Built to perform.

More strength, durability and performance are offered by Integrity from Marvin All Ultrex Series. With an exterior and interior of Ultrex®, a pultruded fiberglass material that outperforms and outlasts vinyl, this series is everything you want plus the reputation for quality from Marvin Windows and Doors. The All Ultrex Series is easy to order, simple to install, delivered on time, energy efficient and extremely well built so you’ll have virtually no call backs. Take performance to the next level with Integrity from Marvin, All Ultrex Series.
Ultrex® Looks like a beauty. Works like a beast.

With a seal this tight, only good news gets out.

Ultrex has a low thermal expansion rate. Plus, Ultrex expands at virtually the same rate as glass, so the entire window stays tightly sealed, with no leaks, seal failures, or stress cracks. Unlike vinyl, which can distort in extreme heat or streak and crack in fluctuating temperatures, Ultrex stays square, true and beautiful over the long term.

If you’ve ever struggled with an ill-fitting, dinged or cracked window, there’s good news: Ultrex. Ultrex is superior to vinyl and roll-form aluminum in virtually every way—strength, beauty, stability, durability, and energy efficiency. From easy installation to trouble-free maintenance (with virtually no call backs), Ultrex is a great window and door material that translates into a hassle-free experience.

And its from Integrity® from Marvin Windows and Doors, the global leader in composite windows for more than a decade.

Ultrex is 8x stronger than vinyl! Tough, dependable, non-corrosive and low-maintenance, the last word in window and door construction is Ultrex.

Ultrex has a tensile strength equal to that of steel. One square inch of Ultrex could hold the weight of eleven cars—totaling 34,000 pounds!

Ultrex: 34,000 psi tensile
Steel: 33,000 psi tensile

Vinyl
ULTREX®
Pultruded fiberglass

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

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

Integrity All Ultrex Series interior
The interior is created with the same durable Ultrex fiberglass as the exterior and is offered in Stone White, Pebble Gray, Cashmere, Bronze, Evergreen and Ebony. Can be painted with no impact on its protective properties.

If you’ve ever struggled with an ill-fitting, dinged or cracked window, there’s good news: Ultrex. Ultrex is superior to vinyl and roll-form aluminum in virtually every way—strength, beauty, stability, durability, and energy efficiency. From easy installation to trouble-free maintenance (with virtually no call backs), Ultrex is a great window and door material that translates into a hassle-free experience.

And its from Integrity® from Marvin Windows and Doors, the global leader in composite windows for more than a decade.

Ultrex® Looks like a beauty. Works like a beast.

With a seal this tight, only good news gets out.

Ultrex has a low thermal expansion rate. Plus, Ultrex expands at virtually the same rate as glass, so the entire window stays tightly sealed, with no leaks, seal failures, or stress cracks. Unlike vinyl, which can distort in extreme heat or streak and crack in fluctuating temperatures, Ultrex stays square, true and beautiful over the long term.

If you’ve ever struggled with an ill-fitting, dinged or cracked window, there’s good news: Ultrex. Ultrex is superior to vinyl and roll-form aluminum in virtually every way—strength, beauty, stability, durability, and energy efficiency. From easy installation to trouble-free maintenance (with virtually no call backs), Ultrex is a great window and door material that translates into a hassle-free experience.

And its from Integrity® from Marvin Windows and Doors, the global leader in composite windows for more than a decade.

Ultrex® Looks like a beauty. Works like a beast.

With a seal this tight, only good news gets out.

Ultrex has a low thermal expansion rate. Plus, Ultrex expands at virtually the same rate as glass, so the entire window stays tightly sealed, with no leaks, seal failures, or stress cracks. Unlike vinyl, which can distort in extreme heat or streak and crack in fluctuating temperatures, Ultrex stays square, true and beautiful over the long term.

If you’ve ever struggled with an ill-fitting, dinged or cracked window, there’s good news: Ultrex. Ultrex is superior to vinyl and roll-form aluminum in virtually every way—strength, beauty, stability, durability, and energy efficiency. From easy installation to trouble-free maintenance (with virtually no call backs), Ultrex is a great window and door material that translates into a hassle-free experience.

And its from Integrity® from Marvin Windows and Doors, the global leader in composite windows for more than a decade.

Ultrex® Looks like a beauty. Works like a beast.

With a seal this tight, only good news gets out.

Ultrex has a low thermal expansion rate. Plus, Ultrex expands at virtually the same rate as glass, so the entire window stays tightly sealed, with no leaks, seal failures, or stress cracks. Unlike vinyl, which can distort in extreme heat or streak and crack in fluctuating temperatures, Ultrex stays square, true and beautiful over the long term.

If you’ve ever struggled with an ill-fitting, dinged or cracked window, there’s good news: Ultrex. Ultrex is superior to vinyl and roll-form aluminum in virtually every way—strength, beauty, stability, durability, and energy efficiency. From easy installation to trouble-free maintenance (with virtually no call backs), Ultrex is a great window and door material that translates into a hassle-free experience.

And its from Integrity® from Marvin Windows and Doors, the global leader in composite windows for more than a decade.
InTEgRITy® fRom mARvIn All ULtREx® SERIeS

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

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

ISO certification is a voluntary undertaking and speaks to the depth of an organization’s commitment to quality and the environment. Integrity from Marvin willingly took on this challenge in an effort to raise our own high standards of quality and test our quality management systems against the world’s highest standards. To receive certification Integrity underwent an extensive detailed audit process that requires an unwavering commitment to quality and the environment and continuous resolve for improved management systems.

Integrity Windows and Doors is proud to have achieved both our ISO-9001-2000 and ISO-14001-2004 certification and will continue to focus our efforts to ensure consistent quality and environmental standards in serving you now and into the future.

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

Energy Efficiency
An Energy Star is born.

