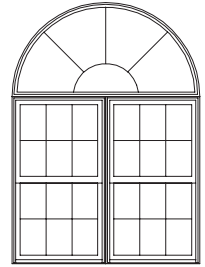
6-2 3/4 (1899)
6-3 (1905)
6-2 1/2 (1892)



IRT38 1W / ITDH3856 E

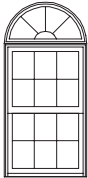
M.O. (mm)	5-7 1/2 (1715)
R.O. (mm)	5-8 (1727)
Frame Size (mm)	5-7 (1702)

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



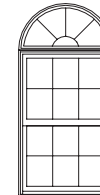
IRT34 2W / ITDH3460 2W E

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



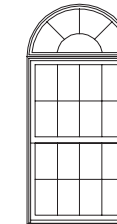
IRT30 1W / ITDH3048

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



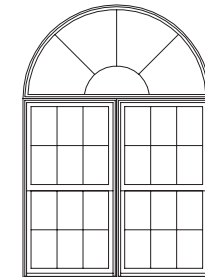
IRT34 1W / ITDH3452

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



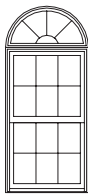
IRT38 1W / ITDH3860 E

8-11 1/2 (2477)
8-13/4 (2483)
8-11/4 (2470)



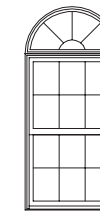
IRT34 2W / ITDH3464 2W E

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



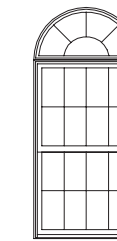
IRT30 1W / ITDH3052

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



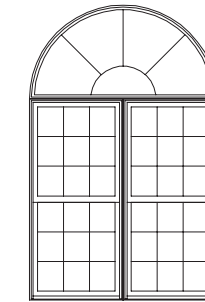
IRT34 1W / ITDH3456

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



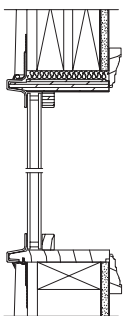
IRT38 1W / ITDH3864 E

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



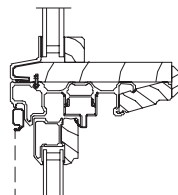
IRT34 2W / ITDH3472 2W E

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.

E = 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, SDL with Spacer Bar, Grilles and GBG are available in a standard cut, as shown on page 80. (Round Top divided lites not available in other lite cuts.)

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

DOOR ROUND TOPS

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

Door Round Tops

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

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

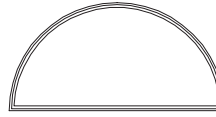


IRTD7218

Door Round Tops

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

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

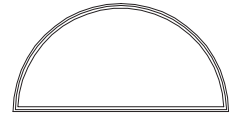


IRTD7236

Double Hung Round Tops

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

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



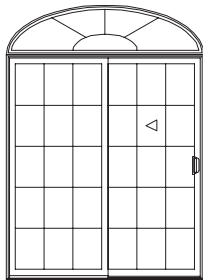
IRT36-2W DH

Multiple Assemblies

Sliding Patio Doors

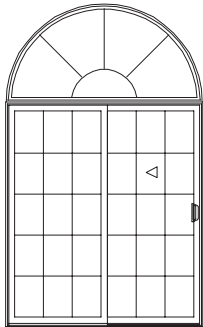
M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

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



IRTD7218 / ISPD6068 OX

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

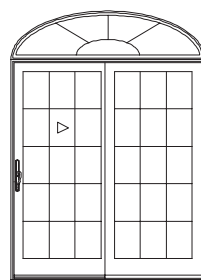


IRTD7236* / ISPD6068 OX

Sliding French Doors

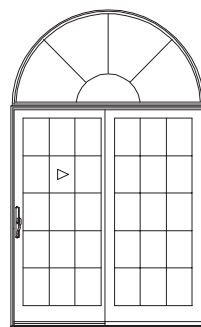
M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

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



IRTD7218 / ISFD6068 XO

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

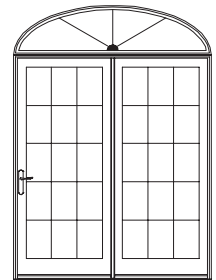


IRTD7236* / ISFD6068 XO

Inswing French Doors

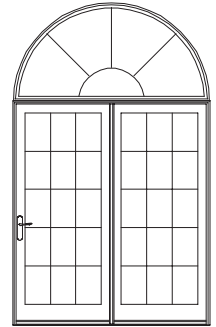
M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

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



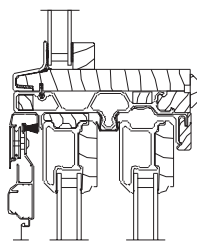
IRTD7218 / IIFD6068 XO

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

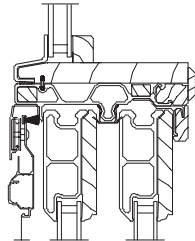


IRTD7236* / IIFD6068 XO

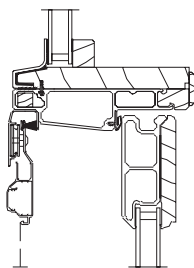
Horizontal Mullion Details



Round Top Over
Sliding Patio Door



Round Top Over
Sliding French Door



Round Top Over
Inswing French Door

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied up to 1W2h or 2W2h or 3W1h. See product specifications for mulling limitations.

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.

* Assembly available field mullied only.

Optional Round Top SDL, SDL with Spacer Bar, Grilles and GBG are available in a standard cut, as shown on page 80. (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.

IRTD7236 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.

MARVIN® ROUND TOPS

Casement Round Tops

Quarter Circle, True Half

M.O. (mm)	2-0 1/2 (622)
R.O. (mm)	2-1 (635)
Frame Size (mm)	2-0 (610)



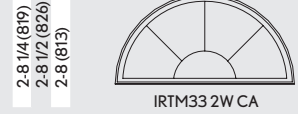
M.O. (mm)	2-8 1/2 (826)
R.O. (mm)	2-9 (838)
Frame Size (mm)	2-8 (813)



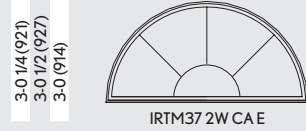
M.O. (mm)	3-0 1/2 (927)
R.O. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)



M.O. (mm)	5-4 1/2 (1638)
R.O. (mm)	5-5 (1651)
Frame Size (mm)	5-4 (1626)



M.O. (mm)	6-0 1/2 (1842)
R.O. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)



MULTIPLE ASSEMBLIES

Units may be factory mull 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.

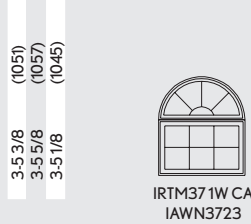
Maximum Rough Opening: 113 1/2" (2883 mm) wide X 91 1/16" (2313 mm) high or 85" (2159 mm) wide X 107 9/16" (2732 mm) high. Quarter Circle shapes require a Casement with a continuous head jamb.

Multiple Assemblies

M.O. (mm)	2-0 1/2 (622)
R.O. (mm)	2-1 (635)
Frame Size (mm)	2-0 (610)



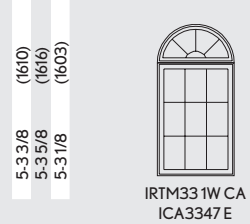
M.O. (mm)	3-0 1/2 (927)
R.O. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)



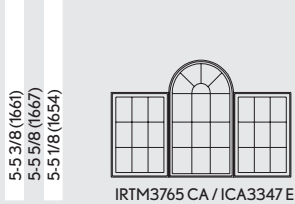
M.O. (mm)	3-0 1/2 (927)
R.O. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)



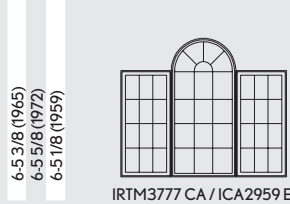
M.O. (mm)	2-8 1/2 (826)
R.O. (mm)	2-9 (838)
Frame Size (mm)	2-8 (813)



M.O. (mm)	8-4 1/2 (2553)
R.O. (mm)	8-5 (2565)
Frame Size (mm)	8-4 (2540)



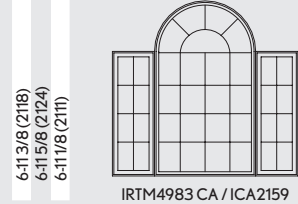
M.O. (mm)	7-8 1/2 (2350)
R.O. (mm)	7-9 (2362)
Frame Size (mm)	7-8 (2337)



M.O. (mm)	6-4 1/2 (1943)
R.O. (mm)	6-5 (1956)
Frame Size (mm)	6-4 (1930)



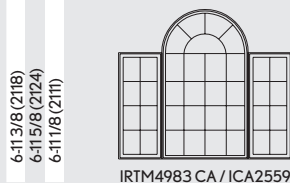
M.O. (mm)	7-4 1/2 (2248)
R.O. (mm)	7-5 (2261)
Frame Size (mm)	7-4 (2235)



M.O. (mm)	8-0 1/2 (2451)
R.O. (mm)	8-1 (2464)
Frame Size (mm)	8-0 (2438)



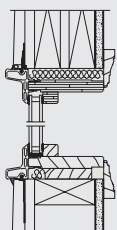
M.O. (mm)	8-0 1/2 (2451)
R.O. (mm)	8-1 (2464)
Frame Size (mm)	8-0 (2438)



M.O. (mm)	6-0 1/2 (1842)
R.O. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)

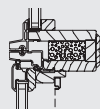


Construction Detail



Casement Round Top
Head Jamb & Sill

Horizontal Mullion Detail



Casement Round Top
Over Casement

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

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

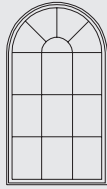
Not to scale. Optional Round Top SDL/Grilles and SDL with Spacer Bar are available in standard cut shown above. GBG patterns shown on page 91. (Round Top divided lites not available in other lite cuts.) Optional Casement and Double Hung Grilles, GBGs and SDLs are available in several lite variations, standard Rectangular cut shown.

Casement Round Tops True Half above Springline

M.O. (mm)	3-0 1/2 (927)
R.O. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)

5-5 3/8 (1661)
5-5 5/8 (1667)
5-5 1/8 (1654)

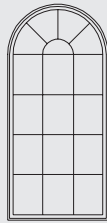
SPLN 47ICA



IRTM3765 CA

6-5 3/8 (1965)
6-5 5/8 (1972)
6-5 1/8 (1959)

SPLN 59ICA

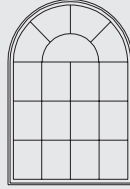


IRTM3777 CA

M.O. (mm)	4-0 1/2 (1232)
R.O. (mm)	4-1 (1245)
Frame Size (mm)	4-0 (1219)

5-11 3/8 (1813)
5-11 5/8 (1819)
5-11 1/8 (1807)

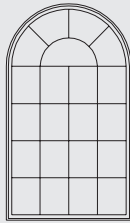
SPLN 47ICA



IRTM4971 CA

6-11 3/8 (2118)
6-11 5/8 (2124)
6-11 1/8 (2111)

SPLN 59ICA

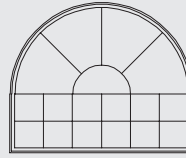


IRTM4983 CA

M.O. (mm)	6-0 1/2 (1842)
R.O. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)

4-11 3/8 (1508)
4-11 5/8 (1514)
4-11 1/8 (1502)

SPLN 23IAWN



IRTM7359 CA / AWN

Eyebrow above Springline

M.O. (mm)	1-8 1/2 (521)
R.O. (mm)	1-9 (533)
Frame Size (mm)	1-8 (508)

1-6 3/16 (462)
1-6 7/16 (468)
1-5 15/16 (456)

SPLN 16ICATR



IRTM2118-1W CA

M.O. (mm)	2-0 1/2 (622)
R.O. (mm)	2-1 (635)
Frame Size (mm)	2-0 (610)

1-7 1/4 (488)
1-7 1/2 (495)
1-7 (482)

SPLN 16ICATR



IRTM2519 CA

2-2 5/8 (675)
2-2 7/8 (682)
2-2 3/8 (669)

SPLN 23IAWN



IRTM2526 CA/AWN

M.O. (mm)	2-4 1/2 (724)
R.O. (mm)	2-5 (737)
Frame Size (mm)	2-4 (711)

1-8 1/2 (521)
1-8 3/4 (528)
1-8 1/4 (515)

SPLN 16ICATR



IRTM2920 CA

2-3 7/8 (709)
2-4 1/8 (715)
2-3 5/8 (702)

SPLN 23IAWN



IRTM2928 CA/AWN

M.O. (mm)	2-8 1/2 (826)
R.O. (mm)	2-9 (838)
Frame Size (mm)	2-8 (813)

1-8 5/8 (524)
1-8 7/8 (530)
1-8 3/8 (518)

SPLN 16ICATR



IRTM3320 CA

2-4 (711)
2-4 1/4 (718)
2-3 3/4 (705)

SPLN 23IAWN



IRTM3328 CA/AWN

M.O. (mm)	3-0 1/2 (927)
R.O. (mm)	3-1 (940)
Frame Size (mm)	3-0 (914)

1-10 (559)
1-10 1/4 (565)
1-9 3/4 (552)

SPLN 16ICATR



IRTM3722 CA

2-5 3/8 (746)
2-5 5/8 (752)
2-5 1/8 (740)

SPLN 23IAWN

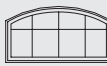


IRTM3729 CA/AWN

M.O. (mm)	3-4 1/2 (1029)
R.O. (mm)	3-5 (1041)
Frame Size (mm)	3-4 (1016)

1-9 3/8 (543)
1-9 5/8 (549)
1-9 1/8 (537)

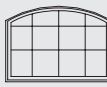
SPLN 16ICATR



IRTM4121 CA

2-4 3/4 (730)
2-5 (737)
2-4 1/2 (724)

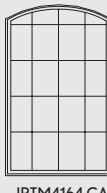
SPLN 23IAWN



IRTM4128 CA / AWN

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

SPLN 59ICA



IRTM4164 CA

M.O. (mm)	4-0 1/2 (1232)
R.O. (mm)	4-1 (1245)
Frame Size (mm)	4-0 (1219)

1-9 5/8 (549)
1-9 7/8 (556)
1-9 3/8 (543)

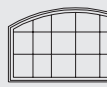
SPLN 16ICATR



IRTM4921 CA

2-5 (737)
2-5 1/4 (743)
2-4 3/4 (730)

SPLN 23IAWN



IRTM4929 CA / AWN

5-5 (1651)
5-5 1/4 (1657)
5-4 3/4 (1645)

SPLN 59ICA



IRTM4965 CA

M.O. (mm)	4-8 1/2 (1435)
R.O. (mm)	4-9 (1448)
Frame Size (mm)	4-8 (1422)

1-11 3/16 (605)
2-0 1/16 (611)
1-11 9/16 (598)

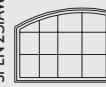
SPLN 16ICATR



IRTM5724 CA

2-7 3/16 (793)
2-7 7/16 (799)
2-6 15/16 (786)

SPLN 23IAWN



IRTM5731 CA / AWN

5-7 3/16 (1707)
5-7 7/16 (1713)
5-6 15/16 (1700)

SPLN 59ICA



IRTM5767 CA

M.O. (mm)	5-4 1/2 (1638)
R.O. (mm)	5-5 (1651)
Frame Size (mm)	5-4 (1626)

1-11 1/2 (597)
1-11 3/4 (603)
1-11 1/4 (591)

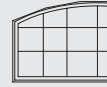
SPLN 16ICATR



IRTM6523 CA

2-6 7/8 (784)
2-7 1/8 (791)
2-6 5/8 (778)

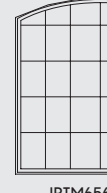
SPLN 23IAWN



IRTM6531 CA / AWN

5-6 7/8 (1699)
5-7 1/8 (1705)
5-6 5/8 (1692)

SPLN 59ICA



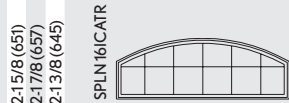
IRTM6567 CA

MARVIN® ROUND TOPS

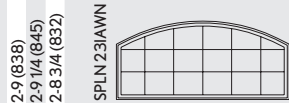
Casement Round Tops

Eyebrow above Springline

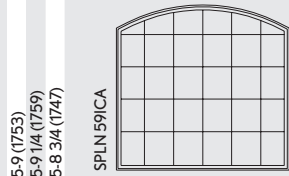
M.O. (mm)	6-0 1/2 (1842)
R.O. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)



IRTM7325 CA



IRTM7333 CA / AWN



IRTM7369 CA T

Multiple Assemblies

M.O. (mm)	2-4 1/2 (724)
R.O. (mm)	2-5 (737)
Frame Size (mm)	2-4 (711)



IRTM2920 CA
ICA2947 E

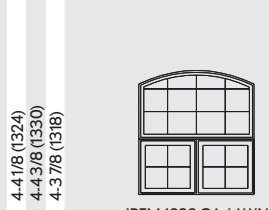
M.O. (mm)	2-8 1/2 (826)
R.O. (mm)	2-9 (838)
Frame Size (mm)	2-8 (813)



IRTM3328 CA
ICA3355 E

Multiple Assemblies

M.O. (mm)	4-0 1/2 (1232)
R.O. (mm)	4-1 (1245)
Frame Size (mm)	4-0 (1219)

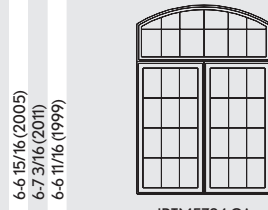


IRTM4929 CA / AWN
IAWN2523 2W

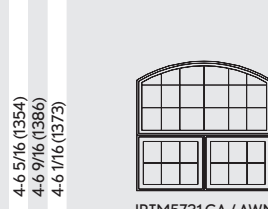


IRTM4921 CA
ICA2555 2W

M.O. (mm)	4-8 1/2 (1435)
R.O. (mm)	4-9 (1448)
Frame Size (mm)	4-8 (1422)

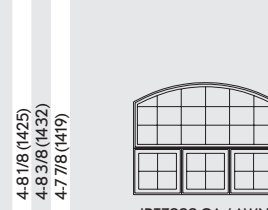


IRTM5724 CA
ICA2955 2W E

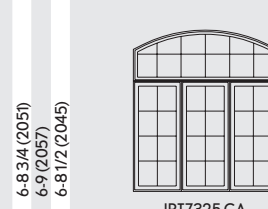


IRTM5731 CA / AWN
IAWN2933 2W

M.O. (mm)	6-0 1/2 (1842)
R.O. (mm)	6-1 (1854)
Frame Size (mm)	6-0 (1829)



IRT7333 CA / AWN
IAWN2523 3W



IRT7325 CA
ICA2555 3W

MULTIPLE ASSEMBLIES

Units may be factory mullioned up to 3 units wide by 2 units high. Field mullion 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.

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

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 and SDL with Spacer Bar are available in standard cut shown above. GBG patterns shown on page 91. (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.

Casement Round Tops

Eyebrow above Springline Multiple Assemblies

M.O. (mm)	7-4 1/2 (2248)
R.O. (mm)	7-5 (2261)
Frame Size (mm)	7-4 (2235)

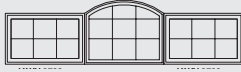
1-8 5/8 (524)
1-8 7/8 (530)
1-8 3/8 (518)



IRTM3320 CA
ICA2916 E

M.O. (mm)	9-0 1/2 (2756)
R.O. (mm)	9-1 (2769)
Frame Size (mm)	9-0 (2743)

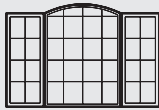
2-5 3/8 (746)
2-5 5/8 (752)
2-5 1/8 (740)



IRTM3729 CA
ICA3723 E

M.O. (mm)	8-0 1/2 (2451)
R.O. (mm)	8-1 (2464)
Frame Size (mm)	8-0 (2438)

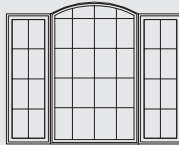
5-5 (1651)
5-5 1/4 (1657)
5-4 3/4 (1645)



IRTM4965 CA
ICA2559

M.O. (mm)	6-8 1/2 (2045)
R.O. (mm)	6-9 (2057)
Frame Size (mm)	6-8 (2032)

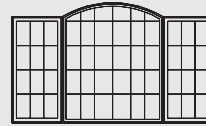
5-4 3/4 (1645)
5-5 (1651)
5-4 1/2 (1638)



IRTM4164 CA
ICA2159

M.O. (mm)	9-4 1/2 (2858)
R.O. (mm)	9-5 (2870)
Frame Size (mm)	9-4 (2845)

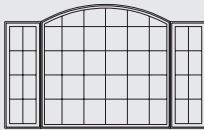
5-7 3/16 (1707)
5-7 7/16 (1713)
5-6 15/16 (1700)



IRTM5767 CA
ICA2959 E

M.O. (mm)	9-4 1/2 (2858)
R.O. (mm)	9-5 (2870)
Frame Size (mm)	9-4 (2845)

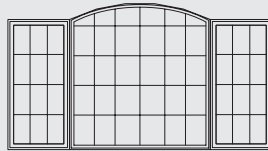
5-9 (1753)
5-9 1/4 (1759)
5-8 3/4 (1747)



IRTM7369 CA
ICA2159

M.O. (mm)	10-0 1/2 (3061)
R.O. (mm)	10-1 (3073)
Frame Size (mm)	10-0 (3048)

5-6 7/8 (1699)
5-7 1/8 (1705)
5-6 5/8 (1692)



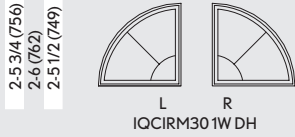
IRTM6567 CA
ICA2959 E

MARVIN® ROUND TOPS

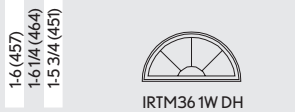
Double Hung Round Tops

Quarter Circle, True Half, Full Circle, Ellipse

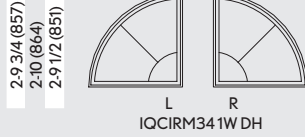
M.O. (mm)	2-6 (762)
R.O. (mm)	2-6 1/2 (775)
Frame Size (mm)	2-5 1/2 (749)



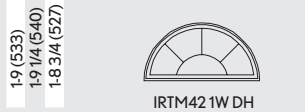
M.O. (mm)	3-0 (914)
R.O. (mm)	3-0 1/2 (927)
Frame Size (mm)	2-11 1/2 (902)



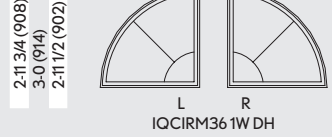
M.O. (mm)	2-10 (864)
R.O. (mm)	2-10 1/2 (876)
Frame Size (mm)	2-9 1/2 (851)



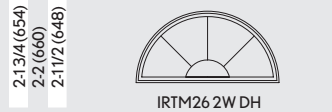
M.O. (mm)	3-6 (1067)
R.O. (mm)	3-6 1/2 (1080)
Frame Size (mm)	3-5 1/2 (1054)



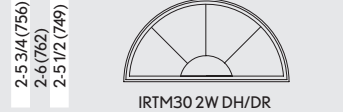
M.O. (mm)	3-0 (914)
R.O. (mm)	3-0 1/2 (927)
Frame Size (mm)	2-11 1/2 (902)



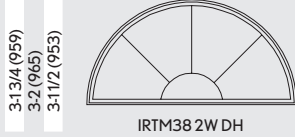
M.O. (mm)	4-3 1/2 (1308)
R.O. (mm)	4-4 (1321)
Frame Size (mm)	4-3 (1295)



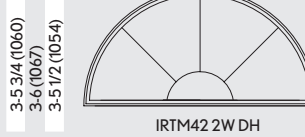
M.O. (mm)	4-11 1/2 (1511)
R.O. (mm)	5-0 (1524)
Frame Size (mm)	4-11 (1499)



M.O. (mm)	6-3 1/2 (1918)
R.O. (mm)	6-4 (1930)
Frame Size (mm)	6-3 (1905)



M.O. (mm)	6-11 1/2 (2121)
R.O. (mm)	7-0 (2134)
Frame Size (mm)	6-11 (2108)



M.O. (mm)	2-11 1/2 (902)
R.O. (mm)	3-0 (914)
Frame Size (mm)	2-11 (889)



M.O. (mm)	2-7 1/2 (800)
R.O. (mm)	2-8 (813)
Frame Size (mm)	2-7 (787)

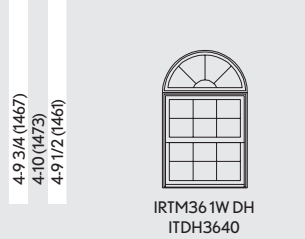


Multiple Assemblies

M.O. (mm)	2-10 (864)
R.O. (mm)	2-10 1/2 (876)
Frame Size (mm)	2-9 1/2 (851)



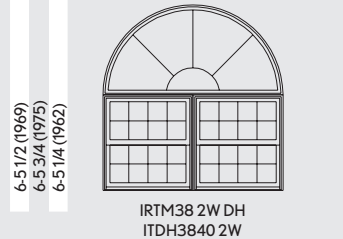
M.O. (mm)	3-0 (914)
R.O. (mm)	3-0 1/2 (927)
Frame Size (mm)	2-11 1/2 (902)



M.O. (mm)	3-6 (1067)
R.O. (mm)	3-6 1/2 (1080)
Frame Size (mm)	3-5 1/2 (1054)



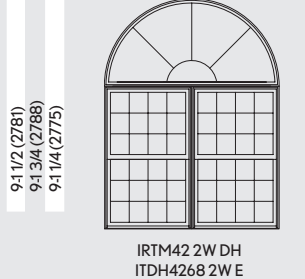
M.O. (mm)	6-3 1/2 (1918)
R.O. (mm)	6-4 (1930)
Frame Size (mm)	6-3 (1905)



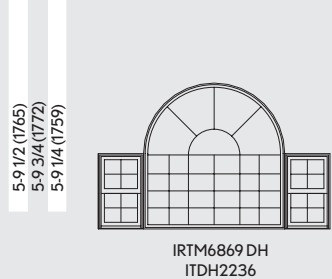
M.O. (mm)	4-11 1/2 (1511)
R.O. (mm)	5-0 (1524)
Frame Size (mm)	4-11 (1499)



M.O. (mm)	6-11 1/2 (2121)
R.O. (mm)	7-0 (2134)
Frame Size (mm)	6-11 (2108)



M.O. (mm)	9-2 1/2 (2807)
R.O. (mm)	9-3 (2819)
Frame Size (mm)	9-2 (2794)



MULTIPLE ASSEMBLIES

Units may be factory mull 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 9/16" (2313 mm) high or 85" (2159 mm) wide X 107 7/16" (2732 mm) high. Quarter Circle shapes require a Casement with a continuous head jamb.

