

The windows will be Marvin Integrity, All Ultrex. No mullions/grilles are called for, the finish is 'stone white'. Window styles are casement, sliders and fixed as shown on the elevations.



ULTREX® FIBERGLASS

QUITE POSSIBLY THE PERFECT BUILDING MATERIAL®



BUILD WITH INTEGRITY

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 third- and 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.



Third- and fourth-generation Marvin family members active at Marvin Windows and Doors.

From Susan Marvin:

"At Integrity from Marvin Windows and Doors, we didn't join the fiberglass windows and doors 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."

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Ultrex® fiberglass is Built to Perform® in every challenge that a window or door can face, and we can prove it. In this overview, we break down the performance properties of Ultrex fiberglass and prove why Integrity® windows and doors are the best choice for your next project.

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BUILT TO PERFORM®

Integrity® windows and doors are made with Ultrex® pultruded fiberglass, which outperforms and outlasts vinyl, roll-form aluminum and vinyl/wood composites. We use Ultrex and our proprietary pultrusion process to manufacture windows and doors that stand the test of time.

We are dedicated to leading the way in innovation and 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 a fast and efficient manufacturing and delivery system so our products are received quickly and when expected. We create products to be easily installed and operable with virtually no maintenance required.

THREE POWERFUL PRODUCT LINES



WOOD-ULTREX: Wood-Ultrex windows and doors feature exteriors of Ultrex fiberglass and beautiful, real-wood interiors made with finely milled pine.

ALL ULTREX: Windows and doors made with Ultrex fiberglass construction inside and out to provide exceptional strength and durability.

IMPACT: Window and door products made specifically for coastal conditions that can magnify the effects of weather on a home. Impact Zone 3 (IZ3) hurricane rated.

**THE MATERIAL
YOU CHOOSE FOR YOUR
WINDOWS AND DOORS
MATTERS**

WHAT IS ULTREX PULTRUDED FIBERGLASS?

Integrity windows and doors are built with Ultrex®, a highly durable, state-of-the-art, pultruded fiberglass that significantly outlasts and outperforms vinyl and vinyl/wood composites in virtually every way. This pioneering technology benefits from over 20 years of proven performance in the field.

"FIBERGLASS WINDOWS HAVE A 38% LONGER USEFUL LIFE EXPECTANCY THAN VINYL."⁽¹⁾

VINYL & VINYL/WOOD COMPOSITES (FIBREX®):

Vinyl is not very strong. It has a high rate of expansion and contraction and can get soft and brittle with changing temperatures. This can lead to sagging headers, seal failures, stress cracks and poor operation. Vinyl/wood composites, like Fibrex®, are 60% vinyl infused with wood fibers and struggle from the same durability and performance issues as their vinyl counterparts.

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

HOW STRONG? MONSTER TRUCK STRONG.

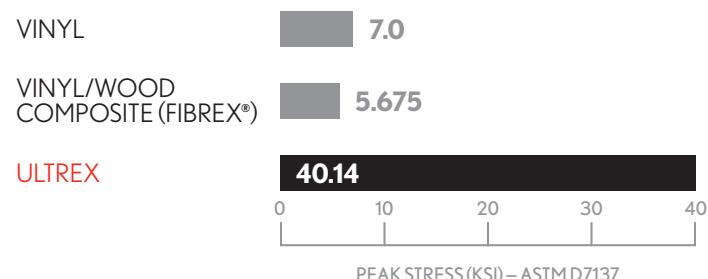
One square inch of our state-of-the-art building material can support

34,000 lbs.

That's more than the weight of TWO of these gigantic monster trucks.

TENSILE STRENGTH:

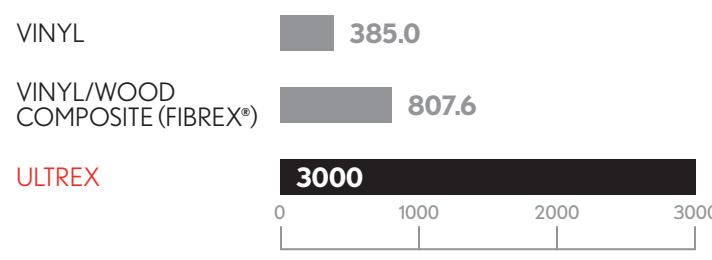
Stress-tested to the point of failure to avoid your stress being tested to anywhere near those levels.



FLEXURAL MODULUS:

Ultrex® is 8 times stronger than vinyl.

We know how far our material bends and flexes so you don't have to worry. That's confidence that vinyl and vinyl/wood composites, like Fibrex®, can't deliver.



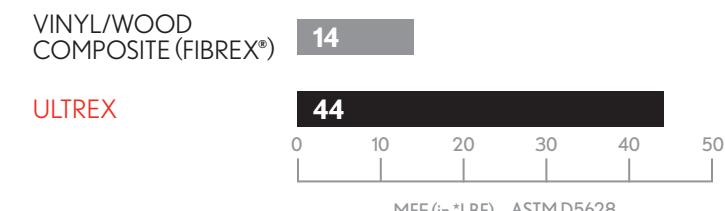
STRONG
AS
STEEL

8x
STRONGER
THAN VINYL

3x
STRONGER
THAN FIBREX®

IMPACT RESISTANCE:

Ultrex fiberglass can take a lot of hits – like wind, branches, rain, hail and even a direct hit from a baseball.



WHY DOES STRENGTH MATTER?

Stronger material is highly impact resistant and able to handle whatever life throws at it.

Stronger windows bend and flex less. This helps maintain the seals and window operation, year after year.

Stronger material will not crack or separate. It weathers better against everyday wear and stands the test of time.

**BECAUSE GOOD ENOUGH ISN'T
STRONG ENOUGH.**

HOW SUPERIOR IS THE FINISH?

IT'S THE BEST.

Endless rain? Got it. Heavy wind? No problem.

48,000 hours of sun⁽¹⁾

can't fade the superior finish of Ultrex® fiberglass.

WHY AN ACRYLIC FINISH?

The orange light to the right is acrylic, while the rest of the car is painted. The auto industry learned decades ago that acrylic lights outlast a painted finish. Similarly, Ultrex employs an acrylic finish to provide long-term color retention and durability.



BEAUTY THAT LASTS.

Our patented, high-performance, co-extruded capping process is unlike anything else in the industry and provides a thick, even acrylic finish that is free of pinholes, striations and imperfections and will resist scratches, fading and chalking to retain its original beauty.

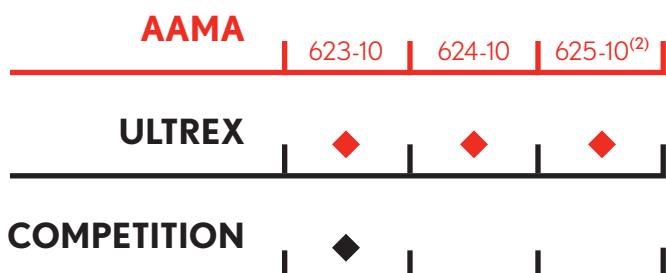


With a finish that is 3 times thicker than competitive finishes, Ultrex® was developed to not crack, dent, chip or peel.

INDUSTRY'S BEST FIBERGLASS FINISH

Ultrex is the *first and only* fiberglass finish to be third-party verified to AAMA 624-10 finish specifications.

The patented Ultrex finish performs so well that, unlike vinyl, we offer it in dark colors, like Ebony, without fear of increased heat loads, UV degradation or fading.



1. Average sunlight exposure per 10 years

2. The Ultrex patented coating system is listed under the AAMA Verified Components List (VCL) for AAMA 625-10, with the exception of the long-term outdoor weather performance test, which is currently in progress

It's easy to see the difference between the Ultrex patented, mechanically bonded finish and the competition's painted finish.

WHY DOES A SUPERIOR FINISH MATTER?

The patented finish resists scratches, chalking and fading even in dark colors.

Superior finish that is 100% paintable to match any home without impacting the protective properties of Ultrex.

Virtually maintenance-free – no sanding, scraping or painting.

BECAUSE A GOOD ENOUGH FINISH ISN'T ENOUGH.

HOW ENERGY EFFICIENT?

SO EFFICIENT, THE LOWER ENERGY BILLS WILL BE AS ATTRACTIVE AS THE WINDOWS AND DOORS.

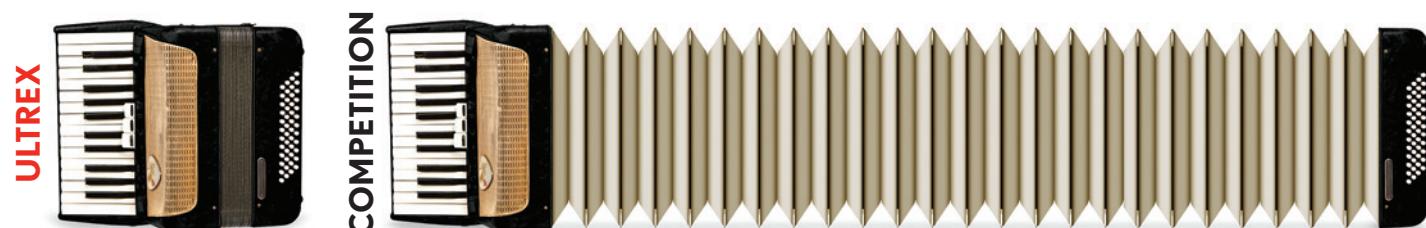
ULTREX CAN TAKE THE HEAT. OR COLD.

Constant expansion and contraction can gradually break down windows and doors, causing poor operation, leaky seals and a loss of structural integrity.

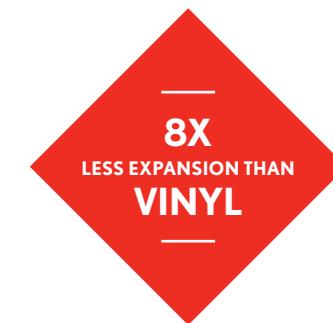
Ultrex® expands at virtually the same rate as glass and maintains a tight seal, so it's resistant to leaks, seal failures and stress cracks that can compromise energy efficiency and long-term performance.



Integrity® from Marvin® windows and doors combine the low conductivity and superior performance attributes of Ultrex with a selection of energy-efficient glazing options to deliver ENERGY STAR® qualified solutions and beyond.⁽¹⁾

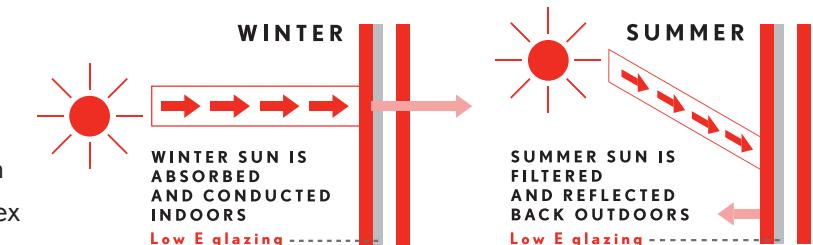


Heat and cold can take their toll on vinyl and vinyl/wood composites, causing welded corners to fail. Windows and doors constructed of Ultrex maintain tightly mitered corners and joinery throughout changing temperatures.



THERMAL CONDUCTIVITY

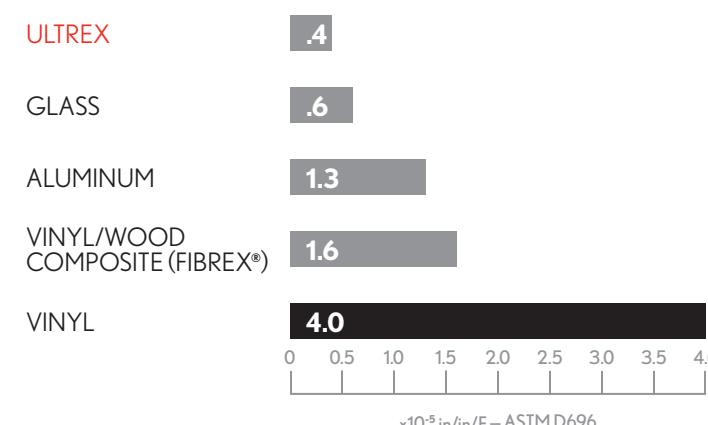
Windows with low conductivity reduce heat loss in homes, which translates to lower energy bills. Ultrex is 500 times less conductive than roll-form aluminum, so homes retain more heat in the winter and stay cooler in the summer.



Integrity's dual-pane windows made from Ultrex® with Low E coatings can reduce window heat loss, cut heating costs by 34% in cold climates and cut cooling costs by 38% in warm climates.⁽²⁾

EXPANSION AND CONTRACTION

Ultrex expands and contracts at virtually the same rate as glass and 8 times less than vinyl.



WHY DOES ENERGY EFFICIENCY MATTER?

Integrity's ENERGY STAR® qualified products can save 15% in energy costs and lower energy bills.⁽¹⁾

Ultrex helps keep heat inside during cooler weather and block the sun's rays during warmer weather.

Ultrex expands and contracts at virtually the same rate as glass to resist seal failures that can compromise energy efficiency.

BECAUSE EFFICIENT ENOUGH ISN'T ENOUGH.

1. ENERGY STAR at energystar.gov

2. Sustainable Energy Coalition at sustainableenergycoalition.org

HOW DURABLE? JOB SITE DURABLE.

We pioneered Ultrex fiberglass over 20 years ago.

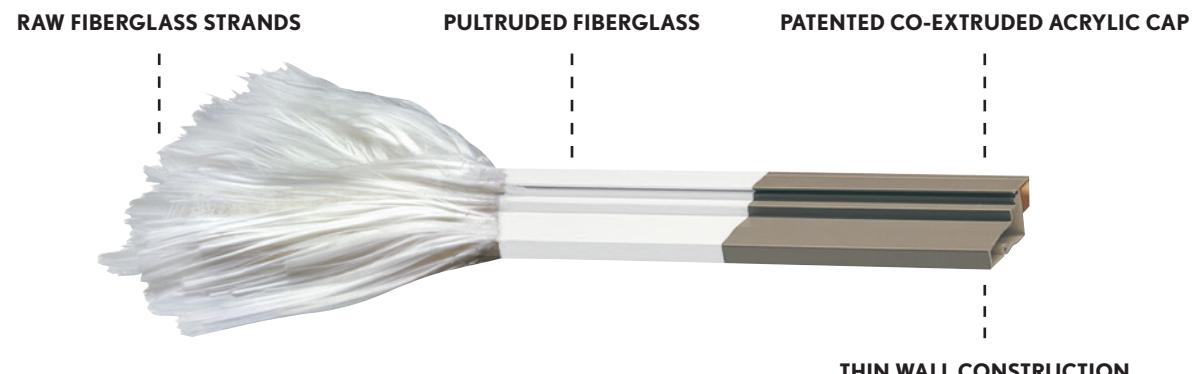
We created Ultrex® pultruded fiberglass to build windows and doors – strength usually reserved for boats, bridges and hardhats.⁽¹⁾

WHAT TOUGH IS MADE OF:

Fiberglass has an amazing strength-to-weight ratio, which is one of the reasons why it's the material of choice for boats, bridges, guardrails, ladders and hardhats.⁽¹⁾ It's highly durable, doesn't leak, corrode or rot and resists expanding and contracting in temperature swings. **Ultrex fiberglass is 8 times stronger** than vinyl and far more durable.

TOUGH. LONG-LASTING. UNBLEMISHED.

Just like the reputations of the contractors, builders and architects who use it. Ultrex has virtually all the characteristics you'd want in a material used to make windows and doors. It's super strong, rigid, heat resistant, non-corrosive and stays true and square for easy, efficient installation.



WHAT ULTREX IS MADE OF:

Ultrex® is made by taking thin strands of strong glass cables and saturating them with specifically compounded resins. This material innovation was pioneered by Marvin®, bringing over 20 years of unmatched experience, tooling and component optimization to every Integrity® product.

WHY DOES DURABILITY MATTER?

A patented acrylic finish means no worries about gouging, denting, scuffing and marring, keeping projects on time and within budget.

Durable windows stay true and square for easy, efficient installation.

Durable windows perform consistently in all types of weather and require virtually no maintenance, ensuring happy homeowners.

BECAUSE GOOD ENOUGH ISN'T DURABLE ENOUGH.

