

MARVIN®

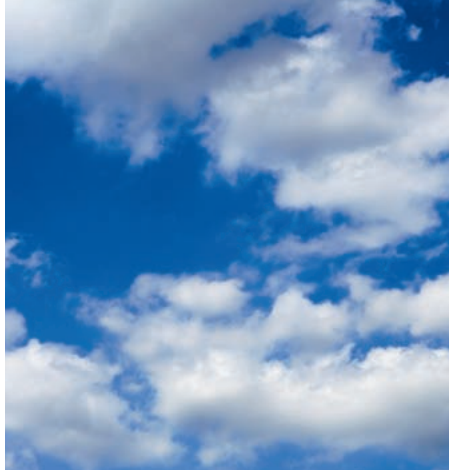
Windows and Doors

Built around you.®



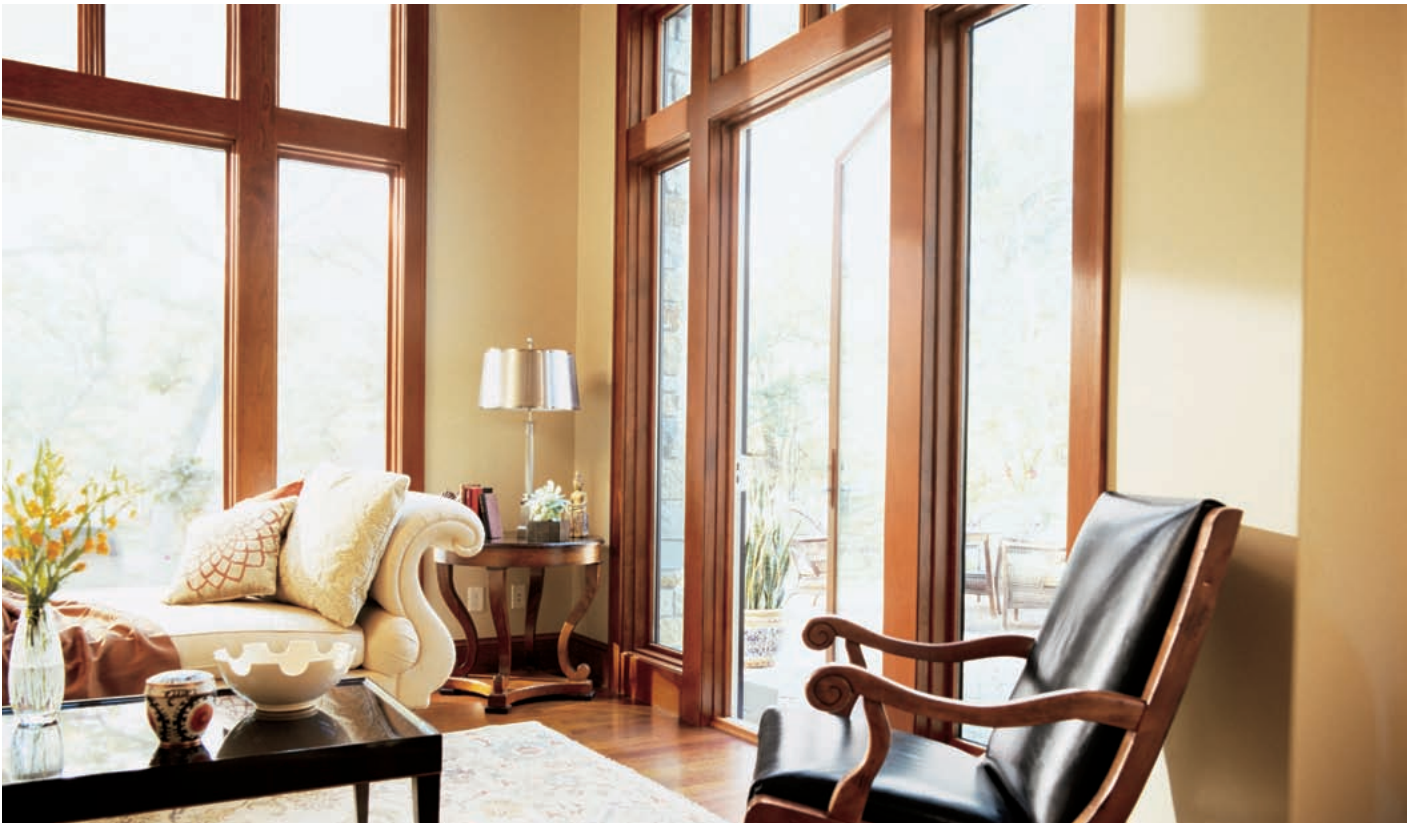
YOU

live a life that no one else lives. Shouldn't you have windows and doors that no one else has? You do not live a cookie-cutter life. You're an individual with your own views. You know exactly what you value, what makes you unique, what inspires you. You've spent years defining your style, your way. You see things differently – as you should. So when it comes to aesthetics, you have a definite idea of what you want, what is best, what is beautiful. At Marvin®, we build on your ideas, literally. It's the way we've been making products for over half a century, one window or door at a time for one individual at a time. With endless options for customization, and limitless capabilities with design, when you work with Marvin, your windows or doors aren't just like those down the block. How could they be? They're built around your vision.

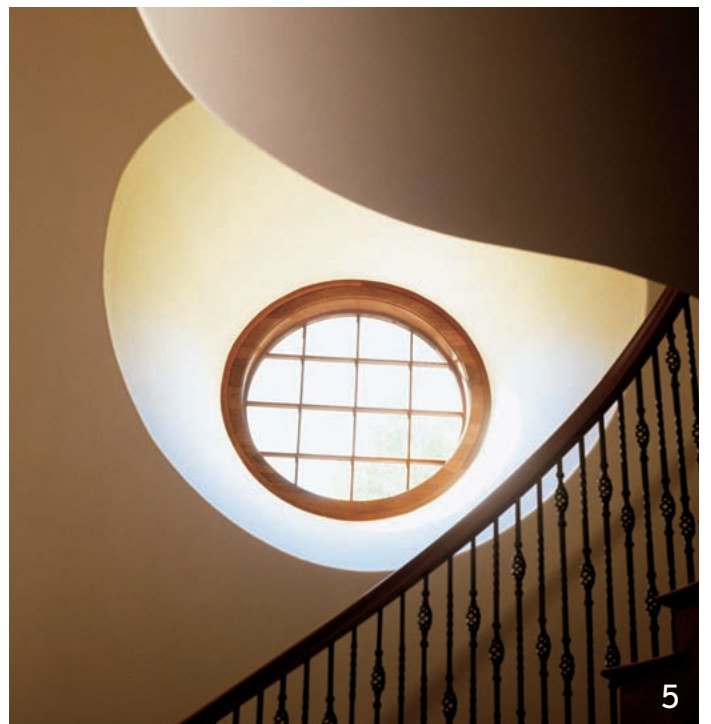




YOU



surround yourself with beauty. Where does your inspiration come from? If it's the outdoors, let it stream in through the perfect window or door. Beauty comes in all shapes and sizes, and at Marvin®, in all styles and options. Start with one of the thousands of standard windows and doors and then add levels of beauty with divided lite patterns, hardware finishes, and clad colors. Or start with an idea and we'll build the window or door that perfectly complements you.





YOU



appreciate innovation. At Marvin®, we are always improving design to better suit the way people live and to adapt to the ever-changing needs of the customer. Our products are built with features like LoE²-272® glass to maximize energy savings and filter harmful UV rays, and an extruded aluminum cladding that's substantially stronger than roll-form aluminum. We continually advance our windows and doors with the best innovations and technologies, so when we design a custom product, only the best is provided for you.





YOU

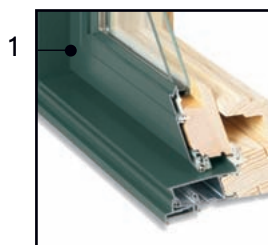
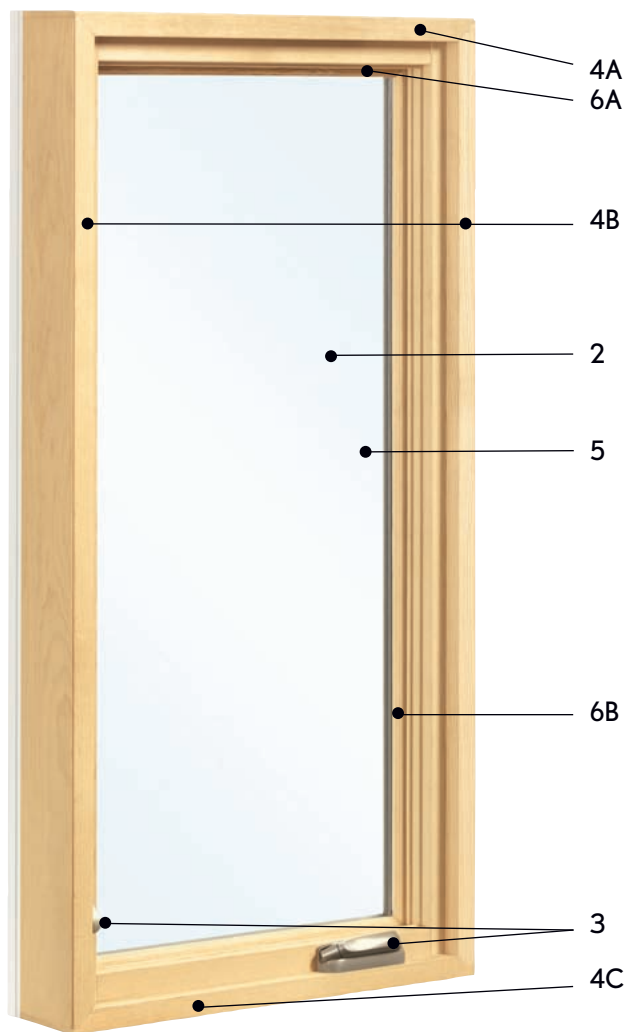


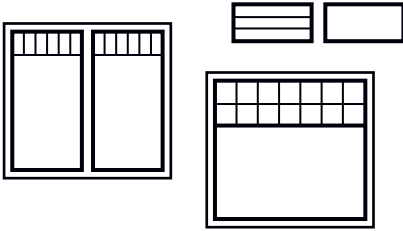
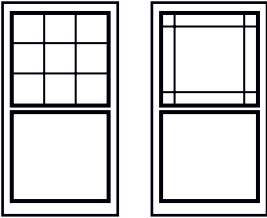
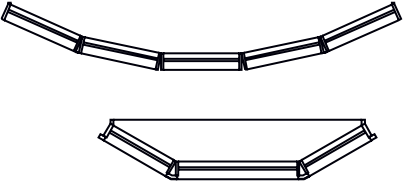
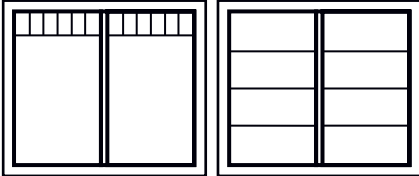
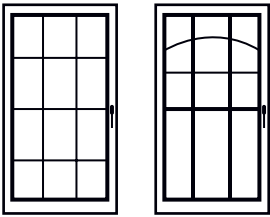
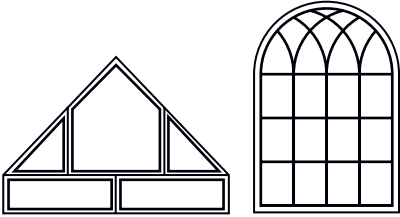
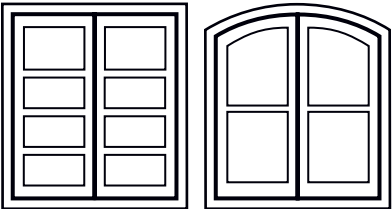
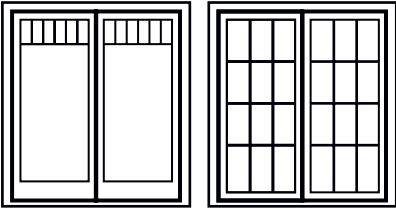
count on durability. The most important thing to protect isn't your house, it's who lives inside. Every one of our products is made with furniture-grade craftsmanship – the highest quality materials and a superior attention to detail. That's why Marvin® windows and doors with extruded aluminum are crafted to resist the most extreme elements. The combination of our finishes and extruded aluminum cladding exceed the highest American Architectural Manufacturers Association (AAMA) specifications, so commercial strength and durability stand beautifully to protect your home, your family and you.



THE PARTS AND PIECES OF PERFECTION.

- 1** Our standard extruded aluminum exterior cladding is second to none in the industry. Think of it as a suit of armor covered with the ultimate finish. (To learn more, see page 56.)
- 2** A single area of glass is called a lite. Marvin® offers many different ways to create patterns of divided lites, each with its own special benefits. (See the possibilities on page 55.)
- 3** Hardware is the operating components of your window or door: locks, handles, hinges, etc.
- 4** A window or door frame has three different components that hold operating and/or stationary sash: A) the header across the top, B) the jambs down each side and C) the sill across the bottom. To match the thickness of your walls, jamb extensions can be used to create a frame that has the perfect depth.
- 5** You'll see the word "glazing" often. It refers to the glass in a window or door. (There's much more to it – see page 56 for the details.)
- 6** The sash is what you probably think of when you think of windows – it's the main section, operating or stationary, that is installed into the frame. The framework of a sash is made up of A) horizontal rails and B) vertical stiles. In a door, this component is referred to as a panel.
- 7** Ultrex® is a pultruded fiberglass-based material that provides our door sills with unmatched strength and durability. It's virtually impervious to time, weather and pressure so it won't transfer heat or cold, warp, dent, corrode or fade.



	
CASEMENT, AWNING, AND VENTING PICTURE WINDOWS	DOUBLE HUNG WINDOWS
<p>Casements open and close from the side using a folding crank handle. Awning windows swing open from the bottom. Venting picture windows come in large sizes and open for cross-ventilation.</p>	<p>Windows that have two operating sash that slide up and down.</p>
	
BOW AND BAY WINDOWS	GLIDER WINDOWS
<p>Bow and bay windows are created from multiple assemblies of windows. Bays can be created in multiple angles, and bows create a graceful arc. Choose from Ultimate Double Hung, Casement and picture unit configurations.</p>	<p>Windows that open with ease on a horizontally gliding sash.</p>
	
TILT TURN WINDOWS	SPECIAL SHAPE WINDOWS
<p>Windows that open two ways: swinging in like a door or tilting in at the top for ventilation.</p>	<p>Windows in a variety of geometric and circular shapes that can be used alone or in multiple assemblies.</p>
	
SWINGING FRENCH DOORS	SLIDING DOORS
<p>Originally referred to as two doors that swing open in the center, now any combination of operating and stationary door panels. Choose from inswing, outswing or arch top.</p>	<p>Sliding doors deliver a unique combination of features and benefits – including unrivaled aesthetics, dependable performance, and smooth operation.</p>

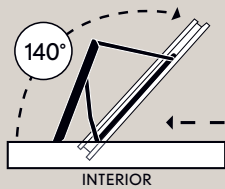
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THE ULTIMATE CASEMENT.

Every project requires a different kind of perfection. Marvin® introduces the Ultimate Casement collection. The collection of windows that offers you flexibility of application, design and size – sizes up to 40" wide by 92" tall to be exact. Add a revolutionary wash mode feature for easy cleaning, superior energy efficiency, and commercial grade hardware durability and you have just a few of the innovations Marvin is proud to introduce. Whether your project involves a new construction, replacement, or remodeling application, the perfect window lies within the Ultimate Casement Collection.

REVOLUTIONARY WASH MODE



Revolutionary hardware allows for access to both sides of the glass from indoors.

LARGE SIZES – ULTIMATE PERFORMANCE

We have developed the most durable hardware in the industry, which ensures easy opening and smooth operation over the life of your window.



CASEMENT

40" x 92"
36" x 96"
max.

AWNING



72" x 72" Ultimate Awning
72" x 63" Ultimate Replacement Awning max.

ULTIMATE CASEMENT



FULL
4⁹/₁₆"

ULTIMATE REPLACEMENT CASEMENT



NARROW
2³/₁₆"

ANY APPLICATION

Choice of a full 4⁹/₁₆" jamb or a narrow 2³/₁₆" jamb allows for use in nearly any new construction, replacement, or remodeling application.

ENERGY EFFICIENCY

Commercial Rated
DP50
EVEN AT LARGE SIZES

Casement
FRAME SIZE 40" x 92"
36" x 96"

Awning
FRAME SIZE 72" x 72" Ultimate Awning
FRAME SIZE 72" x 63" Ultimate Replacement Awning

ENERGY STAR Compliant
N, NC, SC, S

One-lite LoE²-272[®] with Argon insulating glass.

EASY CLEANING INSIDE AND OUT.

Gone are the days of ladders, scaffolding, or ignoring a dirty window because it's a chore to clean. With the new Ultimate Casement Collection, cleaning is a simple task. The revolutionary hardware allows the window to rotate inward, making both sides of the glass washable from the interior of the home. That means second-and third-story windows can be as easy to wash as your main-floor windows, so your views are always clean.

EASY WASH MODE



Crank handle twice.



Push down on the hardware arm, and push the window away. Then crank arm back.



Swing window all the way open, pulling it across toward the lock for accessibility to exterior glass.



ULTIMATE CASEMENT COLLECTION



ULTIMATE CASEMENT

ULTIMATE REPLACEMENT CASEMENT

ANY APPLICATION

THEY'RE CALLED ULTIMATE FOR A REASON.

Today, more than ever, home design calls for versatility. The Ultimate Casement was designed to suit virtually any application. This means whether you are building a new home, remodeling, adding on, or looking at different style options, there is a perfect casement for your project. The Ultimate Casement features a full 4 9/16" jamb – making it perfectly suited for new construction or full-frame tear-outs – along with a recessed sash for a more traditional look. The Ultimate Replacement Casement offers a flush, more contemporary looking sash, and a narrow 2 3/16" jamb. The narrow jamb is perfect for new construction, remodeling or frame-in-frame replacement applications – allowing you to keep the existing frame or wallpaper intact.

STANDARD FEATURES

- Full 4 9/16" or narrow 2 3/16" jamb options
- Revolutionary wash mode
- Satin Taupe folding handle
- Exclusive easy-installation features
- One-lite LoE²-272[®] with Argon insulating glass
- Extruded aluminum clad exterior (clad units)
- Bare wood interior

CASEMENT & AWNING

UC URC

Can be used in new construction, full-frame tear-outs, and additions.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Can be used as a frame-in-frame insert.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Features a recessed sash for a more traditional look.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Features a flush sash for a more contemporary look.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Jamb extensions available.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Marvin [®] exclusive wash mode.*	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
All Marvin Casement Collection options.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

*Marvin exclusive wash mode is not available on Awning windows, Round Tops and Casement windows less than 20" in width.



ULTIMATE AWNING & ULTIMATE REPLACEMENT AWNING WINDOWS



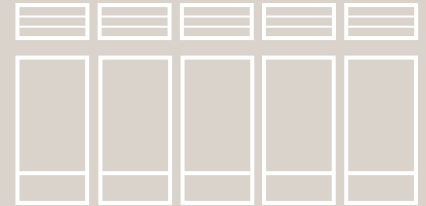
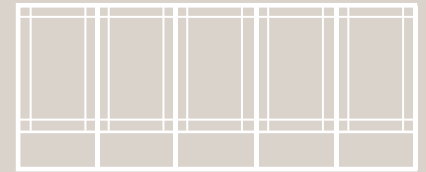
Full frame for a recessed traditional look.

ULTIMATE AWNING



Narrow jamb for a more contemporary style.

ULTIMATE REPLACEMENT AWNING



Awnings are a great complement to casements.

DESIGN FLEXIBILITY

INNOVATIONS THAT HEIGHTEN AND LIGHTEN.

The Ultimate Collection also offers Ultimate Awnings. Awnings open from the bottom, and can be used on their own or as a complement to casement windows. Ultimate Awnings can achieve wider than ever openings for better airflow and expansive, open views. And with the most durable hardware in the industry, Ultimate Awnings are available in larger than ever sizes – 72" x 72" or 72" x 63". For maximum visual impact and flexibility, picture windows are also available.

STANDARD FEATURES

- Full 4 9/16" or narrow 2 3/16" jamb options
- Satin Taupe folding handle
- Exclusive easy-installation features
- One-lite LoE²-272[®] with Argon insulating glass
- Extruded aluminum clad exterior (clad units)
- Bare wood interior

DETAILS



ULTIMATE REPLACEMENT AWNING

The Ultimate Replacement Awning features a narrow 2 3/16" jamb, making it the flexible solution for any remodel, replacement, or frame-in-frame application.



ULTIMATE FRENCH CASEMENT WINDOWS



INTERIOR PUSH OUT



EXTERIOR PUSH OUT



EXTERIOR

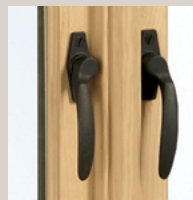
CLASSIC ELEGANCE, MODERN PERFORMANCE.

Traditional styling and modern features distinguish the new Ultimate French Casement. The newest windows in the Ultimate Casement Collection feature push out or cranking hardware and clean lines to let in maximum light. The Ultimate French Casement has no center stile or vertical post, making it ideal for those who want to enjoy an unobstructed view. And a Marvin® exclusive wash mode makes it easy to keep that view sparklingly clean. Built with strength, it has up to a DP50 performance rating. Strength, beauty and performance: the Ultimate French Casement is the ideal solution for any application.

STANDARD FEATURES

- Full 4 ⁹/₁₆" or narrow 2 ³/₁₆" jamb options
- Revolutionary wash mode
- Oil Rubbed Bronze push out handle or Satin Taupe folding handle
- Exclusive easy-installation features
- One-lite LoE²-272® with Argon insulating glass
- Extruded aluminum clad exterior (clad units)
- Bare wood interior

DETAILS



ULTIMATE FLEXIBILITY

Open the window with a classic push out hardware system or choose a more modern cranking variation. Two jamb widths are available. The full 4 ⁹/₁₆" jamb on the Ultimate French Casement is ideal for full frame replacement and new construction. The narrow 2 ³/₁₆" can be used as a solution for frame-in-frame installation, remodeling or new construction.



ULTIMATE PUSH OUT & ULTIMATE ROUND TOP WINDOWS

LOCKS AT THREE DIFFERENT OPENING ANGLES



The exclusive sash limiter device on the Ultimate Push Out allows you to pre-set and lock the window at specific opening angles. This means you can now safely open your window on windy days – just flip a lever to lock the sash securely in place.

ULTIMATE PUSH OUT

EXCLUSIVE SASH LIMITER

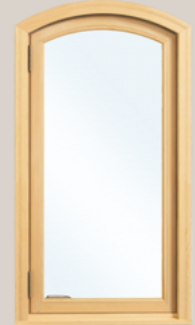
WE'VE ROUNDED OUT THE ULTIMATE COLLECTION.

Completing the Ultimate Collection are the **Ultimate Push Out** windows. Push Out windows provide a more traditional alternative to crank-out style casement and awning windows. With a multi-point locking system, the Push Out is extremely easy to operate – just unlock a single handle to open the sash. Our exclusive sash limiter device also gives you the flexibility of locking the open window at your desired angle.

The Ultimate Collection also offers **Ultimate Round Tops**. You don't have to limit your vision to straight lines anymore. Round Tops can stand alone, making their own unique statement, or be used as a transom, complementing casements. With over 60 Round Top options, there's no shortage of design flexibility.

ULTIMATE ROUND TOP

OTHER ROUND TOP SHAPES



With over 60 different Round Top shapes, you'll enjoy unparalleled design flexibility.



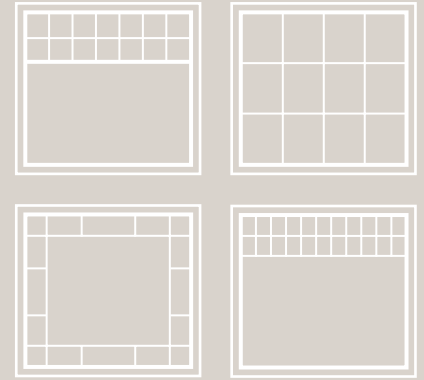
ULTIMATE VENTING PICTURE WINDOWS



INTERIOR



EXTERIOR



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

SOME PICTURE WINDOWS ARE WORTH MORE THAN A THOUSAND WORDS.

An expansive picture window is a beautiful way to bring natural light into a room or to highlight a lovely outdoor view. Now it can also be a source of fresh air. Marvin® Windows and Doors' Ultimate Venting Picture window is designed to open evenly on all sides, allowing for passive air exchange. An ingenious mesh screen system allows the sash to project out slightly, ³/₄" to 1" from the closed position, providing air flow around windows as large as 6'x 6' or 3' x 8'. The Ultimate Venting Picture window can add more than just a pretty view. Consider it an innovative alternative to traditional picture window choices.

STANDARD FEATURES

- One-lite LoE²-272® with Argon insulating glass
- Stainless steel hardware system and Satin Taupe lock levers
- Bare wood interior
- Hidden screen
- Extruded aluminum clad exterior
- 4 ⁹/₁₆" (116 mm) jambs

HARDWARE

LOCK LEVER



DETAILS



The air flow provided by an open Ultimate Venting Picture Window can help with a building's ventilation when positioned strategically with other windows. By itself, the Ultimate Venting Picture window provides passive air exchange.



ULTIMATE DOUBLE HUNG WINDOWS



INTERIOR



EXTERIOR



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

BOTH TRADITIONAL AND MODERN AT THE SAME TIME.

Window makers of an earlier era got a lot of things right. Sophisticated lines, profiles and proportions never go out of style. Marvin® Windows and Doors' Ultimate Double Hung combines a state-of-the-art window design with a classic style of the past. New advancements in engineering make Ultimate Double Hung windows simple to open. Marvin's exclusive integrated tilt lever lock allows the sash to be tilted in or removed for easy cleaning. And with so many options for sash sizes, glazing and lite patterns, you can dream up the ultimate window, and Marvin can build it.

STANDARD FEATURES

- One-lite LoE²-272[®] with Argon insulating glass
- Satin Taupe sash lock
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs

HARDWARE

SASH LOCK



DETAILS



SASH LIFT



(optional)

FULL & HALF SCREEN

Consider a full screen to cover your entire window or a half screen that covers only the lower portion. Choose from several mesh and surround options.

GIVE ULTIMATE BEAUTY AN ARTFUL LINE.

Sometimes your vision includes an arching, elegant line. For that, we've got Ultimate Double Hung Round Top variations. Variations are available with options such as wood species and hardware finishes.



Round Top 1
Standard Double Hung window with a half round elliptical transom.



Round Top 2
Double Hung window with true radius upper sash and frame. Both interior and exterior have radius top.



Round Top 3
Standard Double Hung window on the interior with arched exterior casing.*

*Available for wood windows only.



ULTIMATELY EASY.

Not only do both lower and upper sash operate and tilt with ease, they're both completely removable without removing the screen. The jamb interiors are crafted with a generous amount of wood so you can stain or paint them to match the style of your home.



Round Top 4

Double Hung window with eyebrow radius upper sash and frame. Both interior and exterior have a radius top.



Round Top 5

Standard Double Hung with a rectangular sash and radius glass designed to have a round top appearance.*



Round Top 6

Standard Double Hung with a round top appearance from the exterior, thanks to curved exterior components. Interior has a standard frame with rectangular sash and radius glass.*



The sash in locked position.



Unlocked position with tilt release open.



Sash tilting freely into the room.



ULTIMATE DOUBLE HUNG MAGNUM WINDOWS



INTERIOR



EXTERIOR



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

BEAUTY GOES BIG.

The Ultimate Double Hung Magnum can be designed as large as 5 1/2' wide x 10 1/2' tall so commercial buildings, historic renovations and new construction have no size barriers when it comes to beauty and protection. The high quality and performance of the spiral balance system make even the largest window a breeze to open. The sight lines and profiles match our Ultimate Double Hung family of products so your design options are greatly expanded. When you want magnum sizes with exceptional, real-wood construction, architectural appeal and commercial-grade performance, this is the ultimate window for you.

STANDARD FEATURES

- One-lite LoE²-272[®] with Argon insulating glass
- Satin Taupe sash lock
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs
- Installation hardware

HARDWARE

SASH LOCK



SASH LIFT



(optional)

DETAILS



The Ultimate Double Hung Magnum Round Top provides options for large, high performance elliptical, eyebrow, and true radius shapes in double hung, single hung and picture unit styles.

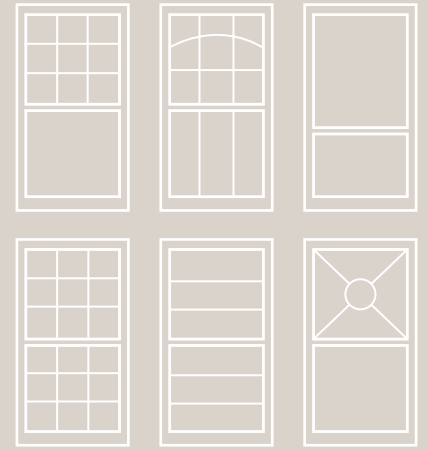


ULTIMATE INSERT DOUBLE HUNG WINDOWS



INTERIOR

EXTERIOR



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

REVIVE THE BEAUTY WHEN YOU REPLACE THE WINDOW.

With the Ultimate Insert Double Hung replacement window you have a beautiful alternative to vinyl replacement windows. There's no need to take out the current frame, remove trim or replace wallpaper. The frame-in-frame design is crafted specifically to your window opening so it fits perfectly into the existing space. Options like a flat frame or frame bevels ensure a snug fit. The sash even tilts or comes out for easy cleaning so there's less work and more time to enjoy the scenery. And Marvin® Windows and Doors' vast array of hardware finishes, wood species and clad colors means you'll get the exact look you want.

STANDARD FEATURES

- One-lite LoE²-272[®] with Argon insulating glass
- Satin Taupe sash lock
- Bare wood interior
- All wood exterior (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs (wood units)
- 3 1/4" (82.5 mm) jambs (clad units)
- Installation hardware

HARDWARE

SASH LOCK



DETAILS



SASH LIFT



(optional)

TILTING SASH

The hardware easily operates with one hand so hard to clean areas become accessible with the tilt feature.



TILT PAC® DOUBLE HUNG SASH REPLACEMENT KIT



TILT PAC® DOUBLE HUNG KIT



THERE'S NEW LIFE FOR YOUR OLD WINDOWS.

With the Marvin® Tilt Pac, replacing the sash on your double hung window is an exercise in simplicity. This sash replacement kit is designed specifically for replacing older double hung windows; the Tilt Pac is ideal if the frame is in good shape, but the sash or hardware need replacement. Both sash are fully operational and tilt in for easy cleaning. Create or match the lasting look you want with a variety of divided lites, screens, and hardware finishes. Everything you need is included so all it takes is just four simple installation steps and you'll be admiring the brand new, great looking, energy efficient windows you've been dreaming about.

STANDARD FEATURES

- One-lite LoE²-272® with Argon insulating glass
- Satin Taupe sash lock
- Bare wood interior
- All wood exterior (wood units)
- Extruded aluminum clad exterior (clad units)
- Installation hardware

HARDWARE

SASH LOCK



DETAILS



SASH LIFT



(optional)

MAGNUM TILT PAC PANNING SYSTEM

For extra-large sizes, try the Magnum Tilt Pac. Optional Magnum Panning Systems cover weathered exterior sills and trim with a new exterior of low maintenance extruded aluminum panning. Panning is easy to assemble.



BOW AND BAY WINDOWS

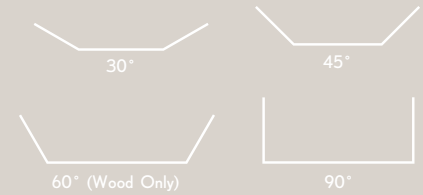


BAY INTERIOR AND EXTERIOR

BOW



BAY



ANGLE OPTIONS

OPEN UP TO THE POSSIBILITIES OF MARVIN® BOW AND BAY WINDOWS.

A Bay or Bow window from Marvin turns an ordinary wall into an extraordinary expression of your own personal style. Adding openness and space, they're perfect for creating a window retreat and bringing the outdoors in. Have your Bay or Bow designed with any number of windows, angles, and finish options. Made with our Ultimate Casement, Ultimate Double Hung or Picture Unit configurations, we assemble our Bows and Bays to give your home a look that will draw admiration from both the indoors and out.

STANDARD FEATURES

- One-lite LoE²-272[®] with Argon insulating glass
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs

DETAILS



BOW AND BAY OPTIONS

Bows and Bays can be used to add height and light to any room. Curved, laminated head and seat boards can be factory applied for your Bow and Bay windows to create a seamless wood interior and perfect fit.



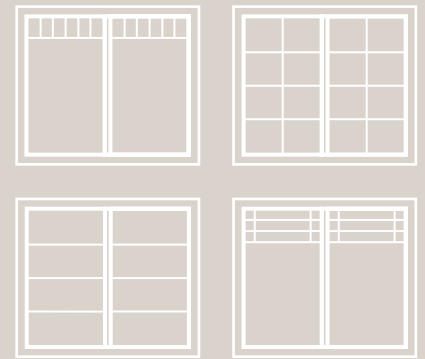
GLIDER WINDOWS



INTERIOR



EXTERIOR



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

SIMPLE STYLING, SOPHISTICATED FEATURES.

Innovative operation and contemporary styling describe the Ultimate Glider. The simple lines and the unique design of the Glider, like the automatic locking system, differentiate it from other sliding windows. The convenience of an easy cleaning feature plus energy efficiency provide excellent performance – making the glider a perfect choice.

STANDARD FEATURES

- One-lite LoE²-272[®] with Argon insulating glass
- Satin Taupe sash lock
- Finger pull on stile of operating sash
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs. 3 9/16" (90 mm) jambs are available for clad gliders
- White sill track on wood units / beige sill track on clad units

HARDWARE



EASE OF OPERATION

The easy-to-use folding handle, tucks into the sash for minimal visibility. The lock system automatically engages when the window is slid shut so the window locks automatically. The ergonomic handle is placed low on the sash to provide easy, one-handed operation.



TILT TURN AND HOPPER WINDOWS



INTERIOR



EXTERIOR



Turn the handle and the window opens like a door. Turn it some more and it locks the bottom of the sash into the frame, tilting the top in to allow generous air exchange.

TILT TURN OPERATION

THE WINDOW THAT ACTS LIKE A DOOR.

Once you see the versatility and style of our Tilt Turn and Hopper windows, you'll understand why they're so popular in Europe. Tilt Turns swing open like a door or tilt at the top of the sash for overhead ventilation. One simple handle controls all the action. An emergency exit, a window and a door all built into one. The Hopper is situated horizontally, so it virtually "scoops" air into the room. Add your own preferences for finish and hardware options, and these windows are nothing short of amazing.

STANDARD FEATURES

- One-lite LoE²-272[®] with Argon insulating glass
- Bronze handle
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 2¹³/₃₂" (61 mm) jambs

HARDWARE

HANDLE



DETAILS



- 1 STANDARD TILT TURN
- 2 SIMULATED DOUBLE HUNG
- 3 HOPPER



ROUND TOP, POLYGON AND SPECIAL SHAPE WINDOWS



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

THINK OUTSIDE THE BOX AND LET MARVIN® CREATE YOUR WINDOW.

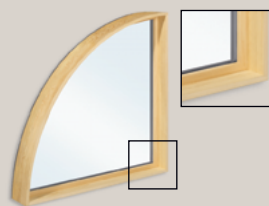
Make your unique vision a reality. Marvin Round Tops come in full, half and quarter rounds, ellipticals, inverted corners, ovals, gothic shapes, eyebrows and more. Our Polygon windows can be created in virtually any geometric shape – octagons, hexagons, trapezoids, pentoids and triangles. Use one for an accent or create a marvelous multi-window display. Marvin offers thousands of standard round top sizes plus unlimited options with customization so you can create a view that's anything but square.

STANDARD FEATURES

- One-lite LoE²-272[®] with Argon insulating glass
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs
- Interior pine trim and plinth blocks (round top units)

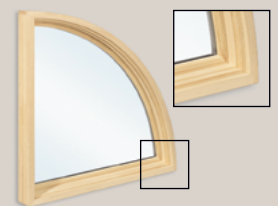
DETAILS

SPECIAL SHAPE, ROUND TOP AND POLYGON WINDOWS CAN BE CONSTRUCTED ONE OF TWO WAYS:



DIRECT GLAZE

Direct Glaze maximizes the light coming through the window. Glass is set directly into the window frame, maximizing the glass surface of the window.



IN-SASH

In-Sash windows have a sash that is set in the frame of the window. In-Sash is a great option when you want to match the sight lines of other windows or doors in your house.



ULTIMATE SWINGING FRENCH DOORS



INSWING



OUTSWING

THIS DOOR KNOWS HOW TO MAKE AN ENTRANCE.

Unmatched in fit and finish, our Ultimate Swinging French Doors offer you a remarkable amount of design flexibility with trusted Marvin® quality. The inswing model accentuates any interior with generous amounts of space while the outswing is ideal for high traffic areas or limited interior space. Designed to the nth degree, most come with a DP40 rating for commercial-grade performance. And the sill is made with super tough Ultrex® – so your sill doesn't warp, rot, corrode or fade over time.

STANDARD FEATURES

- Tempered, one-lite LoE²-272[®] with Argon insulating glass
- Multi-point locking system on the active panel
- Head and foot bolts on inactive panel
- Satin Taupe adjustable hinges
- Oak liner on beige Ultrex sill
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs

HARDWARE

HANDLE



HINGES



ADJUSTABLE



BUTT
(optional)

DETAILS



ULTIMATE SWINGING SCREEN

Storm and screen combinations provide a beautiful complement to rectangular and arch top wood and clad inswing doors.



ULTIMATE ARCH TOP SWINGING FRENCH DOORS



INTERIOR



EXTERIOR



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

HOW TO ROUND OUT THE BEST.

Marvin® Arch Top French Doors offer a heightened elegance. Graceful curves contain the same strength and durability as our other French doors, but add more design possibilities to any entrance. Choose two inswing door panels for a classic appearance or choose outswing if you need more room indoors. There's flexibility with design and features so you can make your entrance as grand as it can be.

STANDARD FEATURES

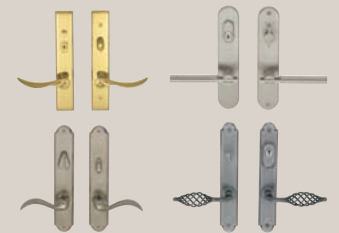
- Tempered, one-lite LoE²-272® with Argon insulating glass
- Multi-point locking system on the active panel
- Head and foot bolts on inactive panel
- Satin Taupe adjustable hinges
- Oak liner on beige Ultrex® sill
- Bare wood interior
- Interior pine trim with plinth blocks
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs

HARDWARE

HANDLE



DETAILS



HINGES



ADJUSTABLE

(optional)

ARCHITECTURAL DOOR HANDLES

Designed to fit Marvin's swinging and sliding doors. Architectural Hardware includes designer styles from four exclusive hardware brands. For more options, visit Marvin.com.



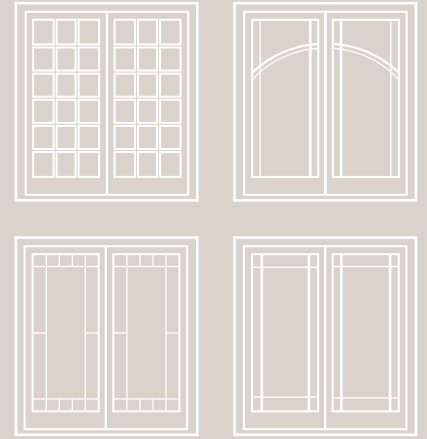
ULTIMATE SLIDING FRENCH DOORS



INTERIOR



EXTERIOR



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

SPACE-SAVING, BUT AWE-INSPIRING.

Enjoy the elegance of our French door in a smooth operating, space-saving sliding version. Our Ultimate Sliding French Doors are thoughtfully designed from the extra-wide stiles and tall bottom rails to the ergonomically designed handle that cradles your palm. Screens are top hung so they slide smoothly and won't slide off the track. The multi-point lock comes standard, or you can choose the three-point locking system for added security. With 19 clad color varieties and our standard or Ultimate Screens, you can have the French door that speaks to your style.

STANDARD FEATURES

- Tempered, one-lite LoE²-272[®] with Argon insulating glass
- Multi-point locking system
- Oak liner on beige Ultrex[®] sill
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs

HARDWARE

HANDLE



DETAILS



RAISED PANEL DOOR

Raised panels add a classic look to any door. Available for Sliding, Swinging and Arch Top French Doors.



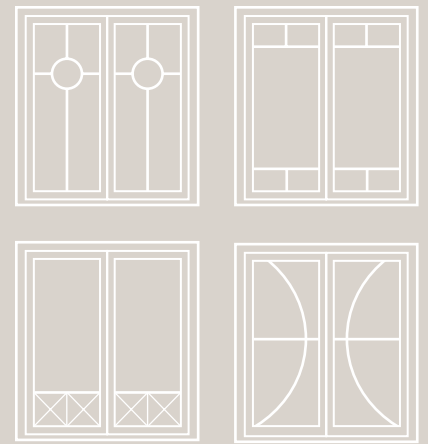
SLIDING PATIO DOORS



INTERIOR



EXTERIOR



These are only a few designs for divided lites. Please see options section or Marvin.com for more possibilities.

DESIGN POSSIBILITIES

EVEN YOUR PATIO DOOR CAN HAVE UNRIVALED PERFORMANCE.

Sophistication and contemporary design are matched with smooth operation to create doors that perform beautifully. Our Sliding Patio Doors feature two large glass surfaces that allow light to make a grand entrance into any room. Three-inch stiles and rails plus a sill made from super tough Ultrex®, a pultruded fiberglass material, add to the sturdiness and performance, while features like the harp-shaped handle provide an elegance that elevates a patio door to perfection.

STANDARD FEATURES

- Tempered, one-lite LoE²-272® with Argon insulating glass
- Two-point locking system
- Oak liner on beige Ultrex sill
- Bare wood interior
- All wood brick mould casing (wood units)
- Extruded aluminum clad exterior (clad units)
- 4 9/16" (116 mm) jambs

HARDWARE

HANDLE



DETAILS



ULTIMATE TOP HUNG SCREEN DOOR

Aluminum top hung sliding screen with roller bar, adjustable rollers and replaceable bottom guide create smooth operation. The exterior profile replicates the look of a traditional wood screen.



BI-FOLD DOORS



THE LUXURY OF INDOOR/OUTDOOR LIVING.

An elegant, contemporary solution, our Bi-fold Door opens wide to infuse a room with fresh air and spectacular views. The Bi-fold Door, configuring two to eight panels, can create an opening up to 21' wide by 8' high. That's large enough to extend the interior right out into the garden or the veranda, or to connect with another room. Door panels travel easily on an extruded aluminum track and fold neatly to one side. The unit can incorporate an ADA or floor channel sill option for an even more seamless transition.

STANDARD FEATURES

- Tempered, one-lite LoE²-272[®] with Argon insulating glass
- Bare wood interior
- Available in wood or extruded aluminum clad exterior
- Outswing service panel (based upon configuration)
- Mortise latch or multi-point locking systems on service panel
- Adjustable hinges
- Elite hardware system created for folding doors in exterior residential and light commercial applications

HARDWARE

HANDLE



DETAILS



ECLIPSE E3™

The eclipse e3™ hardware system equips each carrier with a patented "Sure-Lock IITM" adjusting system. Once engaged, it prevents slippage.



ULTIMATE LIFT AND SLIDE DOORS



ADD 500 ACRES TO YOUR FLOOR PLAN.

You don't want anything to stand between you and your view. That's why Marvin® designed the new Ultimate Lift and Slide. Available in stunningly large sizes, up to 60' wide, and in several panel configurations, they allow for a seamless transition from the exterior to the interior of your home. The Lift and Slide comes in both Pocket and Stacked configurations. In the Pocket configuration, panels slide into wall openings and completely disappear from the exterior to the interior of your home. Now you can let more than just fresh air into your home – with Marvin's Lift and Slide doors, you can let the outdoors in.

STANDARD FEATURES

- Tempered, one-lite LoE²-272[®] with Argon insulating glass
- Bare wood interior
- Extruded aluminum clad exterior (clad units)
- All wood brick mould casing (stacked wood units)
- 2 3/4" thick panels
- Bronze PVD hardware
- Exclusive Flush Mount handle and exterior finger pull
- 3/16" exposed track above finished floor height
- Sill options available in anodized bronze aluminum (std.) or anodized mill finish

HARDWARE

HANDLE



Our industry-exclusive Flush Mount hardware blends beautifully into the door for a clean aesthetic. The intuitive design provides ease of operation.

DETAILS



STACKED

Available in pocket or stacked configurations. Pocket shown on opposite page.



ENERGY EFFICIENT.

Marvin® Windows and Doors are engineered for energy efficiency. Windows and doors are the biggest energy losers in a typical home, that's why choosing the right product is essential for long term savings on utility bills. Marvin wood and wood clad windows are more energy-efficient than vinyl or all aluminum windows. Every Marvin window is hand-crafted and built to exactly fit your specifications, better fit means less money spent on heating and cooling your home. Your Marvin dealer can recommend the best options, production and glass choices for your climate.

ENERGY EFFICIENT GLASS OPTIONS

- Double-pane with Argon gas
- Tripane glazing features two layers of LoE glass with a clear center pane
- LoE²-272® features double metallic coating on the inside glass surface to reflect or absorb the sun's warmth and reduce damaging UV rays
- LoE³-366® features three metallic layers of silver, this glass rejects solar heat. Recommended for warm climates where cooling costs are high and also for areas with intense exposure to the sun

Most Marvin products are certified for energy efficiency in all regions of the United States by the federal ENERGY STAR program. Look for the ENERGY STAR label for your assurance of top performance.



HIGH PERFORMANCE

There's no need to sacrifice the WOW factor for the U-factor.

Marvin has over 800 NFRC certified glazing options that perform to .20 or lower. Available in a wide variety of products and configurations, high performance glazing assures you of increased energy efficiency and comfort.

TRIPANE WITH KRYPTON

Tripaine with Krypton allows Marvin windows to deliver even greater energy efficiency. This new option adds the remarkable insulating properties of Krypton to the proven performance of Tripaine construction. Krypton, a blend of Krypton as the primary gas with Argon and air, reduces the already impressive U-factor of Tripaine with Argon by about .03.

WOOD SPECIES

SELECT



PINE



VERTICAL GRAIN
DOUGLAS FIR



MAHOGANY



CHERRY



DOUGLAS FIR



WHITE OAK



CEDRO MACHO



PRIMED WOOD

DIVIDED LITES

SIMULATED DIVIDED LITE (SDL)



SDL is an energy-efficient way to create the look of divided lites. SDL bars are permanently adhered to both sides of the glass.

SIMULATED DIVIDED LITE WITH SPACER BAR



SDL bars are combined with spacer bars installed between the glass, creating the essence of Authentic Divided Lites.

AUTHENTIC DIVIDED LITE (ADL)



Separate panes of glass are glazed between muntin bars – the way windows have been made since the beginning. Now, Marvin's state-of-the-art design adds traditional appeal. (Available for wood units only.)

GRILLES



Solid wood Grilles on the interior offer the look of classic divided lites, but can be easily removed for cleaning.

GRILLES-BETWEEN-THE-GLASS (GBG'S)



Grilles are permanently installed between the glass panes. This low-maintenance grille is available with a two-tone option.



GLASS, HARDWARE FINISHES AND CLAD COLORS

GLASS OPTIONS

Marvin® offers a broad array of specialty glass options. Choose clear, patterned or decorative glazing or have our artisans create a special glass just for you. Contact a Marvin representative for availability.



BRONZE TINT



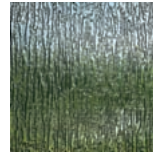
GREEN TINT



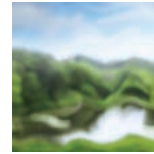
GRAY TINT



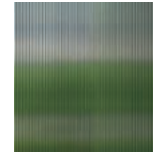
OBSCURE



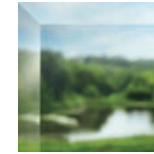
RAIN



RENOVA



THIN REED

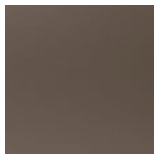


CLEAR
BEVELED

HARDWARE FINISHES



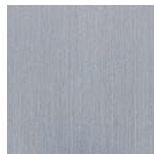
SATIN TAUPE



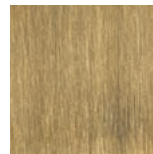
BRONZE



SATIN
NICKEL



SATIN
CHROME



ANTIQU
BRASS



OIL RUBB
BRONZE



BRASS

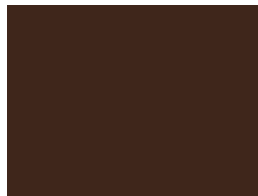


WHITE

CLAD COLORS



PEBBLE GRAY



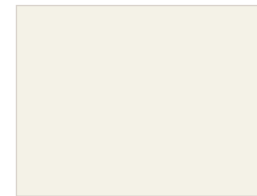
BAHAMA BROWN



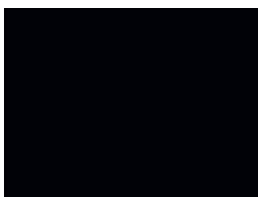
EVERGREEN



BRONZE



STONE WHITE



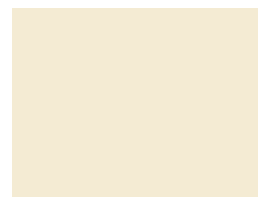
EBONY



COBALT BLUE



WINEBERRY



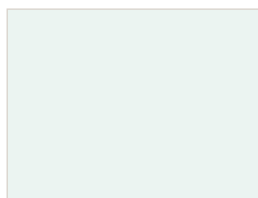
COCONUT CREAM



HAMPTON SAGE



CASHMERE



ARCTIC WHITE



CUMULUS GRAY

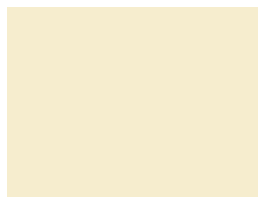


DESERT BEIGE



SHERWOOD GREEN

Printed color may not be an accurate representation. Ask your local Marvin retailer for color chips.



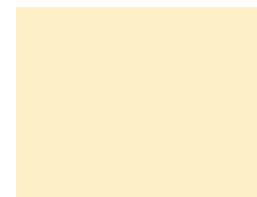
SIERRA WHITE



CADET GRAY



CASCADE BLUE



FRENCH VANILLA

WE BUILD MARVIN® EXTERIOR CLAD PRODUCTS TO LAST.

Our extruded aluminum is substantially stronger than roll-form aluminum. Marvin exterior clad products are so strong, they exceed the American Architectural Manufacturers Association's toughest specification (2605-05) for aluminum cladding, which requires extruded aluminum and a 70% Kynar® finish. The interior of our clad products is made of wood, which greatly increases thermal efficiency. Strength, performance and beauty makes Marvin tough to beat.

TIME EXPOSURE-FADING

These panels illustrate the superior resistance to fading that our flurospar with 70% Kynar 500 has over standard finishes used in roll-form and vinyl.



Marvin Polyester Powder



Marvin Urethane



Marvin Polyester



Marvin Silicone Polyester

MARVIN CLAD



The difference in strength is similar to the difference in the thickness of an industrial chair versus an inexpensive lawn chair.

EXTRUDED ALUMINUM CLAD FINISH

Lasting durability starts with a chemical reaction. During manufacturing, we create a chemical bond between the extruded aluminum and Flurospar®, a fluoropolymer finish with 70% Kynar 500® – an advanced and extremely hard finish. Extrusions go through a five-step pre-treatment process that includes cleaners, rinses, and surface preparation to ensure the Flurospar finish adheres smoothly. Our extrusions are formed, then painted, which means a quality paint adhesion unlike roll-form which is painted then formed.

This means beauty is not interrupted by chalking, pitting, fading, erosion and marring. Your Marvin clad products will retain color and gloss for years to come. We wouldn't settle for anything less.

ROLL-FORM VINYL



Roll-form aluminum isn't much thicker than a pop can. It is easily bent and damaged. Most windows using roll-form aluminum come standard with a less expensive paint coating which can easily fade, chalk and scratch.



Vinyl expands and contracts due to heat and cold. Couple this issue with the damaging effects of UV light, the vinyl will eventually chalk and fade. This constant climatic attack breaks the vinyl down, leaving a brittle, faded shell behind.

TIME EXPOSURE-CHALKING

These microscopic images illustrate the superior resistance to chalking that Flurospar with Kynar 500 has over standard finishes. Notice the heavy pitting that occurs over time which results in chalking.

	UNEXPOSED	51 MONTHS	160 MONTHS
ACTYLIC			
SILICONE POLYESTER			
70% KYNAR 500			

CLAD CASINGS & SUBSILLS

CLAD CASINGS & SUBSILLS



BRICK MOULD CASING
WITH A246 SUBSILL
IN EBONY



KINSLEY CASING
WITH A1451 SUBSILL
IN CASHMERE



THORTON CASING
WITH A1453 SUBSILL
IN SHERWOOD GREEN



POTTER CASING
WITH A1451 SUBSILL
IN CASCADE BLUE



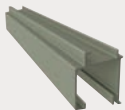
FLAT CASING
WITH A246 SUBSILL
IN WINEBERRY



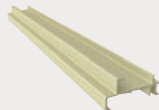
GRAYSON CASING
WITH A1450 SUBSILL
IN BRONZE

See page 56 for more clad color options.

SUBSILLS



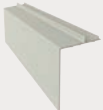
A217



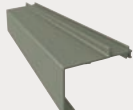
A246



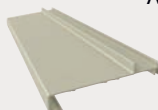
A1450



A1451



A1452



A1453

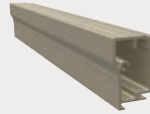
MARVIN® CLAD PROFILES

FLAT CASING



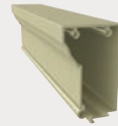
SUBSILL
COMPATIBILITY
A217 A246

BRICK MOULD CASING



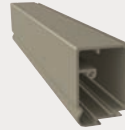
SUBSILL
COMPATIBILITY
A217 A246

COLUMBUS CASING



SUBSILL
COMPATIBILITY
A1450 A1452
A1451 A1453

GRAYSON CASING



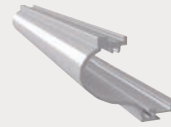
SUBSILL
COMPATIBILITY
A1450 A1452
A1451 A1453

KINSLEY CASING



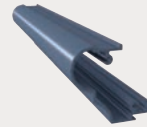
SUBSILL
COMPATIBILITY
A1450 A1452
A1451 A1453

RIDGELAND CASING



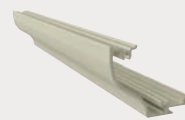
SUBSILL
COMPATIBILITY
A1453

STRATTON CASING



SUBSILL
COMPATIBILITY
A1452 A1453

THORTON CASING




























SUBSILL
COMPATIBILITY
A1450 A1453
A1452

POTTER CASING



SUBSILL
COMPATIBILITY
A217 A1450 A252
A246 A1451 A1453





WINDOW HARDWARE

	SATIN TAUPE	BRONZE	WHITE	BRASS	SATIN NICKEL	OIL RUBBED BRONZE	SATIN CHROME	ANTIQUE BRASS
SASH LOCK	Ultimate Double Hung, Ultimate Double Hung Magnum*, Ultimate Insert Double Hung							
								
SASH LOCK	Tilt Pac/Magnum Tilt Pac**							
								
SASH LIFT	Ultimate Double Hung, Ultimate Double Hung Magnum, Ultimate Insert Double Hung, Tilt Pac/Magnum Tilt Pac							
								
FOLDING HANDLE	Glider							
	Available in bronze	Available in white	Available in brass	Available in satin nickel	Available in oil rubbed bronze	Available in satin chrome	Available in antique brass	
HANDLE	Tilt Turn							
								
	Key option available							

Printed colors may not be an accurate representation. Ask your local Marvin® retailer for aluminum color chips.

*Tilt lever not available on Ultimate Double Hung Magnum.
 **Also available as keyed sash lock in Satin Taupe, Bronze or White

WINDOW AND DOOR HARDWARE

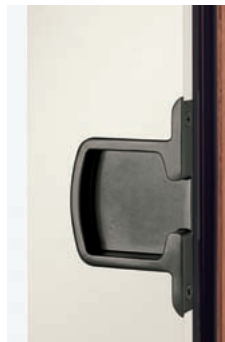
	SATIN TAUPE	BRONZE	WHITE	BRASS	SATIN NICKEL	OIL RUBBED BRONZE	SATIN CHROME	ANTIQUE BRASS
FOLDING HANDLE	Ultimate Casement, Ultimate Replacement Casement, Ultimate Awning, Ultimate Replacement Awning							
	Available in bronze	Available in white	Available in brass	Available in satin nickel	Available in oil rubbed bronze	Available in satin chrome	Available in antique brass	
CRANK HANDLE	Ultimate Casement, Ultimate Replacement Casement, Ultimate Awning, Ultimate Replacement Awning							
	Available in bronze	Available in white	Available in brass					
PUSH OUT HANDLE	Ultimate Push Out Casement and Replacement Casement, Ultimate Push Out Awning and Replacement Awning							
 Oil Rubbed Bronze Standard				Available in brass	Available in satin nickel			Available in antique brass
LIFT AND SLIDE	Ultimate Lift and Slide							



Exclusive Flush-Mount Hardware
























Interior Finger Pull (Optional)



Exclusive Exterior Finger Pull

Available in Bronze^{PVD}, Satin Nickel^{PVD}, and Brass^{PVD}

DOOR HANDLES

	SATIN TAUPE	WHITE	BRASS ^{PVD}	SATIN NICKEL ^{PVD}	OIL RUBBED BRONZE	SATIN CHROME	ANTIQU BRASS
SWINGING FRENCH	Standard Handles						
							
					Also available with a PVD finish		
SLIDING FRENCH	Standard Handles						
							
					Also available with a PVD finish		
SLIDING PATIO	Standard Handles						
							
					Also available with a PVD finish		

DOOR HINGES

	SATIN TAUPE	GOLDTONE	WHITE	BRASS ^{PVD}	SATIN NICKEL ^{PVD}	OIL RUBBED BRONZE	SATIN CHROME	ANTIQU BRASS
BUTT HINGE*								
ADJUSTABLE HINGE**								
						Also available with a PVD finish		

*Available for 2 1/4" doors in Brass, Bronze, Satin Chrome and Stainless Steel.
 **Silver Frost Adjustable Hinge is also available.

ARCHITECTURAL DOOR HANDLES

For more selections, visit Marvin.com

ASHLEY NORTON



BOUVET



ARCHITECTURAL DOOR HANDLES

For more selections, visit Marvin.com

NOBILUS



VALLI&VALLI



SCREENS

SCREEN MESH OPTIONS



CHARCOAL FIBERGLASS



CHARCOAL ALUMINUM WIRE
(shown with optional wood surround)



BRIGHT BRONZE WIRE
(shown with optional wood surround)



BLACK ALUMINUM WIRE
(shown with optional wood surround)



BRIGHT ALUMINUM WIRE
(shown with optional wood surround)



HI TRANSPARENCY MESH
(shown with optional wood surround)

CASEMENT



WOOD SCREEN SURROUND

WOOD SCREEN SURROUND WITH ALUMINUM EXTERIOR

- Creates a seamless wood interior
- Screen mesh comes masked to allow no-mess staining or painting of the wood surround
- Hi-transparency screen mesh comes standard with wood screen surround
- Patented

ULTIMATE DOUBLE HUNG SCREEN OPTIONS



FULL SCREEN

Exterior screen with an aluminum surround.