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

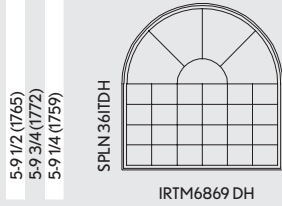
Contact your sales representative for multiple assembly lite alignment. Certain assemblies do not allow for exact lite alignment.

Not to scale. Optional Round Top SDL/Grilles and SDL with Spacer Bar are available in standard cut shown above. GBG patterns shown on page 91. (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.

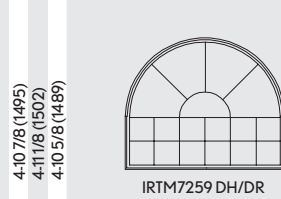
Double Hung Round Tops

True Half above Springline

M.O. (mm)	5-7 1/2 (1715)
R.O. (mm)	5-8 (1727)
Frame Size (mm)	5-7 (1702)



M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



Eyebrow above Springline

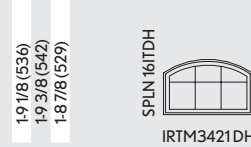
M.O. (mm)	2-2 (660)
R.O. (mm)	2-2 1/2 (673)
Frame Size (mm)	2-1 1/2 (648)



M.O. (mm)	2-6 (762)
R.O. (mm)	2-6 1/2 (775)
Frame Size (mm)	2-5 1/2 (749)



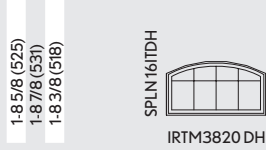
M.O. (mm)	2-10 (864)
R.O. (mm)	2-10 1/2 (876)
Frame Size (mm)	2-9 1/2 (851)



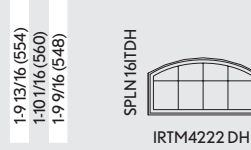
M.O. (mm)	3-0 (914)
R.O. (mm)	3-0 1/2 (927)
Frame Size (mm)	2-11 1/2 (902)



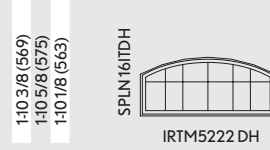
M.O. (mm)	3-2 (965)
R.O. (mm)	3-2 1/2 (978)
Frame Size (mm)	3-1 1/2 (953)



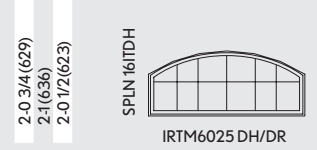
M.O. (mm)	3-6 (1067)
R.O. (mm)	3-6 1/2 (1080)
Frame Size (mm)	3-5 1/2 (1054)



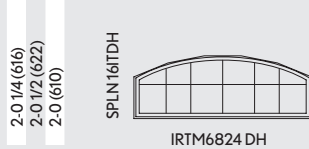
M.O. (mm)	4-3 1/2 (1308)
R.O. (mm)	4-4 (1321)
Frame Size (mm)	4-3 (1295)



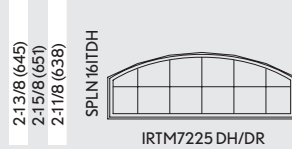
M.O. (mm)	4-11 1/2 (1511)
R.O. (mm)	5-0 (1524)
Frame Size (mm)	4-11 (1499)



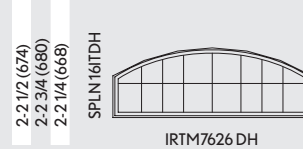
M.O. (mm)	5-7 1/2 (1715)
R.O. (mm)	5-8 (1727)
Frame Size (mm)	5-7 (1702)



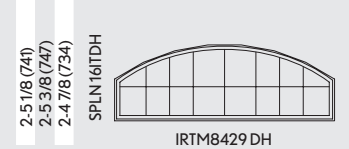
M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



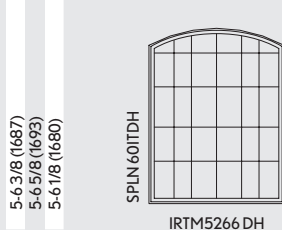
M.O. (mm)	6-3 1/2 (1918)
R.O. (mm)	6-4 (1930)
Frame Size (mm)	6-3 (1905)



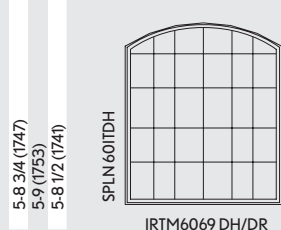
M.O. (mm)	6-11 1/2 (2121)
R.O. (mm)	7-0 (2134)
Frame Size (mm)	6-11 (2108)



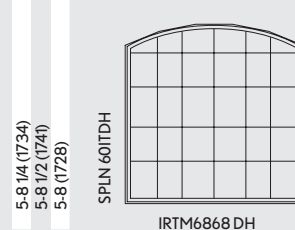
M.O. (mm)	4-3 1/2 (1308)
R.O. (mm)	4-4 (1321)
Frame Size (mm)	4-3 (1295)



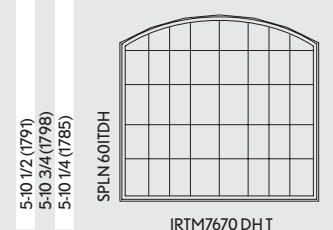
M.O. (mm)	4-11 1/2 (1511)
R.O. (mm)	5-0 (1524)
Frame Size (mm)	4-11 (1499)



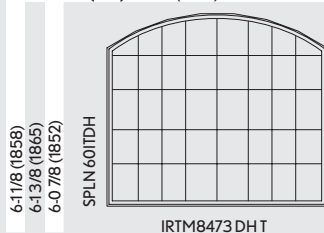
M.O. (mm)	5-7 1/2 (1715)
R.O. (mm)	5-8 (1727)
Frame Size (mm)	5-7 (1702)



M.O. (mm)	6-3 1/2 (1918)
R.O. (mm)	6-4 (1930)
Frame Size (mm)	6-3 (1905)



M.O. (mm)	6-11 1/2 (2121)
R.O. (mm)	7-0 (2134)
Frame Size (mm)	6-11 (2108)



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

Not to scale. Optional Round Top SDL/Grilles and SDL with Spacer Bar are available in standard cut shown above. GBG patterns shown on page 91. (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

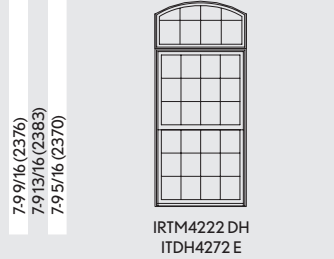
Double Hung Round Tops

Eyebrow above Springline Multiple Assemblies

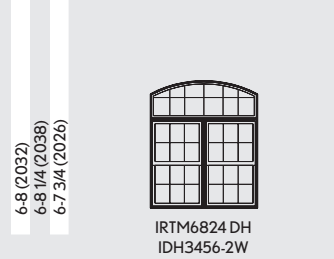
M.O. (mm)	3-0 (914)
R.O. (mm)	3-0 1/2 (927)
Frame Size (mm)	2-11 1/2 (902)



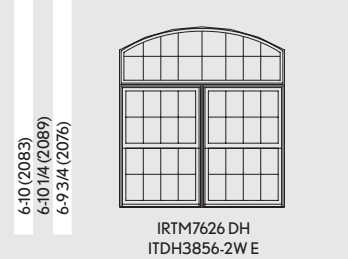
M.O. (mm)	3-6 (1067)
R.O. (mm)	3-6 1/2 (1080)
Frame Size (mm)	3-5 1/2 (1054)



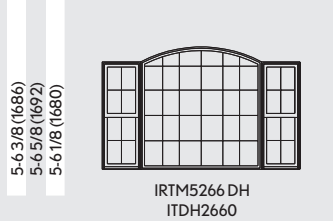
M.O. (mm)	5-7 1/2 (1715)
R.O. (mm)	5-8 (1727)
Frame Size (mm)	5-7 (1702)



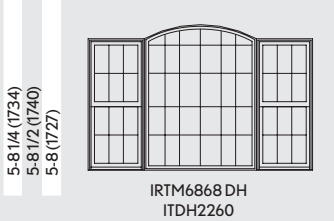
M.O. (mm)	6-3 1/2 (1918)
R.O. (mm)	6-4 (1930)
Frame Size (mm)	6-3 (1905)



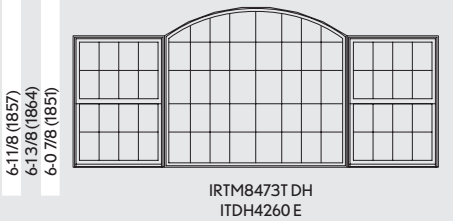
M.O. (mm)	8-6 1/2 (2604)
R.O. (mm)	8-7 (2616)
Frame Size (mm)	8-6 (2591)



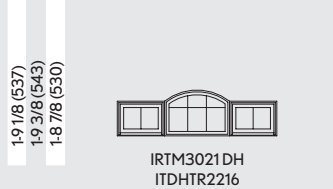
M.O. (mm)	9-2 1/2 (2807)
R.O. (mm)	9-3 (2819)
Frame Size (mm)	9-2 (2794)



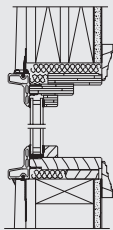
M.O. (mm)	13-10 1/2 (4229)
R.O. (mm)	13-11 (4242)
Frame Size (mm)	13-10 (4216)



M.O. (mm)	6-1 (1854)
R.O. (mm)	6-1 1/2 (1867)
Frame Size (mm)	6-0 1/2 (1842)



Construction Detail



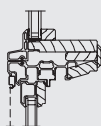
Double Hung/Door Round Top
Head Jamb & Sill

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

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 and SDL with Spacer Bar are available in standard cut shown above. GBG patterns shown on page 91. (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

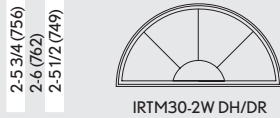
Units may be factory mullied up to 3 units wide by 2 units high. Field mull kits are available. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity® representative for more information.

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.

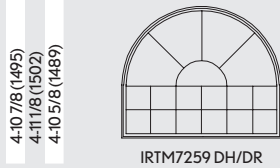
Double Hung/Door Round Tops

Half Round above Springline

M.O. (mm)	4-11 1/2 (1511)
R.O. (mm)	5-0 (1524)
Frame Size (mm)	4-11 (1499)

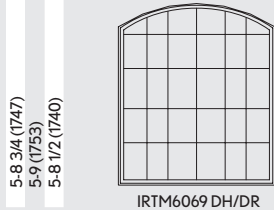
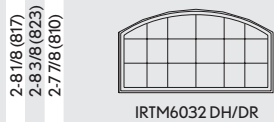
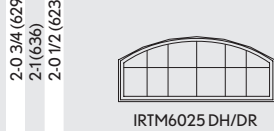


M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

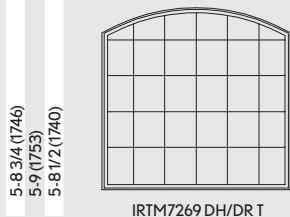
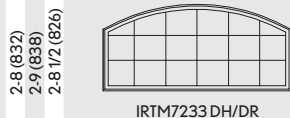
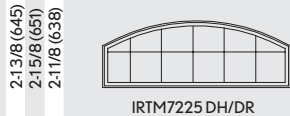


Eyebrow above Springline

M.O. (mm)	4-11 1/2 (1511)
R.O. (mm)	5-0 (1524)
Frame Size (mm)	4-11 (1499)



M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



T = Standard Tempered

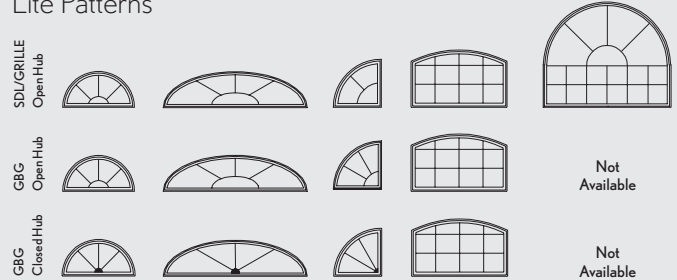
Contact your sales representative for multiple assembly lite alignment. Certain assemblies do not allow for exact lite alignment.

Not to scale. Optional Round Top SDL/Grilles and SDL with Spacer Bar are available in standard cut shown below. GBG patterns shown below. (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.

Note: IRTM7225, IRTM7233, and IRTM7269 can be mulled 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 mulled 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



PERFORMANCE GRADE

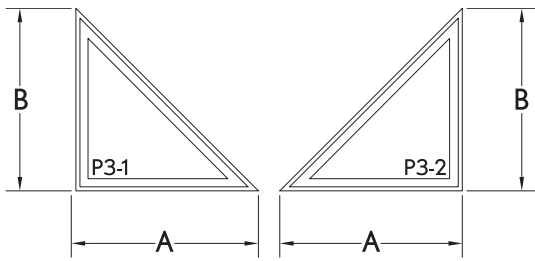
Round Top Windows

PG50

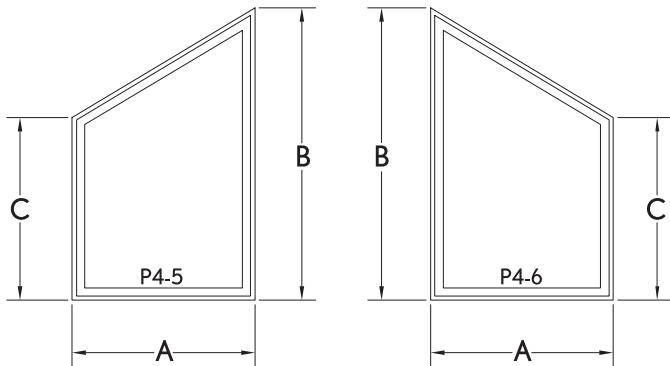
WARRANTY

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

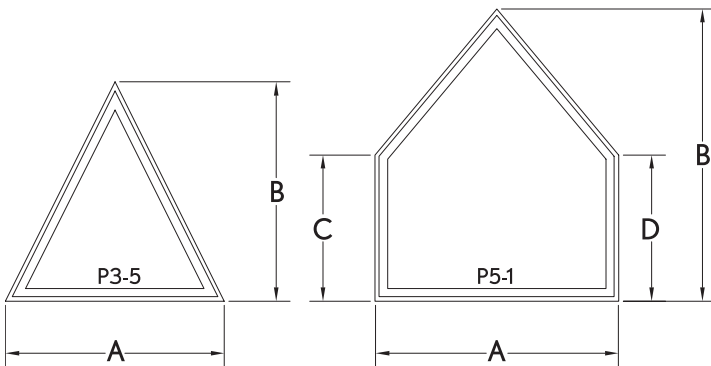
POLYGON



90° TRIANGLE

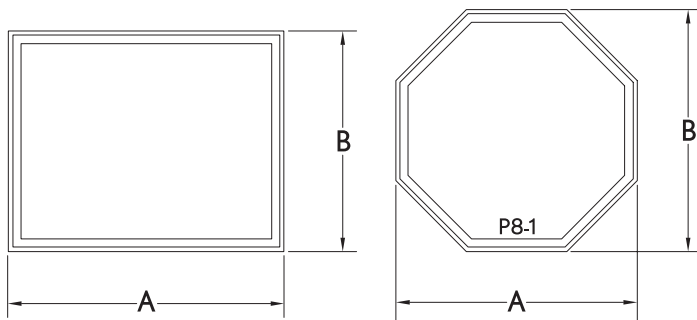


TRAPEZOID



ISOSCELES TRIANGLE

PENTAGON



90° RECTANGLE

OCTAGON

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 frame long dimension: 109" (2767)

Maximum frame short dimension at 109" (2767) long dimension: 64 3/4" (1645)

Tripane maximum frame long dimension: 102 13/16" (2611)

Tripane maximum frame short dimension at 102 13/16" (2611) long dimension: 61 13/16" (1570)

Minimum unit frame dimensions: 12 7/8" (327) x 12 7/8" (327)

Minimum P8-1 RO size: 19 1/8" (486) x 19 1/8" (486)

Minimum frame short dimension for P4-5, P4-6, P5-1: 7 1/2" (191)

Maximum frame square footage: 49 ft². All shapes shall be defined by the enclosed rectangle.

Tripane maximum frame square footage: 44.160 ft². All shapes shall be defined by the enclosed rectangle.

Product Spec 22762 Rev 19.0 states that the minimum frame angle is 15 degrees (3.22/12 pitch)

MULTIPLE ASSEMBLIES - RECTANGLES ONLY

Multiple assemblies of rectangles only can be factory mull:

For ICA/IAWN direct glaze unit: up to 7 units wide by 1 unit high. MAXIMUM ROUGH OPENING: not to exceed 113" x 71 5/8" OR up to 4 units wide by 5 units high. MAXIMUM ROUGH OPENING: not to exceed 85" x 94 3/4".

For ICA/IAWN Direct Glaze units up to 7 units wide by 1 unit high not to exceed a maximum rough opening of 113" x 71 5/8" or up to 4 units wide by 5 units high not to exceed a maximum rough opening of 85" x 94 3/4".

For ITGL direct glaze units up to 3 units wide by 1 unit high. MAXIMUM ROUGH OPENING: not to exceed 113 1/2" x 60 1/4"

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".

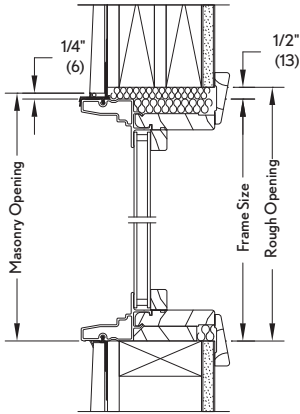
For IIFD direct glaze unit: up to 3 units wide by 1 unit high. MAXIMUM ROUGH OPENING: not to exceed 109 15/16" x 96" OR up to 2 units wide by 2 units high. MAXIMUM ROUGH OPENING: not to exceed 73 5/8" x 100 1/2".

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 for Double Hung, Gliders, and Doors.

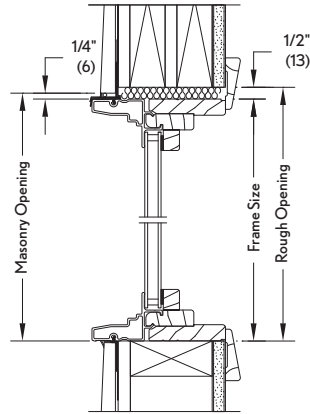
Field mulling window assemblies beyond the above limitations is not recommended.

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

Construction Details

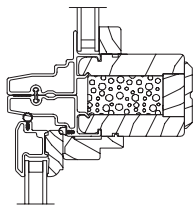


Casement Polygon
Head Jamb and Sill

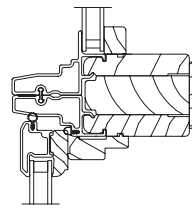


Double Hung/Door Polygon
Head Jamb and Sill

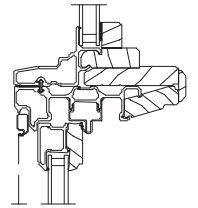
Mullion Details



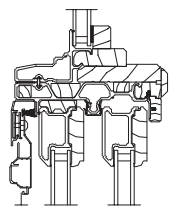
Direct Glaze
Polygon/Transom
Over Casement/Awning



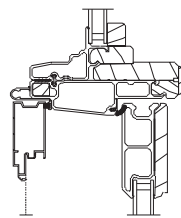
Direct Glaze
Polygon/Transom
Over Casement/Awning
with Structural Mull
Reinforcement Block*



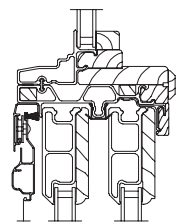
Direct Glaze
Polygon/Transom
Over Double Hung



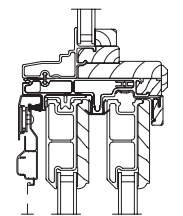
Direct Glaze
Polygon/Transom
Over Sliding Patio Door



Direct Glaze
Polygon/Transom
Over Inswing French Door



Direct Glaze
Polygon/Transom
Over 2/3 - panel
Sliding French Door



Direct Glaze
Polygon/Transom
Over 4 - panel
Sliding French Door

Details not to scale.

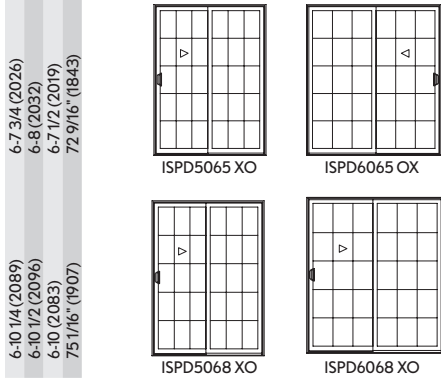
Note: Drip cap supplied on direct glaze rectangles only.