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

Why? Because Ultrex® is 500 times less conductive than aluminum. In that, it resembles wood and PVC. And—compared to single-pane unglazed windows— Integrity’s double-pane windows with LoE— coatings can reduce window heat loss and cut costs by 34% in cold climates, and cut cooling costs by 36% in warm climates.2 Argon gas, which has thermal conductivity 30% lower than that of air, and a warm-edge spacer also contributes to Integrity’s energy efficient products.

At the same time, UV rays are screened to reduce fading and damage to upholstery and carpets.

LoE glass is coated with microscopic metal or metallic oxide layers to reflect or absorb the sun’s warmth, as well as reduce the damage from UV rays.

LoE stands for “low emissivity” and is designed to improve thermal performance. LoE glass is coated with microscopic metal or metallic oxide layers to reflect or absorb the sun’s warmth, as well as reduce the damage from UV rays.

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

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

Our commitment to environmental responsibility is evident in what our windows are made of, how we make them, and what they can do for the home. Ultrex® is made primarily of silica sand, an abundant natural resource, and recycled glass content. Plus the glass in our products contains 15% – 33% recycled content. Additionally, Ultrex requires 39% less energy to produce than vinyl.

The Ultrex manufacturing facility is the only pultrusion company to fully comply with the EPA’s RMP Clear Air Act and has been designated as a MACT (Maximum Achievable Control Technology) facility. Integrity was also designated the Greener North Dakota Company of the Year for 2005—presented by North Dakota Solid Waste & Recycling Association (NDSWARA), and our Fargo facility’s environmental management system is ISO-14001-2004 certified.

For more information visit www.integritywindows.com and click on “green building.”

Manufactured for quality and the environment.

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

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

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

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

Options for Integrity® All Ultrex® Windows and Doors

**Finishes**

- Stone White (exterior and interior)
- Cashmere (exterior)
- Pebble Gray (exterior)
- Bronze (exterior)
- Evergreen (exterior)
- Ebony (exterior)

**Glazing**

- Tempered obscure glass provides privacy and safety. Secure a modicum of privacy without sacrificing the performance of Integrity’s LoE® and LoE®-366® insulating glass with Argon gas. Available on every All Ultrex window.

Every window and door comes standard with LoE® insulating glass with Argon gas or optional LoE®-366® for superior performance and long-term energy costs savings. Tempered insulating glass with Argon gas is available in LoE® and LoE®-366.

**Grilles**

- Profiled Grilles-Between-the-Glass** are available in several popular lite cut options (see page 19) for a classic divided lite look and easy glass cleaning.

Available in a Stone White interior with a Stone White, Pebble Gray, Cashmere, Bronze, Evergreen and Ebony exterior to match the exterior finish.

**Hardware**

- All interior hardware comes in a standard White finish.

- Sliding Patio Door Interior Handle Finish
- Sliding Patio Door Exterior Handle Finish**

**Options for Integrity® All Ultrex® Windows and Doors**

- Special Sizes: All Ultrex windows can be specified by rough opening to 1/4” for the perfect fit.

- J-Channel: Installs easily with various installation applications, while the detailed profile provides a more dramatic finished appearance.

- Frame Expander: Provides the look of thicker casing profile, while allowing for installation flexibility.

- Sheetrock Return: Factory-applied return accommodates 1/8” to 1/4” drywall and provides time savings on the job site.

- 3/4” Receiver: Works with thicker installation methods, including box jambs.

- Jamb Extension: A 2” window jamb depth is standard, but factory-applied 4 9/16” or 6 9/16” white non-wood jamb extensions are available.

- Vent Stop: Temporarily limits sash movement for safety and security.

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

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

- 3/4” Receiver: Works with thicker installation methods, including box jambs.

- Jamb Extension: A 2” window jamb depth is standard, but factory-applied 4 9/16” or 6 9/16” white non-wood jamb extensions are available.

- Vent Stop: Temporarily limits sash movement for safety and security.

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

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

- 3/4” Receiver: Works with thicker installation methods, including box jambs.

- Jamb Extension: A 2” window jamb depth is standard, but factory-applied 4 9/16” or 6 9/16” white non-wood jamb extensions are available.

- Vent Stop: Temporarily limits sash movement for safety and security.

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

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

- 3/4” Receiver: Works with thicker installation methods, including box jambs.

- Jamb Extension: A 2” window jamb depth is standard, but factory-applied 4 9/16” or 6 9/16” white non-wood jamb extensions are available.

- Vent Stop: Temporarily limits sash movement for safety and security.

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

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

Fast, on-time, complete and defect-free delivery and standard factory-installed screens make Integrity All Ultrex® Series easy to use on any project.

Factory mulling is available and provides on-site time savings and convenience. Field mulling kits are also available and allow for design flexibility and unique custom configurations.

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

** Not available in polygons except direct-glaze rectangles.

*** Matches Ultrex finish selection.
There is more than a single reason to like this beauty. The All Ultrex® Single Hung offers DP50 performance on a majority of sizes. Innovative tilt latches, robust low profile sash lock, factory-applied installation accessories, and superior delivery combine with Ultrex construction, LoE glass and energy star qualified performance to make the Single Hung a superior product in both looks and performance. Mull with picture units, transoms, other Single Hung or Polygon units to create unique multiple assemblies. Factory mulling and field mulling kits are available.

- 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.

**SINGLE HUNG WINDOWS**

Designed for beauty. Engineered for life.
DOUBLE HUNG

Stunning looks, with surprising depth.

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 DP50 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, other Double Hungs or Polygon units to create a myriad of assemblies. Factory Mulling and Field Mulling Kits are available.

- 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.
Say goodbye to sagging headers and painful operation of vinyl gliders forever. The All Ultrex® Glider offers Ultrex construction that ensures smooth, effortless operation for years to come thanks to the superior strength and minimal expansion/contraction properties of Ultrex. Choose an X0, OX or OXX (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. DP40 performance on a majority of sizes and the standard suite of All Ultrex Series options make ordering, delivery, installation and dependable performance effortless.