1. Boats and hardhats are molded fiberglass

HOW DOES ULTREX WITHSTAND COASTAL WEATHER?

Seasonal hurricanes. Blasting sand. Salt spray.

For Ultrex, it's just another day at the beach.

The coastal environment is one of the harshest environments windows and doors face, and Ultrex® is more than up to the test. Ultrex is non-corrosive, a must on the coast, but it's the combination of its performance characteristics that really make it stand out under the harshest conditions. Through heat, cold, wind and rain, Ultrex keeps performing beautifully, which means you can trust it to perform for your next project no matter what the weather has in store.



FOR HOMES AND BUILDINGS ALONG THE COAST, ULTREX IS QUITE POSSIBLY THE PERFECT BUILDING MATERIAL®—HOLDING UP TO THE HARSH CONDITIONS MOTHER NATURE CAN DISH OUT.



The IZ3 (Impact Zone 3) icon demonstrates that the window has passed every extensive test required to be used in Atlantic and Gulf Coast hurricane zones. IZ3 windows will hold up against winds from 120–140 mph, have undergone intense pressure testing, and can withstand a hit from an 8-foot-long 2x4 stud moving 50 feet per second.

For those who know, Ultrex is not a choice. It's THE CHOICE.

The characteristics that separate Ultrex® from other windows and doors truly make it Quite Possibly the Perfect Building Material®. That's why builders, contractors, architects and homeowners alike think of Integrity® products made with Ultrex as THE CHOICE when choosing windows and doors for their homes.

| | VINYL | VINYL/WOOD COMPOSITE (FIBREX®) | ULTREX FIBERGLASS |
|--|---------------|-----------------------------------|-----------------------------|
| THERMOPLASTIC/THERMOSET | Thermoplastic | Thermoplastic | Thermoset |
| REINFORCEMENT | None | Wood Fiber | Glass Fiber |
| HEAT DEFLECTION TEMPERATURE | 163° F | 173° F | 350° F |
| TENSILE STRENGTH | 7.0 ksi | 5.675 ksi | 40.14 ksi |
| FLEXURAL MODULUS | 385 ksi | 807.6 ksi | 3000 ksi |
| CTE ($\times 10^{-5}$ in/in/F) | 4.0 | 1.6 | 0.4 |
| SURFACE FINISH | PVC | PVC, Polyester Urethane, Acrylics | Acrylic (AAMA Verified) |
| COATING HARDNESS | NA/Substrate | B (Hardness) 15.00 (Barcol) | H (Hardness) 35.03 (Barcol) |
| THERMAL CONDUCTIVITY⁽¹⁾ | .10 | .13 | .12 |
| IMPACT RESISTANCE | NA | 14 MFE (in * lb.) | 44 MFE (in * lb.) |

References: Stork Technimet/Testing Corporation: #0602-15293, #0512-14889, #0704-19702, #TCT006638P. Precision Measurements and Instruments Corporation: #13043-DS. Tecton: # ESP010521P, "Test Results for Fibrex® and Ultrex". Plastics Engineering Handbook of the Society of Plastics Industry, Inc. Fifth Edition. Andersen Fibrex® Manual: "A High Performance, High Value Biofiber Polymer Composite Technology". Renewal by Andersen: "Fibrex® Material: A Better Alternative, A Better Window".

1. Highest rate of thermal conductivity shown. Test results range from .10-.13 for vinyl/wood composite (Fibrex®) and .09-.12 for Ultrex.

See videos about the durability and incredible performance of Ultrex® at
IntegrityWindows.com/Ultrex



Visit **IntegrityWindows.com**
for the Integrity dealer nearest you and
to see why Integrity windows and doors
are the best choice for your next project.



Integrity is backed by The Marvin® Windows and Doors' century-long heritage of service, craftsmanship and quality with a focus on all-out performance.



ALL ULTREX®
SERIES



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."

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.

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





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.

- 4 Integrity® from Marvin®
- 6 Ultrex® Performance
- 10 Energy Efficiency
- 12 Delivery and Features
- 14 Product Options
- 18 Exterior Trim
- 20 Casement and Awning
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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.

**THE MATERIAL
YOU CHOOSE FOR YOUR
WINDOWS AND DOORS
MATTERS**

Get tough

ULTREX FIBERGLASS OFFERS UNMATCHED PERFORMANCE AND UNBEATABLE SATISFACTION.

Durable doesn't begin to describe how tough Ultrex® fiberglass is. Strong, stable, and virtually indestructible, **ULTREX FIBERGLASS 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 and 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

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



All Ultrex interior

The interior is created with the same durable Ultrex fiberglass as the exterior and is offered in a Stone White finish.



All Ultrex exterior

Integrity's patented factory finish meets AAMA 624-10 performance requirements and is available in Stone White, Pebble Gray, Cashmere, Bronze, Evergreen or Ebony. Can be painted with no impact on its protective properties.

Ultrex Construction

The patented and advanced thin wall construction technologies of Ultrex allow for detailed profiles and component optimization, as well as superior aesthetics and performance.

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 minuscule 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 $\frac{1}{32}$ " 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.

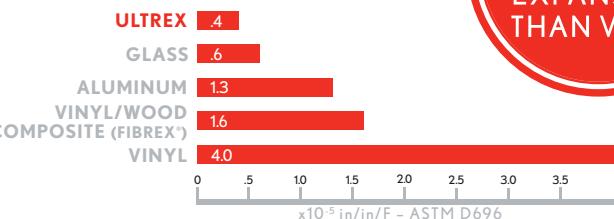
Premium Finish.

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**

EXPANSION MEASUREMENT

Ultrex expands and contracts at virtually the same rate as glass.



**ULTREX:
8X LESS
EXPANSION
THAN VINYL**

The tensile strength of Ultrex means one square inch can support up to 34,000 lbs. So, two monster trucks? 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.

**JUST ONE
SQUARE INCH OF
ULTREX CAN SUPPORT
34,000
POUNDS!**



34,000 LBS

Ultrex® fiberglass. Quite possibly the perfect building material.®

"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."

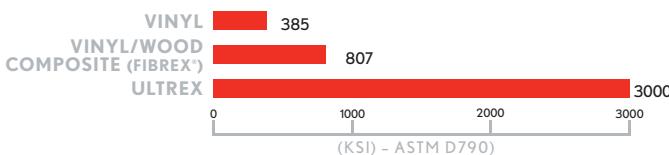
Susan Marvin, Vice Chair of the Board,
Marvin® Windows and Doors



Stay true

Ultrex® fiberglass 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

ULTREX

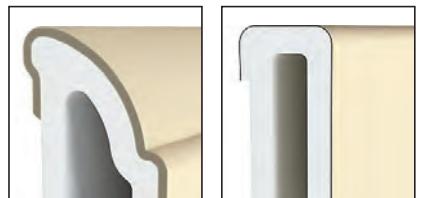
VINYL



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.

Pioneers



One hundred 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](#).



OUR INSULATED
GLASS CONTAINS
15%-33%
RECYCLED
CONTENT

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



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.

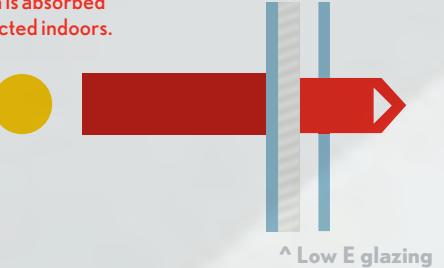
The International Organization for Standardization (ISO) is a worldwide federation established in 1947 that defines standards for Quality Management Systems (ISO 9001:2008) and Environmental Management Systems (ISO 14001:2004). These universal standards allow companies to provide more streamlined and 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.

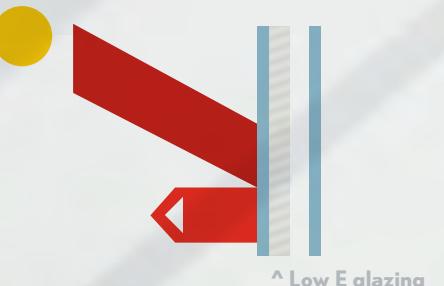


5000x
LESS CONDUCTIVE
THAN ALUMINUM =
REDUCED ENERGY COSTS

Winter sun is absorbed and conducted indoors.



Summer sun is filtered and reflected back outdoors.



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.



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 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.



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.





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, All Ultrex® from Integrity® can help.

From its sustainable Ultrex fiberglass construction and ENERGY STAR® qualification, to its 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 15 years, we have been the go-to product for building professionals. From commercial to residential and new construction, to remodeling and replacement, All Ultrex has the solution for your job site.



No matter the project, Ultrex fiberglass has you covered.

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, factory services, unmatched delivery and dedicated service and support personnel make Integrity the perfect choice.



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.

Rest assured

WE MAKE INSTALLATION SIMPLE AND EFFICIENT.



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

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).



1



2



3



4



5



6



7



8

STYLE RIGHT WITH OPTIONS THAT SUIT YOUR PREFERENCES.

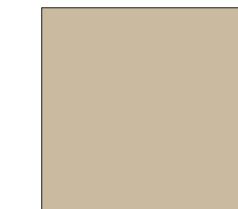
Finishes.

Interior Finishes: Comes standard in Stone White.

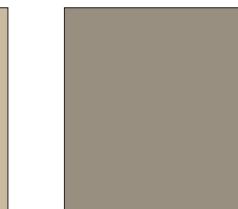
Exterior Finishes: Stone White, Cashmere, Pebble Gray, Bronze, Evergreen or Ebony. All are AAMA 624-10 verified and fully paintable without affecting the durability.



Stone White
(exterior and interior)



Cashmere
(exterior)



Pebble Gray
(exterior)



Bronze
(exterior)



Evergreen
(exterior)



Ebony
(exterior)

Glazing.

Integrity windows and doors are available in Low E1, Low E2, Low E3 and Low E3/ERS insulated glass with Argon gas for a selection of energy-efficient glazing options.*

Tempered Glass: Is standard on large units and doors, and available on most other units.

Obscure Glass: Obscure glass provides privacy and safety. Secure a modicum of privacy without sacrificing the energy efficiency and light.

Sound Abatement: Variable thickness glass provide enhanced STC and OITC sound abatement performance, while still providing a full selection of glass and divided lite options.



Tempered Glass



Obscure Glass



Variable Thickness Glass

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



Grilles.

Profiled Grilles-Between-the-Glass:

Available in several popular lite cut options (see page 35) for a classic divided lite look and easy glass cleaning. Available in Stone White interior and Stone White, Pebble Gray, Cashmere, Bronze, Evergreen and Ebony exterior.



Grilles-Between-the-Glass**
shown in Stone White



White



Almond Frost



Brass (PVD)



Satin Nickel (PVD)



Oil Rubbed Bronze (PVD)

Hardware Finishes.

Integrity® window and door hardware is available in five finish options: White, Almond Frost, Brass (PVD), Satin Nickel (PVD) and Oil Rubbed Bronze (PVD).

Handle Collections.

Integrity door handles are available in two distinct hardware collections. Select from either the Cambridge Collection or Northfield Collection to meet your design needs. Available factory keyed and keyed alike options.



Cambridge Collection
shown in Almond Frost



Northfield Collection
shown in Satin Nickel

Accessibility Options.

Opening Control Device: Limits opening to 4", while providing for full egress. ASTM F2090-10 compliant. Available on Casement, Double Hung, Single Hung, and Glider Windows.

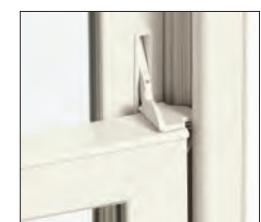
32" Handle: Handle provides a 32" net clear opening on Sliding Patio Doors.

Sash Limiter: Permanently limits sash movement for safety and security.

Non-Operable Lock: Renders sash inoperable when security is a paramount concern.



Casement Opening
Control Device



Double Hung/Single Hung
Opening Control Device



32" Handle



Single/Double Hung
Sash Limiter



Non-Operable Lock



Awning Sash Limiter

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

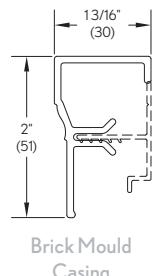
THE STRONGEST CHOICE IN EXTERIOR TRIM.

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.



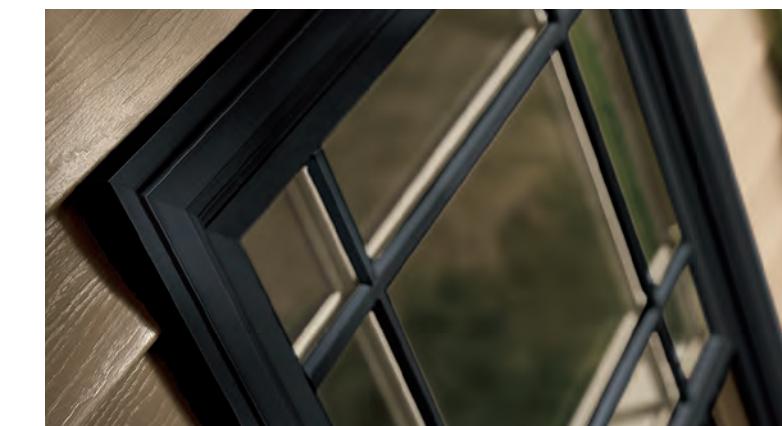
NOTE: SDL available on Wood-Ultrex product only. Images shown with SDL are Wood-Ultrex product images.
* BMC, Flat and Flat Ranch profiles are available on doors. Sill profiles are not included for door trim sets.



Brick Mould Casing

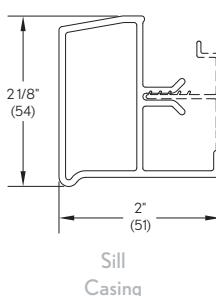


Flat Casing



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.



Sill Casing



Connection Barb

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

BUILT FOR STRENGTH. DESIGNED FOR FLEXIBILITY.



Multi-point sequential locking system provides superior PG40 rated performance with single lever operation.

ENERGY STAR® qualified and available with Low E1, Low E2, Low E3, or Low E3/ERS insulated glass.

Folding handle provides easy operation and neatly stows out of the way of window treatments and blinds – available in five finishes; White, Almond Frost, Brass, Satin Nickel, and Oil Rubbed Bronze.

Interior screen features an extruded aluminum surround and concealed pressure mounting points for ease of operation and enhanced aesthetics.

Stationary, operating, transom and picture units available.

The amazing strength of Ultrex® fiberglass in a Casement and Awning. These dynamic windows deliver high end performance with the strength and sustainable characteristics of Ultrex. Dual-arm operating hardware and a single lever sequential locking system deliver PG40 performance. A clean design and measured sight lines provide visual depth and a modern classic feel. Six exterior finish colors, five hardware finishes, assorted lite cut configurations, special sizing to $\frac{1}{64}$ ", and available picture and transom units allow for stunning and unique combinations.

A selection of hardware finishes, divided lites and lite cuts provide an abundance of design options.



Single Hung

DESIGNED FOR BEAUTY. ENGINEERED FOR LIFE.



Removable lower sash
easily removes with
no tools and no strings
or cords to detach.



The All Ultrex® Single Hung comes with a standard aluminum half screen; optional full screen is available.

Sash lock provides a positive detent, reassuring user that the window is either locked or unlocked.

Equal, Cottage, and Reverse Cottage sash provide a variety of looks and checkrail heights.

There is more than a single reason to like this beauty. The All Ultrex Single Hung offers PG50 performance on a majority of sizes. Innovative tilt latches, robust low profile sash lock, factory-applied installation accessories, and superior delivery combine with Ultrex fiberglass construction, Low E glass and ENERGY STAR® qualified performance to make the Single Hung a superior product in both looks and performance. Mull with picture units, transoms, Round Tops, other Single Hung or Polygon units to create unique multiple assemblies. Factory mulling, reinforced mulling and field mulling kits are available.



Double Hung

STUNNING LOOKS, WITH SURPRISING DEPTH.



The Double Hung is equipped with a standard full screen: optional half screen is available.

Tilt latches are ergonomically designed and easy to operate making tilting and cleaning this window even easier.

Sash lock provides a positive detent, reassuring user that the window is either locked or unlocked.

Equal, Cottage, and Reverse Cottage sash provide a variety of looks and checkrail heights.