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

SLIDING PATIO DOOR

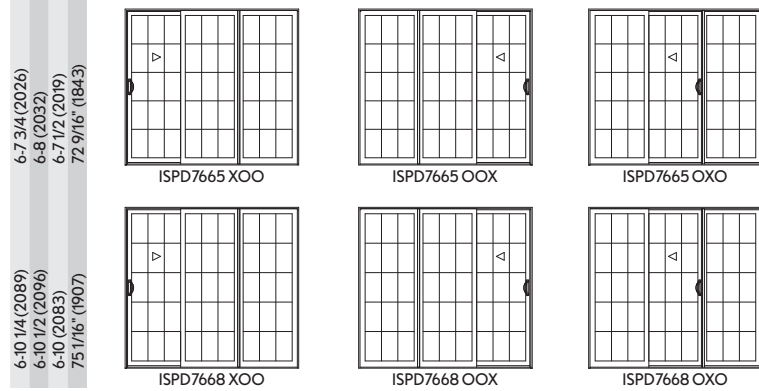
2 Panel Sliding Patio Doors

M.O. (mm)	4-11 1/2 (1511)	5-11 1/2 (1816)
R.O. (mm)	5-0 (1524)	6-0 (1829)
Frame Size (mm)	4-11 (1499)	5-11 (1803)
DLO (mm)	25" (635)	31" (787)



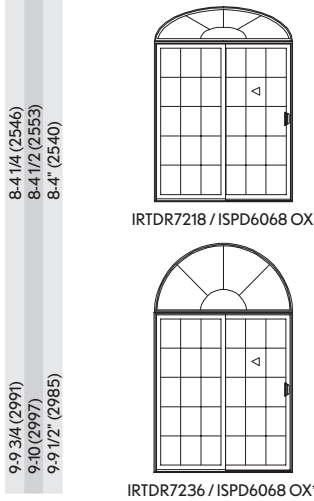
3 Panel Sliding Patio Doors

M.O. (mm)	7-5 (2261)	7-5 (2261)	7-5 (2261)
R.O. (mm)	7-5 1/2 (2273)	7-5 1/2 (2273)	7-5 1/2 (2273)
Frame Size (mm)	7-4 1/2 (2248)	7-4 1/2 (2248)	7-4 1/2 (2248)
DLO (mm)	25" (635)	25" (635)	25" (635)

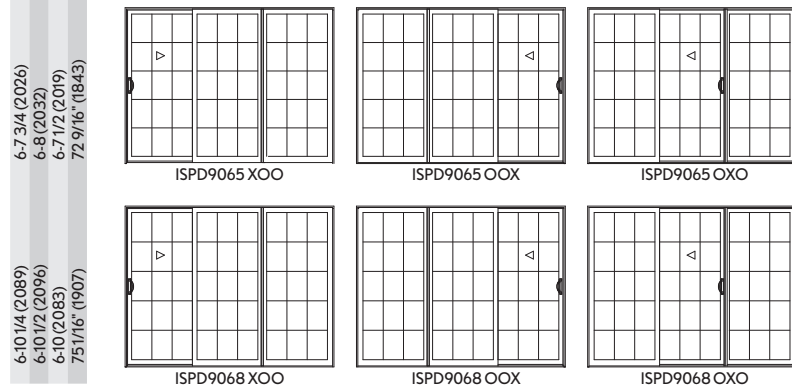


Round Top Over Sliding Patio Door

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

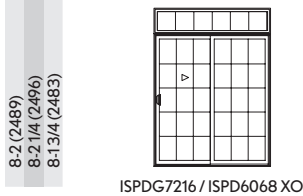


M.O. (mm)	8-11 (2718)	8-11 (2718)	8-11 (2718)
R.O. (mm)	8-11 1/2 (2731)	8-11 1/2 (2731)	8-11 1/2 (2731)
Frame Size (mm)	8-10 1/2 (2705)	8-10 1/2 (2705)	8-10 1/2 (2705)
DLO (mm)	31" (787)	31" (787)	31" (787)



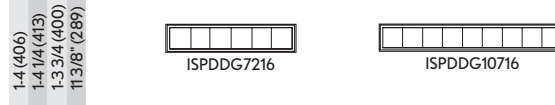
Direct Glaze Transom Over Sliding Patio Door

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



Sliding Patio Door Direct Glaze Transom

M.O. (mm)	5-11 1/2 (1816)	8-11 (2718)
R.O. (mm)	6-0 (1829)	8-11 1/2 (2731)
Frame Size (mm)	5-11 (1803)	8-10 1/2 (2705)
DLO (mm)	66 5/8" (1692)	102 1/8" (2594)



Details and Elevations not to scale.

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.

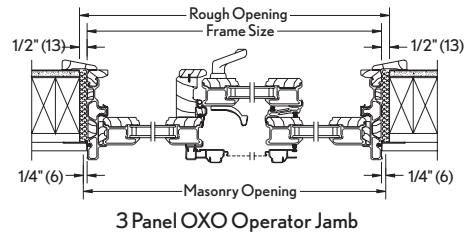
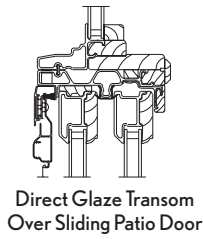
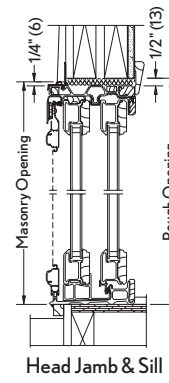
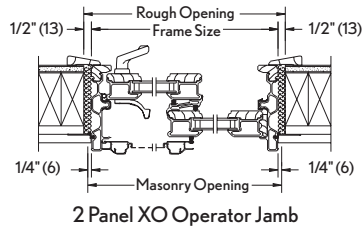
Optional Direct Glaze transom Grilles, GBGs and SDLs are available in a standard Rectangular cut, as shown. Alternate transom lite cuts available to align with select lite cut options shown on page 49. Optional Round Top SDL/Grilles and SDL with Spacer Bar are available in a standard cut, as shown. Round Top GBG cuts are shown on page 80. (Round Top divided lites not available in other lite cuts.)

* This product is only available field mulled.

SLIDING PATIO DOOR

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

Construction Details



SLIDING FRENCH DOOR

2 Panel Sliding French Doors

M.O. (mm)	4-11 1/2 (1511)	5-11 1/2 (1816)	7-11 1/2 (2426)
R.O. (mm)	5-0 (1524)	6-0 (1829)	8-0 (2438)
Frame Size (mm)	4-11 (1499)	5-11 (1803)	7-11 (2413)
DLO (mm)	22 3/8" (568)	28 3/8" (721)	40 3/8" (1026)

6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 6 7 3/32" (1704)						
ISFD 5065 XO	ISFD 5065 OX	ISFD 6065 XO	ISFD 6065 OX	ISFD 8065 XO	ISFD 8065 OX	
6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 6 9 19/32" (1768)						
ISFD 5068 XO	ISFD 5068 OX	ISFD 6068 XO	ISFD 6068 OX	ISFD 8068 XO	ISFD 8068 OX	
7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 7 3 19/32" (1869)						
ISFD 5070 XO	ISFD 5070 OX	ISFD 6070 XO	ISFD 6070 OX	ISFD 8070 XO	ISFD 8070 OX	
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 8 3 3/32" (2111)						
ISFD 5080 XO	ISFD 5080 OX	ISFD 6080 XO	ISFD 6080 OX	ISFD 8080 XO	ISFD 8080 OX	

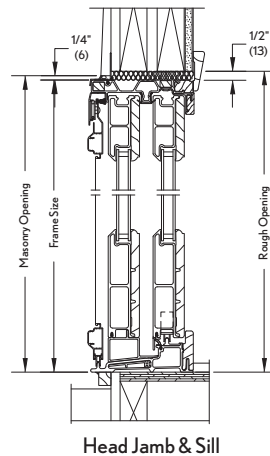
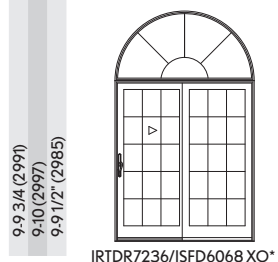
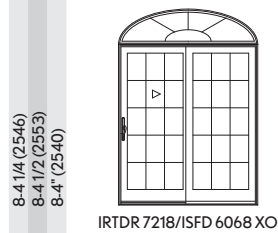
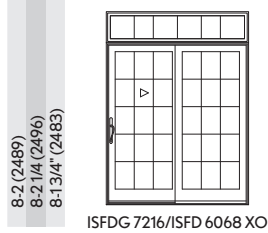
Construction Details

Direct Glaze Transom
Over Sliding French Door

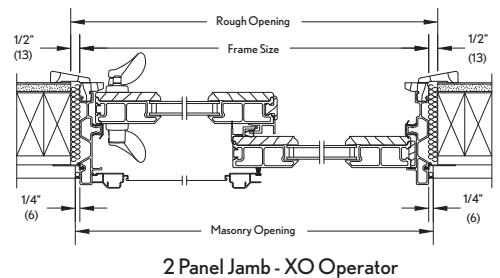
Round Top Over
Sliding French Door

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



MULTIPLE ASSEMBLIES
Multiple assembly units can be factory mulled 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 mulled only. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity® representative for more information.



SLIDING FRENCH DOOR

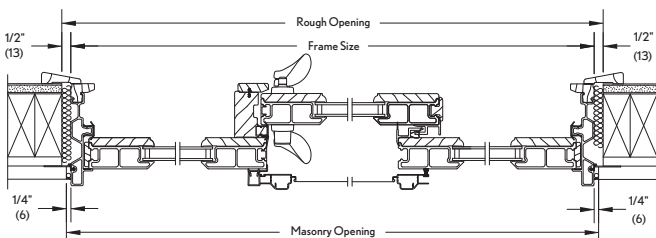
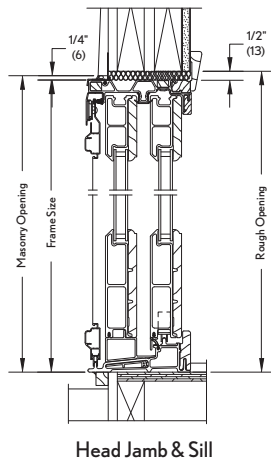
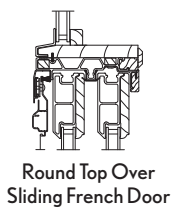
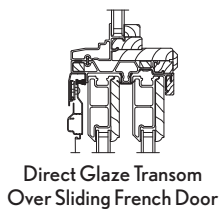
INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

3 Panel Sliding French Doors

M.O. (mm)	7-5 (2261)	8-11 (2718)
R.O. (mm)	7-5 1/2 (2273)	8-11 1/2 (2731)
Frame Size (mm)	7-4 1/2 (2248)	8-10 1/2 (2705)
DLO (mm)	22 3/8" (568)	28 3/8" (721)

6-7 3/4 (2026)	ISFD 7665 XOO	ISFD 7665 OOX	ISFD 7665 OXO	ISFD 9065 XOO	ISFD 9065 OOX	ISFD 9065 OXO
6-8 (2032)						
6-7 1/2 (2019)						
6-7 3/32" (1704)						
6-10 1/4 (2089)	ISFD 7668 XOO	ISFD 7668 OOX	ISFD 7668 OXO	ISFD 9068 XOO	ISFD 9068 OOX	ISFD 9068 OXO
6-10 1/2 (2096)						
6-10 (2083)						
6-9 19/32" (1768)						
7-2 1/4 (2191)	ISFD 7670 XOO	ISFD 7670 OOX	ISFD 7670 OXO	ISFD 9070 XOO	ISFD 9070 OOX	ISFD 9070 OXO
7-2 1/2 (2197)						
7-2 (2184)						
7-3 19/32" (1869)						
7-11 3/4 (2432)	ISFD 7680 XOO	ISFD 7680 OOX	ISFD 7680 OXO	ISFD 9080 XOO	ISFD 9080 OOX	ISFD 9080 OXO
8-0 (2438)						
7-11 1/2 (2426)						
8-3 3/32" (2111)						

Construction Details



Sliding French Door Direct Glaze Transom

M.O. (mm)	5-11 1/2 (1816)	8-11 (2718)
R.O. (mm)	6-0 (1829)	8-11 1/2 (2731)
Frame Size (mm)	5-11 (1803)	8-10 1/2 (2705)

1-4 (406)	ISFDDG 7216	ISFDDG 10716
1-4 1/4 (413)		
1-3 3/4 (400)		

* This product is only available field mullled.

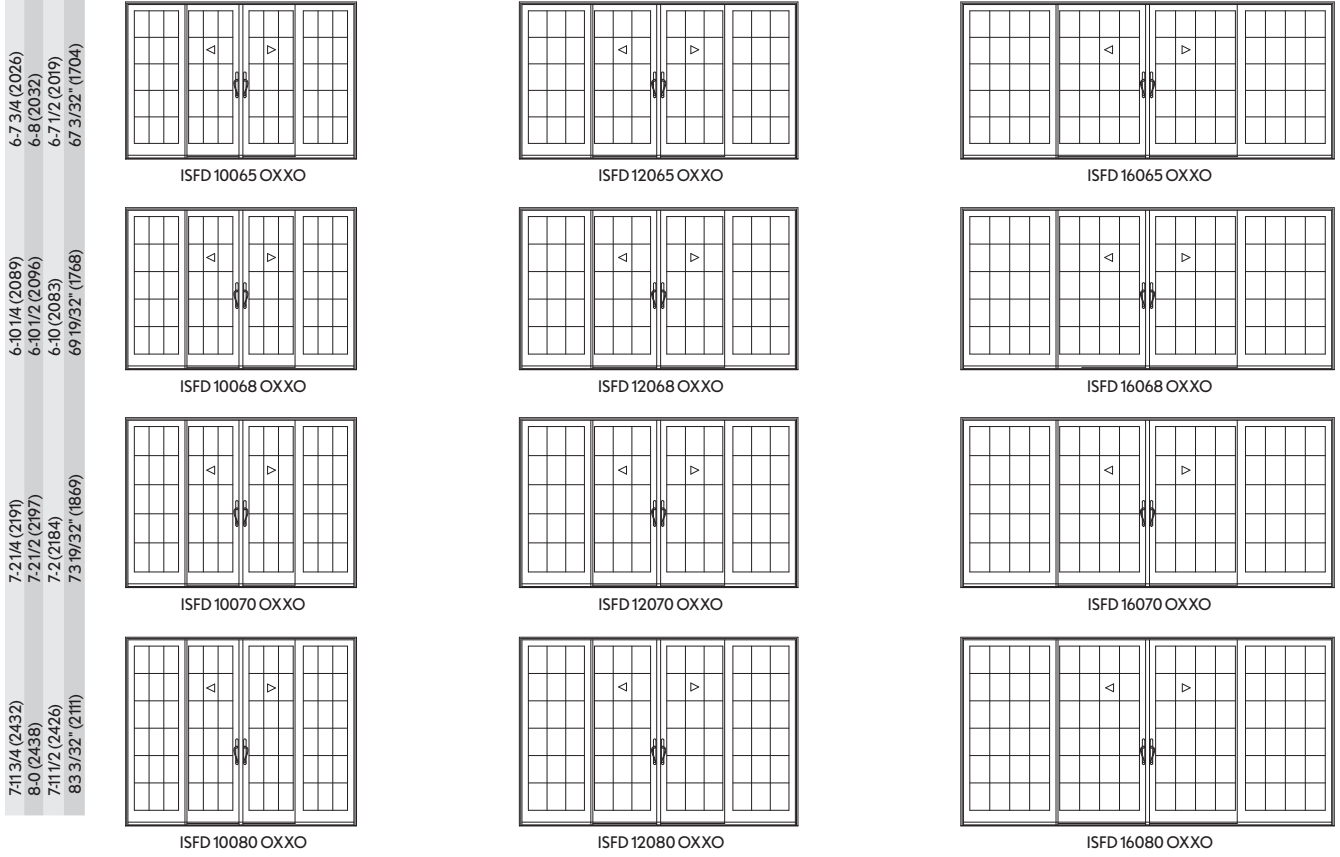
MULTIPLE ASSEMBLIES

Multiple assembly units can be factory mullled 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 mullled only. Structural mullion reinforcement is required for some assemblies. Please consult your local Integrity representative for more information.

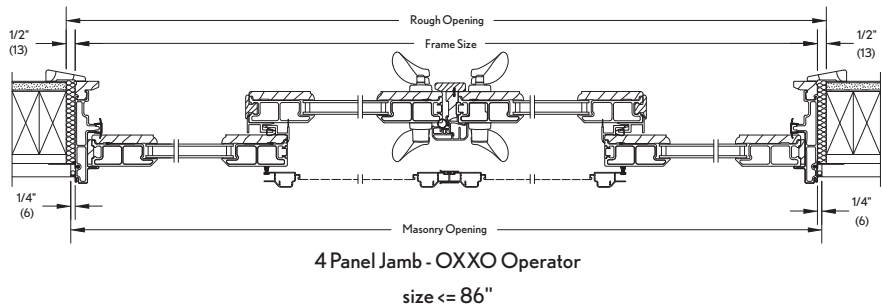
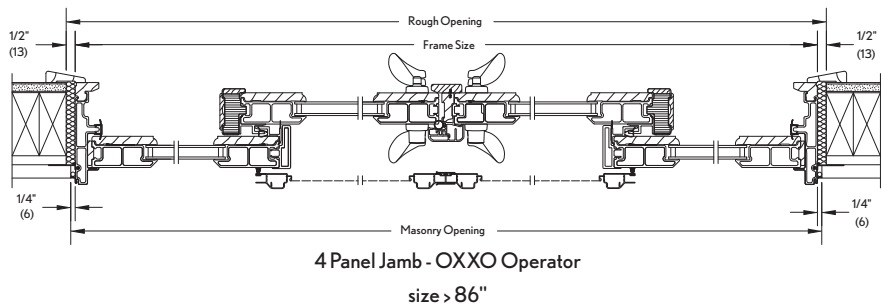
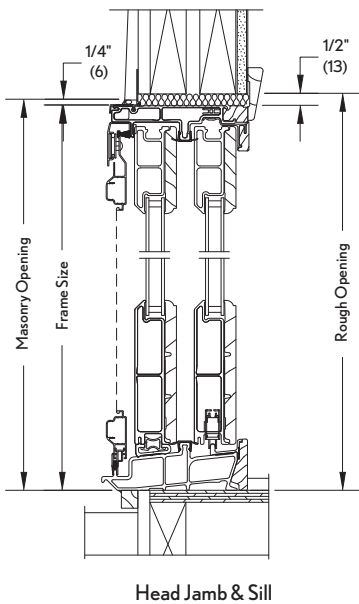
SLIDING FRENCH DOOR

4 Panel Sliding French Doors

M.O. (mm)	9-9 1/2 (2985)	11-9 1/2 (3594)	15-9 1/2 (4813)
R.O. (mm)	9-10 (2997)	11-10 (3607)	15-10 (4826)
Frame Size (mm)	9-9 (2972)	11-9 (3581)	15-9 (4801)
DLO (mm)	22 3/8" (568)	28 3/8" (721)	40 3/8" (1026)






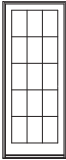







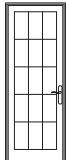
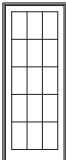


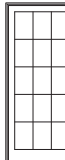
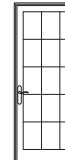

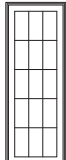

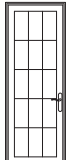
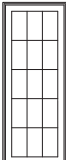



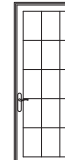


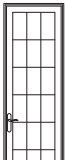
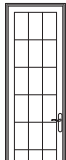
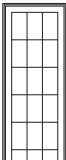

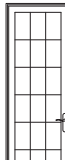
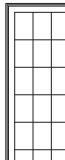

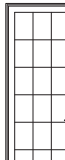
Construction Details



INSWING FRENCH DOOR

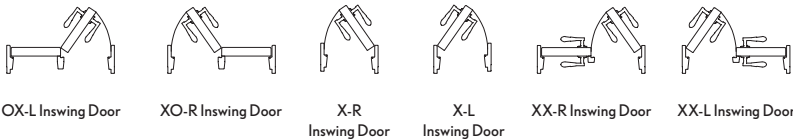
INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

Inswing French Doors

M.O. (mm)	2-6 13/16 (783)	2-8 13/16 (834)	3-0 13/16 (935)						
R.O. (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)						
DLO (mm)	21 11/32" (542)	23 11/32" (593)	27 11/32" (695)						
6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 67 3/32" (1704)	 IIFD2665 O	 IIFD2665 X R	 IIFD2665 X L	 IIFD2865 O	 IIFD2865 X R	 IIFD2865 X L	 IIFD3065 O	 IIFD3065 X R	 IIFD3065 X L
6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 69 19/32" (1768)	 IIFD2668 O	 IIFD2668 X R	 IIFD2668 X L	 IIFD2868 O	 IIFD2868 X R	 IIFD2868 X L	 IIFD3068 O	 IIFD3068 X R	 IIFD3068 X L
7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 73 19/32" (1869)	 IIFD2670 O	 IIFD2670 X R	 IIFD2670 X L	 IIFD2870 O	 IIFD2870 X R	 IIFD2870 X L	 IIFD3070 O	 IIFD3070 X R	 IIFD3070 X L
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 83 3/32" (2111)	 IIFD2680 O	 IIFD2680 X R	 IIFD2680 X L	 IIFD2880 O	 IIFD2880 X R	 IIFD2880 X L	 IIFD3080 O	 IIFD3080 X R	 IIFD3080 X L

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.

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

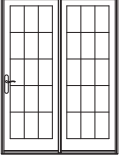
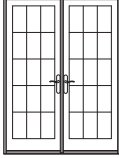

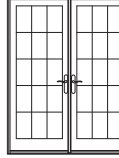
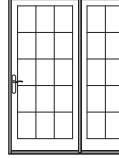
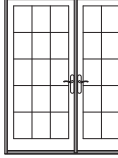
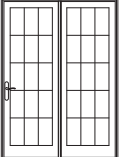
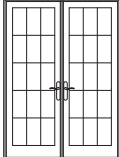
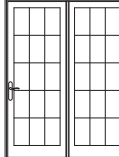

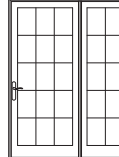
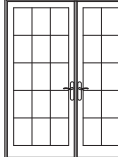




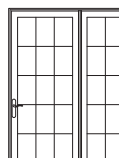
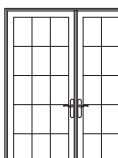

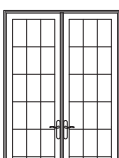


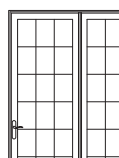
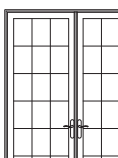
MULTIPLE ASSEMBLIES

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.