HALF SCREEN

Exterior screen with an aluminum surround. The screen covers only the lower portion (bottom sash) of the window.



TWO-LITE WOOD STORM SASH OR SCREEN

A wood frame containing non-removable glass. The storm sash can be removed during the summer and replaced with a wood framed screen. Available only for wood windows.



ENERGY PANEL

Often confused with storm windows, an Energy Panel is technically a glazing option. It is a removable, exterior glass panel finished on the edges by a surround. Energy panels cover the exposed glass surface of each sash and offer added energy efficiency for wood windows with single glazing.



STORM AND SCREEN COMBINATIONS

A combination unit is composed of two glass panels and one screen panel.

- Panels can be configured multiple ways to accommodate season or preference: glass above screen, screen above glass or glass above glass
- One of the glass panels slides behind the other for self storage when the screen is in use
- Panels can be easily removed from the interior for cleaning. Available with a wood (bare or primed wood) or aluminum surround

RETRACTABLE SCREEN

Discover the new Retractable Screen from Marvin® Windows and Doors. The Retractable Screen provides the perfect solution for new or existing cranking and Push Out Ultimate Casement and Awning windows. When a screen is needed, simply glide the retractable screen across the window to put the Retractable Screen in place. When wide open views are needed, the Retractable Screen effortlessly integrates into the jamb of the window. When the screen is in the closed position, it is virtually undetectable. Imagine never having to remove screens from windows again, but still being able to enjoy the benefits of a wide open view or a window screen as easily as opening and closing window treatments.



- Simply pull the screen from side to side for easy operation on casement windows
- Concealed system seamlessly blends in for beautiful views
- Installation friendly system – easy to remove, clean, paint or stain
- Pull the screen from top to bottom on awning windows

LOW PROFILE SILL

PERFORMANCE AND ADA COMPLIANCE



The Low Profile Sill from Marvin Windows and Doors is a new and innovative sill option that provides for a smooth transition between exterior and interior living spaces. The patent-pending Low Profile Sill combines two elements: universal design where a flush threshold is desirable and high performance. The Low Profile Sill is an example of an innovative design coupled with the craftsmanship of Marvin windows and doors that offers exceptional performance and beauty.

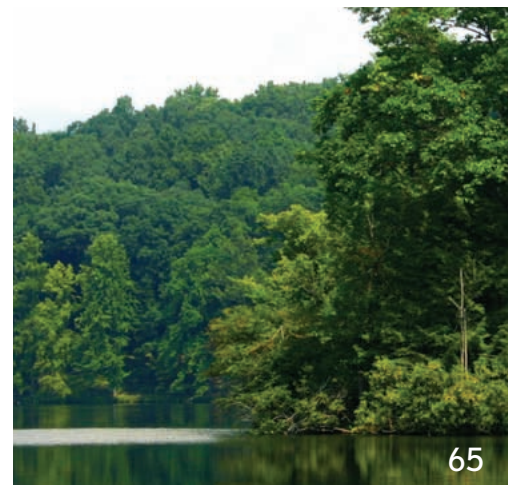
Compatible with both wood and clad Ultimate Sliding French and Sliding Patio Doors, the sill can be paired with any standard sliding door panel configuration, providing the same design flexibility and reliability that distinguishes all Marvin products.

CERTIFIED WOOD

SFI CERTIFIED WOOD AND FSC CERTIFIED WOOD

Marvin Windows and Doors has routinely purchased raw lumber from reliable suppliers who subscribe to the Sustainable Forest Initiative® (SFI®), an affiliation that attests to sound forest management. Marvin products are now available with chain of custody certification for either SFI certified products or FSC certified products. While SFI certifies wood products in North America, the Forest Stewardship Council™ (FSC®) operates worldwide to assure biodiversity and high conservation of forests along with humane labor practices.

Chain of custody for either certification means that the wood in your Marvin product has been tracked from the forest from which it was harvested, through manufacturing and distribution, to the building where it is installed. Each process along the way has been third-party certified to meet environmentally responsible criteria established by FSC or by SFI.



DOORS

LOCK SYSTEMS



ACTIVE PANEL

Keyed, Multi-point (Standard)

Concealed multi-point lock with stainless steel head and foot bolts activated from a keyed, lever handle. Compatible with a standard handle or with handles from Marvin® Architectural Hardware. No lock, no bore option is available.



INACTIVE LOCKING PANEL

Manual head and foot bolts (Standard)
Multi-point lock (optional)

Concealed multi-point lock with stainless steel head and foot bolts activated from a lever handle, matching active panel escutcheon and lever.

CONCEALED MULTI-POINT LOCK



TOP LOCK



HANDLE LOCK



BOTTOM LOCK



HINGES

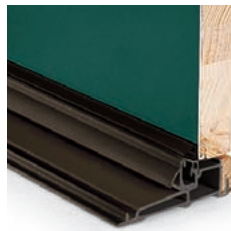
Butt and Adjustable Hinges are available in a variety of finishes including Satin Taupe, White, Brass, Satin Nickel, Oil Rubbed Bronze, Satin Chrome, and Antique Brass. Butt Hinges are also available in Goldtone.

DOOR SILL AND WEATHER STRIP OPTIONS



BEIGE ULTrex®

Sill and weatherstrip (Standard)



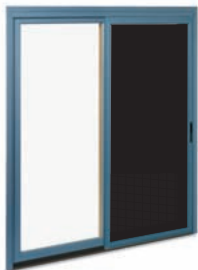
BRONZE ULTrex

Sill and weatherstrip (Optional)

Ultrex is a pultruded fiberglass-based material that is unmatched in strength and durability. It's virtually impervious to time, weather and pressure so it won't transfer heat or cold, warp, dent, corrode or fade.

DOOR SCREENS

SLIDING TOP HUNG



Aluminum top hung sliding screen with adjustable rollers and replaceable bottom guide. Available for both wood and clad-wood Sliding Patio Doors and Ultimate Sliding French Doors.

ULTIMATE TOP HUNG



Aluminum top hung sliding screen with roller bar, adjustable rollers and replaceable bottom guide. The exterior profile replicates the look of a traditional wood screen. Available for both wood and clad-wood Sliding Patio Doors, Ultimate Sliding French Doors and Ultimate Inswing French Doors.

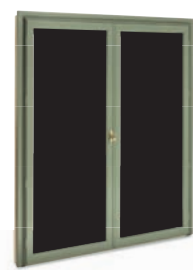
STANDARD SWINGING



This tough extruded aluminum swinging screen door specifically designed for use with Ultimate Inswing French Doors provides solid protection and outstanding performance. The frame is made of the same thick metal as our cladding so both the profile and the finish match the exterior of your door perfectly.

Automatic closer standard for swinging screen.

ULTIMATE SWINGING

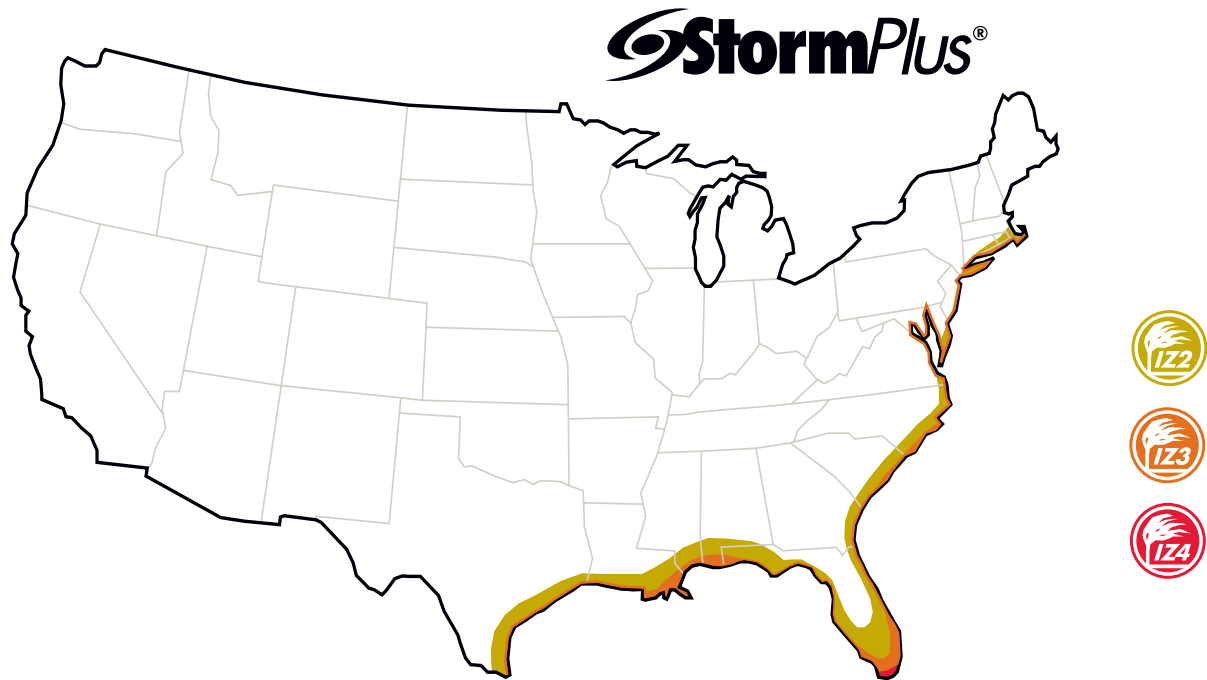


The exceptional Ultimate Swinging Screen Door features Marvin exclusive hardware and unmatched aesthetics. Choose the optional Storm Panel Inserts for harsher climates. Screen and Storm panels remove without tools.

Available for wood and clad Ultimate Inswing French Doors and Ultimate Arch Top French Doors.

STORMPLUS.

With Marvin® Windows and Doors' StormPlus products and the superior performance of LoE²-272® glass, you'll have beauty and style that provides you with amazing views even through the harshest of conditions. During a hurricane, StormPlus offers protection from the brutal pushing and pulling of high-speed winds. StormPlus products are rigorously tested and certified for energy efficiency, driving rain, impact resistance and cyclic pressure. So though they may look like glass, they act like shields, protecting against flying debris and providing additional security against break-ins and even outdoor noise.



IMPACT ZONE 2

Products meet International Building Codes for coastal and near-coastal areas in Atlantic and Gulf Coast states.



- Withstands winds from 120 mph to 129 mph
- Stands up to wind borne debris test: 4' long 2x4 stud shot at 40' per second
- Extensive +/- pressure testing (9000 cycles)
- IZ2 Products are certified through the WDMA and listed in the FL state database

IMPACT ZONE 3

Products meet International Building Codes for many East Coast states, from Rhode Island to Florida to Texas



- Withstands winds from 120 mph to 140 mph
- Stands up to wind borne debris test: 8' long 2x4 stud shot at 50' per second
- Extensive +/- pressure testing (9000 cycles)
- IZ3 Products are certified through the WDMA and listed in the FL state database

IMPACT ZONE 4

Products meet Miami-Dade County and Florida state versions of the International Building Code



- Withstands winds beyond 140 mph
- Stands up to wind borne debris test: 8' long 2x4 stud shot at 50' per second, multiple times
- Extensive +/- pressure testing (9000 cycles)
- IZ4 Products are approved by Miami-Dade County Notice of Acceptance (NOA) and listed in the FL state database

STANDARD FEATURES

- Laminated glass to protect against impact from debris such as tree branches or construction materials.
- Reinforced sash, frame and locking points
- Aesthetically unobtrusive hardware reinforcements that secure the sash to the frame.

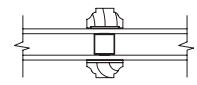


StormPlus products are named and tested to coincide with the American Society for Testing and Materials zones reference within the International Building Codes.

PRODUCT OPTIONS

MUNTIN PROFILES

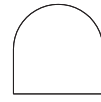
QUICK REFERENCE TO ROUND TOP SHAPES



WOOD 7/8" (22) SDL WITH SPACER BAR



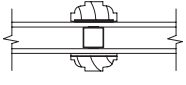
RT1



RT2



RT5



WOOD 1 1/8" (29) SDL WITH SPACER BAR



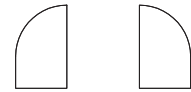
RT6



RT7



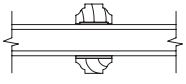
RT8



RT9



RT10



WOOD 7/8" (22) SDL WITHOUT SPACER BAR



RT11



RT12



RT13



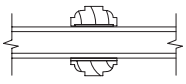
RT14



RT15



RT16



WOOD 1 1/8" (29) SDL WITHOUT SPACER BAR



RT17



RT18



RT19



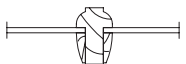
RT20



RT21



RT22



WOOD 7/8" (22) ADL



RT23



RT24



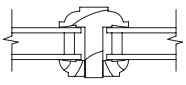
RT25



RT26



RT27



WOOD 1 1/16" (43) ADL



RT23



RT24



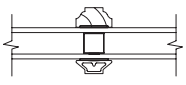
RT25



RT26



RT27



CLAD 7/8" (22) SDL WITH SPACER BAR



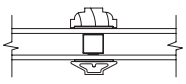
RT28



RT29



RT30



CLAD 1 1/8" (29) SDL WITH SPACER BAR



RT31



RT32



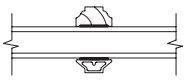
RT33



RT34



RT42



CLAD 7/8" (22) SDL WITHOUT SPACER BAR



RT43



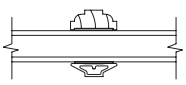
RT44



RT45



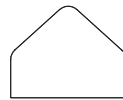
RT46



CLAD 1 1/8" (29) SDL WITHOUT SPACER BAR



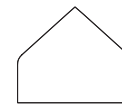
RT47



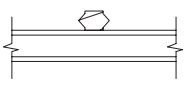
RT48



RT49



RT50



WOOD 3/4" (19) GRILLE



RT51



RT52



RT53



RT54



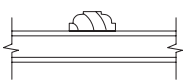
RT55



RT56



RT57



WOOD 1 1/8" (29) GRILLE

PRODUCT OPTIONS

QUICK REFERENCE TO POLYGON SHAPES



P3-1



P3-2



P3-3



P3-4



P3-5



P3-6



P3-7



P3-8



P3-9



P3-10



P3-11



P3-12



P3-13



P3-14



P3-15



P3-16



P3-17



P3-18



P3-19



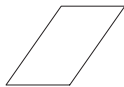
P3-20



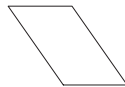
P3-21



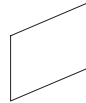
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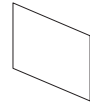
P4-1



P4-2



P4-3



P4-4



P4-5



P4-6



P4-7



P4-8



P4-9



P4-10



P4-11



P4-12



P4-13



P4-14



P4-15



P4-16



P4-17



P5-1



P5-2



P5-3



P5-4



P5-5



P5-6



P5-7



P5-8



P5-9



P5-10



P5-11



P5-12



P5-13



P5-14



P5-15



P5-16



P6-1



P6-2



P6-3



P6-4



P6-5



P6-6



P6-7



P6-8



P8-1



P8-2



P8-3



P8-4

HOW TO ORDER MARVIN WINDOWS AND DOORS

The following pages include specifications for many of the standard windows and doors Marvin makes. For complete specification information, visit Marvin.com or contact your local Marvin representative. There's a lot of information here, but once you understand the different elements, these pages will become the first step in seeing your window and door dreams become a reality. So when you meet with your local Marvin representative, you'll be speaking the same language. And should you have something special in mind, remember that in addition to the thousands of standard offerings listed here, our favorite challenge is creating a custom window or door that has never been built before.

SPECIFICATION INFORMATION

Each product section is divided into wood and clad, with metric measurements in parenthesis. Cross section drawings are also included. Product codes for ordering are listed under each unit but do not necessarily indicate product size.

You'll notice width and height measurements are given for each size. The masonry opening is the size of the hole needed if the window is to be installed within a brick, block, or stone opening; rough openings are the required hole size in houses covered with wood, vinyl or metal siding. Frame size measures from edge to edge of your window (excluding exterior casings); glass size indicates the dimensions of the total glass, both visible and covered, in a single sash (operating or stationary) see chart below.

Mas. Opg. (mm)	1-7 5/8 (499)	1-11 5/8 (600)	2-3 5/8 (702)
Rgh. Opg. (mm)	1-5 (432)	1-9 (533)	2-0 (610)
Frame Size (mm)	1-4 (406)	1-8 (508)	2-1 (635)
Glass Size (mm)	11 9/16" (294)	15 9/16" (395)	19 9/16" (497)

2-1 7/8 (657)
2-9/16 (624)
2-1/16 (611)
17 7/8 (454)



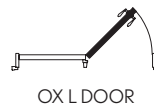
NOTES:

- Elevations are not to scale
- Numbers listed in parentheses () are metric equivalents in millimeters rounded to the nearest whole number
- Allow 1/16" (2) tolerance on all measurements
- On Clad units, all masonry openings are based on units without casing.
- All performance information is based on Marvin installation recommendations for standard products.
- It is recommended that a minimum of 1/4" be added to the rough opening height when using a rigid sill pan product such as Marvin SillGuard™.
- **Round Tops with Springlines.** Caution: It is recommended that a minimum of 1/4" be added to the rough opening height when using rigid sill pan product such as Marvin SillGuard™. Sillguard requires a minimum of 6" RO springline.
- **Round Tops with no Springline and Commercial Doors.** Marvin SillGuard™ is not recommended for this product.
- **Caution:** Marvin SillGuard™ is not recommended for bow or bay assemblies.
- Due to the variety of combinations of casings and subsill options available, special dimensional considerations for different installation methods will be required. Please contact your local Marvin retailer when specifying these casing and subsill combinations.

OPERATING VS. STATIONARY

Our drawings always illustrate the window sash or door panels as if you are looking from the outside in. Identifying which sash or panels are operating is a little counter-intuitive. X means operating, O means stationary. So when listing the sash or panels start from the left to right looking from the exterior. For example, a two panel French Door with a left operating panel and a right stationary panel would be identified as XO. A French Door with two operating panels would be identified as XX.

The identification of stationary/operating panels is then followed by the handing of the primary operating panel (the one that would be opened first, in the case of two operating panels). If you stand straddling the sill of a door with your back to the hinge of the operating panel, notice which hand you would use to reach out and close the door. That indicates whether a door panel is "R" - right handing or "L" - left handing for Marvin residential doors.



ORDERING CONSIDERATIONS

All products are ordered through window and door professionals. They'll take care of you every step of the way, working with you to specify each detail. Since Marvin products are not warehoused and are made to order to your exact needs, product returns are at the discretion of your individual dealer.

Listed below are some of the details you may want to consider:

- Wood species
- Bare wood or primed interior
- Bare wood, primed or clad exterior
- Glazing options such as insulating glass and LoE²-272[®]
- Divided lite options: ADL, SDL, Grilles or GBG's
- Hardware styles and finishes
- Exterior casings and subsills
- Operating vs. stationary sash and panels
- Screen or combination storm/screen needs
- Jamb depth needs

PERFORMANCE RATING INFORMATION

As you flip through this catalog, you'll see different ratings on the performance of our windows and doors. Here's some brief background 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). Marvin products are rated in accordance with the AAMA/NWWDA 101/I.S. 2-97, 101/I.S. 2/NAF S-02 or AAMA/WDMA CSA 101/I.S.2/A440-05 Standards and are certified in compliance with the WDMA Hallmark program.

DESIGN PRESSURE (DP)

A design pressure rating, as created by AAMA/WDMA/CSA Standards, is a measure of the amount of pressure a window or door is designed to withstand when closed and locked. Each DP rating also establishes other performance factors such as structural pressure, water penetration and air infiltration. The higher a DP number a window has, the better the performance. As a frame of reference: DP 40 means that a window is tested to 60 pounds per square foot (PSF) and must withstand water penetration under conditions equal to 8 inches of rain per hour driven by 50 mph winds. For product specific design pressure, please contact your local Marvin Representative or visit marvin.com

NFRC

Marvin Windows and Doors is a founding member of the National Fenestration Rating Council, an independent, non-profit organization that has established an energy performance rating system for accurately comparing different window and door products. Some factors considered in creating an individual window or door's rating include: the U-factor (measuring heat loss), the solar heat gain coefficient, and visible light transmission, evaluating the frame, sash and glass in its entirety.

ENERGY STAR

The U.S. Department of Energy and the U.S. Environmental Protection Agency created this standard to help consumers identify products that reduce energy use. Windows and doors that qualify for ENERGY STAR are twice as efficient as an average window produced ten years ago and must be rated, certified, and labeled according to the NFRC.

An example of an energy chart you will see in this catalog is below.

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.44	0.53	0.56	43	
3/4" Insulating Glass LoE 272 Air	0.33	0.29	0.49	55	SC
3/4" Insulating Glass LoE 272 Argon	0.30	0.29	0.49	58	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.32	0.19	0.44	55	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.29	0.19	0.44	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.23	0.24	0.39	66	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.21	0.24	0.39	69	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.25	0.39	0.47	65	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.23	0.39	0.47	67	N, NC

















































































Thermal and solar values are subject to update. Values are generated in accordance with NFRC 100-97, 100-2001, or 100-2004 and other applicable NFRC procedures. Argon gas is not available for the elevations that require capillary tubes.

SHGC = Solar Heat Gain Coefficient.
VT = Visible Light Transmittance.

ENERGY STAR Zones: N = Northern, NC = North Central, SC = South Central, S = Southern.

WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT

Mas. Opp. (mm)	1'-7 5/8" (498)	1'-9 5/8" (549)	1'-11 5/8" (600)	2'-3 5/8" (702)	2'-5 5/8" (752)	2'-7 5/8" (803)	2'-9 5/8" (854)	2'-11 5/8" (905)	3'-3 5/8" (1006)	3'-7 5/8" (1108)
Rgh. Opp. (mm)	1'-5" (431)	1'-7" (482)	1'-9" (533)	2'-1" (635)	2'-3" (685)	2'-5" (736)	2'-7" (787)	2'-9" (838)	3'-1" (939)	3'-5" (1041)
Frame Size (mm)	1'-4" (406)	1'-6" (457)	1'-8" (508)	2'-0" (609)	2'-2" (660)	2'-4" (711)	2'-6" (762)	2'-8" (812)	3'-0" (914)	3'-4" (1016)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)	35 9/32" (896)

1'-3 7/8" (403) 1'-2 9/16" (370) 1'-2 1/16" (357) 8 13/32" (214)										
WUCA1614	WUCA1814	WUCA2014	WUCA2414	WUCA2614	WUCA2814	WUCA3014	WUCA3214	WUCA3614	WUCA4014	
1'-5 7/8" (454) 1'-4 9/16" (421) 1'-4 1/16" (408) 10 13/32" (264)										
WUCA1616	WUCA1816	WUCA2016	WUCA2416	WUCA2616	WUCA2816	WUCA3016	WUCA3216	WUCA3616	WUCA4016	
WUPCA1616	WUPCA1816	WUPCA2016	WUPCA2416	WUPCA2616	WUPCA2816	WUPCA3016	WUPCA3216	WUPCA3616	WUPCA4016	
1'-7 7/8" (505) 1'-6 9/16" (472) 1'-6 1/16" (459) 12 13/32" (315)										
WUCA1618	WUCA1818	WUCA2018	WUCA2418	WUCA2618	WUCA2818	WUCA3018	WUCA3218	WUCA3618	WUCA4018	
WUPCA1618	WUPCA1818	WUPCA2018	WUPCA2418	WUPCA2618	WUPCA2818	WUPCA3018	WUPCA3218	WUPCA3618	WUPCA4018	
1'-9 7/8" (556) 1'-8 9/16" (522) 1'-8 1/16" (500) 14 13/32" (366)										
WUCA1620	WUCA1820	WUCA2020	WUCA2420	WUCA2620	WUCA2820	WUCA3020	WUCA3220	WUCA3620	WUCA4020	
WUPCA1620	WUPCA1820	WUPCA2020	WUPCA2420	WUPCA2620	WUPCA2820	WUPCA3020	WUPCA3220	WUPCA3620	WUPCA4020	
2'-1 7/8" (557) 2'-9/16" (522) 2'-1/16" (500) 18 13/32" (468)										
WUCA1624	WUCA1824	WUCA2024	WUCA2424	WUCA2624	WUCA2824	WUCA3024	WUCA3224	WUCA3624	WUCA4024	
WUPCA1624	WUPCA1824	WUPCA2024	WUPCA2424	WUPCA2624	WUPCA2824	WUPCA3024	WUPCA3224	WUPCA3624	WUPCA4024	
2'-5 7/8" (759) 2'-4 9/16" (725) 2'-4 1/16" (713) 22 13/32" (569)										
WUCA1628	WUCA1828	WUCA2028	WUCA2428	WUCA2628	WUCA2828	WUCA3028	WUCA3228	WUCA3628	WUCA4028	
WUPCA1628	WUPCA1828	WUPCA2028	WUPCA2428	WUPCA2628	WUPCA2828	WUPCA3028	WUPCA3228	WUPCA3628	WUPCA4028	
2'-9 7/8" (860) 2'-8 9/16" (827) 2'-8 1/16" (814) 26 13/32" (671)										
WUCA1632	WUCA1832	WUCA2032	WUCA2432	WUCA2632	WUCA2832	WUCA3032	WUCA3232	WUCA3632	WUCA4032*	
WUPCA1632	WUPCA1832	WUPCA2032	WUPCA2432	WUPCA2632	WUPCA2832	WUPCA3032	WUPCA3232	WUPCA3632	WUPCA4032*	
3'-1 7/8" (962) 3'-9/16" (929) 3'-1/16" (916) 30 13/32" (772)										
WUCA1636	WUCA1836	WUCA2036	WUCA2436	WUCA2636	WUCA2836	WUCA3036	WUCA3236	WUCA3636*	WUCA4036*	
WUPCA1636	WUPCA1836	WUPCA2036	WUPCA2436	WUPCA2636	WUPCA2836	WUPCA3036	WUPCA3236	WUPCA3636*	WUPCA4036*	

NOTES:

Marvin exclusive wash mode is not available on Ultimate Awnings, Ultimate Casement Round Tops or Ultimate Casement windows less than 20" in width.

Wood Ultimate Push Out Casement not available in Frame Size heights less than 16 1/16".

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





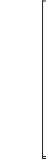



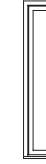





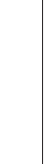



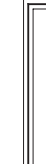





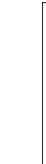



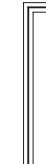





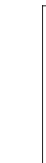



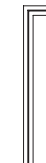





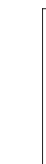



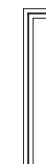

WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT

Mas. Opp. (mm)	1'-7 5/8" (498)	1'-9 5/8" (549)	1'-11 5/8" (600)	2'-3 5/8" (702)	2'-5 5/8" (752)	2'-7 5/8" (803)	2'-9 5/8" (854)	2'-11 5/8" (905)	3'-3 5/8" (1006)	3'-7 5/8" (1108)
Rgh. Opp. (mm)	1'-5" (431)	1'-7" (482)	1'-9" (533)	2'-1" (635)	2'-3" (685)	2'-5" (736)	2'-7" (787)	2'-9" (838)	3'-1" (939)	3'-5" (1041)
Frame Size (mm)	1'-4" (406)	1'-6" (457)	1'-8" (508)	2'-0" (609)	2'-2" (660)	2'-4" (711)	2'-6" (762)	2'-8" (812)	3'-0" (914)	3'-4" (1016)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)	35 9/32" (896)

3'-5 7/8" (1064) 3'-4 9/16" (1030) 3'-4 1/16" (1018) 34 13/32" (874)										
	WUCA1640 WUPCA1640	WUCA1840 WUPCA1840	WUCA2040 WUPCA2040	WUCA2440 WUPCA2440	WUCA2640 WUPCA2640	WUCA2840 WUPCA2840	WUCA3040 WUPCA3040*	WUCA3240 WUPCA3240*	WUCA3640 WUPCA3640*	WUCA4040 WUPCA4040*
3'-9 7/8" (1165) 3'-8 9/16" (1132) 3'-8 1/16" (1119) 38 13/32" (976)										
	WUCA1644 WUPCA1644	WUCA1844 WUPCA1844	WUCA2044 WUPCA2044	WUCA2444 WUPCA2444	WUCA2644 WUPCA2644	WUCA2844 WUPCA2844*	WUCA3044 WUPCA3044*	WUCA3244 WUPCA3244*	WUCA3644 WUPCA3644*	WUCA4044 WUPCA4044*
4'-1 7/8" (1267) 4'-1 9/16" (1233) 4'-1 1/16" (1221) 42 13/32" (1077)										
	WUCA1648 WUPCA1648	WUCA1848 WUPCA1848	WUCA2048 WUPCA2048	WUCA2448 WUPCA2448	WUCA2648 WUPCA2648	WUCA2848 WUPCA2848*	WUCA3048 WUPCA3048*	WUCA3248 WUPCA3248*	WUCA3648 WUPCA3648*	WUCA4048 WUPCA4048*
4'-7 7/8" (1419) 4'-6 9/16" (1386) 4'-6 1/16" (1373) 48 13/32" (1230)										
	WUCA1654 WUPCA1654	WUCA1854 WUPCA1854	WUCA2054 WUPCA2054	WUCA2454 WUPCA2454	WUCA2654 WUPCA2654	WUCA2854 WUPCA2854*	WUCA3054 WUPCA3054*	WUCA3254 WUPCA3254*	WUCA3654 WUPCA3654*	WUCA4054 WUPCA4054*
4'-9 7/8" (1470) 4'-8 9/16" (1437) 4'-8 1/16" (1424) 50 13/32" (1280)										
	WUCA1656 WUPCA1656	WUCA1856 WUPCA1856	WUCA2056 WUPCA2056	WUCA2456 WUPCA2456	WUCA2656 WUPCA2656	WUCA2856 WUPCA2856*	WUCA3056 WUPCA3056*	WUCA3256 WUPCA3256*	WUCA3656 WUPCA3656*	WUCA4056 WUPCA4056*
5'-1 7/8" (1572) 5'-1 9/16" (1538) 5'-1 1/16" (1526) 54 13/32" (1382)										
	WUCA1660 WUPCA1660	WUCA1860 WUPCA1860	WUCA2060 WUPCA2060	WUCA2460 WUPCA2460	WUCA2660 WUPCA2660	WUCA2860 WUPCA2860*	WUCA3060 WUPCA3060*	WUCA3260 WUPCA3260*	WUCA3660 WUPCA3660*	WUCA4060 WUPCA4060*
5'-5 7/8" (1673) 5'-4 9/16" (1640) 5'-4 1/16" (1627) 58 13/32" (1484)										
	WUCA1664 WUPCA1664	WUCA1864 WUPCA1864	WUCA2064 WUPCA2064	WUCA2464 WUPCA2464	WUCA2664 WUPCA2664	WUCA2864 WUPCA2864*	WUCA3064 WUPCA3064*	WUCA3264 WUPCA3264*	WUCA3664 WUPCA3664*	WUCA4064 WUPCA4064*

WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT

Mas. Opg. (mm)	1'-7 5/8" (498)	1'-9 5/8" (549)	1'-11 5/8" (600)	2'-3 5/8" (702)	2'-5 5/8" (752)	2'-7 5/8" (803)	2'-9 5/8" (854)	2'-11 5/8" (905)	3'-3 5/8" (1006)	3'-7 5/8" (1108)
Rgh. Opg. (mm)	1'-5" (431)	1'-7" (482)	1'-9" (533)	2'-1" (635)	2'-3" (685)	2'-5" (736)	2'-7" (787)	2'-9" (838)	3'-1" (939)	3'-5" (1041)
Frame Size (mm)	1'-4" (406)	1'-6" (457)	1'-8" (508)	2'-0" (609)	2'-2" (660)	2'-4" (711)	2'-6" (762)	2'-8" (812)	3'-0" (914)	3'-4" (1016)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)	35 9/32" (896)

6'-1 7/8" (1876)										
	WUCA1672 [†]	WUCA1872 [†]	WUCA2072 [†]	WUCA2472 [†]	WUCA2672 [†]	WUCA2872 ^{†*}	WUCA3072 ^{†*}	WUCA3272 ^{†*}	WUCA3672 ^{†*}	WUCA4072 ^{†*}
6'-6 9/16" (1995)										
	WUCA1678 [†]	WUCA1878 [†]	WUCA2078 [†]	WUCA2478 [†]	WUCA2678 [†]	WUCA2878 ^{†*}	WUCA3078 ^{†*}	WUCA3278 ^{†*}	WUCA3678 ^{†*}	WUCA4078 ^{†*}
7'-1 7/8" (2181)										
	WUCA1684 [†]	WUCA1884 [†]	WUCA2084 [†]	WUCA2484 [†]	WUCA2684 [†]	WUCA2884 ^{†*}	WUCA3084 ^{†*}	WUCA3284 ^{†*}	WUCA3684 ^{†*}	WUCA4084 ^{†*}
7'-8 9/16" (2351)										
	WUCA1692 [†]	WUCA1892 [†]	WUCA2092 [†]	WUCA2492 [†]	WUCA2692 [†]	WUCA2892 ^{†*}	WUCA3092 ^{†*}	WUCA3292 ^{†*}	WUCA3692 ^{†*}	WUCA4092 ^{†*}
8'-1 7/8" (2486)										
	WUCA1696 [†]	WUCA1896 [†]	WUCA2096 [†]	WUCA2496 [†]	WUCA2696 [†]	WUCA2896 ^{†*}	WUCA3096 ^{†*}	WUCA3296 ^{†*}	WUCA3696 ^{†*}	WUCA4096 ^{†*}

NOTES:

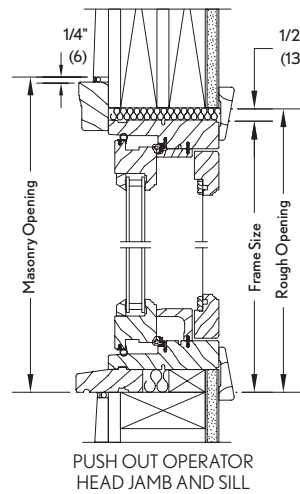
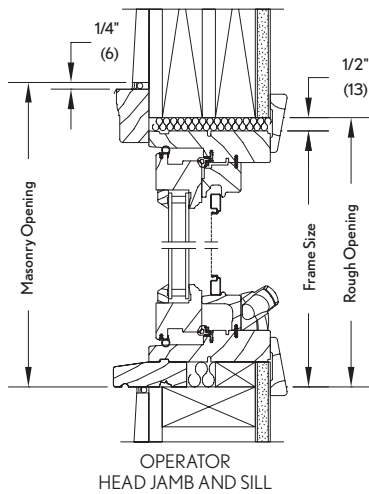
Marvin exclusive wash mode is not available on Ultimate Awnings, Ultimate Casement Round Tops or Ultimate Casement windows less than 20" in width.

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

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 72 1/16" or larger and units with a frame size of 25.2 sq. ft. and larger.

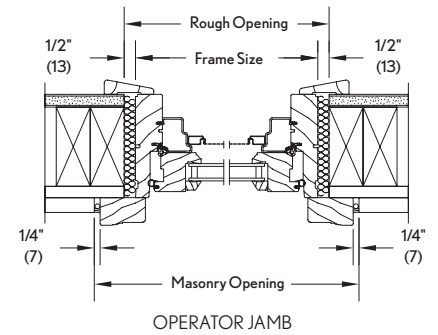
WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT

CONSTRUCTION DETAILS



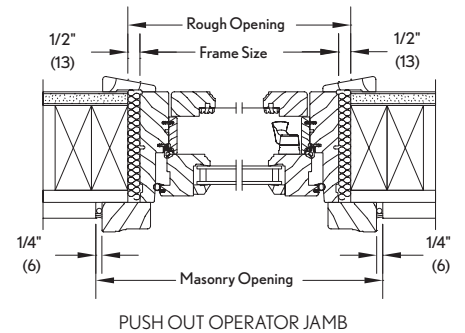
WOOD ULTIMATE CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.42	0.52	0.55	44	
3/4" Insulating Glass LoE 272 Air	0.31	0.28	0.48	56	NC, SC
3/4" Insulating Glass LoE 272 Argon	0.28	0.28	0.48	59	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.30	0.19	0.43	57	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.27	0.18	0.43	60	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.22	0.24	0.38	68	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.20	0.24	0.38	71	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.23	0.38	0.46	66	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.21	0.38	0.46	69	N, NC



WOOD ULTIMATE PUSH OUT CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.43	0.52	0.55	45	
3/4" Insulating Glass LoE 272 Air	0.32	0.28	0.48	57	NC, SC
3/4" Insulating Glass LoE 272 Argon	0.29	0.28	0.48	60	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.31	0.19	0.43	57	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.18	0.43	61	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.22	0.24	0.38	69	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.2	0.24	0.38	72	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.23	0.38	0.46	68	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.21	0.38	0.46	70	N, NC



CLAD ULTIMATE CASEMENT/PUSH OUT CASEMENT

Mas. Opg. (mm)	1' - 4 1/2" (419)	1' - 6 1/2" (469)	1' - 8 1/2" (520)	2' - 1/2" (622)	2' - 2 1/2" (673)	2' - 4 1/2" (723)	2' - 6 1/2" (774)	2' - 8 1/2" (825)	3' - 1/2" (927)	3' - 4 1/2" (1028)
Rgh. Opg. (mm)	1' - 5" (431)	1' - 7" (482)	1' - 9" (533)	2' - 1" (635)	2' - 3" (685)	2' - 5" (736)	2' - 7" (787)	2' - 9" (838)	3' - 1" (939)	3' - 5" (1041)
Frame Size (mm)	1' - 4" (406)	1' - 6" (457)	1' - 8" (508)	2' - 0" (609)	2' - 2" (660)	2' - 4" (711)	2' - 6" (762)	2' - 8" (812)	3' - 0" (914)	3' - 4" (1016)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)	35 9/32" (896)

1' - 1 3/8" (339) 1' - 1 5/8" (346) 1' - 1 7/8" (353)										
1' - 3 3/8" (390) 1' - 3 5/8" (396) 1' - 3 7/8" (403)										
1' - 5 3/8" (441) 1' - 5 5/8" (447) 1' - 5 7/8" (454)										
1' - 7 3/8" (492) 1' - 7 5/8" (498) 1' - 7 7/8" (505)										
1' - 9 3/8" (543) 1' - 9 5/8" (549) 1' - 9 7/8" (556)										
1' - 11 3/8" (594) 1' - 11 5/8" (600) 1' - 11 7/8" (607)										
2' - 1 3/8" (645) 2' - 1 5/8" (651) 2' - 1 7/8" (658)										
2' - 3 3/8" (696) 2' - 3 5/8" (702) 2' - 3 7/8" (709)										
2' - 5 3/8" (747) 2' - 5 5/8" (753) 2' - 5 7/8" (760)										

NOTES:

Marvin exclusive wash mode is not available on Ultimate Awnings, Ultimate Casement Round Tops or Ultimate Casement windows less than 20" in width.

Clad Ultimate Push Out Casement not available in Frame Size heights less than 15 1/8".

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

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 71 1/8" or larger and units with a frame size of 25.2 sq. ft. and larger.

CLAD ULTIMATE CASEMENT/PUSH OUT CASEMENT

Mas. Opg. (mm)	1'-4 1/2" (419)	1'-6 1/2" (469)	1'-8 1/2" (520)	2'-1/2" (622)	2'-2 1/2" (673)	2'-4 1/2" (723)	2'-6 1/2" (774)	2'-8 1/2" (825)	3'-1/2" (927)	3'-4 1/2" (1028)
Rgh. Opg. (mm)	1'-5" (431)	1'-7" (482)	1'-9" (533)	2'-1" (635)	2'-3" (685)	2'-5" (736)	2'-7" (787)	2'-9" (838)	3'-1" (939)	3'-5" (1041)
Frame Size (mm)	1'-4" (406)	1'-6" (457)	1'-8" (508)	2'-0" (609)	2'-2" (660)	2'-4" (711)	2'-6" (762)	2'-8" (812)	3'-0" (914)	3'-4" (1016)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)	35 9/32" (896)

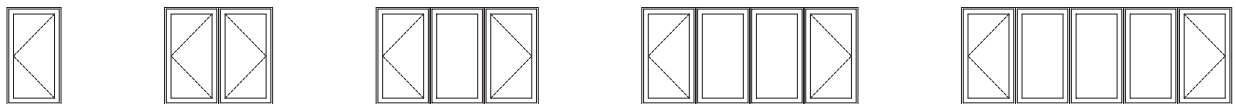
3'-7 3/8" (1101) 3'-7 5/8" (1108) 3'-7 1/8" (1095) 38 13/32" (976)										
3'-11 3/8" (1203) 3'-11 5/8" (1209) 3'-11 1/8" (1196) 42 13/32" (1077)										
4'-5 3/8" (1355) 4'-5 5/8" (1362) 4'-5 1/8" (1349) 48 13/32" (1230)										
4'-7 3/8" (1406) 4'-7 5/8" (1412) 4'-7 1/8" (1400) 50 13/32" (1280)										
4'-11 3/8" (1508) 4'-11 5/8" (1514) 4'-11 1/8" (1501) 54 13/32" (1382)										
5'-3 3/8" (1609) 5'-3 5/8" (1616) 5'-3 1/8" (1603) 58 13/32" (1484)										
5'-11 3/8" (1812) 5'-11 5/8" (1819) 5'-11 1/8" (1806) 66 13/32" (1687)										

CLAD ULTIMATE CASEMENT/PUSH OUT CASEMENT

Mas. Opg. (mm)	1' - 4 1/2" (419)	1' - 6 1/2" (469)	1' - 8 1/2" (520)	2' - 1/2" (622)	2' - 2 1/2" (673)	2' - 4 1/2" (723)	2' - 6 1/2" (774)	2' - 8 1/2" (825)	3' - 1/2" (927)	3' - 4 1/2" (1028)
Rgh. Opg. (mm)	1' - 5" (431)	1' - 7" (482)	1' - 9" (533)	2' - 1" (635)	2' - 3" (685)	2' - 5" (736)	2' - 7" (787)	2' - 9" (838)	3' - 1" (939)	3' - 5" (1041)
Frame Size (mm)	1' - 4" (406)	1' - 6" (457)	1' - 8" (508)	2' - 0" (609)	2' - 2" (660)	2' - 4" (711)	2' - 6" (762)	2' - 8" (812)	3' - 0" (914)	3' - 4" (1016)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)	35 9/32" (896)

6' - 5 3/8" (1965) 6' - 5 5/8" (1971) 6' - 5 1/8" (1958) 72 13/32" (1839)										
6' - 11 3/8" (2117) 6' - 11 5/8" (2124) 6' - 11 1/8" (2111) 78 13/32" (1992)										
7' - 7 3/8" (2320) 7' - 7 5/8" (2327) 7' - 7 1/8" (2314) 86 13/32" (2195)										
7' - 11 3/8" (2422) 7' - 11 5/8" (2428) 7' - 11 1/8" (2416) 90 13/32" (2296)										

CLAD ULTIMATE CASEMENT STANDARD OPERATION AS VIEWED FROM THE OUTSIDE



NOTES:

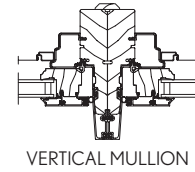
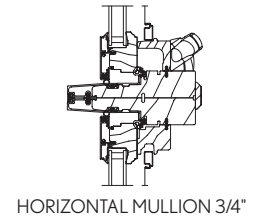
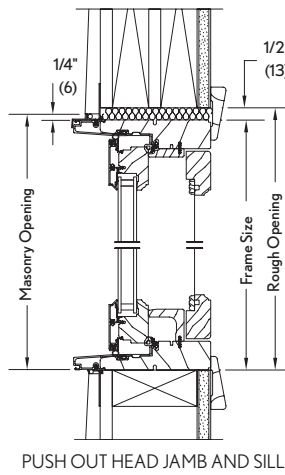
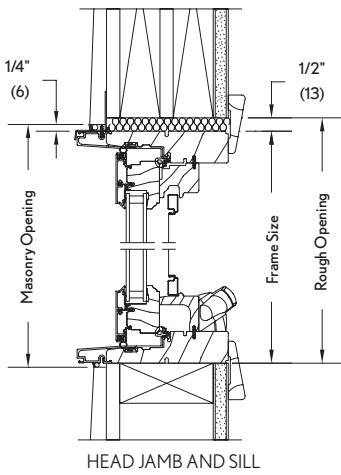
Marvin exclusive wash mode is not available on Ultimate Awnings, Ultimate Casement Round Tops or Ultimate Casement windows less than 20" in width.

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

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 71 1/8" or larger and units with a frame size of 25.2 sq. ft. and larger.

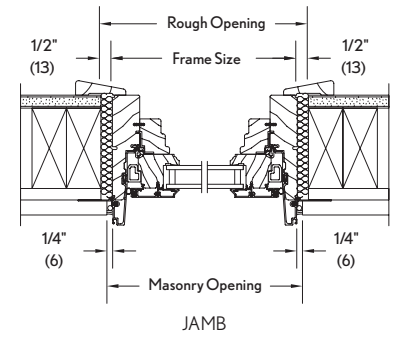
CLAD ULTIMATE CASEMENT/PUSH OUT CASEMENT

CONSTRUCTION DETAILS



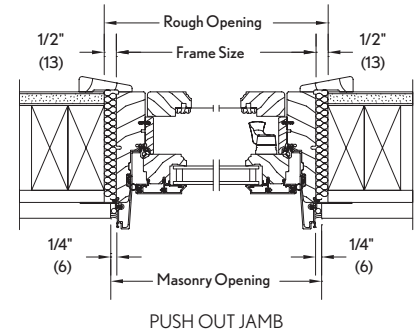
CLAD ULTIMATE CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.44	0.53	0.56	43	
3/4" Insulating Glass LoE 272 Air	0.33	0.29	0.49	55	SC
3/4" Insulating Glass LoE 272 Argon	0.30	0.29	0.49	58	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.32	0.19	0.44	55	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.29	0.19	0.44	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.23	0.24	0.39	66	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.21	0.24	0.39	69	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.25	0.39	0.47	65	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.23	0.39	0.47	67	N, NC










CLAD ULTIMATE PUSH OUT CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.45	0.53	0.56	44	
3/4" Insulating Glass LoE 272 Air	0.34	0.29	0.49	56	SC
3/4" Insulating Glass LoE 272 Argon	0.31	0.29	0.49	59	NC, SC
3/4" Insulating Glass LoE 366 Air	0.33	0.19	0.44	56	SC, S
3/4" Insulating Glass LoE 366 Argon	0.30	0.19	0.44	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.24	0.25	0.39	67	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.22	0.25	0.39	68	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.26	0.39	0.47	66	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.23	0.39	0.47	68	N, NC



WOOD ULTIMATE FRENCH CASEMENT/PUSH OUT FRENCH CASEMENT

Mas. Opg. (mm)	3' - 3 5/8" (1007)	3' - 7 5/8" (1108)	4' - 3 5/8" (1311)	4' - 11 5/8" (1515)	5' - 3 5/8" (1616)
Rgh. Opg. (mm)	3' - 1" (914)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)
Frame Size (mm)	3' - 0" (914)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)
Glass Size (mm)	31 9/32" (795)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)

2' - 9 7/8" (860) 2' - 8 9/16" (827) 2' - 8 1/16" (814) 26 13/32" (671)	 WUPFCA3632	 WUFCA4032 WUPFCA4032	 WUFCA4832* WUPFCA4832*	 WUFCA5632* WUPFCA5632*	 WUFCA6032* WUPFCA6032*
3' - 1 7/8" (962) 3' - 9/16" (929) 3' - 1/16" (916) 30 13/32" (772)	 WUPFCA3636	 WUFCA4036 WUPFCA4036*	 WUFCA4836* WUPFCA4836*	 WUFCA5636* WUPFCA5636*	 WUFCA6036* WUPFCA6036*
3' - 5 7/8" (1064) 3' - 4 9/16" (1030) 3' - 4 1/16" (1018) 34 13/32" (874)	 WUPFCA3640	 WUFCA4040* WUPFCA4040*	 WUFCA4840* WUPFCA4840*	 WUFCA5640* WUPFCA5640*	 WUFCA6040* WUPFCA6040*
3' - 9 7/8" (1165) 3' - 8 9/16" (1132) 3' - 8 1/16" (1119) 38 13/32" (976)	 WUPFCA3644	 WUFCA4044* WUPFCA4044*	 WUFCA4844* WUPFCA4844*	 WUFCA5644* WUPFCA5644*	 WUFCA6044* WUPFCA6044*
4' - 1 7/8" (1267) 4' - 9/16" (1234) 4' - 1/16" (1221) 42 13/32" (1077)	 WUPFCA3648*	 WUFCA4048* WUPFCA4048*	 WUFCA4848* WUPFCA4848*	 WUFCA5648* WUPFCA5648*	 WUFCA6048* WUPFCA6048*
4' - 7 7/8" (1419) 4' - 6 9/16" (1386) 4' - 6 1/16" (1373) 48 13/32" (1230)	 WUPFCA3654*	 WUFCA4054* WUPFCA4054*	 WUFCA4854* WUPFCA4854*	 WUFCA5654* WUPFCA5654*	 WUFCA6054* WUPFCA6054*

NOTES:

* These units meet national egress codes for fire evacuation. Local codes may differ.

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

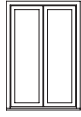
Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass. Tempered requirements are subject to MQS validation.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™

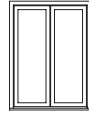
WOOD ULTIMATE FRENCH CASEMENT/PUSH OUT FRENCH CASEMENT

Mas. Opg. (mm)	3' - 3 5/8" (1007)	3' - 7 5/8" (1108)	4' - 3 5/8" (1311)	4' - 11 5/8" (1515)	5' - 3 5/8" (1616)
Rgh. Opg. (mm)	3' - 1" (940)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)
Frame Size (mm)	3' - 0" (914)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)
Glass Size (mm)	31 9/32" (795)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)

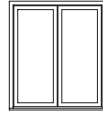
4' - 9 7/8" (1470)
4' - 8 9/16" (1437)
4' - 8 1/16" (1424)
50 13/32" (1280)



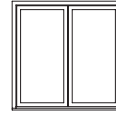
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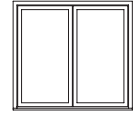
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WUPFCA4056*



WUFCA4856*
WUPFCA4856*

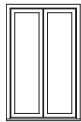


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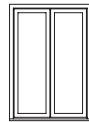


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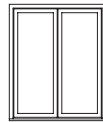
5' - 1 7/8" (1572)
5' - 9/16" (1538)
5' - 1/16" (1526)
54 13/32" (1382)



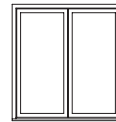
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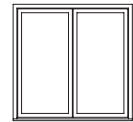
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WUFCA4860*
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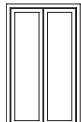


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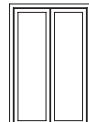


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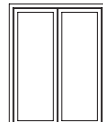
5' - 5 7/8" (1673)
5' - 4 9/16" (1640)
5' - 4 1/16" (1627)
58 13/32" (1484)



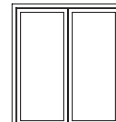
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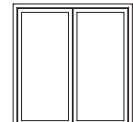
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WUPFCA4064*



WUFCA4864*
WUPFCA4864*

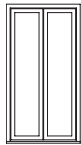


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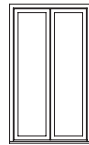


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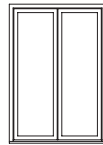
6' - 1 7/8" (1876)
6' - 9/16" (1843)
6' - 1/16" (1830)
66 13/32" (1687)



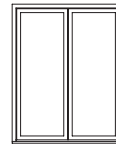
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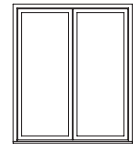
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WUFCA4872*+
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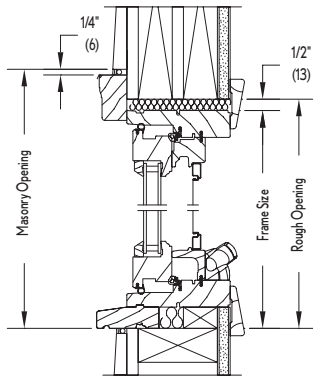
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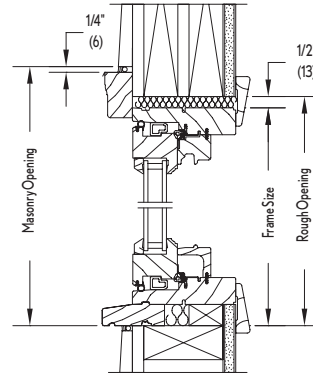
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WOOD ULTIMATE FRENCH CASEMENT

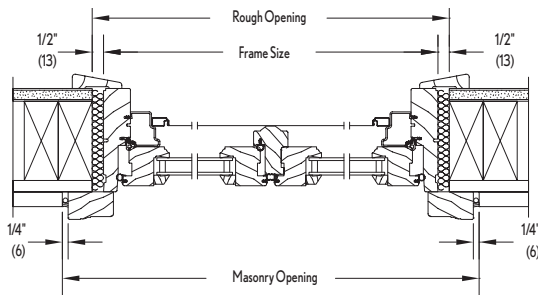
CONSTRUCTION DETAILS



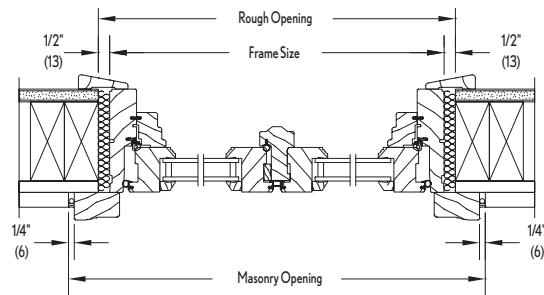
OPERATOR
HEAD JAMB AND SILL



STATIONARY
HEAD JAMB AND SILL



OPERATOR
JAMB



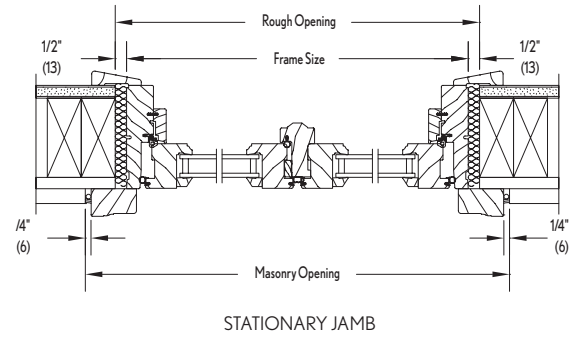
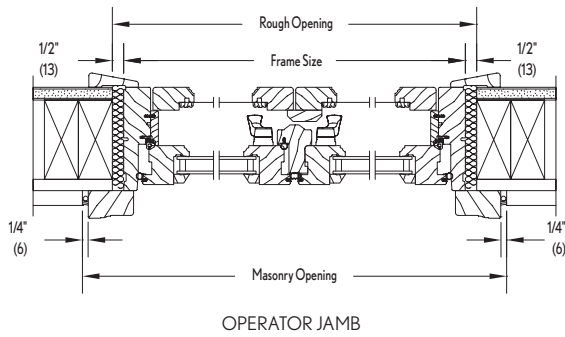
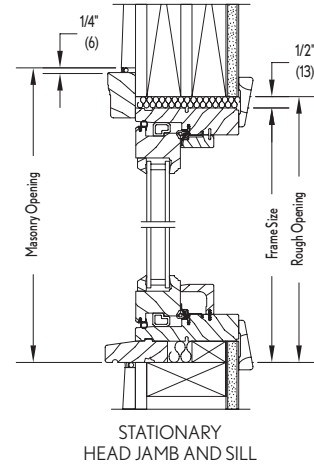
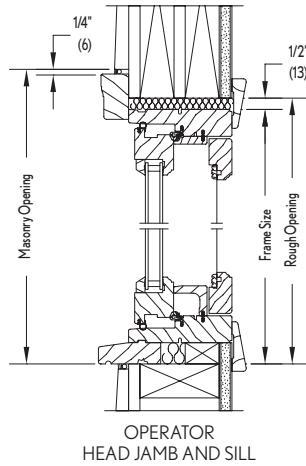
STATIONARY
JAMB

WOOD ULTIMATE FRENCH CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.42	0.52	0.55	44	
3/4" Insulating Glass LoE 272 Air	0.31	0.28	0.48	56	NC, SC
3/4" Insulating Glass LoE 272 Argon	0.28	0.28	0.48	59	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.30	0.19	0.43	57	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.27	0.18	0.43	60	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.22	0.24	0.38	68	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.20	0.24	0.38	71	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.23	0.38	0.46	66	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.21	0.38	0.46	69	N, NC

WOOD ULTIMATE PUSH OUT FRENCH CASEMENT

CONSTRUCTION DETAILS

















WOOD ULTIMATE PUSH OUT FRENCH CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.43	0.52	0.55	45	
3/4" Insulating Glass LoE 272 Air	0.32	0.28	0.48	57	NC, SC
3/4" Insulating Glass LoE 272 Argon	0.29	0.28	0.48	60	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.31	0.19	0.43	57	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.18	0.43	61	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.22	0.24	0.38	69	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.2	0.24	0.38	72	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.23	0.38	0.46	68	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.21	0.38	0.46	70	N, NC

CLAD ULTIMATE FRENCH CASEMENT/PUSH OUT FRENCH CASEMENT

Mas. Opg. (mm)	3' - 1/2" (927)	3' - 4 1/2" (1029)	4' - 1/2" (1232)	4' - 8 1/2" (1435)	5' - 1/2" (1537)
Rgh. Opg. (mm)	3' - 1" (914)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)
Frame Size (mm)	3' - 0" (914)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)
Glass Size (mm)	31 9/32" (795)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)

2' - 7 3/8" (797) 2' - 7 5/8" (803) 2' - 7 1/8" (791) 26 13/32" (671)	 CUPFCA3632	 CUFCA4032 CUPFCA4032	 CUFCA4832* CUPFCA4832*	 CUFCA5632* CUPFCA5632*	 CUFCA6032* CUPFCA6032*
2' - 11 3/8" (899) 2' - 11 5/8" (905) 2' - 11 1/8" (892) 30 13/32" (772)	 CUPFCA3636	 CUFCA4036 CUPFCA4036*	 CUFCA4836* CUPFCA4836*	 CUFCA5636* CUPFCA5636*	 CUFCA6036* CUPFCA6036*
3' - 3 3/8" (1000) 3' - 3 5/8" (1006) 3' - 3 1/8" (994) 34 13/32" (874)	 CUPFCA3640	 CUFCA4040* CUPFCA4040*	 CUFCA4840* CUPFCA4840*	 CUFCA5640* CUPFCA5640*	 CUFCA6040* CUPFCA6040*
3' - 7 3/8" (1102) 3' - 7 5/8" (1108) 3' - 7 1/8" (1095) 38 13/32" (976)	 CUPFCA3644	 CUFCA4044* CUPFCA4044*	 CUFCA4844* CUPFCA4844*	 CUFCA5644* CUPFCA5644*	 CUFCA6044* CUPFCA6044*
3' - 11 3/8" (1203) 3' - 11 5/8" (1210) 3' - 11 1/8" (1197) 42 13/32" (1077)	 CUPFCA3648*	 CUFCA4048* CUPFCA4048*	 CUFCA4848* CUPFCA4848*	 CUFCA5648* CUPFCA5648*	 CUFCA6048* CUPFCA6048*
4' - 5 3/8" (1356) 4' - 5 5/8" (1362) 4' - 5 1/8" (1349) 48 13/32" (1230)	 CUPFCA3654*	 CUFCA4054* CUPFCA4054*	 CUFCA4854* CUPFCA4854*	 CUFCA5654* CUPFCA5654*	 CUFCA6054* CUPFCA6054*

NOTES:

* These units meet national egress codes for fire evacuation. Local codes may differ.