- 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.

Sash lock provides a positive detent, reassuring the user that the window is either locked or unlocked.
Big views beg for big windows. Polygons are available with lengths of 96” and overall dimension of 49 square feet.*

A new angle on style.

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, flanking, unique assemblies or stand alone units. These windows offer WDMA Design Pressure 50 Hallmark Certification (DP50), 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.

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

+ Standard jambs of 4-9/16” (116 mm) and 6-9/16” (167 mm) are available factory applied or as an extension kit.
+ Consistent, fast delivery applies to even the most unique products.

Octagon
Isosceles Triangle
Pentagon
Rectangle
90˚ Triangle
Trapezoid
Welcome to consistent durable performance. The All Ultrex Sliding Patio Door provides low maintenance DP30 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.

- A top hung sliding screen operates smoothly free of dirt and debris.
- Matching handle set design provides style and security.
- Handle set complements the Ultrex finish option, and are available in White to the interior; and White, Pebble Gray, Cashmere, Bronze, Evergreen and Ebony to the exterior.

Ultrex strength and durability provide superior performance and continual ease of operation.

It works, beautifully.
ORDERING INTEGRITY® ALL ULTREX® SERIES

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 glass size. The masonry opening is for a home built with brick or stone; rough openings are for houses with wood, vinyl or metal siding. Frame size measures from edge to edge of the unit; glass size indicates the dimensions of the total glass, both visible and covered, in a single sash.

**Mulling Options**

A variety of factory mulled combinations are available two units wide by two units high or four units wide by one unit high, or select a field mulling kit to create your own unique multiple assemblies. Please contact your local Integrity from Marvin representative for more information.

---

**Integrity All Ultrex Series Products**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
<td>2'3&quot; 1/2&quot; (714)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
</tr>
<tr>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
<td>2'3&quot; 1/2&quot; (714)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
</tr>
<tr>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
<td>2'3&quot; 1/2&quot; (714)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
</tr>
<tr>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
<td>2'3&quot; 1/2&quot; (714)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
</tr>
<tr>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>1'8&quot; 1/2&quot; (558)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
<td>2'3&quot; 1/2&quot; (714)</td>
<td>2'4&quot; 1/2&quot; (714)</td>
</tr>
</tbody>
</table>

*Polygon units are specified according to guidelines on page 40.
### Single Hung

#### Operating Units - 18", 24", 30", 36", 42", 48" Widths

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1' - 6&quot; (457)</td>
<td>2' - 0&quot; (610)</td>
<td>27 9 /32&quot; (693)</td>
<td>13 17 /32&quot; (344)</td>
</tr>
<tr>
<td>2' - 0&quot; (610)</td>
<td>2' - 6&quot; (762)</td>
<td>24 9 /32&quot; (617)</td>
<td>19 17 /32&quot; (496)</td>
</tr>
<tr>
<td>2' - 6&quot; (762)</td>
<td>2' - 8&quot; (914)</td>
<td>21 9 /32&quot; (541)</td>
<td>25 17 /32&quot; (649)</td>
</tr>
<tr>
<td>3' - 0&quot; (914)</td>
<td>3' - 6&quot; (1067)</td>
<td>18 9 /32&quot; (464)</td>
<td>27 17 /32&quot; (703)</td>
</tr>
<tr>
<td>3' - 6&quot; (1067)</td>
<td>4' - 0&quot; (1219)</td>
<td>15 9 /32&quot; (388)</td>
<td>31 17 /32&quot; (801)</td>
</tr>
<tr>
<td>4' - 0&quot; (1219)</td>
<td>4' - 6&quot; (1372)</td>
<td>12 9 /32&quot; (312)</td>
<td>37 17 /32&quot; (953)</td>
</tr>
<tr>
<td>4' - 6&quot; (1372)</td>
<td>5' - 0&quot; (1524)</td>
<td>9' 9 /32&quot; (236)</td>
<td>43 17 /32&quot; (1106)</td>
</tr>
</tbody>
</table>

**MULTIPLE ASSEMBLIES**

Multiple assemblies can be factory mullled up-to 4 units wide by 1 unit high.

- **MASONRY OPENING**: not to exceed 364" x 78" or up-to 2 units wide by 2 units high.
- **ROUGH OPENING**: not to exceed 190" x 90". Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity representative for more information.

---

**Construction Details**

- **Jams**
- **Head Jamb & Sill**
- **Vertical Mullion**
- **Horizontal Mullion**

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

GBG available in standard rectangular lite cut shown. Other GBG lite cuts shown on page 19.

\*C = Cottage Style

Obscure Glass option available on all units.

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

See page 39 for specific DP ratings.
## Integrity® from Marvin

### All Ultrex® Series

**SINGLE HUNG**


<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>2’-11 3/4” (903)</th>
<th>3’-11 3/4” (1213)</th>
<th>5’-3 1/2” (1600)</th>
<th>6’-6 1/4” (1981)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rough Opening</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frame Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Masonry Opening**

| 3’-0” (914) | 4’-0” (1219) | 5’-0” (1524) | 5’-4” (1626) | 6’-0” (1829) | 8’-0” (2438) |

**Rough Opening**

| 3’-0” (914) | 4’-0” (1219) | 5’-0” (1524) | 5’-4” (1626) | 6’-0” (1829) | 8’-0” (2438) |

**Frame Size**

| 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) |

---

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

Details and Elevations not to scale.

\*C = Cottage Style

Obscure Glass option available on all units.

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

See page 39 for specific DP ratings.

---

**MULTIPLE ASSEMBLIES**

Multiple assemblies can be factory mullled up to 4 units wide by 1 unit high.

**MAXIMUM ROUGH OPENING:**

-not to exceed 154” x 78” or up to 2 units wide by 2 units high.