INSWING FRENCH DOOR



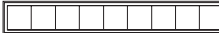
Inswing French Doors

M.O. (mm)	4-11/2 (1511)	5-3 1/2 (1613)	5-11 1/2 (1816)
R.O. (mm)	5-0 (1524)	5-4 (1626)	6-0 (1829)
Frame Size (mm)	4-11 (1499)	5-3 (1600)	5-11 (1803)
DLO (mm)	21 11/32" (542)	23 11/32 (593)	27 11/32 (695)

6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 6-7 3/32" (1704)						
IIFD5065 XO	IIFD5065 XX	IIFD5465 XO	IIFD5465 XX	IIFD6065 XO	IIFD6065 XX	IIFD6065 XX
6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 6-9 19/32" (1766)						
IIFD5068 XO	IIFD5068 XX	IIFD5468 XO	IIFD5468 XX	IIFD6068 XO	IIFD6068 XX	IIFD6068 XX
7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 7-3 19/32" (1869)						
IIFD5070 XO	IIFD5070 XX	IIFD5470 XO	IIFD5470 XX	IIFD6070 XO	IIFD6070 XX	IIFD6070 XX
7-1 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 8-3 3/32" (2111)						
IIFD5080 XO	IIFD5080 XX	IIFD5480 XO	IIFD5480 XX	IIFD6080 XO	IIFD6080 XX	IIFD6080 XX

Inswing French Door Direct Glaze Transoms

M.O. (mm)	3-0 13/16 (935)	5-11 1/2 (1816)	8-11 13/16 (2738)
R.O. (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)
DLO (mm)	31 15/16" (811)	66 5/8" (1962)	102 15/16" (2615)

1-4 (406) 1-4 1/4 (413) 1-3 3/4 (400) 11 3/8" (289)			
IIFDDG3616	IIFDDG7216	IIFDDG10816	

Details and Elevations not to scale.

O = Stationary X = Operator

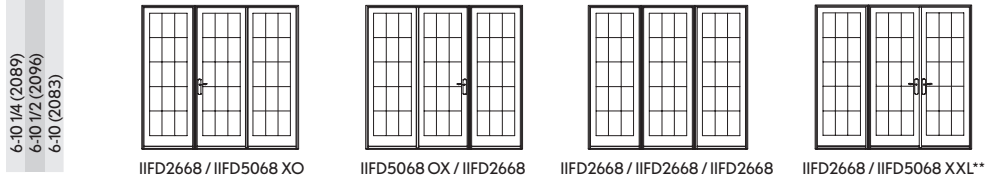
Optional Direct Glaze transom Grilles, GBGs, SDLs and SDLs with Spacer Bar are available in a standard Rectangular cut, as shown. Alternate transom lite cuts available to align with select lite cut options shown on page 49.

INSWING FRENCH DOOR

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

Multiple Assemblies - 3 Panel

M.O. (mm)	7-5 13/16 (2281)	7-5 13/16 (2281)	7-7 7/16 (2323)	7-5 13/16 (2281)
R.O. (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)

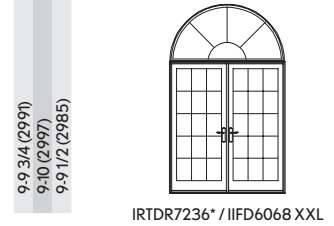
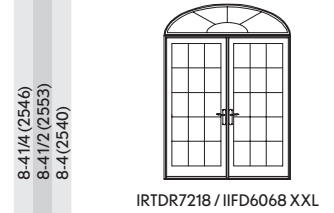


M.O. (mm)	8-11 13/16 (2738)	8-11 13/16 (2738)	9-1 7/16 (2780)	8-11 13/16 (2738)
R.O. (mm)	9-0 5/16 (2751)	9-0 5/16 (2751)	9-1 15/16 (2792)	9-0 5/16 (2751)
Frame Size (mm)	8-11 5/16 (2726)	8-11 5/16 (2726)	9-0 15/16 (2767)	8-11 5/16 (2726)



Round Top Over Inswing French Door

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



Direct Glaze Transom Over Inswing French Door

M.O. (mm)	3-0 13/16 (935)	3-0 13/16 (935)	5-11 1/2 (1816)
R.O. (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)



Details and Elevations not to scale.

*This product is only available field mullled.

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

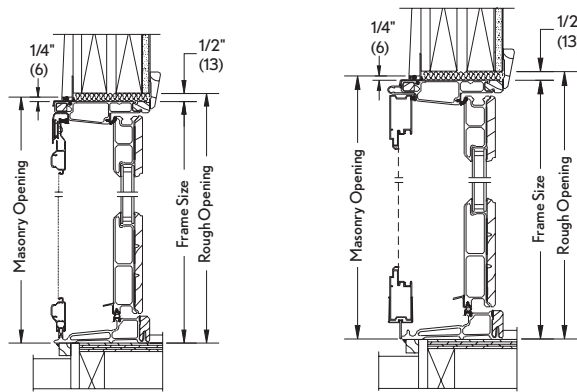
O = Stationary X = Operator

Optional Round Top SDL/Grilles and SDL with Spacer Bar are available in a standard cut, as shown. Round Top GBG cuts are shown on page 80. (Round Top divided lites only available in standard lite cut.)

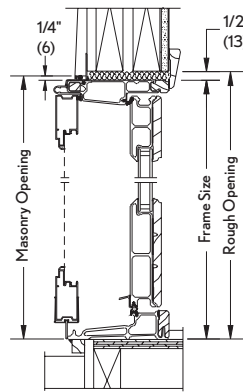
MULTIPLE ASSEMBLIES

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.

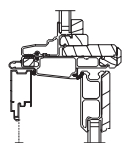
Construction Details



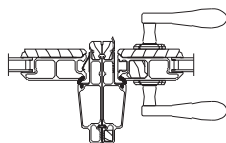
Head Jamb & Sill



Head Jamb & Sill



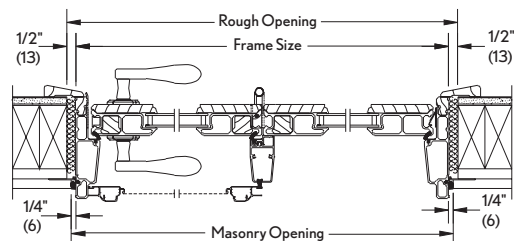
Direct Glaze Transom Over Inswing French Door



Vertical Mullion O-XO operator



Jamb - XX Operator



Jamb - XO Operator

OUTSWING FRENCH DOOR

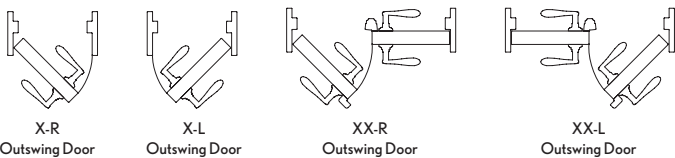
Outswing French Doors

M.O. (mm)	2-6 13/16 (783)	2-8 13/16 (834)	3-0 13/16 (935)
R.O. (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)
DLO (mm)	2111/32" (542)	23 11/32" (593)	27 11/32" (695)

6-7 3/4" (2026) 6-8" (2032) 6-7 1/2" (2019) 67 3/32" (1704)									
6-10 1/4" (2089) 6-10 1/2" (2096) 6-10" (2083) 69 19/32" (1768)									
7-2 1/4" (2191) 7-2 1/2" (2197) 7-2" (2184) 73 19/32" (1869)									
7-1 3/4" (2432) 8-0" (2438) 7-1 1/2" (2426) 83 3/32" (2111)									

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, SDLs and SDLs with Spacer Bar are available in a standard Rectangular cut, as shown. Other available lite cuts on page 49.

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).

Outswing French Door Direct Glaze Transoms

M.O. (mm)	3-0 13/16 (935)	5-11 1/2 (1816)	8-11 13/16 (2738)
R.O. (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)
DLO (mm)	3115/16" (811)	66 5/8" (1692)	102 15/16" (2615)

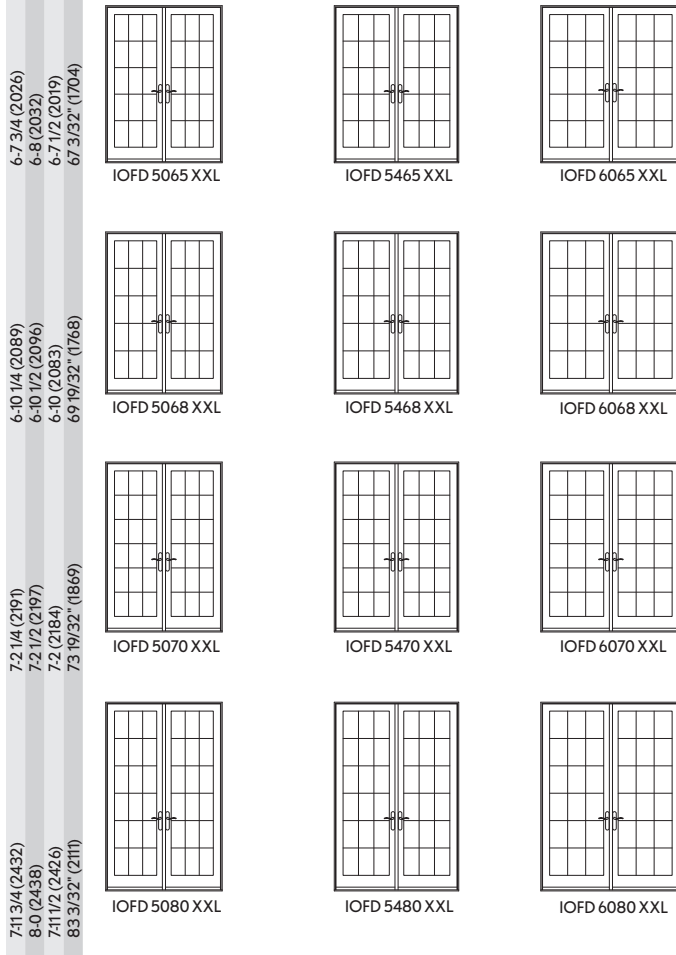
1-4 (406) 1-4 1/4" (413) 1-3 3/4" (400) 11 3/8" (289)			
	IOFDDG3616	IOFDDG7216	IOFDDG10816

OUTSWING FRENCH DOOR

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

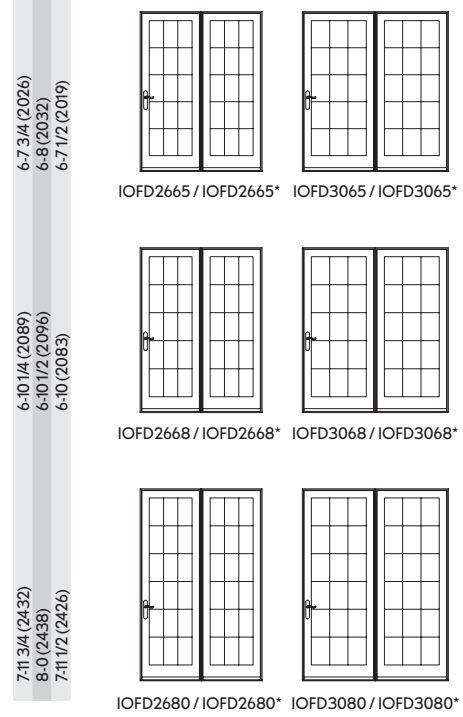
Outswing French Doors

M.O. (mm)	4-11/2 (1511)	5-3 1/2 (1613)	5-11/2 (1816)
R.O. (mm)	5-0 (1524)	5-4 (1626)	6-0 (1829)
Frame Size (mm)	4-11 (1499)	5-3 (1600)	5-11 (1803)
DLO (mm)	21 11/32" (542)	23 11/32" (593)	27 11/32" (695)

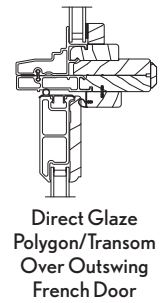
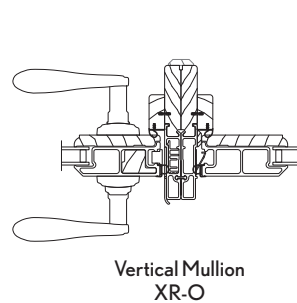
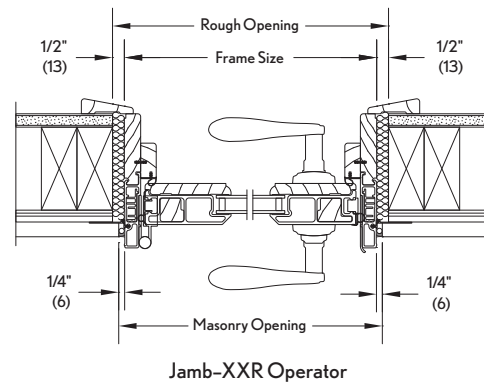
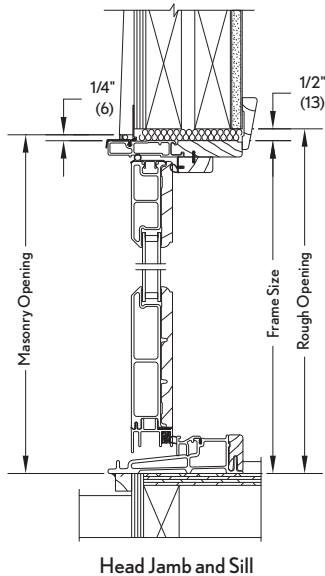


Multiple Assemblies - 2 Panel

M.O. (mm)	5-11/8 (1553)	6-11/8 (1857)
R.O. (mm)	5-15/8 (1565)	6-15/8 (1870)
Frame Size (mm)	5-0 5/8 (1540)	6-0 5/8 (1845)



Construction Details



* 2 panel mullied assembly

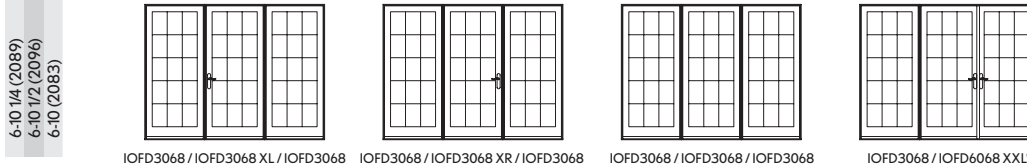
OUTSWING FRENCH DOOR

Multiple Assemblies - 3 Panel

M.O. (mm)	7-7 7/16 (2323)	7-7 7/16 (2323)	7-7 7/16 (2323)	7-5 13/16 (2281)
R.O. (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)

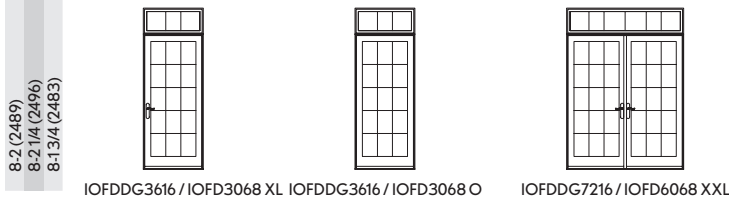


M.O. (mm)	9-1 7/16 (2780)	9-1 7/16 (2780)	9-1 7/16 (2780)	8-11 13/16 (2738)
R.O. (mm)	9-1 15/16 (2792)	9-1 15/16 (2792)	9-1 15/16 (2792)	9-0 5/16 (2751)
Frame Size (mm)	9-0 15/16 (2767)	9-0 15/16 (2767)	9-0 15/16 (2767)	8-11 5/16 (2726)



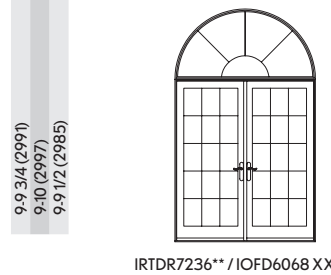
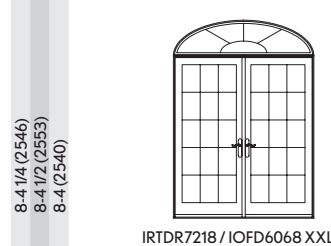
Direct Glaze Transom Over Outswing French Door

M.O. (mm)	3-0 13/16 (935)	3-0 13/16 (935)	5-11 1/2 (1816)
R.O. (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

M.O. (mm)	5-11 1/2 (1816)
R.O. (mm)	6-0 (1829)
Frame Size (mm)	5-11 (1803)



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 and 3 panel XX configurations also available in XX R.

** This product is only available field mullied.

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, SDLs and SDLs with Spacer Bar are available in a standard Rectangular cut, as shown. Alternate transom lite cuts available to align with select lite cut options shown on page 49.

Optional Round Top SDL/Grilles and SDL with Spacer Bar are available in a standard cut, as shown. Round Top GBG cuts are shown on page 80. (Round Top divided lites only available in standard lite cut.)

Casement

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	
1731	7.24	184	26.71	678	1.34	1248	53.23	1352	2.20	2046	1.94	1804	
1735	7.24	184	30.71	780	1.54	1435	49.23	1250	2.53	2352	2.24	2082	
1739	7.24	184	34.71	882	1.75	1622	45.23	1149	2.86	2659	2.54	2361	
1743	7.24	184	38.83	986	1.95	1814	41.11	1044	3.20	2975	2.85	2648	
1747	7.24	184	42.71	1085	2.15	1995	37.23	946	3.52	3271	3.14	2917	
1755	7.24	184	50.71	1288	2.55	2369	29.23	742	4.18	3884	3.74	3474	
1759	7.24	184	54.71	1390	2.75	2556	25.23	641	4.51	4191	4.04	3753	
1763	7.24	184	58.71	1491	2.95	2743	21.23	539	4.84	4497	4.34	4031	
1771	7.24	184	66.71	1694	3.35	3117	13.23	336	5.50	5110	4.94	4588	
2131	11.24	286	26.71	678	2.08	1937	53.23	1352	2.94	2735	2.66	2473	
2135	11.24	286	30.71	780	2.40	2227	49.23	1250	3.38	3145	3.07	2854	
2139	11.24	286	34.71	882	2.71	2517	45.23	1149	3.83	3554	3.48	3236	
2143	11.24	286	38.83	986	3.03	2816	41.11	1044	4.28	3977	3.91	3629	
2147	11.24	286	42.71	1085	3.33	3097	37.23	946	4.71	4374	4.30	3999	
2155	11.24	286	50.71	1288	3.96	3678	29.23	742	5.59	5193	5.13	4762	
2159	11.24	286	54.71	1390	4.27	3968	25.23	641	6.03	5602	5.54	5144	
2163	11.24	286	58.71	1491	4.58	4258	21.23	539	6.47	6012	5.95	5526	
2171	11.24	286	66.71	1694	5.21	4838	13.23	336	7.35	6831	6.77	6289	
2531	15.24	387	26.71	678	2.83	2626	53.23	1352	3.69	3424	3.38	3141	
2535	15.24	387	30.71	780	3.25	3019	49.23	1250	4.24	3937	3.90	3626	
2539	15.24	387	34.71	882	3.67	3413	45.23	1149	4.79	4450	4.43	4111	
2543	15.24	387	38.83	986	4.11	3818	41.11	1044	5.36	4979	4.96	4611	
2547	15.24	387	42.71	1085	4.52	4199	37.23	946	5.89	5476	5.47	5081	
2555	15.24	387	50.71	1288	5.37	4986	29.23	742	7.00	6501	6.51	6051	
2559	15.24	387	54.71	1390	5.79	5379	25.23	641	7.55	7014	7.03	6535	
2563	15.24	387	58.71	1491	6.21	5773	21.23	539	8.10	7527	7.56	7020	
2571	15.24	387	66.71	1694	7.06	6559	13.23	336	9.21	8553	8.60	7990	
2931	21.87	555	26.71	678	4.06	3767	53.23	1352	4.43	4113	4.10	3810	
2935	21.87	555	30.71	780	4.66	4332	49.23	1250	5.09	4729	4.73	4398	
2939	21.87	555	34.71	882	5.27	4896	45.23	1149	5.75	5345	5.37	4986	
2943E	21.87	555	38.83	986	5.90	5478	41.11	1044	6.44	5981	6.02	5593	
2947E	21.87	555	42.71	1085	6.48	6025	37.23	946	7.08	6578	6.63	6162	
2955E	21.87	555	50.71	1288	7.70	7153	29.23	742	8.41	7810	7.90	7339	
2959E	21.87	555	54.71	1390	8.31	7718	25.23	641	9.07	8426	8.53	7927	
2963E	21.87	555	58.71	1491	8.91	8282	21.23	539	9.73	9042	9.17	8515	
2971E	21.87	555	66.71	1694	10.13	9411	13.23	336	11.06	10274	10.43	9691	
3331	23.24	590	26.71	678	4.31	4004	53.23	1352	5.17	4802	4.82	4479	
3335	23.24	590	30.71	780	4.96	4604	49.23	1250	5.94	5522	5.57	5170	
3339	23.12	613	34.71	882	5.6	5400	45.23	1149	6.72	6241	6.31	5861	
3343E	23.24	590	38.83	986	6.27	5822	41.11	1044	7.52	6983	7.08	6574	
3347E	23.24	590	42.71	1085	6.89	6404	37.23	946	8.27	7680	7.80	7244	
3355E	23.24	590	50.71	1288	8.18	7603	29.23	742	9.81	9118	9.29	8627	
3359E	23.24	590	54.71	1390	8.83	8203	25.23	641	10.59	9838	10.03	9318	
3363E	23.24	590	58.71	1491	9.48	8803	21.23	539	11.36	10557	10.77	10009	
3371E	23.24	590	66.71	1694	10.77	10002	13.23	336	12.91	11996	12.26	11392	
3731	27.24	692	26.71	678	5.05	4694	53.23	1352	5.91	5492	5.54	5148	
3735E**	27.24	692	30.71	780	5.81	5397	49.23	1250	6.80	6314	6.40	5942	
3739E**	27.24	692	34.71	882	6.57	6100	45.23	1149	7.68	7137	7.25	6737	
3743E	27.24	692	38.83	986	7.35	6825	41.11	1044	8.59	7985	8.13	7556	
3747E	27.24	692	42.71	1085	8.08	7506	37.23	946	9.45	8782	8.96	8326	
3755E	27.24	692	50.71	1288	9.59	8912	29.23	742	11.22	10427	10.67	9915	
3759E	27.24	692	54.71	1390	10.35	9615	25.23	641	12.11	11249	11.53	10709	
3763E	27.24	692	58.71	1491	11.11	10318	21.23	539	12.99	12072	12.38	11504	
3771E	27.24	692	66.71	1694	12.62	11724	13.23	336	14.76	13717	14.09	13093	

Awning

VENT OPENING				
Unit #	Vent		DLO	
	Sq. Ft.	cm ²	Sq. Ft.	cm ²
2519	2.05	1901	1.82	1687
2523	2.60	2414	2.34	2172
2527	3.15	2927	2.86	2656
2535	4.25	3953	3.90	3626
2539	4.81	4466	4.43	4111
2547	5.91	5492	5.47	5081
2919	2.46	2284	2.20	2046
2923	3.12	2900	2.84	2634
2927	3.79	3516	3.47	3222
2935	5.11	4749	4.73	4398
2939	5.77	5365	5.37	4986
2947	7.10	6597	6.63	6162
3319	2.87	2667	2.59	2405
3323	3.64	3386	3.33	3096
3327	4.42	4106	4.08	3787
3335	5.97	5544	5.57	5170
3339	6.74	6264	6.31	5861
3347	8.29	7702	7.80	7244

Awning

VENT OPENING				
Unit #	Vent		DLO	
	Sq. Ft.	cm ²	Sq. Ft.	cm ²
3719	3.28	3050	2.97	2764
3723	4.17	3872	3.83	3558
3727	5.05	4695	4.69	4353
3735	6.82	6340	6.40	5942
3739	7.71	7162	7.25	6737
3747	9.48	8807	8.96	8326
4119	3.69	3432	3.36	3123
4123	4.69	4358	4.33	4021
4127	5.69	5284	5.29	4918
4135	7.68	7135	7.23	6714
4139	8.68	8061	8.19	7612
4147	10.67	9913	10.13	9407
4919	4.52	4198	4.13	3841
4923	5.74	5330	5.32	4945
4927	6.96	6462	6.51	6050
4935	9.39	8727	8.89	8258
4939	10.61	9859	10.08	9362
4947	13.05	12123	12.45	11571

E = 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.