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass. Tempered requirements are subject to MQS validation.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™

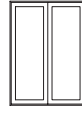
CLAD ULTIMATE FRENCH CASEMENT/PUSH OUT FRENCH CASEMENT

Mas. Opg. (mm)	3' - 1/2" (927)	3' - 4 1/2" (1029)	4' - 1/2" (1232)	4' - 8 1/2" (1435)	5' - 1/2" (1537)
Rgh. Opg. (mm)	3' - 1" (914)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)
Frame Size (mm)	3' - 0" (914)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)
Glass Size (mm)	31 9/32" (795)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)

4' - 7 3/8" (1407)
4' - 7 5/8" (1413)
4' - 7 1/8" (1400)
50 13/32" (1280)



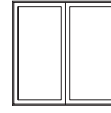
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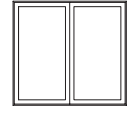
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CUPFCA4056*



CUFCA4856*
CUPFCA4856*



CUFCA5656*
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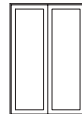


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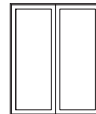
4' - 11 3/8" (1508)
4' - 11 5/8" (1514)
4' - 11 1/8" (1502)
54 13/32" (1382)



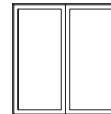
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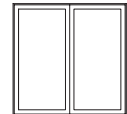
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CUFCA4860*
CUPFCA4860*



CUFCA5660*
CUPFCA5660*

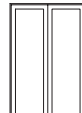


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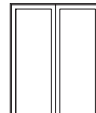
5' - 3 3/8" (1610)
5' - 3 5/8" (1616)
5' - 3 1/8" (1603)
58 13/32" (1484)



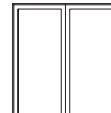
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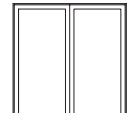
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CUFCA4864*
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CUFCA5664*
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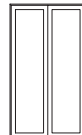


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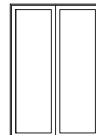
5' - 11 3/8" (1813)
5' - 11 5/8" (1819)
5' - 11 1/8" (1807)
66 13/32" (1687)



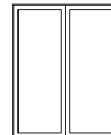
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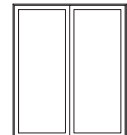
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CUPFCA4072**



CUFCA4872**
CUPFCA4872**



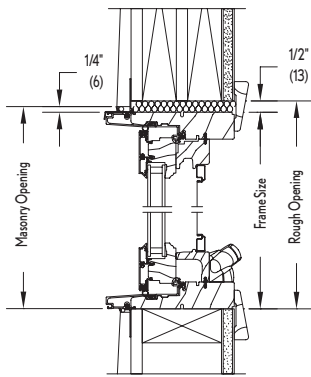
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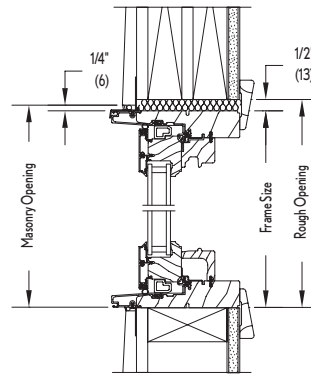
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CLAD ULTIMATE FRENCH CASEMENT

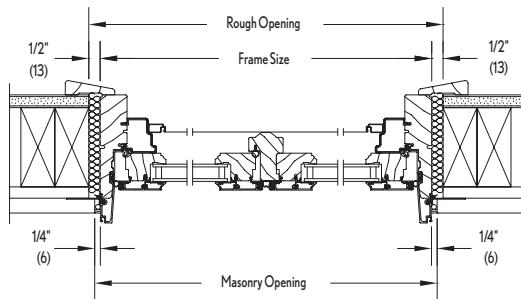
CONSTRUCTION DETAILS



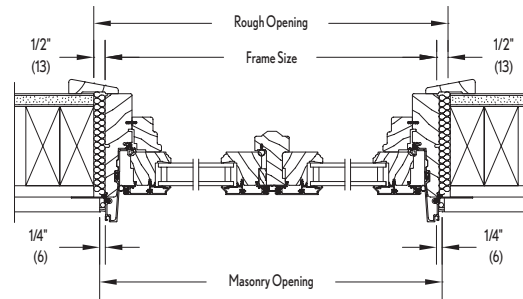
OPERATOR
HEAD JAMB AND SILL



STATIONARY
HEAD JAMB AND SILL



OPERATOR
JAMB



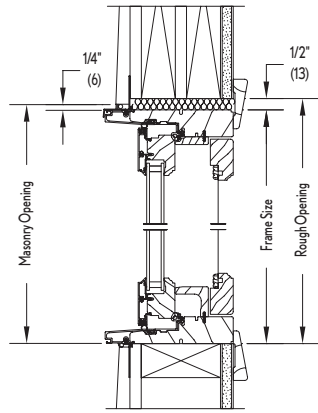
STATIONARY
JAMB

CLAD ULTIMATE FRENCH CASEMENT

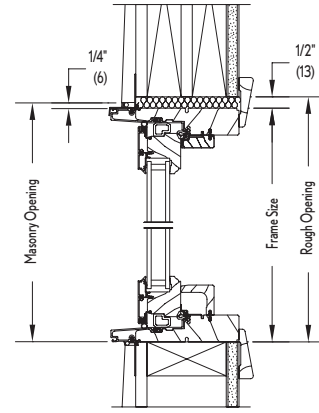
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.44	0.53	0.56	43	
3/4" Insulating Glass LoE 272 Air	0.33	0.29	0.49	55	SC
3/4" Insulating Glass LoE 272 Argon	0.30	0.29	0.49	58	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.32	0.19	0.44	55	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.29	0.19	0.44	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.23	0.24	0.39	66	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.21	0.24	0.39	69	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.25	0.39	0.47	65	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.23	0.39	0.47	67	N, NC

CLAD ULTIMATE PUSH OUT FRENCH CASEMENT

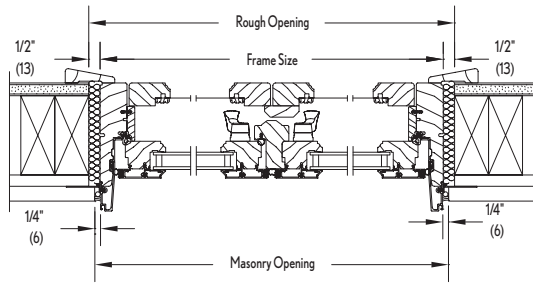
CONSTRUCTION DETAILS



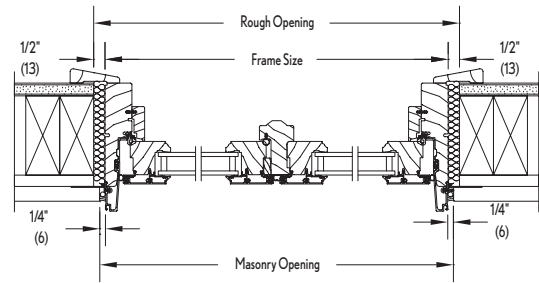
OPERATOR
HEAD JAMB AND SILL



STATIONARY
HEAD JAMB AND SILL



OPERATOR JAMB



STATIONARY JAMB















































































































CLAD ULTIMATE PUSH OUT FRENCH CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.45	0.53	0.56	44	
3/4" Insulating Glass LoE 272 Air	0.34	0.29	0.49	56	SC
3/4" Insulating Glass LoE 272 Argon	0.31	0.29	0.49	59	NC, SC
3/4" Insulating Glass LoE 366 Air	0.33	0.19	0.44	56	SC, S
3/4" Insulating Glass LoE 366 Argon	0.30	0.19	0.44	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.24	0.25	0.39	67	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.22	0.25	0.39	68	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.26	0.39	0.47	66	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.23	0.39	0.47	68	N, NC

WOOD ULTIMATE AWNING/PUSH OUT AWNING

Mas. Opp. (mm)	1'-7 5/8" (498)	1'-9 5/8" (549)	1'-11 5/8" (600)	2'-3 5/8" (702)	2'-5 5/8" (752)	2'-7 5/8" (803)	2'-9 5/8" (854)	2'-11 5/8" (905)	3'-3 5/8" (1006)
Rgh. Opp. (mm)	1'-5" (431)	1'-7" (482)	1'-9" (533)	2'-1" (635)	2'-3" (685)	2'-5" (736)	2'-7" (787)	2'-9" (838)	3'-1" (939)
Frame Size (mm)	1'-4" (406)	1'-6" (457)	1'-8" (508)	2'-0" (609)	2'-2" (660)	2'-4" (711)	2'-6" (762)	2'-8" (812)	3'-0" (914)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)

1'-3 7/8" (403)
 1'-5 7/8" (454)
 1'-2 9/16" (370)
 1'-4 9/16" (408)
 1'-2 1/16" (357)
 10 13/32" (214)
 1'-7 7/8" (656)
 1'-6 9/16" (471)
 1'-4 9/16" (421)
 1'-6 1/16" (459)
 12 13/32" (315)
 1'-9 7/8" (759)
 1'-8 9/16" (624)
 1'-8 1/16" (611)
 14 13/32" (468)
 2'-1 7/8" (657)
 2'-9 7/8" (860)
 2'-8 9/16" (827)
 2'-4 9/16" (725)
 2'-1 7/8" (657)
 2'-5 7/8" (759)
 2'-4 9/16" (814)
 2'-4 1/16" (713)
 26 13/32" (671)
 2'-9 7/8" (962)
 2'-8 9/16" (929)
 3'-1 7/8" (1064)
 3'-9 7/8" (1165)
 3'-1 1/16" (916)
 30 13/32" (772)
 3'-5 7/8" (1064)
 3'-4 9/16" (1030)
 3'-4 1/16" (1018)
 34 13/32" (874)
 3'-9 7/8" (1165)
 3'-8 9/16" (1132)
 3'-8 1/16" (1119)
 38 13/32" (976)
 4'-1 7/8" (1267)
 4'-9/16" (1233)
 4'-1/16" (1221)
 42 13/32" (1077)

									
WUAWN1614 WUPAWN1614	WUAWN1814 WUPAWN1814	WUAWN2014 WUPAWN2014	WUAWN2414 WUPAWN2414	WUAWN2614 WUPAWN2614	WUAWN2814 WUPAWN2814	WUAWN3014 WUPAWN3014	WUAWN3214 WUPAWN3214	WUAWN3614 WUPAWN3614	
									
WUAWN1616 WUPAWN1616	WUAWN1816 WUPAWN1816	WUAWN2016 WUPAWN2016	WUAWN2416 WUPAWN2416	WUAWN2616 WUPAWN2616	WUAWN2816 WUPAWN2816	WUAWN3016 WUPAWN3016	WUAWN3216 WUPAWN3216	WUAWN3616 WUPAWN3616	
									
WUAWN1618 WUPAWN1618	WUAWN1818 WUPAWN1818	WUAWN2018 WUPAWN2018	WUAWN2418 WUPAWN2418	WUAWN2618 WUPAWN2618	WUAWN2818 WUPAWN2818	WUAWN3018 WUPAWN3018	WUAWN3218 WUPAWN3218	WUAWN3618 WUPAWN3618	
									
WUAWN1620 WUPAWN1620	WUAWN1820 WUPAWN1820	WUAWN2020 WUPAWN2020	WUAWN2420 WUPAWN2420	WUAWN2620 WUPAWN2620	WUAWN2820 WUPAWN2820	WUAWN3020 WUPAWN3020	WUAWN3220 WUPAWN3220	WUAWN3620 WUPAWN3620	
									
WUAWN1624 WUPAWN1624	WUAWN1824 WUPAWN1824	WUAWN2024 WUPAWN2024	WUAWN2424 WUPAWN2424	WUAWN2624 WUPAWN2624	WUAWN2824 WUPAWN2824	WUAWN3024 WUPAWN3024	WUAWN3224 WUPAWN3224	WUAWN3624 WUPAWN3624	
									
WUAWN1628 WUPAWN1628	WUAWN1828 WUPAWN1828	WUAWN2028 WUPAWN2028	WUAWN2428 WUPAWN2428	WUAWN2628 WUPAWN2628	WUAWN2828 WUPAWN2828	WUAWN3028 WUPAWN3028	WUAWN3228 WUPAWN3228	WUAWN3628 WUPAWN3628	
									
WUAWN1632 WUPAWN1632	WUAWN1832 WUPAWN1832	WUAWN2032 WUPAWN2032	WUAWN2432 WUPAWN2432	WUAWN2632 WUPAWN2632	WUAWN2832 WUPAWN2832	WUAWN3032 WUPAWN3032	WUAWN3232 WUPAWN3232	WUAWN3632 WUPAWN3632	
									
WUAWN1636 WUPAWN1636	WUAWN1836 WUPAWN1836	WUAWN2036 WUPAWN2036	WUAWN2436 WUPAWN2436	WUAWN2636 WUPAWN2636	WUAWN2836 WUPAWN2836	WUAWN3036 WUPAWN3036	WUAWN3236 WUPAWN3236	WUAWN3636 WUPAWN3636	
									
WUAWN1640 WUPAWN1640	WUAWN1840 WUPAWN1840	WUAWN2040 WUPAWN2040	WUAWN2440 WUPAWN2440	WUAWN2640 WUPAWN2640	WUAWN2840 WUPAWN2840	WUAWN3040 WUPAWN3040	WUAWN3240 WUPAWN3240	WUAWN3640 WUPAWN3640	
									
WUAWN1644 WUPAWN1644	WUAWN1844 WUPAWN1844	WUAWN2044 WUPAWN2044	WUAWN2444 WUPAWN2444	WUAWN2644 WUPAWN2644	WUAWN2844 WUPAWN2844	WUAWN3044 WUPAWN3044	WUAWN3244 WUPAWN3244	WUAWN3644 WUPAWN3644	
									
WUAWN1648 WUPAWN1648	WUAWN1848 WUPAWN1848	WUAWN2048 WUPAWN2048	WUAWN2448 WUPAWN2448	WUAWN2648 WUPAWN2648	WUAWN2848 WUPAWN2848	WUAWN3048 WUPAWN3048	WUAWN3248 WUPAWN3248	WUAWN3648 WUPAWN3648	

NOTES:
































Wood Ultimate Push Out Awning not available in Frame Size heights greater than 48 1/16".

Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass. Tempered requirements are subject to MQS validation.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™

WOOD ULTIMATE AWNING/PUSH OUT AWNING

Mas. Opg. (mm)	1' - 7 5/8" (498)	1' - 9 5/8" (549)	1' - 11 5/8" (600)	2' - 3 5/8" (702)	2' - 5 5/8" (752)	2' - 7 5/8" (803)	2' - 9 5/8" (854)	2' - 11 5/8" (905)	3' - 3 5/8" (1006)
Rgh. Opg. (mm)	1' - 5" (431)	1' - 7" (482)	1' - 9" (533)	2' - 1" (635)	2' - 3" (685)	2' - 5" (736)	2' - 7" (787)	2' - 9" (838)	3' - 1" (939)
Frame Size (mm)	1' - 4" (406)	1' - 6" (457)	1' - 8" (508)	2' - 0" (609)	2' - 2" (660)	2' - 4" (711)	2' - 6" (762)	2' - 8" (812)	3' - 0" (914)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)

4' - 7 7/8" (1419) 4' - 6 9/16" (1386) 4' - 6 1/16" (1373) 48 13/32" (1230)										
	WUAWN1654 WUPAWN1654	WUAWN1854 WUPAWN1854	WUAWN2054 WUPAWN2054	WUAWN2454 WUPAWN2454	WUAWN2654 WUPAWN2654	WUAWN2854 WUPAWN2854	WUAWN3054 WUPAWN3054	WUAWN3254 WUPAWN3254	WUAWN3654 WUPAWN3654	
4' - 9 7/8" (1470) 4' - 8 9/16" (1437) 4' - 8 1/16" (1424) 50 13/32" (1280)										
	WUAWN1656 WUPAWN1656	WUAWN1856 WUPAWN1856	WUAWN2056 WUPAWN2056	WUAWN2456 WUPAWN2456	WUAWN2656 WUPAWN2656	WUAWN2856 WUPAWN2856	WUAWN3056 WUPAWN3056	WUAWN3256 WUPAWN3256	WUAWN3656 WUPAWN3656	
5' - 1 7/8" (1572) 5' - 9/16" (1538) 5' - 1/16" (1526) 54 13/32" (1382)										
	WUAWN1660 WUPAWN1660	WUAWN1860 WUPAWN1860	WUAWN2060 WUPAWN2060	WUAWN2460 WUPAWN2460	WUAWN2660 WUPAWN2660	WUAWN2860 WUPAWN2860	WUAWN3060 WUPAWN3060	WUAWN3260 WUPAWN3260	WUAWN3660 WUPAWN3660	
5' - 5 7/8" (1673) 5' - 4 9/16" (1640) 5' - 4 1/16" (1627) 58 13/32" (1484)										
	WUAWN1664 WUPAWN1664	WUAWN1864 WUPAWN1864	WUAWN2064 WUPAWN2064	WUAWN2464 WUPAWN2464	WUAWN2664 WUPAWN2664	WUAWN2864 WUPAWN2864	WUAWN3064 WUPAWN3064	WUAWN3264 WUPAWN3264	WUAWN3664 WUPAWN3664	
6' - 1 7/8" (1876) 6' - 9/16" (1843) 6' - 1/16" (1830) 66 13/32" (1687)										
	WUAWN1672 WUPAWN1672	WUAWN1872 WUPAWN1872	WUAWN2072 WUPAWN2072	WUAWN2472 WUPAWN2472	WUAWN2672 WUPAWN2672	WUAWN2872 WUPAWN2872	WUAWN3072 WUPAWN3072	WUAWN3272 WUPAWN3272	WUAWN3672 WUPAWN3672	

WOOD ULTIMATE AWNING/PUSH OUT AWNING

Mas. Opg. (mm)	3' - 7 5/8" (1108)	4' - 3 5/8" (1311)	4' - 11 5/8" (1514)	5' - 3 5/8" (1616)	5' - 7 5/8" (1718)	6' - 3 5/8" (1921)
Rgh. Opg. (mm)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)
Frame Size (mm)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)
Glass Size (mm)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)

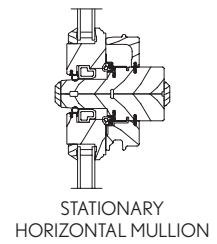
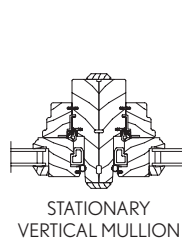
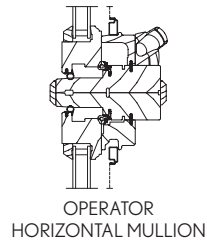
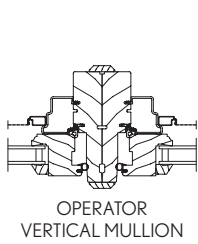
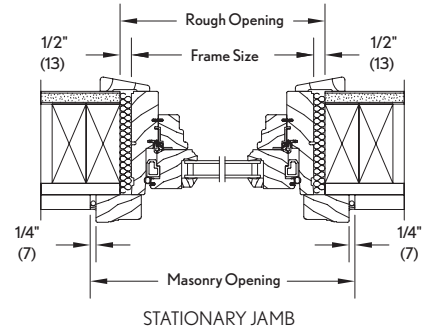
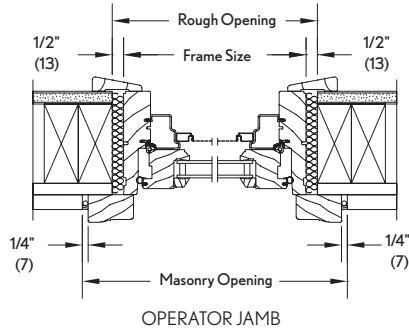
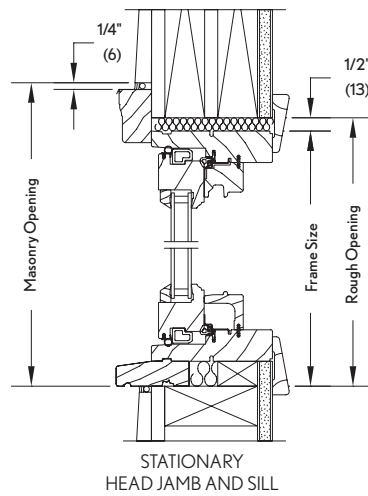
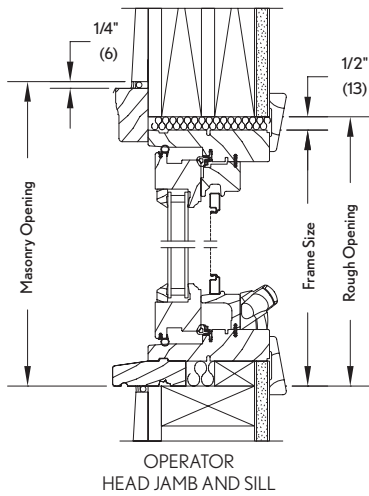
4' - 7 7/8" (1419) 4' - 6 9/16" (1386) 4' - 6 1/16" (1373) 48 13/32" (1230)						
4' - 9 7/8" (1470) 4' - 8 9/16" (1437) 4' - 8 1/16" (1424) 50 13/32" (1280)						
5' - 1 7/8" (1572) 5' - 9/16" (1538) 5' - 1/16" (1526) 54 13/32" (1382)						
5' - 5 7/8" (1673) 5' - 4 9/16" (1640) 5' - 4 1/16" (1627) 58 13/32" (1484)						
6' - 1 7/8" (1876) 6' - 9/16" (1843) 6' - 1/16" (1830) 66 13/32" (1687)						

NOTES:

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 72 1/16" or larger and units with a frame size of 25.2 sq. ft. and larger.

WOOD ULTIMATE AWNING

CONSTRUCTION DETAILS

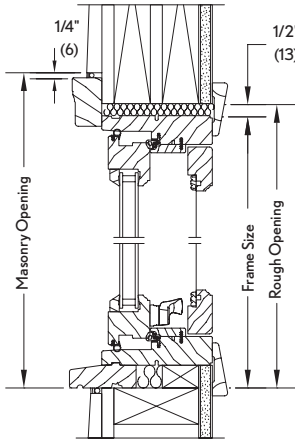


WOOD ULTIMATE AWNING

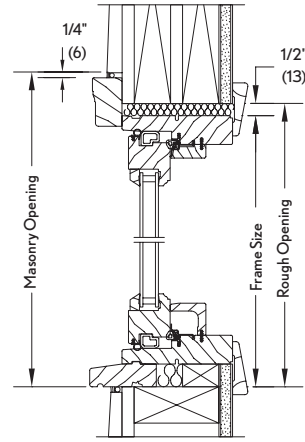
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.42	0.50	0.53	44	
3/4" Insulating Glass LoE 272 Air	0.30	0.27	0.46	55	N, NC, SC, S
3/4" Insulating Glass LoE 272 Argon	0.28	0.27	0.46	58	N, NC, SC, S
3/4" Insulating Glass LoE 366 Air	0.30	0.18	0.42	55	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.27	0.18	0.42	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.21	0.23	0.37	69	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.19	0.23	0.37	71	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.22	0.37	0.45	67	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.20	0.37	0.45	70	N, NC

WOOD ULTIMATE PUSH OUT AWNING

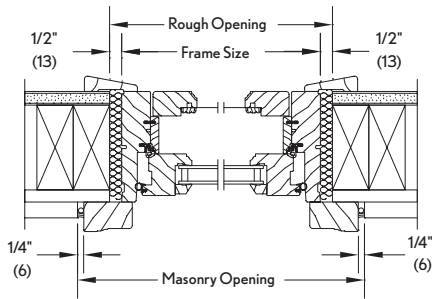
CONSTRUCTION DETAILS



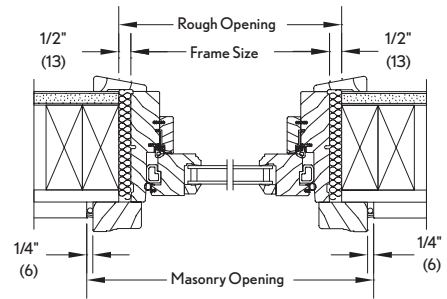
PUSH OUT
OPERATOR HEAD JAMB AND SILL



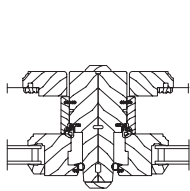
PUSH OUT
STATIONARY HEAD JAMB AND SILL



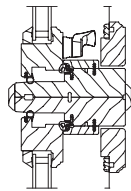
PUSH OUT
OPERATOR JAMB



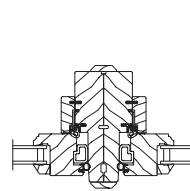
PUSH OUT
STATIONARY JAMB



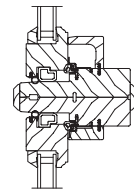
PUSH OUT OPERATOR
VERTICAL MULLION



PUSH OUT OPERATOR
HORIZONTAL MULLION



PUSH OUT STATIONARY
VERTICAL MULLION



PUSH OUT STATIONARY
HORIZONTAL MULLION

WOOD ULTIMATE PUSH OUT AWNING

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.43	0.50	0.53	45	
3/4" Insulating Glass LoE 272 Air	0.31	0.27	0.46	56	NC, SC, S
3/4" Insulating Glass LoE 272 Argon	0.29	0.27	0.46	59	N, NC, SC, S
3/4" Insulating Glass LoE 366 Air	0.31	0.18	0.42	56	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.18	0.42	60	N, NC, SC, S
1" Tri-Pane LoE EA Air LoE EA	0.27	0.37	0.41	64	N, NC
1" Tri-Pane LoE 272 Air LoE 272	0.25	0.23	0.37	66	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.22	0.23	0.37	70	N, NC, SC, S
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.21	0.37	0.45	71	N, NC

CLAD ULTIMATE AWNING/PUSH OUT AWNING
























































Mas. Opp. (mm)	1'-4 1/2" (419)	1'-6 1/2" (469)	1'-8 1/2" (520)	2'-1/2" (622)	2'-2 1/2" (673)	2'-4 1/2" (723)	2'-6 1/2" (774)	2'-8 1/2" (825)	3'-1/2" (927)	3'-4 1/2" (1028)
Rgh. Opp. (mm)	1'-5" (431)	1'-7" (482)	1'-9" (533)	2'-1" (635)	2'-3" (688)	2'-5" (736)	2'-7" (787)	2'-9" (838)	3'-1" (939)	3'-5" (1041)
Frame Size (mm)	1'-4" (406)	1'-6" (457)	1'-8" (508)	2'-0" (609)	2'-2" (660)	2'-4" (711)	2'-6" (762)	2'-8" (812)	3'-0" (914)	3'-4" (1016)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)	35 9/32" (896)

1'-1 3/8" (339)
 1'-1 5/8" (346)
 1'-1 7/8" (353)
 1'-2" (360)
 1'-2 1/8" (367)
 1'-2 3/8" (374)
 1'-2 5/8" (381)
 1'-2 7/8" (388)
 1'-3" (395)
 1'-3 1/8" (402)
 1'-3 3/8" (409)
 1'-3 5/8" (416)
 1'-3 7/8" (423)
 1'-4" (430)
 1'-4 1/8" (437)
 1'-4 3/8" (444)
 1'-4 5/8" (451)
 1'-4 7/8" (458)
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 1'-77 1/8" (2992)
 1'-77 3/8" (2999)
 1'-77 5/8" (3006)
 1'-77 7/8" (3013)
 1'-78" (3020)
 1'-78 1/8" (3027)
 1'-78 3/8" (3034)
 1'-78 5/8" (3041)
 1'-78 7/8" (3048)
 1'-79" (3055)
 1'-79 1/8" (3062)
 1'-79 3/8" (3069)
 1'-79 5/8" (3076)
 1'-79 7/8" (3083)
 1'-80" (3090)
 1'-80 1/8" (3097)
 1'-80 3/8" (3104)
 1'-80 5/8" (3111)
 1'-80 7/8" (3118)
 1'-81" (3125)
 1'-81 1/8" (3132)
 1'-81 3/8" (3139)
 1'-81 5/8" (3146)
 1'-81 7/8" (3153)
 1'-82" (3160)
 1'-82 1/8" (3167)
 1'-82 3/8" (3174)
 1'-82 5/8" (3181)
 1'-82 7/8" (3188)
 1'-83" (3195)
 1'-83 1/8" (3202)
 1'-83 3/8" (3209)
 1'-83 5/8" (3216)
 1'-83 7/8" (3223)
 1'-84" (3230)
 1'-84 1/8" (3237)
 1'-84 3/8" (3244)
 1'-84 5/8" (3251)
 1'-84 7/8" (3258)
 1'-85" (3265)
 1'-85 1/8" (3272)
 1'-85 3/8" (3279)
 1'-85 5/8" (3286)
 1'-85 7/8" (3293)
 1'-86" (3300)
 1'-86 1/8" (3307)
 1'-86 3/8" (3314)
 1'-86 5/8" (3321)
 1'-86 7/8" (3328)
 1'-87" (3335)
 1'-87 1/8" (3342)
 1'-87 3/8" (3349)
 1'-87 5/8" (3356)
 1'-87 7/8" (3363)
 1'-88" (3370)
 1'-88 1/8" (3377)
 1'-88 3/8" (3384)
 1'-88 5/8" (3391)
 1'-88 7/8" (3398)
 1'-89" (3405)
 1'-89 1/8" (3412)
 1'-89 3/8" (3419)
 1'-89 5/8" (3426)
 1'-89 7/8" (3433)
 1'-90" (3440)
 1'-90 1/8" (3447)
 1'-90 3/8" (3454)
 1'-90 5/8" (3461)
 1'-90 7/8" (3468)
 1'-91" (3475)
 1'-91 1/8" (3482)
 1'-91 3/8" (3489)
 1'-91 5/8" (3496)
 1'-91 7/8" (3503)
 1'-92" (3510)
 1'-92 1/8" (3517)
 1'-92 3/8" (3524)
 1'-92 5/8" (3531)
 1'-92 7/8" (3538)
 1'-93" (3545)
 1'-93 1/8" (3552)
 1'-93 3/8" (3559)
 1'-93 5/8" (3566)
 1'-93 7/8" (3573)
 1'-94" (3580)
 1'-94 1/8" (3587)
 1'-94 3/8" (3594)
 1'-94 5/8" (3601)
 1'-94 7/8" (3608)
 1'-95" (3615)
 1'-95 1/8" (3622)
 1'-95 3/8" (3629)
 1'-95 5/8" (3636)
 1'-95 7/8" (3643)
 1'-96" (3650)
 1'-96 1/8" (3657)
 1'-96 3/8" (3664)
 1'-96 5/8" (3671)
 1'-96 7/8" (3678)
 1'-97" (3685)
 1'-97 1/8" (3692)
 1'-97 3/8" (3699)
 1'-97 5/8" (3706)
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 1'-98" (3720)
 1'-98 1/8" (3727)
 1'-98 3/8" (3734)
 1'-98 5/8" (3741)
 1'-98 7/8" (3748)
 1'-99" (3755)
 1'-99 1/8" (3762)
 1'-99 3/8" (3769)
 1'-99 5/8" (3776)
 1'-99 7/8" (3783)
 1'-100" (3790)
 1'-100 1/8" (3797)
 1'-100 3/8" (3804)
 1'-100 5/8" (3811)
 1'-100 7/8" (3818)
 1'-101" (3825)
 1'-101 1/8" (3832)
 1'-101 3/8" (3839)
 1'-101 5/8" (3846)
 1'-101 7/8" (3853)
 1'-102" (3860)
 1'-102 1/8" (3867)
 1'-102 3/8" (3874)
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 1'-102 7/8" (3888)
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 1'-103 1/8" (3902)
 1'-103 3/8" (3909)
 1'-103 5/8" (3916)
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 1'-105" (3965)
 1'-105 1/8" (3972)
 1'-105 3/8" (3979)
 1'-105 5/8" (3986)
 1'-105 7/8" (3993)
 1'-106" (4000)
 1'-106 1/8" (4007)
 1'-106 3/8" (4014)
 1'-106 5/8" (4021)
 1'-106 7/8" (4028)
 1'-107" (4035)
 1'-107 1/8" (4042)
 1'-107 3/8" (4049)
 1'-107 5/8" (4056)
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 1'-108 1/8" (4077)
 1'-108 3/8" (4084)
 1'-108 5/8" (4091)
 1'-108 7/8" (4098)
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 1'-110 3/8" (4154)
 1'-110 5/8" (4161)
 1'-110 7/8" (4168)
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 1'-111 1/8" (4182)
 1'-111 3/8" (4189)
 1'-111 5/8" (4196)
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 1'-112 3/8" (4224)
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 1'-113 3/8" (4259)
 1'-113 5/8" (4266)
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 1'-114 3/8" (4294)
 1'-114 5/8" (4301)
 1'-114 7/8" (4308)
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 1'-115 3/8" (4329)
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 1'-115 7/8" (4343)
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 1'-116 3/8" (4364)
 1'-116 5/8" (4371)
 1'-116 7/8" (4378)
 1'-117" (4385)
 1'-117 1/8" (4392)
 1'-117 3/8" (4399)
 1'-117 5/8" (4406)
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 1'-118 3/8" (4434)
 1'-118 5/8" (4441)
 1'-118 7/8" (4448)
 1'-119" (4455)
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 1'-119 3/8" (4469)
 1'-119 5/8" (4476)
 1'-119 7/8" (4483)
 1'-120" (4490)
 1'-120 1/8" (4497)
 1'-120 3/8" (4504)
 1'-120 5/8" (4511)
 1'-120 7/8" (4518)
 1'-121" (4525)
 1'-121 1/8" (4532)
 1'-121 3/8" (4539)
 1'-121 5/8" (4546)
 1'-

CLAD ULTIMATE AWNING/PUSH OUT AWNING





























































Mas. Opg. (mm)	4' - 1/2" (1232)	4' - 8 1/2" (1435)	5' - 1/2" (1537)	5' - 4 1/2" (1638)	6' - 1/2" (1842)
Rgh. Opg. (mm)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)
Frame Size (mm)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)
Class Size (mm)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)

3' - 11 3/8" (1203)
 3' - 11 5/8" (1209)
 3' - 11 1/8" (1196)
 42 13/32" (1077)
 3' - 7 3/8" (1101)
 3' - 7 5/8" (1108)
 3' - 7 1/8" (1095)
 38 13/32" (976)
 3' - 3 3/8" (1000)
 3' - 3 5/8" (1006)
 3' - 3 1/8" (993)
 34 13/32" (874)
 2' - 11 3/8" (898)
 2' - 11 5/8" (904)
 2' - 11 1/8" (892)
 30 13/32" (772)
 2' - 7 3/8" (796)
 2' - 7 5/8" (803)
 2' - 7 1/8" (790)
 26 13/32" (671)
 2' - 3 3/8" (695)
 2' - 3 5/8" (701)
 2' - 3 1/8" (688)
 22 13/32" (569)
 1' - 11 3/8" (593)
 1' - 11 5/8" (600)
 1' - 11 1/8" (587)
 18 13/32" (468)
 1' - 7 3/8" (492)
 1' - 7 5/8" (498)
 1' - 7 1/8" (485)
 14 13/32" (366)
 1' - 5 3/8" (441)
 1' - 5 5/8" (447)
 1' - 5 1/8" (434)
 12 13/32" (315)
 1' - 3 3/8" (390)
 1' - 3 5/8" (396)
 1' - 3 1/8" (384)
 10 13/32" (264)
 1' - 1 3/8" (339)
 1' - 1 5/8" (346)
 1' - 1 1/8" (333)
 8 13/32" (214)

 CUAWN4814 CUPAWN4814	 CUAWN5614 CUPAWN5614	 CUAWN6014 CUPAWN6014	 CUAWN6414 CUPAWN6414	 CUAWN7214 CUPAWN7214
 CUAWN4816 CUPAWN4816	 CUAWN5616 CUPAWN5616	 CUAWN6016 CUPAWN6016	 CUAWN6416 CUPAWN6416	 CUAWN7216 CUPAWN7216
 CUAWN4818 CUPAWN4818	 CUAWN5618 CUPAWN5618	 CUAWN6018 CUPAWN6018	 CUAWN6418 CUPAWN6418	 CUAWN7218 CUPAWN7218
 CUAWN4820 CUPAWN4820	 CUAWN5620 CUPAWN5620	 CUAWN6020 CUPAWN6020	 CUAWN6420 CUPAWN6420	 CUAWN7220 CUPAWN7220
 CUAWN4824 CUPAWN4824	 CUAWN5624 CUPAWN5624	 CUAWN6024 CUPAWN6024	 CUAWN6424 CUPAWN6424	 CUAWN7224 CUPAWN7224
 CUAWN4828 CUPAWN4828	 CUAWN5628 CUPAWN5628	 CUAWN6028 CUPAWN6028	 CUAWN6428 CUPAWN6428	 CUAWN7228 CUPAWN7228
 CUAWN4832 CUPAWN4832	 CUAWN5632 CUPAWN5632	 CUAWN6032 CUPAWN6032	 CUAWN6432 CUPAWN6432	 CUAWN7232 CUPAWN7232
 CUAWN4836 CUPAWN4836	 CUAWN5636 CUPAWN5636	 CUAWN6036 CUPAWN6036	 CUAWN6436 CUPAWN6436	 CUAWN7236 CUPAWN7236
 CUAWN4840 CUPAWN4840	 CUAWN5640 CUPAWN5640	 CUAWN6040 CUPAWN6040	 CUAWN6440 CUPAWN6440	 CUAWN7240 CUPAWN7240
 CUAWN4844 CUPAWN4844	 CUAWN5644 CUPAWN5644	 CUAWN6044 CUPAWN6044	 CUAWN6444 CUPAWN6444	 CUAWN7244 CUPAWN7244
 CUAWN4848 CUPAWN4848	 CUAWN5648 CUPAWN5648	 CUAWN6048 CUPAWN6048	 CUAWN6448 CUPAWN6448	 CUAWN7248 CUPAWN7248

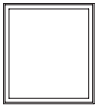
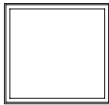



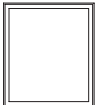
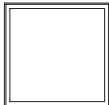


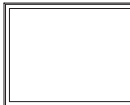
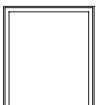
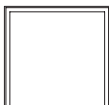



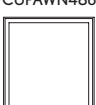
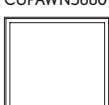
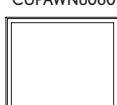
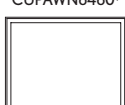
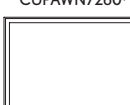




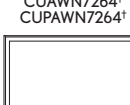
CLAD ULTIMATE AWNING/PUSH OUT AWNING

Mas. Opp. (mm)	1'-4 1/2" (419)	1'-6 1/2" (469)	1'-8 1/2" (520)	2'-1/2" (622)	2'-2 1/2" (673)	2'-4 1/2" (723)	2'-6 1/2" (774)	2'-8 1/2" (825)	3'-1/2" (927)	3'-4 1/2" (1028)
Rgh. Opp. (mm)	1'-5" (431)	1'-7" (482)	1'-9" (533)	2'-1" (635)	2'-3" (685)	2'-5" (736)	2'-7" (787)	2'-9" (838)	3'-1" (939)	3'-5" (1041)
Frame Size (mm)	1'-4" (406)	1'-6" (457)	1'-8" (508)	2'-0" (609)	2'-2" (660)	2'-4" (711)	2'-6" (762)	2'-8" (812)	3'-0" (914)	3'-4" (1016)
Glass Size (mm)	11 9/32" (287)	13 9/32" (337)	15 9/32" (388)	19 9/32" (490)	21 9/32" (541)	23 9/32" (591)	25 9/32" (642)	27 9/32" (693)	31 9/32" (795)	35 9/32" (896)

4'-5 3/8" (1355) 4'-5 5/8" (1362) 4'-5 1/8" (1349) 48 13/32" (1230)												
	CUAWN1654 CUPAWN1654	CUAWN1854 CUPAWN1854	CUAWN2054 CUPAWN2054	CUAWN2454 CUPAWN2454	CUAWN2654 CUPAWN2654	CUAWN2854 CUPAWN2854	CUAWN3054 CUPAWN3054	CUAWN3254 CUPAWN3254	CUAWN3654 CUPAWN3654	CUAWN4054 CUPAWN4054		
4'-7 3/8" (1406) 4'-7 5/8" (1412) 4'-7 1/8" (1400) 50 13/32" (1280)												
	CUAWN1656 CUPAWN1656	CUAWN1856 CUPAWN1856	CUAWN2056 CUPAWN2056	CUAWN2456 CUPAWN2456	CUAWN2656 CUPAWN2656	CUAWN2856 CUPAWN2856	CUAWN3056 CUPAWN3056	CUAWN3256 CUPAWN3256	CUAWN3656 CUPAWN3656	CUAWN4056 CUPAWN4056		
4'-11 3/8" (1508) 4'-11 5/8" (1514) 4'-11 1/8" (1501) 54 13/32" (1382)												
	CUAWN1660 CUPAWN1660	CUAWN1860 CUPAWN1860	CUAWN2060 CUPAWN2060	CUAWN2460 CUPAWN2460	CUAWN2660 CUPAWN2660	CUAWN2860 CUPAWN2860	CUAWN3060 CUPAWN3060	CUAWN3260 CUPAWN3260	CUAWN3660 CUPAWN3660	CUAWN4060 CUPAWN4060		
5'-3 3/8" (1609) 5'-3 5/8" (1616) 5'-3 1/8" (1603) 58 13/32" (1484)												
	CUAWN1664 CUPAWN1664	CUAWN1864 CUPAWN1864	CUAWN2064 CUPAWN2064	CUAWN2464 CUPAWN2464	CUAWN2664 CUPAWN2664	CUAWN2864 CUPAWN2864	CUAWN3064 CUPAWN3064	CUAWN3264 CUPAWN3264	CUAWN3664 CUPAWN3664	CUAWN4064 CUPAWN4064		
5'-11 3/8" (1812) 5'-11 5/8" (1819) 5'-11 1/8" (1806) 66 13/32" (1687)												
	CUAWN1672 CUPAWN1672	CUAWN1872 CUPAWN1872	CUAWN2072 CUPAWN2072	CUAWN2472 CUPAWN2472	CUAWN2672 CUPAWN2672	CUAWN2872 CUPAWN2872	CUAWN3072 CUPAWN3072	CUAWN3272 CUPAWN3272	CUAWN3672 CUPAWN3672	CUAWN4072 CUPAWN4072		

CLAD ULTIMATE AWNING/PUSH OUT AWNING

Mas. Opg. (mm)	4' - 1/2" (1232)	4' - 8 1/2" (1435)	5' - 1/2" (1537)	5' - 4 1/2" (1638)	6' - 1/2" (1842)
Rgh. Opg. (mm)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)
Frame Size (mm)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)
Glass Size (mm)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)

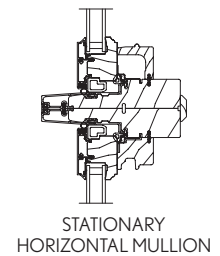
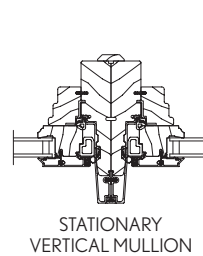
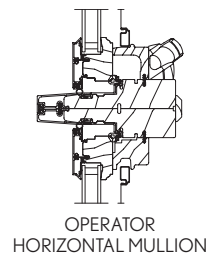
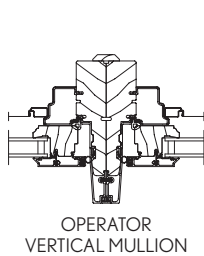
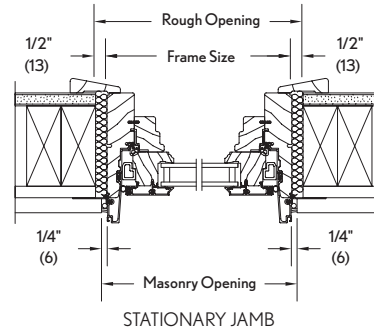
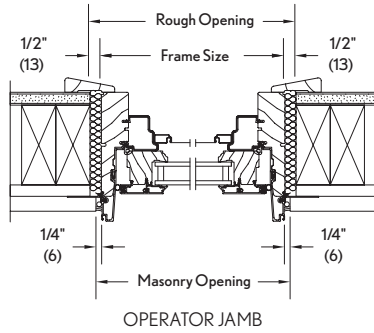
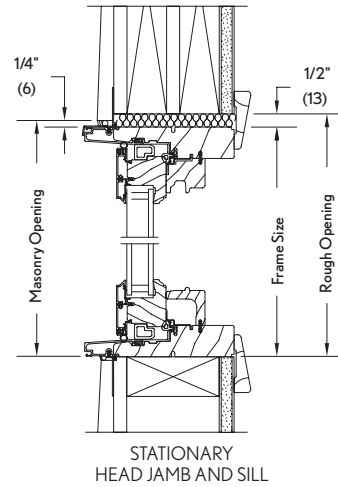
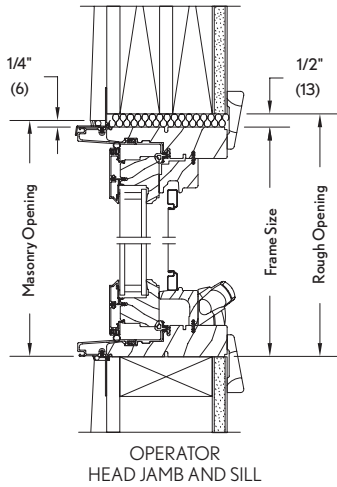
4' - 5 3/8" (1355)					
4' - 7 3/8" (1406)					
4' - 11 3/8" (1508)					
5' - 3 3/8" (1609)					
5' - 11 3/8" (1812)					

NOTES:

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 71 1/8" or larger and units with a frame size of 25.2 sq. ft. and larger.

CLAD ULTIMATE AWNING

CONSTRUCTION DETAILS

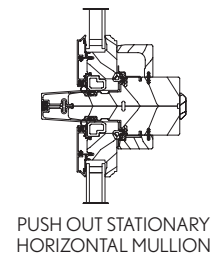
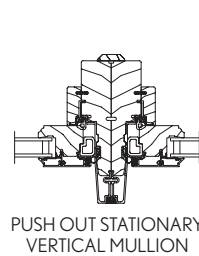
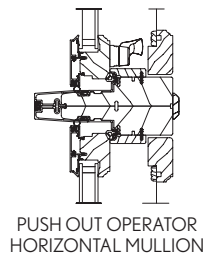
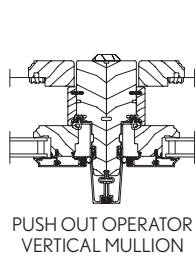
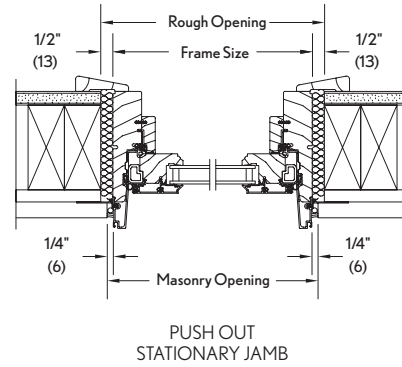
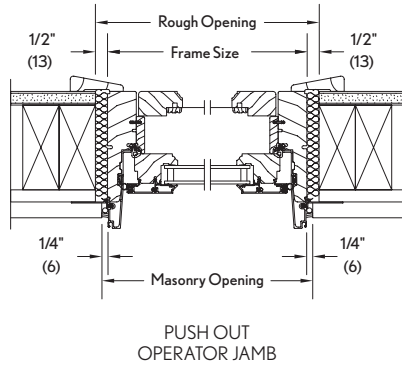
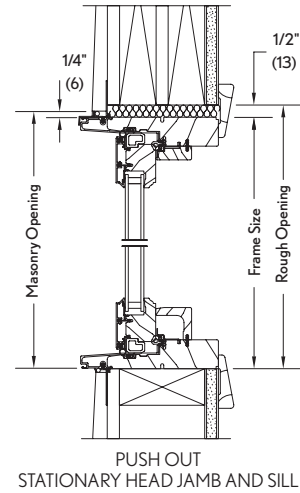
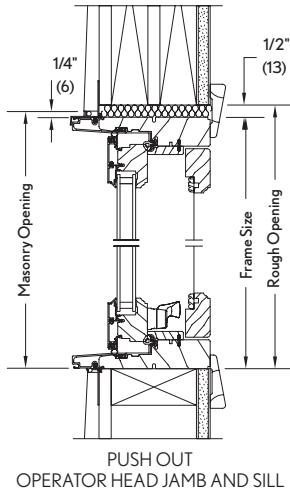


CLAD ULTIMATE AWNING

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.45	0.53	0.56	43	
3/4" Insulating Glass LoE 272 Air	0.33	0.29	0.49	54	SC
3/4" Insulating Glass LoE 272 Argon	0.29	0.29	0.49	57	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.32	0.19	0.44	54	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.29	0.19	0.44	58	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.23	0.24	0.39	67	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.21	0.24	0.39	70	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.24	0.39	0.47	66	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.22	0.39	0.47	68	N, NC

CLAD ULTIMATE PUSH OUT AWNING

CONSTRUCTION DETAILS



CLAD ULTIMATE PUSH OUT AWNING

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.46	0.53	0.56	44	
3/4" Insulating Glass LoE 272 Air	0.34	0.29	0.49	54	SC
3/4" Insulating Glass LoE 272 Argon	0.31	0.29	0.49	58	NC, SC
3/4" Insulating Glass LoE 366 Air	0.34	0.19	0.44	55	SC, S
3/4" Insulating Glass LoE 366 Argon	0.30	0.19	0.44	59	N, NC, SC, S
1" Tri-Pane LoE EA Air LoE EA	0.29	0.39	0.43	63	N, NC
1" Tri-Pane LoE 272 Air LoE 272	0.28	0.25	0.39	65	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.24	0.25	0.39	68	N, NC, SC, S

WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT PICTURE UNIT

Mas. Opp. (mm)	3' - 7 5/8" (1108)	4' - 3 5/8" (1311)	4' - 11 5/8" (1514)	5' - 3 5/8" (1616)	5' - 7 5/8" (1718)	6' - 3 5/8" (1921)	6' - 11 5/8" (2124)	7' - 7 5/8" (2327)	8' - 3 5/8" (2531)
Rgh. Opp. (mm)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)	6' - 9" (2057)	7' - 5" (2261)	8' - 1" (2464)
Frame Size (mm)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	6' - 8" (2032)	7' - 4" (2235)	8' - 0" (2438)
Glass Size (mm)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)	75 9/32" (1912)	83 9/32" (2115)	91 9/32" (2319)

1'-1 7/8" (352)									
1'-1 7/8" (403)	WUCAP4012	WUCAP4812	WUCAP5612	WUCAP6012	WUCAP6412	WUCAP7212	WUCAP8012	WUCAP8812	WUCAP9612
1'-1 7/8" (319)									
1'-2 9/16" (370)	WUCAP4014	WUCAP4814	WUCAP5614	WUCAP6014	WUCAP6414	WUCAP7214	WUCAP8014	WUCAP8814	WUCAP9614
1'-2 1/16" (357)									
1'-2 1/16" (408)	WUCAP4016	WUCAP4816	WUCAP5616	WUCAP6016	WUCAP6416	WUCAP7216	WUCAP8016	WUCAP8816	WUCAP9616
1'-4 1/16" (408)									
1'-4 1/16" (459)	WUCAP4018	WUCAP4818	WUCAP5618	WUCAP6018	WUCAP6418	WUCAP7218	WUCAP8018	WUCAP8818	WUCAP9618
1'-5 7/8" (505)									
1'-5 7/8" (471)	WUCAP4020	WUCAP4820	WUCAP5620	WUCAP6020	WUCAP6420	WUCAP7220	WUCAP8020	WUCAP8820	WUCAP9620
1'-6 9/16" (471)									
1'-6 9/16" (522)	WUCAP4024	WUCAP4824	WUCAP5624	WUCAP6024	WUCAP6424	WUCAP7224	WUCAP8024	WUCAP8824	WUCAP9624
1'-6 1/16" (459)									
1'-6 1/16" (510)	WUCAP4028	WUCAP4828	WUCAP5628	WUCAP6028	WUCAP6428	WUCAP7228	WUCAP8028	WUCAP8828	WUCAP9628
1'-8 1/16" (510)									
1'-8 1/16" (569)	WUCAP4032	WUCAP4832	WUCAP5632	WUCAP6032	WUCAP6432	WUCAP7232	WUCAP8032	WUCAP8832	WUCAP9632
1'-9 7/8" (556)									
1'-9 7/8" (607)	WUCAP4036	WUCAP4836	WUCAP5636	WUCAP6036	WUCAP6436	WUCAP7236	WUCAP8036	WUCAP8836	WUCAP9636
2'-1 7/8" (657)									
2'-1 7/8" (624)	WUCAP4040	WUCAP4840	WUCAP5640	WUCAP6040	WUCAP6440	WUCAP7240	WUCAP8040	WUCAP8840	WUCAP9640
2'-2 9/16" (624)									
2'-2 9/16" (675)	WUCAP4042	WUCAP4842	WUCAP5642	WUCAP6042	WUCAP6442	WUCAP7242	WUCAP8042	WUCAP8842	WUCAP9642
2'-2 1/16" (611)									
2'-2 1/16" (661)	WUCAP4044	WUCAP4844	WUCAP5644	WUCAP6044	WUCAP6444	WUCAP7244	WUCAP8044	WUCAP8844	WUCAP9644
2'-4 1/16" (713)									
2'-4 1/16" (769)	WUCAP4048	WUCAP4848	WUCAP5648	WUCAP6048	WUCAP6448	WUCAP7248	WUCAP8048	WUCAP8848	WUCAP9648
2'-5 7/8" (759)									
2'-5 7/8" (725)	WUCAP4052	WUCAP4852	WUCAP5652	WUCAP6052	WUCAP6452	WUCAP7252	WUCAP8052	WUCAP8852	WUCAP9652
2'-8 1/16" (814)									
2'-8 1/16" (864)	WUCAP4056	WUCAP4856	WUCAP5656	WUCAP6056	WUCAP6456	WUCAP7256	WUCAP8056	WUCAP8856	WUCAP9656
2'-9 7/8" (860)									
2'-9 7/8" (827)	WUCAP4060	WUCAP4860	WUCAP5660	WUCAP6060	WUCAP6460	WUCAP7260	WUCAP8060	WUCAP8860	WUCAP9660
3'-1 7/8" (962)									
3'-1 7/8" (929)	WUCAP4064	WUCAP4864	WUCAP5664	WUCAP6064	WUCAP6464	WUCAP7264	WUCAP8064	WUCAP8864	WUCAP9664
3'-1/16" (916)									
3'-1/16" (972)	WUCAP4068	WUCAP4868	WUCAP5668	WUCAP6068	WUCAP6468	WUCAP7268	WUCAP8068	WUCAP8868	WUCAP9668
3'-13/32" (772)									
3'-13/32" (729)	WUCAP4072	WUCAP4872	WUCAP5672	WUCAP6072	WUCAP6472	WUCAP7272	WUCAP8072	WUCAP8872	WUCAP9672






























































NOTES:

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 72 1/16" or larger and units with a frame size of 25.2 sq. ft. and larger.

Larger sizes require 1" insulating glass.

WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT PICTURE UNIT

Mas. Opp. (mm)	3' - 7 5/8" (1108)	4' - 3 5/8" (1311)	4' - 11 5/8" (1514)	5' - 3 5/8" (1616)	5' - 7 5/8" (1718)	6' - 3 5/8" (1921)	6' - 11 5/8" (2124)	7' - 7 5/8" (2327)	8' - 3 5/8" (2530)
Rgh. Opp. (mm)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)	6' - 9" (2057)	7' - 5" (2261)	8' - 1" (2464)
Frame Size (mm)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	6' - 8" (2032)	7' - 4" (2235)	8' - 0" (2438)
Glass Size (mm)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)	75 9/32" (1912)	83 9/32" (2115)	91 9/32" (2319)

3' - 5 7/8" (1064) 3' - 4 9/16" (1030) 3' - 4 1/16" (1018) 34 13/32" (874)									
3' - 9 7/8" (1165) 3' - 8 9/16" (1132) 3' - 8 1/16" (1119) 38 13/32" (976)									
4' - 1 7/8" (1267) 4' - 9/16" (1233) 4' - 1/16" (1221) 42 13/32" (1077)									
4' - 7 7/8" (1419) 4' - 6 9/16" (1386) 4' - 6 1/16" (1373) 48 13/32" (1250)									
4' - 9 7/8" (1470) 4' - 8 9/16" (1437) 4' - 8 1/16" (1424) 50 13/32" (1280)									
5' - 1 7/8" (1572) 5' - 9/16" (1538) 5' - 1/16" (1526) 54 13/32" (1382)									
5' - 5 7/8" (1673) 5' - 4 9/16" (1640) 5' - 4 1/16" (1627) 58 13/32" (1484)									

WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT PICTURE UNIT

Mas. Opg. (mm)	3' - 7 5/8" (1108)	4' - 3 5/8" (1311)	4' - 11 5/8" (1514)	5' - 3 5/8" (1616)	5' - 7 5/8" (1718)	6' - 3 5/8" (1921)	6' - 11 5/8" (2124)	7' - 7 5/8" (2327)	8' - 3 5/8" (2530)
Rgh. Opg. (mm)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)	6' - 9" (2057)	7' - 5" (2261)	8' - 1" (2464)
Frame Size (mm)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	6' - 8" (2032)	7' - 4" (2235)	8' - 0" (2438)
Glass Size (mm)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)	75 9/32" (1912)	83 9/32" (2115)	91 9/32" (2319)

6' - 1 7/8" (1876) 6' - 9/16" (1843) 6' - 1/16" (1830) 66 13/32" (1687)									
6' - 7 7/8" (2029) 6' - 6 9/16" (1995) 6' - 6 1/16" (1983) 72 13/32" (1839)									
7' - 1 7/8" (2181) 7' - 9/16" (2148) 7' - 1/16" (2135) 78 13/32" (1992)									
7' - 9 7/8" (2384) 7' - 8 9/16" (2351) 7' - 8 1/16" (2338) 86 13/32" (2195)									
8' - 1 7/8" (2486) 8' - 9/16" (2453) 8' - 1/16" (2440) 90 13/32" (2296)									

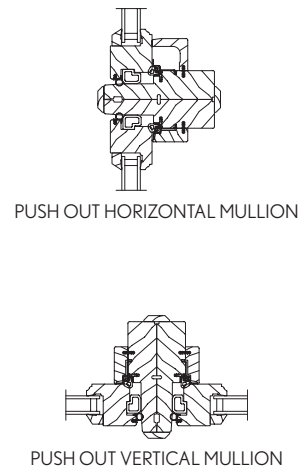
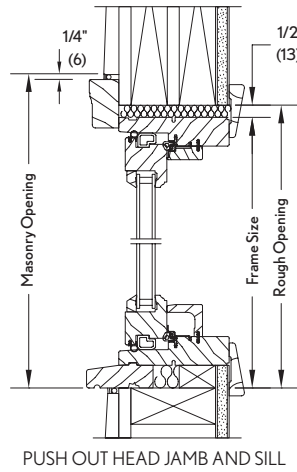
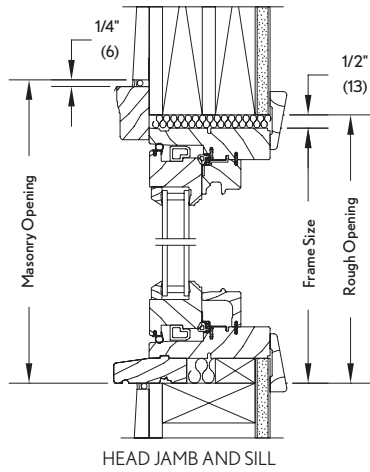
NOTES:

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 72 1/16" or larger and units with a frame size of 25.2 sq. ft. and larger.