Bring traditional beauty where it hasn't been traditional. The All Ultrex® Double Hung window offers clean, even and measured sight lines that provide significant depth where historically only a flat vinyl facade has been present. Add superior PG50 performance on a majority of sizes, factory applied installation accessories and unparalleled delivery and this window not only looks great it performs great. Mull with picture units, transoms, Round Tops, other Double Hungs or Polygon units to create a myriad of assemblies. Factory mulling, reinforced mulling and field mulling kits are available.



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



Glider

EFFORTLESS OPERATION. EASY CHOICE.



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



The Glider operating sash easily tilts and removes with no tools and no cords or strings to detach.

Tilt latches are ergonomically designed and easy to operate making tilting and cleaning this window even easier.

Discreet and ergonomic pull blends seamlessly with the interior while offering durable performance.

The Glider is available in a triple sash configuration for a more expansive view.

Say goodbye to sagging headers and painful operation of vinyl gliders forever. The All Ultrex® Glider offers Ultrex fiberglass construction that ensures smooth effortless operation for years to come thanks to the superior strength and minimal expansion/contraction properties of Ultrex. Choose an XO, OX or XOX (triple sash) configuration with the confidence that Ultrex construction eliminates sagging headers common to vinyl gliders. An innovative screen design makes removing and installing the screen of our Glider easier than ever. PG40 performance on a majority of sizes and the standard suite of All Ultrex Series options make ordering, delivery, installation and dependable performance effortless.



Round Top

A DYNAMIC COMPLEMENT TO TOP OFF YOUR DESIGN.



Glass reinforced composite material complements Ultrex's performance in a radius profile.

Acrylic capping technology delivers consistent finish and durability in all six All Ultrex® Series exterior colors.

Available nailing fin, installation bracket and through jamb installation.

Perforated folding radius nailing fin provides for simple installation and proper water management.

Available factory and field mulling options.

The All Ultrex Series Round Top is constructed of a glass reinforced composite capped with Integrity® Windows and Doors' acrylic finish technology. The dynamic windows are a great way to top off any project and are available as true half rounds, half rounds above springline and eyebrow above springline configurations. Choose from three installation options, six exterior colors and several glass options to create an individual unit or pair your Round Top with another All Ultrex product to create a unique assembly.

Integrity's Round Tops,
used separately, or as
part of a larger assembly,
bring space and
dimension to any room.



Polygon

A NEW ANGLE ON STYLE.



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

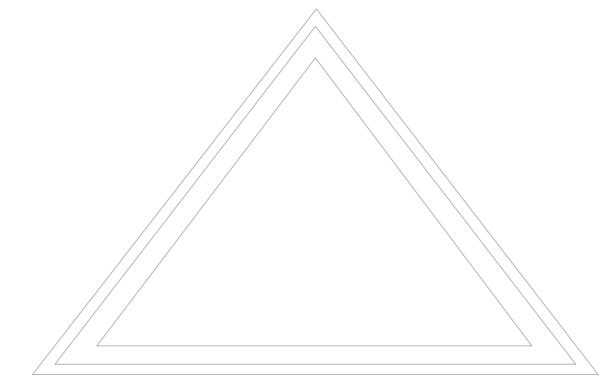
Standard jambs of $4 \frac{9}{16}$ " (116 mm) and $6 \frac{9}{16}$ " (167 mm) are available factory applied or as an extension kit.

Consistent, fast delivery applies to even the most unique products.

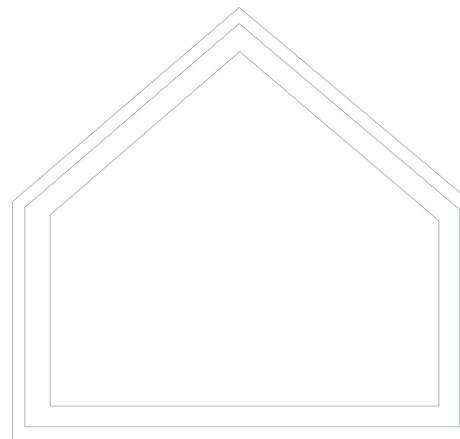
Enhance your windows by including the unique shapes and sizes of Integrity® All Ultrex® Polygons. Choose from eight popular shapes; including rectangles, triangles, pentagons, octagons and trapezoids. Integrity Polygons are available in sizes up to 49 square feet with a maximum span of 9 feet. So think big and imagine the possibilities – sidelites, transoms, flankers, unique assemblies or stand alone units. These windows offer WDMA Performance Grade 50 Hallmark Certification (PG50), and same service, delivery, energy efficiency, strength, durability and options as the rest of the All Ultrex series of products. So dare to dream with confidence, because unique just got a whole lot easier.



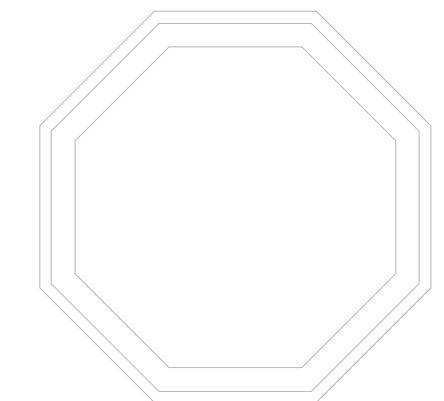
Trapezoid



Isosceles Triangle



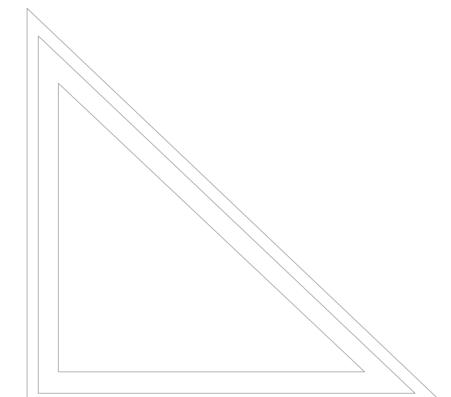
Pentagon



Octagon



Rectangle



90° Triangle

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

Sliding Patio Door

IT WORKS, BEAUTIFULLY.



Our doors come with standard tempered Low E2 insulated glass with argon gas. Optional Low E1 Low E3 and Low E3/ERS meet diverse energy efficiency needs.



A top hung sliding screen operates smoothly free of dirt and debris.
Matching handle set design provides style and security.
Interior and exterior handle available in White, Pebble Gray, Cashmere, Bronze, Evergreen and Ebony.
Optional 32" Handle provides 32" net clear opening on 3' panel configurations.
Special sizing available on 2-panel configurations.

Welcome to consistent durable performance. The All Ultrex® Sliding Patio Door provides low maintenance PG30 performance that vinyl just can't match. Ultrex construction ensures this door has the strength, durability and resilience to stand the test of time. Always straight, square and true, so effortless operation is a constant. The All Ultrex Sliding Patio Door offers a large daylight opening, 2-panel and 3-panel configurations, and heights up to 8 feet high. A handle set with matching interior and exterior styling and a top hung screen further this door's amazing style, performance and dependability.

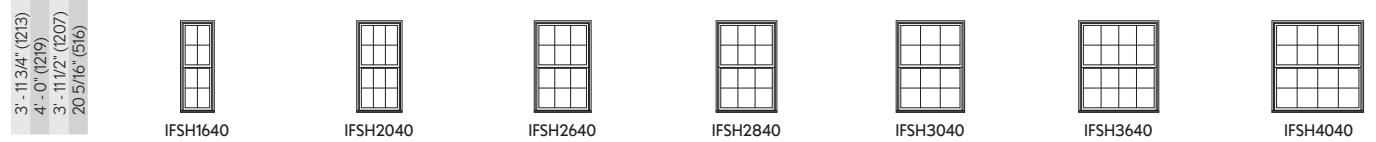


ORDERING INTEGRITY WINDOWS AND DOORS

Integrity® All Ultrex® Series products are sized with consistent nominal sizing to simplify specification and ordering.* Each product section offers product codes for ordering under each unit. Metric millimeter measurements are in parentheses.

You'll notice four measurements for each window or door: masonry opening, rough opening, frame size and day light opening 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; daylight opening indicates the dimension of total visible glass in a single sash.

| | | | | | | | |
|-----------------|-------------------|--------------------|-------------------|-------------------|--------------------|--------------------|---------------------|
| MO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 2' - 8" (914) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) |
| RO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 2' - 8" (914) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) |
| FS (mm) | 1' - 5 1/2" (445) | 1' - 11 1/2" (597) | 2' - 5 1/2" (749) | 2' - 7 1/2" (902) | 2' - 11 1/2" (902) | 3' - 5 1/2" (1054) | 3' - 11 1/2" (1207) |
| DLO (mm) | 12 9/16" (319) | 18 9/16" (471) | 24 9/16" (624) | 26 9/16" (675) | 30 9/16" (776) | 36 9/16" (929) | 42 9/16" (1081) |

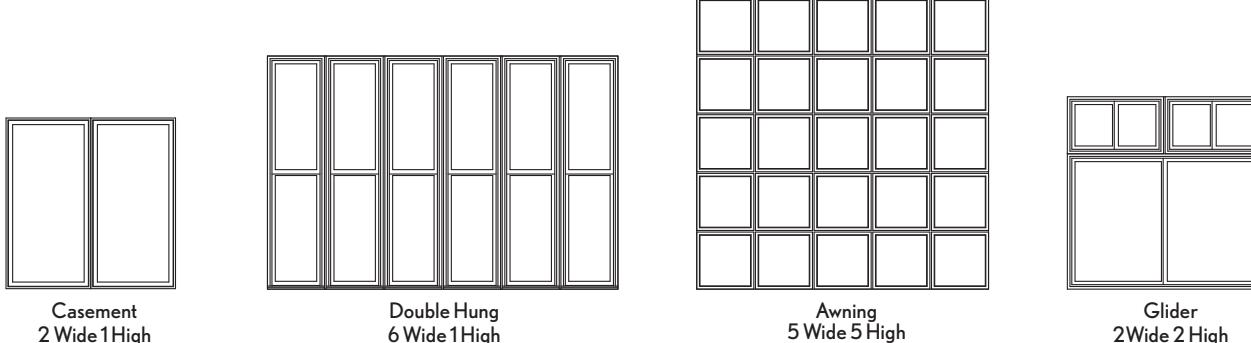


Mulling Options - A variety of standard factory mulled and reinforced factory mulled combinations are available.

| All Ultrex Mulling Configurations | Maximum Overall Rough Opening not to exceed: | Maximum Units Wide by High |
|---|--|----------------------------|
| Casement / Awning Single Hung / Double Hung | 114" (2896) X 78" (1981) | 6 Wide X 1 High |
| Picture / Transom / Direct Glaze | 96" (2438) X 96" (2438) | 5 Wide X 5 High |
| Glider | 114" (2896) X 60" (1524) | 3 Wide X 1 High |
| Picture / Transom / Direct Glaze | 72" (1829) X 78" (1981) | 2 Wide X 2 High |

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

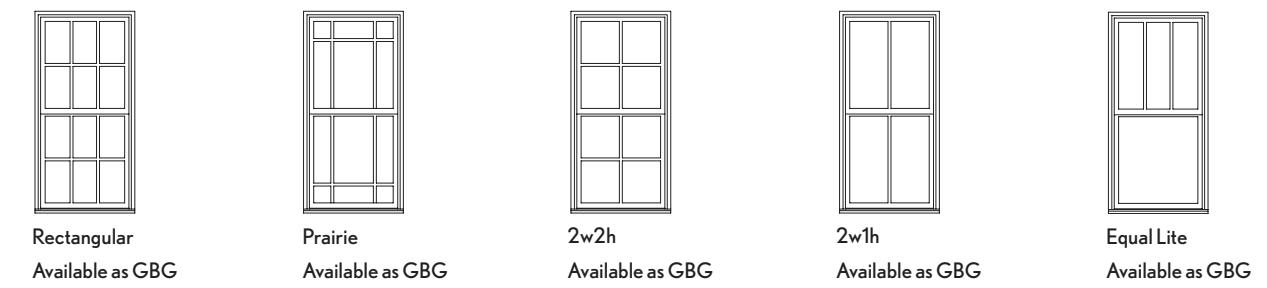
Examples of Possible Configurations



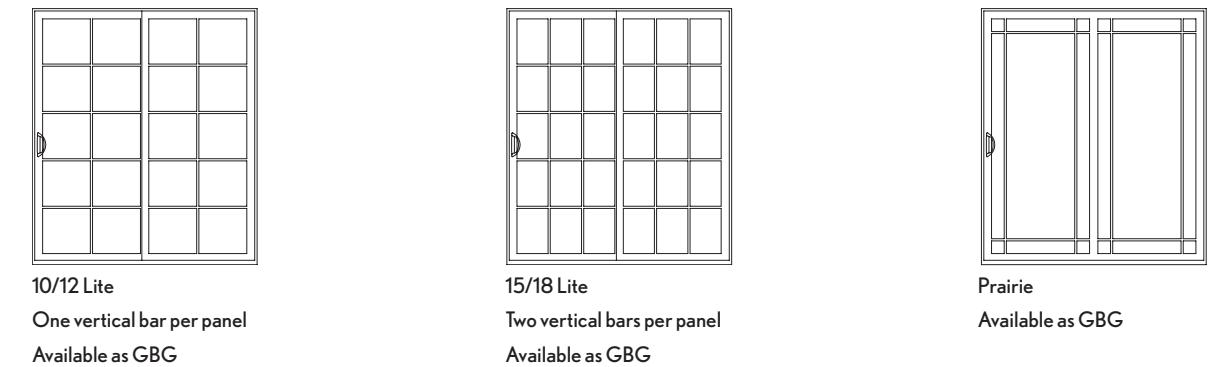
* Polygon units are specified according to guidelines on page 68.

INTEGRITY LITE CUTS

Windows



Doors



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

| | | | | |
|--------------------|--------------------|--------------------|--------------------|--------------------|
| MO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 3' - 0" (914) |
| RO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 3' - 0" (914) |
| FS (mm) | 1' - 5 1/2" (445) | 1' - 11 1/2" (597) | 2' - 5 1/2" (749) | 2' - 11 1/2" (902) |
| DLO (mm) | 11 53/64" (300) | 17 53/64" (453) | 23 53/64" (605) | 29 53/64" (757) |
| 3' - 5 3/4" (1060) | 2' - 11 3/4" (908) | 2' - 5 3/4" (756) | 1' - 11 3/4" (603) | |
| 3' - 6" (914) | 3' - 0" (914) | 2' - 6" (762) | 2' - 0" (610) | |
| 3' - 6" (914) | 2' - 11 1/2" (597) | 2' - 5 1/2" (449) | 1' - 11 1/2" (597) | |
| 35 53/64" (1062) | 29 53/64" (757) | 23 53/64" (605) | 17 53/64" (453) | |

IFCA1620 IFCA2020 IFCA2620* IFCA3020*
IFCA1626 IFCA2026 IFCA2626* IFCA3026*
IFCA1630 IFCA2030 IFCA2630* IFCA3030*
IFCA1636 IFCA2036 IFCA2636* IFCA3036 E*
IFCA1640 IFCA2040 IFCA2640 E* IFCA3040 E*
IFCA1646 IFCA2046 IFCA2646 E* IFCA3046 E*
IFCA1650 IFCA2050 IFCA2650 E* IFCA3050 E*
IFCA1656 IFCA2056 IFCA2656 E* IFCA3056 E*
IFCA1660 T IFCA2060 T IFCA2660 ET* IFCA3060 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

Obscure Glass option available on all units.

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 35.
See page 87 for specific PG Ratings.