** 3735 and 3739 meet Egress if installed at proper height from floor.

Double Hung Reverse Cottage

EGRESS OPENING														
Unit #	Egress Width		Egress Height		Egress Clear Opp.		Floor To Clear Opp.**		Vent		DLO		Check Rail Height**	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	cm ²	Inches	(mm)	Sq. Ft.	cm ²	Sq. Ft.	cm ²	Inches	(mm)
3636	32.372	822	9.859	250	2.216	2059	48.480	1231	2.216	2059	5.64	5243	16.145	410
3640	32.372	822	12.249	311	2.754	2558	44.480	1130	2.754	2558	6.47	6010	17.755	451
3644	32.372	822	10.639	270	2.392	2222	40.480	1028	2.392	2222	7.29	6776	19.365	492
3648	32.372	822	13.030	331	2.929	2721	36.480	927	2.929	2721	8.12	7542	20.974	533
3652	32.372	822	15.420	392	3.467	3220	32.480	825	3.467	3220	8.94	8308	22.584	574
3656	32.372	822	17.810	452	4.004	3720	28.480	723	4.004	3720	9.77	9074	24.194	615
3660	32.372	822	20.200	513	4.541	4219	24.480	622	4.541	4219	10.59	9840	25.804	655
3664	32.372	822	22.591	574	5.079	4718	20.480	520	5.079	4718	11.42	10606	27.413	696
3668	32.372	822	23.508	597	5.285	4910	16.480	419	5.285	4910	12.24	11373	29.023	737
3836	34.372	873	9.859	250	2.353	2186	48.480	1231	2.353	2186	6.02	5597	16.145	410
3840	34.372	873	12.249	311	2.924	2716	44.480	1130	2.924	2716	6.90	6414	17.755	451
3844	34.372	873	10.639	270	2.539	2359	40.480	1028	2.539	2359	7.78	7232	19.365	492
3848	34.372	873	13.030	331	3.110	2889	36.480	927	3.110	2889	8.66	8050	20.974	533
3852	34.372	873	15.420	392	3.681	3419	32.480	825	3.681	3419	9.55	8868	22.584	574
3856	34.372	873	17.810	452	4.251	3949	28.480	723	4.251	3949	10.43	9685	24.194	615
3860	34.372	873	20.200	513	4.822	4479	24.480	622	4.822	4479	11.31	10503	25.804	655
3864	34.372	873	22.591	574	5.392	5010	20.480	520	5.392	5010	12.19	11321	27.413	696
3868	34.372	873	23.508	597	5.611	5213	16.480	419	5.611	5213	13.07	12139	29.023	737
4236	38.372	975	9.859	250	2.627	2441	48.480	1231	2.627	2441	6.78	6303	16.145	410
4240	38.372	975	12.249	311	3.264	3032	44.480	1130	3.264	3032	7.78	7224	17.755	451
4244	38.372	975	10.639	270	2.835	2634	40.480	1028	2.835	2634	8.77	8145	19.365	492
4248	38.372	975	13.030	331	3.472	3226	36.480	927	3.472	3226	9.76	9066	20.974	533
4252	38.372	975	15.420	392	4.109	3817	32.480	825	4.109	3817	10.75	9987	22.584	574
4256	38.372	975	17.810	452	4.746	4409	28.480	723	4.746	4409	11.74	10908	24.194	615
4260	38.372	975	20.200	513	5.383	5001	24.480	622	5.383	5001	12.73	11829	25.804	655
4264	38.372	975	22.591	574	6.020	5593	20.480	520	6.020	5593	13.72	12750	27.413	696
4268	38.372	975	23.508	597	6.264	5820	16.480	419	6.264	5820	14.72	13671	29.023	737
4836	44.372	1127	9.859	250	3.038	2822	48.480	1231	3.038	2822	7.93	7363	16.145	410
4840	44.372	1127	12.249	311	3.774	3507	44.480	1130	3.774	3507	9.08	8439	17.755	451
4844	44.372	1127	10.639	270	3.278	3046	40.480	1028	3.278	3046	10.24	9515	19.365	492
4848	44.372	1127	13.030	331	4.015	3730	36.480	927	4.015	3730	11.40	10590	20.974	533
4852	44.372	1127	15.420	392	4.752	4414	32.480	825	4.752	4414	12.56	11666	22.584	574
4856	44.372	1127	17.810	452	5.488	5098	28.480	723	5.488	5098	13.72	12742	24.194	615
4860	44.372	1127	20.200	513	6.224	5783	24.480	622	6.224	5783	14.87	13818	25.804	655
4864	44.372	1127	22.591	574	6.961	6467	20.480	520	6.961	6467	16.03	14894	27.413	696
4868	44.372	1127	23.508	597	7.244	6730	16.480	419	7.244	6730	17.19	15969	29.023	737
5436	50.372	1279	9.859	250	3.449	3204	48.480	1231	3.449	3204	9.07	8423	16.145	410
5440	50.372	1279	12.249	311	4.285	3981	44.480	1130	4.285	3981	10.39	9653	17.755	451
5444	50.372	1279	10.639	270	3.722	3457	40.480	1028	3.722	3457	11.72	10884	19.365	492
5448	50.372	1279	13.030	331	4.558	4234	36.480	927	4.558	4234	13.04	12115	20.974	533
5452	50.372	1279	15.420	392	5.394	5011	32.480	825	5.394	5011	14.36	13345	22.584	574
5456	50.372	1279	17.810	452	6.230	5788	28.480	723	6.230	5788	15.69	14576	24.194	615
5460	50.372	1279	20.200	513	7.066	6565	24.480	622	7.066	6565	17.01	15807	25.804	655
5464	50.372	1279	22.591	574	7.902	7342	20.480	520	7.902	7342	18.34	17037	27.413	696
5468	50.372	1279	23.508	597	8.223	7640	16.480	419	8.223	7640	19.66	18268	29.023	737

Use of optional Double hung HP upgrade kit will change egress measurements. Please Contact your local Integrity Sales Representative for more information.

E = 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.

** Check Rail Height is measured from the sill base to the top of the check rail cover (Top of bottom sash).

EGRESS OPENINGS

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-XO	14-1/8	359	19-9/16	497	1.92	1793	60.73	1543	1.92	1784	3.36	3122
3636-XO	14-1/8	359	31-9/16	802	3.10	2880	48.73	1238	3.10	2880	5.64	5240
3642-XO	14-1/8	359	37-9/16	954	3.69	3428	42.73	1085	3.69	3428	6.78	6299
3648-XO	14-1/8	359	43-9/16	1107	4.27	3967	36.73	933	4.27	3967	7.93	7367
3660-XO	14-1/8	359	55-9/16	1411	5.45	5063	24.73	628	5.45	5063	10.21	9485
4824-XO	20-1/8	511	19-9/16	497	2.74	2546	60.73	1543	2.74	2546	4.84	4497
4836-XO	20-1/8	511	31-9/16	802	4.41	4097	48.73	1238	4.41	4097	8.12	7544
4842-XO	20-1/8	511	37-9/16	954	5.25	4877	42.73	1085	5.25	4877	9.76	9067
4848-XO E	20-1/8	511	43-9/16	1107	6.09	5658	36.73	933	6.09	5658	11.40	10591
4860-XO E	20-1/8	511	55-9/16	1411	7.77	7219	24.73	628	7.77	7219	14.68	13638
6024-XO	26-1/8	664	19-9/16	497	3.55	3298	60.73	1543	3.55	3298	6.31	5862
6036-XO E*	26-1/8	664	31-9/16	802	5.73	5323	48.73	1238	5.73	5323	10.59	9838
6042-XO E	26-1/8	664	37-9/16	954	6.82	6336	42.73	1085	6.82	6336	12.73	11827
6048-XO E	26-1/8	664	43-9/16	1107	7.91	7349	36.73	933	7.91	7349	14.87	13815
6060-XO E	26-1/8	664	55-9/16	1411	10.08	9365	24.73	628	10.08	9365	19.15	17791
7224-XO	32-1/8	816	19-9/16	497	4.37	4060	60.73	1543	4.37	4060	7.78	7228
7236-XO E*	32-1/8	816	31-9/16	802	7.04	6540	48.73	1238	7.04	6540	13.07	12142
7242-XO E	32-1/8	816	37-9/16	954	8.38	7785	42.73	1085	8.38	7785	15.71	14595
7248-XO E	32-1/8	816	43-9/16	1107	9.72	9030	36.73	933	9.72	9030	18.35	17048
7260-XO E	32-1/8	816	55-9/16	1411	12.40	11520	24.73	628	12.40	11520	23.63	21953
7224-XOX	15-11/16	398	19-9/16	497	2.13	1979	60.73	1543	4.26	3958	7.50	6968
7236-XOX	15-11/16	398	31-9/16	802	3.44	3196	48.73	1238	6.87	6382	12.59	11696
7242-XOX	15-11/16	398	37-9/16	954	4.09	3800	42.73	1085	8.18	7599	15.13	14056
7248-XOX	15-11/16	398	43-9/16	1107	4.74	4404	36.73	933	9.49	8816	17.68	16429
7260-XOX	15-11/16	398	55-9/16	1411	6.05	5621	24.73	628	12.10	11241	22.77	21154
8424-XOX	18-11/16	475	19-9/16	497	2.54	2360	60.73	1543	5.08	4719	8.97	8333
8442-XOX	18-11/16	475	31-9/16	802	4.09	3800	48.73	1238	8.19	7609	15.06	13991
8436-XOX	18-11/16	475	37-9/16	954	4.87	4524	42.73	1085	9.75	9058	18.11	16825
8448-XOX	18-11/16	475	43-9/16	1107	5.65	5249	36.73	933	11.30	10498	21.15	19649
8460-XOX	18-11/16	475	55-9/16	1411	7.21	6698	24.73	628	14.41	13387	27.24	25307
9624-XOX E	21-11/16	551	19-9/16	497	2.95	2741	60.73	1543	5.89	5472	10.45	9708
9636-XOX E	21-11/16	551	31-9/16	802	4.75	4413	48.73	1238	9.50	8826	17.54	16259
9642-XOX E	21-11/16	551	37-9/16	954	5.66	5258	42.73	1085	11.31	10229	21.08	19584
9648-XOX E	21-11/16	551	43-9/16	1107	6.56	6094	36.73	933	13.12	12189	24.63	22882
9660-XOX E	21-11/16	551	55-9/16	1411	8.36	7767	24.73	628	16.73	15543	31.71	29460

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
5065	23 5/16	-(592)	75 3/32	-(1908)	12.16	-1.13	N/A	N/A	12.16	-1.13	20.85	-1.94
5068	23 5/16	-(592)	77 19/32	-(1971)	12.57	-1.17	N/A	N/A	12.57	-1.17	21.63	-2.01
5070	23 5/16	-(592)	81 19/32	-(2073)	13.21	-1.23	N/A	N/A	13.21	-1.23	22.87	-2.12
5080	23 5/16	-(592)	91 3/32	-(2314)	14.75	-1.37	N/A	N/A	14.75	-1.37	25.82	-2.4
6065	29 5/16	-(745)	75 3/32	-(1908)	15.29	-1.42	N/A	N/A	15.29	-1.42	26.44	-2.46
6068	29 5/16	-(745)	77 19/32	-(1971)	15.80	-1.47	N/A	N/A	15.8	-1.47	27.43	-2.55
6070	29 5/16	-(745)	81 19/32	-(2073)	16.61	-1.54	N/A	N/A	16.61	-1.54	29	-2.69
6080	29 5/16	-(745)	91 3/32	-(2314)	18.55	-1.72	N/A	N/A	18.55	-1.72	32.75	-3.04
8065	41 5/16	-(1050)	75 3/32	-(1908)	21.55	-2	N/A	N/A	21.55	-2	37.63	-3.5
8068	41 5/16	-(1050)	77 19/32	-(1971)	22.27	-2.07	N/A	N/A	22.27	-2.07	39.03	-3.63
8070	41 5/16	-(1050)	81 19/32	-(2073)	23.41	-2.18	N/A	N/A	23.41	-2.18	41.27	-3.83
8080	41 5/16	-(1050)	91 3/32	-(2314)	26.14	-2.43	N/A	N/A	26.14	-2.43	46.6	-4.33
7665	23 5/16	-(592)	75 3/32	-(1908)	12.16	-1.13	N/A	N/A	12.16	-1.13	31.28	-2.91
7668	23 5/16	-(592)	77 19/32	-(1971)	12.57	-1.17	N/A	N/A	12.57	-1.17	32.44	-3.01
7670	23 5/16	-(592)	81 19/32	-(2073)	13.21	-1.23	N/A	N/A	13.21	-1.23	34.31	-3.19
7680	23 5/16	-(592)	91 3/32	-(2314)	14.75	-1.37	N/A	N/A	14.75	-1.37	38.73	-3.6
9065	29 5/16	-(745)	75 3/32	-(1908)	15.29	-1.42	N/A	N/A	15.29	-1.42	39.66	-3.68
9068	29 5/16	-(745)	77 19/32	-(1971)	15.80	-1.47	N/A	N/A	15.8	-1.47	41.14	-3.82
9070	29 5/16	-(745)	81 19/32	-(2073)	16.61	-1.54	N/A	N/A	16.61	-1.54	43.51	-4.04
9080	29 5/16	-(745)	91 3/32	-(2314)	18.55	-1.72	N/A	N/A	18.55	-1.72	49.12	-4.56
10065	46 43/64	-(1186)	74 55/64	-(1902)	24.27	-2.25	N/A	N/A	24.27	-2.25	41.7	-3.87
10068	46 43/64	-(1186)	77 23/64	-(1965)	25.08	-2.33	N/A	N/A	25.08	-2.33	43.26	-4.02
10070	46 43/64	-(1186)	81 23/64	-(2067)	26.37	-2.45	N/A	N/A	26.37	-2.45	45.74	-4.25
10080	44 47/64	-(1136)	90 55/64	-(2308)	28.22	-2.62	N/A	N/A	28.22	-2.62	51.65	-4.8
12065	58 43/64	-(1490)	74 55/64	-(1902)	30.51	-2.83	N/A	N/A	30.51	-2.83	52.88	-4.91
12068	58 43/64	-(1490)	77 23/64	-(1965)	31.52	-2.93	N/A	N/A	31.52	-2.93	54.86	-5.1
12070	58 43/64	-(1490)	81 23/64	-(2067)	33.15	-3.08	N/A	N/A	33.15	-3.08	58.01	-5.39
12080	56 47/64	-(1441)	90 55/64	-(2308)	35.80	-3.33	N/A	N/A	35.8	-3.33	65.5	-6.08
16065	82 43/64	-(2100)	74 55/64	-(1902)	42.98	-3.99	N/A	N/A	42.98	-3.99	75.25	-6.99
16068	82 43/64	-(2100)	77 23/64	-(1965)	44.42	-4.13	N/A	N/A	44.42	-4.13	78.05	-7.25
16070	82 43/64	-2100	81 23/64	-(2067)	46.72	-4.34	N/A	N/A	46.72	-4.34	82.54	-7.67
16080	80 47/64	-2051	90 55/64	-(2308)	50.94	-4.73	N/A	N/A	50.94	-4.73	93.19	-8.66

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 21/64	(1913)	12.29	(114)	N/A	N/A	12.29	(114)	25.19	(2.34)
5068	23 1/2	(597)	77 53/64	(1977)	15.43	(143)	N/A	N/A	15.43	(143)	26.06	(2.42)
6065	29 1/2	(749)	75 21/64	(1913)	12.70	(118)	N/A	N/A	12.70	(118)	31.24	(2.90)
6068	29 1/2	(749)	77 53/64	(1977)	15.95	(148)	N/A	N/A	15.95	(148)	32.32	(3.00)
7665	23 1/2	(597)	75 21/64	(1913)	12.29	(114)	N/A	N/A	12.29	(114)	37.79	(3.51)
7668	23 1/2	(597)	77 53/64	(1977)	12.70	(118)	N/A	N/A	12.70	(118)	39.09	(3.63)
9065	29 1/2	(749)	75 21/64	(1913)	15.43	(143)	N/A	N/A	15.43	(143)	46.86	(4.35)
9068	29 1/2	(749)	77 53/64	(1977)	15.95	(148)	N/A	N/A	15.95	(148)	48.47	(4.50)

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.	m ²	Inches	(mm)	Sq. Ft.	m ²	Sq. Ft.	m ²	
2665	X	25 11/16	(652)	76 17/32	(1944)	13.65	(1.27)	N/A	N/A	13.65	(1.27)	9.95	(0.92)
2865	X	27 11/16	(703)	76 17/32	(1944)	14.71	(1.37)	N/A	N/A	14.71	(1.37)	10.88	(1.01)
3065	X	31 11/16	(805)	76 17/32	(1944)	16.83	(1.56)	N/A	N/A	16.83	(1.56)	12.74	(1.18)
2668	X	25 11/16	(652)	79 1/32	(2007)	14.09	(1.31)	N/A	N/A	14.09	(1.31)	10.32	(0.96)
2868	X	27 11/16	(703)	79 1/32	(2007)	15.19	(1.41)	N/A	N/A	15.19	(1.41)	11.28	(1.05)
3068	X	31 11/16	(805)	79 1/32	(2007)	17.38	(1.62)	N/A	N/A	17.38	(1.62)	13.22	(1.23)
2670	X	25 11/16	(652)	83 1/32	(2109)	14.80	(1.38)	N/A	N/A	14.80	(1.38)	10.91	(1.01)
2870	X	27 11/16	(703)	83 1/32	(2109)	15.96	(1.48)	N/A	N/A	15.96	(1.48)	11.93	(1.11)
3070	X	31 11/16	(805)	83 1/32	(2109)	18.26	(1.70)	N/A	N/A	18.26	(1.70)	13.98	(1.30)
2680	X	25 11/16	(652)	92 17/32	(2350)	16.50	(1.53)	N/A	N/A	16.50	(1.53)	12.32	(1.14)
2880	X	27 11/16	(703)	92 17/32	(2350)	17.78	(1.65)	N/A	N/A	17.78	(1.65)	13.47	(1.25)
3080	X	31 11/16	(805)	92 17/32	(2350)	20.35	(1.89)	N/A	N/A	20.35	(1.89)	15.78	(1.47)
5065	XO / OX	25 19/32	(650)	75 3/8	(1914)	13.40	(1.24)	N/A	N/A	13.40	(1.24)	19.89	(1.85)
5465	XO / OX	27 19/32	(701)	75 3/8	(1914)	14.45	(1.34)	N/A	N/A	14.45	(1.34)	21.76	(2.02)
6065	XO / OX	31 19/32	(803)	75 3/8	(1914)	16.54	(1.54)	N/A	N/A	16.54	(1.54)	25.48	(2.37)
5068	XO / OX	25 19/32	(650)	77 7/8	(1978)	13.84	(1.29)	N/A	N/A	13.84	(1.29)	20.63	(1.92)
5468	XO / OX	27 19/32	(701)	77 7/8	(1978)	14.92	(1.39)	N/A	N/A	14.92	(1.39)	22.57	(2.10)
6068	XO / OX	31 19/32	(803)	77 7/8	(1978)	17.09	(1.59)	N/A	N/A	17.09	(1.59)	26.43	(2.46)
5070	XO / OX	25 19/32	(650)	81 7/8	(2079)	14.55	(1.35)	N/A	N/A	14.55	(1.35)	21.82	(2.03)
5470	XO / OX	27 19/32	(701)	81 7/8	(2079)	15.69	(1.46)	N/A	N/A	15.69	(1.46)	23.86	(2.22)
6070	XO / OX	31 19/32	(803)	81 7/8	(2079)	17.97	(1.67)	N/A	N/A	17.97	(1.67)	27.95	(2.60)
5080	XO / OX	25 19/32	(650)	91 3/8	(2321)	16.24	(1.51)	N/A	N/A	16.24	(1.51)	24.64	(2.29)
5480	XO / OX	27 19/32	(701)	91 3/8	(2321)	17.51	(1.63)	N/A	N/A	17.51	(1.63)	26.94	(2.50)
6080	XO / OX	31 19/32	(803)	91 3/8	(2321)	20.05	(1.86)	N/A	N/A	20.05	(1.86)	31.56	(2.93)
5065	XX	52 13/32	(1331)	76 17/32	(1944)	27.85	(2.59)	N/A	N/A	27.85	(2.59)	19.89	(1.85)
5465	XX	56 13/32	(1433)	76 17/32	(1944)	29.97	(2.78)	N/A	N/A	29.97	(2.78)	21.76	(2.02)
6065	XX	64 13/32	(1636)	76 17/32	(1944)	34.22	(3.18)	N/A	N/A	34.22	(3.18)	25.48	(2.37)
5068	XX	52 13/32	(1331)	79 1/32	(2007)	28.76	(2.67)	N/A	N/A	28.76	(2.67)	20.63	(1.92)
5468	XX	56 13/32	(1433)	79 1/32	(2007)	30.95	(2.88)	N/A	N/A	30.95	(2.88)	22.57	(2.10)
6068	XX	64 13/32	(1636)	79 1/32	(2007)	35.34	(3.28)	N/A	N/A	35.34	(3.28)	26.43	(2.46)
5070	XX	52 13/32	(1331)	83 1/32	(2109)	30.21	(2.81)	N/A	N/A	30.21	(2.81)	21.82	(2.03)
5470	XX	56 13/32	(1433)	83 1/32	(2109)	32.52	(3.02)	N/A	N/A	32.52	(3.02)	23.86	(2.22)
6070	XX	64 13/32	(1636)	83 1/32	(2109)	37.13	(3.45)	N/A	N/A	37.13	(3.45)	27.95	(2.60)
5080	XX	52 13/32	(1331)	92 17/32	(2350)	33.67	(3.13)	N/A	N/A	33.67	(3.13)	24.64	(2.29)
5480	XX	56 13/32	(1433)	92 17/32	(2350)	36.24	(3.37)	N/A	N/A	36.24	(3.37)	26.94	(2.50)
6080	XX	64 13/32	(1636)	92 17/32	(2350)	41.38	(3.84)	N/A	N/A	41.38	(3.84)	31.56	(2.93)