** Larger sizes require 1" insulating glass.

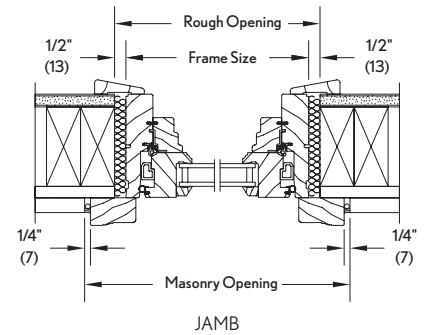
WOOD ULTIMATE CASEMENT/PUSH OUT CASEMENT PICTURE UNIT

CONSTRUCTION DETAILS



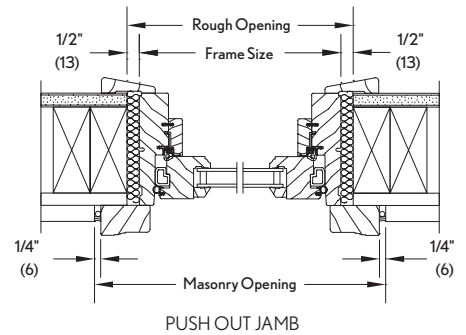
WOOD ULTIMATE CASEMENT PICTURE

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" IG Air	0.44	0.61	0.64	44	
3/4" IG LoE 272 Air	0.30	0.33	0.56	55	N, NC
3/4" IG LoE 272 Argon	0.27	0.32	0.56	59	N, NC
3/4" IG LoE 366 Air	0.30	0.22	0.50	56	N, NC, SC, S
3/4" IG LoE 366 Argon	0.26	0.21	0.50	59	N, NC, SC, S
1" IG Air	0.43	0.58	0.63	44	
1" IG LoE 272 Air	0.30	0.32	0.55	55	N, NC
1" IG LoE 272 Argon	0.27	0.32	0.55	58	N, NC
1" IG LoE 366 Air	0.30	0.22	0.49	55	N, NC, SC, S
1" IG LoE 366 Argon	0.26	0.21	0.49	58	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.20	0.28	0.45	68	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.17	0.27	0.45	71	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.21	0.44	0.54	67	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.19	0.44	0.54	69	N



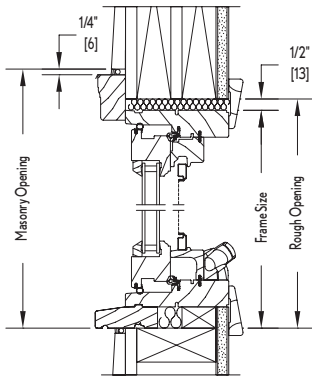
WOOD ULTIMATE PUSH OUT CASEMENT PICTURE

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.44	0.61	0.64	44	
3/4" Insulating Glass LoE 272 Air	0.31	0.33	0.56	56	NC
3/4" Insulating Glass LoE 272 Argon	0.27	0.32	0.56	60	N, NC
3/4" Insulating Glass LoE 366 Air	0.3	0.22	0.5	56	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.26	0.21	0.5	60	N, NC, SC, S
1" Insulating Glass Air	0.44	0.58	0.63	45	
1" Insulating Glass LoE 272 Air	0.31	0.32	0.55	55	NC
1" Insulating Glass LoE 272 Argon	0.27	0.32	0.55	59	N, NC
1" Insulating Glass LoE 366 Air	0.3	0.22	0.49	56	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.27	0.21	0.49	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.2	0.28	0.45	69	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.17	0.27	0.45	72	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.21	0.44	0.54	68	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.19	0.44	0.54	70	N

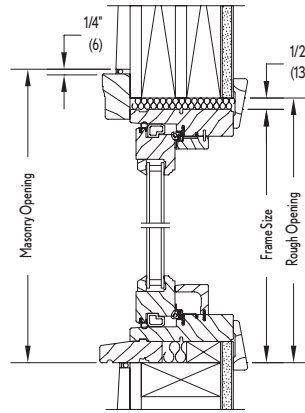


WOOD ULTIMATE AWNING/PUSH OUT AWNING PICTURE UNIT

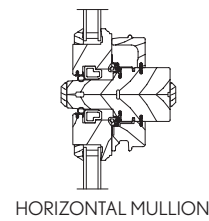
CONSTRUCTION DETAILS



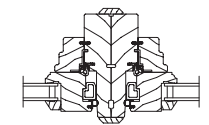
HEAD JAMB AND SILL



PUSH OUT HEAD JAMB AND SILL



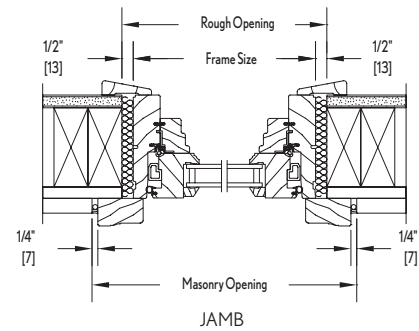
HORIZONTAL MULLION



VERTICAL MULLION

WOOD ULTIMATE AWNING PICTURE

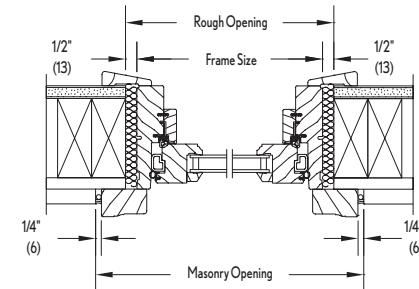
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" IG Air	0.44	0.61	0.64	44	
3/4" IG LoE 272 Air	0.30	0.33	0.56	55	N, NC
3/4" IG LoE 272 Argon	0.27	0.32	0.56	59	N, NC
3/4" IG LoE 366 Air	0.30	0.22	0.50	56	N, NC, SC, S
3/4" IG LoE 366 Argon	0.26	0.21	0.50	59	N, NC, SC, S
1" IG Air	0.43	0.58	0.63	44	
1" IG LoE 272 Air	0.30	0.32	0.55	55	N, NC
1" IG LoE 272 Argon	0.27	0.32	0.55	58	N, NC
1" IG LoE 366 Air	0.30	0.22	0.49	55	N, NC, SC, S
1" IG LoE 366 Argon	0.26	0.21	0.49	58	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.20	0.28	0.45	68	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.17	0.27	0.45	71	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.21	0.44	0.54	67	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.19	0.44	0.54	69	N



JAMB

WOOD ULTIMATE PUSH OUT AWNING PICTURE

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.44	0.61	0.64	44	
3/4" Insulating Glass LoE 272 Air	0.31	0.33	0.56	56	NC
3/4" Insulating Glass LoE 272 Argon	0.27	0.32	0.56	60	N, NC
3/4" Insulating Glass LoE 366 Air	0.3	0.22	0.5	56	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.26	0.21	0.5	60	N, NC, SC, S
1" Insulating Glass Air	0.44	0.58	0.63	45	
1" Insulating Glass LoE 272 Air	0.31	0.32	0.55	55	NC
1" Insulating Glass LoE 272 Argon	0.27	0.32	0.55	59	N, NC
1" Insulating Glass LoE 366 Air	0.3	0.22	0.49	56	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.27	0.21	0.49	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.2	0.28	0.45	69	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.17	0.27	0.45	72	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.21	0.44	0.54	68	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.19	0.44	0.54	70	N



PUSH OUT OPERATOR JAMB

CLAD ULTIMATE CASEMENT/PUSH OUT CASEMENT PICTURE UNIT

Mas. Opp. (mm)	3' - 4 1/2" (1028)	4' - 1/2" (1232)	4' - 8 1/2" (1435)	5' - 1/2" (1537)	5' - 4 1/2" (1638)	6' - 1/2" (1842)	6' - 8 1/2" (2045)	7' - 4 1/2" (2248)	8' - 1/2" (2451)
Rgh. Opp. (mm)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)	6' - 9" (2057)	7' - 5" (2261)	8' - 1" (2464)
Frame Size (mm)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	6' - 8" (2032)	7' - 4" (2235)	8' - 0" (2438)
Glass Size (mm)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)	75 9/32" (1912)	83 9/32" (2115)	91 9/32" (2319)

0' - 11 3/8" (289)									
0' - 11 5/8" (295)	CUCAP4012	CUCAP4812	CUCAP5612	CUCAP6012	CUCAP6412	CUCAP7212	CUCAP8012	CUCAP8812	CUCAP9612
0' - 11 1/8" (283)									
6 13/32" (163)	CUCAP4012	CUCAP4812	CUCAP5612	CUCAP6012	CUCAP6412	CUCAP7212	CUCAP8012	CUCAP8812	CUCAP9612
1' - 1 3/8" (339)									
1' - 1 5/8" (346)	CUCAP4014	CUCAP4814	CUCAP5614	CUCAP6014	CUCAP6414	CUCAP7214	CUCAP8014	CUCAP8814	CUCAP9614
1' - 1 1/8" (333)									
8 13/32" (214)	CUCAP4014	CUCAP4814	CUCAP5614	CUCAP6014	CUCAP6414	CUCAP7214	CUCAP8014	CUCAP8814	CUCAP9614
1' - 3 3/8" (390)									
1' - 3 5/8" (396)	CUCAP4016	CUCAP4816	CUCAP5616	CUCAP6016	CUCAP6416	CUCAP7216	CUCAP8016	CUCAP8816	CUCAP9616
1' - 3 1/8" (384)									
10 13/32" (264)	CUCAP4016	CUCAP4816	CUCAP5616	CUCAP6016	CUCAP6416	CUCAP7216	CUCAP8016	CUCAP8816	CUCAP9616
1' - 5 3/8" (441)									
1' - 5 5/8" (447)	CUCAP4018	CUCAP4818	CUCAP5618	CUCAP6018	CUCAP6418	CUCAP7218	CUCAP8018	CUCAP8818	CUCAP9618
1' - 5 1/8" (434)									
12 13/32" (315)	CUCAP4018	CUCAP4818	CUCAP5618	CUCAP6018	CUCAP6418	CUCAP7218	CUCAP8018	CUCAP8818	CUCAP9618
1' - 7 3/8" (492)									
1' - 7 5/8" (498)	CUCAP4020	CUCAP4820	CUCAP5620	CUCAP6020	CUCAP6420	CUCAP7220	CUCAP8020	CUCAP8820	CUCAP9620
1' - 7 1/8" (485)									
14 13/32" (366)	CUCAP4020	CUCAP4820	CUCAP5620	CUCAP6020	CUCAP6420	CUCAP7220	CUCAP8020	CUCAP8820	CUCAP9620
1' - 11 3/8" (593)									
1' - 11 5/8" (600)	CUCAP4024	CUCAP4824	CUCAP5624	CUCAP6024	CUCAP6424	CUCAP7224	CUCAP8024	CUCAP8824	CUCAP9624
1' - 11 1/8" (587)									
18 13/32" (468)	CUCAP4024	CUCAP4824	CUCAP5624	CUCAP6024	CUCAP6424	CUCAP7224	CUCAP8024	CUCAP8824	CUCAP9624
2' - 3 3/8" (695)									
2' - 3 5/8" (701)	CUCAP4028	CUCAP4828	CUCAP5628	CUCAP6028	CUCAP6428	CUCAP7228	CUCAP8028	CUCAP8828	CUCAP9628
2' - 3 1/8" (688)									
22 13/32" (569)	CUCAP4028	CUCAP4828	CUCAP5628	CUCAP6028	CUCAP6428	CUCAP7228	CUCAP8028	CUCAP8828	CUCAP9628

CLAD ULTIMATE CASEMENT/PUSH OUT CASEMENT PICTURE UNIT

Mas. Opp. (mm)	3' - 4 1/2" (1028)	4' - 1/2" (1232)	4' - 8 1/2" (1435)	5' - 1/2" (1537)	5' - 4 1/2" (1638)	6' - 1/2" (1842)	6' - 8 1/2" (2045)	7' - 4 1/2" (2248)	8' - 1/2" (2451)
Rgh. Opp. (mm)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)	6' - 9" (2057)	7' - 5" (2261)	8' - 1" (2464)
Frame Size (mm)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	6' - 8" (2032)	7' - 4" (2235)	8' - 0" (2438)
Glass Size (mm)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)	75 9/32" (1912)	83 9/32" (2115)	91 9/32" (2319)

2' - 7 3/8" (796) 2' - 7 5/8" (803) 2' - 7 1/8" (790) 26 13/32" (671)									
	CUCAP4032 CUPCAP4032	CUCAP4832 CUPCAP4832	CUCAP5632 CUPCAP5632	CUCAP6032 CUPCAP6032	CUCAP6432 CUPCAP6432	CUCAP7232 CUPCAP7232	CUCAP8032 CUPCAP8032	CUCAP8832 CUPCAP8832	CUCAP9632 CUPCAP9632
2' - 11 3/8" (898) 2' - 11 5/8" (904) 2' - 11 1/8" (892) 30 13/32" (772)									
	CUCAP4036 CUPCAP4036	CUCAP4836 CUPCAP4836	CUCAP5636 CUPCAP5636	CUCAP6036 CUPCAP6036	CUCAP6436 CUPCAP6436	CUCAP7236 CUPCAP7236	CUCAP8036 CUPCAP8036	CUCAP8836 CUPCAP8836	CUCAP9636 CUPCAP9636
3' - 3 3/8" (1000) 3' - 3 5/8" (1006) 3' - 3 1/8" (993) 34 13/32" (874)									
	CUCAP4040 CUPCAP4040	CUCAP4840 CUPCAP4840	CUCAP5640 CUPCAP5640	CUCAP6040 CUPCAP6040	CUCAP6440 CUPCAP6440	CUCAP7240 CUPCAP7240	CUCAP8040 CUPCAP8040	CUCAP8840 CUPCAP8840	CUCAP9640† CUPCAP9640†
3' - 7 3/8" (1101) 3' - 7 5/8" (1108) 3' - 7 1/8" (1095) 38 13/32" (976)									
	CUCAP4044 CUPCAP4044	CUCAP4844 CUPCAP4844	CUCAP5644 CUPCAP5644	CUCAP6044 CUPCAP6044	CUCAP6444 CUPCAP6444	CUCAP7244 CUPCAP7244	CUCAP8044 CUPCAP8044	CUCAP8844† CUPCAP8844†	CUCAP9644† CUPCAP9644†
3' - 11 3/8" (1203) 3' - 11 5/8" (1209) 3' - 11 1/8" (1196) 42 13/32" (1077)									
	CUCAP4048 CUPCAP4048	CUCAP4848 CUPCAP4848	CUCAP5648 CUPCAP5648	CUCAP6048 CUPCAP6048	CUCAP6448 CUPCAP6448	CUCAP7248 CUPCAP7248	CUCAP8048† CUPCAP8048†	CUCAP8848† CUPCAP8848†	CUCAP9648† CUPCAP9648†
4' - 5 3/8" (1355) 4' - 5 5/8" (1362) 4' - 5 1/8" (1349) 48 13/32" (1230)									
	CUCAP4054 CUPCAP4054	CUCAP4854 CUPCAP4854	CUCAP5654 CUPCAP5654	CUCAP6054 CUPCAP6054	CUCAP6454 CUPCAP6454	CUCAP7254† CUPCAP7254†	CUCAP8054† CUPCAP8054†	CUCAP8854† CUPCAP8854†	CUCAP9654† CUPCAP9654†
4' - 7 3/8" (1406) 4' - 7 5/8" (1412) 4' - 7 1/8" (1400) 50 13/32" (1280)									
	CUCAP4056 CUPCAP4056	CUCAP4856 CUPCAP4856	CUCAP5656 CUPCAP5656	CUCAP6056 CUPCAP6056	CUCAP6456 CUPCAP6456	CUCAP7256† CUPCAP7256†	CUCAP8056† CUPCAP8056†	CUCAP8856† CUPCAP8856†	CUCAP9656† CUPCAP9656†

NOTES:

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a frame size height of 72 1/16" or larger and units with a frame size of 25.2 sq. ft. and larger.

Larger sizes require 1" insulating glass.

CLAD ULTIMATE CASEMENT/PUSH OUT CASEMENT PICTURE UNIT

Mas. Opp. (mm)	3' - 4 1/2" (1028)	4' - 1/2" (1232)	4' - 8 1/2" (1435)	5' - 1/2" (1537)	5' - 4 1/2" (1638)	6' - 1/2" (1842)	6' - 8 1/2" (2045)	7' - 4 1/2" (2248)	8' - 1/2" (2451)
Rgh. Opp. (mm)	3' - 5" (1041)	4' - 1" (1245)	4' - 9" (1448)	5' - 1" (1549)	5' - 5" (1651)	6' - 1" (1854)	6' - 9" (2057)	7' - 5" (2261)	8' - 1" (2464)
Frame Size (mm)	3' - 4" (1016)	4' - 0" (1219)	4' - 8" (1422)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	6' - 8" (2032)	7' - 4" (2235)	8' - 0" (2438)
Glass Size (mm)	35 9/32" (896)	43 9/32" (1099)	51 9/32" (1303)	55 9/32" (1404)	59 9/32" (1506)	67 9/32" (1709)	75 9/32" (1912)	83 9/32" (2115)	91 9/32" (2319)

4' - 11 3/8" (1508) 4' - 11 5/8" (1504) 4' - 11 1/8" (1501) 54 13/32" (1484)									
CUCAP4060 CUCAP4060	CUCAP4860 CUCAP4860	CUCAP5660 CUCAP5660	CUCAP6060 CUCAP6060	CUCAP6460† CUCAP6460†	CUCAP7260† CUCAP7260†	CUCAP8060† CUCAP8060†	CUCAP8860† CUCAP8860†	CUCAP9660† CUCAP9660†	
5' - 3 3/8" (1609) 5' - 3 5/8" (1616) 5' - 3 1/8" (1603) 58 13/32" (1684)									
CUCAP4064 CUCAP4064	CUCAP4864 CUCAP4864	CUCAP5664 CUCAP5664	CUCAP6064† CUCAP6064†	CUCAP6464† CUCAP6464†	CUCAP7264† CUCAP7264†	CUCAP8064† CUCAP8064†	CUCAP8864† CUCAP8864†	CUCAP9664† CUCAP9664†	
5' - 11 3/8" (1812) 5' - 11 5/8" (1819) 5' - 11 1/8" (1806) 66 13/32" (1687)									
CUCAP4072† CUCAP4072†	CUCAP4872† CUCAP4872†	CUCAP5672† CUCAP5672†	CUCAP6072† CUCAP6072†	CUCAP6472† CUCAP6472†	CUCAP7272† CUCAP7272†	CUCAP8072† CUCAP8072†	CUCAP8872† CUCAP8872†	CUCAP9672† CUCAP9672†	
6' - 5 3/8" (1965) 6' - 5 5/8" (1971) 6' - 5 1/8" (1958) 72 13/32" (1839)									
CUCAP4078† CUCAP4078†	CUCAP4878† CUCAP4878†	CUCAP5678† CUCAP5678†	CUCAP6078† CUCAP6078†	CUCAP6478† CUCAP6478†	CUCAP7278† CUCAP7278†	CUCAP8078† CUCAP8078†	CUCAP8878† CUCAP8878†	CUCAP9678† CUCAP9678†	
6' - 11 3/8" (2117) 6' - 11 5/8" (2124) 6' - 11 1/8" (2111) 78 13/32" (1992)									
CUCAP4084† CUCAP4084†	CUCAP4884† CUCAP4884†	CUCAP5684† CUCAP5684†	CUCAP6084† CUCAP6084†	CUCAP6484† CUCAP6484†	CUCAP7284† CUCAP7284†	CUCAP8084† CUCAP8084†	CUCAP8884† CUCAP8884†	CUCAP9684† CUCAP9684†	
7' - 7 3/8" (2320) 7' - 7 5/8" (2327) 7' - 7 1/8" (2314) 86 13/32" (2195)									
CUCAP4092† CUCAP4092†	CUCAP4892† CUCAP4892†	CUCAP5692† CUCAP5692†	CUCAP6092† CUCAP6092†	CUCAP6492† CUCAP6492†	CUCAP7292† CUCAP7292†	CUCAP8092† CUCAP8092†	CUCAP8892† CUCAP8892†		
7' - 11 3/8" (2422) 7' - 11 5/8" (2428) 7' - 11 1/8" (2416) 90 13/32" (2296)									
CUCAP4096† CUCAP4096†	CUCAP4896† CUCAP4896†	CUCAP5696† CUCAP5696†	CUCAP6096† CUCAP6096†	CUCAP6496† CUCAP6496†	CUCAP7296† CUCAP7296†	CUCAP8096† CUCAP8096†	CUCAP8896† CUCAP8896†		

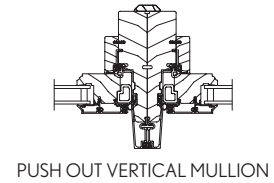
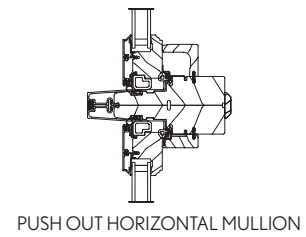
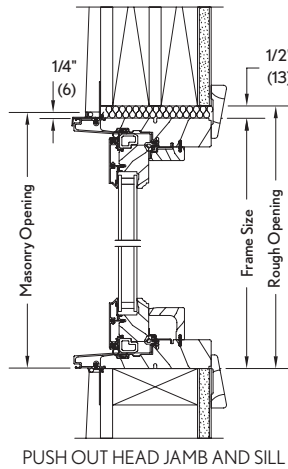
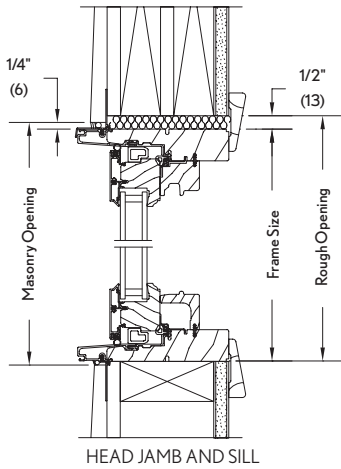
NOTES:

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** Larger sizes require 1" insulating glass.

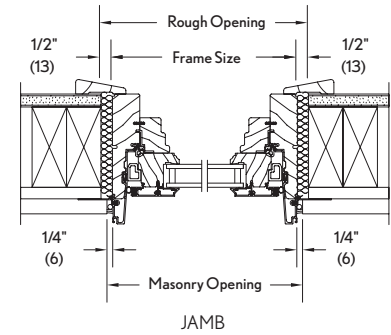
CLAD ULTIMATE CASEMENT/PUSH OUT CASEMENT PICTURE UNIT

CONSTRUCTION DETAILS



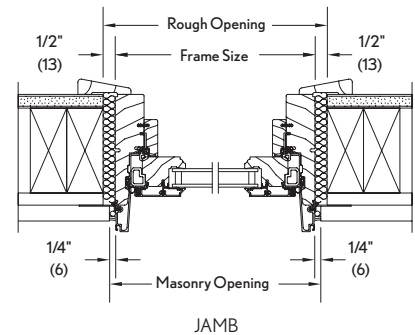
CLAD ULTIMATE CASEMENT PICTURE

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.45	0.62	0.65	43	
3/4" Insulating Glass LoE 272 Air	0.31	0.33	0.57	54	NC
3/4" Insulating Glass LoE 272 Argon	0.28	0.33	0.57	58	N, NC
3/4" Insulating Glass LoE 366 Air	0.31	0.22	0.51	55	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.27	0.22	0.51	58	N, NC, SC, S
1" Insulating Glass Air	0.45	0.59	0.64	43	
1" Insulating Glass LoE 272 Air	0.32	0.32	0.56	53	NC
1" Insulating Glass LoE 272 Argon	0.28	0.32	0.56	56	N, NC
1" Insulating Glass LoE 366 Air	0.31	0.22	0.50	54	NC, SC, S
1" Insulating Glass LoE 366 Argon	0.28	0.22	0.50	57	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.21	0.28	0.45	67	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.18	0.28	0.45	69	N, NC, SC
1" Tri-Pane LoE 179 Argon LoE 179	0.22	0.45	0.55	65	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.20	0.45	0.55	67	N



CLAD ULTIMATE PUSH OUT CASEMENT PICTURE

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
CUPCAP					
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.46	0.62	0.65	43	
3/4" Insulating Glass LoE 272 Air	0.32	0.33	0.57	55	NC
3/4" Insulating Glass LoE 272 Argon	0.28	0.33	0.57	58	N, NC
3/4" Insulating Glass LoE 366 Air	0.31	0.22	0.51	55	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.22	0.51	59	N, NC, SC, S
1" Insulating Glass Air	0.45	0.59	0.64	43	
1" Insulating Glass LoE 272 Air	0.32	0.33	0.56	54	NC
1" Insulating Glass LoE 272 Argon	0.29	0.32	0.56	57	N, NC
1" Insulating Glass LoE 366 Air	0.32	0.22	0.50	54	NC, SC, S
1" Insulating Glass LoE 366 Argon	0.28	0.22	0.50	57	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.21	0.28	0.45	67	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.19	0.28	0.45	70	N, NC, SC
1" Tri-Pane LoE 179 Argon LoE 179	0.23	0.45	0.55	66	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.20	0.45	0.55	68	N

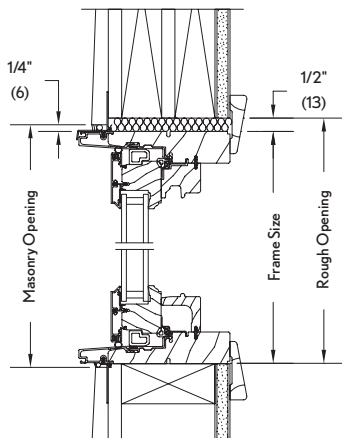


NOTES:

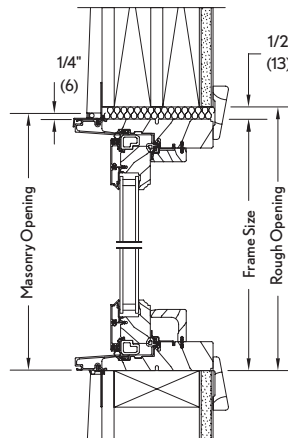
Interior mullion trim supplied by Marvin applied by others.

CLAD ULTIMATE AWNING/PUSH OUT AWNING PICTURE UNIT

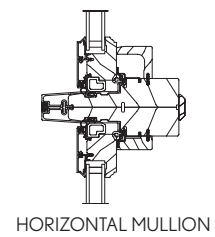
CONSTRUCTION DETAILS



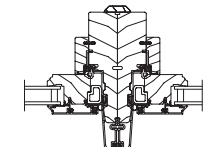
HEAD JAMB AND SILL



PUSH OUT HEAD JAMB AND SILL



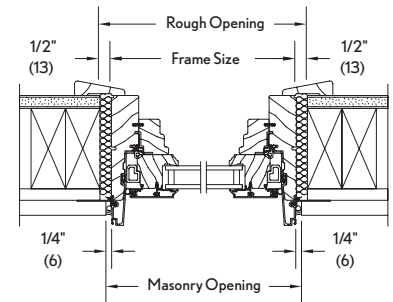
HORIZONTAL MULLION



VERTICAL MULLION

CLAD ULTIMATE AWNING PICTURE

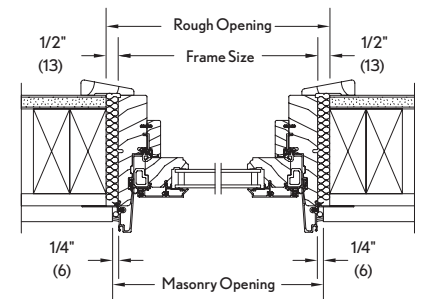
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.45	0.62	0.65	43	
3/4" Insulating Glass LoE 272 Air	0.31	0.33	0.57	54	NC
3/4" Insulating Glass LoE 272 Argon	0.28	0.33	0.57	58	N, NC
3/4" Insulating Glass LoE 366 Air	0.31	0.22	0.51	55	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.27	0.22	0.51	58	N, NC, SC, S
1" Insulating Glass Air	0.45	0.59	0.64	43	
1" Insulating Glass LoE 272 Air	0.32	0.32	0.56	53	NC
1" Insulating Glass LoE 272 Argon	0.28	0.32	0.56	56	N, NC
1" Insulating Glass LoE 366 Air	0.31	0.22	0.50	54	NC, SC, S
1" Insulating Glass LoE 366 Argon	0.28	0.22	0.50	57	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.21	0.28	0.45	67	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.18	0.28	0.45	69	N, NC, SC
1" Tri-Pane LoE 179 Argon LoE 179	0.22	0.45	0.55	65	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.20	0.45	0.55	67	N



JAMB

CLAD ULTIMATE PUSH OUT AWNING PICTURE

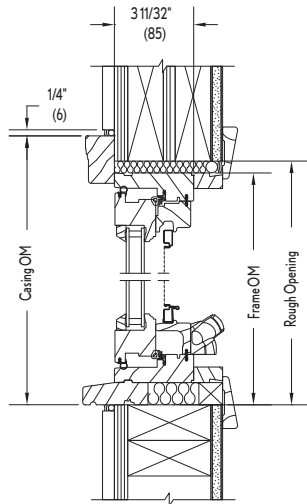
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
CUPCAP					
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.46	0.62	0.65	43	
3/4" Insulating Glass LoE 272 Air	0.32	0.33	0.57	55	NC
3/4" Insulating Glass LoE 272 Argon	0.28	0.33	0.57	58	N, NC
3/4" Insulating Glass LoE 366 Air	0.31	0.22	0.51	55	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.22	0.51	59	N, NC, SC, S
1" Insulating Glass Air	0.45	0.59	0.64	43	
1" Insulating Glass LoE 272 Air	0.32	0.33	0.56	54	NC
1" Insulating Glass LoE 272 Argon	0.29	0.32	0.56	57	N, NC
1" Insulating Glass LoE 366 Air	0.32	0.22	0.50	54	NC, SC, S
1" Insulating Glass LoE 366 Argon	0.28	0.22	0.50	57	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.21	0.28	0.45	67	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.19	0.28	0.45	70	N, NC, SC
1" Tri-Pane LoE 179 Argon LoE 179	0.23	0.45	0.55	66	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.20	0.45	0.55	68	N



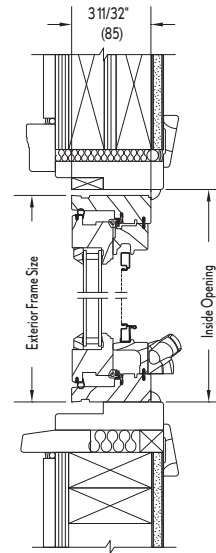
PUSH OUT OPERATOR JAMB

WOOD ULTIMATE REPLACEMENT CASEMENT AND AWNING

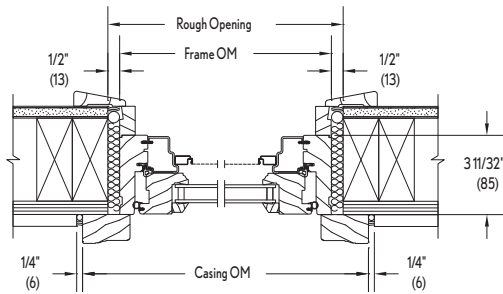
CONSTRUCTION DETAILS



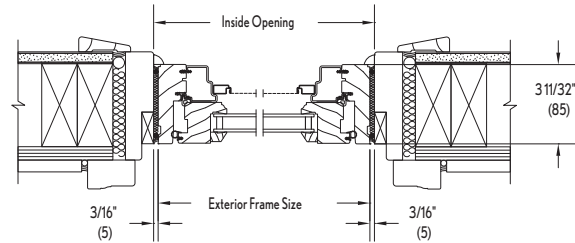
WURCA REPLACEMENT CASEMENT AND AWNING
FULL FRAME REPLACE
HEAD JAMB, WOOD SIDING



WURCA REPLACEMENT CASEMENT AND AWNING
IN CASEMENT FRAME
HEAD JAMB, WOOD SIDING



WURCA REPLACEMENT CASEMENT AND AWNING
FULL FRAME REPLACE
JAMBS, WOOD SIDING



WURCA REPLACEMENT CASEMENT AND AWNING
IN CASEMENT FRAME
JAMBS, WOOD SIDING

WOOD ULTIMATE REPLACEMENT CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" IG Air	0.43	0.52	0.55	44	
3/4" IG LoE 272 Air	0.31	0.28	0.48	56	NC, SC
3/4" IG LoE 272 Argon	0.28	0.28	0.48	59	N, NC, SC
3/4" IG LoE 366 Air	0.31	0.19	0.43	56	NC, SC, S
3/4" IG LoE 366 Argon	0.28	0.19	0.43	60	N, NC, SC, S

NOTES:

Ultimate Replacement Casement windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

Also available as Push Out Casement and Push Out Awning.

The frame size is 3 11/32"

On sizes less than 20" wide, sash does not rotate into wash mode.

Bottom of the sill is available with either a flat, 8° or 14° frame bevel.

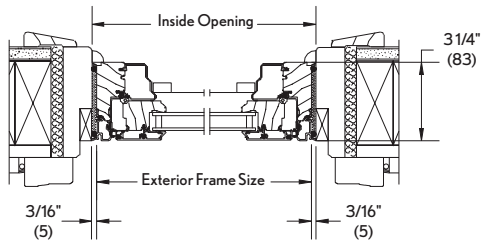
For complete measurement instructions, visit Marvin.com.

WOOD ULTIMATE REPLACEMENT AWNING

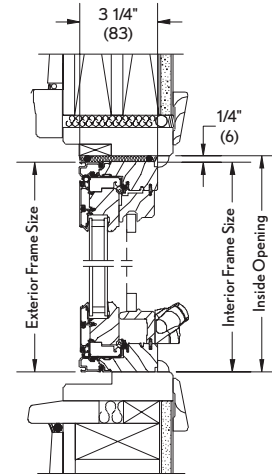
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" IG Air	0.42	0.51	0.53	44	
3/4" IG LoE 272 Air	0.31	0.27	0.46	54	NC, SC, S
3/4" IG LoE 272 Argon	0.28	0.27	0.46	58	N, NC, SC, S
3/4" IG LoE 366 Air	0.31	0.18	0.42	55	NC, SC, S
3/4" IG LoE 366 Argon	0.28	0.18	0.42	59	N, NC, SC, S

CLAD ULTIMATE REPLACEMENT CASEMENT

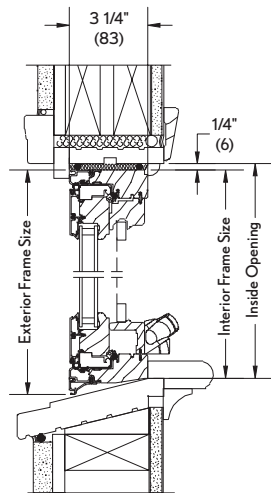
CONSTRUCTION DETAILS



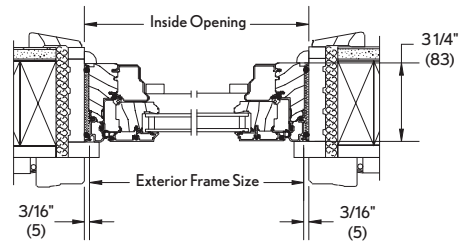
CURCA REPLACEMENT CASEMENT
IN CASEMENT FRAME
JAMBS WOOD SIDING



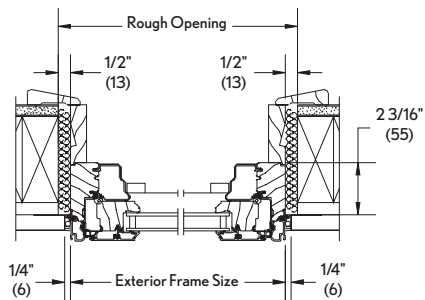
CURCA REPLACEMENT CASEMENT
IN CASEMENT FRAME
HEAD JAMB, SILL WOOD SIDING



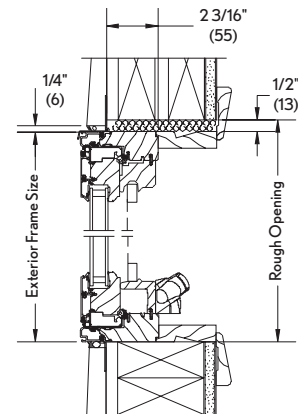
CURCA REPLACEMENT CASEMENT
IN DOUBLE HUNG FRAME
HEAD JAMB, SILL STUCCO



CURCA REPLACEMENT CASEMENT
IN DOUBLE HUNG FRAME
JAMBS STUCCO



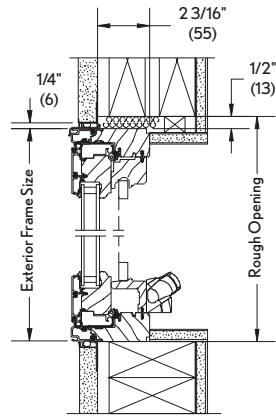
CURCA REPLACEMENT CASEMENT
FULL FRAME REPLACE
JAMBS WOOD SIDING



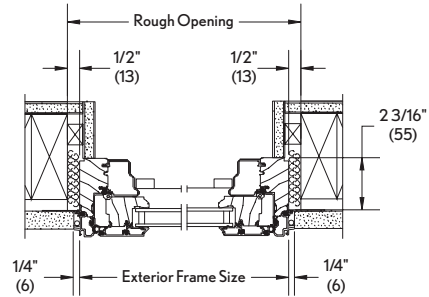
CURCA REPLACEMENT CASEMENT
FULL FRAME REPLACE
HEAD JAMB, SILL WOOD SIDING

CLAD ULTIMATE REPLACEMENT CASEMENT

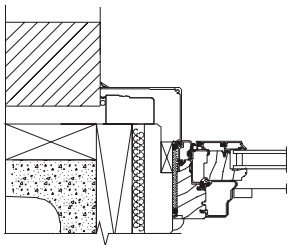
CONSTRUCTION DETAILS



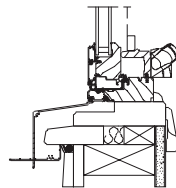
CURCA REPLACEMENT CASEMENT
FULL FRAME REPLACE
HEAD JAMB, SILL STUCCO



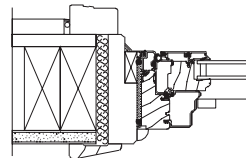
CURCA REPLACEMENT CASEMENT
FULL FRAME REPLACE
JAMBS STUCCO



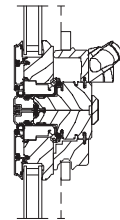
PANNING OPTIONS
MASONRY



PANNING OPTIONS
SILL



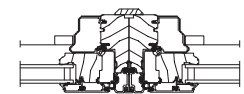
PANNING OPTIONS
FRAME EXPANDER



CURCA CASEMENT
HORIZONTAL MULLION OPERATOR

CLAD ULTIMATE REPLACEMENT CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.46	0.54	0.56	43	
3/4" Insulating Glass LoE 272 Air	0.34	0.29	0.49	54	SC
3/4" Insulating Glass LoE 272 Argon	0.31	0.29	0.49	57	NC, SC
3/4" Insulating Glass LoE 366 Air	0.33	0.20	0.44	54	SC, S
3/4" Insulating Glass LoE 366 Argon	0.30	0.19	0.44	57	N, NC, SC, S



CURCA CASEMENT
VERTICAL MULLION OPERATOR

NOTES:

Ultimate Replacement Casement windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

Available as a clad wood window only.

2 3/16" jambs (full frame installation) 3 1/4" jambs frame-in-frame insert application.

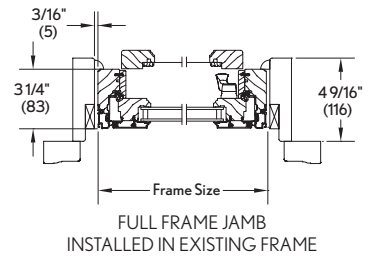
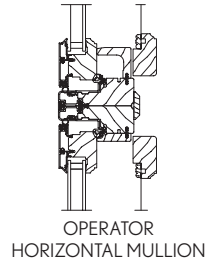
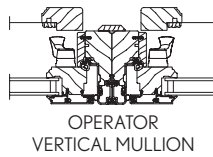
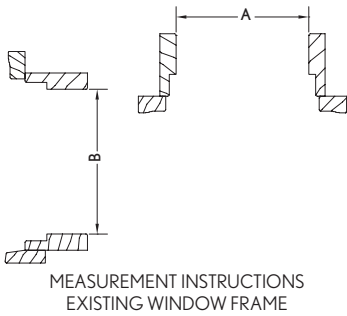
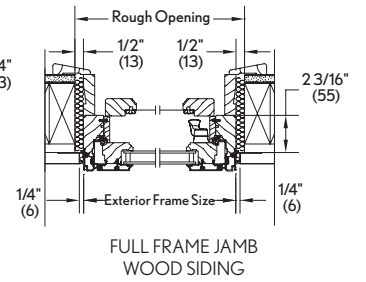
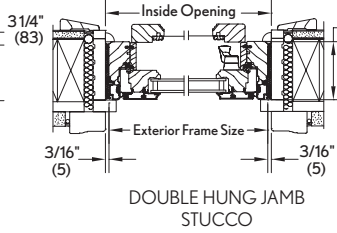
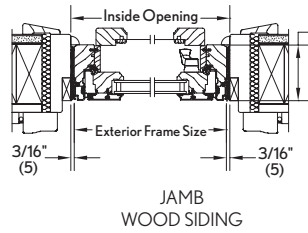
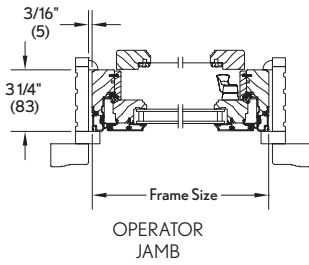
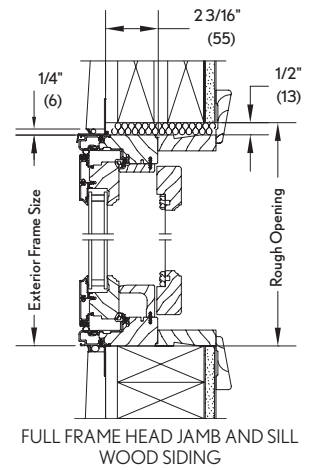
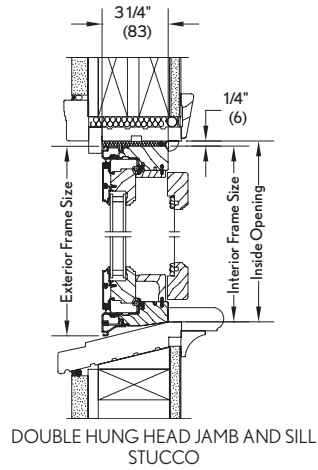
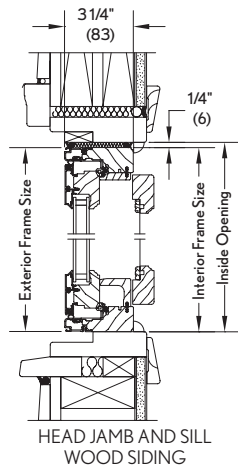
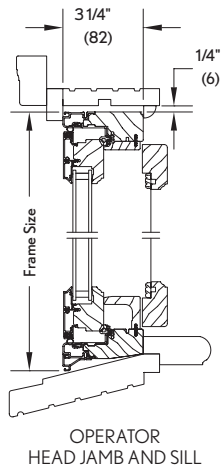
On sizes less than 20" wide, sash does not rotate into wash mode.

Bottom of the sill is available with either a flat, 8° or 14° frame bevel.

For complete measurement instructions, visit Marvin.com.

CLAD ULTIMATE PUSH OUT REPLACEMENT CASEMENT

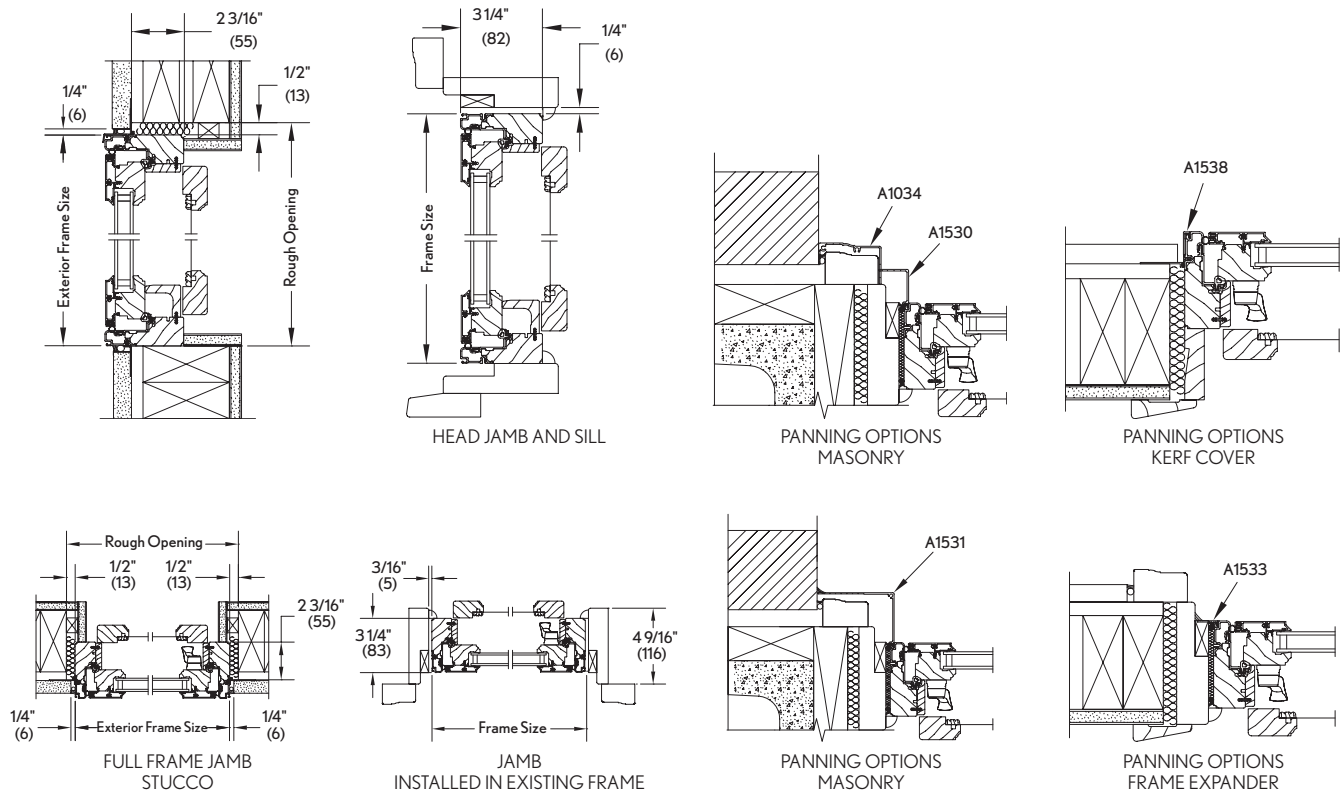
CONSTRUCTION DETAILS



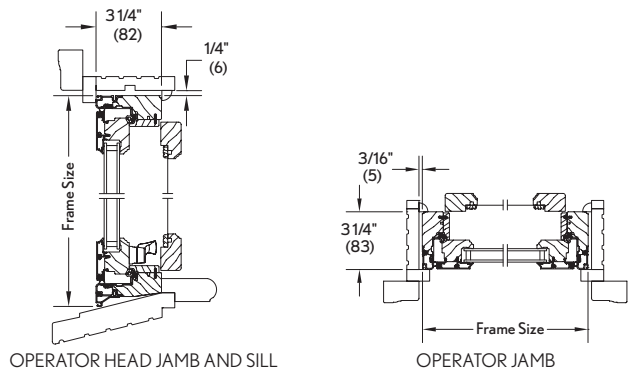
CLAD ULTIMATE REPLACEMENT CASEMENT PICTURE

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.46	0.62	0.65	42	
3/4" Insulating Glass LoE 272 Air	0.32	0.33	0.57	53	NC
3/4" Insulating Glass LoE 272 Argon	0.29	0.33	0.57	57	N, NC
3/4" Insulating Glass LoE 366 Air	0.32	0.22	0.51	54	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.22	0.51	57	N, NC, SC, S

CLAD ULTIMATE REPLACEMENT PUSH OUT AWNING



CONSTRUCTION DETAILS

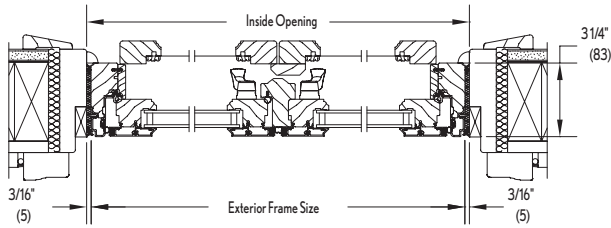


CLAD ULTIMATE REPLACEMENT AWNING

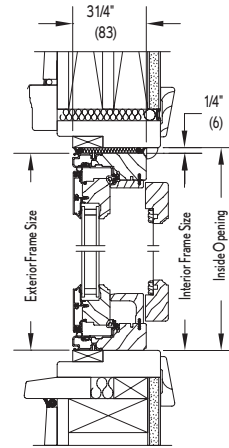
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.46	0.54	0.56	42	
3/4" Insulating Glass LoE 272 Air	0.34	0.29	0.49	52	SC
3/4" Insulating Glass LoE 272 Argon	0.31	0.29	0.49	56	NC, SC
3/4" Insulating Glass LoE 366 Air	0.33	0.20	0.44	53	SC, S
3/4" Insulating Glass LoE 366 Argon	0.30	0.19	0.44	56	N, NC, SC, S

CLAD ULTIMATE REPLACEMENT FRENCH CASEMENT

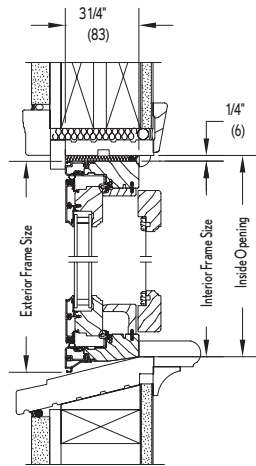
CONSTRUCTION DETAILS



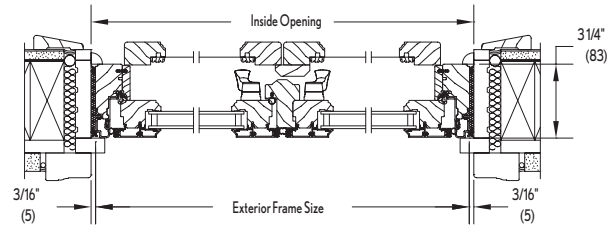
CLAD ULTIMATE PUSHOUT REPLACEMENT FRENCH CASEMENT
IN CASEMENT FRAME
JAMBS WOOD SIDING



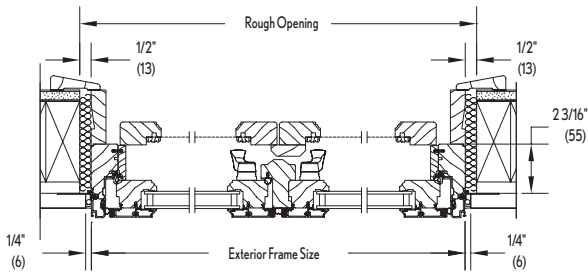
CLAD ULTIMATE PUSHOUT
REPLACEMENT FRENCH CASEMENT
IN CASEMENT FRAME
HEAD JAMB, SILL WOOD SIDING



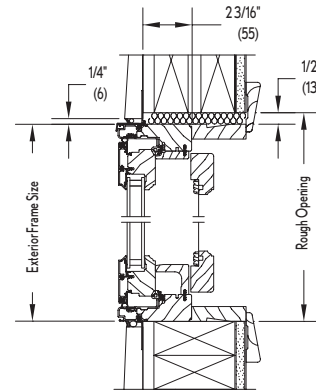
CLAD ULTIMATE PUSHOUT REPLACEMENT FRENCH
CASEMENT
IN DOUBLE HUNG FRAME
HEAD JAMB, SILL STUCCO



CLAD ULTIMATE PUSHOUT REPLACEMENT FRENCH CASEMENT
IN DOUBLE HUNG FRAME
JAMBS STUCCO



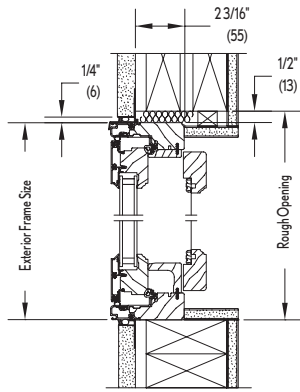
CLAD ULTIMATE PUSHOUT REPLACEMENT FRENCH
CASEMENT
FULL FRAME REPLACE
JAMBS WOOD SIDING



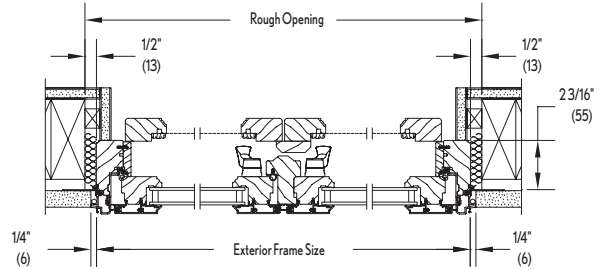
CLAD ULTIMATE PUSHOUT
REPLACEMENT FRENCH CASEMENT
FULL FRAME REPLACE
HEAD JAMB, SILL WOOD SIDING

CLAD ULTIMATE REPLACEMENT PUSH OUT FRENCH CASEMENT

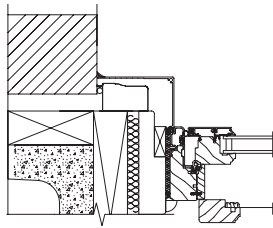
CONSTRUCTION DETAILS



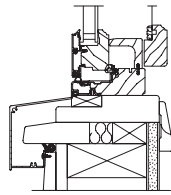
CLAD ULTIMATE PUSHOUT
REPLACEMENT FRENCH CASEMENT
FULL FRAME REPLACE
HEAD JAMB, SILL STUCCO



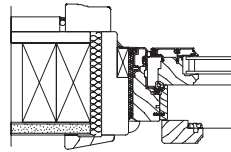
CLAD ULTIMATE PUSHOUT REPLACEMENT FRENCH
CASEMENT
FULL FRAME REPLACE
JAMBS STUCCO



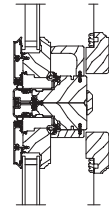
PANNING OPTIONS
MASONRY



PANNING OPTIONS
SILL



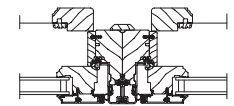
PANNING OPTIONS
FRAME EXPANDER



CUPRFCA CASEMENT
HORIZONTAL MULLION OPERATOR

CLAD ULTIMATE REPLACEMENT PUSH OUT FRENCH CASEMENT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.47	0.54	0.56	43	
3/4" Insulating Glass LoE 272 Air	0.35	0.29	0.49	55	SC
3/4" Insulating Glass LoE 272 Argon	0.32	0.29	0.49	58	NC, SC
3/4" Insulating Glass LoE 366 Air	0.34	0.20	0.44	55	SC, S
3/4" Insulating Glass LoE 366 Argon	0.31	0.19	0.44	58	NC, SC, S



CUPRFCA CASEMENT
VERTICAL MULLION OPERATOR

NOTES:

Ultimate Replacement Casement windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

Available as a clad wood window only.

2 3/16" jambs (full frame installation) 3 1/4" jambs frame-in-frame insert application.












On sizes less than 20" wide, sash does not rotate into wash mode.

Bottom of the sill is available with either a flat, 8° or 14° frame bevel.

For complete measurement instructions, visit MarvinCasement.com.

WOOD ULTIMATE CASEMENT ROUND TOP

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES - OPERATOR AND STATIONARY

Rgh. Opg. (mm)	1'-5" (432)	1'-7" (483)	1'-9" (533)	2'-1" (635)	2'-3" (686)	2'-5" (737)	2'-7" (787)	2'-9" (838)	3'-1" (940)	3'-5" (1041)
2'-8 9/16" (827)										
	WUCART1632	WUCART1832	WUCART2032							
3'-9/16" (929)										
	WUCART1636	WUCART1836	WUCART2036	WUCART2436						
3'-4 9/16" (1030)										
	WUCART1640	WUCART1840	WUCART2040	WUCART2440	WUCART2640	WUCART2840				
3'-8 9/16" (1132)										
	WUCART1644	WUCART1844	WUCART2044	WUCART2444	WUCART2644	WUCART2844	WUCART3044*			
4'-9/16" (1234)										
	WUCART1648	WUCART1848	WUCART2048	WUCART2448	WUCART2648	WUCART2848*	WUCART3048*	WUCART3248*		
4'-6 9/16" (1386)										
	WUCART1654	WUCART1854	WUCART2054	WUCART2454	WUCART2654	WUCART2854*	WUCART3054*	WUCART3254*	WUCART3654*	

NOTES:

Marvin exclusive wash mode is not available on Ultimate Casement Round Tops.