* These units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

CASEMENT

2 Wide Operator / Stationary Units

| | | | | |
|--------------------|--------------------|---------------------|---------------------|---------------------|
| MO (mm) | 3' - 0" (914) | 4' - 0" (1219) | 5' - 0" (1524) | 6' - 0" (1829) |
| RO (mm) | 3' - 0" (914) | 4' - 0" (1219) | 5' - 0" (1524) | 6' - 0" (1829) |
| FS (mm) | 2' - 11 1/2" (902) | 3' - 11 1/2" (1207) | 4' - 11 1/2" (1511) | 5' - 11 1/2" (1816) |
| 3' - 5 3/4" (1060) | 2' - 11 3/4" (908) | 2' - 5 3/4" (756) | 1' - 11 3/4" (603) | |
| 3' - 6" (914) | 3' - 0" (914) | 2' - 6" (762) | 2' - 0" (610) | |
| 3' - 6" (914) | 2' - 11 1/2" (597) | 2' - 5 1/2" (449) | 1' - 11 1/2" (597) | |
| 35 53/64" (1062) | 29 53/64" (757) | 23 53/64" (605) | 17 53/64" (453) | |

IFCA1620 IFCA2020 IFCA2620* IFCA3020*
IFCA1626 IFCA2026 IFCA2626* IFCA3026*
IFCA1630 IFCA2030 IFCA2630* IFCA3030*
IFCA1636 IFCA2036 IFCA2636* IFCA3036 E*
IFCA1640 IFCA2040 IFCA2640 E* IFCA3040 E*
IFCA1646 IFCA2046 IFCA2646 E* IFCA3046 E*
IFCA1650 IFCA2050 IFCA2650 E* IFCA3050 E*
IFCA1656 IFCA2056 IFCA2656 E* IFCA3056 E*
IFCA1660 T IFCA2060 T IFCA2660 ET* IFCA3060 ET*

Multiple Assemblies

Multiple assemblies can be factory milled.

MAXIMUM ROUGH OPENING not to exceed 114" X 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" X 96". Maximum up to 5 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

3 Wide Operator / Stationary Units

| MO (mm) | 4' - 6" (1372) | 6' - 0" (1829) | 7' - 6" (2286) | 9' - 0" (2743) |
|--------------|---|---|---|---|
| RO (mm) | 4' - 6" (1372) | 6' - 0" (1829) | 7' - 6" (2286) | 9' - 0" (2743) |
| FS (mm) | 4' - 5 1/2" (1359) | 5' - 11 1/2" (1816) | 7' - 5 1/2" (2273) | 8' - 11 1/2" (2731) |
| | 2' - 5 3/4" (756) 3' - 6" (960) 3' - 0" (944) 2' - 6" (762) 2' - 0" (610) 1' - 11 1/2" (597) | 2' - 11 3/4" (908) 3' - 0" (944) 3' - 6" (967) 3' - 0" (942) 2' - 5 1/2" (49) 1' - 11 1/2" (597) | 2' - 5 3/4" (756) 3' - 6" (960) 3' - 0" (944) 2' - 6" (762) 2' - 0" (610) 1' - 11 1/2" (597) | 2' - 5 3/4" (756) 3' - 6" (960) 3' - 0" (944) 2' - 6" (762) 2' - 0" (610) 1' - 11 1/2" (597) |
| IFCA1620 | | | | |
| IFCA2020 | | | | |
| IFCA2620* | | | | |
| IFCA3020* | | | | |
| IFCA1626 | | | | |
| IFCA2026 | | | | |
| IFCA2626* | | | | |
| IFCA3026* | | | | |
| IFCA1630 | | | | |
| IFCA2030 | | | | |
| IFCA2630* | | | | |
| IFCA3030* | | | | |
| IFCA1636 | | | | |
| IFCA2036 | | | | |
| IFCA2636* | | | | |
| IFCA3036 E* | | | | |
| IFCA1640 | | | | |
| IFCA2040 | | | | |
| IFCA2640 E* | | | | |
| IFCA3040 E* | | | | |
| IFCA1646 | | | | |
| IFCA2046 | | | | |
| IFCA2646 E* | | | | |
| IFCA3046 E* | | | | |
| IFCA1650 | | | | |
| IFCA2050 | | | | |
| IFCA2650 E* | | | | |
| IFCA3050 E* | | | | |
| IFCA1656 | | | | |
| IFCA2056 | | | | |
| IFCA2656 E* | | | | |
| IFCA3056 E* | | | | |
| IFCA1660T | | | | |
| IFCA2060T | | | | |
| IFCA2660 ET* | | | | |
| IFCA3060 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

Obscure Glass option available on all units.

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 35.

* These units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation. See page 87 for specific PG Ratings.

CASEMENT

4 Wide Operator / Stationary Units

| MO (mm) | 6' - 0" (1829) | 8' - 0" (2438) |
|--------------|---|---|
| RO (mm) | 6' - 0" (1829) | 8' - 0" (2438) |
| FS (mm) | 5' - 11 1/2" (1816) | 7' - 11 1/2" (2426) |
| | 2' - 5 3/4" (756) 3' - 6" (960) 3' - 0" (944) 2' - 6" (762) 2' - 0" (610) 1' - 11 1/2" (597) | 2' - 5 3/4" (756) 3' - 6" (960) 3' - 0" (944) 2' - 6" (762) 2' - 0" (610) 1' - 11 1/2" (597) |
| IFCA1620 | | |
| IFCA2020 | | |
| IFCA1626 | | |
| IFCA2026 | | |
| IFCA1630 | | |
| IFCA2030 | | |
| IFCA1636 | | |
| IFCA2036 | | |
| IFCA1640 | | |
| IFCA2040 | | |
| IFCA2640 E* | | |
| IFCA3040 E* | | |
| IFCA1646 | | |
| IFCA2046 | | |
| IFCA2646 E* | | |
| IFCA3046 E* | | |
| IFCA1650 | | |
| IFCA2050 | | |
| IFCA2650 E* | | |
| IFCA3050 E* | | |
| IFCA1656 | | |
| IFCA2056 | | |
| IFCA2656 E* | | |
| IFCA3056 E* | | |
| IFCA1660T | | |
| IFCA2060T | | |
| IFCA2660 ET* | | |
| IFCA3060 ET* | | |

Multiple Assemblies

Multiple assemblies can be factory milled.

MAXIMUM ROUGH OPENING not to exceed 114" X 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" X 96". Maximum up to 5 units wide by 5 units high.

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

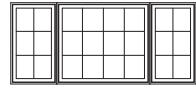
Please consult your local Integrity from Marvin representative for more information.

CASEMENT Multiple Assemblies

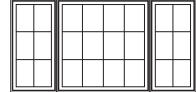
Casement Flankers

with Picture Center Unit

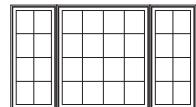
| | | | |
|-----------------|--------------------|---------------------|--------------------|
| MO (mm) | 2' - 0" (610) | 4' - 0" (1219) | 2' - 0" (610) |
| RO (mm) | 2' - 0" (610) | 4' - 0" (1219) | 2' - 0" (610) |
| FS (mm) | 1' - 11 1/2" (597) | 3' - 11 1/2" (1207) | 1' - 11 1/2" (597) |
| DLO (mm) | 17 53/64" (453) | 41 53/64" (1062) | 17 53/64" (453) |



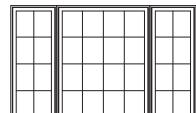
IFCA2036 / IFSWP4036 / IFCA2036



IFCA2040 / IFSWP4040 / IFCA2040



IFCA2046 / IFSWP4046 / IFCA2046

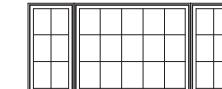


IFCA2050 / IFSWP4050 / IFCA2050

Casement Flankers

with Picture Center Unit

| | | | |
|-----------------|--------------------|---------------------|--------------------|
| MO (mm) | 2' - 0" (610) | 5' - 0" (1524) | 2' - 0" (610) |
| RO (mm) | 2' - 0" (610) | 5' - 0" (1524) | 2' - 0" (610) |
| FS (mm) | 1' - 11 1/2" (597) | 4' - 11 1/2" (1511) | 1' - 11 1/2" (597) |
| DLO (mm) | 17 53/64" (453) | 41 53/64" (1062) | 17 53/64" (453) |



IFCA2050 / IFSWP5050 / IFCA2050



IFCA2056 / IFSWP5056 / IFCA2056

Details and Elevations not to scale.

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

Obscure Glass option available on all units.

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 35.

See page 87 for specific PG Ratings.

Multiple Assemblies

Multiple assemblies can be factory mulled.

MAXIMUM ROUGH OPENING not to exceed 114" X 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" X 96". Maximum up to 5 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.

AWNING

Operator / Stationary Units

| | | | | | | |
|-----------------|-------------------|--------------------|-------------------|--------------------|--------------------|---------------------|
| MO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) |
| RO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) |
| FS (mm) | 1' - 5 1/2" (445) | 1' - 11 1/2" (597) | 2' - 5 1/2" (749) | 2' - 11 1/2" (902) | 3' - 5 1/2" (1054) | 3' - 11 1/2" (1207) |
| DLO (mm) | 1153/64" (300) | 17 53/64" (453) | 23 53/64" (605) | 29 53/64" (757) | 35 53/64" (910) | 41 53/64" (1062) |



IFAWN1616



IFAWN2016



IFAWN2616



IFAWN3016



IFAWN3616



IFAWN4016



IFAWN1620



IFAWN2020



IFAWN2620



IFAWN3020



IFAWN3620



IFAWN4020



IFAWN1626



IFAWN2026



IFAWN2626



IFAWN3026



IFAWN3626



IFAWN4026



IFAWN1630



IFAWN2030



IFAWN2630



IFAWN3030

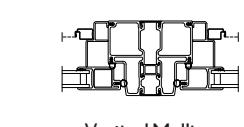
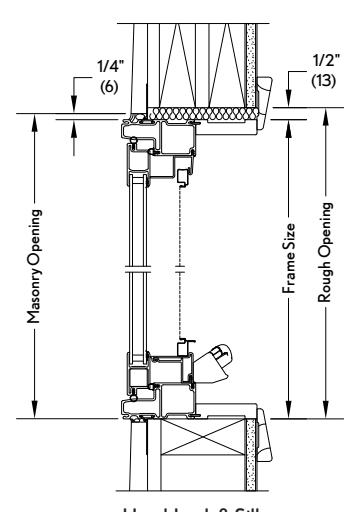
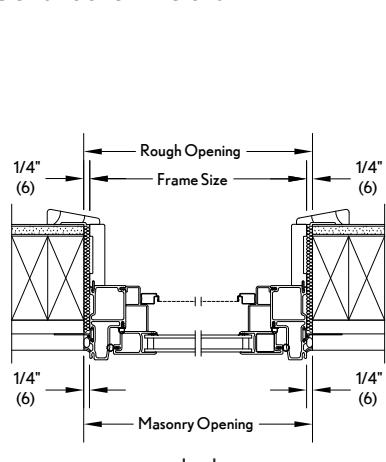


IFAWN3630

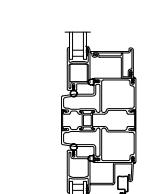


IFAWN4030

Construction Details



Vertical Mullion
Transom/Operator



AWNING

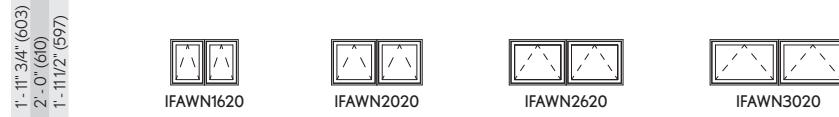
INTEGRITY® FROM MARVIN®
ALL ULTREX® SERIES

2 Wide Operator / Stationary Units

| | | | | | | |
|----------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| MO (mm) | 3' - 0" (914) | 4' - 0" (1219) | 5' - 0" (1524) | 6' - 0" (1829) | 7' - 0" (2134) | 8' - 0" (2438) |
| RO (mm) | 3' - 0" (914) | 4' - 0" (1219) | 5' - 0" (1524) | 6' - 0" (1829) | 7' - 0" (2134) | 8' - 0" (2438) |
| FS (mm) | 2' - 11 1/2" (902) | 3' - 11 1/2" (1207) | 4' - 11 1/2" (1511) | 5' - 11 1/2" (1816) | 6' - 11 1/2" (2121) | 7' - 11 1/2" (2426) |



IFAWN1616 IFAWN2016 IFAWN2616 IFAWN3016 IFAWN3616 IFAWN4016



IFAWN1620 IFAWN2020 IFAWN2620 IFAWN3020 IFAWN3620 IFAWN4020



IFAWN1626 IFAWN2026 IFAWN2626 IFAWN3026 IFAWN3626 IFAWN4026



IFAWN1630 IFAWN2030 IFAWN2630 IFAWN3030 IFAWN3630 IFAWN4030

AWNING

3 Wide Operator / Stationary Units

| | | | | |
|----------------|--------------------|---------------------|--------------------|---------------------|
| MO (mm) | 4' - 6" (1372) | 6' - 0" (1829) | 7' - 6" (2286) | 9' - 0" (2743) |
| RO (mm) | 4' - 6" (1372) | 6' - 0" (1829) | 7' - 6" (2286) | 9' - 0" (2743) |
| FS (mm) | 4' - 5 1/2" (1359) | 5' - 11 1/2" (1816) | 7' - 5 1/2" (2273) | 8' - 11 1/2" (2731) |



IFAWN1616 IFAWN2016 IFAWN2616 IFAWN3016



IFAWN1620 IFAWN2020 IFAWN2620 IFAWN3020



IFAWN1626 IFAWN2026 IFAWN2626 IFAWN3026



IFAWN1630 IFAWN2030 IFAWN2630 IFAWN3030

Details and Elevations not to scale.

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

Obscure Glass option available on all units.

See page 87 for specific PG Ratings.

Multiple Assemblies

Multiple assemblies can be factory mulled.

MAXIMUM ROUGH OPENING not to exceed 114" X 78". Maximum up to 6 units wide by 1 unit high.

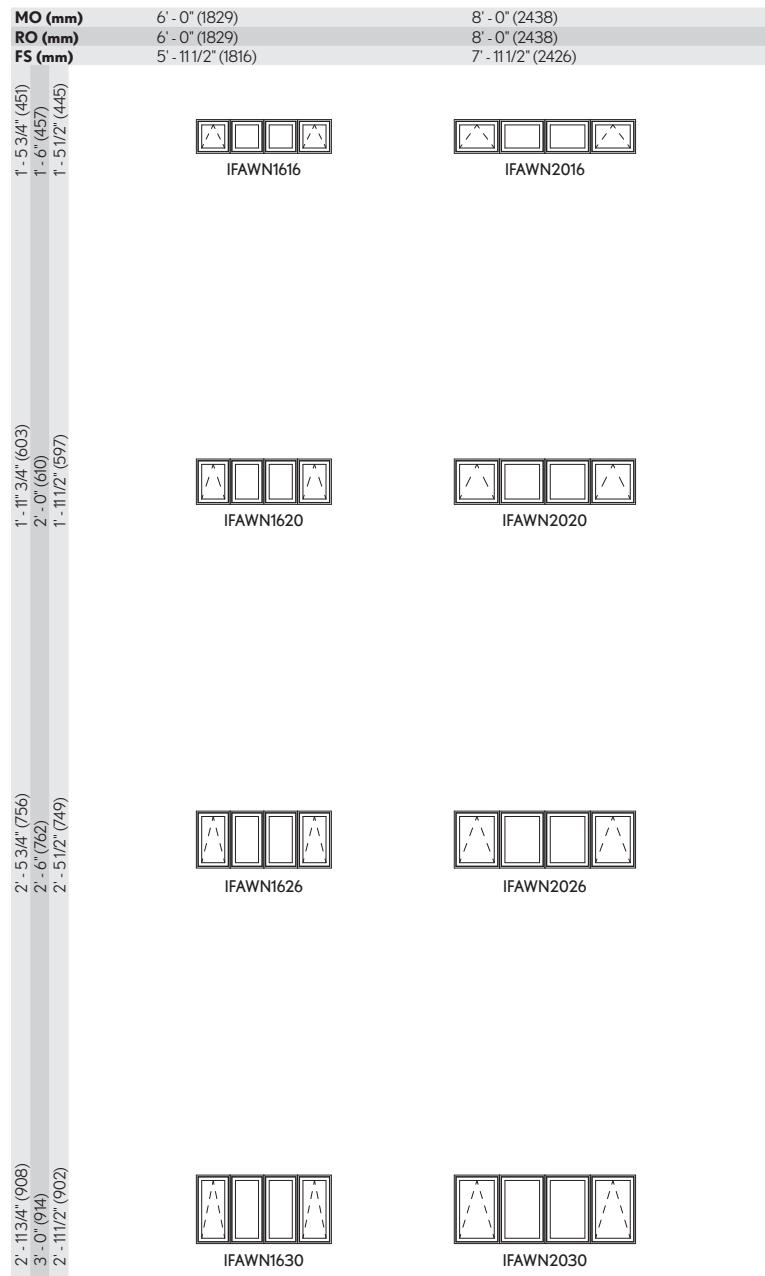
MAXIMUM ROUGH OPENING not to exceed 96" X 96". Maximum up to 5 units wide by 5 units high.