**MAXIMUM ROUGH OPENING:**

-not to exceed 138” x 96”. Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

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

#### Multiple Assemblies

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

**MAXIMUM ROUGH OPENING:**
- Not to exceed 114" x 78" or 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.

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

**This product is only available field mullied.** Details and elevations not to scale.

- /C = Cottage Style
- Obscure Glass option available on all units.
- Special sized units available within product size matrix. See your Integrity retailer.

See page 39 for specific DP ratings.
SINGLE HUNG

4 Wide Operating Units – 72’, 96’ Widths

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’ - 0” (1829)</td>
<td>0’ - 0” (0)</td>
<td>0’ - 0” (0)</td>
</tr>
<tr>
<td>6’ - 6” (1981)</td>
<td>0’ - 6” (182)</td>
<td>0’ - 6” (182)</td>
</tr>
<tr>
<td>6’ - 5 1/2” (1969)</td>
<td>0’ - 5 1/2” (181.6)</td>
<td>0’ - 5 1/2” (181.6)</td>
</tr>
</tbody>
</table>

In-Sash Transom Mulled Over Single Hung – Operating Unit

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’ - 0” (1829)</td>
<td>0’ - 0” (0)</td>
<td>0’ - 0” (0)</td>
</tr>
<tr>
<td>6’ - 6” (1981)</td>
<td>0’ - 6” (182)</td>
<td>0’ - 6” (182)</td>
</tr>
<tr>
<td>6’ - 5 1/2” (1969)</td>
<td>0’ - 5 1/2” (181.6)</td>
<td>0’ - 5 1/2” (181.6)</td>
</tr>
</tbody>
</table>

120° Flankers with Picture Unit Center **

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’ - 0” (1829)</td>
<td>0’ - 0” (0)</td>
<td>0’ - 0” (0)</td>
</tr>
<tr>
<td>6’ - 6” (1981)</td>
<td>0’ - 6” (182)</td>
<td>0’ - 6” (182)</td>
</tr>
<tr>
<td>6’ - 5 1/2” (1969)</td>
<td>0’ - 5 1/2” (181.6)</td>
<td>0’ - 5 1/2” (181.6)</td>
</tr>
</tbody>
</table>

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled up to 4 units wide by 1 unit high.

MAXIMUM ROUGH OPENING: not to exceed 114” x 78” or up to 2 units wide by 2 units high.

MAXIMUM ROUGH OPENING: not to exceed 96” x 96”. Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

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

Operating Units – 18”, 24”, 30”, 32”, 36”, 42”, 48” Widths

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1’-6” (457)</td>
<td>2’-0” (610)</td>
<td>15 3/32’ (380)</td>
<td>13 17/32” (344)</td>
</tr>
<tr>
<td>2’-0” (610)</td>
<td>2’-6” (762)</td>
<td>21 9/32’ (541)</td>
<td>19 17/32” (496)</td>
</tr>
<tr>
<td>2’-6” (762)</td>
<td>2’-8” (914)</td>
<td>27 9/32’ (693)</td>
<td>25 17/32” (649)</td>
</tr>
<tr>
<td>3’-0” (914)</td>
<td>3’-6” (1067)</td>
<td>33 9/32’ (845)</td>
<td>30 17/32” (769)</td>
</tr>
<tr>
<td>3’-6” (1067)</td>
<td>4’-0” (1219)</td>
<td>39 9/32’ (996)</td>
<td>37 17/32” (953)</td>
</tr>
</tbody>
</table>

**Multiple Assemblies**

Multiple assemblies can be factory milled up to 4 units wide by 1 unit high.

Maximum Rough Opening:
- Not to exceed 114” x 78” or up to 2 units wide by 2 units high.

Maximum Rough Opening:
- Not to exceed 90” x 90”. 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. Other GBG lite cuts shown on page 19.*

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

Details and Elevations not to scale.

/C = Cottage Style

Obscure Glass option available on all units. Special sized units available within product size matrix. See your Integrity retailer. See page 39 for specific DP ratings.

**Construction Details**

[Diagram of construction details]
**DOUBLE HUNG**

2 Wide Operating Units – 18", 24", 30", 36", 42", 48" Widths

- **Masonry Opening**:
  - 2' - 11 1/2" (908)
  - 3' - 11 1/2" (1213)
  - 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)

- **Rough Opening**:
  - 2' - 11 3/4" (914)
  - 3' - 11 3/4" (1216)
  - 4' - 5 3/4" (1365)
  - 5' - 3 1/2" (1600)
  - 6' - 5 3/4" (1975)
  - 7' - 3 1/2" (2029)
  - 8' - 0" (2438)

- **Frame Size**:
  - 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)

- **MULTIPLE ASSEMBLIES**
  - Multiple assemblies can be factory milled up to 4 units wide by 1 unit high.
  - **MAXIMUM ROUGH OPENING**: not to exceed 114" x 78" or up to 2 units wide by 2 units high.
  - **MAXIMUM ROUGH OPENING**: not to exceed 96" x 96". Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

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

- Details and Elevations not to scale.

- C = Cottage Style

- Obscure Glass option available on all units.

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

- See page 39 for specific DP ratings.

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

---

* These windows meet National Egress Codes for fire evacuation. Local codes may differ. Details and Elevations not to scale. C = Cottage Style. Obscure Glass option available on all units. Special sized units available within product size matrix. See your Integrity retailer. See page 39 for specific DP ratings. Please consult your local Integrity from Marvin representative for more information.
### DOUBLE HUNG

3 Wide Operating Units – 18", 24", 30", 32", 36" Widths

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>4' - 6&quot; (1372)</td>
<td>6' - 0&quot; (1829)</td>
<td>7' 0&quot; (2134)</td>
</tr>
<tr>
<td>5' - 6&quot; (1676)</td>
<td>6' - 0&quot; (1829)</td>
<td>7' 0&quot; (2134)</td>
</tr>
<tr>
<td>6' - 0&quot; (1829)</td>
<td>7' 0&quot; (2134)</td>
<td>8' 0&quot; (2438)</td>
</tr>
<tr>
<td>6' - 0&quot; (1829)</td>
<td>7' 0&quot; (2134)</td>
<td>8' 0&quot; (2438)</td>
</tr>
</tbody>
</table>

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

** This product is only available field mullled.

Details and Elevations not to scale.