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

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

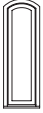








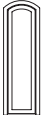









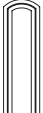









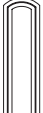









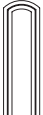









Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

Rough Opening height includes 15/16" subsill.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™

WOOD ULTIMATE CASEMENT ROUND TOP

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES - OPERATOR AND STATIONARY

Rgh. Opp. (mm)	1'-5" (432)	1'-7" (483)	1'-9" (533)	2'-1" (635)	2'-3" (686)	2'-5" (737)	2'-7" (787)	2'-9" (838)	3'-1" (940)	3'-5" (1041)
4'-8 9/16" (1437)										
	WUCART1656	WUCART1856	WUCART2056	WUCART2456	WUCART2656	WUCART2856*	WUCART3056*	WUCART3256*	WUCART3656*	
5'-9/16" (1538)										
	WUCART1660	WUCART1860	WUCART2060	WUCART2460	WUCART2660	WUCART2860*	WUCART3060*	WUCART3260*	WUCART3660*	WUCART4060*
5'-4 9/16" (1640)										
	WUCART1664	WUCART1864	WUCART2064	WUCART2464	WUCART2664	WUCART2864*	WUCART3064*	WUCART3264*	WUCART3664*	WUCART4064*
6'-9/16" (1843)										
	WUCART1672†	WUCART1872†	WUCART2072†	WUCART2472†	WUCART2672†	WUCART2872*†	WUCART3072*†	WUCART3272*†	WUCART3672*†	WUCART4072*†
6'-6 9/16" (1996)										
	WUCART1678†	WUCART1878†	WUCART2078†	WUCART2478†	WUCART2678†	WUCART2878*†	WUCART3078*†	WUCART3278*†	WUCART3678*†	WUCART4078*†

NOTES:

Marvin exclusive wash mode is not available on Ultimate Casement Round Tops.

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

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

Rough Opening height includes 15/16" subsill.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™

WOOD ULTIMATE CASEMENT ROUND TOP

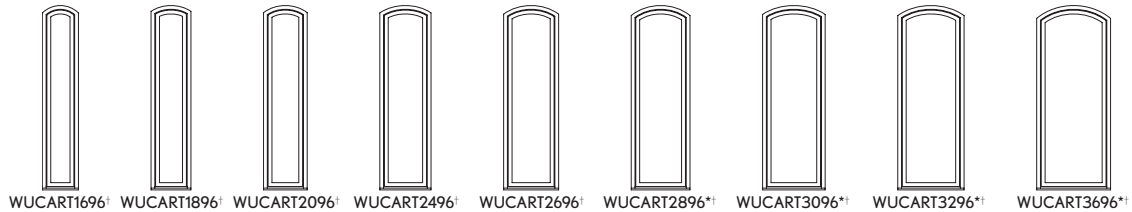
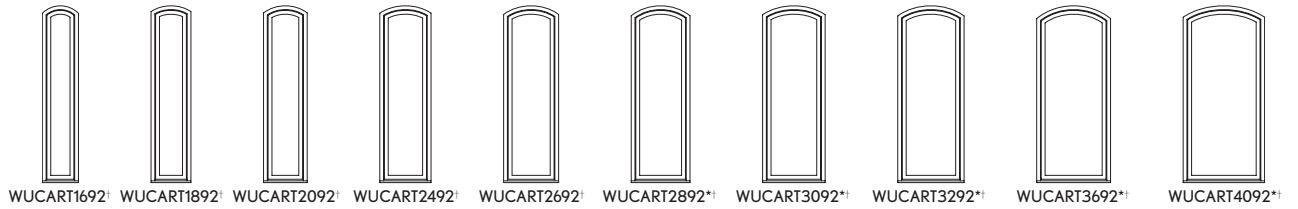
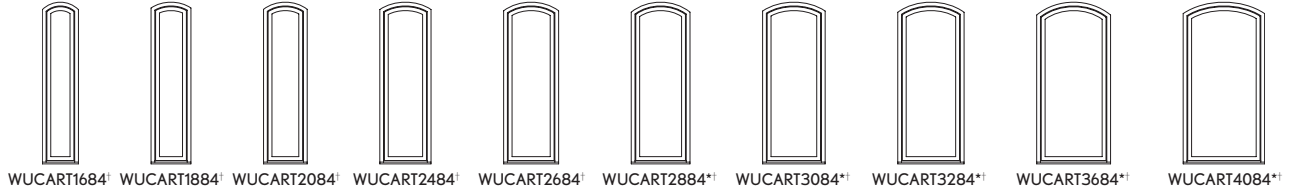
RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES - OPERATOR AND STATIONARY

Mas. Opg. (mm)	1'-7 5/8" (499)	1'-9 5/8" (549)	1'-11 5/8" (600)	2'-3 5/8" (702)	2'-5 5/8" (753)	2'-7 5/8" (803)	2'-9 5/8" (854)	2'-11 5/8" (905)	3'-3 5/8" (1007)	3'-7 5/8" (1108)
Rgh. Opg. (mm)	1'-5" (432)	1'-7" (483)	1'-9" (533)	2'-1" (635)	2'-3" (686)	2'-5" (737)	2'-7" (787)	2'-9" (838)	3'-1" (940)	3'-5" (1041)
Frame Size (mm)	1'-4" (406)	1'-6" (457)	1'-8" (508)	2'-0" (610)	2'-2" (660)	2'-4" (711)	2'-6" (762)	2'-8" (813)	3'-0" (914)	3'-4" (1016)

7'-1 7/8" (2181)
7'-9/16" (2148)
7'-1/16" (2135)





























7'-9 7/8" (2384)
7'-8 9/16" (2351)
7'-8 1/16" (2338)

8'-1 7/8" (2486)
8'-9/16" (2453)
8'-1/16" (2440)



WOOD ULTIMATE CASEMENT ROUND TOP

RT2 STANDARD SIZES OPERATOR AND STATIONARY

Rgh. Opg. (mm)	2' - 1" (635)	2' - 3" (686)	2' - 5" (737)	2' - 7" (787)	2' - 9" (838)	3' - 1" (940)	3' - 5" (1041)
3' - 8 9/16" (1132)	 WUCART2444						
4' - 9/16" (1234)	 WUCART2448	 WUCART2648					
4' - 6 9/16" (1386)	 WUCART2454	 WUCART2654	 WUCART2854*	 WUCART3054*			
4' - 8 9/16" (1437)	 WUCART2456	 WUCART2656	 WUCART2856*	 WUCART3056*			
5' - 9/16" (1538)	 WUCART2460	 WUCART2660	 WUCART2860*	 WUCART3060*	 WUCART3260*		
5' - 4 9/16" (1640)	 WUCART2464	 WUCART2664	 WUCART2864*	 WUCART3064*	 WUCART3264*	 WUCART3664*	
6' - 9/16" (1843)	 WUCART2472†	 WUCART2672†	 WUCART2872*†	 WUCART3072*†	 WUCART3272*†	 WUCART3672*†	 WUCART4072*†

NOTES:

Marvin exclusive wash mode is not available on Ultimate Casement Round Tops.

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

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

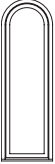






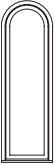






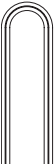






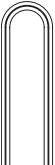





Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

Rough Opening height includes 15/16" subsill.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™































WOOD ULTIMATE CASEMENT ROUND TOP

RT2 STANDARD SIZES OPERATOR AND STATIONARY

Rgh. Opg. (mm)	2' - 1" (635)	2' - 3" (686)	2' - 5" (737)	2' - 7" (787)	2' - 9" (838)	3' - 1" (940)	3' - 5" (1041)
6' - 6 9/16" (1996)	 WUCART2478 [†]	 WUCART2678 [†]	 WUCART2878* [†]	 WUCART3078* [†]	 WUCART3278* [†]	 WUCART3678* [†]	 WUCART4078* [†]
7' - 9/16" (2148)	 WUCART2484 [†]	 WUCART2684 [†]	 WUCART2884* [†]	 WUCART3084* [†]	 WUCART3284* [†]	 WUCART3684* [†]	 WUCART4084* [†]
7' - 8 9/16" (2351)	 WUCART2492 [†]	 WUCART2692 [†]	 WUCART2892* [†]	 WUCART3092* [†]	 WUCART3292* [†]	 WUCART3692* [†]	 WUCART4092* [†]
8' - 9/16" (2453)	 WUCART2496 [†]	 WUCART2696 [†]	 WUCART2896* [†]	 WUCART3096* [†]	 WUCART3296* [†]	 WUCART3696* [†]	

WOOD ULTIMATE CASEMENT ROUND TOP TRANSOMS

RT6 STANDARD SIZES STATIONARY UNIT AS TRANSOM

Rgh. Opg. (mm)	2' - 1" (635)	2' - 3" (686)	2' - 5" (737)	2' - 7" (787)	2' - 9" (838)
1 - 6 1/2" (470)	 WUCART2419	 WUCART2619	 WUCART2819	 WUCART3019	 WUCART3219
2 - 0 1/2" (622)	 WUCART2423	 WUCART2623	 WUCART2823	 WUCART3023	 WUCART3223
3 - 0 1/2" (927)	 WUCART2435	 WUCART2635	 WUCART2835	 WUCART3035	 WUCART3235
4 - 0 1/2" (1232)	 WUCART2447	 WUCART2647	 WUCART2847	 WUCART3047	 WUCART3247
5 - 0 1/2" (1537)	 WUCART2459	 WUCART2659	 WUCART2859	 WUCART3059	 WUCART3259
6 - 0 1/2" (1842)	 WUCART2471†	 WUCART2671†	 WUCART2871†	 WUCART3071†	 WUCART3271†

NOTES:

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

Rough Opening height does not include subsill. If units are not used as transom, add 15/16" to height for subsill.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™


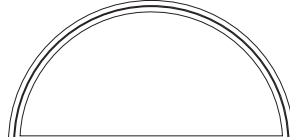
WOOD ULTIMATE CASEMENT ROUND TOP TRANSOMS

RT6 STANDARD SIZES STATIONARY UNIT AS TRANSOM





Rgh. Opg. (mm)	3 - 1" (939)	3 - 5" (1041)	4 - 1" (1245)	4 - 9" (1448)	6 - 1" (1854)
1 - 6 1/2" (470)	 WUCART3619	 WUCART4019	 WUCART4819	 WUCART5619	 WUCART7219
2 - 0 1/2" (622)	 WUCART3623	 WUCART4023	 WUCART4823	 WUCART5623	 WUCART7223
3 - 0 1/2" (927)	 WUCART3635	 WUCART4035	 WUCART4835	 WUCART5635	 WUCART7235
4 - 0 1/2" (1232)	 WUCART3647	 WUCART4047	 WUCART4847	 WUCART5647	 WUCART7247
5 - 0 1/2" (1537)	 WUCART3659	 WUCART4059	 WUCART4859	 WUCART5659	 WUCART7259
6 - 0 1/2" (1842)	 WUCART3671†	 WUCART4071†	 WUCART4871†	 WUCART5671†	 WUCART7271†

WOOD ULTIMATE CASEMENT ROUND TOP

RT1 STANDARD SIZES

Rgh. Opg. (mm)	2 - 1" (635)	2 - 3" (685)	2 - 9" (838)	3 - 1" (940)
1 - 0 1/2" (317)	 WUCART2412	 WUCART2814	 WUCART3216	 WUCART3218
Rgh. Opg. (mm)	3 - 5" (1041)	4 - 1" (1245)	4 - 9" (1448)	5 - 1" (1549)
1 - 8 1/2" (521)	 WUCART4020	 WUCART4824	 WUCART5628	 WUCART6030
Rgh. Opg. (mm)	5 - 5" (1651)	6 - 1" (1854)	7 - 1" (2159)	8 - 1" (2464)
2 - 8 1/2" (826)	 WUCART6432	 WUCART7236	 WUCART8442	 WUCART9648
Rgh. Opg. (mm)	9 - 1" (2769)		10 - 1" (3073)	
4 - 6 1/2" (1384)	 WUCART10854		5 - 0 1/2" (1537)	 WUCART12060

RT29 STANDARD SIZES

Rgh. Opg. (mm)	3 - 5" (1041)	4 - 1" (1245)	4 - 9" (1448)	6 - 1" (1854)
1 - 5 15/16" (456)	 WUCART4017	 WUCART4817	 WUCART5617	 WUCART7217

NOTES:








Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

Rough Opening height does not include subsill. If units are not used as transom, add 15/16" to height for subsill.



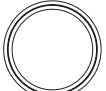
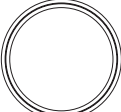
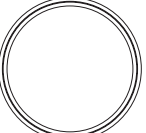
CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™

WOOD ULTIMATE CASEMENT ROUND TOP


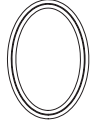
RT15 AND RT16 STANDARD SIZES (RT16 SHOWN)

Rgh. Opg. (mm)	1-9" (533)	2-1" (635)	2-3" (685)	2-9" (838)
1-7 5/8" (498)	 WUCAQCIR2020	1-11 5/8" (600)	2-3 5/8" (702)	2-7 5/8" (803)
		 WUCAQCIR2424		 WUCAQCIR2828
				 WUCAQCIR3232
Rgh. Opg. (mm)	3-1" (940)	3-5" (1041)	3-11 5/8" (1210)	4-1" (1245)
2-11 5/8" (905)	 WUCAQCIR3636	3-3 5/8" (1006)	 WUCAQCIR4040	 WUCAQCIR4848

RT27 STANDARD SIZES

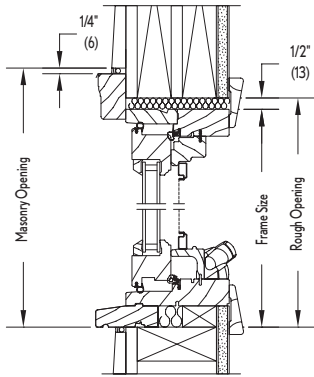
Rgh. Opg. (mm)	2-1 1/2" (648)	3-1 1/2" (953)	4-1 1/2" (1257)	5-1 1/2" (1562)	6-1 1/2" (1867)
2-1 1/2" (648)	 WUCAFCIR2750	3-1 1/2" (953)	4-1 1/2" (1257)	5-1 1/2" (1526)	6-1 1/2" (1867)
		 WUCAFCIR3950	 WUCAFCIR5150	 WUCAFCIR6350	 WUCAFCIR7550

RT28 STANDARD SIZES

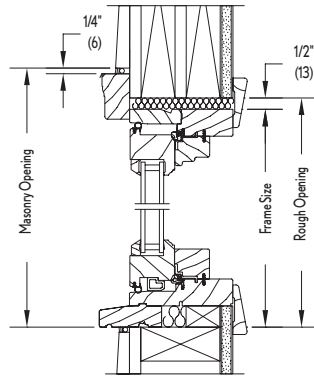
Rgh. Opg. (mm)	2-9" (838)	3-5" (1041)
4-1" (1245)	 WUCAFELP3248	5-5-1" (1549)
		 WUCAFELP4060

WOOD ULTIMATE CASEMENT ROUND TOP

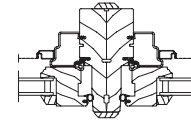
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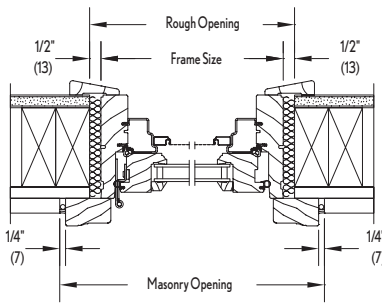
OPERATOR
HEAD JAMB AND SILL



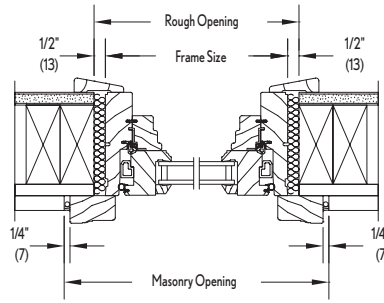
STATIONARY
HEAD JAMB AND SILL



VERTICAL MULLION



OPERATOR
JAMB







STATIONARY
JAMB

WOOD ULTIMATE CASEMENT ROUND TOP OPERATOR/STATIONARY

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.43	0.52	0.55	44	
3/4" Insulating Glass LoE 272 Air	0.31	0.28	0.48	55	NC, SC
3/4" Insulating Glass LoE 272 Argon	0.28	0.28	0.48	59	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.31	0.19	0.43	56	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.19	0.43	59	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.23	0.24	0.38	64	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.21	0.24	0.38	66	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.24	0.38	0.46	63	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.22	0.38	0.46	64	N, NC

CLAD ULTIMATE CASEMENT ROUND TOP

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES OPERATOR AND STATIONARY

Rgh. Opg. (mm)	1'-5" (432)	1'-7" (483)	1'-9" (533)	2'-1" (635)	2'-3" (686)	2'-5" (737)	2'-7" (787)	2'-9" (838)	3'-1" (940)	3'-5" (1041)
2'-7 5/8" (803)										
	CUCART1632	CUCART1832	CUCART2032							
2'-11 5/8" (905)										
	CUCART1636	CUCART1836	CUCART2036	CUCART2436						
3'-3 5/8" (1006)										
	CUCART1640	CUCART1840	CUCART2040	CUCART2440	CUCART2640	CUCART2840				
3'-7 5/8" (1108)										
	CUCART1644	CUCART1844	CUCART2044	CUCART2444	CUCART2644	CUCART2844	CUCART3044*			
3'-11 5/8" (1210)										
	CUCART1648	CUCART1848	CUCART2048	CUCART2448	CUCART2648	CUCART2848*	CUCART3048*	CUCART3248*		
4'-5 5/8" (1362)										
	CUCART1654	CUCART1854	CUCART2054	CUCART2454	CUCART2654	CUCART2854*	CUCART3054*	CUCART3254*	CUCART3654*	

NOTES:

Marvin exclusive wash mode is not available on Ultimate Casement Round Tops.

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


















































† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™

CLAD ULTIMATE CASEMENT ROUND TOP

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES OPERATOR AND STATIONARY

Rgh. Opg. (mm)	1'-5" (432)	1'-7" (483)	1'-9" (533)	2'-1" (635)	2'-3" (686)	2'-5" (737)	2'-7" (787)	2'-9" (838)	3'-1" (940)	3'-5" (1041)
4'-7 5/8" (1413)										
4'-11 5/8" (1514)										
5'-3 5/8" (1616)										
5'-11 5/8" (1819)										
6'-5 5/8" (1972)										

NOTES:

Marvin exclusive wash mode is not available on Ultimate Casement Round Tops.

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






























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Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™






























CLAD ULTIMATE CASEMENT ROUND TOP

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES OPERATOR AND STATIONARY

Rgh. Opg. (mm)	1'-5" (432)	1'-7" (483)	1'-9" (533)	2'-1" (635)	2'-3" (686)	2'-5" (737)	2'-7" (787)	2'-9" (838)	3'-1" (940)	3'-5" (1041)
6'-11 5/8" (2124)										
	CUCART1684 [†]	CUCART1884 [†]	CUCART2084 [†]	CUCART2484 [†]	CUCART2684 [†]	CUCART2884 ^{†*}	CUCART3084 ^{†*}	CUCART3284 ^{†*}	CUCART3684 ^{†*}	CUCART4084 ^{†*}
7'-7 5/8" (2327)										
	CUCART1692 [†]	CUCART1892 [†]	CUCART2092 [†]	CUCART2492 [†]	CUCART2692 [†]	CUCART2892 ^{†*}	CUCART3092 ^{†*}	CUCART3292 ^{†*}	CUCART3692 ^{†*}	CUCART4092 ^{†*}
7'-11 5/8" (2429)										
	CUCART1696 [†]	CUCART1896 [†]	CUCART2096 [†]	CUCART2496 [†]	CUCART2696 [†]	CUCART2896 ^{†*}	CUCART3096 ^{†*}	CUCART3296 ^{†*}	CUCART3696 ^{†*}	

CLAD ULTIMATE CASEMENT ROUND TOP

RT2 STANDARD SIZES OPERATOR AND STATIONARY

Rgh. Opg. (mm)	2' - 1" (635)	2' - 3" (686)	2' - 5" (737)	2' - 7" (787)	2' - 9" (838)	3' - 1" (940)	3' - 5" (1041)
3' - 7 5/8" (1108)	 CUCART2444						
3' - 11 5/8" (1210)	 CUCART2448	 CUCART2648					
4' - 5 5/8" (1362)	 CUCART2454	 CUCART2654	 CUCART2854*	 CUCART3054*			
4' - 7 5/8" (1413)	 CUCART2456	 CUCART2656	 CUCART2856*	 CUCART3056*			
4' - 11 5/8" (1514)	 CUCART2460	 CUCART2660	 CUCART2860*	 CUCART3060*	 CUCART3260*		
5' - 3 5/8" (1616)	 CUCART2464	 CUCART2664	 CUCART2864*	 CUCART3064*	 CUCART3264*	 CUCART3664*	
5' - 11 5/8" (1819)	 CUCART2472†	 CUCART2672†	 CUCART2872*†	 CUCART3072*†	 CUCART3272*†	 CUCART3672*†	 CUCART4072*†

NOTES:

Marvin exclusive wash mode is not available on Ultimate Casement Round Tops.

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


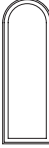






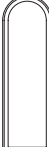






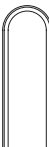






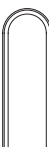




† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™































CLAD ULTIMATE CASEMENT ROUND TOP

RT2 STANDARD SIZES OPERATOR AND STATIONARY

Rgh. Opg. (mm)	2' - 1" (635)	2' - 3" (686)	2' - 5" (737)	2' - 7" (787)	2' - 9" (838)	3' - 1" (940)	3' - 5" (1041)
6' - 5 5/8" (1972)	 CUCART2478	 CUCART2678†	 CUCART2878*†	 CUCART3078*†	 CUCART3278*†	 CUCART3678*†	 CUCART4078*†
6' - 11 5/8" (2124)	 CUCART2484†	 CUCART2684†	 CUCART2884*†	 CUCART3084*†	 CUCART3284*†	 CUCART3684*†	 CUCART4084*†
7' - 7 5/8" (2327)	 CUCART2492†	 CUCART2692†	 CUCART2892*†	 CUCART3092*†	 CUCART3292*†	 CUCART3692*†	 CUCART4092*†
7' - 11 5/8" (2429)	 CUCART2496†	 CUCART2696†	 CUCART2896*†	 CUCART3096*†	 CUCART3296*†	 CUCART3696*†	

CLAD ULTIMATE CASEMENT ROUND TOP TRANSOMS

RT6 STANDARD SIZES STATIONARY UNITS AS TRANSOM

Rgh. Opg. (mm)	2 - 1" (635)	2 - 3" (685)	2 - 5" (736)	2 - 7" (787)	2 - 9" (838)
1 - 6 1/2" (470)	 CUCART2419	 CUCART2619	 CUCART2819	 CUCART3019	 CUCART3219
2 - 0 1/2" (622)	 CUCART2423	 CUCART2623	 CUCART2823	 CUCART3023	 CUCART3223
3 - 0 1/2" (927)	 CUCART2435	 CUCART2635	 CUCART2835	 CUCART3035	 CUCART3235
4 - 0 1/2" (1232)	 CUCART2447	 CUCART2647	 CUCART2847	 CUCART3047	 CUCART3247
5 - 0 1/2" (1537)	 CUCART2459	 CUCART2659	 CUCART2859	 CUCART3059	 CUCART3259
6 - 0 1/2" (1842)	 CUCART2471†	 CUCART2671†	 CUCART2871†	 CUCART3071†	 CUCART3271†

NOTES:

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.

Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

CAUTION: It is recommended that a minimum of 1/4" be added to the Rough Opening height when using rigid sill pan product such as Marvin SillGuard.™








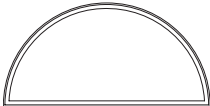
CLAD ULTIMATE CASEMENT ROUND TOP TRANSOMS

RT6 STANDARD SIZES STATIONARY UNITS AS TRANSOM





Rgh. Opg. (mm)	3 - 1" (939)	3 - 5" (1041)	4 - 1" (1245)	4 - 9" (1448)	6 - 1" (1854)
1 - 6 1/2" (470)	 CUCART3619	 CUCART4019	 CUCART4819	 CUCART5619	 CUCART7219
2 - 0 1/2" (622)	 CUCART3623	 CUCART4023	 CUCART4823	 CUCART5623	 CUCART7223
3 - 0 1/2" (927)	 CUCART3635	 CUCART4035	 CUCART4835	 CUCART5635	 CUCART7235
4 - 0 1/2" (1232)	 CUCART3647	 CUCART4047	 CUCART4847	 CUCART5647	 CUCART7247
5 - 0 1/2" (1537)	 CUCART3659	 CUCART4059	 CUCART4859	 CUCART5659	 CUCART7259
6 - 0 1/2" (1842)	 CUCART3671†	 CUCART4071†	 CUCART4871†	 CUCART5671†	 CUCART7271†

CLAD ULTIMATE CASEMENT ROUND TOP

RT1 STANDARD SIZES

Rgh. Opg. (mm)	2 - 1" (635)	2 - 3" (685)	2 - 9" (838)	3 - 1" (940)
1 - 0 1/2" (317)	 CUCART2412	 CUCART2814	 CUCART3216	 CUCART3218
Rgh. Opg. (mm)	3 - 5" (1041)	4 - 1" (1245)	4 - 9" (1448)	5 - 1" (1549)
1 - 8 1/2" (521)	 CUCART4020	 CUCART4824	 CUCART5628	 CUCART6030
Rgh. Opg. (mm)	5 - 5" (1651)	6 - 1" (1854)	7 - 1" (2159)	8 - 1" (2464)
2 - 8 1/2" (826)	 CUCART6432	 CUCART7236	 CUCART8442	 CUCART9648
Rgh. Opg. (mm)	9 - 1" (2769)			10 - 1" (3073)
4 - 6 1/2" (1384)	 CUCART10854			 CUCART12060

RT29 STANDARD SIZES

Rgh. Opg. (mm)	3 - 5" (1041)	4 - 1" (1245)	4 - 9" (1448)	6 - 1" (1854)
1 - 5 15/16" (456)	 CUCART4017	 CUCART4817	 CUCART5617	 CUCART7217

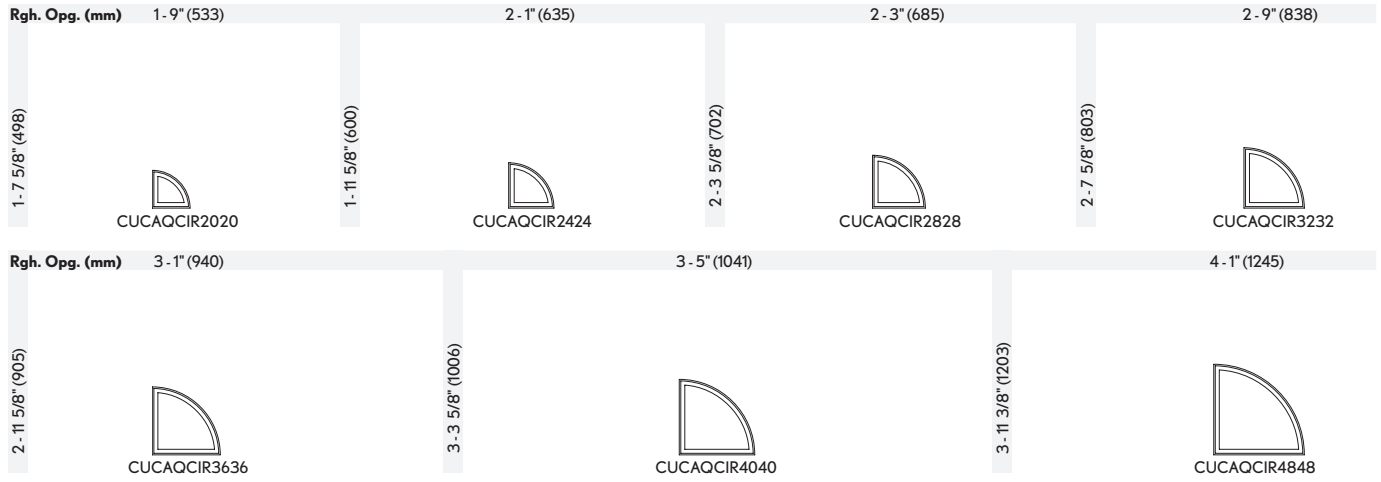
NOTES:

Units with Basic Frame Size 25.2 sq. ft. and larger may require tempered glass.

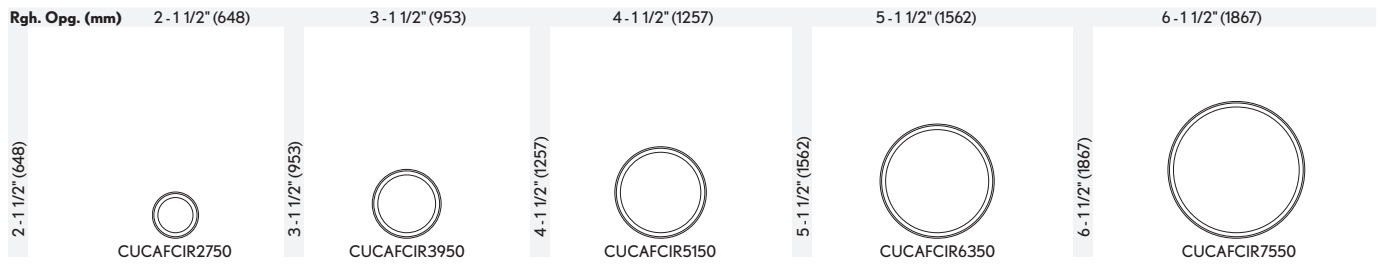
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CLAD ULTIMATE CASEMENT ROUND TOP

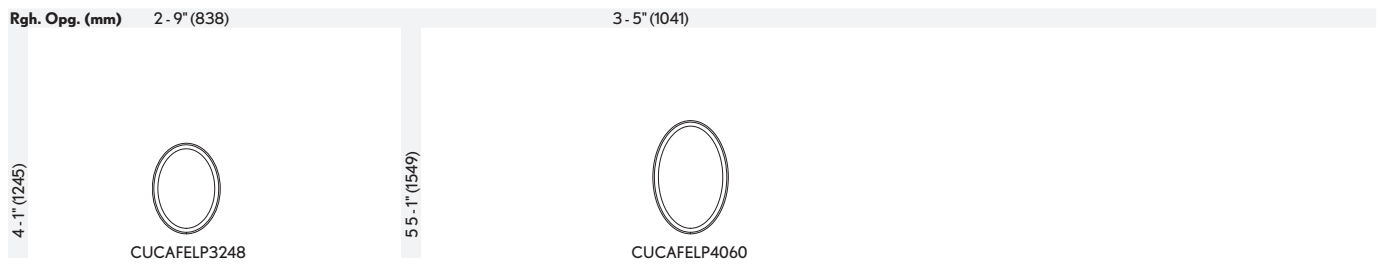
RT15 AND RT16 STANDARD SIZES (RT16 SHOWN)



RT27 STANDARD SIZES

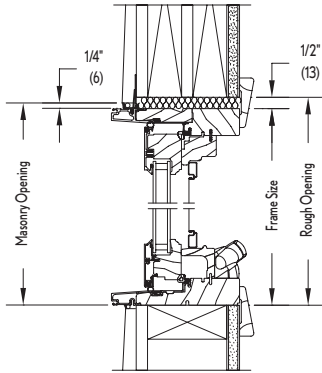


RT28 STANDARD SIZES

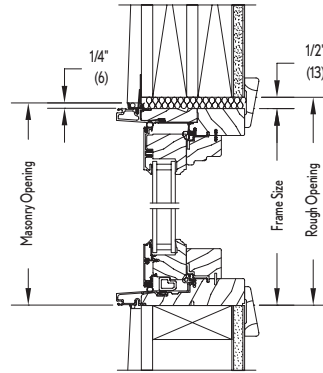


CLAD ULTIMATE CASEMENT ROUND TOP

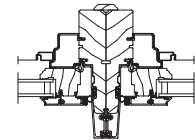
CONSTRUCTION DETAILS



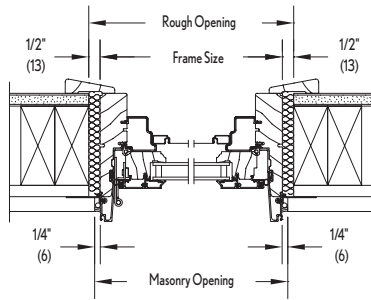
OPERATOR
HEAD JAMB AND SILL



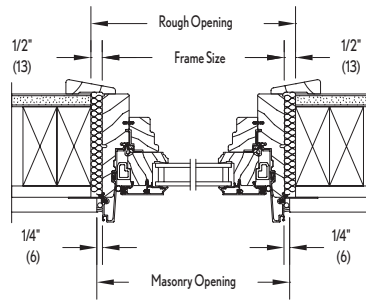
STATIONARY
HEAD JAMB AND SILL



VERTICAL MULLION



OPERATOR
JAMB



























































STATIONARY
JAMB

CLAD ULTIMATE CASEMENT ROUND TOP OPERATOR/STATIONARY

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.45	0.53	0.56	42	
3/4" Insulating Glass LoE 272 Air	0.33	0.29	0.49	54	SC
3/4" Insulating Glass LoE 272 Argon	0.30	0.29	0.49	57	N, NC, SC
3/4" Insulating Glass LoE 366 Air	0.33	0.19	0.44	54	SC, S
3/4" Insulating Glass LoE 366 Argon	0.30	0.19	0.44	57	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.25	0.25	0.39	61	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.23	0.24	0.39	63	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.26	0.39	0.47	60	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.24	0.39	0.47	62	N, NC

CLAD ULTIMATE CASEMENT VENTING PICTURE

Mas. Opg. (mm)	1-4 1/2 (419)	1-6 1/2 (470)	1-8 1/2 (521)	2-0 1/2 (622)	2-2 1/2 (673)	2-4 1/2 (724)	2-6 1/2 (775)	2-8 1/2 (826)
Rgh. Opg. (mm)	1-5 (492)	1-7 (483)	1-9 (533)	2-1 (635)	2-3 (686)	2-5 (737)	2-7 (787)	2-9 (838)
Frame Size (mm)	1-4 (406)	1-6 (457)	1-8 (508)	2-0 (610)	2-2 (660)	2-4 (711)	2-6 (762)	2-8 (813)

2-11 3/8 (898) 2-11 5/8 (904) 2-11 7/8 (892)	 CUCAVP1636	 CUCAVP1836	 CUCAVP2036	 CUCAVP2436	 CUCAVP2636	 CUCAVP2836	 CUCAVP3036	 CUCAVP3236
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 7/8 (993)	 CUCAVP1640	 CUCAVP1840	 CUCAVP2040	 CUCAVP2440	 CUCAVP2640	 CUCAVP2840	 CUCAVP3040	 CUCAVP3240
3-7 3/8 (1101) 3-7 5/8 (1108) 3-7 7/8 (1095)	 CUCAVP1644	 CUCAVP1844	 CUCAVP2044	 CUCAVP2444	 CUCAVP2644	 CUCAVP2844	 CUCAVP3044	 CUCAVP3244
3-11 3/8 (1203) 3-11 5/8 (1209) 3-11 7/8 (1196)	 CUCAVP1648	 CUCAVP1848	 CUCAVP2048	 CUCAVP2448	 CUCAVP2648	 CUCAVP2848	 CUCAVP3048	 CUCAVP3248
4-5 3/8 (1355) 4-5 5/8 (1362) 4-5 7/8 (1349)	 CUCAVP1654	 CUCAVP1854	 CUCAVP2054	 CUCAVP2454	 CUCAVP2654	 CUCAVP2854	 CUCAVP3054	 CUCAVP3254
4-7 3/8 (1406) 4-7 5/8 (1412) 4-7 7/8 (1400)	 CUCAVP1656	 CUCAVP1856	 CUCAVP2056	 CUCAVP2456	 CUCAVP2656	 CUCAVP2856	 CUCAVP3056	 CUCAVP3256
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 7/8 (1501)	 CUCAVP1660	 CUCAVP1860	 CUCAVP2060	 CUCAVP2460	 CUCAVP2660	 CUCAVP2860	 CUCAVP3060	 CUCAVP3260

NOTES:

* Units will have structural cable on the head and sill.

† For safety and/or code requirements, Marvin recommends tempered glass in all units with a Frame Size height of 71 1/8" or larger.


















































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CLAD ULTIMATE CASEMENT VENTING PICTURE

















































Mas. Opg. (mm)	3 - 0 1/2 (927)	3 - 4 1/2 (1029)	4 - 0 1/2 (1232)	4 - 8 1/2 (1435)	5 - 0 1/2 (1537)	5 - 4 1/2 (1638)	6 - 0 1/2 (1842)
Rgh. Opg. (mm)	3 - 1 (940)	3 - 5 (1041)	4 - 1 (1245)	4 - 9 (1448)	5 - 1 (1549)	5 - 5 (1651)	6 - 1 (1854)
Frame Size (mm)	3 - 0 (914)	3 - 4 (1016)	4 - 0 (1219)	4 - 8 (1422)	5 - 0 (1524)	5 - 4 (1626)	6 - 0 (1829)

2 - 11 3/8 (898)	2 - 11 5/8 (904)	2 - 11 7/8 (892)
3 - 3 3/8 (1000)	3 - 3 5/8 (1006)	3 - 3 7/8 (993)
3 - 7 3/8 (1101)	3 - 7 5/8 (1108)	3 - 7 7/8 (1095)
3 - 11 3/8 (1203)	3 - 11 5/8 (1209)	3 - 11 7/8 (1196)
4 - 5 3/8 (1355)	4 - 5 5/8 (1362)	4 - 5 7/8 (1349)
4 - 7 3/8 (1406)	4 - 7 5/8 (1412)	4 - 7 7/8 (1400)
4 - 11 3/8 (1508)	4 - 11 5/8 (1514)	4 - 11 7/8 (1501)

						
CUCAVP3636	CUCAVP4036	CUCAVP4836*	CUCAVP5636*	CUCAVP6036*	CUCAVP6436*	CUCAVP7236*
						
CUCAVP3640	CUCAVP4040	CUCAVP4840*	CUCAVP5640*	CUCAVP6040*	CUCAVP6440*	CUCAVP7240*
						
CUCAVP3644	CUCAVP4044	CUCAVP4844*	CUCAVP5644*	CUCAVP6044*	CUCAVP6444*	CUCAVP7244*
						
CUCAVP3648	CUCAVP4048	CUCAVP4848	CUCAVP5648*	CUCAVP6048*	CUCAVP6448*	CUCAVP7248*
						
CUCAVP3654	CUCAVP4054	CUCAVP4854	CUCAVP5654*	CUCAVP6054*	CUCAVP6454*	CUCAVP7254*
						
CUCAVP3656	CUCAVP4056	CUCAVP4856	CUCAVP5656*	CUCAVP6056*	CUCAVP6456*	CUCAVP7256*
						
CUCAVP3660	CUCAVP4060	CUCAVP4860	CUCAVP5660*	CUCAVP6060*	CUCAVP6460*	CUCAVP7260*

CLAD ULTIMATE CASEMENT VENTING PICTURE

Mas. Opg. (mm)	1-4 1/2 (419)	1-6 1/2 (470)	1-8 1/2 (521)	2-0 1/2 (622)	2-2 1/2 (673)	2-4 1/2 (724)	2-6 1/2 (775)	2-8 1/2 (826)
Rgh. Opg. (mm)	1-5 (492)	1-7 (483)	1-9 (533)	2-1 (635)	2-3 (686)	2-5 (737)	2-7 (787)	2-9 (838)
Frame Size (mm)	1-4 (406)	1-6 (457)	1-8 (508)	2-0 (610)	2-2 (660)	2-4 (711)	2-6 (762)	2-8 (813)

5-3 3/8 (1609) 5-3 5/8 (1616) 5-3 1/8 (1603)								
CUCAVP1664	CUCAVP1864	CUCAVP2064	CUCAVP2464	CUCAVP2664	CUCAVP2864	CUCAVP3064	CUCAVP3264	
5-11 3/8 (1812) 5-11 5/8 (1819) 5-11 1/8 (1806)								
CUCAVP1672†	CUCAVP1872†	CUCAVP2072†	CUCAVP2472†	CUCAVP2672†	CUCAVP2872†	CUCAVP3072†	CUCAVP3272†	
6-5 3/8 (1965) 6-5 5/8 (1971) 6-5 1/8 (1958)								
CUCAVP1678	CUCAVP1878	CUCAVP2078†	CUCAVP2478	CUCAVP2678	CUCAVP2878	CUCAVP3078	CUCAVP3278	
6-11 3/8 (2117) 6-11 5/8 (2124) 6-11 1/8 (2111)								
CUCAVP1684†	CUCAVP1884†	CUCAVP2084†	CUCAVP2484†	CUCAVP2684†	CUCAVP2884†	CUCAVP3084	CUCAVP3284	
7-7 3/8 (2320) 7-7 5/8 (2327) 7-7 1/8 (2314)								
CUCAVP1692†	CUCAVP1892†	CUCAVP2092†	CUCAVP2492†	CUCAVP2692†	CUCAVP2892†	CUCAVP3092	CUCAVP3292	
7-11 3/8 (2422) 7-11 5/8 (2428) 7-11 1/8 (2416)								
CUCAVP1696†	CUCAVP1896†	CUCAVP2096†	CUCAVP2496†	CUCAVP2696†	CUCAVP2896†	CUCAVP3096	CUCAVP3296	

NOTES:

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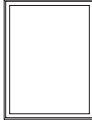
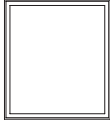
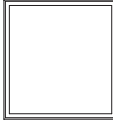
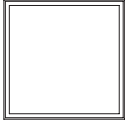



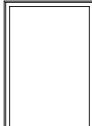
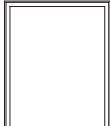
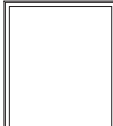
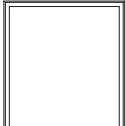








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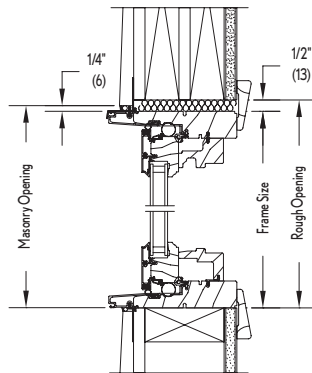
CLAD ULTIMATE CASEMENT VENTING PICTURE

Mas. Opg. (mm)	3 - 0 1/2 (927)	3 - 4 1/2 (1029)	4 - 0 1/2 (1232)	4 - 8 1/2 (1435)	5 - 0 1/2 (1537)	5 - 4 1/2 (1638)	6 - 0 1/2 (1842)
Rgh. Opg. (mm)	3 - 1 (940)	3 - 5 (1041)	4 - 1 (1245)	4 - 9 (1448)	5 - 1 (1549)	5 - 5 (1651)	6 - 1 (1854)
Frame Size (mm)	3 - 0 (914)	3 - 4 (1016)	4 - 0 (1219)	4 - 8 (1422)	5 - 0 (1524)	5 - 4 (1626)	6 - 0 (1829)

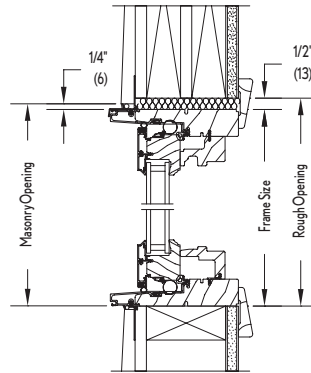
5 - 3 3/8 (1609) 5 - 3 5/8 (1616) 5 - 3 1/8 (1603)							
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5 - 11 3/8 (1812) 5 - 11 5/8 (1819) 5 - 11 1/8 (1806)							
CUCAVP3672†	CUCAVP4072†	CUCAVP4872†	CUCAVP5672*†	CUCAVP6072*†	CUCAVP6472*†	CUCAVP7272*†	
6 - 5 3/8 (1965) 6 - 5 5/8 (1971) 6 - 5 1/8 (1958)							
CUCAVP3678†	CUCAVP4078†						
6 - 11 3/8 (2117) 6 - 11 5/8 (2124) 6 - 11 1/8 (2111)							
CUCAVP3684†	CUCAVP4084†						
7 - 7 3/8 (2320) 7 - 7 5/8 (2327) 7 - 7 1/8 (2314)							
CUCAVP3692†	CUCAVP4092†						
7 - 11 3/8 (2422) 7 - 11 5/8 (2428) 7 - 11 1/8 (2416)							
CUCAVP3696†							

CLAD ULTIMATE CASEMENT VENTING PICTURE

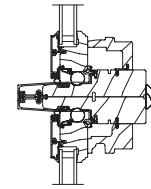
CONSTRUCTION DETAILS



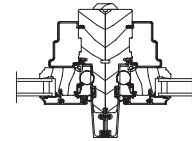
3/4" VENTING PICTURE
HEAD JAMB AND SILL



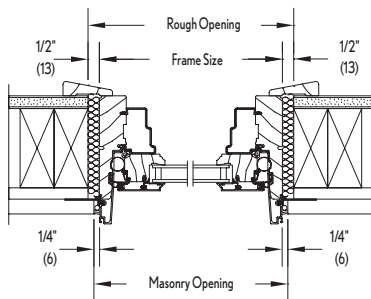
1" VENTING PICTURE
HEAD JAMB AND SILL



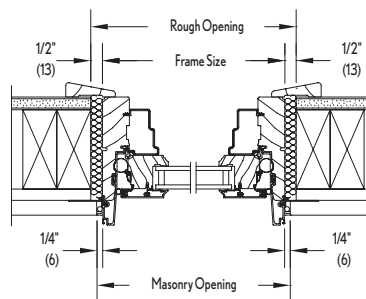
HORIZONTAL MULLION



VERTICAL MULLION



3/4" VENTING PICTURE
JAMB



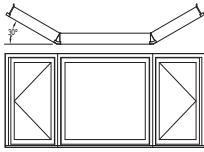
1" VENTING PICTURE
JAMB

CLAD ULTIMATE CASEMENT VENTING PICTURE

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.45	0.62	0.65	43	
3/4" Insulating Glass LoE 272 Air	0.31	0.33	0.57	54	NC
3/4" Insulating Glass LoE 272 Argon	0.28	0.33	0.57	57	N, NC
3/4" Insulating Glass LoE 366 Air	0.31	0.22	0.51	54	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.27	0.22	0.51	58	N, NC, SC, S
1" Insulating Glass Air	0.45	0.59	0.64	43	
1" Insulating Glass LoE 272 Air	0.31	0.32	0.56	54	NC
1" Insulating Glass LoE 272 Argon	0.28	0.32	0.56	57	N, NC
1" Insulating Glass LoE 366 Air	0.31	0.22	0.50	54	NC, SC, S
1" Insulating Glass LoE 366 Argon	0.27	0.22	0.50	57	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.20	0.28	0.45	67	N, NC, SC
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.18	0.28	0.45	70	N, NC, SC
1" Tri-Pane LoE 179 Argon LoE 179	0.22	0.45	0.55	66	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.19	0.45	0.55	68	N

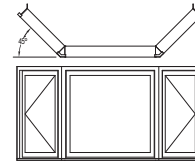
WOOD ULTIMATE CASEMENT BAY

30° WOOD ULTIMATE CASEMENT BAY WITH PICTURE CENTER UNIT



UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-16-16	4-0 13/32 (1229)	9 3/8" (239)
16-20-16	4-4 13/32 (1330)	9 3/8" (239)
16-24-16	4-8 13/32 (1432)	9 3/8" (239)
16-28-16	5-0 13/32 (1533)	9 3/8" (239)
16-32-16	5-4 13/32 (1635)	9 3/8" (239)
16-36-16	5-8 13/32 (1737)	9 3/8" (239)
16-40-16	6-0 13/32 (1838)	9 3/8" (239)
16-48-16	6-8 13/32 (2041)	9 3/8" (239)
16-56-16	7-4 13/32 (2245)	9 3/8" (239)
16-60-16	7-8 13/32 (2346)	9 3/8" (239)
16-64-16	8-0 13/32 (2448)	9 3/8" (239)
16-72-16	8-8 13/32 (2651)	9 3/8" (239)
<hr/>		
20-20-20	4-11 9/32 (1506)	11 3/8" (289)
20-24-20	5-3 9/32 (1608)	11 3/8" (289)
20-28-20	5-7 9/32 (1709)	11 3/8" (289)
20-32-20	5-11 9/32 (1811)	11 3/8" (289)
20-36-20	6-3 9/32 (1913)	11 3/8" (289)
20-40-20	6-7 9/32 (2014)	11 3/8" (289)
20-48-20	7-3 9/32 (2217)	11 3/8" (289)
20-56-20	7-11 9/32 (2421)	11 3/8" (289)
20-60-20	8-3 9/32 (2522)	11 3/8" (289)
20-64-20	8-7 9/32 (2624)	11 3/8" (289)
20-72-20	9-3 9/32 (2827)	11 3/8" (289)
<hr/>		
24-24-24	5-10 1/4 (1784)	13 3/8" (340)
24-28-24	6-2 1/4 (1885)	13 3/8" (340)
24-32-24	6-6 1/4 (1987)	13 3/8" (340)
24-36-24	6-10 1/4 (2089)	13 3/8" (340)
24-40-24	7-2 1/4 (2190)	13 3/8" (340)
24-48-24	7-10 1/4 (2393)	13 3/8" (340)
24-56-24	8-6 1/4 (2597)	13 3/8" (340)
24-60-24	8-10 1/4 (2698)	13 3/8" (340)
24-64-24	9-2 1/4 (2800)	13 3/8" (340)
24-72-24	9-10 1/4 (3003)	13 3/8" (340)
<hr/>		
28-28-28	6-9 5/32 (2061)	15 3/8" (391)
28-32-28	7-1 5/32 (2163)	15 3/8" (391)
28-36-28	7-5 5/32 (2265)	15 3/8" (391)
28-40-28	7-9 5/32 (2366)	15 3/8" (391)
28-48-28	8-5 5/32 (2569)	15 3/8" (391)
28-56-28	9-1 5/32 (2773)	15 3/8" (391)
28-60-28	9-5 5/32 (2874)	15 3/8" (391)
28-64-28	9-9 5/32 (2976)	15 3/8" (391)
28-72-28	10-5 5/32 (3179)	15 3/8" (391)
<hr/>		
32-32-32	7-8 1/8 (2339)	17 3/8" (442)
32-36-32	8-0 1/8 (2441)	17 3/8" (442)
32-40-32	8-4 1/8 (2542)	17 3/8" (442)
32-48-32	9-0 1/8 (2745)	17 3/8" (442)
32-56-32	9-8 1/8 (2949)	17 3/8" (442)
32-60-32	10-0 1/8 (3050)	17 3/8" (442)
32-64-32	10-4 1/8 (3152)	17 3/8" (442)
32-72-32	11-0 1/8 (3355)	17 3/8" (442)
<hr/>		
36-36-36	8-7 (2617)	19 3/8" (493)
36-40-36	8-11 (2718)	19 3/8" (493)
36-48-36	9-7 (2921)	19 3/8" (493)
36-56-36	10-3 (3125)	19 3/8" (493)
36-60-36	10-7 (3226)	19 3/8" (493)
36-64-36	10-11 (3328)	19 3/8" (493)
36-72-36	11-7 (3531)	19 3/8" (493)

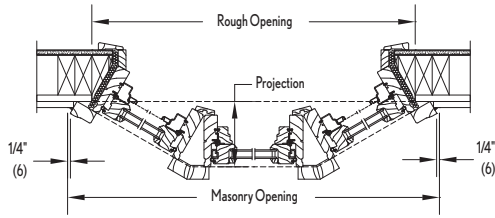
45° WOOD ULTIMATE CASEMENT BAY WITH PICTURE CENTER UNIT



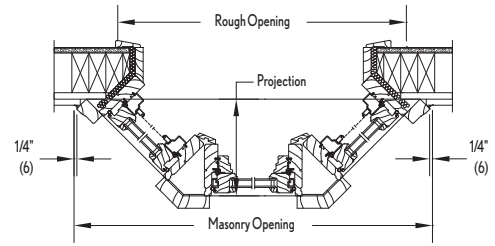
UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-16-16	3-7 7/8 (1114)	13 3/4" (349)
16-20-16	3-11 7/8 (1216)	13 3/4" (349)
16-24-16	4-3 7/8 (1318)	13 3/4" (349)
16-28-16	4-7 7/8 (1419)	13 3/4" (349)
16-32-16	4-11 7/8 (1521)	13 3/4" (349)
16-36-16	5-3 7/8 (1622)	13 3/4" (349)
16-40-16	5-7 7/8 (1724)	13 3/4" (349)
16-48-16	6-3 7/8 (1927)	13 3/4" (349)
16-56-16	6-11 7/8 (2130)	13 3/4" (349)
16-60-16	7-3 7/8 (2232)	13 3/4" (349)
16-64-16	7-7 7/8 (2334)	13 3/4" (349)
16-72-16	8-3 7/8 (2537)	13 3/4" (349)
<hr/>		
20-20-20	4-5 17/32 (1360)	16 9/16" (421)
20-24-20	4-9 17/32 (1461)	16 9/16" (421)
20-28-20	5-1 17/32 (1563)	16 9/16" (421)
20-32-20	5-5 17/32 (1664)	16 9/16" (421)
20-36-20	5-9 17/32 (1766)	16 9/16" (421)
20-40-20	6-1 17/32 (1868)	16 9/16" (421)
20-48-20	6-9 17/32 (2071)	16 9/16" (421)
20-56-20	7-5 17/32 (2274)	16 9/16" (421)
20-60-20	7-9 17/32 (2376)	16 9/16" (421)
20-64-20	8-1 17/32 (2477)	16 9/16" (421)
20-72-20	8-9 17/32 (2680)	16 9/16" (421)
<hr/>		
24-24-24	5-3 3/16 (1605)	19 13/32" (493)
24-28-24	5-7 3/16 (1706)	19 13/32" (493)
24-32-24	5-11 3/16 (1808)	19 13/32" (493)
24-36-24	6-3 3/16 (1910)	19 13/32" (493)
24-40-24	6-7 3/16 (2011)	19 13/32" (493)
24-48-24	7-3 3/16 (2214)	19 13/32" (493)
24-56-24	7-11 3/16 (2418)	19 13/32" (493)
24-60-24	8-3 3/16 (2519)	19 13/32" (493)
24-64-24	8-7 3/16 (2621)	19 13/32" (493)
24-72-24	9-3 3/16 (2824)	19 13/32" (493)
<hr/>		
28-28-28	6-0 27/32 (1850)	22 1/4" (565)
28-32-28	6-4 27/32 (1952)	22 1/4" (565)
28-36-28	6-8 27/32 (2053)	22 1/4" (565)
28-40-28	7-0 27/32 (2155)	22 1/4" (565)
28-48-28	7-8 27/32 (2358)	22 1/4" (565)
28-56-28	8-4 27/32 (2561)	22 1/4" (565)
28-60-28	8-8 27/32 (2663)	22 1/4" (565)
28-64-28	9-0 27/32 (2765)	22 1/4" (565)
28-72-28	9-8 27/32 (2968)	22 1/4" (565)
<hr/>		
32-32-32	6-10 1/2 (2095)	25 1/16" (637)
32-36-32	7-2 1/2 (2197)	25 1/16" (637)
32-40-32	7-6 1/2 (2299)	25 1/16" (637)
32-48-32	8-2 1/2 (2502)	25 1/16" (637)
32-56-32	8-10 1/2 (2705)	25 1/16" (637)
32-60-32	9-2 1/2 (2807)	25 1/16" (637)
32-64-32	9-6 1/2 (2908)	25 1/16" (637)
32-72-32	10-2 1/2 (3111)	25 1/16" (637)
<hr/>		
36-36-36	7-8 5/32 (2341)	27 29/32" (709)
36-40-36	8-0 5/32 (2442)	27 29/32" (709)
36-48-36	8-8 5/32 (2646)	27 29/32" (709)
36-56-36	9-4 5/32 (2849)	27 29/32" (709)
36-60-36	9-8 5/32 (2950)	27 29/32" (709)
36-64-36	10-0 5/32 (3052)	27 29/32" (709)
36-72-36	10-8 5/32 (3255)	27 29/32" (709)

WOOD ULTIMATE CASEMENT BAY

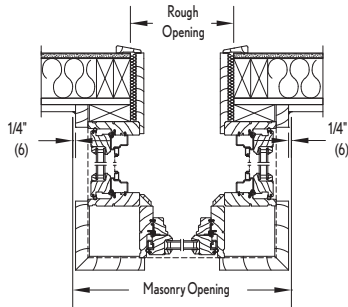
CONSTRUCTION DETAILS



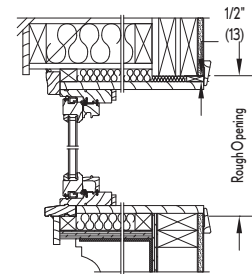
30° WOOD ULTIMATE CASEMENT BAY
WITH STATIONARY CENTER JAMB



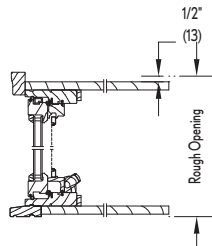
45° WOOD ULTIMATE CASEMENT BAY
WITH STATIONARY CENTER JAMB



90° WOOD ULTIMATE CASEMENT BAY
WITH STATIONARY CENTER UNIT JAMB



WOOD ULTIMATE CASEMENT
STATIONARY HEAD JAMB AND SILL



WOOD ULTIMATE CASEMENT
OPERATOR HEAD JAMB AND SILL

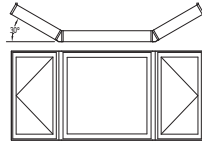
ROUGH OPENING HEIGHTS

UNIT NO. (HEIGHT)	ROUGH OPENING (HEIGHT)
24	2-1/4 (641)
32	2-9/4 (845)
36	3-1/4 (946)
40	3-5/4 (1048)
48	4-1/4 (1251)
56	4-9/4 (1454)
60	5-1/4 (1556)
64	5-5/4 (1657)
72	6-1/4 (1861)

Above dimensions include head and seat boards.
If no head board, deduct 11/16" (17) in rough opening height.