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

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

AWNING

4 Wide Operator / Stationary Units



Details and Elevations not to scale.

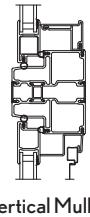
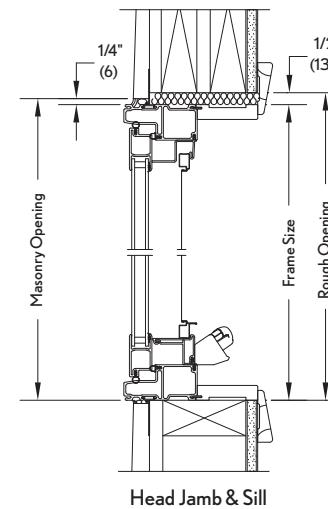
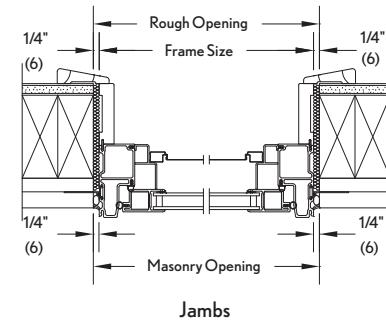
Special sized units available within product size matrix. See your Integrity® retailer.

Obscure Glass option available on all units.

See page 87 for specific PG Ratings.

AWNING

Construction Detail



Multiple Assemblies

Multiple assemblies can be factory mulled.

MAXIMUM ROUGH OPENING not to exceed
14" X 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed
96" X 96". Maximum up to 5 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.

SWINGING PICTURE AND TRANSOM UNITS

Picture Units

| | | | | | | | | |
|--------------------|---------------------|--------------------|--------------------|---------------------|--------------------|---------------------|---------------------|---------------------|
| MO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) | 5' - 0" (1524) | 6' - 0" (1829) |
| RO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) | 5' - 0" (1524) | 6' - 0" (1829) |
| FS (mm) | 1' - 5 1/2" (445) | 1' - 11 1/2" (597) | 2' - 5 1/2" (749) | 2' - 11 1/2" (902) | 3' - 5 1/2" (1054) | 3' - 11 1/2" (1207) | 4' - 11 1/2" (1511) | 5' - 11 1/2" (1816) |
| DLO (mm) | 1153/64" (300) | 17 53/64" (453) | 23 53/64" (605) | 29 53/64" (757) | 35 53/64" (910) | 41 53/64" (1062) | 53 53/64" (1367) | 65 53/64" (1672) |
| 5' - 5 3/4" (1622) | 4' - 11 3/4" (1518) | 4' - 5 3/4" (1365) | 3' - 11 3/4" (123) | 3' - 5 3/4" (1060) | 2' - 11 3/4" (908) | 2' - 5 3/4" (756) | 1' - 11 3/4" (603) | |
| 5' - 0" (1829) | 5' - 6" (1676) | 5' - 6" (1324) | 4' - 6" (1372) | 3' - 6" (914) | 3' - 0" (914) | 2' - 6" (762) | 2' - 0" (610) | |
| 6' - 0" (1816) | 5' - 5 1/2" (1664) | 5' - 5 1/2" (1511) | 4' - 5 1/2" (1207) | 3' - 11 1/2" (1054) | 2' - 11 1/2" (902) | 2' - 5 1/2" (749) | 2' - 11 1/2" (597) | |
| 65 53/64" (1672) | 53 53/64" (1627) | 53 53/64" (1519) | 47 53/64" (1215) | 35 53/64" (910) | 29 53/64" (757) | 23 53/64" (605) | 17 53/64" (453) | |

Details and Elevations not to scale.

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

T = Standard Tempered

Obscure Glass option available on all units.

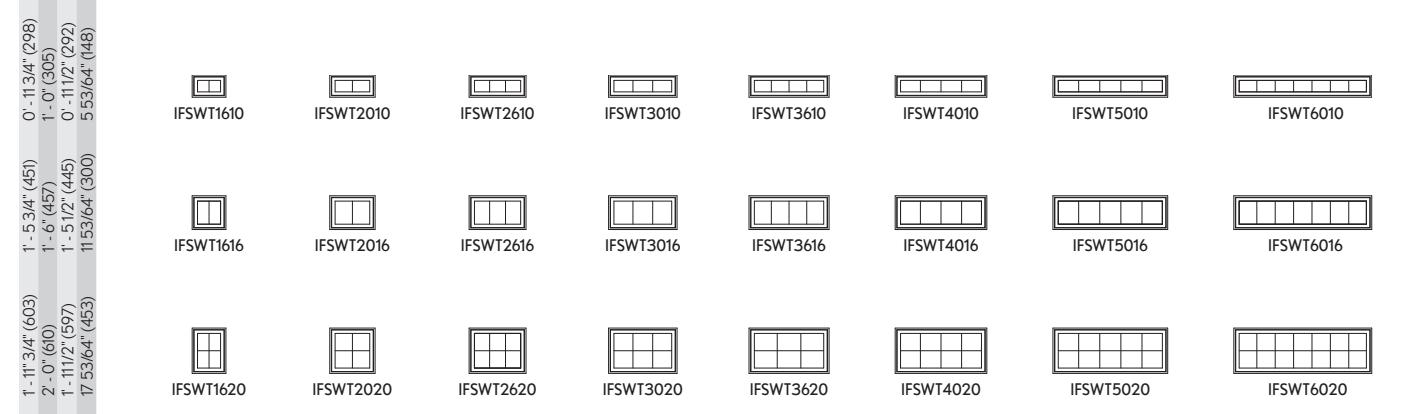
GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 35.

See page 87 for specific PG Ratings.

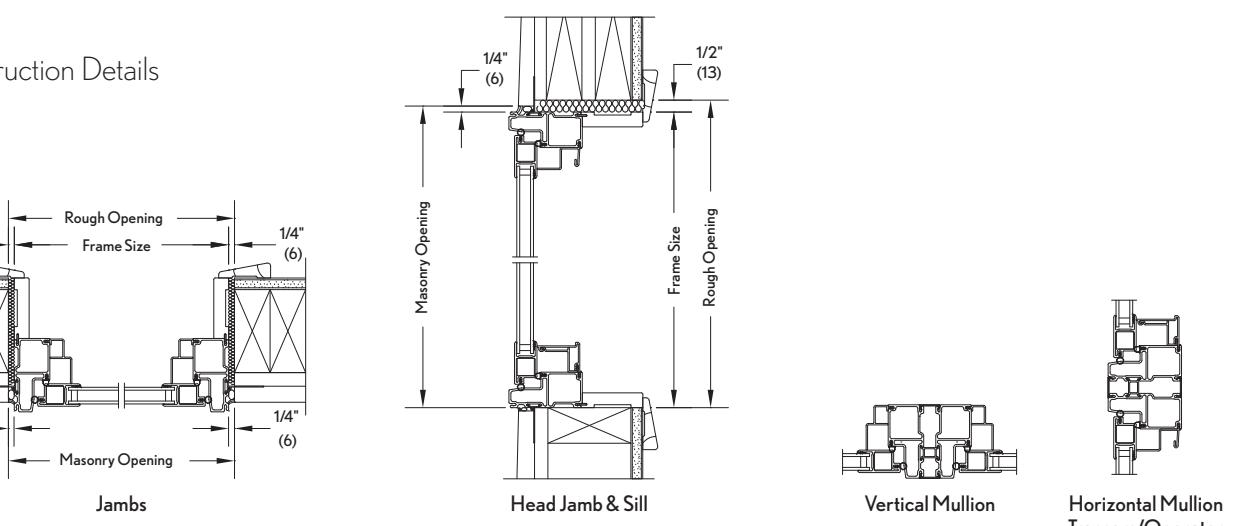
SWINGING PICTURE AND TRANSOM UNITS

In-Sash Transom

| | | | | | | | | |
|-----------------|-------------------|--------------------|-------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| MO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) | 5' - 0" (1524) | 6' - 0" (1829) |
| RO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) | 5' - 0" (1524) | 6' - 0" (1829) |
| FS (mm) | 1' - 5 1/2" (445) | 1' - 11 1/2" (597) | 2' - 5 1/2" (749) | 2' - 11 1/2" (902) | 3' - 5 1/2" (1054) | 3' - 11 1/2" (1207) | 4' - 11 1/2" (1511) | 5' - 11 1/2" (1816) |
| DLO (mm) | 1153/64" (300) | 17 53/64" (453) | 23 53/64" (605) | 29 53/64" (757) | 35 53/64" (910) | 41 53/64" (1062) | 53 53/64" (1367) | 65 53/64" (1672) |



Construction Details



Multiple Assemblies

Multiple assemblies can be factory mulled.

MAXIMUM ROUGH OPENING not to exceed 114" X 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" X 96". Maximum up to 5 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.

SINGLE HUNG

Operator Units

| | | | | | | | |
|-----------------|-------------------|--------------------|-------------------|-------------------|--------------------|--------------------|---------------------|
| MO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 2' - 8" (914) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) |
| RO (mm) | 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 2' - 8" (914) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) |
| FS (mm) | 1' - 5 1/2" (445) | 1' - 11 1/2" (597) | 2' - 5 1/2" (749) | 2' - 7 1/2" (902) | 2' - 11 1/2" (902) | 3' - 5 1/2" (1054) | 3' - 11 1/2" (1207) |
| DLO (mm) | 12 9/16" (319) | 18 9/16" (471) | 24 9/16" (624) | 26 9/16" (675) | 30 9/16" (776) | 36 9/16" (929) | 42 9/16" (1081) |

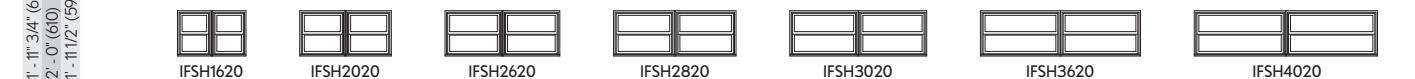


IFSH1620 IFSH2020 IFSH2620 IFSH2820 IFSH3020 IFSH3620 IFSH4020
IFSH1626 IFSH2026 IFSH2626 IFSH2826 IFSH3026 IFSH3626 IFSH4026
IFSH1630 IFSH2030 IFSH2630 IFSH2830 IFSH3030 IFSH3630 IFSH4030
IFSH1636 IFSH2036 IFSH2636 IFSH2836 IFSH3030 IFSH3636 IFSH4036
IFSH1640 IFSH2040 IFSH2640 IFSH2840 IFSH3040 IFSH3640 IFSH4040
IFSH1646 IFSH2046 IFSH2646 IFSH2846 IFSH3046 IFSH3646 IFSH4046
IFSH1650 IFSH2050 IFSH2650 IFSH2850 IFSH3050 E IFSH3650 E IFSH4050 E
IFSH1656 IFSH2056 IFSH2656 IFSH2856 IFSH3056 E IFSH3656 E IFSH4056 E
IFSH1660 IFSH2060 IFSH2660 E IFSH2860 E IFSH3060 E IFSH3660 E IFSH4060 E
IFSH1666 IFSH2066 IFSH2666 E IFSH2866 E IFSH3066 E IFSH3666 E IFSH4066 E

SINGLE HUNG

2 Wide Operator Units

| | | | | | | | |
|----------------|--------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|
| MO (mm) | 3' - 0" (914) | 4' - 0" (1219) | 5' - 0" (1524) | 5' - 4" (1626) | 6' - 0" (1829) | 7' - 0" (2134) | 8' - 0" (2438) |
| RO (mm) | 3' - 0" (914) | 4' - 0" (1219) | 5' - 0" (1524) | 5' - 4" (1626) | 6' - 0" (1829) | 7' - 0" (2134) | 8' - 0" (2438) |
| FS (mm) | 2' - 11 1/2" (902) | 3' - 11 1/2" (1207) | 4' - 11 1/2" (1511) | 5' - 3 1/2" (1600) | 5' - 11 1/2" (1816) | 6' - 11 1/2" (2121) | 7' - 11 1/2" (2426) |



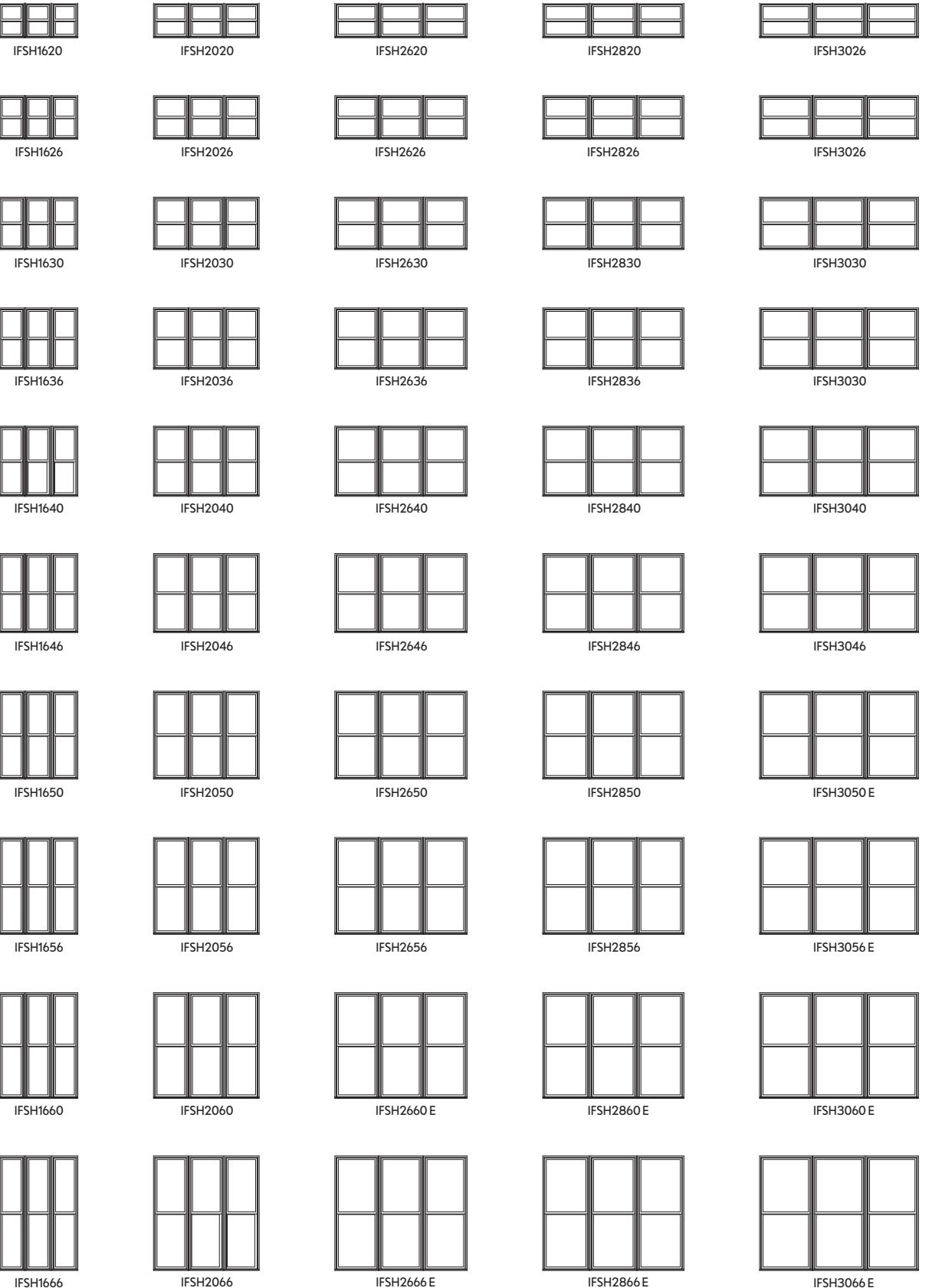
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IFSH1660 IFSH2060 IFSH2660 E IFSH2860 E IFSH3060 E IFSH3660 E IFSH4060 E
IFSH1666 IFSH2066 IFSH2666 E IFSH2866 E IFSH3066 E IFSH3666 E IFSH4066 E