1/C = Cottage Style

Obscure Glass option available on all units.

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

See page 39 for specific DP ratings.

---

### DOUBLE HUNG

3 Wide Operating Units – 18", 24", 30", 32", 36" Widths

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>4' - 6&quot; (1372)</td>
<td>6' - 0&quot; (1829)</td>
<td>7' 0&quot; (2134)</td>
</tr>
<tr>
<td>5' - 6&quot; (1676)</td>
<td>6' - 0&quot; (1829)</td>
<td>7' 0&quot; (2134)</td>
</tr>
<tr>
<td>6' - 0&quot; (1829)</td>
<td>7' 0&quot; (2134)</td>
<td>8' 0&quot; (2438)</td>
</tr>
<tr>
<td>6' - 0&quot; (1829)</td>
<td>7' 0&quot; (2134)</td>
<td>8' 0&quot; (2438)</td>
</tr>
</tbody>
</table>

*MULTIPLE ASSEMBLIES*

Multiple assemblies can be factory mullled up to 4 units wide by 1 unit high.

**MAXIMUM ROUGH OPENING**

- not to exceed 114" x 78" or up to 2 units wide by 2 units high.

**MAXIMUM ROUGH OPENING**

- not to exceed 96" x 96". Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

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

4 Wide Operating Units – 72’, 96’ Widths

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’ - 5 3/4” (1975)</td>
<td>5’ - 11 3/4” (1822)</td>
<td>5’ - 5 3/4” (1670)</td>
<td>4’ - 11 3/4” (1518)</td>
</tr>
<tr>
<td>6’ - 5 3/4” (1975)</td>
<td>5’ - 11 3/4” (1822)</td>
<td>5’ - 5 3/4” (1670)</td>
<td>4’ - 5 3/4” (1365)</td>
</tr>
<tr>
<td>6’ - 5 3/4” (1975)</td>
<td>5’ - 11 3/4” (1822)</td>
<td>5’ - 5 3/4” (1670)</td>
<td>3’ - 11 3/4” (1213)</td>
</tr>
<tr>
<td>6’ - 5 3/4” (1975)</td>
<td>5’ - 11 3/4” (1822)</td>
<td>5’ - 5 3/4” (1670)</td>
<td>3’ - 5 3/4” (1060)</td>
</tr>
<tr>
<td>6’ - 6” (1981)</td>
<td>6’ - 0” (1829)</td>
<td>5’ - 6” (1676)</td>
<td>4’ - 6” (1372)</td>
</tr>
<tr>
<td>6’ - 6” (1981)</td>
<td>6’ - 0” (1829)</td>
<td>5’ - 6” (1676)</td>
<td>4’ - 0” (1219)</td>
</tr>
<tr>
<td>6’ - 5 1/2” (1969)</td>
<td>5’ - 11 1/2” (1816)</td>
<td>5’ - 5 1/2” (1664)</td>
<td>4’ - 11 1/2” (1511)</td>
</tr>
<tr>
<td>6’ - 5 1/2” (1969)</td>
<td>5’ - 11 1/2” (1816)</td>
<td>5’ - 5 1/2” (1664)</td>
<td>4’ - 5 1/2” (1359)</td>
</tr>
</tbody>
</table>

Masonry Opening

| 6’ - 0” (1829) | 8’ - 0” (2438) |

Rough Opening

| 6’ - 0” (1829) | 8’ - 0” (2438) |

Frame size

| 5’ - 11 1/2” (1816) | 7’ - 11 1/2” (2426) |

Glass size

| 25 17/32” (649) |

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

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

[C = Cottage Style]

Obscure glass option available on all units.

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

See page 39 for specific DP ratings.

---

**Double Hung**

Transoms and Multiple Assemblies

In-Sash Transom Mulled Over Double Hung – 2 wide Operating Unit

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>7’ - 6” (2286)</td>
<td>6’ - 6” (1981)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
<tr>
<td>7’ - 6” (2286)</td>
<td>6’ - 6” (1981)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
<tr>
<td>7’ - 6” (2286)</td>
<td>6’ - 6” (1981)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
<tr>
<td>7’ - 6” (2286)</td>
<td>6’ - 6” (1981)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
</tbody>
</table>

120° Flankers with Picture Unit Center**

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’ - 6” (1981)</td>
<td>6’ - 0” (1829)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
<tr>
<td>6’ - 6” (1981)</td>
<td>6’ - 0” (1829)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
<tr>
<td>6’ - 6” (1981)</td>
<td>6’ - 0” (1829)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
</tbody>
</table>

90° Flankers with Operator Unit Center

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Rough Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>7’ - 6” (2286)</td>
<td>6’ - 6” (1981)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
<tr>
<td>7’ - 6” (2286)</td>
<td>6’ - 6” (1981)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
<tr>
<td>7’ - 6” (2286)</td>
<td>6’ - 6” (1981)</td>
<td>2 - 5 1/2” (54)</td>
<td>20 3/8” (523)</td>
</tr>
</tbody>
</table>

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled up to 4 units wide by 1 unit high.

MAXIMUM ROUGH OPENING:
not to exceed 114” x 78” or up to 2 units wide by 2 units high.