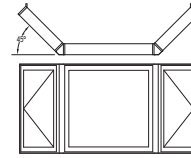
CLAD ULTIMATE CASEMENT BAY

30° CLAD ULTIMATE CASEMENT BAY WITH PICTURE CENTER UNIT



UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-16-16	4-0 21/32 (1236)	8 5/8" (219)
16-20-16	4-4 21/32 (1337)	8 5/8" (219)
16-24-16	4-8 21/32 (1439)	8 5/8" (219)
16-28-16	5-0 21/32 (1541)	8 5/8" (219)
16-32-16	5-4 21/32 (1642)	8 5/8" (219)
16-36-16	5-8 21/32 (1744)	8 5/8" (219)
16-40-16	6-0 21/32 (1845)	8 5/8" (219)
16-48-16	6-8 21/32 (2049)	8 5/8" (219)
16-56-16	7-4 21/32 (2252)	8 5/8" (219)
16-60-16	7-8 21/32 (2353)	8 5/8" (219)
16-64-16	8-0 21/32 (2455)	8 5/8" (219)
16-72-16	8-8 21/32 (2658)	8 5/8" (219)
20-20-20	4-11 19/32 (1513)	10 5/8" (270)
20-24-20	5-3 19/32 (1615)	10 5/8" (270)
20-28-20	5-7 19/32 (1716)	10 5/8" (270)
20-32-20	5-11 19/32 (1818)	10 5/8" (270)
20-36-20	6-3 19/32 (1920)	10 5/8" (270)
20-40-20	6-7 19/32 (2021)	10 5/8" (270)
20-48-20	7-3 19/32 (2224)	10 5/8" (270)
20-56-20	7-11 19/32 (2428)	10 5/8" (270)
20-60-20	8-3 19/32 (2529)	10 5/8" (270)
20-64-20	8-7 19/32 (2631)	10 5/8" (270)
20-72-20	9-3 19/32 (2834)	10 5/8" (270)
24-24-24	5-10 1/2 (1791)	12 5/8" (320)
24-28-24	6-2 1/2 (1892)	12 5/8" (320)
24-32-24	6-6 1/2 (1994)	12 5/8" (320)
24-36-24	6-10 1/2 (2096)	12 5/8" (320)
24-40-24	7-2 1/2 (2197)	12 5/8" (320)
24-48-24	7-10 1/2 (2400)	12 5/8" (320)
24-56-24	8-6 1/2 (2604)	12 5/8" (320)
24-60-24	8-10 1/2 (2705)	12 5/8" (320)
24-64-24	9-2 1/2 (2807)	12 5/8" (320)
24-72-24	9-10 1/2 (3010)	12 5/8" (320)
28-28-28	6-9 7/16 (2068)	14 5/8" (371)
28-32-28	7-1 7/16 (2170)	14 5/8" (371)
28-36-28	7-5 7/16 (2272)	14 5/8" (371)
28-40-28	7-9 7/16 (2373)	14 5/8" (371)
28-48-28	8-5 7/16 (2576)	14 5/8" (371)
28-56-28	9-1 7/16 (2780)	14 5/8" (371)
28-60-28	9-5 7/16 (2881)	14 5/8" (371)
28-64-28	9-9 7/16 (2983)	14 5/8" (371)
28-72-28	10-5 7/16 (3186)	14 5/8" (371)
32-32-32	7-8 3/8 (2346)	16 5/8" (422)
32-36-32	8-0 3/8 (2448)	16 5/8" (422)
32-40-32	8-4 3/8 (2549)	16 5/8" (422)
32-48-32	9-0 3/8 (2752)	16 5/8" (422)
32-56-32	9-8 3/8 (2956)	16 5/8" (422)
32-60-32	10-0 3/8 (3057)	16 5/8" (422)
32-64-32	10-4 3/8 (3159)	16 5/8" (422)
32-72-32	11-0 3/8 (3362)	16 5/8" (422)
36-36-36	8-7 5/16 (2624)	18 5/8" (473)
36-40-36	8-11 5/16 (2725)	18 5/8" (473)
36-48-36	9-7 5/16 (2928)	18 5/8" (473)
36-56-36	10-3 5/16 (3132)	18 5/8" (473)
36-60-36	10-7 5/16 (3233)	18 5/8" (473)
36-64-36	10-11 5/16 (3335)	18 5/8" (473)
36-72-36	11-7 5/16 (3538)	18 5/8" (473)

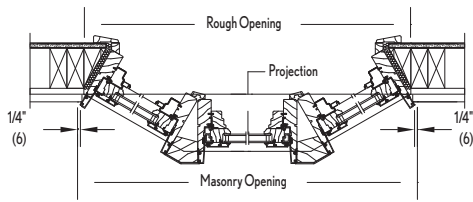
45° CLAD ULTIMATE CASEMENT BAY WITH PICTURE CENTER UNIT



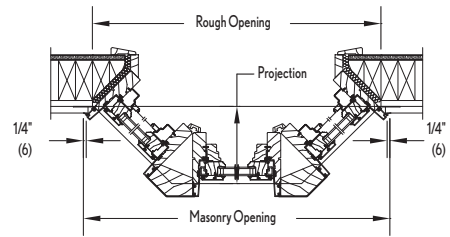
UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-16-16	3-9 11/32 (1151)	12 21/32" (321)
16-20-16	4-1 11/32 (1253)	12 21/32" (321)
16-24-16	4-5 11/32 (1355)	12 21/32" (321)
16-28-16	4-9 11/32 (1456)	12 21/32" (321)
16-32-16	5-1 11/32 (1558)	12 21/32" (321)
16-36-16	5-5 11/32 (1659)	12 21/32" (321)
16-40-16	5-9 11/32 (1761)	12 21/32" (321)
16-48-16	6-5 11/32 (1964)	12 21/32" (321)
16-56-16	7-1 11/32 (2167)	12 21/32" (321)
16-60-16	7-5 11/32 (2269)	12 21/32" (321)
16-64-16	7-9 11/32 (2371)	12 21/32" (321)
16-72-16	8-5 11/32 (2574)	12 21/32" (321)
20-20-20	4-7 (1397)	15 1/2" (393)
20-24-20	4-11 (1498)	15 1/2" (393)
20-28-20	5-3 (1600)	15 1/2" (393)
20-32-20	5-7 (1701)	15 1/2" (393)
20-36-20	5-11 (1803)	15 1/2" (393)
20-40-20	6-3 (1905)	15 1/2" (393)
20-48-20	6-11 (2108)	15 1/2" (393)
20-56-20	7-7 (2311)	15 1/2" (393)
20-60-20	7-11 (2413)	15 1/2" (393)
20-64-20	8-3 (2514)	15 1/2" (393)
20-72-20	8-11 (2717)	15 1/2" (393)
24-24-24	5-4 21/32 (1642)	18 5/16" (465)
24-28-24	5-8 21/32 (1744)	18 5/16" (465)
24-32-24	6-0 21/32 (1845)	18 5/16" (465)
24-36-24	6-4 21/32 (1947)	18 5/16" (465)
24-40-24	6-8 21/32 (2048)	18 5/16" (465)
24-48-24	7-4 21/32 (2252)	18 5/16" (465)
24-56-24	8-0 21/32 (2455)	18 5/16" (465)
24-60-24	8-4 21/32 (2556)	18 5/16" (465)
24-64-24	8-8 21/32 (2658)	18 5/16" (465)
24-72-24	9-4 21/32 (2861)	18 5/16" (465)
28-28-28	6-2 5/16 (1887)	21 1/8" (537)
28-32-28	6-6 5/16 (1989)	21 1/8" (537)
28-36-28	6-10 5/16 (2090)	21 1/8" (537)
28-40-28	7-2 5/16 (2192)	21 1/8" (537)
28-48-28	7-10 5/16 (2395)	21 1/8" (537)
28-56-28	8-6 5/16 (2598)	21 1/8" (537)
28-60-28	8-10 5/16 (2700)	21 1/8" (537)
28-64-28	9-2 5/16 (2802)	21 1/8" (537)
28-72-28	9-10 5/16 (3005)	21 1/8" (537)
32-32-32	6-11 31/32 (2133)	23 31/32" (609)
32-36-32	7-3 31/32 (2234)	23 31/32" (609)
32-40-32	7-7 31/32 (2336)	23 31/32" (609)
32-48-32	8-3 31/32 (2539)	23 31/32" (609)
32-56-32	8-11 31/32 (2742)	23 31/32" (609)
32-60-32	9-3 31/32 (2844)	23 31/32" (609)
32-64-32	9-7 31/32 (2945)	23 31/32" (609)
32-72-32	10-3 31/32 (3149)	23 31/32" (609)
36-36-36	7-9 5/8 (2378)	26 13/16" (681)
36-40-36	8-1 5/8 (2479)	26 13/16" (681)
36-48-36	8-9 5/8 (2683)	26 13/16" (681)
36-56-36	9-5 5/8 (2886)	26 13/16" (681)
36-60-36	9-9 5/8 (2987)	26 13/16" (681)
36-64-36	10-1 5/8 (3089)	26 13/16" (681)
36-72-36	10-9 5/8 (3292)	26 13/16" (681)

CLAD ULTIMATE CASEMENT BAY

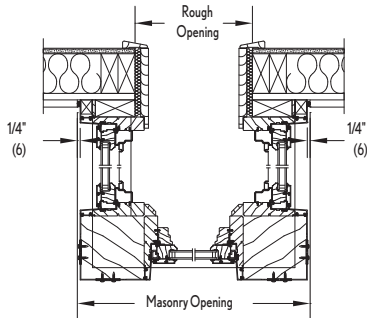
CONSTRUCTION DETAILS



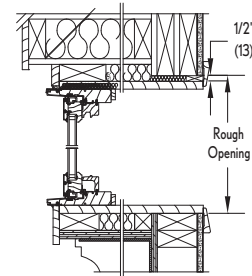
30° CLAD ULTIMATE CASEMENT BAY
WITH STATIONARY CENTER JAMB



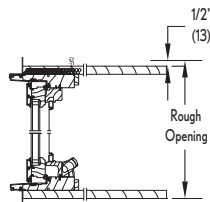
45° CLAD ULTIMATE CASEMENT BAY
WITH STATIONARY CENTER JAMB



90° CLAD ULTIMATE CASEMENT BAY
WITH STATIONARY CENTER UNIT JAMB



CLAD ULTIMATE CASEMENT
STATIONARY HEAD JAMB AND SILL



CLAD ULTIMATE CASEMENT
OPERATOR HEAD JAMB AND SILL

ROUGH OPENING HEIGHTS

UNIT NO. (HEIGHT)	ROUGH OPENING (HEIGHT)
24	2-1 (635)
32	2-9 (838)
36	3-1 (940)
40	3-5 (1041)
48	4-1 (1245)
56	4-9 (1448)
60	5-1 (1549)
64	5-5 (1651)
72	6-1 (1854)

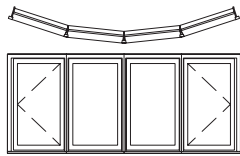
Above dimensions include head and seat boards.
If no head board, deduct 11/16" (17) in rough opening height.

NOTES:

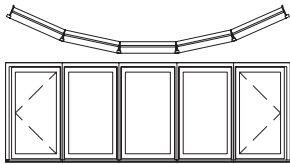
Please contact your local Marvin representative for masonry openings that include casings and subsills.

WOOD ULTIMATE CASEMENT BOW

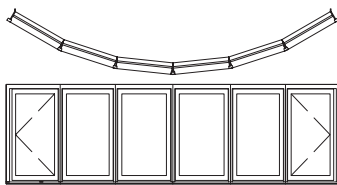
CONSTRUCTION DETAILS WOOD ULTIMATE CASEMENT BOW



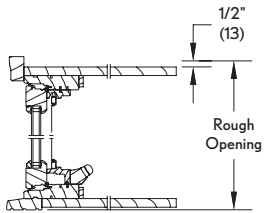
WOOD ULTIMATE CASEMENT
4-WIDE BOW



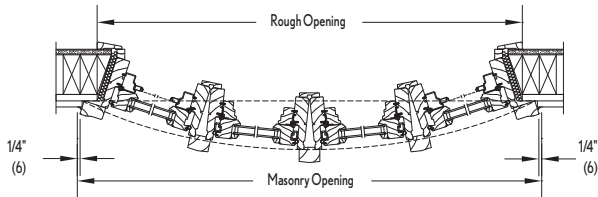
WOOD ULTIMATE CASEMENT
5-WIDE BOW



WOOD ULTIMATE CASEMENT
6-WIDE BOW



WOOD ULTIMATE CASEMENT
OPERATOR HEAD JAMB AND SILL



WOOD ULTIMATE CASEMENT JAMB

UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-4W	5-5 3/4 (1670)	7 11/32" (187)
16-5W	6-8 11/16 (2049)	10 7/8" (276)
16-6W	7-10 5/8 (2404)	16 1/32" (407)
20-4W	6-9 5/16 (2066)	9" (229)
20-5W	8-3 13/16 (2535)	13 5/16" (338)
20-6W	9-9 1/8 (2975)	19 11/16" (500)
24-4W	8-0 7/8 (2461)	10 21/32" (270)
24-5W	9-10 15/16 (3021)	15 25/32" (401)
24-6W	11-7 5/8 (3546)	23 11/32" (593)
28-4W	9-4 7/16 (2856)	12 5/16" (313)
28-5W	11-6 1/16 (3507)	18 1/4" (463)
28-6W	13-6 1/8 (4118)	27" (686)
32-4W	10-8 (3252)	13 31/32" (355)
32-5W	13-17/32 (3993)	20 11/16" (526)
36-4W	11-11 19/32 (3647)	15 5/8" (397)
36-5W	14-8 11/32 (4479)	23 5/32" (588)

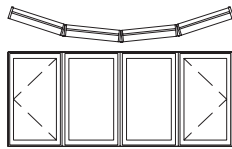
ROUGH OPENING HEIGHTS

UNIT NO. (HEIGHT)	ROUGH OPENING (HEIGHT)
24	2-1 1/4 (641)
32	2-9 1/4 (845)
36	3-1 1/4 (946)
40	3-5 1/4 (1048)
48	4-1 1/4 (1251)
56	4-9 1/4 (1454)
60	5-1 1/4 (1556)
64	5-5 1/4 (1657)
72	6-1 1/4 (1861)

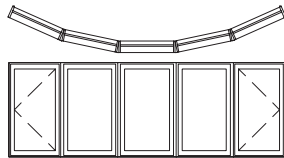
Above dimensions include head and seat boards.
If no head/seat board, deduct 11/16" (17) in rough opening height.

CLAD ULTIMATE CASEMENT BOW

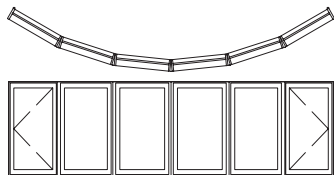
CONSTRUCTION DETAILS CLAD ULTIMATE CASEMENT BOW



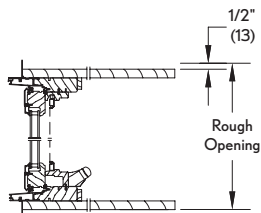
CLAD ULTIMATE CASEMENT
4-WIDE BOW



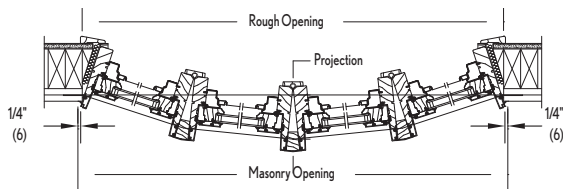
CLAD ULTIMATE CASEMENT
5-WIDE BOW



CLAD ULTIMATE CASEMENT
6-WIDE BOW



CLAD ULTIMATE CASEMENT
OPERATOR HEAD JAMB AND SILL



CLAD ULTIMATE CASEMENT JAMB

UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-4W	5-5 7/16 (1662)	6 7/8" (174)
16-5W	6-8 5/8 (2048)	10 1/4" (260)
16-6W	7-10 29/32 (2411)	15 1/4" (387)
20-4W	6-9 (2058)	8 1/2" (216)
20-5W	8-3 3/4 (2534)	12 11/16" (322)
20-6W	9-9 13/32 (2982)	18 29/32" (480)
24-4W	8-0 9/16 (2453)	10 3/16" (258)
24-5W	9-10 7/8 (3020)	15 1/8" (385)
24-6W	11-7 7/8 (3553)	22 9/16" (573)
28-4W	9-4 1/8 (2849)	11 13/16" (300)
28-5W	11-6 1/64 (3506)	17 5/8" (447)
28-6W	13-6 3/8 (4124)	26 7/32" (666)
32-4W	10-7 23/32 (3244)	13 1/2" (342)
32-5W	13-1 5/32 (3992)	20 1/16" (510)
36-4W	11-11 9/32 (3639)	15 1/8" (384)
36-5W	14-8 9/32 (4578)	22 1/2" (572)

ROUGH OPENING HEIGHTS


















































































UNIT NO. (HEIGHT)	ROUGH OPENING (HEIGHT)
24	2-1 (635)
32	2-9 (838)
36	3-1 (940)
40	3-5 (1041)
48	4-1 (1245)
56	4-9 (1448)
60	5-1 (1549)
64	5-5 (1651)
72	6-1 (1859)

Above dimensions include head and seat boards.
If no head/seat board, deduct 11/16" (17) in rough opening height.

NOTES:

Please contact your local Marvin representative for masonry openings that include casings and subsills.

WOOD ULTIMATE DOUBLE HUNG

Mas. Opg. (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-4 1/2 (1029)	3-8 1/2 (1130)	4-0 1/2 (1232)
Rgh. Opg. (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Frame Size (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	26" (660)	28" (711)	30" (762)	32" (813)	36" (914)	40" (1016)
2-0 9/16 (878) 2-9 1/2 (851) 2-9 (838) 12" (305)	 WUDH1612	 WUDH2012	 WUDH2412	 WUDH2612	 WUDH2812	 WUDH3012	 WUDH3212	 WUDH3612	 WUDH4012
3-2 9/16 (980) 3-1 1/2 (953) 3-1 (940) 14" (356)	 WUDH1614	 WUDH2014	 WUDH2414	 WUDH2614	 WUDH2814	 WUDH3014	 WUDH3214	 WUDH3614	 WUDH4014
3-6 9/16 (1081) 3-5 1/2 (1054) 3-5 (1041) 16" (406)	 WUDH1616	 WUDH2016	 WUDH2416	 WUDH2616	 WUDH2816	 WUDH3016	 WUDH3216	 WUDH3616	 WUDH4016
3-10 9/16 (1183) 3-9 1/2 (1156) 3-9 (1143) 18" (457)	 WUDH1618	 WUDH2018	 WUDH2418	 WUDH2618	 WUDH2818	 WUDH3018	 WUDH3218	 WUDH3618	 WUDH4018
4-2 9/16 (1284) 4-1 1/2 (1257) 4-1 (1245) 20" (508)	 WUDH1620	 WUDH2020	 WUDH2420	 WUDH2620	 WUDH2820	 WUDH3020	 WUDH3220	 WUDH3620	 WUDH4020
4-6 9/16 (1386) 4-5 1/2 (1359) 4-5 (1346) 22" (559)	 WUDH1622	 WUDH2022	 WUDH2422	 WUDH2622	 WUDH2822	 WUDH3022	 WUDH3222	 WUDH3622	 WUDH4022
4-10 9/16 (1488) 4-9 1/2 (1461) 4-9 (1448) 24" (610)	 WUDH1624	 WUDH2024	 WUDH2424	 WUDH2624	 WUDH2824	 WUDH3024	 WUDH3224	 WUDH3624	 WUDH4024
5-2 9/16 (1589) 5-1 1/2 (1562) 5-1 (1549) 26" (660)	 WUDH1626	 WUDH2026	 WUDH2426	 WUDH2626	 WUDH2826	 WUDH3026	 WUDH3226*	 WUDH3626*	 WUDH4026*
5-6 9/16 (1691) 5-5 1/2 (1664) 5-5 (1651) 28" (711)	 WUDH1628	 WUDH2028	 WUDH2428	 WUDH2628	 WUDH2828	 WUDH3028*	 WUDH3228*	 WUDH3628*	 WUDH4028*

MULTIPLE ASSEMBLY CONVERSIONS

ROUGH OPENING		MASONRY OPENING WITH BMC	
Width	Height	Width	Height
Add all frame sizes plus 1" (25)	Add frame sizes plus 1/2" (13)	Add all frame sizes plus 3 1/8" (79)	Add frame sizes plus 1 9/16" (39)






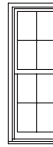



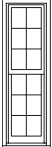
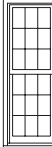






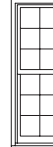
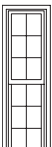
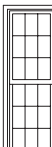



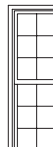


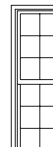

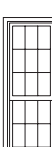

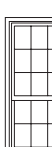





NOTES:

Lite patterns shown are 3/4" (19) grilles or 7/8" (22) SDL. Lite patterns for 1 1/8" (29) may vary.

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

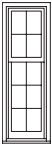


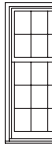

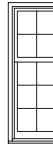


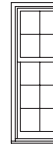
WOOD ULTIMATE DOUBLE HUNG

Mas. Opp. (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-4 1/2 (1029)	3-8 1/2 (1130)	4-0 1/2 (1232)
Rgh. Opp. (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Frame Size (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	26" (660)	28" (711)	30" (762)	32" (813)	36" (914)	40" (1016)

5-10 9/16 (1792) 5-9 1/2 (1765) 5-9 (1753) 30" (762)										
	WUDH1630	WUDH2030	WUDH2430	WUDH2630	WUDH2830*	WUDH3030*	WUDH3230*	WUDH3630*	WUDH4030*	
	6-2 9/16 (1894) 6-1 1/2 (1867) 6-1 (1854) 32" (813)									
		WUDH1632	WUDH2032	WUDH2432	WUDH2632*	WUDH2832*	WUDH3032*	WUDH3232*	WUDH3632*	WUDH4032*
6-6 9/16 (1996) 6-5 1/2 (1969) 6-5 (1956) 34" (864)										
	WUDH1634	WUDH2034	WUDH2434*	WUDH2634*	WUDH2834*	WUDH3034*	WUDH3234*	WUDH3634*	WUDH4034*	
6-10 9/16 (2097) 6-9 1/2 (2070) 6-9 (2057) 36" (914)										
	WUDH1636	WUDH2036	WUDH2436*	WUDH2636*	WUDH2836*	WUDH3036*	WUDH3236*	WUDH3636*	WUDH4036*	

COTTAGE STYLE

Mas. Opp. (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-4 1/2 (1029)	3-8 1/2 (1130)	4-0 1/2 (1232)
Rgh. Opp. (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Frame Size (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	26" (660)	28" (711)	30" (762)	32" (813)	36" (914)	40" (1016)

5-10 9/16 (1792) 5-9 1/2 (1765) 5-9 (1753) 24" (610) / 36" (914)									
	WUDH1624/36	WUDH2024/36	WUDH2424/36	WUDH2624/36	WUDH2824/36	WUDH3024/36	WUDH3224/36	WUDH3624/36	WUDH4024/36

WOOD ULTIMATE DOUBLE HUNG STORM COMBINATIONS

Measurement Conversion	Width	Height
Rough Opening to OM	-2 1/2" (64)	-2 3/16" (56)
Glass* to OM	+3 7/8" (98)	(Glass height x2) PLUS 7 5/16" (186)

*Glass size measurement conversions are valid for one lite units only.

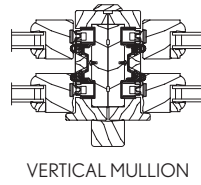
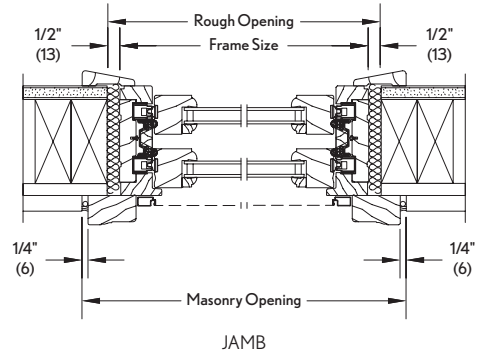
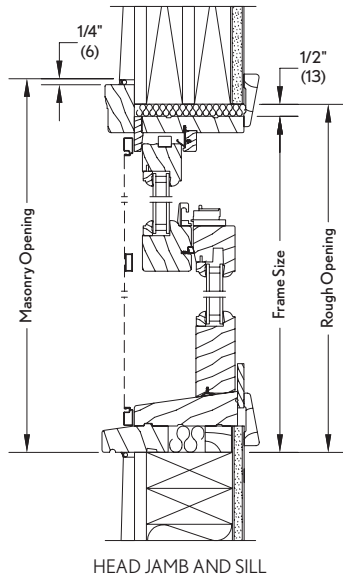
NOTES:

Lite patterns shown are 3/4" (19) grilles, 7/8" (22) SDL, or SG ADL. Lite patterns for 1 1/8" (29) grilles, SDL, or IG ADL may vary.

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

WOOD ULTIMATE DOUBLE HUNG

CONSTRUCTION DETAILS



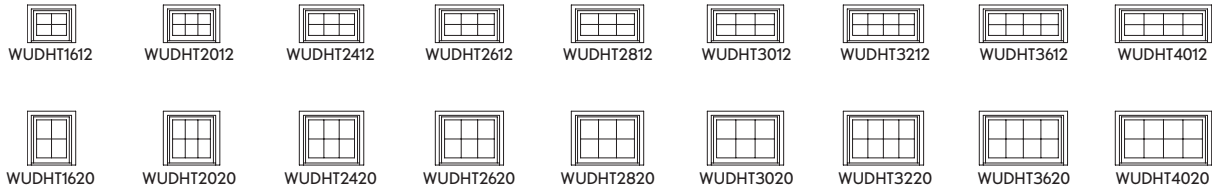
WOOD ULTIMATE DOUBLE HUNG / SINGLE HUNG

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.45	0.55	0.58	43	
11/16" Insulating Glass LoE 272 Air	0.32	0.30	0.51	53	NC, SC
11/16" Insulating Glass LoE 272 Argon	0.29	0.29	0.51	56	N, NC, SC
11/16" Insulating Glass LoE 366 Air	0.32	0.20	0.46	53	NC, SC, S
11/16" Insulating Glass LoE 366 Argon	0.28	0.20	0.46	57	N, NC, SC, S
11/16" Insulating Glass LoE 272 Air w/Combination	0.23	0.30	0.46	65	N, NC, SC
11/16" Insulating Glass LoE 272 Argon w/Combination	0.21	0.29	0.46	67	N, NC, SC
11/16" Insulating Glass LoE 366 Air w/Combination	0.23	0.22	0.42	65	N, NC, SC, S
11/16" Insulating Glass LoE 366 Argon w/Combination	0.20	0.21	0.42	68	N, NC, SC, S
7/8" Tri-Pane LoE 272 Argon LoE 272	0.24	0.25	0.40	64	N, NC, SC, S
7/8" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.22	0.25	0.40	67	N, NC, SC, S
7/8" Tri-Pane LoE 179 Argon LoE 179	0.25	0.40	0.49	63	N, NC
7/8" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.23	0.40	0.49	66	N, NC

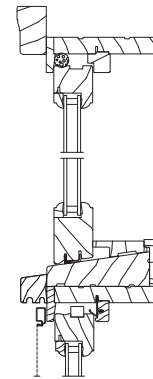
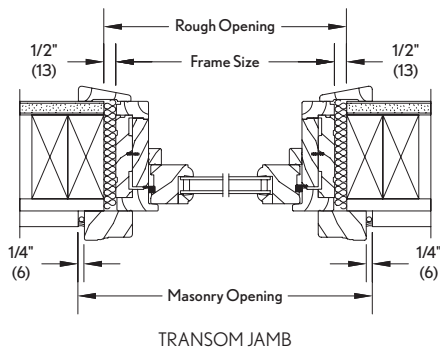
WOOD ULTIMATE DOUBLE HUNG TRANSOM UNIT

Mas. Opg. (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-4 1/2 (1029)	3-8 1/2 (1130)	4-0 1/2 (1232)
Rgh. Opg. (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Frame Size (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	26" (660)	28" (711)	30" (762)	32" (813)	36" (914)	40" (1016)

1-6 15/16 (481)
1-5 7/8 (454)
1-5 3/8 (441)
12 (305)
2-2 15/16 (684)
2-1 7/8 (657)
2-1 3/8 (645)
20 (508)



CONSTRUCTION DETAILS



TRANSOM MULLERED OVER WOOD
ULTIMATE DOUBLE HUNG

WOOD ULTIMATE DOUBLE HUNG TRANSOM


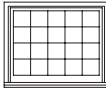
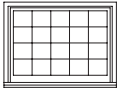
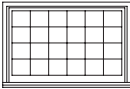
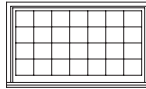

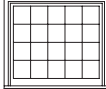
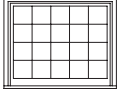
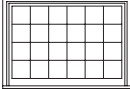
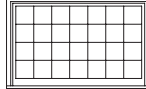

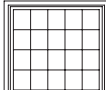
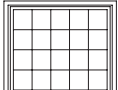
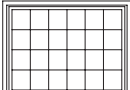
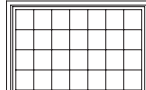

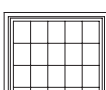
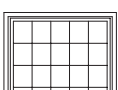
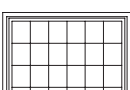
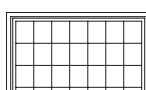


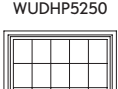










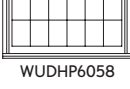

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.45	0.59	0.62	44	
11/16" Insulating Glass LoE 272 Air	0.31	0.32	0.54	55	NC
11/16" Insulating Glass LoE 272 Argon	0.28	0.31	0.54	59	N, NC
11/16" Insulating Glass LoE 366 Air	0.31	0.21	0.49	55	NC, SC, S
11/16" Insulating Glass LoE 366 Argon	0.27	0.21	0.49	59	N, NC, SC, S

NOTES:

*Lite patterns shown are 3/4" (19) grilles, 7/8" (22) SDL, or SG ADL Lite patterns for 1 1/8" (29) grilles, SDL, or IG ADL may vary.

Transom heights do not include subsill. Add 1 3/32" (28) for stand alone heights if subsill is wanted.

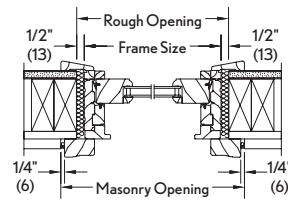
WOOD ULTIMATE DOUBLE HUNG PICTURE UNIT

Mas. Opg. (mm)	3-8 1/2 (1130)	4-4 1/2 (1334)	4-8 1/2 (1435)	5-4 1/2 (1638)	6-0 1/2 (1842)
Rgh. Opg. (mm)	3-6 3/8 (1076)	4-2 3/8 (1280)	4-6 3/8 (1381)	5-2 3/8 (1584)	5-10 3/8 (1788)
Frame Size (mm)	3-5 3/8 (1051)	4-1 3/8 (1254)	4-5 3/8 (1356)	5-1 3/8 (1559)	5-9 3/8 (1762)
Glass Size (mm)	36" (914)	44" (1118)	48" (1219)	56" (1422)	64" (1626)
3-6 9/16 (1081) 3-5 1/2 (1054) 3-5 (1041) 33 5/16" (846)	 WUDHP4038	 WUDHP4838	 WUDHP5238	 WUDHP6038	 WUDHP6838
3-10 9/16 (1183) 3-9 1/2 (1156) 3-9 (1143) 37 5/16" (948)	 WUDHP4042	 WUDHP4842	 WUDHP5242	 WUDHP6042	 WUDHP6842
4-2 9/16 (1284) 4-1 1/2 (1257) 4-1 (1245) 41 5/16" (1049)	 WUDHP4046	 WUDHP4846	 WUDHP5246	 WUDHP6046	 WUDHP6846
4-5 9/16 (1386) 4-5 1/2 (1359) 4-5 (1346) 45 5/16" (1151)	 WUDHP4050	 WUDHP4850	 WUDHP5250	 WUDHP6050	 WUDHP6850
4-10 9/16 (1488) 4-9 1/2 (1461) 4-9 (1448) 49 5/16" (1253)	 WUDHP4054	 WUDHP4854	 WUDHP5254	 WUDHP6054	 WUDHP6854
5-2 9/16 (1589) 5-1 1/2 (1562) 5-1 (1549) 53 5/16" (1354)	 WUDHP4058	 WUDHP4858	 WUDHP5258	 WUDHP6058	 WUDHP6858
5-6 9/16 (1691) 5-5 1/2 (1664) 5-5 (1651) 57 5/16" (1456)	 WUDHP4062	 WUDHP4862	 WUDHP5262	 WUDHP6062	 WUDHP6862

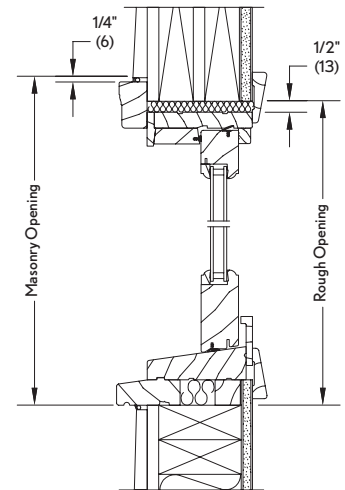
NOTES:

Lite patterns and glass sizes shown are for 1 5/8" picture units, 3/4" (19) grilles, 7/8" (22) SDL, or SG ADL. Lite patterns for 1 1/8" (29) grilles, SDL, or IG ADL may vary.

CONSTRUCTION DETAILS



1-5/8" (41) SASH PICTURE UNIT JAMB



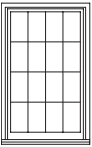
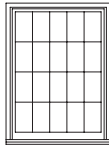
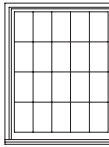
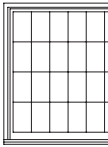
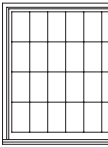
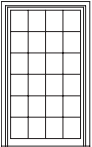
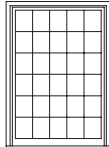
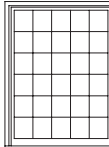
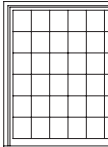
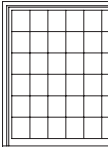
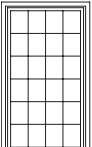
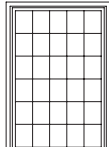
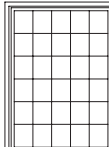
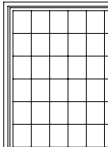
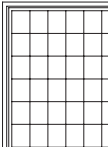
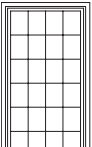
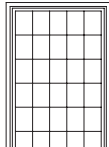
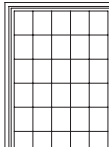
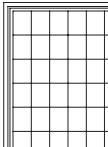
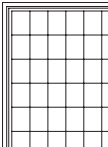
1-5/8" (41) SASH PICTURE UNIT HEAD JAMB

WOOD ULTIMATE DOUBLE HUNG 1-5/8" PICTURE UNIT

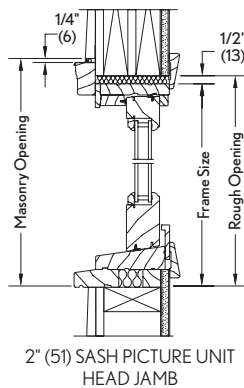
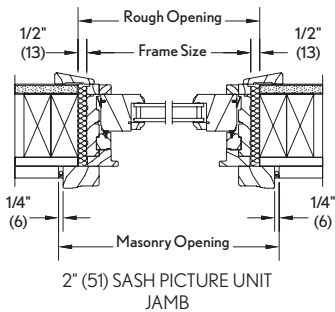
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1 1/16" Insulating Glass Air	0.45	0.57	0.61	44	
1 1/16" Insulating Glass LoE 272 Air	0.32	0.31	0.53	56	NC
1 1/16" Insulating Glass LoE 272 Argon	0.28	0.31	0.53	59	N, NC
1 1/16" Insulating Glass LoE 366 Air	0.31	0.21	0.48	56	NC, SC, S
1 1/16" Insulating Glass LoE 366 Argon	0.28	0.2	0.48	60	N, NC, SC, S

WOOD ULTIMATE DOUBLE HUNG PICTURE UNIT

Mas. Opg. (mm)	3-8 1/2 (1130)	4-4 1/2 (1334)	4-8 1/2 (1435)	5-4 1/2 (1638)	6-0 1/2 (1842)
Rgh. Opg. (mm)	3-6 3/8 (1076)	4-2 3/8 (1280)	4-6 3/8 (1381)	5-2 3/8 (1584)	5-10 3/8 (1788)
Frame Size (mm)	3-5 3/8 (1051)	4-1 3/8 (1254)	4-5 3/8 (1356)	5-1 3/8 (1559)	5-9 3/8 (1762)
Glass Size (mm)	36" (914)	44" (1118)	48" (1219)	56" (1422)	64" (1626)

5-10 9/16 (1792) 5-9 1/2 (1765) 5-9 (1753) 6-1 5/16 (1657)					
WUDHP4066	WUDHP4866	WUDHP5266	WUDHP6066	WUDHP6866	
6-2 9/16 (1894) 6-1 1/2 (1867) 6-1 (1854) 6-5 7/16 (1659)					
WUDHP4070	WUDHP4870	WUDHP5270	WUDHP6070	WUDHP6870	
6-6 9/16 (1996) 6-5 1/2 (1969) 6-5 (1956) 6-9 5/16 (1761)					
WUDHP4074	WUDHP4874	WUDHP5274	WUDHP6074	WUDHP6874	
6-10 9/16 (2097) 6-9 1/2 (2070) 6-9 (2057) 7-3 5/16 (1862)					
WUDHP4078	WUDHP4878	WUDHP5278	WUDHP6078	WUDHP6878	

CONSTRUCTION DETAILS



WOOD ULTIMATE DOUBLE HUNG 2" PICTURE UNIT

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1" Insulating Glass Air	0.43	0.55	0.6	46	
1" Insulating Glass LoE 272 Air	0.31	0.3	0.52	57	NC, SC
1" Insulating Glass LoE 272 Argon	0.27	0.3	0.52	61	N, NC, SC
1" Insulating Glass LoE 366 Air	0.3	0.2	0.47	58	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.27	0.2	0.47	61	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.2	0.26	0.42	72	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.18	0.26	0.42	72	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.22	0.42	0.51	70	N
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.19	0.42	0.51	72	N

NOTES:

Lite patterns and glass sizes shown are for 1 5/8" picture units, 3/4" (19) grilles, 7/8" (22) SDL, or SG ADL. Lite patterns for 1 1/8" (29) grilles, SDL, or IG ADL may vary.

Transom heights do not include subsill. Add 1 3/32" (28) for stand alone heights if subsill is wanted.

CLAD ULTIMATE DOUBLE HUNG

Mas. Opg. (mm)	1-9 7/8 (556)	2-1 7/8 (657)	2-5 7/8 (759)	2-7 7/8 (810)	2-9 7/8 (860)	2-11 7/8 (911)	3-1 7/8 (962)	3-5 7/8 (1064)	3-9 7/8 (1165)
Rgh. Opg. (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Frame Size (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	26" (660)	28" (711)	30" (762)	32" (813)	36" (914)	40" (1016)
2-8 5/8 (829) 2-8 7/8 (835) 2-8 3/8 (822) 12" (305)									
3-0 5/8 (930) 3-0 7/8 (937) 3-0 3/8 (924) 14" (356)									
3-4 5/8 (1032) 3-4 7/8 (1038) 3-4 3/8 (1026) 16" (406)									
3-8 5/8 (1133) 3-8 7/8 (1140) 3-8 3/8 (1127) 18" (457)									
4-0 5/8 (1235) 4-0 7/8 (1241) 4-0 3/8 (1229) 20" (508)									
4-4 5/8 (1337) 4-4 7/8 (1343) 4-4 3/8 (1330) 22" (559)									
4-8 5/8 (1438) 4-8 7/8 (1445) 4-8 3/8 (1432) 24" (610)									
5-0 5/8 (1540) 5-0 7/8 (1546) 5-0 3/8 (1534) 26" (660)									
5-4 5/8 (1641) 5-4 7/8 (1648) 5-4 3/8 (1635) 28" (711)									

MULTIPLE ASSEMBLY CONVERSIONS

ROUGH OPENING		MASONRY OPENING WITHOUT BMC	
Width	Height	Width	Height
Add all frame sizes plus 1" (25)	Add frame sizes plus 1/2" (13)	Add all frame sizes plus 1/2" (13)	Add frame sizes plus 1/4" (6)

NOTES:

Lite patterns shown are 3/4" (19) grilles or 7/8" (22) SDL Lite patterns for 11/8" (29) may vary.

Please contact your local Marvin representative for masonry openings that include casings and subsills.

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

CLAD ULTIMATE DOUBLE HUNG

Mas. Opg. (mm)	1-9 7/8 (556)	2-1 7/8 (657)	2-5 7/8 (759)	2-7 7/8 (810)	2-9 7/8 (860)	2-11 7/8 (911)	3-1 7/8 (962)	3-5 7/8 (1064)	3-9 7/8 (1165)
Rgh. Opg. (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Frame Size (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	26" (660)	28" (711)	30" (762)	32" (813)	36" (914)	40" (1016)

5-8 5/8 (1743) 5-8 7/8 (1749) 5-8 3/8 (1737) 30" (762)									
CUDH1630	CUDH2030	CUDH2430	CUDH2630	CUDH2830*	CUDH3030*	CUDH3230*	CUDH3630*	CUDH4030*	
6-0 5/8 (1845) 6-0 7/8 (1851) 6-0 3/8 (1838) 32" (813)									
CUDH1632	CUDH2032	CUDH2432	CUDH2632*	CUDH2832*	CUDH3032*	CUDH3232*	CUDH3632*	CUDH4032*	
6-4 5/8 (1946) 6-4 7/8 (1953) 6-4 3/8 (1940) 34" (864)									
CUDH1634	CUDH2034	CUDH2434*	CUDH2634*	CUDH2834*	CUDH3034*	CUDH3234*	CUDH3634*	CUDH4034*	
6-8 5/8 (2048) 6-8 7/8 (2054) 6-8 3/8 (2042) 36" (914)									
CUDH1636	CUDH2036	CUDH2436*	CUDH2636*	CUDH2836*	CUDH3036*	CUDH3236*	CUDH3636*	CUDH4036*	

COTTAGE STYLE

Mas. Opg. (mm)	1-9 7/8 (556)	2-1 7/8 (657)	2-5 7/8 (759)	2-7 7/8 (810)	2-9 7/8 (860)	2-11 7/8 (911)	3-1 7/8 (962)	3-5 7/8 (1064)	3-9 7/8 (1165)
Rgh. Opg. (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Frame Size (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	26" (660)	28" (711)	30" (762)	32" (813)	36" (914)	40" (1016)

5-8 5/8 (1743) 5-8 7/8 (1749) 5-8 3/8 (1737) 24" (610) / 36" (914)									
CUDH1624/36	CUDH2024/36	CUDH2424/36	CUDH2624/36	CUDH2824/36	CUDH3024/36	CUDH3224/36	CUDH3624/36	CUDH4024/36	

CLAD ULTIMATE DOUBLE HUNG STORM COMBINATIONS

Measurement Conversion	Width	Height
Rough Opening to OM	-3" (76)	-2 11/32" (60)
Glass* to OM	+3 3/8" (86)	(Glass height x2) PLUS 6 17/32" (166)

Conversions are applicable for Marvin Clad Ultimate Double Hung only.

NOTES:

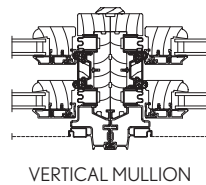
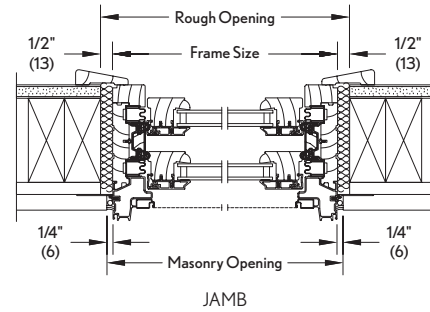
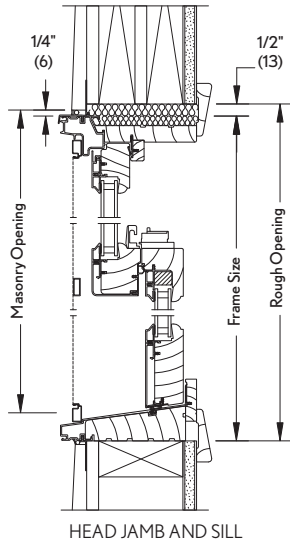
Lite patterns shown are 3/4" (19) grilles or 7/8" (22) SDL Lite patterns for 1 1/8" (29) may vary.

Please contact your local Marvin representative for masonry openings that include casings and subsills.

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

CLAD ULTIMATE DOUBLE HUNG

CONSTRUCTION DETAILS



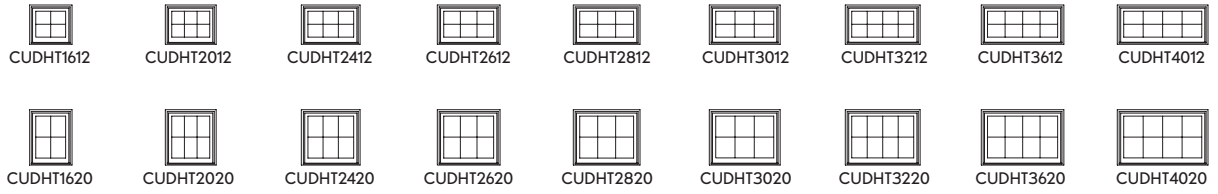
CLAD ULTIMATE DOUBLE HUNG / SINGLE HUNG

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.46	0.56	0.58	42	
11/16" Insulating Glass LoE 272 Air	0.34	0.30	0.51	52	SC
11/16" Insulating Glass LoE 272 Argon	0.30	0.30	0.51	56	N, NC, SC
11/16" Insulating Glass LoE 366 Air	0.33	0.20	0.46	53	SC, S
11/16" Insulating Glass LoE 366 Argon	0.30	0.20	0.46	56	N, NC, SC, S
7/8" Tri-Pane LoE 272 Argon LoE 272	0.25	0.25	0.41	64	N, NC, SC, S
7/8" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.23	0.25	0.41	66	N, NC, SC, S
7/8" Tri-Pane LoE 179 Argon LoE 179	0.26	0.41	0.49	63	N
7/8" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.24	0.41	0.49	65	N
11/16" Insulating Glass LoE 272 Air w/Combination	0.26	0.30	0.47	69	N, NC, SC
11/16" Insulating Glass LoE 272 Argon w/Combination	0.24	0.29	0.47	70	N, NC, SC
11/16" Insulating Glass LoE 366 Air w/Combination	0.26	0.22	0.42	69	N, NC, SC, S
11/16" Insulating Glass LoE 272 Argon w/Combination	0.24	0.24	0.36	70	N, NC, SC, S

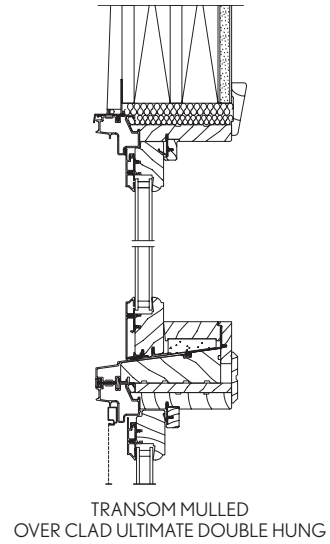
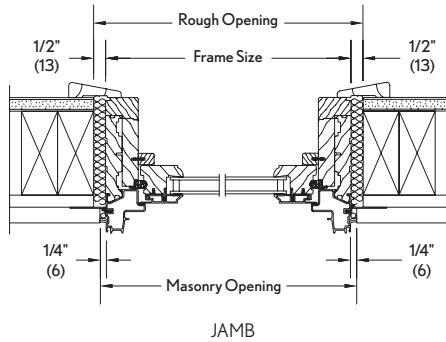
CLAD ULTIMATE DOUBLE HUNG TRANSOM UNIT

Mas. Opg. (mm)	1-9 7/8 (556)	2-1 7/8 (657)	2-5 7/8 (759)	2-7 7/8 (810)	2-9 7/8 (860)	2-11 7/8 (911)	3-1 7/8 (962)	3-5 7/8 (1064)	3-9 7/8 (1165)
Rgh. Opg. (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Frame Size (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	26" (660)	28" (711)	30" (762)	32" (813)	36" (914)	40" (1016)

1-7 15/16 (506)
 1-8 3/16 (513)
 1-7 11/16 (500)
 14" (356)
 2-3 15/16 (710)
 2-4 3/16 (716)
 2-3 11/16 (703)
 22" (559)



CONSTRUCTION DETAILS



CLAD ULTIMATE DOUBLE HUNG TRANSOM

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.46	0.60	0.63	43	
11/16" Insulating Glass LoE 272 Air	0.33	0.32	0.55	54	
11/16" Insulating Glass LoE 272 Argon	0.29	0.32	0.55	57	N, NC
11/16" Insulating Glass LoE 366 Air	0.32	0.22	0.50	54	NC, SC, S
11/16" Insulating Glass LoE 366 Argon	0.29	0.21	0.50	58	N, NC, SC, S


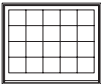
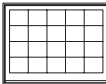
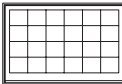
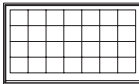

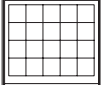
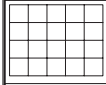
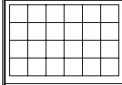
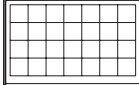

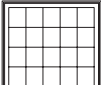
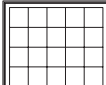
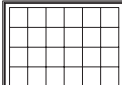
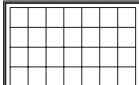

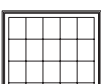
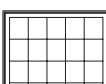
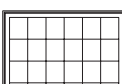
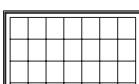


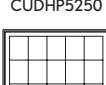
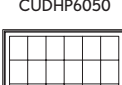


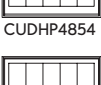
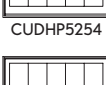
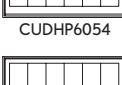


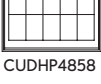
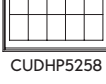
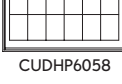
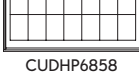

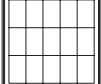

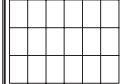
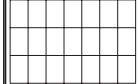
NOTES:

Lite patterns shown are 3/4" (19) grilles or 7/8" (22) SDL. Lite patterns for 1 1/8" (29) may vary.

Please contact your local Marvin representative for masonry openings that include casings and subsills.

CLAD ULTIMATE DOUBLE HUNG PICTURE UNIT

Mas. Opg. (mm)	3-5 7/8 (1064)	4-1 7/8 (1267)	4-5 7/8 (1368)	5-1 7/8 (1572)	5-9 7/8 (1775)
Rgh. Opg. (mm)	3-6 3/8 (1076)	4-2 3/8 (1280)	4-6 3/8 (1381)	5-2 3/8 (1584)	5-10 3/8 (1788)
Frame Size (mm)	3-5 3/8 (1051)	4-1 3/8 (1254)	4-5 3/8 (1356)	5-1 3/8 (1559)	5-9 3/8 (1762)
Glass Size (mm)	36" (914)	44" (1118)	48" (1219)	56" (1422)	64" (1626)

3-4 5/8 (1032) 3-4 7/8 (1038) 3-4 3/8 (1026) 33 3/8" (848)					
CUDHP4038	CUDHP4838	CUDHP5238	CUDHP6038	CUDHP6838	
3-8 5/8 (1133) 3-8 7/8 (1140) 3-8 3/8 (1127) 37 3/8" (949)					
CUDHP4042	CUDHP4842	CUDHP5242	CUDHP6042	CUDHP6842	
4-0 5/8 (1235) 4-0 7/8 (1241) 4-0 3/8 (1229) 41 3/8" (1051)					
CUDHP4046	CUDHP4846	CUDHP5246	CUDHP6046	CUDHP6846	
4-4 5/8 (1337) 4-4 7/8 (1343) 4-4 3/8 (1330) 45 3/8" (1153)					
CUDHP4050	CUDHP4850	CUDHP5250	CUDHP6050	CUDHP6850	
4-8 5/8 (1438) 4-8 7/8 (1445) 4-8 3/8 (1432) 49 3/8" (1254)					
CUDHP4054	CUDHP4854	CUDHP5254	CUDHP6054	CUDHP6854	
5-0 5/8 (1540) 5-0 7/8 (1546) 5-0 3/8 (1534) 53 3/8" (1356)					
CUDHP4058	CUDHP4858	CUDHP5258	CUDHP6058	CUDHP6858	
5-4 5/8 (1641) 5-4 7/8 (1648) 5-4 3/8 (1635) 57 3/8" (1457)					
CUDHP4062	CUDHP4862	CUDHP5262	CUDHP6062	CUDHP6862	
5-8 5/8 (1743) 5-8 7/8 (1749) 5-8 3/8 (1737) 61 3/8" (1551)					
CUDHP4066	CUDHP4866	CUDHP5266	CUDHP6066	CUDHP6866	

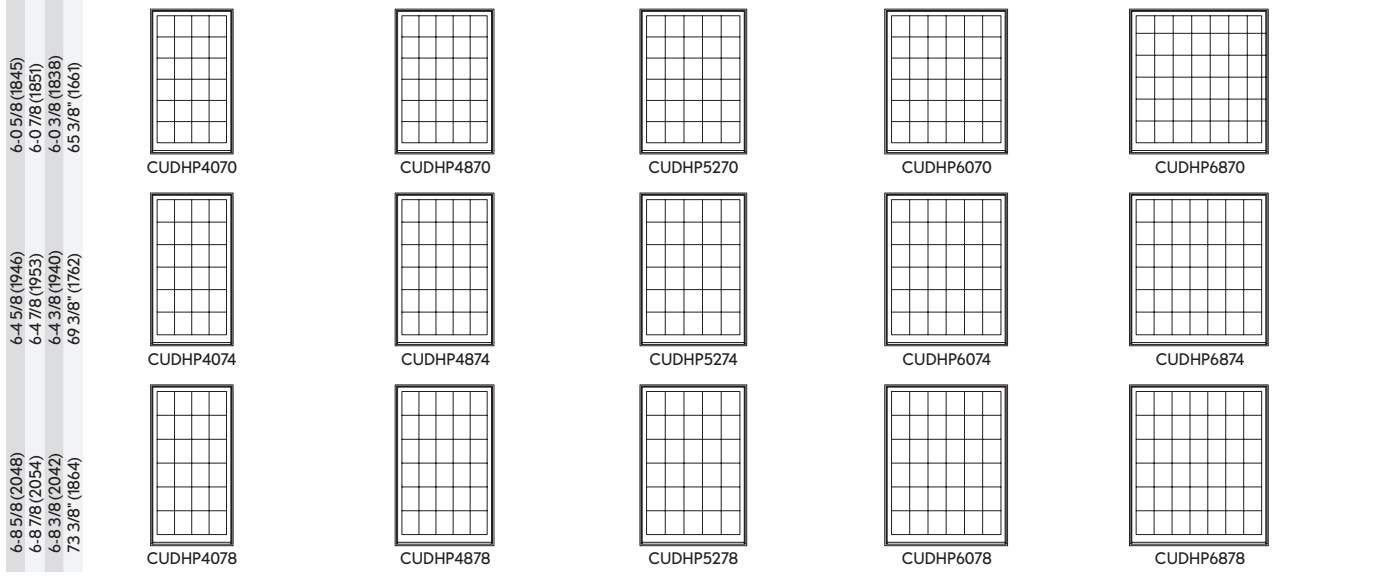
NOTES:

Lite patterns shown are 3/4" (19) grilles or 7/8" (22) SDL Lite patterns for 1 1/8" (29) may vary.

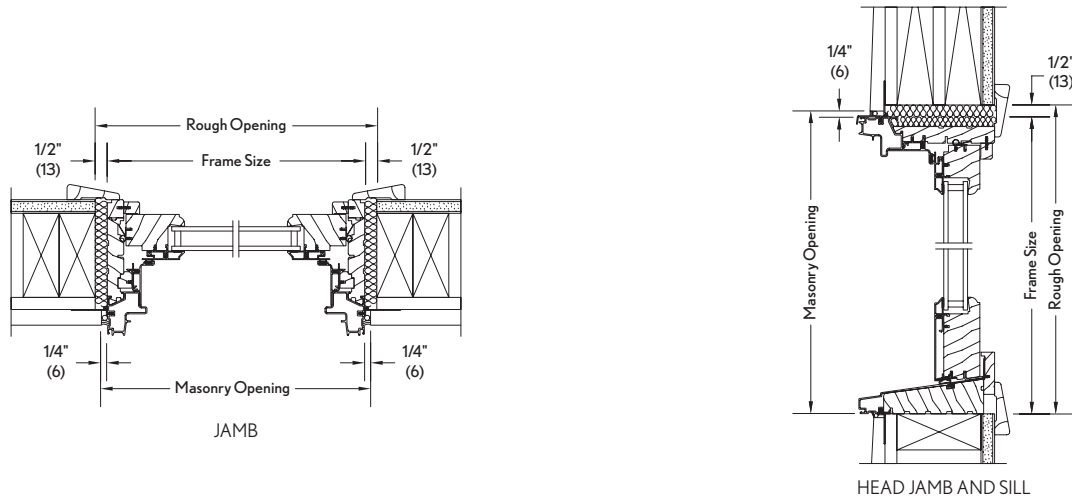
Please contact your local Marvin representative for masonry openings that include casings and subsills.

CLAD ULTIMATE DOUBLE HUNG PICTURE UNIT

Mas. Opg. (mm)	3-5 7/8 (1064)	4-1 7/8 (1267)	4-5 7/8 (1368)	5-17/8 (1572)	5-9 7/8 (1775)
Rgh. Opg. (mm)	3-6 3/8 (1076)	4-2 3/8 (1280)	4-6 3/8 (1381)	5-2 3/8 (1584)	5-10 3/8 (1788)
Frame Size (mm)	3-5 3/8 (1051)	4-1 3/8 (1254)	4-5 3/8 (1356)	5-1 3/8 (1559)	5-9 3/8 (1762)
Glass Size (mm)	36" (914)	44" (1118)	48" (1219)	56" (1422)	64" (1626)



CONSTRUCTION DETAILS



NOTES:

Lite patterns shown are 3/4" (19) grilles or 7/8" (22) SDL Lite patterns for 1 1/8" (29) may vary.

Please contact your local Marvin representative for masonry openings that include casings and subsills.

WOOD ROUND TOP WOOD ULTIMATE DOUBLE HUNG

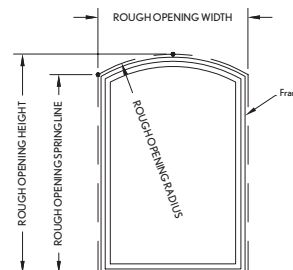
RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES DIRECT GLAZE

Rgh. Opg. (mm)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)
Rgh. Opg Rad. (mm)	2-0 1/2 (622)	2-0 1/2 (622)	2-6 1/2 (775)	2-6 1/2 (775)	2-6 1/2 (775)	3-4 1/2 (1029)	3-4 1/2 (1029)
	1-0 1/2 (318) 0-8 5/8 (219)	0-7 7/32 (183)	0-7 7/8 (200)	0-7 3/16 (183)	0-6 1/2 (165)	0-7 11/16 (195)	0-6 1/2 (165)
	WRT2511 DH	WRT2911 DH	WRT3111 DH	WRT3311 DH	WRT3511 DH	WRT3711 DH	WRT4111 DH
	1-6 1/2 (470) 1-2 5/8 (372)	1-1 7/32 (336)	1-1 7/8 (352)	1-1 3/16 (335)	1-0 1/2 (318)	1-1 11/16 (348)	1-0 1/2 (318)
	WRT2519 DH	WRT2919 DH	WRT3119 DH	WRT3319 DH	WRT3519 DH	WRT3719 DH	WRT4119 DH
	2-0 1/2 (622) 1-8 5/8 (524)	1-7 7/32 (488)	1-7 7/8 (505)	1-7 3/16 (487)	1-6 1/2 (470)	1-7 11/16 (500)	1-6 1/2 (470)
	WRT2523 DH	WRT2923 DH	WRT3123 DH	WRT3323 DH	WRT3523 DH	WRT3723 DH	WRT4123 DH
	3-0 1/2 (927) 2-8 5/8 (829)	2-7 7/32 (793)	2-7 7/8 (810)	2-7 3/16 (792)	2-6 1/2 (775)	2-7 11/16 (805)	2-6 1/2 (775)
	WRT2535 DH	WRT2935 DH	WRT3135 DH	WRT3335 DH	WRT3535 DH	WRT3735 DH	WRT4135 DH
	4-0 1/2 (1232) 3-8 5/8 (1133)	3-7 7/32 (1098)	3-7 7/8 (1114)	3-7 3/16 (1097)	3-6 1/2 (1080)	3-7 11/16 (1110)	3-6 1/2 (1080)
	WRT2547 DH	WRT2947 DH	WRT3147 DH	WRT3347 DH	WRT3547 DH	WRT3747 DH	WRT4147 DH
	5-0 1/2 (1537) 4-8 5/8 (1438)	4-7 7/32 (1403)	4-7 7/8 (1419)	4-7 3/16 (1402)	4-6 1/2 (1384)	4-7 11/16 (1414)	4-6 1/2 (1384)
	WRT2559 DH	WRT2959 DH	WRT3159 DH	WRT3359 DH	WRT3559 DH	WRT3759 DH	WRT4159 DH
	6-0 1/2 (1842) 5-8 5/8 (1743)	5-7 7/32 (1707)	5-7 7/8 (1724)	5-7 3/16 (1707)	5-6 1/2 (1689)	5-7 11/16 (1719)	5-6 1/2 (1689)
Rgh. Opg. (mm)	WRT2571 DH	WRT2971 DH	WRT3171 DH	WRT3371 DH	WRT3571 DH	WRT3771 DH	WRT4171 DH
Rgh. Opg. Spln. (mm)							

NOTES:





















































If these units are NOT used as transoms, ADD 15/16" (24) to the rough opening height for subsill.