SINGLE HUNG

INTEGRITY® FROM MARVIN®
ALL ULTREX® SERIES

3 Wide Operator Units

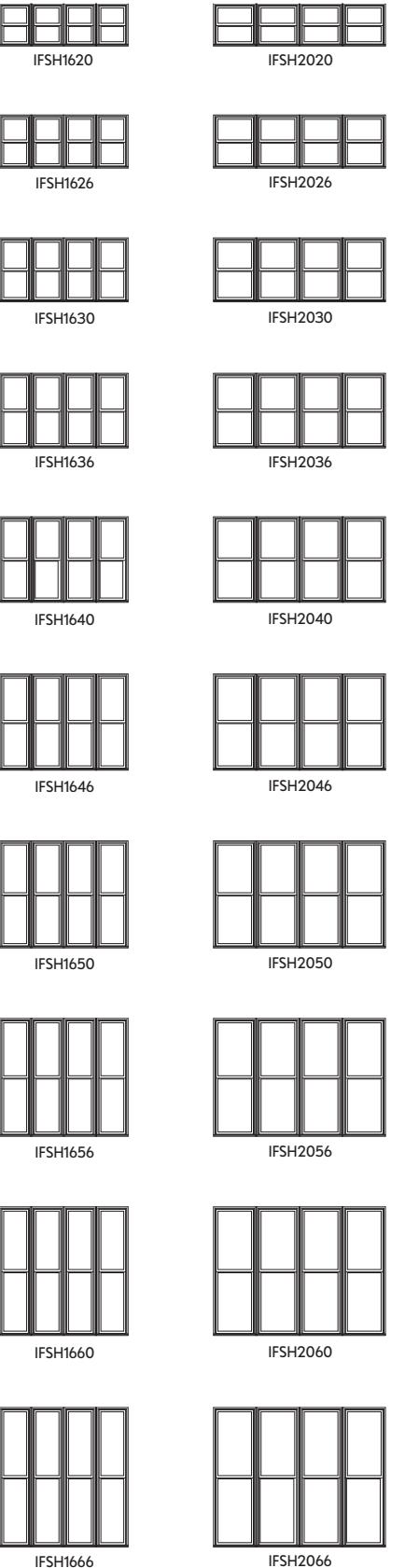
| | | | | | | | |
|----------------|--------------------|---------------------|--------------------|-------------------|---------------------|--------------------|-------------------|
| MO (mm) | 4' - 6" (1372) | 6' - 0" (1829) | 7' - 6" (2286) | 8' - 0" (2438) | 9' - 0" (2743) | 2' - 11 3/4" (603) | 2' - 5 3/4" (756) |
| RO (mm) | 4' - 6" (1372) | 6' - 0" (1829) | 7' - 6" (2286) | 8' - 0" (2438) | 9' - 0" (2743) | 3' - 0" (914) | 2' - 6" (762) |
| FS (mm) | 4' - 5 1/2" (1359) | 5' - 11 1/2" (1816) | 7' - 5 1/2" (2273) | 7' 11 1/2" (2413) | 8' - 11 1/2" (2731) | 2' - 11 1/2" (597) | 2' - 5 1/2" (49) |



SINGLE HUNG

4 Wide Operator Units

| | | | |
|----------------|---------------------|---------------------|--------------------|
| MO (mm) | 6' - 0" (1829) | 8' - 0" (2438) | 2' - 11 3/4" (603) |
| RO (mm) | 6' - 0" (1829) | 8' - 0" (2438) | 2' - 0" (610) |
| FS (mm) | 5' - 11 1/2" (1816) | 7' - 11 1/2" (2426) | 1' - 11 1/2" (597) |



GBG available in standard Rectangular lite cut, shown.
Other GBG lite cuts shown on page 35.

E = These windows (in equal sash) meet National Egress Codes for fire evacuation. Local codes may differ.

Details and Elevations not to scale.

Available in equal, cottage and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available on 20 call number heights.

Obscure Glass option available on all units.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

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

See page 87 for specific PG Ratings.

Multiple Assemblies

Multiple assemblies can be factory milled.

MAXIMUM ROUGH OPENING not to exceed 114" X 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" X 96". Maximum up to 5 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.

SINGLE HUNG Transoms and Multiple Assemblies

In-Sash Transom Mulled Over Single Hung – Operator Unit

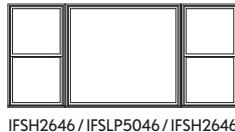
| MO (mm) | 2'-6" (762) | RO (mm) | 2'-6" (762) | FS (mm) | 2'-5 1/2" (749) | DLO (mm) | 24 9/16" (624) |
|---------|------------------|---------|------------------|---------|------------------|----------|----------------|
| MO (mm) | 4'-5 3/4" (1365) | RO (mm) | 4'-6" (1372) | FS (mm) | 4'-5 1/2" (1359) | DLO (mm) | 4'-5 1/2" (39) |
| MO (mm) | 4'-6" (1372) | RO (mm) | 4'-5 1/2" (1359) | FS (mm) | 4'-5 1/2" (1359) | DLO (mm) | 4'-5 1/2" (39) |

IFSLT2616

IFSH2646

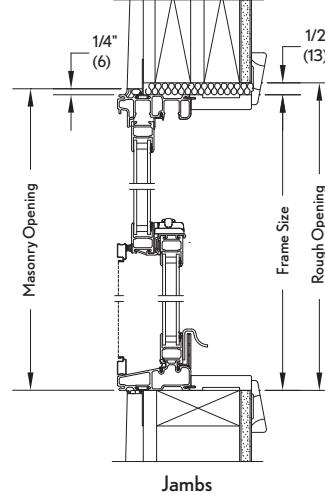
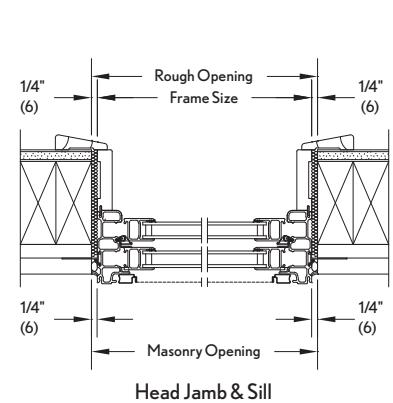
Single Hung Flankers with Picture Center Unit *

| MO (mm) | 2'-6" (762) | RO (mm) | 2'-0" (1524) | FS (mm) | 2'-6" (762) |
|---------|-----------------|---------|-------------------|---------|-----------------|
| MO (mm) | 2'-6" (762) | RO (mm) | 5'-0" (1524) | FS (mm) | 2'-6" (762) |
| MO (mm) | 2'-5 1/2" (749) | RO (mm) | 4'-11 1/2" (1511) | FS (mm) | 2'-5 1/2" (749) |



IFSH2646 / IFSLP5046 / IFSH2646

Construction Details

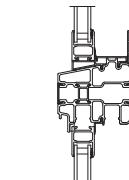


Head Jamb & Sill

Jams



Vertical Mullion



Horizontal Mullion Transom/Operator

E = These windows (in equal sash) meet National Egress Codes for fire evacuation. Local codes may differ.

* This product is only available field mulled. Details and Elevations not to scale.

Available in equal, cottage and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available on 20 and 66 call number heights.

See page 87 for specific PG Ratings.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

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

See page 87 for specific PG Ratings.

Multiple Assemblies

Multiple assemblies can be factory mulled.

MAXIMUM ROUGH OPENING not to exceed 114" X 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" X 96". Maximum up to 5 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.

DOUBLE HUNG

Operator Units

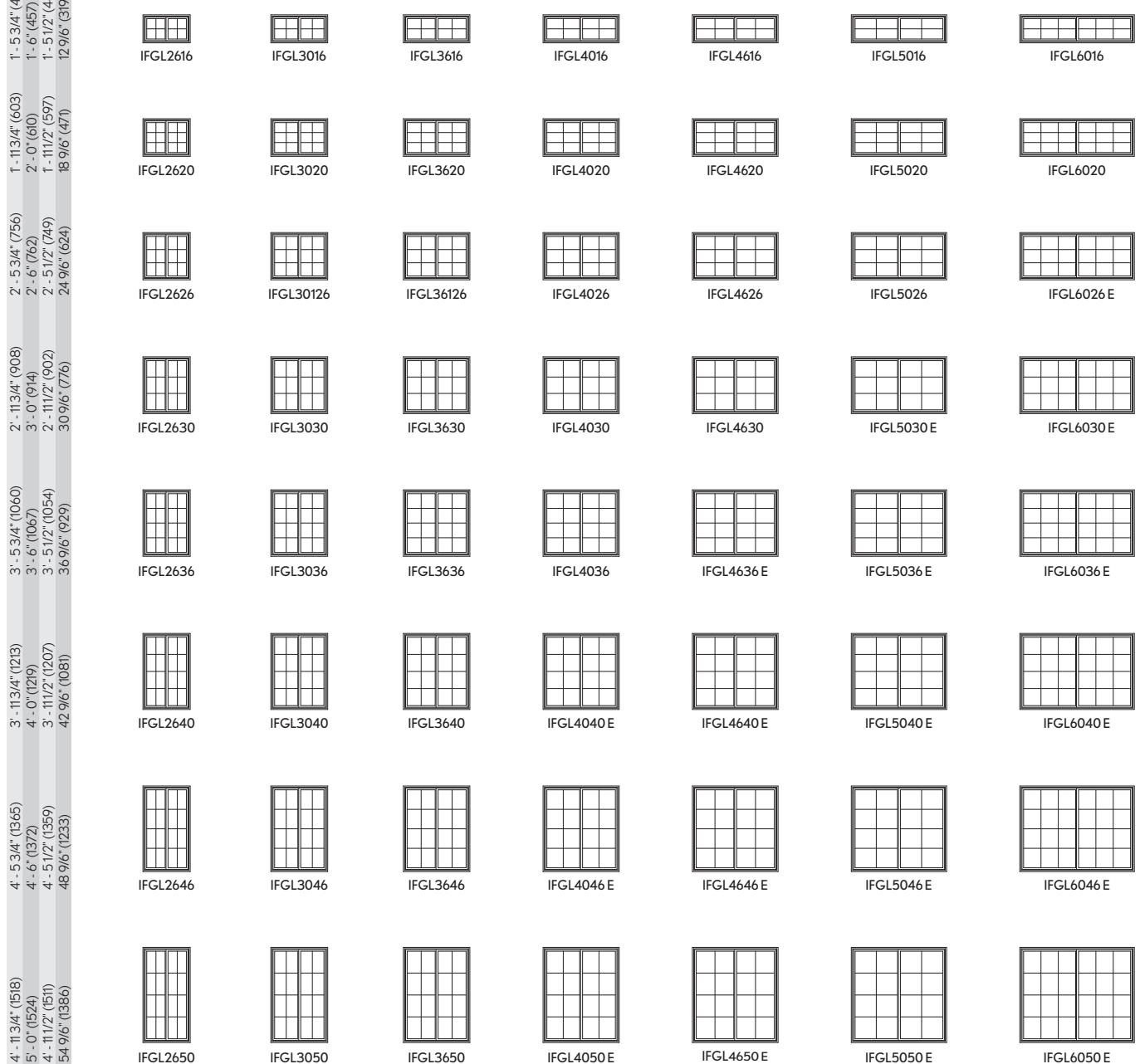
| | | | | | | | | | | | | | | | |
|---------|-----------------|---------|------------------|---------|-----------------|----------|-----------------|---------|------------------|---------|--------------|---------|------------------|----------|-------------------|
| MO (mm) | 1'-6" (457) | RO (mm) | 2'-0" (610) | FS (mm) | 2'-6" (762) | DLO (mm) | 2'-8" (914) | MO (mm) | 3'-0" (914) | RO (mm) | 3'-6" (1067) | FS (mm) | 3'-6" (1067) | DLO (mm) | 4'-0" (1219) |
| MO (mm) | 1'-6" (457) | RO (mm) | 2'-6" (762) | FS (mm) | 2'-6" (762) | DLO (mm) | 2'-8" (914) | MO (mm) | 3'-0" (914) | RO (mm) | 3'-6" (1067) | FS (mm) | 3'-6" (1067) | DLO (mm) | 4'-0" (1219) |
| MO (mm) | 1'-5 1/2" (445) | RO (mm) | 1'-11 1/2" (597) | FS (mm) | 2'-5 1/2" (749) | DLO (mm) | 2'-7 1/2" (902) | MO (mm) | 2'-11 1/2" (902) | RO (mm) | 3'-0" (914) | FS (mm) | 3'-5 1/2" (1054) | DLO (mm) | 3'-11 1/2" (1207) |



INTEGRITY® FROM MARVIN®
ALL ULTREX® SERIES

Operator Units

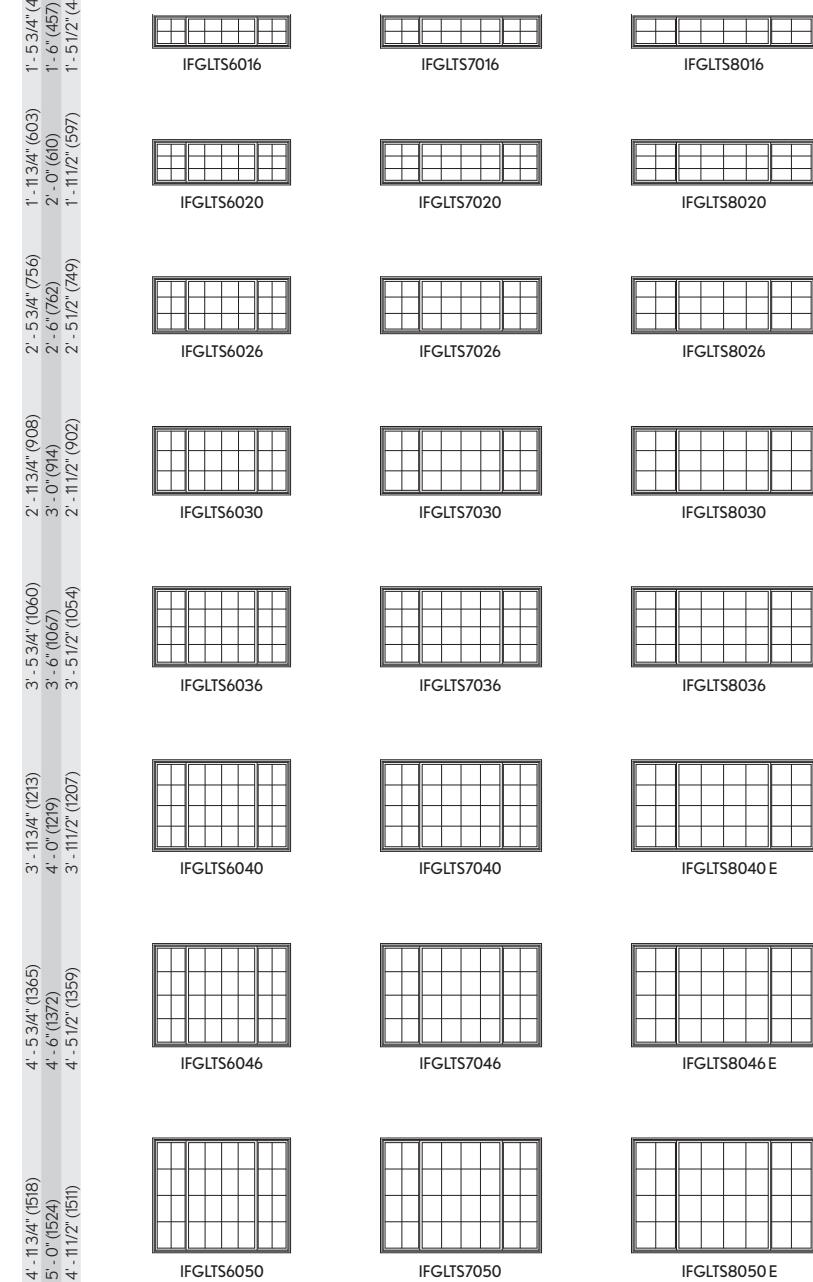
| | | | | | | | |
|-----------------|-------------------|--------------------|--------------------|---------------------|--------------------|---------------------|---------------------|
| MO (mm) | 2' - 6" (762) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) | 4' - 6" (1372) | 5' - 0" (1524) | 6' - 0" (1829) |
| RO (mm) | 2' - 6" (762) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) | 4' - 6" (1372) | 5' - 0" (1524) | 6' - 0" (1829) |
| FS (mm) | 2' - 5 1/2" (749) | 2' - 11 1/2" (902) | 3' - 5 1/2" (1054) | 3' - 11 1/2" (1207) | 4' - 5 1/2" (1359) | 4' - 11 1/2" (1511) | 5' - 11 1/2" (1816) |
| DLO (mm) | 115/16" (287) | 14 5/16" (363) | 17 5/16" (440) | 20 5/16" (516) | 23 5/16" (592) | 26 5/16" (668) | 32 5/16" (821) |



GLIDER

Operator Units

| | | | |
|----------------|---------------------|---------------------|---------------------|
| MO (mm) | 6' - 0" (1829) | 7' - 0" (2134) | 8' - 0" (2438) |
| RO (mm) | 6' - 0" (1829) | 7' - 0" (2134) | 8' - 0" (2438) |
| FS (mm) | 5' - 11 1/2" (1816) | 6' - 11 1/2" (2121) | 7' - 11 1/2" (2426) |



GBG available in standard Rectangular lite cut, shown.
Other GBG lite cuts shown on page 35.