EGRESS OPENINGS

Outswing French Door

EGRESS OPENING													
Unit #		Egress Width		Egress Height		Egress Clear Opp.		Floor To Clear Opp.**		Vent		DLO	
		Inches	(mm)	Inches	(mm)	Sq.Ft.	m ²	Inches	(mm)	Sq.Ft.	m ²	Sq.Ft.	m ²
2665	X	25 19/32	(650)	76 9/16	(1944)	13.60	(1.26)	N/A	N/A	13.60	(1.26)	9.95	(0.92)
2865	X	27 19/32	(701)	76 9/16	(1944)	14.66	(1.36)	N/A	N/A	14.66	(1.36)	10.88	(1.01)
3065	X	31 19/32	(802)	76 9/16	(1944)	16.79	(1.56)	N/A	N/A	16.79	(1.56)	12.74	(1.18)
2668	X	25 19/32	(650)	79 1/16	(2008)	14.04	(1.30)	N/A	N/A	14.04	(1.30)	10.32	(0.96)
2868	X	27 19/32	(701)	79 1/16	(2008)	15.14	(1.41)	N/A	N/A	15.14	(1.41)	11.28	(1.05)
3068	X	31 19/32	(802)	79 1/16	(2008)	17.34	(1.61)	N/A	N/A	17.34	(1.61)	13.22	(1.23)
2670	X	25 19/32	(650)	83 1/16	(2109)	14.75	(1.37)	N/A	N/A	14.75	(1.37)	10.91	(1.01)
2870	X	27 19/32	(701)	83 1/16	(2109)	15.91	(1.48)	N/A	N/A	15.91	(1.48)	11.93	(1.11)
3070	X	31 19/32	(802)	83 1/16	(2109)	18.21	(1.69)	N/A	N/A	18.21	(1.69)	13.98	(1.30)
2680	X	25 19/32	(650)	92 9/16	(2351)	16.44	(1.53)	N/A	N/A	16.44	(1.53)	12.32	(1.14)
2880	X	27 19/32	(701)	92 9/16	(2351)	17.73	(1.65)	N/A	N/A	17.73	(1.65)	13.47	(1.25)
3080	X	31 19/32	(802)	92 9/16	(2351)	20.30	(1.89)	N/A	N/A	20.30	(1.89)	15.78	(1.47)
5065	XX	52 7/32	(1326)	76 9/16	(1944)	27.76	(2.58)	N/A	N/A	27.76	(2.58)	19.89	(1.85)
5465	XX	56 7/32	(1428)	76 9/16	(1944)	29.88	(2.78)	N/A	N/A	29.88	(2.78)	21.76	(2.02)
6065	XX	64 7/32	(1631)	76 9/16	(1944)	34.13	(3.17)	N/A	N/A	34.13	(3.17)	25.48	(2.37)
5068	XX	52 7/32	(1326)	79 1/16	(2008)	28.66	(2.66)	N/A	N/A	28.66	(2.66)	20.63	(1.92)
5468	XX	56 7/32	(1428)	79 1/16	(2008)	30.86	(2.87)	N/A	N/A	30.86	(2.87)	22.57	(2.10)
6068	XX	64 7/32	(1631)	79 1/16	(2008)	35.25	(3.27)	N/A	N/A	35.25	(3.27)	26.43	(2.46)
5070	XX	52 7/32	(1326)	83 1/16	(2109)	30.11	(2.80)	N/A	N/A	30.11	(2.80)	21.82	(2.03)
5470	XX	56 7/32	(1428)	83 1/16	(2109)	32.42	(3.01)	N/A	N/A	32.42	(3.01)	23.86	(2.22)
6070	XX	64 7/32	(1631)	83 1/16	(2109)	37.03	(3.44)	N/A	N/A	37.03	(3.44)	27.95	(2.60)
5080	XX	52 7/32	(1326)	92 9/16	(2351)	33.56	(3.12)	N/A	N/A	33.56	(3.12)	24.64	(2.29)
5480	XX	56 7/32	(1428)	92 9/16	(2351)	36.13	(3.36)	N/A	N/A	36.13	(3.36)	26.94	(2.50)
6080	XX	64 7/32	(1631)	92 9/16	(2351)	41.27	(3.83)	N/A	N/A	41.27	(3.83)	31.56	(2.93)

Casement

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air Low E1	0.32	0.49	0.56	54	N
11/16" Insulating Glass Air Low E1-GBG	0.32	0.45	0.51	54	N
11/16" Insulating Glass Air Low E1-SDLN <1"	0.32	0.45	0.51	54	N
11/16" Insulating Glass Air Low E1-SDLS <1"	0.32	0.45	0.51	54	N
11/16" Insulating Glass Argon Low E1	0.29	0.49	0.56	58	N
11/16" Insulating Glass Argon Low E1-GBG	0.29	0.45	0.51	58	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.29	0.45	0.51	58	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.29	0.45	0.51	58	N
11/16" Insulating Glass Low E2 Air	0.31	0.30	0.51	55	NC, SC
11/16" Insulating Glass Low E2 Air-GBG	0.31	0.28	0.46	55	NC, SC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.31	0.28	0.46	55	NC, SC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.31	0.28	0.46	55	NC, SC
11/16" Insulating Glass Low E2 Argon	0.28	0.30	0.51	58	N, NC, SC
11/16" Insulating Glass Low E2 Argon-GBG	0.28	0.27	0.46	58	N, NC, SC, S
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.28	0.27	0.46	58	N, NC, SC, S
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.28	0.27	0.46	58	N, NC, SC, S
11/16" Insulating Glass Low E3 Air	0.31	0.20	0.46	55	NC, SC, S
11/16" Insulating Glass Low E3 Air-GBG	0.31	0.19	0.42	55	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.31	0.19	0.42	55	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.31	0.19	0.42	55	NC, SC, S
11/16" Insulating Glass Low E3 Argon	0.27	0.20	0.46	59	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-GBG	0.27	0.18	0.42	59	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.27	0.18	0.42	59	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.27	0.18	0.42	59	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1	0.23	0.27	0.45	65	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1-GBG	0.23	0.25	0.41	65	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1-SDLN <1"	0.23	0.25	0.41	65	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1-SDLS <1"	0.23	0.25	0.41	65	N, NC, SC, S
11/8" Tripane Low E2 Argon Low E1	0.20	0.27	0.45	68	N, NC, SC, S
11/8" Tripane Low E2 Argon Low E1-GBG	0.20	0.25	0.41	68	N, NC, SC, S
11/8" Tripane Low E2 Argon Low E1-SDLN <1"	0.20	0.25	0.41	68	N, NC, SC, S
11/8" Tripane Low E2 Argon Low E1-SDLS <1"	0.20	0.25	0.41	68	N, NC, SC, S

Awning

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air Low E1	0.33	0.50	0.56	52	
11/16" Insulating Glass Air Low E1-GBG	0.33	0.45	0.51	52	
11/16" Insulating Glass Air Low E1-SDLN <1"	0.33	0.45	0.51	52	
11/16" Insulating Glass Air Low E1-SDLS <1"	0.32	0.45	0.51	53	N
11/16" Insulating Glass Argon Low E1	0.30	0.50	0.56	55	N
11/16" Insulating Glass Argon Low E1-GBG	0.30	0.46	0.51	55	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.30	0.46	0.51	55	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.29	0.45	0.51	56	N
11/16" Insulating Glass Low E2 Air	0.32	0.30	0.51	53	NC, SC
11/16" Insulating Glass Low E2 Air-GBG	0.32	0.28	0.46	53	NC, SC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.32	0.28	0.46	53	NC, SC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.32	0.28	0.46	53	NC, SC
11/16" Insulating Glass Low E2 Argon	0.28	0.30	0.51	57	N, NC, SC
11/16" Insulating Glass Low E2 Argon-GBG	0.28	0.27	0.46	57	N, NC, SC, S
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.28	0.27	0.46	57	N, NC, SC, S
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.28	0.27	0.46	57	N, NC, SC, S
11/16" Insulating Glass Low E3 Air	0.31	0.20	0.46	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-GBG	0.31	0.19	0.42	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.31	0.19	0.42	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.32	0.19	0.42	53	NC, SC, S
11/16" Insulating Glass Low E3 Argon	0.28	0.20	0.46	57	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-GBG	0.28	0.18	0.42	57	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.28	0.18	0.42	57	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.28	0.18	0.42	57	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1	0.23	0.27	0.45	65	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1-GBG	0.23	0.25	0.41	65	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1-SDLN <1"	0.23	0.25	0.41	65	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1-SDLS <1"	0.23	0.25	0.41	65	N, NC, SC, S
11/8" Tripane Low E2 Argon Low E1	0.20	0.27	0.45	69	N, NC, SC, S
11/8" Tripane Low E2 Argon Low E1-GBG	0.20	0.25	0.41	69	N, NC, SC, S
11/8" Tripane Low E2 Argon Low E1-SDLN <1"	0.20	0.25	0.41	69	N, NC, SC, S
11/8" Tripane Low E2 Argon Low E1-SDLS <1"	0.20	0.25	0.41	69	N, NC, SC, S

Casement Picture

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air Low E1	0.33	0.57	0.64	53	
11/16" Insulating Glass Air Low E1-GBG	0.33	0.51	0.57	53	
11/16" Insulating Glass Air Low E1-SDLN <1"	0.33	0.51	0.57	53	
11/16" Insulating Glass Air Low E1-SDLS <1"	0.31	0.50	0.57	54	N
11/16" Insulating Glass Argon Low E1	0.29	0.57	0.64	56	N
11/16" Insulating Glass Argon Low E1-GBG	0.29	0.51	0.57	56	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.29	0.51	0.57	56	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.28	0.50	0.57	57	N
11/16" Insulating Glass Low E2 Air	0.31	0.34	0.58	54	NC
11/16" Insulating Glass Low E2 Air-GBG	0.31	0.31	0.52	54	NC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.31	0.31	0.52	54	NC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.31	0.31	0.52	54	NC
11/16" Insulating Glass Low E2 Argon	0.27	0.34	0.58	57	N, NC
11/16" Insulating Glass Low E2 Argon-GBG	0.27	0.31	0.52	57	N, NC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.27	0.31	0.52	57	N, NC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.27	0.31	0.52	58	N, NC
11/16" Insulating Glass Low E3 Air	0.30	0.23	0.53	54	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-GBG	0.30	0.21	0.47	54	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.30	0.21	0.47	54	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.31	0.21	0.47	54	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon	0.26	0.23	0.53	58	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-GBG	0.26	0.20	0.47	58	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.26	0.20	0.47	58	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.27	0.20	0.47	58	N, NC, SC, S
11/8" Tripane Low E2 Air Low E1	0.21	0.31	0.51	65	N, NC
11/8" Tripane Low E2 Air Low E1-GBG	0.22	0.28	0.46	65	N, NC, SC
11/8" Tripane Low E2 Air Low E1-SDLN <1"	0.21	0.28	0.46	65	N, NC, SC
11/8" Tripane Low E2 Air Low E1-SDLS <1"	0.21	0.28	0.46	65	N, NC, SC
11/8" Tripane Low E2 Argon Low E1	0.18	0.31	0.51	68	N, NC
11/8" Tripane Low E2 Argon Low E1-GBG	0.19	0.28	0.46	68	N, NC, SC
11/8" Tripane Low E2 Argon Low E1-SDLN <1"	0.18	0.28	0.46	68	N, NC, SC
11/8" Tripane Low E2 Argon Low E1-SDLS <1"	0.18	0.28	0.46	68	N, NC, SC

Glider

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air Low E1	0.33	0.52	0.60	53	
11/16" Insulating Glass Air Low E1-GBG	0.33	0.46	0.53	53	
11/16" Insulating Glass Air Low E1-SDLN <1"	0.33	0.46	0.53	53	
11/16" Insulating Glass Air Low E1-SDLS <1"	0.33	0.46	0.53	53	
11/16" Insulating Glass Argon Low E1	0.29	0.52	0.60	56	N
11/16" Insulating Glass Argon Low E1-GBG	0.29	0.47	0.53	56	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.29	0.47	0.53	56	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.29	0.47	0.53	56	N
11/16" Insulating Glass Low E2 Air	0.32	0.32	0.54	53	NC
11/16" Insulating Glass Low E2 Air-GBG	0.32	0.29	0.48	53	NC, SC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.32	0.29	0.48	53	NC, SC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.32	0.29	0.48	53	NC, SC
11/16" Insulating Glass Low E2 Argon	0.29	0.32	0.54	57	N, NC
11/16" Insulating Glass Low E2 Argon-GBG	0.29	0.28	0.48	57	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.29	0.28	0.48	57	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.29	0.28	0.48	57	N, NC, SC
11/16" Insulating Glass Low E3 Air	0.32	0.21	0.49	54	NC, SC, S
11/16" Insulating Glass Low E3 Air-GBG	0.32	0.19	0.43	54	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.19	0.43	54	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.32	0.19	0.43	54	NC, SC, S
11/16" Insulating Glass Low E3 Argon	0.28	0.21	0.49	57	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-GBG	0.28	0.19	0.43	57	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.28	0.19	0.43	57	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.28	0.19	0.43	57	N, NC, SC, S

Thermal and solar values are subject to update. Values are generated in accordance with NFRC 100 and other applicable NFRC procedures. Argon gas is not available for the altitudes that require capillary tubes. Values are select glazing options, for those options not listed please contact the factory.

ENERGY STAR® is United States ENERGY STAR Program only. Please contact your local Integrity retailer for information on Canadian qualifications.

SHGC = Solar Heat Gain Coefficient
SDLN = Without Spacer Bar
VT = Visible Light Transmittance
SDLS = With Spacer Bar
CR=Condensation Resistance

ENERGY STAR codes:
N = Northern
C = North Central
SC = South Central
S = Southern

3.1 mm glass thickness shown

Complete NFRC values for Integrity products and glazing options, including STC/OITC Upgrade glazing and Simulated Checkrail (SDLN and SDLS >1"), are available online at <http://www.integritywindows.com/technical-manuals/>.

THERMAL PERFORMANCE

Double Hung

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air Low E1	0.34	0.53	0.59	51	
11/16" Insulating Glass Air Low E1-GBG	0.34	0.47	0.53	51	
11/16" Insulating Glass Air Low E1-SDLN <1"	0.34	0.47	0.53	51	
11/16" Insulating Glass Air Low E1-SDLS <1"	0.33	0.46	0.53	52	
11/16" Insulating Glass Argon Low E1	0.31	0.53	0.59	54	N
11/16" Insulating Glass Argon Low E1-GBG	0.31	0.47	0.53	54	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.31	0.47	0.53	54	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.30	0.46	0.53	55	N
11/16" Insulating Glass Low E2 Air	0.33	0.32	0.54	52	
11/16" Insulating Glass Low E2 Air-GBG	0.33	0.29	0.48	52	SC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.33	0.29	0.48	52	SC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.32	0.29	0.48	52	NC, SC
11/16" Insulating Glass Low E2 Argon	0.29	0.32	0.54	55	N, NC
11/16" Insulating Glass Low E2 Argon-GBG	0.29	0.28	0.48	55	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.29	0.28	0.48	55	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.29	0.28	0.48	56	N, NC, SC
11/16" Insulating Glass Low E3 Air	0.32	0.21	0.49	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-GBG	0.32	0.19	0.43	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.19	0.43	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.33	0.19	0.43	53	SC, S
11/16" Insulating Glass Low E3 Argon	0.28	0.21	0.49	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-GBG	0.28	0.19	0.43	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.28	0.19	0.43	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.29	0.19	0.43	56	N, NC, SC, S

Double Hung Transom/Picture

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air Low E1	0.31	0.54	0.62	55	N
11/16" Insulating Glass Air Low E1-GBG	0.31	0.49	0.56	55	N
11/16" Insulating Glass Air Low E1-SDLN <1"	0.31	0.49	0.56	55	N
11/16" Insulating Glass Air Low E1-SDLS <1"	0.31	0.49	0.56	55	N
11/16" Insulating Glass Argon Low E1	0.28	0.54	0.62	59	N
11/16" Insulating Glass Argon Low E1-GBG	0.28	0.49	0.56	59	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.28	0.49	0.56	59	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.28	0.49	0.56	59	N
11/16" Insulating Glass Low E2 Air	0.31	0.33	0.57	56	NC
11/16" Insulating Glass Low E2 Air-GBG	0.31	0.30	0.51	56	NC, SC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.31	0.30	0.51	56	NC, SC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.31	0.30	0.51	56	NC, SC
11/16" Insulating Glass Low E2 Argon	0.27	0.33	0.57	59	N, NC
11/16" Insulating Glass Low E2 Argon-GBG	0.27	0.30	0.51	59	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.27	0.30	0.51	59	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.27	0.30	0.51	59	N, NC, SC
11/16" Insulating Glass Low E3 Air	0.30	0.22	0.51	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-GBG	0.30	0.20	0.45	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.30	0.20	0.45	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.30	0.20	0.45	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon	0.26	0.22	0.51	60	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-GBG	0.26	0.20	0.45	60	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.26	0.20	0.45	60	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.26	0.20	0.45	60	N, NC, SC, S

Insert Double Hung

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air Low E1	0.33	0.50	0.58	52	
11/16" Insulating Glass Air Low E1-GBG	0.33	0.45	0.52	52	
11/16" Insulating Glass Air Low E1-SDLN <1"	0.33	0.45	0.52	52	
11/16" Insulating Glass Air Low E1-SDLS <1"	0.33	0.45	0.52	52	
11/16" Insulating Glass Argon Low E1	0.30	0.51	0.58	55	N
11/16" Insulating Glass Argon Low E1-GBG	0.30	0.45	0.52	55	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.30	0.45	0.52	55	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.30	0.45	0.52	55	N
11/16" Insulating Glass Low E2 Air	0.33	0.31	0.53	53	
11/16" Insulating Glass Low E2 Air-GBG	0.33	0.28	0.47	53	SC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.33	0.28	0.47	53	SC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.33	0.28	0.47	53	SC
11/16" Insulating Glass Low E2 Argon	0.29	0.31	0.53	56	N, NC
11/16" Insulating Glass Low E2 Argon-GBG	0.29	0.28	0.47	56	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.29	0.28	0.47	56	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.29	0.28	0.47	56	N, NC, SC
11/16" Insulating Glass Low E3 Air	0.32	0.21	0.47	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-GBG	0.32	0.19	0.42	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.19	0.42	53	NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.32	0.19	0.42	53	NC, SC, S
11/16" Insulating Glass Low E3 Argon	0.28	0.20	0.47	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-GBG	0.28	0.18	0.42	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.28	0.18	0.42	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.28	0.18	0.42	56	N, NC, SC, S

Insert Double Hung Picture

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air Low E1	0.31	0.53	0.61	56	N
11/16" Insulating Glass Air Low E1-GBG	0.31	0.47	0.54	56	N
11/16" Insulating Glass Air Low E1-SDLN <1"	0.31	0.47	0.54	56	N
11/16" Insulating Glass Air Low E1-SDLS <1"	0.31	0.47	0.54	56	N
11/16" Insulating Glass Argon Low E1	0.28	0.53	0.61	59	N
11/16" Insulating Glass Argon Low E1-GBG	0.28	0.47	0.54	59	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.28	0.47	0.54	59	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.28	0.47	0.54	59	N
11/16" Insulating Glass Low E2 Air	0.31	0.32	0.55	56	NC
11/16" Insulating Glass Low E2 Air-GBG	0.31	0.29	0.49	56	NC, SC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.31	0.29	0.49	56	NC, SC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.31	0.29	0.49	56	NC, SC
11/16" Insulating Glass Low E2 Argon	0.27	0.32	0.55	60	N, NC
11/16" Insulating Glass Low E2 Argon-GBG	0.27	0.29	0.49	60	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.27	0.29	0.49	60	N, NC, SC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.27	0.29	0.49	60	N, NC, SC
11/16" Insulating Glass Low E3 Air	0.30	0.22	0.50	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-GBG	0.30	0.20	0.44	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.30	0.20	0.44	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.30	0.20	0.44	56	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon	0.26	0.21	0.50	60	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-GBG	0.26	0.19	0.44	60	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.26	0.19	0.44	60	N, NC, SC, S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.26	0.19	0.44	60	N, NC, SC, S

Thermal and solar values are subject to update. Values are generated in accordance with NFRC 100 and other applicable NFRC procedures. Argon gas is not available for the altitudes that require capillary tubes. Values are select glazing options, for those options not listed please contact the factory.

ENERGY STAR® is United States ENERGY STAR Program only. Please contact your local Integrity retailer for information on Canadian qualifications.

SHGC = Solar Heat Gain Coefficient
 SDLN = Without Spacer Bar
 VT = Visible Light Transmittance
 SDLS = With Spacer Bar
 CR = Condensation Resistance

ENERGY STAR codes:
 N = Northern
 C = North Central
 SC = South Central
 S = Southern

3.1 mm glass thickness shown

Complete NFRC values for Integrity products and glazing options, including STC/OITC Upgrade glazing and Simulated Checkrail (SDLN and SDLS >1"), are available online at <http://www.integritywindows.com/technical-manuals/>.

Marvin Casement Round Top for Integrity

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR*
3/4" Insulating Glass Air Low E1	0.34	0.62	0.71	49	
3/4" Insulating Glass Air Low E1-GBG	0.34	0.56	0.64	49	
3/4" Insulating Glass Air Low E1-SDLN <1"	0.34	0.56	0.64	49	
3/4" Insulating Glass Air Low E1-SDLS <1"	0.33	0.56	0.64	50	
3/4" Insulating Glass Argon Low E1	0.31	0.63	0.71	52	N
3/4" Insulating Glass Argon Low E1-GBG	0.31	0.57	0.64	52	N
3/4" Insulating Glass Argon Low E1-SDLN <1"	0.31	0.57	0.64	52	N
3/4" Insulating Glass Argon Low E1-SDLS <1"	0.29	0.56	0.64	53	N
3/4" Insulating Glass Low E2 Air	0.33	0.37	0.65	50	
3/4" Insulating Glass Low E2 Air-GBG	0.33	0.34	0.58	50	
3/4" Insulating Glass Low E2 Air-SDLN <1"	0.33	0.34	0.58	50	
3/4" Insulating Glass Low E2 Air-SDLS <1"	0.32	0.34	0.58	50	NC
3/4" Insulating Glass Low E2 Argon	0.29	0.37	0.65	53	N,NC
3/4" Insulating Glass Low E2 Argon-GBG	0.29	0.34	0.58	53	N,NC
3/4" Insulating Glass Low E2 Argon-SDLN <1"	0.29	0.34	0.58	53	N,NC
3/4" Insulating Glass Low E2 Argon-SDLS <1"	0.28	0.34	0.58	53	N,NC
3/4" Insulating Glass Low E3 Air	0.32	0.25	0.58	51	NC,SC,S
3/4" Insulating Glass Low E3 Air-GBG	0.32	0.23	0.52	51	NC,SC,S
3/4" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.23	0.52	51	NC,SC,S
3/4" Insulating Glass Low E3 Air-SDLS <1"	0.33	0.23	0.52	51	SC,S
3/4" Insulating Glass Low E3 Argon	0.28	0.25	0.58	54	N,NC,SC,S
3/4" Insulating Glass Low E3 Argon-GBG	0.28	0.22	0.52	54	N,NC,SC,S
3/4" Insulating Glass Low E3 Argon-SDLN <1"	0.28	0.22	0.52	54	N,NC,SC,S
3/4" Insulating Glass Low E3 Argon-SDLS <1"	0.29	0.22	0.52	54	N,NC,SC,S

Marvin Double Hung Round Top for Integrity

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR*
3/4" Insulating Glass Air Low E1	0.34	0.60	0.67	50	
3/4" Insulating Glass Air Low E1-GBG	0.34	0.54	0.60	50	
3/4" Insulating Glass Air Low E1-SDLN <1"	0.34	0.54	0.60	50	
3/4" Insulating Glass Air Low E1-SDLS <1"	0.33	0.53	0.61	51	
3/4" Insulating Glass Argon Low E1	0.31	0.60	0.67	53	N
3/4" Insulating Glass Argon Low E1-GBG	0.31	0.54	0.60	53	N
3/4" Insulating Glass Argon Low E1-SDLN <1"	0.31	0.54	0.60	53	N
3/4" Insulating Glass Argon Low E1-SDLS <1"	0.29	0.53	0.61	54	N
3/4" Insulating Glass Low E2 Air	0.32	0.36	0.61	51	NC
3/4" Insulating Glass Low E2 Air-GBG	0.32	0.32	0.55	51	NC
3/4" Insulating Glass Low E2 Air-SDLN <1"	0.32	0.32	0.55	51	NC
3/4" Insulating Glass Low E2 Air-SDLS <1"	0.32	0.32	0.55	51	NC
3/4" Insulating Glass Low E2 Argon	0.28	0.36	0.61	54	N,NC
3/4" Insulating Glass Low E2 Argon-GBG	0.28	0.32	0.55	54	N,NC
3/4" Insulating Glass Low E2 Argon-SDLN <1"	0.28	0.32	0.55	54	N,NC
3/4" Insulating Glass Low E2 Argon-SDLS <1"	0.28	0.32	0.55	54	N,NC
3/4" Insulating Glass Low E3 Air	0.32	0.24	0.55	51	NC,SC,S
3/4" Insulating Glass Low E3 Air-GBG	0.32	0.22	0.50	51	NC,SC,S
3/4" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.22	0.50	51	NC,SC,S
3/4" Insulating Glass Low E3 Air-SDLS <1"	0.33	0.22	0.50	51	SC,S
3/4" Insulating Glass Low E3 Argon	0.28	0.23	0.55	54	N,NC,SC,S
3/4" Insulating Glass Low E3 Argon-GBG	0.28	0.21	0.50	54	N,NC,SC,S
3/4" Insulating Glass Low E3 Argon-SDLN <1"	0.28	0.21	0.50	54	N,NC,SC,S
3/4" Insulating Glass Low E3 Argon-SDLS <1"	0.29	0.21	0.50	54	N,NC,SC,S