MEASUREMENT IDENTIFICATION RT6 EYEBROW ABOVE SPRINGLINE







WOOD ROUND TOP WOOD ULTIMATE DOUBLE HUNG

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES DIRECT GLAZE

Rgh. Opg. (mm)	3-10 3/8 (1178)	4-3 3/4 (1314)	4-11 3/4 (1518)	5-7 3/4 (1721)	6-3 3/4 (1924)
Rgh. Opg Rad. (mm)	3-4 1/2 (1029)	3-4 1/2 (1029)	4-6 1/2 (1384)	6-0 1/2 (1842)	6-0 1/2 (1842)
Rgh. Opg. (mm)	1-6 1/2 (470)				
Rgh. Opg Rad. (mm)	0-11 7/32 (285)				
					
	WRT4519 DH	WRT5119 DH	WRT5919 DH	WRT6719 DH	WRT7519 DH
Rgh. Opg. (mm)	2-0 1/2 (622)				
Rgh. Opg Rad. (mm)	1-5 7/32 (437)				
					
	WRT4523 DH	WRT5123 DH	WRT5923 DH	WRT6723 DH	WRT7523 DH
Rgh. Opg. (mm)	3-0 1/2 (927)				
Rgh. Opg Rad. (mm)	2-5 7/32 (742)				
					
	WRT4535 DH	WRT5135 DH	WRT5935 DH	WRT6735 DH	WRT7535 DH
Rgh. Opg. (mm)	4-0 1/2 (1232)				
Rgh. Opg Rad. (mm)	3-5 7/32 (1047)				
					
	WRT4547 DH	WRT5147 DH	WRT5947 DH	WRT6747 DH	WRT7547 DH
Rgh. Opg. (mm)	5-0 1/2 (1537)				
Rgh. Opg Rad. (mm)	4-5 7/32 (1352)				
					
	WRT4559 DH	WRT5159 DH	WRT5959 DH	WRT6759 DH	WRT7559 DH
Rgh. Opg. (mm)	6-0 1/2 (1842)				
Rgh. Opg Rad. (mm)	5-5 7/32 (1657)				
					
	WRT4571 DH	WRT5171 DH	WRT5971 DH	WRT6771 DH	WRT7571 DH
Rgh. Opg. (mm)		1-3 5/32 (385)			
Rgh. Opg Rad. (mm)		0-9 5/32 (233)			
					
		WRT5119 DH			
Rgh. Opg. (mm)		1-3 9/16 (395)			
Rgh. Opg Rad. (mm)		0-9 9/16 (243)			
					
		WRT5123 DH			
Rgh. Opg. (mm)		2-3 5/32 (690)			
Rgh. Opg Rad. (mm)		2-3 9/16 (700)			
					
		WRT5135 DH			
Rgh. Opg. (mm)		3-3 5/32 (995)			
Rgh. Opg Rad. (mm)		3-3 9/16 (1005)			
					
		WRT5147 DH			
Rgh. Opg. (mm)		4-3 5/32 (1299)			
Rgh. Opg Rad. (mm)		4-3 9/16 (1310)			
					
		WRT5159 DH			
Rgh. Opg. (mm)		5-3 5/32 (1604)			
Rgh. Opg Rad. (mm)		5-3 9/16 (1614)			
					
		WRT5171 DH			
Rgh. Opg. (mm)			1-4 1/8 (410)		
Rgh. Opg Rad. (mm)			0-10 1/8 (257)		
					
			WRT5919 DH		
Rgh. Opg. (mm)			2-4 1/8 (714)		
Rgh. Opg Rad. (mm)			1-4 1/8 (410)		
					
			WRT5923 DH		
Rgh. Opg. (mm)			3-4 1/8 (1019)		
Rgh. Opg Rad. (mm)			2-4 1/8 (714)		
					
			WRT5935 DH		
Rgh. Opg. (mm)			4-4 1/8 (1324)		
Rgh. Opg Rad. (mm)			3-4 1/8 (1019)		
					
			WRT5947 DH		
Rgh. Opg. (mm)			5-4 1/8 (1629)		
Rgh. Opg Rad. (mm)			4-4 1/8 (1324)		
					
			WRT5959 DH		
Rgh. Opg. (mm)				1-11 1/16 (351)	
Rgh. Opg Rad. (mm)				1-11 1/16 (351)	
					
				WRT6719 DH	
Rgh. Opg. (mm)				2-11 1/16 (656)	
Rgh. Opg Rad. (mm)				2-11 1/16 (656)	
					
				WRT6723 DH	
Rgh. Opg. (mm)				3-11 1/16 (960)	
Rgh. Opg Rad. (mm)				3-11 1/16 (960)	
					
				WRT6735 DH	
Rgh. Opg. (mm)				4-11 1/16 (1265)	
Rgh. Opg Rad. (mm)				4-11 1/16 (1265)	
					
				WRT6747 DH	
Rgh. Opg. (mm)				5-11 1/16 (1570)	
Rgh. Opg Rad. (mm)				5-11 1/16 (1570)	
					
				WRT6759 DH	
Rgh. Opg. (mm)					0-7 13/16 (198)
Rgh. Opg Rad. (mm)					0-7 13/16 (198)
					
					WRT7519 DH
Rgh. Opg. (mm)					1-11 1/16 (351)
Rgh. Opg Rad. (mm)					1-11 1/16 (351)
					
					WRT7523 DH
Rgh. Opg. (mm)					2-11 1/16 (656)
Rgh. Opg Rad. (mm)					2-11 1/16 (656)
					
					WRT7535 DH
Rgh. Opg. (mm)					3-11 1/16 (960)
Rgh. Opg Rad. (mm)					3-11 1/16 (960)
					
					WRT7547 DH
Rgh. Opg. (mm)					4-11 1/16 (1265)
Rgh. Opg Rad. (mm)					4-11 1/16 (1265)
					
					WRT7559 DH
Rgh. Opg. (mm)					5-11 1/16 (1570)
Rgh. Opg Rad. (mm)					5-11 1/16 (1570)
					
					WRT7571 DH

RT29 ELLIPTICAL STANDARD SIZES DIRECT GLAZE

Rgh. Opg. (mm)	4-3 3/4 (1314)	4-11 3/4 (1518)	5-7 3/4 (1721)	6-3 3/4 (1924)
Rgh. Opg. (mm)	1-5 5/16 (456)			
				
	WRT5118 DH	WRT5918 DH	WRT6718 DH	WRT7518 DH

NOTES:

If these units are NOT used as transoms, ADD 15/16" (24) to the rough opening height for subsill.

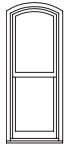
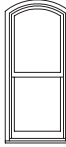




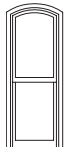
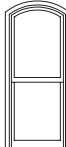




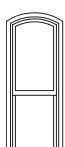
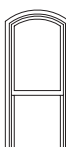




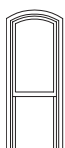





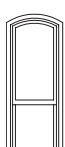
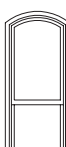




WOOD ROUND TOP WOOD ULTIMATE DOUBLE HUNG

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES ONE WIDE OPERATOR

Rgh. Opg. (mm)	2-2 3/8 (670)	2-6 3/8 (772)	2-10 3/8 (873)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Rgh. Opg Rad. (mm)	2-01/2 (622)	2-01/2 (622)	2-6 1/2 (775)	3-4 1/2 (1029)	3-4 1/2 (1029)	3-4 1/2 (1029)
Right Opg. (mm)	3-5 1/8 (1045)	3-6 17/32 (1080)	3-6 9/16 (1081)	3-6 1/8 (1070)	3-7 9/32 (1099)	3-8 9/16 (1132)
Right Opg. Spln. (mm)	3-19/32 (947)	3-1 1/4 (946)	3-19/32 (947)	3-15/16 (947)	3-19/32 (947)	3-19/32 (947)
	WRT2014 DH	WRT2414 DH	WRT2814 DH	WRT3214 DH	WRT3614 DH	WRT4014 DH
Right Opg. (mm)	3-9 1/8 (1146)	3-10 17/32 (1183)	3-10 9/16 (1183)	3-10 1/8 (1172)	3-11 9/32 (1201)	4-0 9/16 (1233)
Right Opg. Spln. (mm)	3-5 9/32 (1048)	3-5 1/4 (1048)	3-5 9/32 (1048)	3-5 5/16 (1049)	3-5 9/32 (1049)	3-5 9/32 (1048)
	WRT2016 DH	WRT2416 DH	WRT2816 DH	WRT3216 DH	WRT3616 DH	WRT4016 DH
Right Opg. (mm)	4-1 1/8 (1248)	4-2 17/32 (1283)	4-2 9/16 (1285)	4-2 1/8 (1273)	4-3 9/32 (1302)	4-4 9/16 (1335)
Right Opg. Spln. (mm)	3-9 9/32 (1150)	3-9 1/4 (1149)	3-9 9/32 (1150)	3-9 5/16 (1151)	3-9 9/32 (1150)	3-9 9/32 (1150)
	WRT2018 DH	WRT2418 DH	WRT2818 DH	WRT3218 DH	WRT3618 DH	WRT4018 DH
Right Opg. (mm)	4-5 1/8 (1349)	4-6 17/32 (1385)	4-6 9/16 (1386)	4-6 1/8 (1375)	4-7 9/32 (1404)	4-8 9/16 (1437)
Right Opg. Spln. (mm)	4-1 9/32 (1252)	4-1 1/4 (1251)	4-1 9/32 (1252)	4-1 5/16 (1253)	4-1 9/32 (1252)	4-1 9/32 (1251)
	WRT2020 DH	WRT2420 DH	WRT2820 DH	WRT3220 DH	WRT3620 DH	WRT4020 DH
Right Opg. (mm)	4-9 1/8 (1451)	4-10 17/32 (1486)	4-10 9/16 (1488)	4-10 1/8 (1477)	4-11 9/32 (1505)	5-0 9/16 (1538)
Right Opg. Spln. (mm)	4-5 9/32 (1353)	4-5 1/4 (1352)	4-5 9/32 (1353)	4-5 5/16 (1354)	4-5 9/32 (1353)	4-5 9/32 (1353)
	WRT2022 DH	WRT2422 DH	WRT2822 DH	WRT3222 DH	WRT3622 DH	WRT4022 DH
Right Opg. (mm)	5-1 1/8 (1553)	5-2 17/32 (1588)	5-2 9/16 (1589)	5-2 1/8 (1578)	5-3 9/32 (1607)	5-4 9/16 (1640)
Right Opg. Spln. (mm)	4-9 9/32 (1455)	4-9 1/4 (1454)	4-9 9/32 (1455)	4-9 5/16 (1455)	4-9 9/32 (1455)	4-9 9/32 (1455)
	WRT2024 DH	WRT2424 DH	WRT2824 DH	WRT3224 DH	WRT3624 DH	WRT4024 DH
Right Opg. (mm)	5-5 1/8 (1654)	5-6 17/32 (1690)	5-6 9/16 (1691)	5-6 1/8 (1680)	5-7 9/32 (1709)	5-8 9/16 (1741)
Right Opg. Spln. (mm)	5-1 9/32 (1556)	5-1 1/4 (1556)	5-1 9/32 (1556)	5-15/16 (1557)	5-1 9/32 (1557)	5-1 9/32 (1556)
	WRT2026 DH	WRT2426 DH	WRT2826 DH	WRT3226 DH	WRT3626 DH	WRT4026 DH

WOOD ROUND TOP WOOD ULTIMATE DOUBLE HUNG

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES ONE WIDE OPERATOR

Rgh. Opg. (mm)	2-2 3/8 (670)	2-6 3/8 (772)	2-10 3/8 (837)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Rgh. Opg Rad. (mm)	2-0 1/2 (622)	2-0 1/2 (622)	2-6 1/2 (775)	3-4 1/2 (1029)	3-4 1/2 (1029)	3-4 1/2 (1029)
	5-9 1/8 (1756) 5-5 9/32 (1658)  WRT2028 DH	5-10 17/32 (1791) 5-5 1/4 (1657)  WRT2428 DH	5-10 9/16 (1792) 5-5 9/32 (1658)  WRT2828 DH	5-10 1/8 (1781) 5-5 5/16 (1659)  WRT3228* DH	5-11 9/32 (1810) 5-5 9/32 (1658)  WRT3628* DH	6-0 9/16 (1843) 5-5 9/32 (1658)  WRT4028* DH
	6-11 8/16 (1858) 5-9 9/32 (1760)  WRT2030 DH	6-2 17/32 (1893) 5-9 1/4 (1759)  WRT2430 DH	6-2 9/16 (1894) 5-9 9/32 (1759)  WRT2830* DH	6-2 1/8 (1883) 5-9 5/16 (1760)  WRT3230* DH	6-3 9/32 (1912) 5-9 9/32 (1760)  WRT3630* DH	6-4 9/16 (1945) 5-9 9/32 (1759)  WRT4030* DH
	6-5 1/8 (1959) 6-1 9/32 (1861)  WRT2032 DH	6-6 17/32 (1994) 6-1 1/4 (1860)  WRT2432 DH	6-6 9/16 (1996) 6-1 9/32 (1861)  WRT2832* DH	6-6 1/8 (1985) 6-1 5/16 (1862)  WRT3232* DH	6-7 9/32 (2013) 6-1 9/32 (1861)  WRT3632* DH	6-8 9/16 (2046) 6-1 9/32 (1861)  WRT4032* DH
	6-9 1/8 (2061) 6-5 9/32 (1963)  WRT2034 DH	6-10 17/32 (2096) 6-5 1/4 (1962)  WRT2434* DH	6-10 9/16 (2097) 6-5 9/32 (1963)  WRT2834* DH	6-10 1/8 (2086) 6-5 5/16 (1963)  WRT3234* DH	6-11 9/32 (2115) 6-5 9/32 (1963)  WRT3634* DH	7-0 9/16 (2148) 6-5 9/32 (1963)  WRT4034* DH
Rgh. Opg. (mm) Rgh. Opg. Spln. (mm)	7-1 1/8 (2162) 6-9 9/32 (2064)  WRT2036 DH	7-2 17/32 (2198) 6-9 1/4 (2064)  WRT2436* DH	7-2 9/16 (2199) 6-9 9/32 (2064)  WRT2836* DH	7-2 1/8 (2188) 6-9 5/16 (2065)  WRT3236* DH	7-3 9/32 (2217) 6-9 9/32 (2065)  WRT3636* DH	7-4 9/16 (2249) 6-9 9/32 (2064)  WRT4036* DH

NOTES:

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

WOOD ROUND TOP

RT1 TRUE HALF CIRCLE STANDARD SIZES DIRECT GLAZE

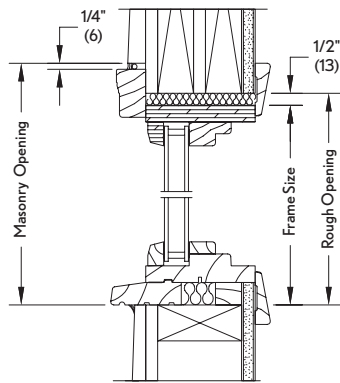
Rgh. Opg. (mm)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)
	1-3 3/16 (386)	1-4 3/16 (411)	1-5 3/16 (437)	1-6 3/16 (462)	1-7 3/16 (487)	1-9 3/16 (538)
	WRT2914 DH	WRT3115 DH	WRT3316 DH	WRT3517 DH	WRT3718 DH	WRT4120 DH
Rgh. Opg. (mm)	3-10 3/8 (1178)	4-3 3/4 (1314)	4-11 3/4 (1518)	5-7 3/4 (1721)	6-3 3/4 (1924)	
	1-11 3/16 (589)	2-1 7/8 (657)	2-5 7/8 (759)	2-9 7/8 (860)	3-1 7/8 (962)	
	WRT4522 DH	WRT5025 DH	WRT5828 DH	WRT6632 DH	WRT7437 DH	

WOOD ULTIMATE DOUBLE HUNG TRANSOM SERIES

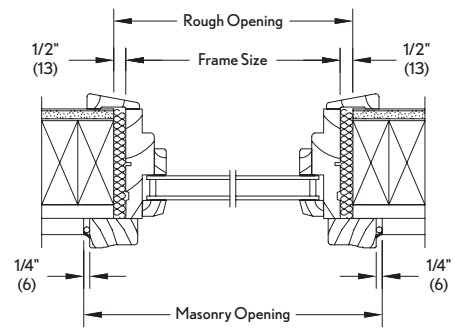
RT1 TRUE HALF CIRCLE IN SASH

Rgh. Opg. (mm)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)
Rgh. Opg Rad. (mm)	1-1 3/16 (335)	1-3 3/16 (386)	1-4 3/16 (411)	1-5 3/16 (437)	1-6 3/16 (462)	1-7 3/16 (487)
	WRT2015 DHT	WRT2417 DHT	WRT2618 DHT	WRT2819 DHT	WRT3020 DHT	WRT3221 DHT
Rgh. Opg. (mm)	3-6 3/8 (1076)	3-10 3/8 (1178)	4-3 3/4 (1314)	4-11 3/4 (1518)	5-7 3/4 (1721)	6-3 3/4 (1924)
Rgh. Opg Rad. (mm)	1-9 3/16 (538)	1-11 3/16 (589)	2-1 7/8 (657)	2-5 7/8 (759)	2-9 7/8 (860)	3-1 7/8 (962)
	WRT3623 DHT	WRT4025 DHT	WRT5027 DHT	WRT5831 DHT	WRT6635 DHT	WRT7439 DHT

CONSTRUCTION DETAILS



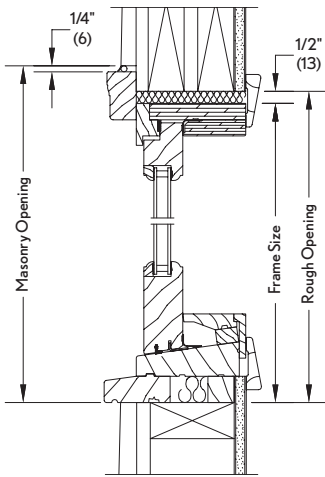
DIRECT GLAZE HEAD JAMB AND SILL



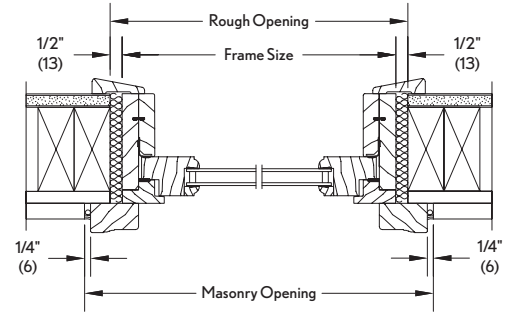
DIRECT GLAZE JAMB

WOOD ROUND TOP ULTIMATE DOUBLE HUNG

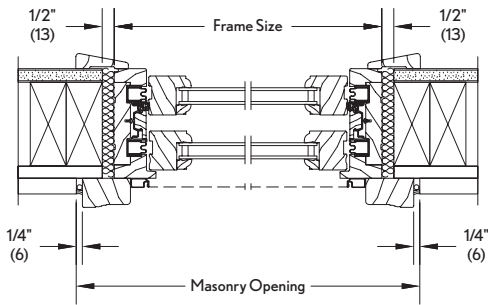
CONSTRUCTION DETAILS



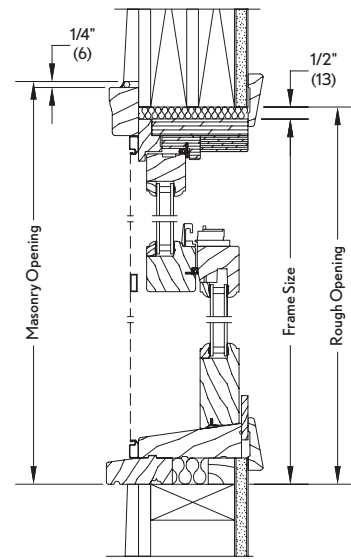
15/8" SASH PICTURE
IN SASH HEAD JAMB AND SILL



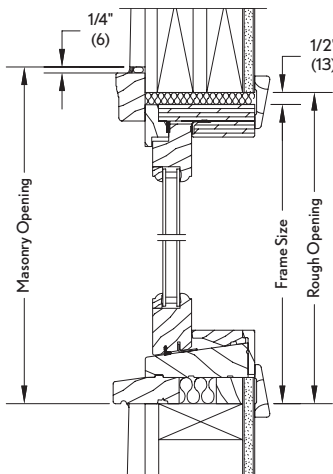
15/8" SASH PICTURE
IN SASH JAMB



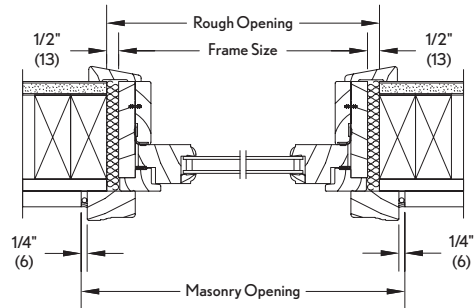
OPERATOR IN SASH JAMB



OPERATOR IN SASH HEAD JAMB AND SILL



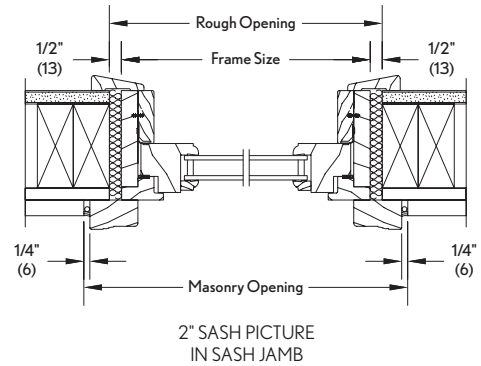
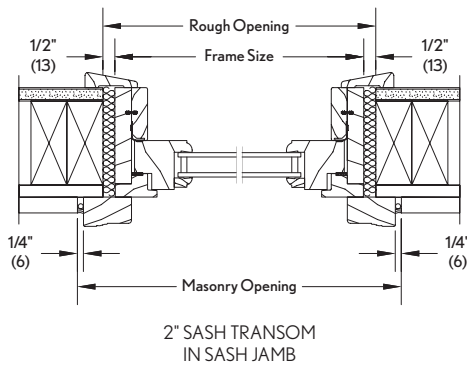
15/8" SASH TRANSOM
IN SASH HEAD JAMB AND SILL



15/8" SASH TRANSOM
IN SASH JAMB

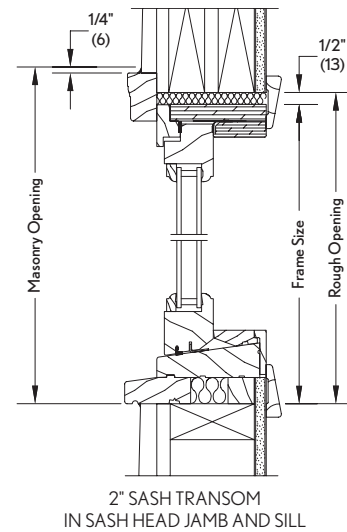
WOOD ROUND TOP ULTIMATE DOUBLE HUNG

CONSTRUCTION DETAILS



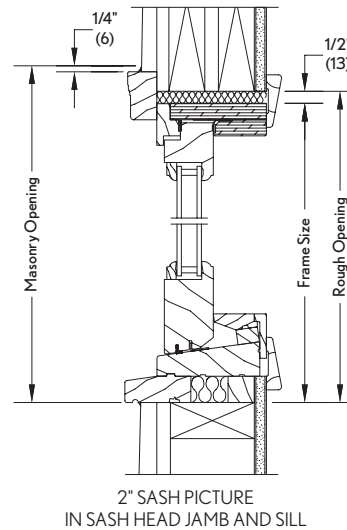
WOOD ULTIMATE DOUBLE/SINGLE HUNG ROUND TOP

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" IG Air	0.45	0.54	0.57	42	
11/16" IG LoE 272 Air	0.32	0.29	0.5	52	NC, SC
11/16" IG LoE 272 Argon	0.29	0.29	0.5	55	N, NC, SC
11/16" IG LoE 366 Air	0.32	0.2	0.45	52	NC, SC, S
11/16" IG LoE 366 Argon	0.29	0.19	0.45	56	N, NC, SC, S
11/16" IG LoE 272 Air w/Combination	0.23	0.3	0.46	65	N, NC, SC
11/16" IG LoE 272 Argon w/Combination	0.21	0.29	0.46	67	N, NC, SC
11/16" IG LoE 366 Air w/Combination	0.23	0.22	0.41	65	N, NC, SC, S
11/16" IG LoE 366 Argon w/Combination	0.21	0.21	0.41	67	N, NC, SC, S



WOOD ULTIMATE DOUBLE HUNG PICTURE 2" ROUND TOP

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1" Insulating Glass Air	0.43	0.56	0.61	45	
1" Insulating Glass LoE 272 Air	0.31	0.31	0.53	56	NC
1" Insulating Glass LoE 272 Argon	0.27	0.3	0.53	59	N, NC, SC
1" Insulating Glass LoE 366 Air	0.30	0.21	0.48	57	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.27	0.2	0.48	60	N, NC, SC, S
1" Tri-Pane LoE EA Air LoE EA	0.26	0.43	0.47	62	N
1" Tri-Pane LoE EA Argon LoE EA	0.23	0.43	0.47	64	N
1" Tri-Pane LoE 272 Air LoE 272	0.24	0.27	0.43	63	N, NC, SC, S
1" Tri-Pane LoE 272 Argon LoE 272	0.21	0.27	0.43	67	N, NC, SC, S



CLAD ROUND TOP ULTIMATE DOUBLE HUNG

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES DIRECT GLAZE































Rgh. Opg. (mm)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)
Rgh. Opg Rad. (mm)	2-0 1/2 (622)	2-0 1/2 (622)	2-6 1/2 (775)	2-6 1/2 (775)	2-6 1/2 (775)	3-4 1/2 (1029)	3-4 1/2 (1029)
Rgh. Opg. (mm)	1-0 1/2 (318)	1-1 1/2 (336)	0-7 7/8 (200)	0-7 3/16 (183)	0-6 1/2 (165)	0-7 11/16 (195)	0-6 1/2 (165)
Rgh. Opg. Splnk. (mm)	0-8 5/8 (219)	1-1 7/32 (336)	1-1 7/8 (352)	1-1 3/16 (335)	1-0 1/2 (318)	1-1 1/16 (348)	1-0 1/2 (318)
	CRT2511 DH	CRT2911 DH	CRT3111 DH	CRT3311 DH	CRT3511 DH	CRT3711 DH	CRT4111 DH
	CRT2519 DH	CRT2919 DH	CRT3119 DH	CRT3319 DH	CRT3519 DH	CRT3719 DH	CRT4119 DH
	CRT2523 DH	CRT2923 DH	CRT3123 DH	CRT3323 DH	CRT3523 DH	CRT3723 DH	CRT4123 DH
	CRT2535 DH	CRT2935 DH	CRT3135 DH	CRT3335 DH	CRT3535 DH	CRT3735 DH	CRT4135 DH
	CRT2547 DH	CRT2947 DH	CRT3147 DH	CRT3347 DH	CRT3547 DH	CRT3747 DH	CRT4147 DH
	CRT2559 DH	CRT2959 DH	CRT3159 DH	CRT3359 DH	CRT3559 DH	CRT3759 DH	CRT4159 DH
	CRT2571 DH	CRT2971 DH	CRT3171 DH	CRT3371 DH	CRT3571 DH	CRT3771 DH	CRT4171 DH

NOTES:

Please contact your local Marvin representative for masonry openings that include casings and subsills.

CLAD ROUND TOP ULTIMATE DOUBLE HUNG

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES DIRECT GLAZE











































Rgh. Opg. (mm)	3-10 3/8 (1178)	4-3 3/4 (1314)	4-11 3/4 (1518)	5-7 3/4 (1721)	6-3 3/4 (1924)
Rgh. Opg Rad. (mm)	3-4 1/2 (1029)	3-4 1/2 (1029)	4-6 1/2 (1384)	6-0 1/2 (1842)	6-0 1/2 (1842)
Rgh. Opg. (mm)	1-6 1/2 (470)	1-3 5/32 (385)	0-9 9/16 (243)	0-10 1/8 (257)	0-7 13/16 (198)
Rgh. Opg Rad. (mm)	0-11 7/32 (285)	0-9 5/32 (233)	0-9 9/16 (243)	0-10 1/8 (257)	0-7 13/16 (198)
					
	CRT4519 DH	CRT5119 DH	CRT5919 DH	CRT6719 DH	CRT7519 DH
Rgh. Opg. (mm)	2-0 1/2 (622)	1-3 5/32 (385)	1-3 9/16 (395)	1-4 1/8 (410)	1-11 3/16 (351)
Rgh. Opg Rad. (mm)	1-5 7/32 (437)	1-3 5/32 (385)	1-3 9/16 (395)	1-4 1/8 (410)	1-11 3/16 (351)
					
	CRT4523 DH	CRT5123 DH	CRT5923 DH	CRT6723 DH	CRT7523 DH
Rgh. Opg. (mm)	3-0 1/2 (927)	2-3 5/32 (690)	2-3 9/16 (700)	2-4 1/8 (714)	2-1 13/16 (656)
Rgh. Opg Rad. (mm)	2-5 7/32 (742)	2-3 5/32 (690)	2-3 9/16 (700)	2-4 1/8 (714)	2-1 13/16 (656)
					
	CRT4535 DH	CRT5135 DH	CRT5935 DH	CRT6735 DH	CRT7535 DH
Rgh. Opg. (mm)	4-0 1/2 (1232)	3-3 5/32 (995)	3-3 9/16 (1005)	3-4 1/8 (1019)	3-1 13/16 (960)
Rgh. Opg Rad. (mm)	3-5 7/32 (1047)	3-3 5/32 (995)	3-3 9/16 (1005)	3-4 1/8 (1019)	3-1 13/16 (960)
					
	CRT4547 DH	CRT5147 DH	CRT5947 DH	CRT6747 DH	CRT7547 DH
Rgh. Opg. (mm)	5-0 1/2 (1537)	4-3 5/32 (1299)	4-3 9/16 (1310)	4-4 1/8 (1324)	4-1 13/16 (1265)
Rgh. Opg Rad. (mm)	4-5 7/32 (1352)	4-3 5/32 (1299)	4-3 9/16 (1310)	4-4 1/8 (1324)	4-1 13/16 (1265)
					
	CRT4559 DH	CRT5159 DH	CRT5959 DH	CRT6759 DH	CRT7559 DH
Rgh. Opg. (mm)	6-0 1/2 (1842)	5-3 5/32 (1604)	5-3 9/16 (1614)	5-4 1/8 (1629)	5-1 13/16 (1570)
Rgh. Opg Rad. (mm)	5-5 7/32 (1657)	5-3 5/32 (1604)	5-3 9/16 (1614)	5-4 1/8 (1629)	5-1 13/16 (1570)
					
	CRT4571 DH	CRT5171 DH	CRT5971 DH	CRT6771 DH	CRT7571 DH

NOTES:

Please contact your local Marvin representative for masonry openings that include casings and subsills.

CLAD ROUND TOP ULTIMATE DOUBLE HUNG

RT6 EYEBROW ABOVE SPRINGLINE STANDARD SIZES OPERATORS

Rgh. Opg. (mm)	2-2 3/8 (670)	2-6 3/8 (772)	2-10 3/8 (873)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
Rgh. Opg Rad. (mm)	2-0 1/2 (622)	2-0 1/2 (622)	2-6 1/2 (775)	3-4 1/2 (1029)	3-4 1/2 (1029)	3-4 1/2 (1029)
Rgh. Opg. (mm) Rgh. Opg. Spln. (mm)	3-4 1/2 (1029) 3-0 21/32 (931)	3-5 29/32 (692) 3-0 5/8 (507)	3-5 31/32 (1065) 3-0 5/8 (931)	3-5 1/2 (1054) 3-0 21/32 (932)	3-6 21/32 (1083) 3-0 21/32 (931)	3-7 15/16 (1116) 3-0 5/8 (931)
	 CRT2014 DH	 CRT2414 DH	 CRT2814 DH	 CRT3214 DH	 CRT3614 DH	 CRT4014 DH
	 CRT2016 DH	 CRT2416 DH	 CRT2816 DH	 CRT3216 DH	 CRT3616 DH	 CRT4016 DH
	 CRT2018 DH	 CRT2418 DH	 CRT2818 DH	 CRT3218 DH	 CRT3618 DH	 CRT4018 DH
	 CRT2020 DH	 CRT2420 DH	 CRT2820 DH	 CRT3220 DH	 CRT3620 DH	 CRT4020 DH
	 CRT2022 DH	 CRT2422 DH	 CRT2822 DH	 CRT3222 DH	 CRT3622 DH	 CRT4022 DH
	 CRT2024 DH	 CRT2424 DH	 CRT2824 DH	 CRT3224 DH	 CRT3624 DH	 CRT4024 DH
	 CRT2026 DH	 CRT2426 DH	 CRT2826 DH	 CRT3226 DH	 CRT3626 DH	 CRT4026 DH
Rgh. Opg. (mm) Rgh. Opg. Spln. (mm)	5-4 1/2 (1638) 5-0 21/32 (1439)	5-5 29/32 (1674) 5-0 5/8 (1540)	5-5 31/32 (1675) 5-0 5/8 (1540)	5-5 1/2 (1664) 5-0 21/32 (1541)	5-6 21/32 (1693) 5-0 21/32 (1541)	5-7 15/16 (1725) 5-0 5/8 (1540)

NOTES:

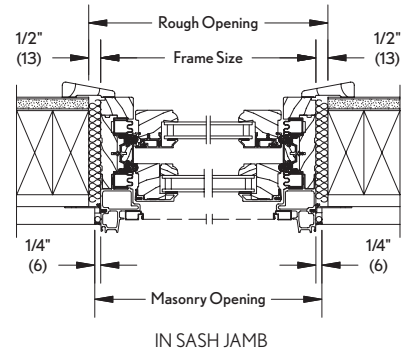
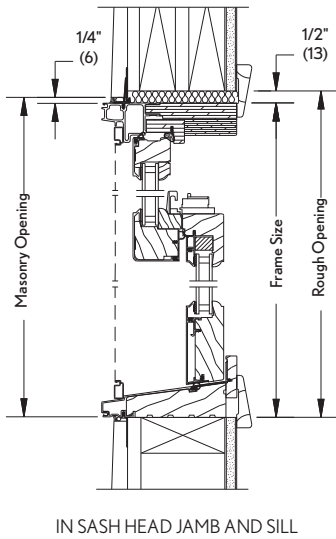
Please contact your local Marvin representative for masonry openings that include casings and subsills.

CLAD ROUND TOP ULTIMATE DOUBLE HUNG

CLAD ULTIMATE DOUBLE HUNG TRANSOM SERIES
RT2 TRUE ROUND ABOVE SPRINGLINE STANDARD SIZES IN SASH

Rgh. Opg. (mm)	2-2 3/8 (670)	2-6 3/8 (722)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)
Rgh. Opg Rad. (mm)	1-13/16 (335)	1-3 3/16 (386)	1-4 3/16 (411)	1-5 3/16 (436)	1-6 3/16 (462)	1-7 3/16 (487)
Rgh. Opg. (mm) Rgh. Opg. Spth. (mm)	1-3 3/4 (400) 0-2 9/16 (65)	1-5 3/4 (451) 0-2 9/16 (65)	1-6 3/4 (476) 0-2 9/16 (65)	1-7 3/4 (502) 0-2 9/16 (65)	1-8 3/4 (527) 0-2 9/16 (65)	1-9 3/4 (552) 0-2 9/16 (65)
	CRT2015 DHT	CRT2417 DHT	CRT2618 DHT	CRT2819 DHT	CRT3020 DHT	CRT3221 DHT
Rgh. Opg. (mm)	3-6 3/8 (1076)	3-10 3/8 (1178)	4-3 3/4 (1314)	4-11 3/4 (1518)	5-7 3/4 (1721)	6-3 3/4 (1924)
Rgh. Opg Rad. (mm)	1-9 3/16 (538)	1-11 3/16 (589)	2-17/8 (657)	2-5 7/8 (759)	2-9 7/8 (860)	3-17/8 (962)
Rgh. Opg. (mm) Rgh. Opg. Spth. (mm)	1-11 3/4 (603) 0-2 9/16 (65)	2-1 3/4 (654) 0-2 9/16 (65)	2-4 7/16 (722) 0-2 9/16 (65)	2-8 7/16 (824) 0-2 9/16 (65)	3-0 7/16 (926) 0-2 9/16 (65)	3-4 7/16 (1027) 0-2 9/16 (65)
	CRT3623 DHT	CRT4025 DHT	CRT5027 DHT	CRT5831 DHT	CRT6635 DHT	CRT7439 DHT

CONSTRUCTION DETAILS

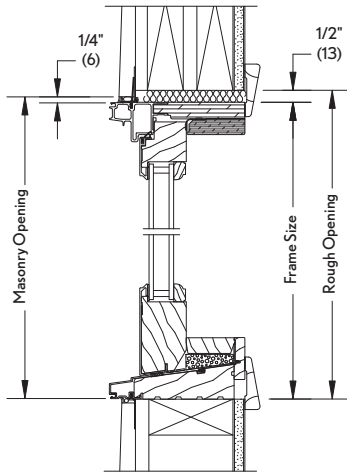


NOTES:

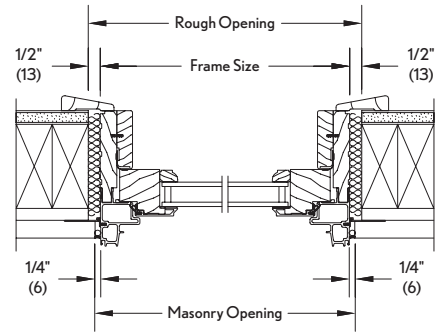
Please contact your local Marvin representative for masonry openings that include casings and subsills.

CLAD ROUND TOP ULTIMATE DOUBLE HUNG

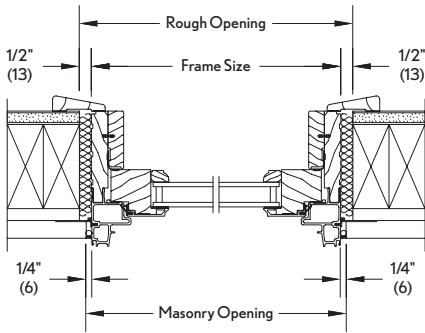
CONSTRUCTION DETAILS



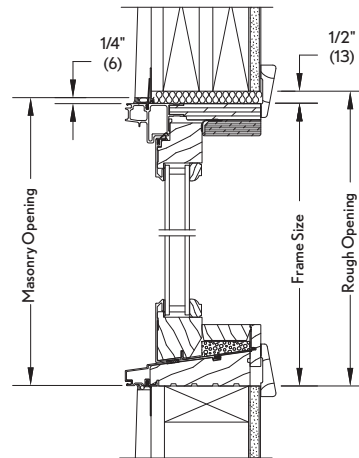
IG ROUND TOP PICTURE
IN SASH HEAD JAMB AND SILL



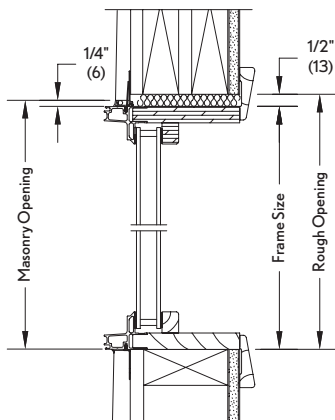
IG ROUND TOP PICTURE
IN SASH JAMB



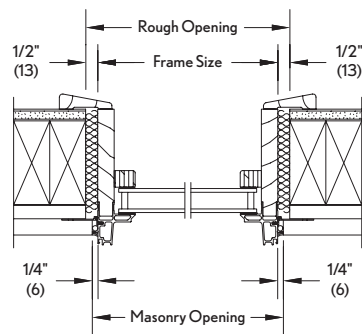
IG ROUND TOP TRANSOM
IN SASH JAMB



IG ROUND TOP TRANSOM
IN SASH HEAD JAMB AND SILL



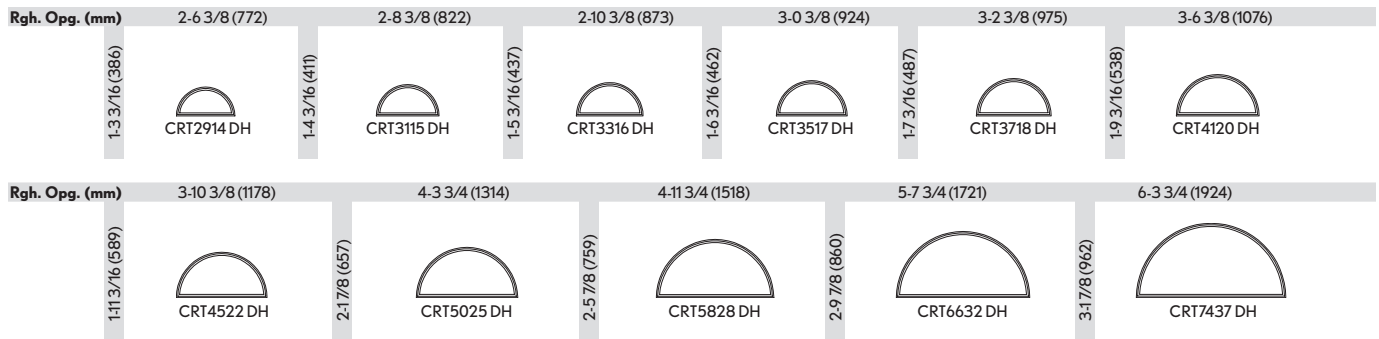
DIRECT GLAZE HEAD JAMB AND SILL



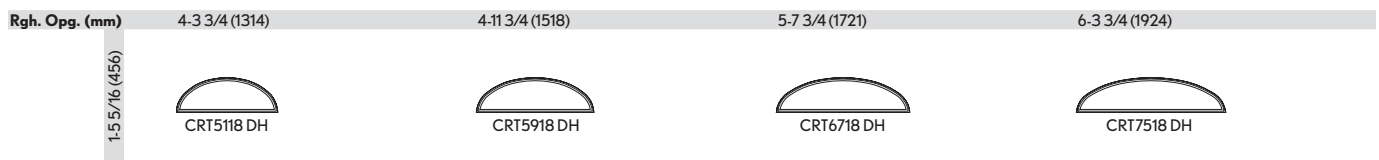
DIRECT GLAZE JAMB

CLAD ROUND TOP

CLAD ULTIMATE DOUBLE HUNG RT1 TRUE HALF CIRCLE STANDARD SIZES DIRECT GLAZE



CLAD ULTIMATE DOUBLE HUNG RT29 ELLIPTICAL STANDARD SIZES DIRECT GLAZE



STANDARD LAYOUT DIRECT GLAZE OR OPERATING EYEBROW ABOVE SPRINGLINE

DOUBLE HUNG/ULTIMATE DOUBLE HUNG

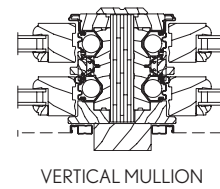
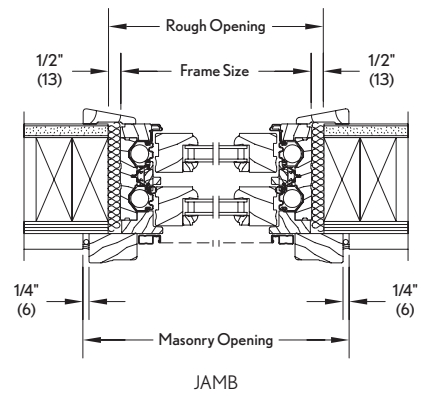
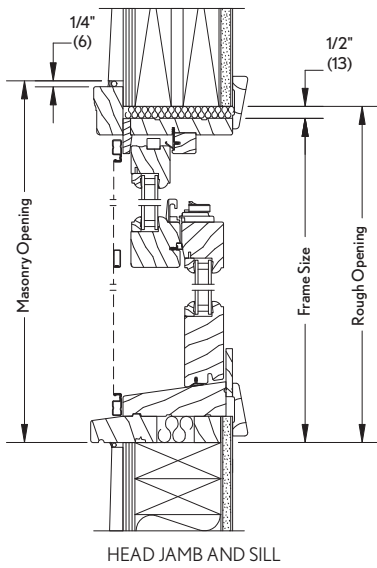
3/4" Rectangular Grilles or Single Glass Divided Lite				1 1/8" Rectangular Grilles or IG Divided Lite			
Unit No. (Width)	(Width)	Unit No. (Height)	(Height)	Unit No. (Width)	(Width)	Unit No. (Height)	(Height)
25	3W	11 or 19	1H	25	3W	11 or 19	1H
29	3W	23 or 35	2H	29	3W	23 or 35	2H
31	3W	37, 41 or 45	2H/sash	31	3W	37 or 45	1H/sash
33	3W	47	3H	33	3W	45	2H/sash
35	3W	49, 53 or 57	2H/sash	35	3W	47	3H
37	4W	59	4H	37	3W	49, 53 or 57	2H/sash
41	4W	61, 65 or 69	2H/sash	41	3W	59*	4H
45	4W	71*	5H	45	4W	61, 65 or 69	2H/sash
51	6W	73, 77 or 81	3H/sash	51	4W	71*	4H
59**	6W	83*	5H	59*	6W	73, 77 or 81	3H/sash
67**	6W	95*	6H	67*	6W	83*	5H
75**	8W			75*	6W	95*	6H

If both width and height have * contact your local Marvin representative for availability of divided lite units

* Available with or without spacer bars. Spacer bars on Round Tops have limitations. Contact your local Marvin representative for availability.

WOOD ULTIMATE DOUBLE HUNG MAGNUM

CONSTRUCTION DETAILS



WOOD MINIMUM AND MAXIMUM MEASUREMENTS

GLASS TYPE	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum Glass Size per Sash
Double Hung					
Insulating Glass	26 3/8" (670)*	48 7/8" (1241)*	66 3/8" (1686)	128 7/8" (3273)	25 Sq. Feet
Transom					
Insulating Glass	14 3/8" (365)	14 3/16" (360)	106" (2692)	60" (1524)	25 Sq. Feet
Picture					
† Insulating Glass	14 3/8" (365)	15 1/2" (394)	121" (3073)	128 7/8" (3273)	60 Sq. Feet

Standard glass thickness is determined by Marvin. For custom glass options, contact your Marvin representative.

* Minimum RO width of 16 3/8" is available with a minimum RO height of 64 7/8".

WOOD ULTIMATE DOUBLE HUNG MAGNUM / SINGLE HUNG MAGNUM

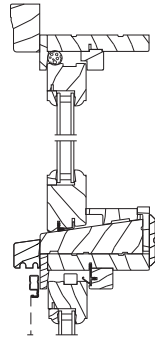
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.45	0.55	0.58	43	
11/16" Insulating Glass LoE 272 Air	0.32	0.3	0.5	53	NC, SC
11/16" Insulating Glass LoE 272 Argon	0.29	0.29	0.5	56	N, NC, SC
11/16" Insulating Glass LoE 366 Air	0.32	0.2	0.45	53	NC, SC, S
11/16" Insulating Glass LoE 366 Argon	0.28	0.19	0.45	57	N, NC, SC, S
7/8" Tri-Pane LoE 272 Argon LoE 272	0.24	0.25	0.4	64	N, NC, SC, S
7/8" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.22	0.25	0.4	67	N, NC, SC, S
7/8" Tri-Pane LoE 179 Argon LoE 179	0.26	0.4	0.49	63	N, NC
7/8" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.23	0.4	0.49	66	N, NC
11/16" Insulating Glass LoE 272 Air w/Combination	0.23	0.3	0.46	72	N, NC, SC
11/16" Insulating Glass LoE 272 Argon w/Combination	0.21	0.29	0.46	73	N, NC, SC
11/16" Insulating Glass LoE 366 Air w/Combination	0.23	0.22	0.41	72	N, NC, SC, S
11/16" Insulating Glass LoE 366 Argon w/Combination	0.21	0.21	0.41	74	N, NC, SC, S

NOTES:

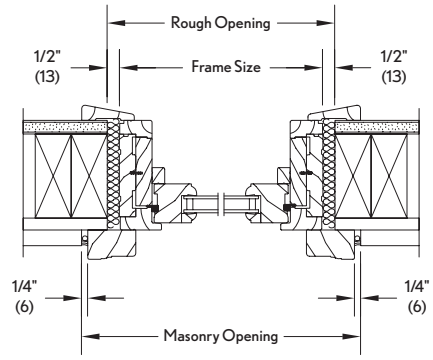
Sizes for Wood Ultimate Double Hung Magnum windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

WOOD ULTIMATE DOUBLE HUNG MAGNUM

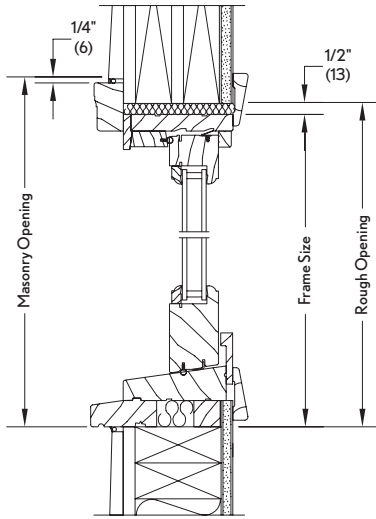
CONSTRUCTION DETAILS



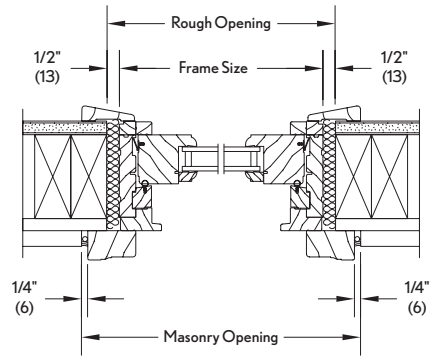
TRANSOM MULLED
OVER WOOD ULTIMATE DOUBLE HUNG MAGNUM



TRANSOM HEAD JAMB AND SILL
WITH WOOD BMC



PICTURE HEAD JAMB AND SILL



PICTURE JAMB
WITH WOOD BMC

MULTIPLE ASSEMBLY CONVERSIONS

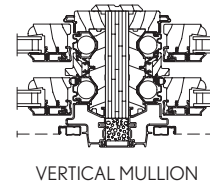
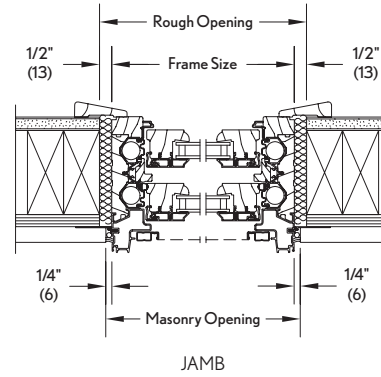
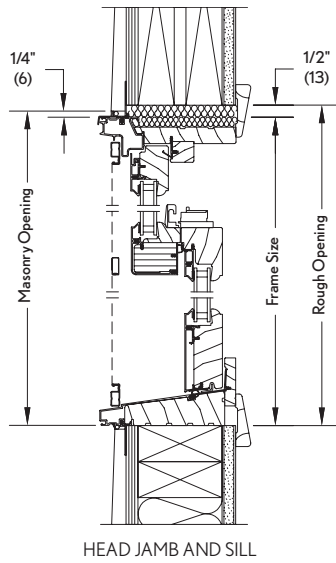
ROUGH OPENING		MASONRY OPENING WITH BMC	
Width	Height	Width	Height
Add all frame sizes plus 1" (25)	Add frame sizes plus 1/2" (13)	Add all frame sizes plus 3 1/8" (79)	Add frame sizes plus 1 9/16" (39)

NOTES:

Sizes for Wood Ultimate Double Hung Magnum windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

CLAD ULTIMATE DOUBLE HUNG MAGNUM

CONSTRUCTION DETAILS (4 9/16" WALL SHOWN)



CLAD MINIMUM AND MAXIMUM MEASUREMENTS

GLASS TYPE	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum Glass Size per Sash
Double Hung					
Insulating Glass	26 3/8" (670)*	48 7/8" (1241)*	66 3/8" (1686)	128 7/8" (3273)	25 Sq. Feet
Transom					
Insulating Glass	14 3/8" (365)	14 3/16" (360)	106" (2692)	60" (1524)	25 Sq. Feet
Picture					
1" Insulating Glass	14 3/8" (365)	15 1/2" (394)	121" (3073)	128 7/8" (3273)	60 Sq. Feet

Standard glass thickness is determined by Marvin. For custom glass options, contact your Marvin representative.
 * Minimum RO width of 16 3/8" is available with a minimum RO height of 64 7/8".

NOTES:

Sizes for Clad Ultimate Double Hung Magnum windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

Please contact your local Marvin representative for masonry openings that include casings and subsills.

CLAD ULTIMATE DOUBLE HUNG MAGNUM

CLAD ULTIMATE DOUBLE HUNG MAGNUM / SINGLE HUNG MAGNUM

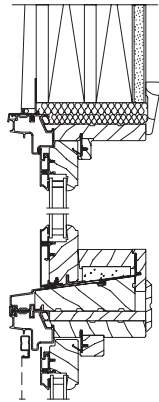
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.46	0.55	0.58	42	
11/16" Insulating Glass LoE 272 Air	0.34	0.30	0.51	52	SC
11/16" Insulating Glass LoE 272 Argon	0.30	0.30	0.51	56	N, NC, SC
11/16" Insulating Glass LoE 366 Air	0.33	0.20	0.46	53	SC, S
11/16" Insulating Glass LoE 366 Argon	0.30	0.20	0.46	56	N, NC, SC, S
11/16" Insulating Glass LoE 272 Air w/Combination	0.26	0.30	0.47	69	N, NC, SC
11/16" Insulating Glass LoE 272 Argon w/Combination	0.24	0.29	0.47	71	N, NC, SC
11/16" Insulating Glass LoE 366 Air w/Combination	0.26	0.22	0.42	70	N, NC, SC, S
11/16" Insulating Glass LoE 366 Argon w/Combination	0.23	0.21	0.42	71	N, NC, SC, S

CLAD ULTIMATE DOUBLE HUNG MAGNUM PICTURE

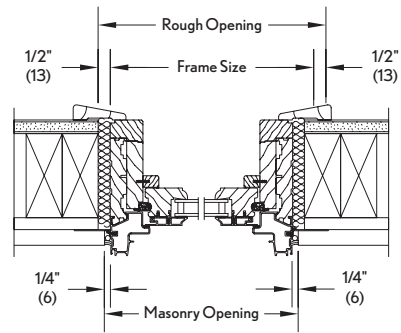
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.46	0.60	0.63	43	
11/16" Insulating Glass LoE 272 Air	0.33	0.32	0.55	54	
11/16" Insulating Glass LoE 272 Argon	0.29	0.32	0.55	57	N, NC
11/16" Insulating Glass LoE 366 Air	0.32	0.22	0.50	54	NC, SC, S
11/16" Insulating Glass LoE 366 Argon	0.29	0.21	0.50	58	N, NC, SC, S

CLAD ULTIMATE DOUBLE HUNG MAGNUM

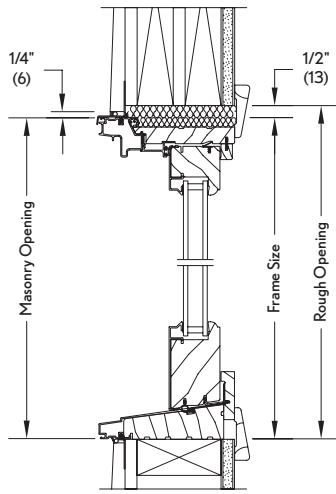
CONSTRUCTION DETAILS (4 9/16" WALL SHOWN)



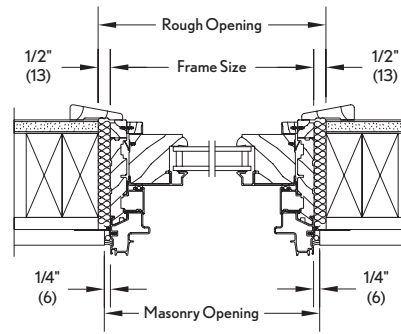
TRANSOM MULLED
OVER CLAD ULTIMATE DOUBLE HUNG MAGNUM



TRANSOM HEAD JAMB AND SILL



HEAD JAMB AND SILL



PICTURE JAMB

MULTIPLE ASSEMBLY CONVERSIONS

ROUGH OPENING		MASONRY OPENING WITHOUT BMC	
Width	Height	Width	Height
Add all frame sizes plus 1" (25)	Add frame sizes plus 1/2" (13)	Add all frame sizes plus 1/2" (13)	Add frame sizes plus 1/4" (6)

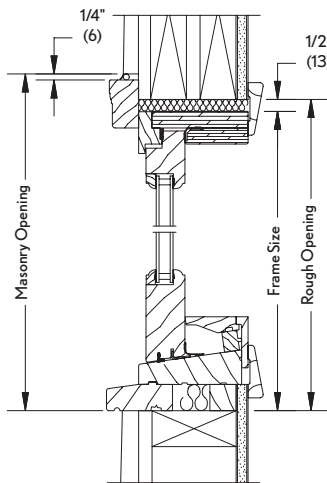
NOTES:

Sizes for Clad Ultimate Double Hung Magnum windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

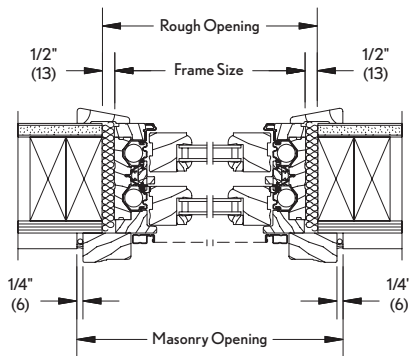
Please contact your local Marvin representative for masonry openings that include casings and subsills.