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

Details and Elevations not to scale.

Obscure Glass option available on all units.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

Special sized units available within productsize matrix.
See your Integrity retailer.

See page 87 for specific PG Ratings.

Multiple Assemblies

Multiple assemblies can be factory mulled.

MAXIMUM ROUGH OPENING not to exceed

114" X 60". Maximum up to 3 units wide by 1 unit high.

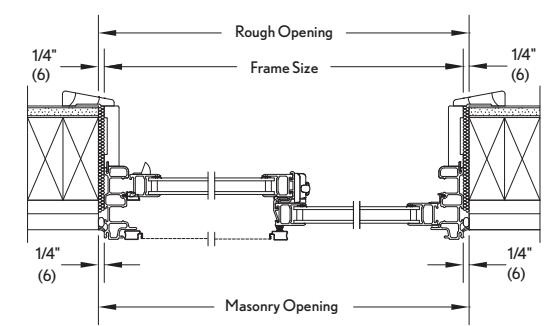
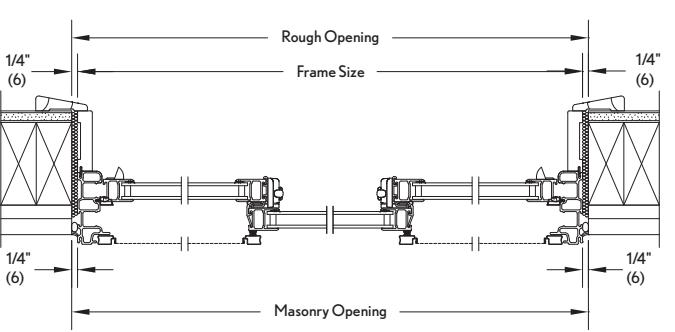
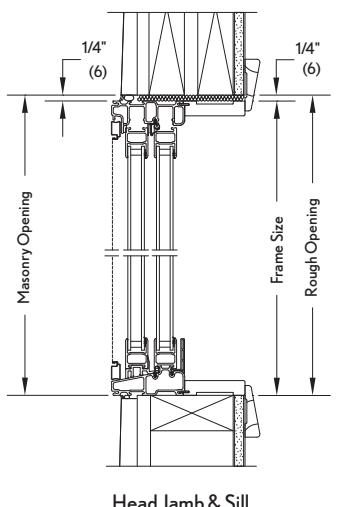
MAXIMUM ROUGH OPENING not to exceed

72" X 78". Maximum up to 2 units wide by 2 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

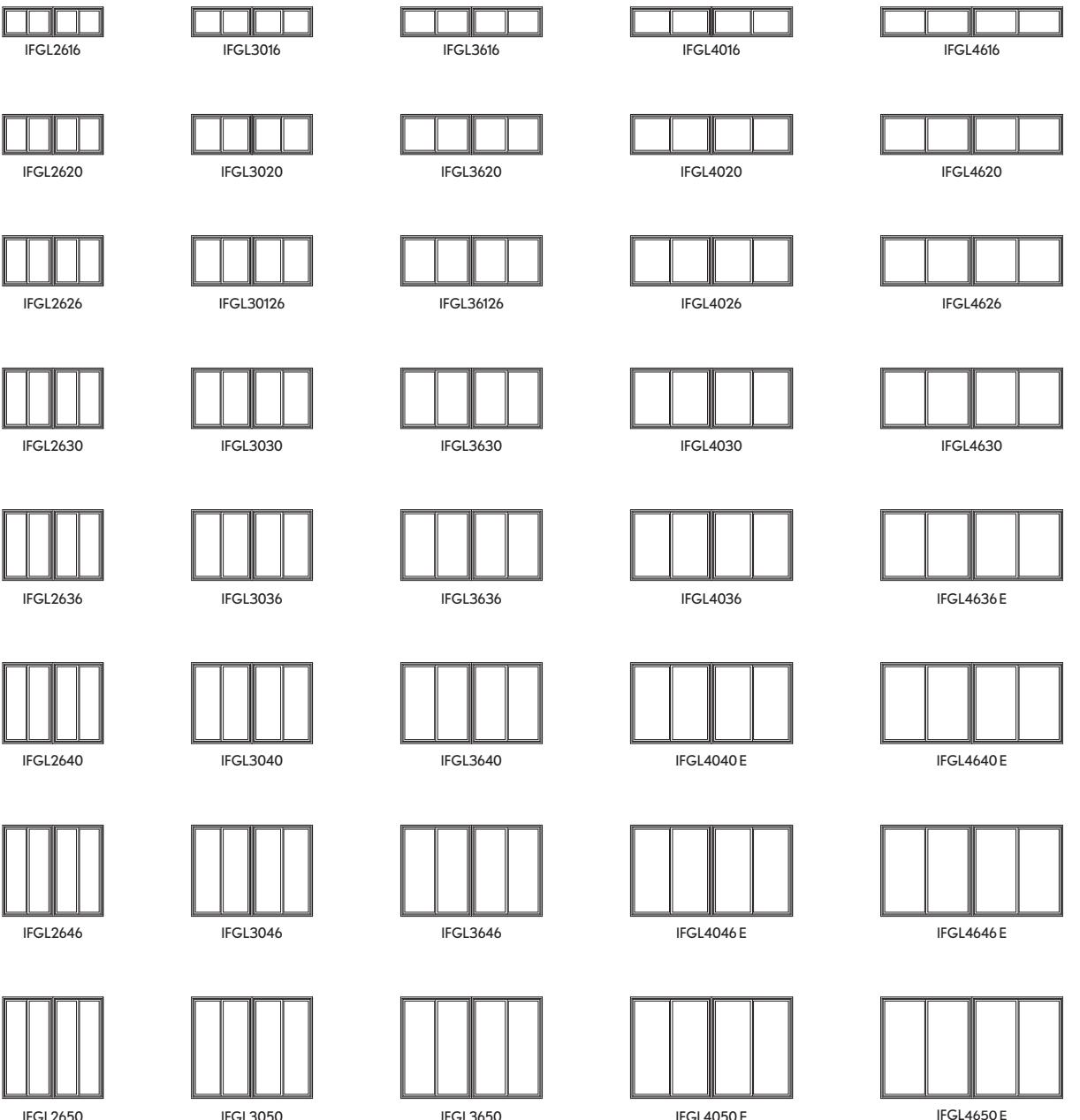


GLIDER

INTEGRITY® FROM MARVIN®
ALL ULTREX® SERIES

2 Wide Operator Units

| | | | | |
|---------------------|---------------------|--------------------|---------------------|--------------------|
| 5' - 0" (1524) | 6' - 0" (1828) | 7' - 0" (2134) | 8' - 0" (2438) | 9' - 0" (2744) |
| 5' - 0" (1524) | 6' - 0" (1828) | 7' - 0" (2134) | 8' - 0" (2438) | 9' - 0" (2744) |
| 4' - 11 1/2" (1511) | 5 - 11 1/2" (1816) | 6 - 11 1/2" (2121) | 7 - 11 1/2" (2426) | 8 - 11 1/2" (2734) |
| 5' - 3 1/4" (1365) | 3' - 11 3/4" (1213) | 3' - 5 3/4" (1060) | 2' - 11 3/4" (908) | 1' - 5 3/4" (451) |
| 4' - 6" (1372) | 4' - 0" (1219) | 3' - 6" (914) | 2' - 6" (762) | 1' - 6" (457) |
| 4' - 5 1/2" (1359) | 3 - 11 1/2" (1207) | 3 - 5 1/2" (1054) | 2 - 11 1/2" (902) | 1 - 5 1/2" (445) |
| 4' - 11 3/4" (1518) | 5' - 0" (1524) | 4' - 5 3/4" (1365) | 3' - 11 3/4" (1060) | 2' - 5 3/4" (756) |
| 5' - 0" (1524) | 4' - 6" (1372) | 3' - 6" (914) | 3' - 0" (914) | 2' - 6" (762) |
| 4' - 11 1/2" (1511) | 3 - 11 1/2" (1359) | 3 - 5 1/2" (1054) | 2 - 11 1/2" (902) | 2' - 5 1/2" (749) |



Multiple Assemblies

Multiple assemblies can be factory mulled.

MAXIMUM ROUGH OPENING not to exceed 114" X 60". Maximum up to 3 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 72" X 78". Maximum up to 2 units wide by 2 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.

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 35.

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

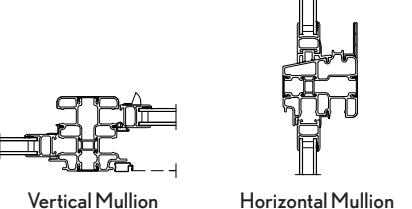
Details and Elevations not to scale.

Obscure Glass option available on all units.

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

See page 87 for specific PG Ratings.

Construction Details



SLIDING PICTURE UNITS

Picture Units

| | | | | | | | |
|------------------|--------------------|------------------|-------------------|-------------------|--------------------|---------------------|---------------------|
| 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 2' - 8" (914) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) | 5' - 0" (1524) |
| 1' - 6" (457) | 2' - 0" (610) | 2' - 6" (762) | 2' - 8" (914) | 3' - 0" (914) | 3' - 6" (1067) | 4' - 0" (1219) | 5' - 0" (1524) |
| 1 - 5 1/2" (445) | 1' - 11 1/2" (597) | 2 - 5 1/2" (749) | 2' - 7 1/2" (902) | 2 - 11 1/2" (902) | 3' - 5 1/2" (1054) | 3' - 11 1/2" (1207) | 4' - 11 1/2" (1511) |
| 12 9/16" (319) | 18 9/16" (471) | 24 9/16" (624) | 26 9/16" (675) | 30 9/16" (776) | 36 9/16" (929) | 42 9/16" (1081) | 54 9/16" (1381) |
| IFSLP1620 | IFSLP2020 | IFSLP2620 | IFSLP2820 | IFSLP3020 | IFSLP3620 | IFSLP4020 | IFSLP5020 |
| IFSLP1626 | IFSLP2026 | IFSLP2626 | IFSLP2826 | IFSLP3026 | IFSLP3626 | IFSLP4026 | IFSLP5026 |
| IFSLP1630 | IFSLP2030 | IFSLP2630 | IFSLP2830 | IFSLP3030 | IFSLP3630 | IFSLP4030 | IFSLP5030 |
| IFSLP1636 | IFSLP2036 | IFSLP2636 | IFSLP2836 | IFSLP3036 | IFSLP3636 | IFSLP4036 | IFSLP5036 |
| IFSLP1640 | IFSLP2040 | IFSLP2640 | IFSLP2840 | IFSLP3040 | IFSLP3640 | IFSLP4040 | IFSLP5040 |
| IFSLP1646 | IFSLP2046 | IFSLP2646 | IFSLP2846 | IFSLP3046 | IFSLP3646 | IFSLP4046 | IFSLP5046 |
| IFSLP1650 | IFSLP2050 | IFSLP2650 | IFSLP2850 | IFSLP3050 | IFSLP3650 | IFSLP4050 | IFSLP5050 |
| IFSLP1656 | IFSLP2056 | IFSLP2656 | IFSLP2856 | IFSLP3056 | IFSLP3656 | IFSLP4056 | IFSLP5056 |
| IFSLP1660 | IFSLP2060 | IFSLP2660 | IFSLP2860 | IFSLP3060 | IFSLP3660 | IFSLP4060 | IFSLP5060 T |

ROUND TOPS

True Half Above Springline (RT2)

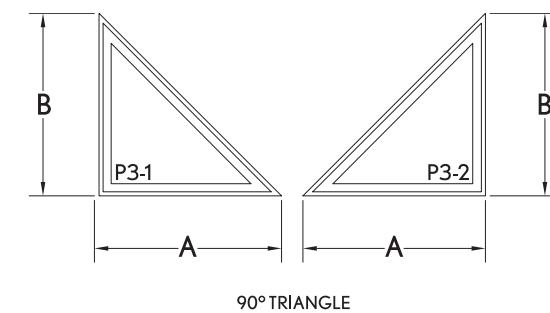
| | | | | | |
|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| MO (mm) | 2' - 6" (762) | RO (mm) | 2' - 6" (762) | FS (mm) | 2' - 5 1/2" (749) |
| 5' - 8 1/2" (1740) | 5' - 2 3/4" (1588) | 4' - 8 1/2" (1435) | 4' - 2 3/4" (1441) | 4' - 2 3/4" (1441) | 3' - 8 1/2" (978) |
| 5' - 8 3/4" (1899) | 5' - 2 3/4" (1746) | 4' - 8 3/4" (1594) | 4' - 8 3/4" (1441) | 4' - 8 3/4" (1441) | 3' - 2 3/4" (984) |
| 5' - 8 1/4" (1734) | 5' - 2 1/4" (1588) | 4' - 8 1/4" (1429) | 4' - 2 1/4" (1276) | 3' - 8 1/4" (1124) | 3' - 2 1/4" (894) |
| 6' - 2 1/4" (1886) | 6' - 3 3/4" (1924) | 5' - 9 1/2" (1765) | 5' - 3 1/2" (163) | 4' - 9 1/2" (1461) | 3' - 9 1/2" (1156) |
| 6' - 3 3/4" (1924) | 5' - 9 3/4" (1772) | 5' - 3 3/4" (169) | 4' - 9 3/4" (1467) | 4' - 3 3/4" (1314) | 3' - 3 3/4" (1010) |
| 6' - 3 1/4" (911) | 5' - 9 1/4" (1759) | 5' - 3 1/4" (1607) | 4' - 9 1/4" (1454) | 4' - 3 1/4" (1302) | 3' - 3 1/4" (937) |
| 6' - 3 1/2" (918) | 6' - 2 1/2" (1816) | 5' - 5 1/2" (1664) | 4' - 11 1/2" (151) | 4' - 5 1/2" (1359) | 3' - 11 1/2" (1207) |
| 6' - 3 3/4" (1975) | 6' - 1 3/4" (1822) | 5' - 5 3/4" (1670) | 4' - 11 3/4" (1518) | 4' - 5 3/4" (1365) | 3' - 11 3/4" (1213) |
| 6' - 5 1/4" (1962) | 5' - 1 1/4" (1810) | 5' - 5 1/4" (1657) | 4' - 11 1/4" (1505) | 4' - 5 1/4" (1553) | 3' - 11 1/4" (1200) |
| 6' - 5 1/2" (2045) | 6' - 2 1/2" (1892) | 5' - 8 1/2" (1740) | 5' - 2 1/2" (1588) | 4' - 8 1/2" (1435) | 3' - 11 1/2" (1283) |
| 6' - 8 3/4" (2058) | 6' - 2 3/4" (1899) | 5' - 8 3/4" (1746) | 5' - 2 3/4" (1594) | 4' - 8 3/4" (1441) | 3' - 11 3/4" (1137) |
| 6' - 8 1/4" (2038) | 6' - 2 1/4" (1886) | 5' - 8 1/4" (1734) | 5' - 2 1/4" (1581) | 4' - 8 1/4" (1429) | 3' - 11 1/4" (1124) |
| 6' - 11 1/2" (2121) | 6' - 5 1/2" (1969) | 5' - 11 1/2" (1816) | 5' - 5 1/2" (1664) | 4' - 11 1/2" (1511) | 4' - 5 1/2" (1359) |
| 6' - 11 3/4" (2127) | 6' - 5 3/4" (1975) | 5' - 11 3/4" (1822) | 5' - 5 3/4" (1670) | 4' - 11 3/4" (1518) | 3' - 11 3/4" (1213) |
| 6' - 11 1/4" (2115) | 6' - 5 1/4" (1962) | 5' - 11 1/4" (1810) | 5' - 5 1/4" (1657) | 4' - 11 1/4" (1505) | 3' - 11 1/4" (1200) |
| IFRT2610 | IFRT2616 | IFRT2620 | IFRT2626 | IFRT2630 | IFRT2636 |
| IFRT2810 | IFRT2816 | IFRT2820 | IFRT2826 | IFRT2830 | IFRT2836 |
| IFRT3010 | IFRT3016 | IFRT3020 | IFRT3026 | IFRT3030 | IFRT3036 |
| IFRT3610 | IFRT3616 | IFRT3620 | IFRT3626 | IFRT3630 | IFRT3636 |
| IFRT4010 | IFRT4016 | IFRT4020 | IFRT4026 | IFRT4030 | IFRT4036 |
| IFRT5010 | IFRT5016 | IFRT5020 | IFRT5026 | IFRT5030 | IFRT5036 |
| IFRT5410 | IFRT5416 | IFRT5420 | IFRT5426 | IFRT5430 | IFRT5436 |
| IFRT6010 | IFRT6016 | IFRT6020 | IFRT6026 | | |