MAXIMUM ROUGH OPENING:
not to exceed 96” x 96”. Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity from Marvin representative for more information.
### GLIDER: Operating Units – 30”, 36”, 42”, 48”, 54”, 60”, 72” Widths

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2' - 5 1/2” (749)</td>
<td>15 7/16” (392)</td>
<td>12 7/16” (316)</td>
</tr>
<tr>
<td>2' - 11 1/2” (902)</td>
<td>15 7/16” (392)</td>
<td>12 7/16” (316)</td>
</tr>
<tr>
<td>3' - 5 1/2” (1054)</td>
<td>18 7/16” (468)</td>
<td>15 7/16” (392)</td>
</tr>
<tr>
<td>3' - 11 1/2” (1207)</td>
<td>18 7/16” (468)</td>
<td>15 7/16” (392)</td>
</tr>
<tr>
<td>4' - 5 1/2” (1359)</td>
<td>21 7/16” (545)</td>
<td>18 7/16” (468)</td>
</tr>
<tr>
<td>4' - 11 1/2” (1511)</td>
<td>21 7/16” (545)</td>
<td>18 7/16” (468)</td>
</tr>
<tr>
<td>5' - 1/2” (1816)</td>
<td>24 7/16” (621)</td>
<td>21 7/16” (545)</td>
</tr>
<tr>
<td>5' - 11 1/2” (1816)</td>
<td>24 7/16” (621)</td>
<td>21 7/16” (545)</td>
</tr>
</tbody>
</table>

---

### GLIDER: Operating Units – 84”, 96” Widths

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Frame Size</th>
<th>Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2' - 5 1/2” (749)</td>
<td>15 7/16” (392)</td>
<td>12 7/16” (316)</td>
</tr>
<tr>
<td>2' - 11 1/2” (902)</td>
<td>15 7/16” (392)</td>
<td>12 7/16” (316)</td>
</tr>
<tr>
<td>3' - 5 1/2” (1054)</td>
<td>18 7/16” (468)</td>
<td>15 7/16” (392)</td>
</tr>
<tr>
<td>3' - 11 1/2” (1207)</td>
<td>18 7/16” (468)</td>
<td>15 7/16” (392)</td>
</tr>
<tr>
<td>4' - 5 1/2” (1359)</td>
<td>21 7/16” (545)</td>
<td>18 7/16” (468)</td>
</tr>
<tr>
<td>4' - 11 1/2” (1511)</td>
<td>21 7/16” (545)</td>
<td>18 7/16” (468)</td>
</tr>
<tr>
<td>5' - 1/2” (1816)</td>
<td>24 7/16” (621)</td>
<td>21 7/16” (545)</td>
</tr>
<tr>
<td>5' - 11 1/2” (1816)</td>
<td>24 7/16” (621)</td>
<td>21 7/16” (545)</td>
</tr>
</tbody>
</table>

---

**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 39 for specific DP ratings.

---

**Construction Details**

- **Frame Size**
- **Rough Opening**
- **Masonry Opening**

---

**GBG available in standard rectangular lite cut shown. Other GBG lite cuts shown on page 19.**
* These windows meet National Egress Codes for fire evacuation. Local codes may differ.

---

**Integrity® from Marvin**

---

**ALL UL® Series**
GLIDER

2 Wide Operating Units - 30", 36", 42", 48", 54" Widths

Masonry Opening
1' - 5 3/4" (451)
0' - 11 3/4" (298)
1' - 6" (457)
1' - 0" (305)
1' - 5 1/2" (445)
0' - 11 1/2" (292)
13 17 /32" (344)
7 17 /32" (191)

Picture Units
4' - 11 3/4" (1518)
4' - 5 3/4" (1365)
3' - 11 3/4" (1213)
3' - 5 3/4" (1060)
2' - 11 3/4" (908)
2' - 5 3/4" (756)
1' - 11 3/4" (603)
1' - 5 3/4" (451)

Masonry Opening
5' - 0" (1524)
6' - 0" (1828)
7' - 0" (2134)
8' - 0" (2438)
9' - 0" (27 44)

Picture Units
5' - 0" (1524)
6' - 0" (1828)
7' - 0" (2134)
8' - 0" (2438)
9' - 0" (27 44)

Frame Size
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)

Frame Size
2' - 11 1/2" (902)
2' - 5 1/2" (749)
1' - 11 1/2" (597)
1' - 5 1/2" (445)

In-Sash Transom Units

GBG available in standard rectangular cut shown. Other GBG lite cuts shown on page 19. (Not available on In-Sash Transom units.)

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

Details and Elevations not to scale. See page 39 for specific DP ratings.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled up to 4 units wide by 1 unit high.

Maximum Rough Opening: not to exceed 114" x 60".

Maximum Rough Opening: not to exceed 96" x 96". Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity from Marvin representative for more information.
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 MQS 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): 12” x 12” Rough Opening
- Minimum (P5): 18” x 18” Rough Opening
- Minimum Short Leg (P4, P5): 8” Rough Opening

P3 Pack: 3/12 to 36/12 Pitch Available
P4 Pack: 36/12 Maximum Pitch Available
P5 Pack: 36/12 Maximum Pitch Available

**MULTIPLE ASSEMBLIES**

Multiple assemblies can be factory mullied. For IFDPF units up to 4 units wide by 1 unit high.

Maximum Rough Opening: not to exceed 114” x 178” OR up to 2 units wide by 2 units high.

Max Height: not to exceed 90” * 90”

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

**Construction Details**

- Head Jamb & Sill
- Jamb

**Direct Glaze transom**

Over Sliding Patio Door

Details and Elevations not to scale.

See page 39 for specific DP ratings.

XO operation shown, OX operation optional.

**MULTIPLE ASSEMBLIES**

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

Maximum Rough Opening: not to exceed 72” x 100 1/2”. Field mull kits available for up to 3 units wide by 2 units high not to exceed 110” x 112”. Structural mullion reinforcement is required for some assemblies.