Integrity Casement Round Top

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR*
11/16" Insulating Glass Air Low E1	0.33	0.59	0.69	51	
11/16" Insulating Glass Air Low E1-GBG	0.33	0.54	0.62	51	
11/16" Insulating Glass Air Low E1-SDLN <1"	0.33	0.54	0.62	51	
11/16" Insulating Glass Air Low E1-SDLS <1"	0.33	0.54	0.62	51	
11/16" Insulating Glass Argon Low E1	0.29	0.60	0.69	54	N
11/16" Insulating Glass Argon Low E1-GBG	0.29	0.54	0.62	54	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.29	0.54	0.62	54	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.29	0.54	0.62	54	N
11/16" Insulating Glass Low E2 Air	0.32	0.36	0.62	51	NC
11/16" Insulating Glass Low E2 Air-GBG	0.32	0.33	0.56	51	NC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.32	0.33	0.56	51	NC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.32	0.33	0.56	51	NC
11/16" Insulating Glass Low E2 Argon	0.28	0.36	0.62	55	N,NC
11/16" Insulating Glass Low E2 Argon-GBG	0.28	0.33	0.56	55	N,NC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.28	0.33	0.56	55	N,NC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.28	0.33	0.56	55	N,NC
11/16" Insulating Glass Low E3 Air	0.31	0.24	0.56	52	NC,SC,S
11/16" Insulating Glass Low E3 Air-GBG	0.31	0.22	0.50	52	NC,SC,S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.31	0.22	0.50	52	NC,SC,S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.31	0.22	0.50	52	NC,SC,S
11/16" Insulating Glass Low E3 Argon	0.27	0.24	0.56	55	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-GBG	0.27	0.22	0.50	55	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.27	0.22	0.50	55	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.27	0.22	0.50	55	N,NC,SC,S

Integrity Double Hung Round Top

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR*
11/16" Insulating Glass Air Low E1	0.33	0.60	0.70	51	
11/16" Insulating Glass Air Low E1-GBG	0.33	0.55	0.63	51	
11/16" Insulating Glass Air Low E1-SDLN <1"	0.33	0.55	0.63	51	
11/16" Insulating Glass Air Low E1-SDLS <1"	0.33	0.55	0.63	51	
11/16" Insulating Glass Argon Low E1	0.29	0.61	0.70	54	N
11/16" Insulating Glass Argon Low E1-GBG	0.29	0.55	0.63	54	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.29	0.55	0.63	54	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.29	0.55	0.63	54	N
11/16" Insulating Glass Low E2 Air	0.32	0.37	0.64	51	NC
11/16" Insulating Glass Low E2 Air-GBG	0.32	0.34	0.57	51	NC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.32	0.34	0.57	51	NC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.32	0.34	0.57	51	NC
11/16" Insulating Glass Low E2 Argon	0.28	0.37	0.64	55	N,NC
11/16" Insulating Glass Low E2 Argon-GBG	0.28	0.33	0.57	55	N,NC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.28	0.33	0.57	55	N,NC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.28	0.33	0.57	55	N,NC
11/16" Insulating Glass Low E3 Air	0.32	0.25	0.57	52	NC,SC,S
11/16" Insulating Glass Low E3 Air-GBG	0.32	0.23	0.51	52	NC,SC,S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.23	0.51	52	NC,SC,S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.32	0.23	0.51	52	NC,SC,S
11/16" Insulating Glass Low E3 Argon	0.27	0.24	0.57	55	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-GBG	0.27	0.22	0.51	55	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.27	0.22	0.51	55	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.27	0.22	0.51	55	N,NC,SC,S

Integrity Direct Glaze Transom/Polygon

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR*
11/16" Insulating Glass Air Low E1	0.32	0.58	0.67	55	N
11/16" Insulating Glass Air Low E1-GBG	0.32	0.52	0.60	55	N
11/16" Insulating Glass Air Low E1-SDLN <1"	0.32	0.52	0.60	55	N
11/16" Insulating Glass Air Low E1-SDLS <1"	0.32	0.52	0.60	55	N
11/16" Insulating Glass Argon Low E1	0.28	0.58	0.67	59	N
11/16" Insulating Glass Argon Low E1-GBG	0.28	0.52	0.60	59	N
11/16" Insulating Glass Argon Low E1-SDLN <1"	0.28	0.52	0.60	59	N
11/16" Insulating Glass Argon Low E1-SDLS <1"	0.28	0.52	0.60	59	N
11/16" Insulating Glass Low E2 Air	0.31	0.35	0.60	55	N,NC
11/16" Insulating Glass Low E2 Air-GBG	0.31	0.32	0.54	55	NC
11/16" Insulating Glass Low E2 Air-SDLN <1"	0.31	0.32	0.54	55	NC
11/16" Insulating Glass Low E2 Air-SDLS <1"	0.31	0.32	0.54	55	NC
11/16" Insulating Glass Low E2 Argon	0.27	0.35	0.60	59	N,NC
11/16" Insulating Glass Low E2 Argon-GBG	0.27	0.32	0.54	59	N,NC
11/16" Insulating Glass Low E2 Argon-SDLN <1"	0.27	0.32	0.54	59	N,NC
11/16" Insulating Glass Low E2 Argon-SDLS <1"	0.27	0.32	0.54	59	N,NC
11/16" Insulating Glass Low E3 Air	0.30	0.24	0.54	56	N,NC,SC,S
11/16" Insulating Glass Low E3 Air-GBG	0.30	0.21	0.49	56	N,NC,SC,S
11/16" Insulating Glass Low E3 Air-SDLN <1"	0.30	0.21	0.49	56	N,NC,SC,S
11/16" Insulating Glass Low E3 Air-SDLS <1"	0.30	0.21	0.49	56	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon	0.26	0.23	0.54	60	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-GBG	0.26	0.21	0.49	60	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-SDLN <1"	0.26	0.21	0.49	60	N,NC,SC,S
11/16" Insulating Glass Low E3 Argon-SDLS <1"	0.26	0.21	0.49	60	N,NC,SC,S
*11/8" Tripane Low E2 Air Low E1	0.21	0.32	0.53	68	N,NC
*11/8" Tripane Low E2 Air Low E1-GBG	0.21	0.29	0.48	68	N,NC,SC
*11/8" Tripane Low E2 Air Low E1-SDLN <1"	0.21	0.29	0.48	68	N,NC,SC
*11/8" Tripane Low E2 Air Low E1-SDLS <1"	0.21	0.29	0.48	68	N,NC,SC
*11/8" Tripane Low E2 Argon Low E1	0.17	0.32	0.53	72	N,NC
*11/8" Tripane Low E2 Argon Low E1-GBG	0.17	0.29	0.48	72	N,NC,SC
*11/8" Tripane Low E2 Argon Low E1-SDLN <1"	0.17	0.29	0.48	72	N,NC,SC
*11/8" Tripane Low E2 Argon Low E1-SDLS <1"	0.17	0.29	0.48	72	N,NC,SC

*Tripane not available in Direct Glaze Double Hung frame.

THERMAL PERFORMANCE

Inswing French Door

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air Low E1	0.33	0.45	0.51	58	
3/4" Insulating Glass Air Low E1-GBG	0.33	0.39	0.44	58	
3/4" Insulating Glass Air Low E1-SDLN <1"	0.33	0.39	0.44	58	
3/4" Insulating Glass Air Low E1-SDLS <1"	0.33	0.39	0.44	58	
3/4" Insulating Glass Argon Low E1	0.30	0.45	0.51	61	
3/4" Insulating Glass Argon Low E1-GBG	0.30	0.39	0.44	61	
3/4" Insulating Glass Argon Low E1-SDLN <1"	0.30	0.39	0.44	61	
3/4" Insulating Glass Argon Low E1-SDLS <1"	0.30	0.39	0.44	61	
3/4" Insulating Glass Low E2 Air	0.33	0.27	0.46	58	
3/4" Insulating Glass Low E2 Air-GBG	0.33	0.24	0.40	58	
3/4" Insulating Glass Low E2 Air-SDLN <1"	0.33	0.24	0.40	58	
3/4" Insulating Glass Low E2 Air-SDLS <1"	0.33	0.24	0.40	58	
3/4" Insulating Glass Low E2 Argon	0.30	0.27	0.46	61	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-GBG	0.30	0.24	0.40	61	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-SDLN <1"	0.30	0.24	0.40	61	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-SDLS <1"	0.30	0.24	0.40	61	N, NC, SC, S
3/4" Insulating Glass Low E3 Air	0.32	0.18	0.42	58	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-GBG	0.32	0.16	0.36	58	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.16	0.36	58	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-SDLS <1"	0.32	0.16	0.36	58	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon	0.29	0.18	0.42	62	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-GBG	0.29	0.16	0.36	62	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-SDLN <1"	0.29	0.16	0.36	62	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-SDLS <1"	0.29	0.16	0.36	62	N, NC, SC, S

Outwing French Door

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air Low E1	0.34	0.46	0.51	56	
3/4" Insulating Glass Air Low E1-GBG	0.34	0.40	0.44	56	
3/4" Insulating Glass Air Low E1-SDLN <1"	0.34	0.40	0.44	56	
3/4" Insulating Glass Air Low E1-SDLS <1"	0.33	0.39	0.44	57	
3/4" Insulating Glass Argon Low E1	0.32	0.46	0.51	59	
3/4" Insulating Glass Argon Low E1-GBG	0.32	0.40	0.44	59	
3/4" Insulating Glass Argon Low E1-SDLN <1"	0.32	0.40	0.44	59	
3/4" Insulating Glass Argon Low E1-SDLS <1"	0.31	0.39	0.44	61	
3/4" Insulating Glass Low E2 Air	0.33	0.28	0.47	58	
3/4" Insulating Glass Low E2 Air-GBG	0.33	0.24	0.40	58	
3/4" Insulating Glass Low E2 Air-SDLN <1"	0.33	0.24	0.40	58	
3/4" Insulating Glass Low E2 Air-SDLS <1"	0.33	0.24	0.40	58	
3/4" Insulating Glass Low E2 Argon	0.30	0.28	0.47	61	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-GBG	0.30	0.24	0.40	61	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-SDLN <1"	0.30	0.24	0.40	61	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-SDLS <1"	0.30	0.24	0.40	61	N, NC, SC, S
3/4" Insulating Glass Low E3 Air	0.33	0.19	0.42	58	
3/4" Insulating Glass Low E3 Air-GBG	0.33	0.17	0.36	58	
3/4" Insulating Glass Low E3 Air-SDLN <1"	0.33	0.17	0.36	58	
3/4" Insulating Glass Low E3 Air-SDLS <1"	0.34	0.17	0.36	58	
3/4" Insulating Glass Low E3 Argon	0.30	0.18	0.42	62	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-GBG	0.30	0.16	0.36	62	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-SDLN <1"	0.30	0.16	0.36	62	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-SDLS <1"	0.31	0.16	0.36	62	N, NC, SC, S

Sliding French Door

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air Low E1	0.33	0.48	0.55	54	
3/4" Insulating Glass Air Low E1-GBG	0.33	0.42	0.47	54	
3/4" Insulating Glass Air Low E1-SDLN <1"	0.33	0.42	0.47	54	
3/4" Insulating Glass Air Low E1-SDLS <1"	0.33	0.42	0.47	54	
3/4" Insulating Glass Argon Low E1	0.30	0.48	0.55	57	
3/4" Insulating Glass Argon Low E1-GBG	0.30	0.42	0.47	57	
3/4" Insulating Glass Argon Low E1-SDLN <1"	0.30	0.42	0.47	57	
3/4" Insulating Glass Argon Low E1-SDLS <1"	0.30	0.42	0.47	57	
3/4" Insulating Glass Low E2 Air	0.33	0.29	0.50	54	
3/4" Insulating Glass Low E2 Air-GBG	0.33	0.26	0.43	54	
3/4" Insulating Glass Low E2 Air-SDLN <1"	0.33	0.26	0.43	54	
3/4" Insulating Glass Low E2 Air-SDLS <1"	0.33	0.26	0.43	54	
3/4" Insulating Glass Low E2 Argon	0.30	0.29	0.50	57	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-GBG	0.30	0.26	0.43	57	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-SDLN <1"	0.30	0.26	0.43	57	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-SDLS <1"	0.30	0.26	0.43	57	N, NC, SC, S
3/4" Insulating Glass Low E3 Air	0.32	0.20	0.45	54	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-GBG	0.32	0.17	0.39	54	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.17	0.39	54	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-SDLS <1"	0.32	0.17	0.39	54	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon	0.29	0.19	0.45	57	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-GBG	0.29	0.17	0.39	57	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-SDLN <1"	0.29	0.17	0.39	57	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-SDLS <1"	0.29	0.17	0.39	57	N, NC, SC, S

Sliding Patio Door

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air Low E1	0.33	0.55	0.64	54	
3/4" Insulating Glass Air Low E1-GBG	0.33	0.49	0.56	54	
3/4" Insulating Glass Air Low E1-SDLN <1"	0.33	0.49	0.56	54	
3/4" Insulating Glass Air Low E1-SDLS <1"	0.33	0.49	0.56	54	
3/4" Insulating Glass Argon Low E1	0.29	0.56	0.64	57	
3/4" Insulating Glass Argon Low E1-GBG	0.29	0.49	0.56	57	
3/4" Insulating Glass Argon Low E1-SDLN <1"	0.29	0.49	0.56	57	
3/4" Insulating Glass Argon Low E1-SDLS <1"	0.29	0.49	0.56	57	
3/4" Insulating Glass Low E2 Air	0.32	0.34	0.58	54	
3/4" Insulating Glass Low E2 Air-GBG	0.32	0.30	0.51	54	N, NC, SC, S
3/4" Insulating Glass Low E2 Air-SDLN <1"	0.32	0.30	0.51	54	N, NC, SC, S
3/4" Insulating Glass Low E2 Air-SDLS <1"	0.32	0.30	0.51	54	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon	0.29	0.34	0.58	57	
3/4" Insulating Glass Low E2 Argon-GBG	0.29	0.30	0.51	57	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-SDLN <1"	0.29	0.30	0.51	57	N, NC, SC, S
3/4" Insulating Glass Low E2 Argon-SDLS <1"	0.29	0.30	0.51	57	N, NC, SC, S
3/4" Insulating Glass Low E3 Air	0.32	0.23	0.52	55	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-GBG	0.32	0.20	0.46	55	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-SDLN <1"	0.32	0.20	0.46	55	N, NC, SC, S
3/4" Insulating Glass Low E3 Air-SDLS <1"	0.32	0.20	0.46	55	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon	0.28	0.22	0.52	58	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-GBG	0.28	0.20	0.46	58	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-SDLN <1"	0.28	0.20	0.46	58	N, NC, SC, S
3/4" Insulating Glass Low E3 Argon-SDLS <1"	0.28	0.20	0.46	58	N, NC, SC, S

These ratings do not apply to the OXXO units. Contact Integrity representative for ratings.

Thermal and solar values are subject to update. Values are generated in accordance with NFRC 100 and other applicable NFRC procedures. Argon gas is not available for the altitudes that require capillary tubes. Values are select glazing options, for those options not listed please contact the factory.

ENERGY STAR® is United States ENERGY STAR Program only. Please contact your local Integrity retailer for information on Canadian qualifications.

SHGC = Solar Heat Gain Coefficient
 SDLN = Without Spacer Bar
 VT = Visible Light Transmittance
 SDLS = With Spacer Bar
 CR = Condensation Resistance

ENERGY STAR codes:
 N = Northern
 C = North Central
 SC = South Central
 S = Southern

WDMA Standards

The Window and Door Manufacturers Association (WDMA) in conjunction with other organizations in the industry has developed standards that make it easy to compare windows from different manufacturers, testing product performance regarding air and water infiltration, as well as physical loads on the exterior and interior (very important when you consider the pressure differentials that can occur in coastal areas, as well as forced entry resistance). Integrity products are rated in accordance with the North American Fenestration Standard (AAMA/WDMA CSA 101/I.S.2/A440) and are certified in compliance with the WDMA Hallmark program.

Performance Grade (PG)

A performance grade rating, as created by AAMA/WDMA/CSA Standards, is a measure of the overall tested performance of a window or door that addresses all of the applicable requirements of the Standards. A product receives a PG rating if it meets all performance requirements, including: air infiltration resistance, water penetration resistance, structural performance, ease of operation, durability, weatherability, and resistance to forced entry. The higher a PG number a product has, the better the performance. As a frame of reference: PG40 means that a product is tested structurally to a minimum 60 pounds per square foot (psf) and must withstand water penetration under conditions equal to 8 inches of rain per hour driven by a minimum of 50 mph winds.

Casement Windows	LC-PG50	Round Top Windows	SP-PG50
Casement Picture	LC-PG50	Round Top Windows by Marvin	LC-PG50
Casement Insert Window	LC-PG50-C	Direct Glazed Windows	LC-PG50
Casement Insert Picture	LC-PG50-AP	Sliding Patio Doors	R-PG30
Awning Windows	LC-PG50	Inswing French Doors	LC-PG30
Awning Insert Windows	LC-PG50-AP	Sliding French Doors	LC-PG40***
Double Hung Windows	LC-PG40*	Outswing French Doors	LC-PG50
Double Hung Picture	LC-PG40*		
Double Hung Insert Windows	LC-PG40**		
Double Hung Insert Picture	LC-PG40		
Gliders	LC-PG30		

* All Double Hung (full frame only) units taller than CN76 have a rating of LC-PG35, High Performance Kit: Optional high performance upgrade kit increases design pressure rating of units to LC-PG50, and units taller than CN76 increases to LC-PG40.

**ITIDH 4284 is LC-PG40, all other larger sizes are LC-PG35.

***ISFD 2 panel call sizes larger than 8068 are LC-PG30, ISFD (OXXO) is LC-PG30, All other ISFD units are LC-PG40.



SOUND TRANSMISSION

PRODUCT TYPE	EXTERIOR GLAZING	AIR SPACE	INTERIOR GLAZING	STC	OITC
WOOD ULTREX CASEMENT/AWNING					
ICA	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	28	24
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	32	28
	*1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	28	24
ICAP	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	27	23
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	31	27
	*1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	28	21
IAWN	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	29	24
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	32	27
	*1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	30	24
WOOD ULTREX DOUBLE HUNG					
ITDH	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	27	23
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	30	26
ITDHP	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	27	23
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	31	26
WOOD ULTREX INSERT DOUBLE HUNG					
ITIDH	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	26	23
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	30	27
ITIDHP	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	27	23
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	31	26
WOOD ULTREX GLIDER					
ITGL	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	28	23
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	30	27

PRODUCT TYPE	EXTERIOR GLAZING	AIR SPACE	INTERIOR GLAZING	STC	OITC
WOOD ULTREX SLIDING PATIO DOOR					
ISPD	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	26	22
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	28	26
WOOD ULTREX INSWING FRENCH DOOR					
IIFD	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	29	24
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	32	27
WOOD ULTREX OUTSWING FRENCH DOOR					
IOFD	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	30	24
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	32	27
WOOD ULTREX SLIDING FRENCH DOOR					
ISFD	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	29	24
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	31	27
ISFD (OXXO)	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	28	24
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	31	27
WOOD ULTREX DIRECT GLAZE					
IDG - CA	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	28	23
	1/8" (3.1)	17/32" (13.0)	3/16" (4.7)	32	27
IDG - DH/DOOR	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	27	22
	1/8" (3.1)	17/32" (13.0)	3/16" (4.7)	31	26

Sound Transmission Class (STC) and Outdoor-Indoor Transmission Class (OITC) values are subject to change. Values are generated in accordance with ASTM E90(09) and ASTM 1332(03) test specifications. Tested glass types available in units using 3.1 mm standard glass thickness. Contact your Integrity® retailer for details.

* Tripane Glass - One additional air space and interior glazing.

ALTITUDE GUIDELINES

WOOD-ULTREX

Casement

ALTITUDE LIMITS (FEET)

UNIT SIZE	17	21	25	29	33	37	
31	Annealed	4000	5000	6000	7000	8000	8000
	Tempered	7000	9000	10000	10000	10000	10000
35	Annealed	4000	5000	6000	7000	8000	9000
	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	10000	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

Casement STC

ALTITUDE LIMITS (FEET)

UNIT SIZE	17	21	25	29	33	37	
31	Annealed	3000	4000	5000	6000	7000	7000
	Tempered	6000	8000	9000	10000	10000	10000
35	Annealed	3000	4000	5000	6000	7000	8000
	Tempered	6000	8000	10000	10000	10000	10000
39	Annealed	3000	4000	5000	6000	7000	8000
	Tempered	6000	9000	10000	10000	10000	10000
43	Annealed	3000	4000	5000	6000	7000	8000
	Tempered	7000	9000	10000	10000	10000	10000
47	Annealed	3000	4000	5000	6000	8000	9000
	Tempered	7000	10000	10000	10000	10000	10000
55	Annealed	3000	4000	5000	7000	8000	9000
	Tempered	7000	10000	10000	10000	10000	10000
59	Annealed	3000	4000	5000	7000	8000	9000
	Tempered	7000	10000	10000	10000	10000	10000
63	Annealed	3000	4000	5000	7000	8000	9000
	Tempered	7000	10000	10000	10000	10000	10000
71	Annealed	NA	NA	NA	NA	NA	NA
	Tempered	7000	10000	10000	10000	10000	10000

WOOD-ULTREX

Casement Tripane

ALTITUDE LIMITS (FEET)

UNIT SIZE	17	21	25	29	33	37	
31	Annealed	NA	NA	4000	5000	5000	6000
	Tempered	NA	NA	8000	9000	9000	10000
35	Annealed	3000	3000	4000	5000	6000	8000
	Tempered	5000	7000	8000	9000	10000	10000
39	Annealed	3000	3000	4000	5000	6000	7000
	Tempered	6000	7000	9000	10000	10000	10000
43	Annealed	3000	3000	4000	5000	6000	7000
	Tempered	6000	8000	10000	10000	10000	10000
47	Annealed	3000	3000	4000	5000	6000	7000
	Tempered	6000	8000	10000	10000	10000	10000
55	Annealed	3000	3000	4000	5000	6000	7000
	Tempered	6000	9000	10000	10000	10000	10000
59	Annealed	3000	3000	4000	5000	6000	7000
	Tempered	6000	9000	10000	10000	10000	10000
63	Annealed	3000	3000	4000	5000	7000	8000
	Tempered	7000	10000	10000	10000	10000	10000
71	Annealed	3000	3000	4000	NA	NA	NA
	Tempered	7000	10000	10000	10000	10000	10000

WOOD-ULTREX

Casement Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE	17	21	25	29	33	37	41	49	57	73	
16	Annealed	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	NA	NA	NA	NA	NA	NA	NA	NA	NA	
19	Annealed	4000	4000	4000	5000	5000	5000	5000	5000	5000	5000
	Tempered	NA	NA	NA	NA	NA	NA	NA	NA	NA	

WOOD-ULTREX

Casement Transom STC

ALTITUDE LIMITS (FEET)

UNIT SIZE	17	21	25	29	33	37	41	49	57	73
16	Annealed	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	NA	NA	NA	NA	NA	NA	NA	NA
19	Annealed	3000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	NA	NA	NA	NA	NA	NA	NA	NA	NA

WOOD-ULTREX

Casement Transom Tripane

ALTITUDE LIMITS (FEET)

UNIT SIZE	17	21	25	29	33	37	41	49	57	73
16	Annealed	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Annealed	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	NA	NA	NA	NA	NA	NA	NA	NA	NA

WOOD-ULTREX

Casement Picture

ALTITUDE LIMITS (FEET)

UNIT SIZE	17	21	25	29	33	37	41	49	57	73
19	Annealed	4000	4000	4000	5000	5000	5000	5000	5000	5000
	Tempered	5000	6000	7000	8000	9000	9000	10000	10000	10000
23	Annealed	4000	5000	5000	6000	6000	6000	6000	6000	6000
	Tempered	6000	7000	9000	10000	10000	10000	10000	10000	10000
27	Annealed	4000	5000	6000	7000	7000	7000	7000	8000	7000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000
31	Annealed	4000	5000	6000	7000	8000	8000	8000	9000	9000
	Tempered	7000	9000	10000	10000	10000	10000	10000	10000	10000
35	Annealed	4000	5000	6000	7000	8000	9000	8000	10000	10000
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000	10000
39	Annealed	4000	5000	6000	7000	9000	10000	10000	10000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000	10000	10000
43	Annealed	4000	5000	6000	8000	9000	10000	10000	10000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000	10000	10000
47	Annealed	4000	5000	6000	8000	9000	10000	10000	10000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000	10000	10000
55	Annealed	4000	5000	6000	8000	9000	10000	10000	10000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000	10000
59	Annealed	4000	5000	6000	8000	9000	10000	10000	10000	NA
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000	10000
63	Annealed	4000	5000	6000	8000	10000	10000	10000	10000	NA
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000	NA
71	Annealed	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000	NA

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.