ROUND TOPS

True Half Above Springline (RT2)

| | | | | | |
|-------------------|-------------------|-------------------|-------------------|---------------------|---------------------|
| MO (mm) | 4' - 0" (1219) | RO (mm) | 4' - 0" (1219) | FS (mm) | 3' - 11 1/2" (1207) |
| 5' - 0" (1524) | 5' - 0" (1524) | 5' - 0" (1524) | 5' - 0" (1524) | 4' - 11 1/2" (1511) | 5' - 31 1/2" (1600) |
| 5' - 2 1/2" (826) | 5' - 2 3/4" (832) | 5' - 2 1/4" (845) | 5' - 2 1/4" (845) | 4' - 11 1/2" (1511) | 5' - 31 1/2" (1816) |
| 5' - 2 3/4" (673) | 5' - 2 3/4" (679) | 5' - 2 1/4" (679) | 5' - 2 1/4" (679) | 4' - 11 1/2" (1511) | 5' - 31 1/2" (1829) |
| 2' - 8 1/2" (978) | 2' - 8 3/4" (984) | 2' - 8 1/4" (984) | 2' - 8 1/4" (984) | 4' - 11 1/2" (1511) | 5' - 31 1/2" (1829) |
| 2' - 2 3/4" (673) | 2' - 2 3/4" (679) | 2' - 2 1/4" (679) | 2' - 2 1/4" (679) | 4' - 11 1/2" (1511) | 5' - 31 1/2" (1829) |
| IFRT2610 | IFRT2616 | IFRT2620 | IFRT2626 | IFRT2630 | IFRT2636 |
| IFRT2810 | IFRT2816 | IFRT2820 | IFRT2826 | IFRT2830 | IFRT2836 |
| IFRT3010 | IFRT3016 | IFRT3020 | IFRT3026 | IFRT3030 | IFRT3036 |
| IFRT3610 | IFRT3616 | IFRT3620 | IFRT3626 | IFRT3630 | IFRT3636 |
| IFRT4010 | IFRT4016 | IFRT4020 | IFRT4026 | IFRT4030 | IFRT4036 |
| IFRT5010 | IFRT5016 | IFRT5020 | IFRT5026 | IFRT5030 | IFRT5036 |
| IFRT5410 | IFRT5416 | IFRT5420 | IFRT5426 | IFRT5430 | IFRT5436 |
| IFRT6010 | IFRT6016 | IFRT6020 | IFRT6026 | | |

POLYGON



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.

SPECIFICATION NOTES:

All units are subject to validation.

Maximum/Minimum Guidelines

Maximum Square Footage: 49 sq. ft. of Rough Opening

Maximum Width: 114" Rough Opening

Maximum Height: 114" Rough Opening

Minimum (RECT, P3, P4, P5): 12" x 12" Rough Opening

Minimum (P8): 18" x 18" Rough Opening

Minimum Short Leg (P4, P5): 8" Rough Opening

P3 Pitch: 3/12 to 36/12 Pitch Available

P4 Pitch: 36/12 Maximum Pitch Available

P5 Pitch: 36/12 Maximum Pitch Available

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mulled.

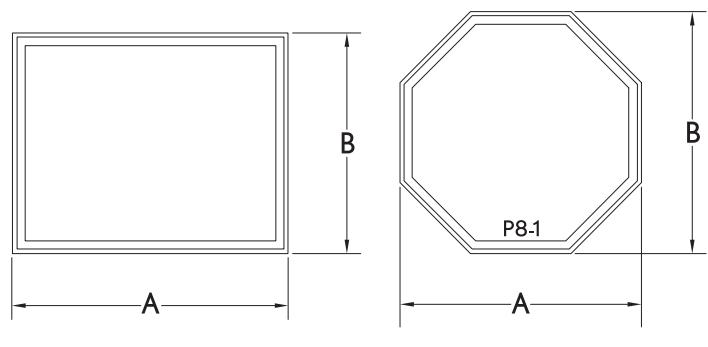
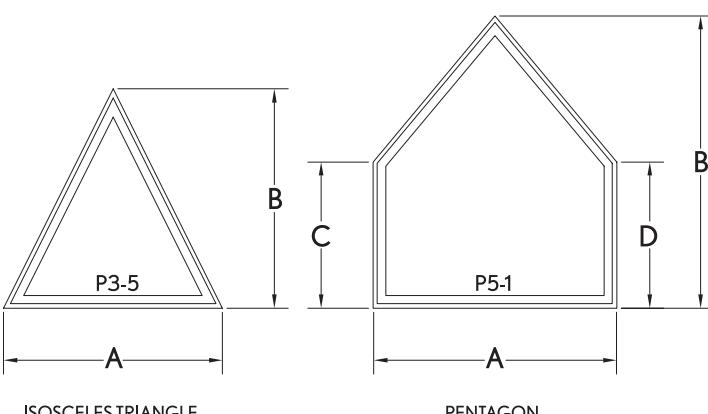
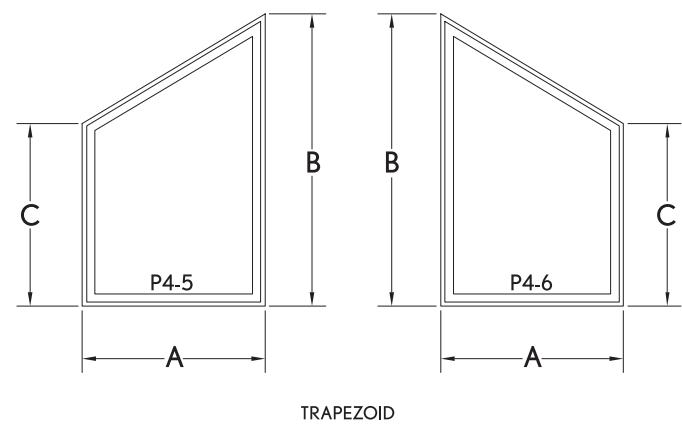
MAXIMUM ROUGH OPENING: not to exceed 114" x 78".

Maximum up to 6 units wide by 1 unit high.

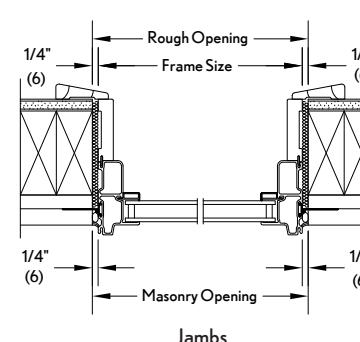
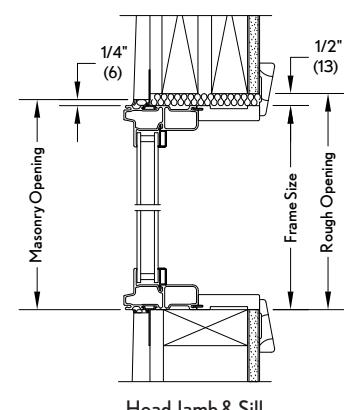
MAXIMUM ROUGH OPENING: not to exceed 96" x 96".

Maximum up to 5 units wide by 5 units high.

NOTE: Units with Rough Opening larger than 37.75 sq. ft. will be standard tempered.



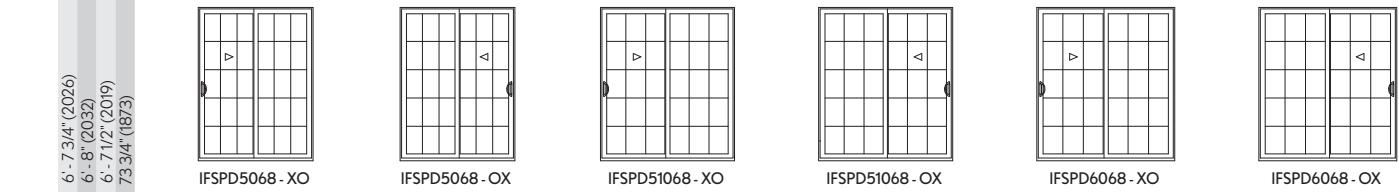
Construction Details



SLIDING PATIO DOOR

2 Panel Sliding Patio Door

| | | | | | | | |
|-----------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| MO (mm) | 5' - 0" (1524) | 5' - 0" (1524) | 5' - 10 1/2" (1791) | 5' - 10 1/2" (1791) | 5' - 10 1/2" (1829) | 6' - 0" (1829) | 6' - 0" (1829) |
| RO (mm) | 5' - 0" (1524) | 5' - 0" (1524) | 5' - 10 1/2" (1791) | 5' - 10 1/2" (1791) | 5' - 10" (1778) | 5' - 10" (1778) | 5' - 10" (1816) |
| FS (mm) | 4' - 11 1/2" (1511) | 4' - 11 1/2" (1511) | 5' - 10" (1778) | 5' - 10" (1778) | 5' - 11 1/2" (1816) | 5' - 11 1/2" (1816) | 5' - 11 1/2" (1816) |
| DLO (mm) | 26 1/4" (667) | 26 1/4" (667) | 31 1/4" (794) | 31 1/4" (794) | 32 1/4" (819) | 32 1/4" (819) | 32 1/4" (819) |



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". Structural mullion reinforcement is required for some assemblies.
Special sized units available within two panel product size matrix. See your Integrity retailer.
See page 87 for specific PG Ratings.

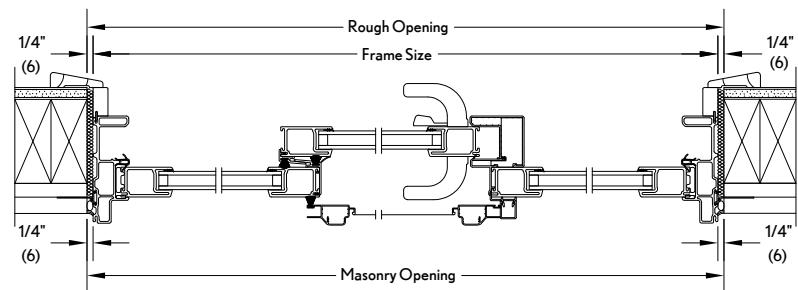
SLIDING PATIO DOOR

3 Panel Sliding Patio Door

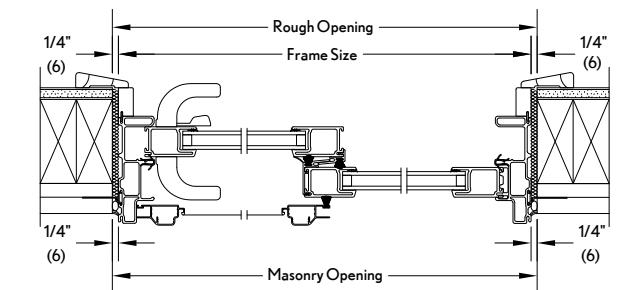
| M.O. (mm) | 9' - 0" (2743) | 9' - 0" (2743) | 9' - 0" (2743) | 9' - 0" (2743) |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| R.O. (mm) | 9' - 0" (2743) | 9' - 0" (2743) | 9' - 0" (2743) | 9' - 0" (2743) |
| F.S. (mm) | 8'-11 1/2" (2731) | 8'-11 1/2" (2731) | 8'-11 1/2" (2731) | 8'-11 1/2" (2731) |
| D.L.O. (mm) | 32 1/4" (819) | 32 1/4" (819) | 32 1/4" (819) | 32 1/4" (819) |
| 6'-7 3/4" (2026) | | | | |
| 6'-8" (2032) | | | | |
| 6'-10" (2083) | | | | |
| 6'-9 1/2" (2070) | | | | |
| 75 3/4" (1924) | | | | |
| 7'-1 3/4" (2432) | | | | |
| 8'-0" (2438) | | | | |
| 7'-11 1/2" (2426) | | | | |
| 89 3/4" (2280) | | | | |

SLIDING PATIO DOOR

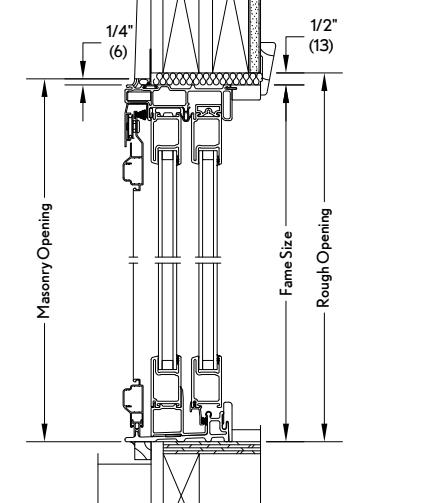
Construction Details



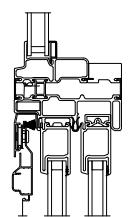
3 Panel OXO Operator Jamb



2 Panel XO Operator Jamb



Head Jamb & Sill



Direct Glaze Transom
Over Sliding Patio Door

Direct Glaze Transom Over Sliding Patio Door

| M.O. (mm) | 6' - 0" (1829) |
|------------------|-------------------|
| R.O. (mm) | 6' - 0" (1829) |
| F.S. (mm) | 5'-11 1/2" (1816) |
| 8'-3 3/4" (2534) | |
| 8'-4" (2540) | |
| 8'-3 1/2" (2527) | |

Sliding Patio Door Direct Glaze Transom

| M.O. (mm) | 5' - 0" (1524) | 5' - 10 1/2" (1791) | 6' - 0" (1829) | 9' - 0" (2743) |
|------------------|-------------------|---------------------|-------------------|-------------------|
| R.O. (mm) | 5' - 0" (1524) | 5' - 10 1/2" (1791) | 6' - 0" (1829) | 9' - 0" (2743) |
| F.S. (mm) | 4'-11 1/2" (1511) | 5'-10" (1778) | 5'-11 1/2" (1816) | 8'-11 1/2" (2731) |
| D.L.O. (mm) | 57 1/4" (1454) | 67 1/4" (1708) | 69 1/4" (1759) | 105 1/4" (2673) |
| 0'-11 3/4" (298) | | | | |
| 1'-0" (305) | | | | |
| 0'-11 1/2" (292) | | | | |
| 9 1/4" (235) | | | | |
| 1'-5 3/4" (45) | | | | |
| 1'-6" (457) | | | | |
| 1'-5 1/2" (445) | | | | |
| 15 1/4" (387) | | | | |

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 35. (Not available on In-Sash Transom units.)

Details and Elevations not to scale.

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

See page 87 for specific PG Ratings.

XO operation shown, OX operation optional.

Multiple Assemblies

Multiple assembly units can be factory milled up to 1 unit wide by 2 units high.

MAXIMUM ROUGH OPENING:

not to exceed 72" x 100 1/2". Field mill kits available for up to 3 units wide by 2 units high not to exceed 110" x 112". Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity representative for more information.

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.



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