Please consult your local Integrity representative for more information.
### Construction Details

#### Sliding Patio Door

<table>
<thead>
<tr>
<th>Masonry Opening</th>
<th>Frame Size</th>
<th>Rough Opening</th>
<th>1/4&quot; Masonry Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>1&quot;</td>
<td>1&quot;</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

#### Egress Openings

**Integrity® All Ultrex Single Hung**

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Egress Width</th>
<th>Egress Height</th>
<th>Sq. Ft.</th>
<th>cm²</th>
<th>DUO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1620</td>
<td>14 9/16</td>
<td>370</td>
<td>714</td>
<td>184</td>
<td>0.73</td>
</tr>
<tr>
<td>1620</td>
<td>14 9/16</td>
<td>370</td>
<td>714</td>
<td>184</td>
<td>0.79</td>
</tr>
<tr>
<td>2020</td>
<td>14 9/16</td>
<td>370</td>
<td>714</td>
<td>184</td>
<td>1.03</td>
</tr>
<tr>
<td>2020</td>
<td>14 9/16</td>
<td>370</td>
<td>714</td>
<td>184</td>
<td>1.14</td>
</tr>
<tr>
<td>2620</td>
<td>14 9/16</td>
<td>370</td>
<td>714</td>
<td>184</td>
<td>1.71</td>
</tr>
</tbody>
</table>

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

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

**Integrity® All Ultralite Double Hung**

<table>
<thead>
<tr>
<th>Unit #</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Clear Width (mm)</th>
<th>Clear Height (mm)</th>
<th>Clear Opening (sq. ft.)</th>
<th>Floor to Clear Opening (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1630</td>
<td>511.2</td>
<td>762.2</td>
<td>511.2</td>
<td>762.2</td>
<td>15.65</td>
<td>15.65</td>
</tr>
<tr>
<td>1620</td>
<td>511.2</td>
<td>762.2</td>
<td>511.2</td>
<td>762.2</td>
<td>15.65</td>
<td>15.65</td>
</tr>
<tr>
<td>1440</td>
<td>438.2</td>
<td>628.3</td>
<td>438.2</td>
<td>628.3</td>
<td>10.51</td>
<td>10.51</td>
</tr>
<tr>
<td>1440</td>
<td>438.2</td>
<td>628.3</td>
<td>438.2</td>
<td>628.3</td>
<td>10.51</td>
<td>10.51</td>
</tr>
<tr>
<td>1440</td>
<td>438.2</td>
<td>628.3</td>
<td>438.2</td>
<td>628.3</td>
<td>10.51</td>
<td>10.51</td>
</tr>
<tr>
<td>1440</td>
<td>438.2</td>
<td>628.3</td>
<td>438.2</td>
<td>628.3</td>
<td>10.51</td>
<td>10.51</td>
</tr>
</tbody>
</table>

* These units meet National Egress Codes requiring 5.75 sq. ft. clear opening. 20” clear width, and 24” clear height, not to exceed a floor to sill height of 44”. Code restrictions may vary depending on local building codes. **Floor to clear opening is calculated using 6’-10”4” from finished floor to rough opening header.*
### ALTITUDE GUIDELINES

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

#### ALTITUDE LIMITS (FEET)

<table>
<thead>
<tr>
<th>UNIT SIZE</th>
<th>3-0</th>
<th>3-6</th>
<th>3-9</th>
<th>4-0</th>
<th>4-6</th>
<th>5-0</th>
<th>5-6</th>
<th>6-0</th>
<th>6-6</th>
<th>7-0</th>
<th>7-6</th>
<th>8-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tempered</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
<td>4000</td>
</tr>
<tr>
<td>Annealed</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Tempered</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td>Annealed</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Tempered</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
<td>6000</td>
</tr>
<tr>
<td>Annealed</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Tempered</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
<td>7000</td>
</tr>
<tr>
<td>Annealed</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Tempered</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
<td>8000</td>
</tr>
<tr>
<td>Annealed</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Tempered</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
<td>9000</td>
</tr>
<tr>
<td>Annealed</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Tempered</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
<td>10000</td>
</tr>
<tr>
<td>Annealed</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

### ALTITUDE GUIDELINES

<table>
<thead>
<tr>
<th>ALTITUDE LINES (FEET)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tempered</td>
</tr>
<tr>
<td>Annealed</td>
</tr>
<tr>
<td>Tempered</td>
</tr>
<tr>
<td>Annealed</td>
</tr>
<tr>
<td>Tempered</td>
</tr>
<tr>
<td>Annealed</td>
</tr>
<tr>
<td>Tempered</td>
</tr>
<tr>
<td>Annealed</td>
</tr>
<tr>
<td>Tempered</td>
</tr>
<tr>
<td>Annealed</td>
</tr>
<tr>
<td>Tempered</td>
</tr>
<tr>
<td>Annealed</td>
</tr>
<tr>
<td>Tempered</td>
</tr>
<tr>
<td>Annealed</td>
</tr>
<tr>
<td>Tempered</td>
</tr>
<tr>
<td>Annealed</td>
</tr>
</tbody>
</table>

### THERMAL PERFORMANCE

#### Integrity® All Ultrex Single Hung

<table>
<thead>
<tr>
<th>ENERGY DATA</th>
<th>U-Value</th>
<th>R-Value</th>
<th>SHGC</th>
<th>VT</th>
<th>ENERGY STAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.85</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.33</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.77</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.23</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
</tbody>
</table>

#### Integrity® All Ultrex Double Hung

<table>
<thead>
<tr>
<th>ENERGY DATA</th>
<th>U-Value</th>
<th>R-Value</th>
<th>SHGC</th>
<th>VT</th>
<th>ENERGY STAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.79</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.30</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.70</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.23</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
</tbody>
</table>

#### Integrity® All Ultrex Picture/Transom

<table>
<thead>
<tr>
<th>ENERGY DATA</th>
<th>U-Value</th>
<th>R-Value</th>
<th>SHGC</th>
<th>VT</th>
<th>ENERGY STAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.83</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.33</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.77</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.23</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
</tbody>
</table>