ALTITUDE GUIDELINES

WOOD-ULTREX®

Casement Picture STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		17	21	25	29	33	37	41	49	57	73
19	Annealed	3000	4000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	4000	5000	6000	7000	7000	8000	8000	9000	10000	10000
23	Annealed	3000	4000	4000	4000	5000	5000	5000	5000	5000	5000
	Tempered	5000	6000	7000	8000	9000	10000	10000	10000	10000	10000
27	Annealed	3000	4000	5000	5000	6000	6000	6000	6000	6000	NA
	Tempered	5000	7000	8000	10000	10000	10000	10000	10000	10000	10000
31	Annealed	3000	4000	5000	6000	7000	7000	7000	7000	7000	NA
	Tempered	6000	8000	9000	10000	10000	10000	10000	10000	10000	10000
35	Annealed	3000	4000	5000	6000	7000	8000	8000	8000	9000	NA
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	10000
39	Annealed	3000	4000	5000	6000	7000	8000	9000	10000	10000	NA
	Tempered	6000	9000	10000	10000	10000	10000	10000	10000	10000	10000
43	Annealed	3000	4000	5000	6000	7000	8000	9000	10000	10000	NA
	Tempered	7000	9000	10000	10000	10000	10000	10000	10000	10000	NA
47	Annealed	3000	4000	5000	6000	8000	9000	10000	10000	10000	NA
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000	10000	NA
55	Annealed	3000	4000	5000	7000	8000	9000	10000	10000	NA	NA
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000	NA	NA
59	Annealed	3000	4000	5000	7000	8000	9000	10000	NA	NA	NA
	Tempered	7000	10000	10000	10000	10000	10000	10000	NA	NA	NA
63	Annealed	3000	4000	5000	7000	8000	9000	10000	NA	NA	NA
	Tempered	7000	10000	10000	10000	10000	10000	10000	NA	NA	NA
71	Annealed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Tempered	7000	10000	10000	10000	10000	10000	10000	NA	NA	NA

WOOD-ULTREX

Casement Picture Tripane

ALTITUDE LIMITS (FEET)

UNIT SIZE		17	21	25	29	33	37	41	49	57	73
19	Annealed	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	4000	5000	6000	6000	7000	7000	8000	9000	9000
23	Annealed	3000	3000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	4000	5000	6000	7000	8000	8000	9000	10000	10000	10000
27	Annealed	3000	3000	4000	4000	5000	5000	5000	5000	5000	5000
	Tempered	5000	6000	7000	8000	8000	9000	10000	10000	10000	10000
31	Annealed	3000	3000	4000	5000	5000	6000	6000	6000	6000	6000
	Tempered	5000	6000	8000	8000	9000	10000	10000	10000	10000	10000
35	Annealed	3000	3000	4000	5000	6000	6000	7000	7000	7000	7000
	Tempered	5000	7000	8000	9000	10000	10000	10000	10000	10000	10000
39	Annealed	3000	3000	4000	5000	6000	7000	7000	8000	8000	8000
	Tempered	6000	7000	9000	10000	10000	10000	10000	10000	10000	10000
43	Annealed	3000	3000	4000	5000	6000	7000	8000	8000	9000	9000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	10000
47	Annealed	3000	3000	4000	5000	6000	7000	8000	9000	10000	NA
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	9000
55	Annealed	3000	3000	4000	5000	6000	7000	8000	10000	10000	10000
	Tempered	6000	9000	10000	10000	10000	10000	10000	10000	10000	10000
59	Annealed	3000	3000	4000	5000	6000	7000	8000	9000	10000	10000
	Tempered	6000	9000	10000	10000	10000	10000	10000	10000	10000	10000
63	Annealed	3000	3000	4000	5000	7000	8000	8000	9000	10000	NA
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000	10000	NA
71	Annealed	3000	3000	4000	NA	NA	NA	9000	9000	10000	NA
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000	10000	NA

WOOD-ULTREX

Casement Direct Glaze

ALTITUDE LIMITS (FEET)

UNIT SIZE	73	
16	Annealed	4000
	Tempered	NA

WOOD-ULTREX

Casement DG STC

ALTITUDE LIMITS (FEET)

UNIT SIZE	73	
16	Annealed	3000
	Tempered	NA

WOOD-ULTREX

Awning

ALTITUDE LIMITS (FEET)

UNIT SIZE		25	29	33	37	41	49
19	Annealed	4000	5000	5000	5000	5000	5000
	Tempered	7000	8000	9000	9000	10000	10000
23	Annealed	5000	6000	6000	6000	6000	6000
	Tempered	9000	10000	10000	10000	10000	10000
27	Annealed	6000	7000	7000	7000	7000	7000
	Tempered	10000	10000	10000	10000	10000	10000
35	Annealed	6000	7000	8000	9000	8000	10000
	Tempered	10000	10000	10000	10000	10000	10000
39	Annealed	6000	7000	9000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000
47	Annealed	6000	8000	9000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000

WOOD-ULTREX

Awning STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		25	29	33	37	41	49
19	Annealed	4000	4000	4000	4000	4000	4000
	Tempered	6000	7000	7000	8000	8000	9000
23	Annealed	4000	4000	5000	5000	5000	5000
	Tempered	7000	8000	9000	10000	10000	10000
27	Annealed	5000	5000	6000	6000	6000	6000
	Tempered	8000	10000	10000	10000	10000	10000
35	Annealed	5000	6000	7000	8000	8000	8000
	Tempered	10000	10000	10000	10000	10000	10000
39	Annealed	5000	6000	7000	8000	9000	10000
	Tempered	10000	10000	10000	10000	10000	10000
47	Annealed	5000	6000	8000	9000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000

WOOD-ULTREX

Awning Tripane

ALTITUDE LIMITS (FEET)

UNIT SIZE		25	29	33	37	41	49
19	Annealed	3000	3000	3000	3000	3000	3000
	Tempered	5000	6000	6000	7000	7000	8000
23	Annealed	4000	4000	4000	4000	4000	4000
	Tempered	6000	7000	8000	8000	9000	10000
27	Annealed	4000	4000	5000	5000	5000	5000
	Tempered	7000	8000	9000	9000	10000	10000
35	Annealed	4000	5000	6000	6000	7000	7000
	Tempered	8000	9000	10000	10000	10000	10000
39	Annealed	4000	5000	6000	7000	7000	8000
	Tempered	9000	10000	10000	10000	10000	10000
47	Annealed	4000	5000	6000	7000	8000	NA
	Tempered	10000	10000	10000	10000	10000	NA

ALTITUDE GUIDELINES

WOOD-ULTREX

Double Hung Picture Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		22	26	30	32	34	36	38	42	50	54	62
16	Annealed	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
24	Annealed	5000	5000	6000	6000	6000	6000	6000	6000	6000	6000	6000
	Tempered	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

WOOD-ULTREX

Double Hung Picture Transom STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		22	26	30	32	34	36	38	42	50	54	62
16	Annealed	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	5000	5000	5000	5000	6000	6000	6000	6000	6000	6000
24	Annealed	4000	4000	4000	4000	5000	5000	5000	5000	5000	5000	5000
	Tempered	6000	7000	8000	8000	9000	10000	10000	10000	10000	10000	10000

WOOD-ULTREX

Glider

ALTITUDE LIMITS (FEET)

UNIT SIZE		36	48	60	72	72/XOX	84/XOX	96/XOX
24	Annealed	4000	5000	6000	6000	4000	5000	5000
	Tempered	7000	9000	10000	10000	7000	8000	9000
36	Annealed	5000	6000	9000	9000	5000	5000	6000
	Tempered	9000	10000	10000	10000	9000	10000	10000
42	Annealed	5000	7000	10000	10000	5000	6000	7000
	Tempered	10000	10000	10000	10000	10000	10000	10000
48	Annealed	5000	7000	10000	10000	5000	6000	7000
	Tempered	10000	10000	10000	10000	10000	10000	10000
60	Annealed	5000	7000	10000	10000	5000	6000	7000
	Tempered	10000	10000	10000	10000	10000	10000	10000

WOOD-ULTREX

Glider STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		36	48	60	72	72/XOX	84/XOX	96/XOX
24	Annealed	4000	4000	4000	5000	4000	4000	4000
	Tempered	6000	7000	9000	10000	6000	7000	7000
36	Annealed	4000	5000	7000	8000	4000	4000	5000
	Tempered	8000	10000	10000	10000	8000	9000	10000
42	Annealed	4000	5000	7000	9000	4000	4000	5000
	Tempered	8000	10000	10000	10000	8000	10000	10000
48	Annealed	4000	5000	7000	9000	4000	4000	5000
	Tempered	9000	10000	10000	10000	9000	10000	10000
60	Annealed	4000	5000	7000	9000	4000	5000	N/A
	Tempered	10000	10000	10000	10000	10000	10000	N/A

WOOD-ULTREX

Inswing French Door

ALTITUDE LIMITS (FEET)

UNIT SIZE		26	28	30	50	54	60
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	10000

WOOD-ULTREX

Inswing French Door DG Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		36	72
16	Annealed	4000	4000
	Tempered	N/A	N/A

WOOD-ULTREX

Inswing French Door DG Transom STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		36	72
16	Annealed	3000	3000
	Tempered	N/A	N/A

ALTITUDE GUIDELINES

INTEGRITY® FROM MARVIN®
WOOD-ULTREX® SERIES

WOOD-ULTREX

Inswing French Door STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		26	28	30	50	54	60
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	10000

WOOD-ULTREX

Outswing French Door

ALTITUDE LIMITS (FEET)

UNIT SIZE		26	28	30	50	54	60
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	10000

WOOD-ULTREX

Outswing French Door STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		26	28	30	50	54	60
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	10000

WOOD-ULTREX

Sliding French Door

ALTITUDE LIMITS (FEET)

UNIT SIZE		50	60	76	80	90	100	120	160
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000

WOOD-ULTREX

Sliding French Door STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		50	60	76	90	100	120
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000

WOOD-ULTREX

Sliding French Door DG Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		72
16	Annealed	4000
	Tempered	N/A

WOOD-ULTREX

Sliding French Door DG Transom STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		72
16	Annealed	3000
	Tempered	N/A

WOOD-ULTREX

Sliding Patio Door

ALTITUDE LIMITS (FEET)

UNIT SIZE		50	60	76	90
65	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000

WOOD-ULTREX

Sliding Patio Door STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		50	60	76	90
65	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000

WOOD-ULTREX

Sliding French Door DG Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		72
16	Annealed	4000
	Tempered	N/A

WOOD-ULTREX

Sliding Patio Door DG Transom STC

ALTITUDE LIMITS (FEET)

UNIT SIZE		72
16	Annealed	3000
	Tempered	N/A

ALTITUDE GUIDELINES

WOOD-ULTREX®
Marvin® Round Tops
 Made for Integrity
 ALTITUDE LIMITS (FEET)

UNIT SIZE	Annealed	Tempered
2499 ICA	5000	NA
2500 ICA	5000	NA
3301 ICA	4000	NA
3302 ICA	9000	NA
3320 ICA	5000	NA
3328 ICA	7000	NA
2118 ICA	4000	NA
2519 ICA	4000	NA
2526 ICA	6000	NA
2920 ICA	5000	NA
2928 ICA	6000	NA
3701 ICA	4000	NA
3702 ICA	9000	NA
3722 ICA	5000	NA
3729 ICA	7000	NA
3765 ICA	8000	10000
3777 ICA	7000	10000
4121 ICA	5000	NA
4128 ICA	7000	10000
4164 ICA	10000	10000
4921 ICA	5000	NA
4929 ICA	8000	10000
4965 ICA	10000	10000
5724 ICA	6000	NA
5731 ICA	9000	10000
5767 ICA	10000	10000
5771 ICA	10000	10000
5783 ICA	10000	10000

WOOD-ULTREX
Marvin Round Tops
 Made for Integrity
 ALTITUDE LIMITS (FEET)

UNIT SIZE	Annealed	Tempered
6523 ICA	6000	NA
6531 ICA	7000	NA
6567 ICA	7000	NA
7325 ICA	8000	NA
7333 ICA	5000	NA
7359 ICA	8000	NA
7369 ICA	8000	NA
2999 ITDH	5000	NA
3000 ITDH	9000	NA
3002 ITDH	9000	NA
3021 ITDH	5000	NA
3399 ITDH	9000	NA
3400 ITDH	7000	NA
3421 ITDH	5000	NA
3599 ITDH	5000	NA
3600 ITDH	10000	NA
3622 ITDH	5000	NA
3636 ITDH	6000	NA
2602 ITDH	10000	10000
2619 ITDH	7000	NA
3820 ITDH	9000	10000
4202 ITDH	10000	10000
4222 ITDH	6000	NA
5222 ITDH	NA	10000
5266 ITDH	6000	NA
6025 ITDH	NA	10000
6032 ITDH	8000	NA
6069 ITDH	4000	NA

WOOD-ULTREX
Marvin Round Tops
 Made for Integrity
 ALTITUDE LIMITS (FEET)

UNIT SIZE	Annealed	Tempered
7626 ITDH	5000	NA
7670 ITDH	8000	NA
8429 ITDH	6000	NA
8473 ITDH	10000	10000
3248 ITDH	10000	10000
3601 ITDH	5000	NA
4201 ITDH	7000	10000
3802 ITDH	10000	10000
6824 ITDH	NA	10000
6868 ITDH	9000	10000
6869 ITDH	10000	NA
7225 ITDH	5000	NA
7233 ITDH	4000	7000
7259 ITDH	10000	10000
7269 ITDH	NA	10000
3002 ITDH/Door	8000	NA
6025 ITDH/Door	7000	NA
6032 ITDH/Door	9000	10000
6069 ITDH/Door	10000	10000
6824 ITDH/Door	6000	NA
6068 ITDH/Door	10000	10000
6069 ITDH/Door	10000	10000
7225 ITDH/Door	5000	NA
7233 ITDH/Door	7000	10000
7259 ITDH/Door	10000	10000
7269 ITDH/Door	NA	10000

WOOD-ULTREX
Integrity Round Top
 ALTITUDE LIMITS (FEET)

UNIT SIZE	Annealed	Tempered
7218 IRT ISPD	5000	NA
7236 IRT ISPD	10000	NA
7218 IRT ISFD	5000	NA
7236 IRT ISFD	10000	NA
7218 IRT IIFD	5000	NA
7236 IRT IIFD	10000	NA
7218 IRT IOFD	5000	NA
7236 IRT IOFD	10000	NA
7218 IRT Door	5000	NA
7236 IRT Door	10000	NA
2901 IRT ICA	4000	NA
2102 IRT ICA	5000	NA
2502 IRT ICA	7000	NA
2509 IRT ICA	8000	NA
2503 IRT ICA	10000	NA
7318 IRT ICA	4000	NA
3001 IRT ITDH	4000	NA
3401 IRT ITDH	4000	NA
3801 IRT ITDH	5000	NA
3402 IRT ITDH	10000	NA
3602 IRT ITDH	10000	NA
7218 IRT ITDH	5000	NA

ALTITUDE GUIDELINES

WOOD-ULTREX

Insert Double Hung - Annealed Glass ALTITUDE LIMITS (FEET)

Frame Size	18	21	25	28	31	34	38	54
28.5	4000	4000	4000	4000	4000	4000	4000	4000
38	4000	4000	4000	4000	4000	4000	4000	4000
46	4000	4000	5000	5000	5000	5000	5000	5000
52	4000	4000	5000	6000	6000	6000	6000	6000
58	4000	4000	5000	6000	7000	7000	7000	7000
64	4000	4000	5000	6000	7000	8000	8000	8000
72	4000	4000	5000	6000	7000	8000	9000	9000
84	4000	4000	5000	6000	7000	8000	9000	10000

WOOD-ULTREX

Insert Double Hung Picture/Transom Annealed Glass ALTITUDE LIMITS (FEET)

Frame Size	18	21	25	28	31	34	38	62
16.5	4000	4000	4000	4000	4000	4000	4000	4000
21.25	4000	4000	4000	4000	4000	4000	4000	4000
25.25	4000	4000	5000	5000	5000	5000	5000	5000
28.25	4000	4000	5000	6000	6000	6000	6000	6000
31.25	4000	4000	5000	6000	7000	7000	7000	7000
34.25	4000	4000	5000	6000	7000	8000	8000	8000
38.25	4000	4000	5000	6000	7000	8000	9000	9000
84	4000	4000	5000	6000	7000	8000	9000	10000

WOOD-ULTREX

Insert Double Hung - Tempered Glass ALTITUDE LIMITS (FEET)

Frame Size	18	20	21	23	25	26	54
28.5	4000	4000	4000	4000	4000	4000	4000
32	4000	4000	4000	4000	4000	4000	4000
36	5000	5000	5000	5000	5000	5000	5000
38	5000	5000	6000	6000	6000	6000	6000
42	5000	5000	6000	7000	7000	7000	7000
46	5000	5000	6000	7000	8000	8000	8000
48	5000	5000	6000	7000	8000	9000	9000
84	5000	5000	6000	7000	8000	9000	10000

WOOD-ULTREX

Insert Double Hung Picture/Transom Tempered Glass ALTITUDE LIMITS (FEET)

Frame Size	18	20	21	23	25	26	62
16.5	4000	4000	4000	4000	4000	4000	4000
18.25	4000	4000	4000	4000	4000	4000	4000
20.25	5000	5000	5000	5000	5000	5000	5000
21.25	5000	5000	6000	6000	6000	6000	6000
23.25	5000	5000	6000	7000	7000	7000	7000
25.25	5000	5000	6000	7000	8000	8000	8000
26.25	5000	5000	6000	7000	8000	9000	9000
84	5000	5000	6000	7000	8000	9000	10000

WOOD-ULTREX

Insert Double Hung - Annealed Glass STC ALTITUDE LIMITS (FEET)

Frame Size	18	20	26	29	33	36	39	42	54
28.5	3000	3000	3000	3000	3000	3000	3000	3000	3000
36	3000	3000	3000	3000	3000	3000	3000	3000	3000
48	3000	3000	4000	4000	4000	4000	4000	4000	4000
54	3000	3000	4000	5000	5000	5000	5000	5000	5000
62	3000	3000	4000	5000	6000	6000	6000	6000	6000
68	3000	3000	4000	5000	6000	7000	7000	7000	7000
74	3000	3000	4000	5000	6000	7000	8000	8000	8000
80	3000	3000	4000	5000	6000	7000	8000	9000	9000
84	3000	3000	4000	5000	6000	7000	8000	9000	10000

WOOD-ULTREX

Insert Double Hung Picture/Transom Annealed Glass STC ALTITUDE LIMITS (FEET)

Frame Size	18	20	26	29	33	36	39	42	62
16.5	3000	3000	3000	3000	3000	3000	3000	3000	3000
20.25	3000	3000	3000	3000	3000	3000	3000	3000	3000
26.25	3000	3000	4000	4000	4000	4000	4000	4000	4000
29.25	3000	3000	4000	5000	5000	5000	5000	5000	5000
33.25	3000	3000	4000	5000	6000	6000	6000	6000	6000
36.25	3000	3000	4000	5000	6000	7000	7000	7000	7000
39.25	3000	3000	4000	5000	6000	7000	8000	8000	8000
42.25	3000	3000	4000	5000	6000	7000	8000	9000	9000
84	3000	3000	4000	5000	6000	7000	8000	9000	10000

WOOD-ULTREX

Insert Double Hung - Tempered Glass STC ALTITUDE LIMITS (FEET)

Frame Size	18	20	22	24	25	27	29	54
28.5	4000	4000	4000	4000	4000	4000	4000	4000
36	4000	4000	4000	4000	4000	4000	4000	4000
40	4000	4000	5000	5000	5000	5000	5000	5000
44	4000	4000	5000	6000	6000	6000	6000	6000
46	4000	4000	5000	6000	7000	7000	7000	7000
50	4000	4000	5000	6000	7000	8000	8000	8000
54	4000	4000	5000	6000	7000	8000	9000	9000
84	4000	4000	5000	6000	7000	8000	9000	10000

WOOD-ULTREX

Insert Double Hung Picture/Transom- Tempered Glass STC ALTITUDE LIMITS (FEET)

Frame Size	18	20	22	24	25	27	29	62
16.5	4000	4000	4000	4000	4000	4000	4000	4000
20.25	4000	4000	4000	4000	4000	4000	4000	4000
22.25	4000	4000	5000	5000	5000	5000	5000	5000
24.25	4000	4000	5000	6000	6000	6000	6000	6000
25.25	4000	4000	5000	6000	7000	7000	7000	7000
27.25	4000	4000	5000	6000	7000	8000	8000	8000
29.25	4000	4000	5000	6000	7000	8000	9000	9000
84	4000	4000	5000	6000	7000	8000	9000	10000

Integrity Windows and Doors provides these elevation guidelines as a convenience to our customers. Integrity does not recommend installation above the elevation guidelines, and products installed above such elevations are not warranted. A variety of factors, including ambient temperature, altitude, and other conditions outside Integrity's control may cause glass deflection, distortion, or an increase in convexity of the insulating glass units. Deflection, distortion, and increased convexity are not considered product defects and are not covered under Integrity's general warranty; capillary tubes may minimize these effects. Integrity does not warrant the amount or percentage of argon or other inert gas present in insulating glass at any time after manufacture. Inert gas dissipates over time, and may be ineffective in products manufactured with capillary tubes. Thermal efficiencies vary with the application of the product. Integrity does not warrant a specific level of thermal efficiency will be achieved by inert gas, low emissivity coatings, or other product features. Determining the suitability and compliance with local or other applicable building codes or standards, of all building components, including the use of any Integrity product, and the design and installation of any flashing or sealing system, is the responsibility of the buyer, user, architect, contractor, installer, and/or other construction professional. Integrity will not be liable for any problem or damage relating to inappropriate or faulty building design or construction, maintenance, installation, or selection of products. Integrity does not warrant any product's compliance with local or other applicable building codes or standards, or its suitability for use in connection with a project seeking third party certification to any standard.

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



MADE IN AMERICA. 

©2015 Marvin® Windows and Doors. All rights reserved. ©Registered trademark of Marvin Windows and Doors. ENERGY STAR® and the ENERGY STAR mark are registered U.S. marks. Part #19981055.