#### Integrity® All Ultrex Glider

<table>
<thead>
<tr>
<th>ENERGY DATA</th>
<th>U-Value</th>
<th>R-Value</th>
<th>SHGC</th>
<th>VT</th>
<th>ENERGY STAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.85</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.33</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.77</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.23</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
</tbody>
</table>

#### Integrity® All Ultrex Direct Glaze Polygon

<table>
<thead>
<tr>
<th>ENERGY DATA</th>
<th>U-Value</th>
<th>R-Value</th>
<th>SHGC</th>
<th>VT</th>
<th>ENERGY STAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.85</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.33</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.77</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.23</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
</tbody>
</table>

#### Integrity® All Ultrex Sliding Patio Door

<table>
<thead>
<tr>
<th>ENERGY DATA</th>
<th>U-Value</th>
<th>R-Value</th>
<th>SHGC</th>
<th>VT</th>
<th>ENERGY STAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.85</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.33</td>
<td>0.33</td>
<td>0.57</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Air</td>
<td>0.35</td>
<td>2.77</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
<tr>
<td>Insulating Glass/Loe Argon</td>
<td>0.32</td>
<td>2.23</td>
<td>0.30</td>
<td>0.51</td>
<td>N, NC, SC, S</td>
</tr>
</tbody>
</table>

Thermal and solar values are subject to update. Values are generated in accordance with NFRC 100-97 and other applicable NFRC procedures. Argon gas is not available for the altitudes that require capillary tubes. Values are select glazing options; for those options not listed please contact the factory.

SHGC = Solar Heat Gain Coefficient

VT = Visible Light Transmittance.

Energy Star codes:
N = Northern
S = Southern
NC = North Central
SC = South Central
**DESIGN PRESSURE (DP) RATINGS**

A design pressure rating, as defined by AAMA/WDMA/CSA 101/1.5/2/A440-05, 101/1.5/2/NAFS-02, and ANSI/ AAMA/NWWDA 101/1.5-97, is an indication of the amount of wind load an individual window or door is intended to withstand when closed and locked. Please consult your local Integrity® from Marvin representative for more information.

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

**WARRANTY**

**Ten Year Limited Warranty**

This limited warranty is extended to all end users of Integrity® Windows and Doors. Your Integrity products are warranted to be free from defects in manufacturing, materials and workmanship. Should any such defect appear during the term of this warranty, Integrity will, at its option (1) repair the defective product; (2) replace the defective materials or (3) refund your purchase price. If replacement is elected, Integrity® will be responsible for installation or refinishing of replacement parts.

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

**Twenty (20) Year Insulating Glass Limited Warranty**

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

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

**Claims Under These Warranties Must Be Made Within 60 Days of the Appearance of a Defect.**

**Conditions and Exclusions**

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

- Variations in the color and grain of natural wood parts.
- Environmental conditions or use exceeding design standards.
- Warpage of 1/4 (6) or less of door stiles and rails.
- Minor glass imperfections that do not affect normal vision or product performance, including curvature of glass due to atmospheric conditions.
- Condensation or frost on exposed surfaces of your Integrity® windows or doors. Condensation or frost is not a defect in the product, but a result of excessive humidity. For more information about condensation and what you can do to keep it to a minimum, write to:
  
  Marvin Windows and Doors, P.O. Box 100, Warroad, Minnesota 56763.

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

**If You Have a Warranty Claim**

Your local Integrity® distributor and dealer is equipped to handle your warranty claim quickly and efficiently. Because they are located near you, and familiar with your purchase and/or project, your local Integrity® dealer or distributor can best expedite the solution to your claim. If you have a warranty claim with your Integrity® window or door, call the dealer or distributor from whom the products were purchased. If you don’t know the name of the dealer or distributor, call 1-800-346-5228 to locate the one nearest you. If, after 5 days, your local Integrity® dealer or distributor has not responded to your complaint, send a written complaint to Marvin Windows and Doors, P.O. Box 700, Warroad, Minnesota 56763. Attn: Warranty Department. Include the following information in your letter: date you purchased your product, the dealer or distributor from whom you purchased the product, the date the product was purchased, description of product, specific definition of problem or defect; action that you’ve taken or contacts you’ve made with your local dealer or distributor; and your name, address and phone number. Once we’ve received your letter, we’ll respond to your claim within 2 working days.

*DP50* These units include *IfSLP3050, 3056, 3060, 3646, 3650, 3656, 3660, 4040, 4056, 4060, 5030, 5036, 5046, 5050, 5056.

*DP40* These units include *IfSLP3050, 3056, 3060, 3646, 3650, 3656, 3660, 4040, 4056, 4060, 5030, 5036, 5046, 5050, 5056.

*DP30* These units include *IfSLP3050, 3056, 3060, 3646, 3650, 3656, 3660, 4040, 4056, 4060, 5030, 5036, 5046, 5050, 5056.

*DP25* These units include *IfSLP3050, 3056, 3060, 3646, 3650, 3656, 3660, 4040, 4056, 4060, 5030, 5036, 5046, 5050, 5056.

*DP20* These units include *IfSLP3050, 3056, 3060, 3646, 3650, 3656, 3660, 4040, 4056, 4060, 5030, 5036, 5046, 5050, 5056.

*DP15* These units include *IfSLP3050, 3056, 3060, 3646, 3650, 3656, 3660, 4040, 4056, 4060, 5030, 5036, 5046, 5050, 5056.*

All Uniglaze® 56 height cottage style windows meet DP40.

All Uniglaze® 56 height cottage style windows meet DP30.

* Picture/transom units meet DP50 per the 2003 and 2006 International Building Code. Your building code may reference the 2000 International Building Code. If your building code still references the 2000 International Building Code, these units include IfSLP3050, 3056, 3060, 3646, 3650, 3656, 3660, 4040, 4056, 4060, 5030, 5036, 5046, 5050, 5056.