WOOD ULTIMATE DOUBLE HUNG MAGNUM ROUND TOP

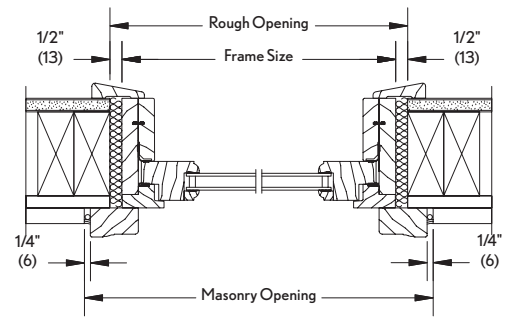
CONSTRUCTION DETAILS



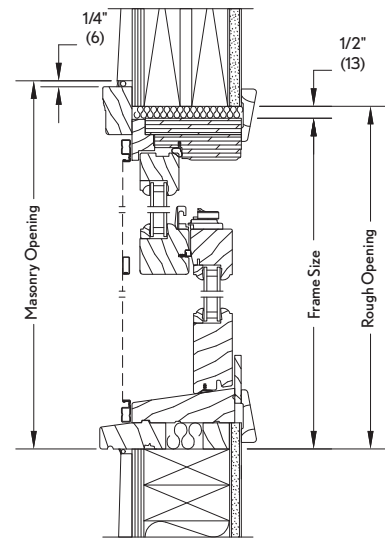
15/8" PICTURE HEAD JAMB AND SILL



OPERATOR JAMB



15/8" PICTURE JAMB



OPERATOR HEAD JAMB AND SILL

WOOD MINIMUM AND MAXIMUM MEASUREMENTS

GLASS TYPE	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum Glass Size per Sash
Double Hung					
Insulating Glass	26 3/8" (670)*	48 7/8" (1241)*	66 3/8" (1686)	129 7/8" (3296)	25 Sq. Feet
Transom					
Insulating Glass	14 3/8" (365)	14 3/16" (360)	106" (2692)	60" (1524)	25 Sq. Feet
Picture					
1" Insulating Glass	14 3/8" (365)	15 1/2" (394)	121" (3073)	128 7/8" (3273)	60 Sq. Feet

Standard glass thickness is determined by Marvin. For custom glass options, contact your Marvin representative.

* Minimum RO width of 16 3/8" is available with a minimum RO height of 64 7/8".

WOOD ULTIMATE DOUBLE HUNG MAGNUM ROUND TOP PICTURE 2"

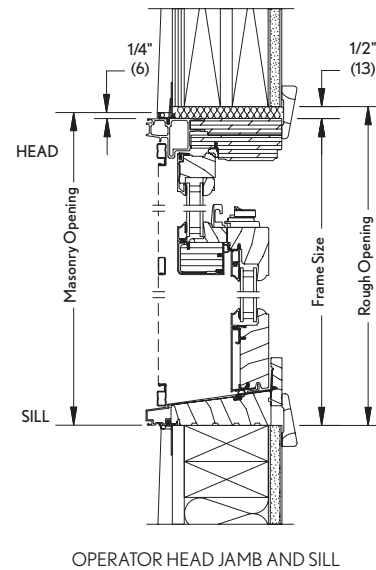
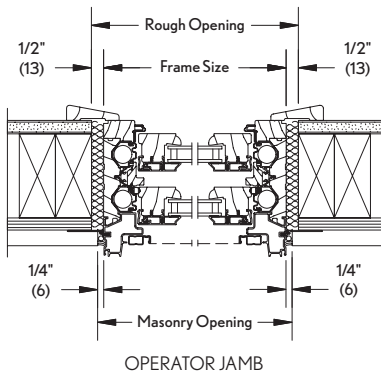
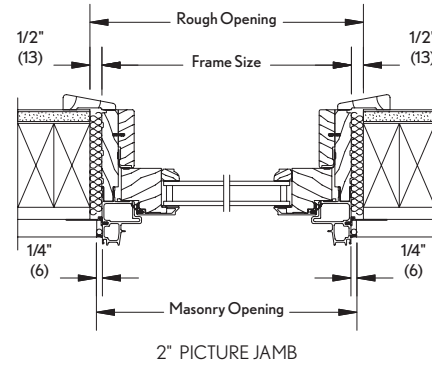
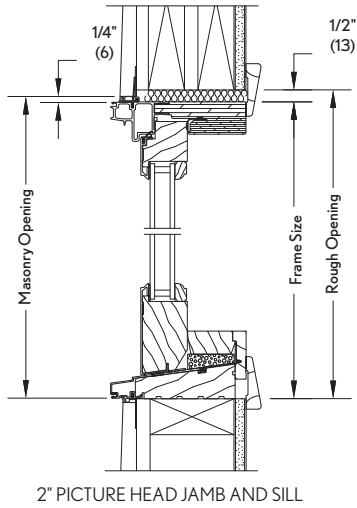
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1" Insulating Glass Air	0.43	0.54	0.59	45	
1" Insulating Glass LoE 272 Air	0.31	0.3	0.52	56	NC, SC
1" Insulating Glass LoE 272 Argon	0.27	0.3	0.52	60	N, NC, SC
1" Insulating Glass LoE 366 Air	0.3	0.2	0.47	57	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.27	0.2	0.47	60	N, NC, SC, S
1" Tri-Pane LoE EA Argon LoE EA	0.23	0.42	0.46	64	N
1" Tri-Pane LoE 272 Argon LoE 272	0.21	0.26	0.42	67	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.19	0.26	0.42	69	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.22	0.42	0.51	65	N

NOTES:

Sizes for Ultimate Double Hung Magnum Round Top windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

CLAD ULTIMATE DOUBLE HUNG MAGNUM ROUND TOP

CONSTRUCTION DETAILS



CLAD MINIMUM AND MAXIMUM MEASUREMENTS

GLASS TYPE	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum Glass Size per Sash
Double Hung					
Insulating Glass	26 3/8" (670)*	48 7/8" (1241)*	66 3/8" (1686)	128 5/8" (3265)	25 Sq. Feet
Transom					
Insulating Glass	14 3/8" (365)	14 3/16" (360)	106" (2692)	60" (1524)	25 Sq. Feet
Picture					
1" Insulating Glass	14 3/8" (365)	15 1/2" (394)	121" (3073)	128 7/8" (3273)	60 Sq. Feet

Standard glass thickness is determined by Marvin. For custom glass options, contact your Marvin representative.
 * Minimum RO width of 16 3/8" is available with a minimum RO height of 64 7/8".

WOOD AND CLAD ULTIMATE INSERT DOUBLE HUNG

ULTIMATE INSERT DOUBLE HUNG MEASUREMENT INSTRUCTIONS

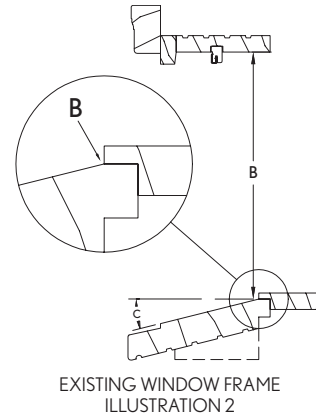
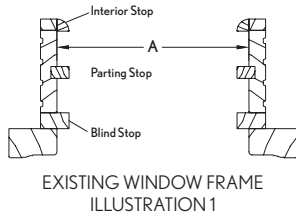
1. For Inside Opening Width (A) measure inside of frame at three locations: the sill, the center and the head jamb. Record the narrowest measurement. Do not measure from parting stops or blind stops. See illustration 1.

Note: This measurement is from wood surface to wood surface. Removal of existing jamb hardware may be necessary to reach the frame.

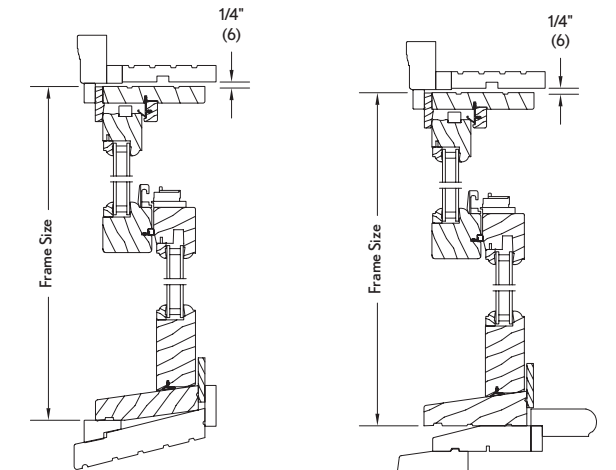
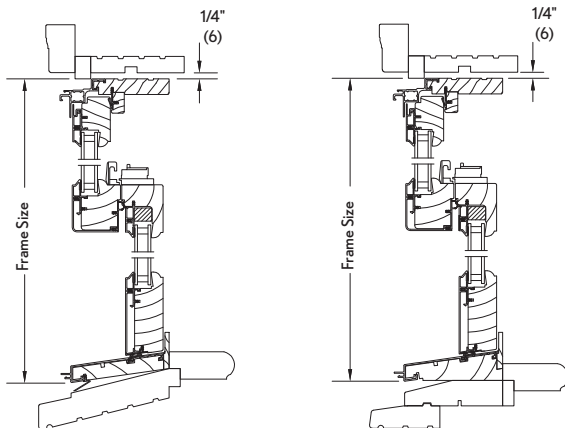
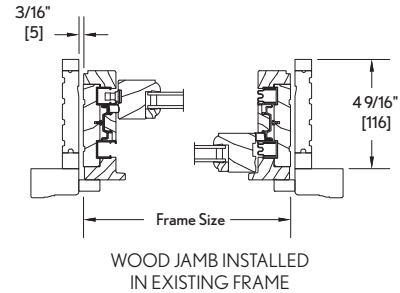
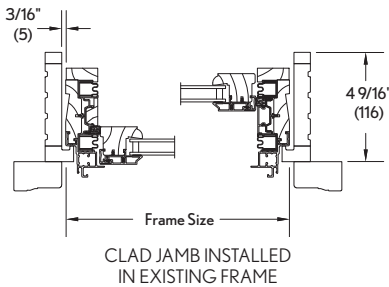
2. Measure the Inside Opening Height (B) from the top of the sill to the bottom of the head jamb as shown in illustration 2.

3. Check the Sill Angle (C). Record the sill angle to the nearest degree. See illustration 2.

Note: If the angle of the sill is 8° or less the unit will be made with a flat bottom frame, if it is greater than 8° it will be made with a bevel frame.

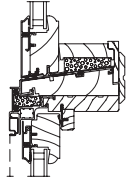


CONSTRUCTION DETAILS

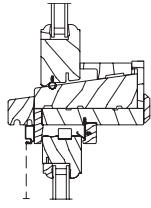


WOOD AND CLAD ULTIMATE INSERT DOUBLE HUNG

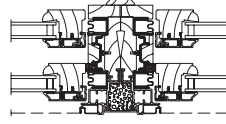
CONSTRUCTION DETAILS



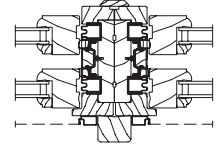
CLAD HORIZONTAL
MULLION
TRANSOM/OPERATOR



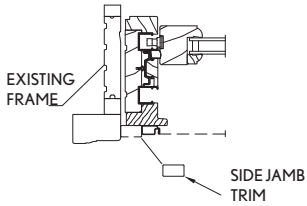
WOOD HORIZONTAL
MULLION
TRANSOM/OPERATOR



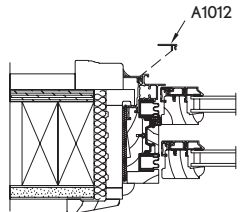
CLAD VERTICAL
MULLION
OPERATOR



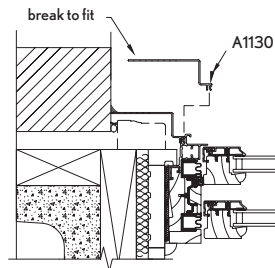
WOOD VERTICAL
MULLION
OPERATOR



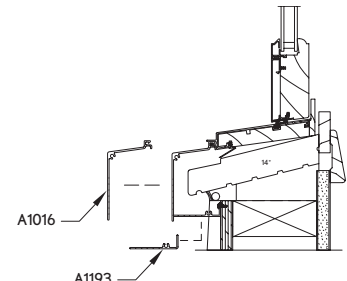
WOOD OPTIONAL EXTERIOR TRIM



CLAD FRAME EXPANDER



CLAD PANNING (MASONRY SHOW)



CLAD SILL PANNING

NOTES:

Ultimate Insert Double Hung windows are manufactured to your specifications. For additional information, contact your local Marvin representative.

WOOD AND CLAD ULTIMATE INSERT DOUBLE HUNG

CLAD ULTIMATE INSERT DOUBLE / SINGLE HUNG

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.47	0.56	0.59	42	
11/16" Insulating Glass LoE 272 Air	0.34	0.31	0.52	52	
11/16" Insulating Glass LoE 272 Argon	0.31	0.3	0.52	56	NC, SC
11/16" Insulating Glass LoE 366 Air	0.34	0.21	0.47	53	SC, S
11/16" Insulating Glass LoE 366 Argon	0.3	0.2	0.47	56	N, NC, SC, S
7/8" Tri-Pane LoE 272 Argon LoE 272	0.26	0.26	0.41	64	N, NC, SC, S
7/8" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.23	0.26	0.41	65	N, NC, SC, S
7/8" Tri-Pane LoE 179 Argon LoE 179	0.27	0.41	0.5	63	N
7/8" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.24	0.41	0.5	65	N

WOOD ULTIMATE INSERT DOUBLE HUNG

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" IG Air	0.45	0.56	0.59	43	
11/16" IG LoE 272 Air	0.33	0.3	0.52	53	SC
11/16" IG LoE 272 Argon	0.29	0.3	0.52	56	N, NC, SC
11/16" IG LoE 366 Air	0.32	0.2	0.46	53	NC, SC, S
11/16" IG LoE 366 Argon	0.28	0.2	0.46	57	N, NC, SC, S
11/16" IG LoE 272 Air w/Combination	0.23	0.31	0.47	65	N, NC
11/16" IG LoE 272 Argon w/Combination	0.21	0.3	0.47	67	N, NC, SC
11/16" IG LoE 366 Air w/Combination	0.23	0.22	0.42	65	N, NC, SC, S
11/16" IG LoE 366 Argon w/Combination	0.21	0.21	0.42	68	N, NC, SC, S

WOOD AND CLAD DOUBLE HUNG TILT PAC

WOOD AND CLAD DOUBLE HUNG TILT PAC STANDARD SIZES

2 LT. GLASS SIZE	SASH OPENING SIZE
16" (406) x 12" (305)	1-8 (508) x 2-6 (762)
16" (406) x 14" (356)	1-8 (508) x 2-10 (864)
16" (406) x 16" (406)	1-8 (508) x 3-2 (965)
16" (406) x 18" (457)	1-8 (508) x 3-6 (1067)
16" (406) x 20" (508)	1-8 (508) x 3-10 (1168)
16" (406) x 22" (559)	1-8 (508) x 4-2 (1270)
16" (406) x 24" (610)	1-8 (508) x 4-6 (1372)
16" (406) x 26" (660)	1-8 (508) x 4-10 (1473)
16" (406) x 28" (711)	1-8 (508) x 5-2 (1575)
16" (406) x 30" (762)	1-8 (508) x 5-6 (1676)
16" (406) x 32" (813)	1-8 (508) x 5-10 (1778)
16" (406) x 34" (864)	1-8 (508) x 6-2 (1880)
16" (406) x 36" (914)	1-8 (508) x 6-6 (1981)

20" (508) x 12" (305)	2-0 (610) x 2-6 (762)
20" (508) x 14" (356)	2-0 (610) x 2-10 (864)
20" (508) x 16" (406)	2-0 (610) x 3-2 (965)
20" (508) x 18" (457)	2-0 (610) x 3-6 (1067)
20" (508) x 20" (508)	2-0 (610) x 3-10 (1168)
20" (508) x 22" (559)	2-0 (610) x 4-2 (1270)
20" (508) x 24" (610)	2-0 (610) x 4-6 (1372)
20" (508) x 26" (660)	2-0 (610) x 4-10 (1473)
20" (508) x 28" (711)	2-0 (610) x 5-2 (1575)
20" (508) x 30" (762)	2-0 (610) x 5-6 (1676)
20" (508) x 32" (813)	2-0 (610) x 5-10 (1778)
20" (508) x 34" (864)	2-0 (610) x 6-2 (1880)
20" (508) x 36" (914)	2-0 (610) x 6-6 (1981)

24" (610) x 12" (305)	2-4 (711) x 2-6 (762)
24" (610) x 14" (356)	2-4 (711) x 2-10 (864)
24" (610) x 16" (406)	2-4 (711) x 3-2 (965)
24" (610) x 18" (457)	2-4 (711) x 3-6 (1067)
24" (610) x 20" (508)	2-4 (711) x 3-10 (1168)
24" (610) x 22" (559)	2-4 (711) x 4-2 (1270)
24" (610) x 24" (610)	2-4 (711) x 4-6 (1372)
24" (610) x 26" (660)	2-4 (711) x 4-10 (1473)
24" (610) x 28" (711)	2-4 (711) x 5-2 (1575)
24" (610) x 30" (762)	2-4 (711) x 5-6 (1676)
24" (610) x 32" (813)	2-4 (711) x 5-10 (1778)
24" (610) x 34" (864)	2-4 (711) x 6-2 (1880)
24" (610) x 36" (914)	2-4 (711) x 6-6 (1981)

26" (660) x 12" (305)	2-6 (762) x 2-6 (762)
26" (660) x 14" (356)	2-6 (762) x 2-10 (864)
26" (660) x 16" (406)	2-6 (762) x 3-2 (965)
26" (660) x 18" (457)	2-6 (762) x 3-6 (1067)
26" (660) x 20" (508)	2-6 (762) x 3-10 (1168)
26" (660) x 22" (559)	2-6 (762) x 4-2 (1270)
26" (660) x 24" (610)	2-6 (762) x 4-6 (1372)
26" (660) x 26" (660)	2-6 (762) x 4-10 (1473)
26" (660) x 28" (711)	2-6 (762) x 5-2 (1575)
26" (660) x 30" (762)	2-6 (762) x 5-6 (1676)
26" (660) x 32" (813)	2-6 (762) x 5-10 (1778)
26" (660) x 34" (864)	2-6 (762) x 6-2 (1880)
26" (660) x 36" (914)	2-6 (762) x 6-6 (1981)

28" (711) x 12" (305)	2-8 (813) x 2-6 (762)
28" (711) x 14" (356)	2-8 (813) x 2-10 (864)
28" (711) x 16" (406)	2-8 (813) x 3-2 (965)
28" (711) x 18" (457)	2-8 (813) x 3-6 (1067)
28" (711) x 20" (508)	2-8 (813) x 3-10 (1168)
28" (711) x 22" (559)	2-8 (813) x 4-2 (1270)
28" (711) x 24" (610)	2-8 (813) x 4-6 (1372)
28" (711) x 26" (660)	2-8 (813) x 4-10 (1473)
28" (711) x 28" (711)	2-8 (813) x 5-2 (1575)
28" (711) x 30" (762)	2-8 (813) x 5-6 (1676)
28" (711) x 32" (813)	2-8 (813) x 5-10 (1778)
28" (711) x 34" (864)	2-8 (813) x 6-2 (1880)
28" (711) x 36" (914)	2-8 (813) x 6-6 (1981)

2 LT. GLASS SIZE	SASH OPENING SIZE
30" (762) x 12" (305)	2-10 (864) x 2-6 (762)
30" (762) x 14" (356)	2-10 (864) x 2-10 (864)
30" (762) x 16" (406)	2-10 (864) x 3-2 (965)
30" (762) x 18" (457)	2-10 (864) x 3-6 (1067)
30" (762) x 20" (508)	2-10 (864) x 3-10 (1168)
30" (762) x 22" (559)	2-10 (864) x 4-2 (1270)
30" (762) x 24" (610)	2-10 (864) x 4-6 (1372)
30" (762) x 26" (660)	2-10 (864) x 4-10 (1473)
30" (762) x 28" (711)	2-10 (864) x 5-2 (1575)
30" (762) x 30" (762)	2-10 (864) x 5-6 (1676)
30" (762) x 32" (813)	2-10 (864) x 5-10 (1778)
30" (762) x 34" (864)	2-10 (864) x 6-2 (1880)
30" (762) x 36" (914)	2-10 (864) x 6-6 (1981)

32" (813) x 12" (305)	3-0 (914) x 2-6 (762)
32" (813) x 14" (356)	3-0 (914) x 2-10 (864)
32" (813) x 16" (406)	3-0 (914) x 3-2 (965)
32" (813) x 18" (457)	3-0 (914) x 3-6 (1067)
32" (813) x 20" (508)	3-0 (914) x 3-10 (1168)
32" (813) x 22" (559)	3-0 (914) x 4-2 (1270)
32" (813) x 24" (610)	3-0 (914) x 4-6 (1372)
32" (813) x 26" (660)	3-0 (914) x 4-10 (1473)
32" (813) x 28" (711)	3-0 (914) x 5-2 (1575)
32" (813) x 30" (762)	3-0 (914) x 5-6 (1676)
32" (813) x 32" (813)	3-0 (914) x 5-10 (1778)
32" (813) x 34" (864)	3-0 (914) x 6-2 (1880)
32" (813) x 36" (914)	3-0 (914) x 6-6 (1981)

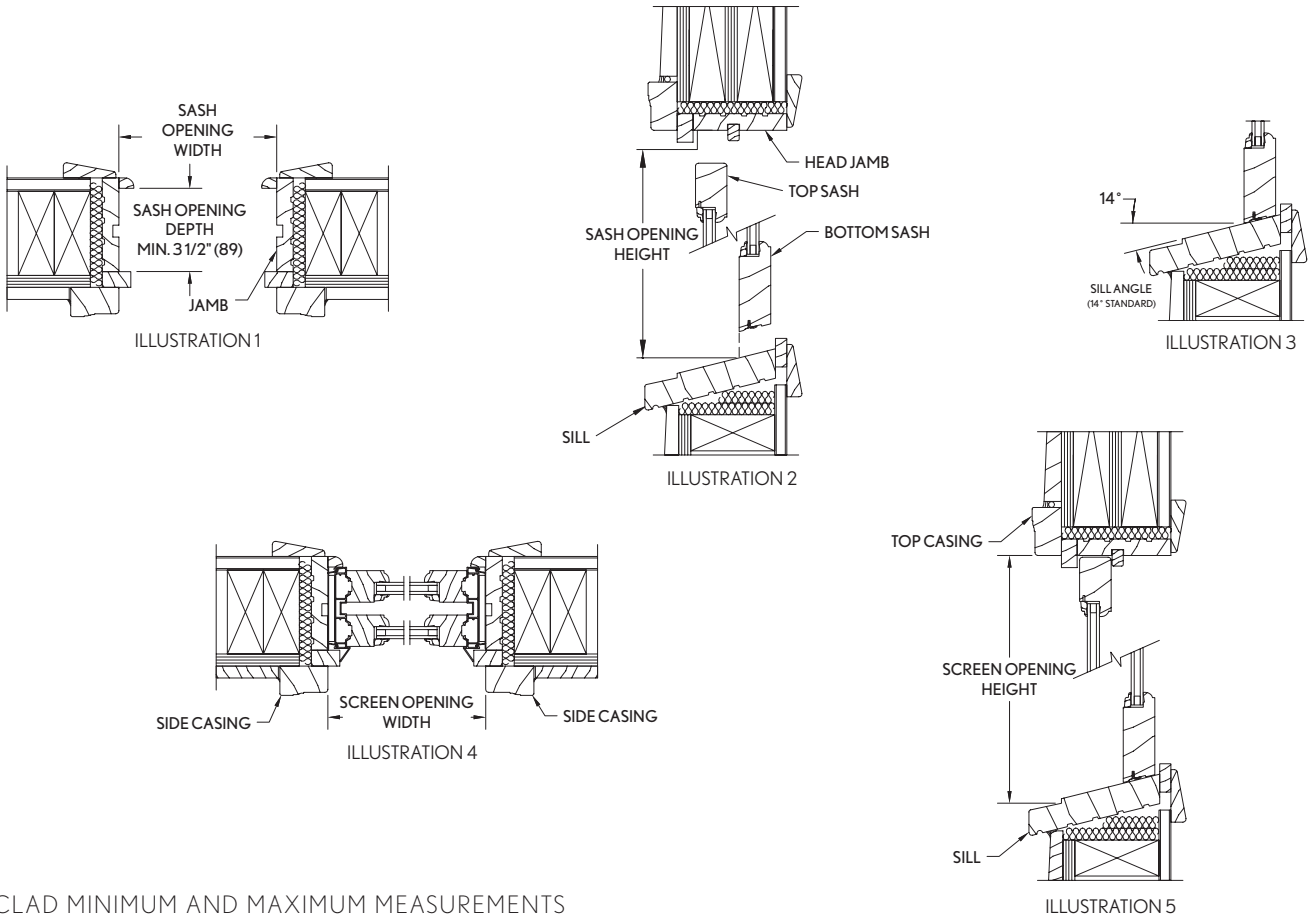
36" (914) x 12" (305)	3-4 (1016) x 2-6 (762)
36" (914) x 14" (356)	3-4 (1016) x 2-10 (864)
36" (914) x 16" (406)	3-4 (1016) x 3-2 (965)
36" (914) x 18" (457)	3-4 (1016) x 3-6 (1067)
36" (914) x 20" (508)	3-4 (1016) x 3-10 (1168)
36" (914) x 22" (559)	3-4 (1016) x 4-2 (1270)
36" (914) x 24" (610)	3-4 (1016) x 4-6 (1372)
36" (914) x 26" (660)	3-4 (1016) x 4-10 (1473)
36" (914) x 28" (711)	3-4 (1016) x 5-2 (1575)
36" (914) x 30" (762)	3-4 (1016) x 5-6 (1676)
36" (914) x 32" (813)	3-4 (1016) x 5-10 (1778)
36" (914) x 34" (864)	3-4 (1016) x 6-2 (1880)
36" (914) x 36" (914)	3-4 (1016) x 6-6 (1981)

40" (1016) x 12" (305)	3-8 (1118) x 2-6 (762)
40" (1016) x 14" (356)	3-8 (1118) x 2-10 (864)
40" (1016) x 16" (406)	3-8 (1118) x 3-2 (965)
40" (1016) x 18" (457)	3-8 (1118) x 3-6 (1067)
40" (1016) x 20" (508)	3-8 (1118) x 3-10 (1168)
40" (1016) x 22" (559)	3-8 (1118) x 4-2 (1270)
40" (1016) x 24" (610)	3-8 (1118) x 4-6 (1372)
40" (1016) x 26" (660)	3-8 (1118) x 4-10 (1473)
40" (1016) x 28" (711)	3-8 (1118) x 5-2 (1575)
40" (1016) x 30" (762)	3-8 (1118) x 5-6 (1676)
40" (1016) x 32" (813)	3-8 (1118) x 5-10 (1778)
40" (1016) x 34" (864)	3-8 (1118) x 6-2 (1880)
40" (1016) x 36" (914)	3-8 (1118) x 6-6 (1981)

Special sill angles available.

WOOD AND CLAD DOUBLE HUNG TILT PAC

MEASUREMENT INSTRUCTIONS



CLAD MINIMUM AND MAXIMUM MEASUREMENTS

GLASS TYPE	Minimum Glass Width	Minimum Glass Height	Maximum Glass Width	Maximum Glass Height	Maximum Glass Square Feet
Clad Double Hung Tilt Pac					
Insulating Glass	8" (203)	8" (203)	44" (1117)	48" (1219)	10.0 Sq. Feet (0.93 Sq. Meters)
Single Glaze	8" (203)	8" (203)	44" (1117)	48" (1219)	12.0 Sq. Feet (1.11 Sq. Meters)
Maximum sash weight 42 lbs. per sash					
Clad Magnum Double Hung Tilt Pac					
Insulating Glass	12" (304)	12" (304)	60" (1524)	60" (1524)	18.5 Sq. Feet (1.72 Sq. Meters)
Maximum sash weight 70 lbs. per sash					

These minimum and maximum measurements are guidelines for configuring custom sized units, all measurements are specific to glass type. For assistance please contact our support hotline at 800.346.3363 or your Marvin representative.

TILT PAC® MEASUREMENT INSTRUCTIONS

Follow these steps to measure for a Tilt Pac:

- For sash opening width, take an inside measurement of the frame from jamb to jamb. Measure sash opening depth, minimum depth allowed is 3 1/2" (89). See Illustration 1.
- If the window has wood blocks holding the top sash in place, remove them. Lower the top sash a few inches.
- Measure the height of the window from where the top sash meets the head jamb to where the exterior face of the bottom sash meets the sill when fully closed. See Illustration 2.
- Check the sill bevel. To determine the existing bevel, raise the bottom sash and place a carpenter's protractor on the sill. The angle of the bevel will register. The standard Marvin sill bevel is 14° but specials are available. See Illustration 3.

TILT PAC® FULL SCREEN MEASUREMENT INSTRUCTIONS

Marvin recommends ordering screen after installation of Tilt Pac. This will insure proper fit if any modifications to frame or casing reveal are made during Tilt Pac installation.

Follow these simple steps to measure for a screen:

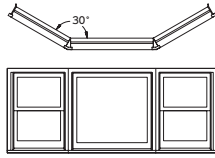
- Measure from side casing to side casing. This is the screen opening width. See Illustration 4.
- Measure from the top of casing to the location on the sill where the screen will rest. This is the screen opening height. See Illustration 5.
- Subtract 1/8" from the screen opening width and 1/8" from screen opening height to arrive at the Outside Measurement needed for ordering a screen or Storm combination. This 1/8" deduct will provide proper clearance and fit into the screen opening.

Note: In determining screen opening height and width do not allow for clearance around perimeter of screen. The actual outside measurements of the screen allowing for clearance will be calculated by Marvin.

Notice: Verify outside measurement of the Marvin clad combination as this unit may not fit in a wood double hung frame.

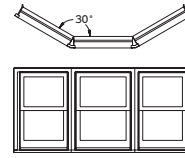
WOOD ULTIMATE DOUBLE HUNG BAY

30° WOOD ULTIMATE DOUBLE HUNG BAY WITH PICTURE CENTER UNIT



UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-40-16	6-11 3/16 (2113)	11 15/16" (303)
16-48-16	7-7 3/16 (2316)	11 15/16" (303)
16-52-16	7-11 3/16 (2418)	11 15/16" (303)
16-60-16	8-7 3/16 (2621)	11 15/16" (303)
20-40-20	7-6 1/8 (2289)	13 15/16" (354)
20-48-20	8-2 1/8 (2492)	13 15/16" (354)
20-52-20	8-6 1/8 (2594)	13 15/16" (354)
20-60-20	9-2 1/8 (2797)	13 15/16" (354)
20-68-20	9-10 1/8 (3000)	13 15/16" (354)
24-40-24	8-1 1/16 (2465)	15 15/16" (405)
24-48-24	8-9 1/16 (2669)	15 15/16" (405)
24-52-24	9-1 1/16 (2770)	15 15/16" (405)
24-60-24	9-9 1/16 (2973)	15 15/16" (405)
24-68-24	10-5 1/16 (3177)	15 15/16" (405)
26-40-26	8-4 1/2 (2553)	16 15/16" (430)
26-48-26	9-0 1/2 (2756)	16 15/16" (430)
26-52-26	9-4 1/2 (2858)	16 15/16" (430)
26-60-26	10-0 1/2 (3061)	16 15/16" (430)
26-68-26	10-8 1/2 (3264)	16 15/16" (430)
28-40-28	8-7 31/32 (2641)	17 15/16" (456)
28-48-28	9-3 31/32 (2844)	17 15/16" (456)
28-52-28	9-7 31/32 (2946)	17 15/16" (456)
28-60-28	10-3 31/32 (3149)	17 15/16" (456)
28-68-28	10-11 31/32 (3352)	17 15/16" (456)
30-40-30	8-11 7/16 (2729)	18 15/16" (481)
30-48-30	9-7 7/16 (2932)	18 15/16" (481)
30-52-30	9-11 7/16 (3034)	18 15/16" (481)
30-60-30	10-7 7/16 (3237)	18 15/16" (481)
30-68-30	11-3 7/16 (3440)	18 15/16" (481)
32-40-32	9-2 15/16 (2817)	19 15/16" (506)
32-48-32	9-10 15/16 (3020)	19 15/16" (506)
32-52-32	10-2 15/16 (3122)	19 15/16" (506)
32-60-32	10-10 15/16 (3325)	19 15/16" (506)
32-68-32	11-6 15/16 (3528)	19 15/16" (506)
36-40-36	9-9 27/32 (2993)	21 15/16" (557)
36-48-36	10-5 27/32 (3196)	21 15/16" (557)
36-52-36	10-9 27/32 (3298)	21 15/16" (557)
36-60-36	11-5 27/32 (3501)	21 15/16" (557)
36-68-36	12-1 27/32 (3704)	21 15/16" (557)
40-40-40	10-4 3/4 (3169)	23 15/16" (608)
40-48-40	11-0 3/4 (3372)	23 15/16" (608)
40-52-40	11-4 3/4 (3473)	23 15/16" (608)
40-60-40	12-0 3/4 (3677)	23 15/16" (608)
40-68-40	12-8 3/4 (3880)	23 15/16" (608)

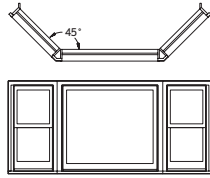
30° WOOD ULTIMATE DOUBLE HUNG BAY WITH OPERATOR CENTER UNIT



UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-16-16	5-3 3/16 (1605)	11 15/16" (304)
16-20-16	5-7 3/16 (1707)	11 15/16" (304)
16-24-16	5-11 3/16 (1808)	11 15/16" (304)
16-26-16	6-1 3/16 (1859)	11 15/16" (304)
16-28-16	6-3 3/16 (1910)	11 15/16" (304)
16-30-16	6-5 3/16 (1961)	11 15/16" (304)
16-32-16	6-7 3/16 (2012)	11 15/16" (304)
16-36-16	6-11 3/16 (2113)	11 15/16" (304)
16-40-16	7-3 3/16 (2215)	11 15/16" (304)
20-20-20	6-2 1/8 (1883)	13 15/16" (354)
20-24-20	6-6 1/8 (1985)	13 15/16" (354)
20-26-20	6-8 1/8 (2032)	13 15/16" (354)
20-28-20	6-10 1/8 (2086)	13 15/16" (354)
20-30-20	7-0 1/8 (2137)	13 15/16" (354)
20-32-20	7-2 1/8 (2188)	13 15/16" (354)
20-36-20	7-6 1/8 (2289)	13 15/16" (354)
20-40-20	7-10 1/8 (2391)	13 15/16" (354)
24-24-24	7-1 1/16 (2160)	15 15/16" (405)
24-26-24	7-3 1/16 (2211)	15 15/16" (405)
24-28-24	7-5 1/16 (2262)	15 15/16" (405)
24-30-24	7-7 1/16 (2313)	15 15/16" (405)
24-32-24	7-9 1/16 (2364)	15 15/16" (405)
24-36-24	8-1 1/16 (2465)	15 15/16" (405)
24-40-24	8-5 1/16 (2567)	15 15/16" (405)
26-26-26	7-6 1/2 (2299)	16 15/16" (431)
26-28-26	7-8 1/2 (2350)	16 15/16" (431)
26-30-26	7-10 1/2 (2401)	16 15/16" (431)
26-32-26	8-0 1/2 (2452)	16 15/16" (431)
26-36-26	8-4 1/2 (2553)	16 15/16" (431)
26-40-26	8-8 1/2 (2655)	16 15/16" (431)
28-28-28	8-0 (2438)	17 15/16" (456)
28-30-28	8-2 (2489)	17 15/16" (456)
28-32-28	8-4 (2540)	17 15/16" (456)
28-36-28	8-8 (2641)	17 15/16" (456)
28-40-28	9-0 (2743)	17 15/16" (456)
30-30-30	8-5 7/16 (2577)	18 15/16" (481)
30-32-30	8-7 7/16 (2628)	18 15/16" (481)
30-36-30	8-11 7/16 (2729)	18 15/16" (481)
30-40-30	9-3 7/16 (2831)	18 15/16" (481)
32-32-32	8-10 15/16 (2716)	19 15/16" (507)
32-36-32	9-2 15/16 (2817)	19 15/16" (507)
32-40-32	9-6 15/16 (2919)	19 15/16" (507)
36-36-36	9-9 27/32 (2993)	21 15/16" (558)
36-40-36	10-1 27/32 (3095)	21 15/16" (558)
40-40-40	10-8 3/4 (3271)	23 15/16" (608)

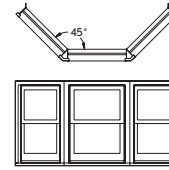
WOOD ULTIMATE DOUBLE HUNG BAY

45° WOOD ULTIMATE DOUBLE HUNG BAY
WITH PICTURE CENTER UNIT



UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-40-16	6-5 3/16 (1961)	17 3/8" (441)
16-48-16	7-1 3/16 (2164)	17 3/8" (441)
16-52-16	7-5 3/16 (2265)	17 3/8" (441)
16-60-16	8-1 3/16 (2469)	17 3/8" (441)
<hr/>		
20-40-20	6-10 7/8 (2104)	20 3/16" (513)
20-48-20	7-6 7/8 (2307)	20 3/16" (513)
20-52-20	7-10 7/8 (2409)	20 3/16" (513)
20-60-20	8-6 7/8 (2612)	20 3/16" (513)
20-68-20	9-2 7/8 (2815)	20 3/16" (513)
<hr/>		
24-40-24	7-4 1/2 (2248)	23 1/32" (585)
24-48-24	8-0 1/2 (2451)	23 1/32" (585)
24-52-24	8-4 1/2 (2553)	23 1/32" (585)
24-60-24	9-0 1/2 (2756)	23 1/32" (585)
24-68-24	9-8 1/2 (2959)	23 1/32" (585)
<hr/>		
26-40-26	7-7 11/32 (2320)	24 7/16" (621)
26-48-26	8-3 11/32 (2523)	24 7/16" (621)
26-52-26	8-7 11/32 (2625)	24 7/16" (621)
26-60-26	9-3 11/32 (2828)	24 7/16" (621)
26-68-26	9-11 11/32 (3031)	24 7/16" (621)
<hr/>		
28-40-28	7-10 3/16 (2392)	25 7/8" (656)
28-48-28	8-6 3/16 (2595)	25 7/8" (656)
28-52-28	8-10 3/16 (2696)	25 7/8" (656)
28-60-28	9-6 3/16 (2900)	25 7/8" (656)
28-68-28	10-2 3/16 (3103)	25 7/8" (656)
<hr/>		
30-40-30	8-1 (2464)	27 9/32" (693)
30-48-30	8-9 (2667)	27 9/32" (693)
30-52-30	9-1 (2769)	27 9/32" (693)
30-60-30	9-9 (2972)	27 9/32" (693)
30-68-30	10-5 (3175)	27 9/32" (693)
<hr/>		
32-40-32	8-3 13/16 (2535)	28 11/16" (729)
32-48-32	8-11 13/16 (2738)	28 11/16" (729)
32-52-32	9-3 13/16 (2840)	28 11/16" (729)
32-60-32	9-11 13/16 (3043)	28 11/16" (729)
32-68-32	10-7 13/16 (3246)	28 11/16" (729)
<hr/>		
36-40-36	8-9 1/2 (2679)	31 1/2" (800)
36-48-36	9-5 1/2 (2882)	31 1/2" (800)
36-52-36	9-9 1/2 (2984)	31 1/2" (800)
36-60-36	10-5 1/2 (3187)	31 1/2" (800)
36-68-36	11-1 1/2 (3390)	31 1/2" (800)
<hr/>		
40-40-40	9-3 1/8 (2823)	34 11/32" (872)
40-48-40	9-11 1/8 (3026)	34 11/32" (872)
40-52-40	10-3 1/8 (3127)	34 11/32" (872)
40-60-40	10-11 1/8 (3331)	34 11/32" (872)
40-68-40	11-7 1/8 (3534)	34 11/32" (872)

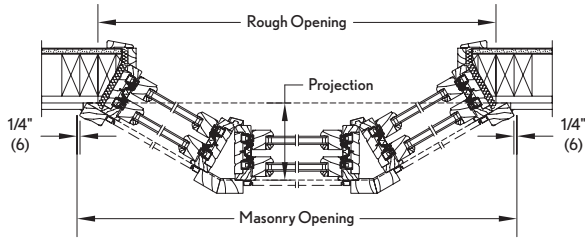
45° WOOD ULTIMATE DOUBLE HUNG BAY
WITH OPERATOR CENTER UNIT



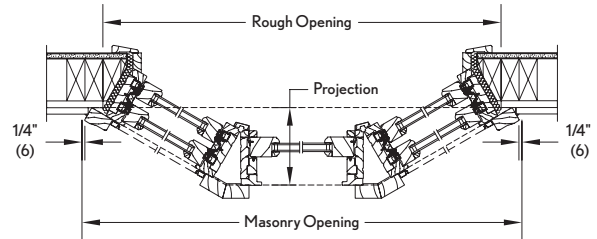
UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-16-16	4-9 3/16 (1453)	17 3/8" (441)
16-20-16	5-1 3/16 (1554)	17 3/8" (441)
16-24-16	5-5 3/16 (1656)	17 3/8" (441)
16-26-16	5-7 3/16 (1707)	17 3/8" (441)
16-28-16	5-9 3/16 (1758)	17 3/8" (441)
16-30-16	5-11 3/16 (1808)	17 3/8" (441)
16-32-16	6-1 3/16 (1859)	17 3/8" (441)
16-36-16	6-5 3/16 (1961)	17 3/8" (441)
16-40-16	6-9 3/16 (2062)	17 3/8" (441)
<hr/>		
20-20-20	5-6 27/32 (1698)	20 3/16" (513)
20-24-20	5-10 27/32 (1800)	20 3/16" (513)
20-26-20	6-0 27/32 (1851)	20 3/16" (513)
20-28-20	6-2 27/32 (1901)	20 3/16" (513)
20-30-20	6-4 27/32 (1952)	20 3/16" (513)
20-32-20	6-6 27/32 (2003)	20 3/16" (513)
20-36-20	6-10 27/32 (2105)	20 3/16" (513)
20-40-20	7-2 27/32 (2206)	20 3/16" (513)
<hr/>		
24-24-24	6-4 1/2 (1943)	23 1/32" (585)
24-26-24	6-6 1/2 (1994)	23 1/32" (585)
24-28-24	6-8 1/2 (2045)	23 1/32" (585)
24-30-24	6-10 1/2 (2096)	23 1/32" (585)
24-32-24	7-0 1/2 (2147)	23 1/32" (585)
24-36-24	7-4 1/2 (2248)	23 1/32" (585)
24-40-24	7-8 1/2 (2350)	23 1/32" (585)
<hr/>		
26-26-26	6-9 11/32 (2066)	24 7/16" (621)
26-28-26	6-11 11/32 (2117)	24 7/16" (621)
26-30-26	7-1 11/32 (2168)	24 7/16" (621)
26-32-26	7-3 11/32 (2219)	24 7/16" (621)
26-36-26	7-7 11/32 (2320)	24 7/16" (621)
26-40-26	7-11 11/32 (2422)	24 7/16" (621)
<hr/>		
28-28-28	7-2 3/16 (2189)	25 7/8" (657)
28-30-28	7-4 3/16 (2240)	25 7/8" (657)
28-32-28	7-6 3/16 (2290)	25 7/8" (657)
28-36-28	7-10 3/16 (2392)	25 7/8" (657)
28-40-28	8-2 3/16 (2494)	25 7/8" (657)
<hr/>		
30-30-30	7-7 (2311)	27 9/32" (693)
30-32-30	7-9 (2362)	27 9/32" (693)
30-36-30	8-1 (2464)	27 9/32" (693)
30-40-30	8-5 (2565)	27 9/32" (693)
<hr/>		
32-32-32	7-11 13/16 (2434)	28 11/16" (729)
32-36-32	8-3 13/16 (2536)	28 11/16" (729)
32-40-32	8-7 13/16 (2637)	28 11/16" (729)
<hr/>		
36-36-36	8-9 1/2 (2679)	31 1/2" (800)
36-40-36	9-1 1/2 (2781)	31 1/2" (800)
<hr/>		
40-40-40	9-7 1/8 (2925)	34 11/32" (872)

WOOD ULTIMATE DOUBLE HUNG BAY

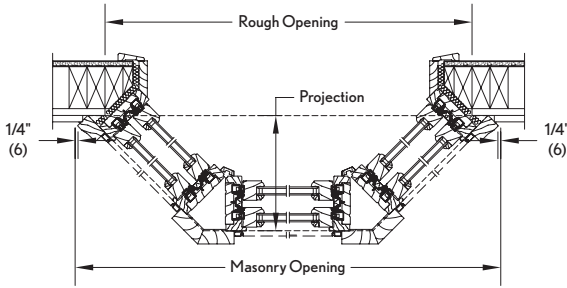
CONSTRUCTION DETAILS



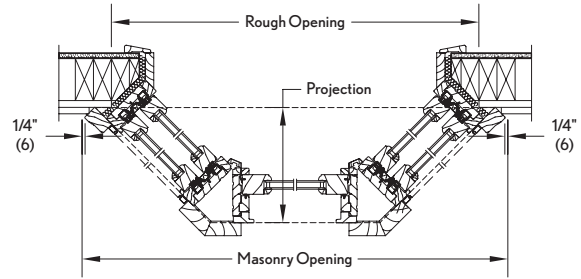
30° WOOD ULTIMATE DOUBLE HUNG BAY
JAMB WITH OPERATOR CENTER UNIT



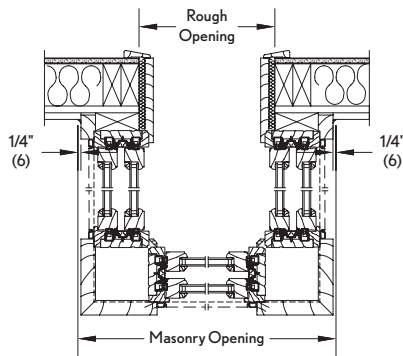
30° WOOD ULTIMATE DOUBLE HUNG BAY
JAMB WITH PICTURE CENTER UNIT



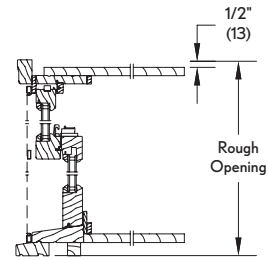
45° WOOD ULTIMATE DOUBLE HUNG BAY
JAMB WITH OPERATOR CENTER UNIT



45° WOOD ULTIMATE DOUBLE HUNG BAY
JAMB WITH PICTURE CENTER UNIT



90° WOOD ULTIMATE DOUBLE HUNG BAY
JAMB WITH OPERATOR CENTER UNIT



WOOD ULTIMATE DOUBLE HUNG BAY
HEAD JAMB AND SILL

60° ULTIMATE DOUBLE HUNG BAY FORMULA

TO CALCULATE PROJECTION

Flanker GLASS SIZE (width) PLUS 9.3217 (237) x .86603 (22) = PROJECTION

TO CALCULATE ROUGH OPENING

PROJECTION x .57735 (15) MINUS 2.1251 (54) x 2 (51) PLUS 5.2684 (134) PLUS Center Unit Sash Operating width = ROUGH OPENING width (Allows 1" (25) clearance)

90° ULTIMATE DOUBLE HUNG BAY FORMULA

TO CALCULATE PROJECTION

OM of Flanker (width) PLUS 6 1/16" (154) = PROJECTION

TO CALCULATE ROUGH OPENING

OM of Center Unit(s) (width) PLUS 15/8" (41) = ROUGH OPENING width

ROUGH OPENING HEIGHTS

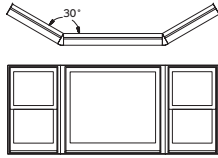
UNIT NO. (HEIGHT)		ROUGH OPENING
Side Unit No.	Center Unit No.	Height
16	38	3-6 3/16 (1073)
18	42	3-10 3/16 (1175)
20	46	4-2 3/16 (1276)
22	50	4-6 3/16 (1378)
24	54	4-10 3/16 (1480)
26	58	5-2 3/16 (1581)
28	62	5-6 3/16 (1683)
30	66	5-10 3/16 (1784)
32	70	6-2 3/16 (1886)
34	74	6-6 3/16 (1988)
36	78	6-10 3/16 (2089)

Above dimensions include head and seat boards.

If no head/seat board, deduct 11/16" (17) in rough opening height.

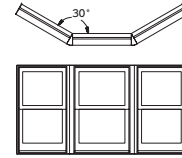
CLAD ULTIMATE DOUBLE HUNG BAY

30° CLAD ULTIMATE DOUBLE HUNG BAY
WITH PICTURE CENTER UNIT



UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-40-16	6-11 5/16 (2116)	11 5/16" (287)
16-48-16	7-7 5/16 (2319)	11 5/16" (287)
16-52-16	7-11 5/16 (2421)	11 5/16" (287)
16-60-16	8-7 5/16 (2624)	11 5/16" (287)
<hr/>		
20-40-20	7-6 1/4 (2292)	13 5/16" (337)
20-48-20	8-2 1/4 (2496)	13 5/16" (337)
20-52-20	8-6 1/4 (2597)	13 5/16" (337)
20-60-20	9-2 1/4 (2800)	13 5/16" (337)
20-68-20	9-10 1/4 (3004)	13 5/16" (337)
<hr/>		
24-40-24	8-1 3/16 (2469)	15 5/16" (388)
24-48-24	8-9 3/16 (2672)	15 5/16" (388)
24-52-24	9-1 3/16 (2773)	15 5/16" (388)
24-60-24	9-9 3/16 (2977)	15 5/16" (388)
24-68-24	10-5 3/16 (3180)	15 5/16" (388)
<hr/>		
26-40-26	8-4 21/32 (2557)	16 5/16" (414)
26-48-26	9-0 21/32 (2760)	16 5/16" (414)
26-52-26	9-4 21/32 (2861)	16 5/16" (414)
26-60-26	10-0 21/32 (3065)	16 5/16" (414)
26-68-26	10-8 21/32 (3268)	16 5/16" (414)
<hr/>		
28-40-28	8-8 1/8 (2645)	17 5/16" (439)
28-48-28	9-4 1/8 (2848)	17 5/16" (439)
28-52-28	9-8 1/8 (2950)	17 5/16" (439)
28-60-28	10-4 1/8 (3153)	17 5/16" (439)
28-68-28	11-0 1/8 (3356)	17 5/16" (439)
<hr/>		
30-40-30	8-11 9/16 (2732)	18 5/16" (464)
30-48-30	9-7 9/16 (2935)	18 5/16" (464)
30-52-30	9-11 9/16 (3037)	18 5/16" (464)
30-60-30	10-7 9/16 (3240)	18 5/16" (464)
30-68-30	11-3 9/16 (3443)	18 5/16" (464)
<hr/>		
32-40-32	9-3 1/16 (2820)	19 5/16" (490)
32-48-32	9-11 1/16 (3023)	19 5/16" (490)
32-52-32	10-3 1/16 (3125)	19 5/16" (490)
32-60-32	10-11 1/16 (3328)	19 5/16" (490)
32-68-32	11-7 1/16 (3531)	19 5/16" (490)
<hr/>		
36-40-36	9-9 31/32 (2996)	21 5/16" (541)
36-48-36	10-5 31/32 (3200)	21 5/16" (541)
36-52-36	10-9 31/32 (3301)	21 5/16" (541)
36-60-36	11-5 31/32 (3504)	21 5/16" (541)
36-68-36	12-1 31/32 (3708)	21 5/16" (541)
<hr/>		
40-40-40	10-4 29/32 (3173)	23 5/16" (591)
40-48-40	11-0 29/32 (3376)	23 5/16" (591)
40-52-40	11-4 29/32 (3477)	23 5/16" (591)
40-60-40	12-0 29/32 (3681)	23 5/16" (591)
40-68-40	12-8 29/32 (3884)	23 5/16" (591)

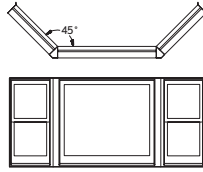
30° CLAD ULTIMATE DOUBLE HUNG BAY
WITH OPERATOR CENTER UNIT



UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-16-16	5-3 5/16 (1609)	11 5/16" (287)
16-20-16	5-7 5/16 (1710)	11 5/16" (287)
16-24-16	5-11 5/16 (1812)	11 5/16" (287)
16-26-16	6-1 5/16 (1863)	11 5/16" (287)
16-28-16	6-3 5/16 (1914)	11 5/16" (287)
16-30-16	6-5 5/16 (1964)	11 5/16" (287)
16-32-16	6-7 5/16 (2015)	11 5/16" (287)
16-36-16	6-11 5/16 (2117)	11 5/16" (287)
16-40-16	7-3 5/16 (2218)	11 5/16" (287)
<hr/>		
20-20-20	6-2 1/4 (1886)	13 5/16" (338)
20-24-20	6-6 1/4 (1988)	13 5/16" (338)
20-26-20	6-8 1/4 (2039)	13 5/16" (338)
20-28-20	6-10 1/4 (2089)	13 5/16" (338)
20-30-20	7-0 1/4 (2140)	13 5/16" (338)
20-32-20	7-2 1/4 (2191)	13 5/16" (338)
20-36-20	7-6 1/4 (2293)	13 5/16" (338)
20-40-20	7-10 1/4 (2394)	13 5/16" (338)
<hr/>		
24-24-24	7-1 3/16 (2164)	15 5/16" (389)
24-26-24	7-3 3/16 (2215)	15 5/16" (389)
24-28-24	7-5 3/16 (2265)	15 5/16" (389)
24-30-24	7-7 3/16 (2316)	15 5/16" (389)
24-32-24	7-9 3/16 (2367)	15 5/16" (389)
24-36-24	8-1 3/16 (2469)	15 5/16" (389)
24-40-24	8-5 3/16 (2570)	15 5/16" (389)
<hr/>		
26-26-26	7-6 21/32 (2303)	16 5/16" (414)
26-28-26	7-8 21/32 (2353)	16 5/16" (414)
26-30-26	7-10 21/32 (2404)	16 5/16" (414)
26-32-26	8-0 21/32 (2455)	16 5/16" (414)
26-36-26	8-4 21/32 (2557)	16 5/16" (414)
26-40-26	8-8 21/32 (2658)	16 5/16" (414)
<hr/>		
28-28-28	8-0 1/8 (2441)	17 5/16" (439)
28-30-28	8-2 1/8 (2492)	17 5/16" (439)
28-32-28	8-4 1/8 (2543)	17 5/16" (439)
28-36-28	8-8 1/8 (2645)	17 5/16" (439)
28-40-28	9-0 1/8 (2746)	17 5/16" (439)
<hr/>		
30-30-30	8-5 9/16 (2580)	18 5/16" (465)
30-32-30	8-7 9/16 (2631)	18 5/16" (465)
30-36-30	8-11 9/16 (2733)	18 5/16" (465)
30-40-30	9-3 9/16 (2834)	18 5/16" (465)
<hr/>		
32-32-32	8-11 1/16 (2719)	19 5/16" (490)
32-36-32	9-3 1/16 (2821)	19 5/16" (490)
32-40-32	9-7 1/16 (2922)	19 5/16" (490)
<hr/>		
36-36-36	9-9 31/32 (2997)	21 5/16" (541)
36-40-36	10-1 31/32 (3098)	21 5/16" (541)
<hr/>		
40-40-40	10-8 29/32 (3274)	23 5/16" (592)

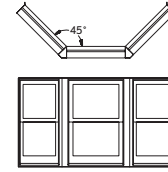
CLAD ULTIMATE DOUBLE HUNG BAY

45° CLAD ULTIMATE DOUBLE HUNG BAY WITH PICTURE CENTER UNIT



UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-40-16	6-6 5/16 (1989)	16 7/16" (418)
16-48-16	7-2 5/16 (2192)	16 7/16" (418)
16-52-16	7-6 5/16 (2294)	16 7/16" (418)
16-60-16	8-2 5/16 (2497)	16 7/16" (418)
20-40-20	6-11 31/32 (2133)	19 9/32" (490)
20-48-20	7-7 31/32 (2336)	19 9/32" (490)
20-52-20	7-11 31/32 (2438)	19 9/32" (490)
20-60-20	8-7 31/32 (2641)	19 9/32" (490)
20-68-20	9-3 31/32 (2844)	19 9/32" (490)
24-40-24	7-5 5/8 (2276)	22 1/8" (561)
24-48-24	8-1 5/8 (2480)	22 1/8" (561)
24-52-24	8-5 5/8 (2581)	22 1/8" (561)
24-60-24	9-1 5/8 (2784)	22 1/8" (561)
24-68-24	9-9 5/8 (2988)	22 1/8" (561)
26-40-26	7-8 7/16 (2348)	23 1/2" (597)
26-48-26	8-4 7/16 (2551)	23 1/2" (597)
26-52-26	8-8 7/16 (2653)	23 1/2" (597)
26-60-26	9-4 7/16 (2856)	23 1/2" (597)
26-68-26	10-0 7/16 (3059)	23 1/2" (597)
28-40-28	7-11 9/32 (2420)	24 15/16" (633)
28-48-28	8-7 9/32 (2623)	24 15/16" (633)
28-52-28	8-11 9/32 (2725)	24 15/16" (633)
28-60-28	9-7 9/32 (2928)	24 15/16" (633)
28-68-28	10-3 9/32 (3131)	24 15/16" (633)
30-40-30	8-2 1/8 (2492)	26 11/32" (669)
30-48-30	8-10 1/8 (2695)	26 11/32" (669)
30-52-30	9-2 1/8 (2796)	26 11/32" (669)
30-60-30	9-10 1/8 (3000)	26 11/32" (669)
30-68-30	10-6 1/8 (3203)	26 11/32" (669)
32-40-32	8-4 15/16 (2564)	27 3/4" (705)
32-48-32	9-0 15/16 (2767)	27 3/4" (705)
32-52-32	9-4 15/16 (2869)	27 3/4" (705)
32-60-32	10-0 15/16 (3072)	27 3/4" (705)
32-68-32	10-8 15/16 (3275)	27 3/4" (705)
36-40-36	8-10 19/32 (2707)	30 19/32" (777)
36-48-36	9-6 19/32 (2911)	30 19/32" (777)
36-52-36	9-10 19/32 (3012)	30 19/32" (777)
36-60-36	10-6 19/32 (3215)	30 19/32" (777)
36-68-36	11-2 19/32 (3419)	30 19/32" (777)
40-40-40	9-4 1/4 (2851)	33 7/16" (849)
40-48-40	10-0 1/4 (3054)	33 7/16" (849)
40-52-40	10-4 1/4 (3156)	33 7/16" (849)
40-60-40	11-0 1/4 (3359)	33 7/16" (849)
40-68-40	11-8 1/4 (3562)	33 7/16" (849)

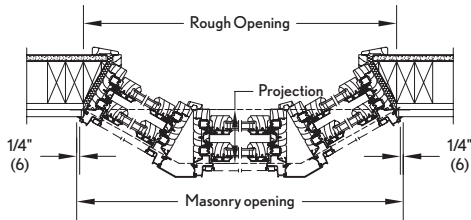
45° CLAD ULTIMATE DOUBLE HUNG BAY WITH OPERATOR CENTER UNIT



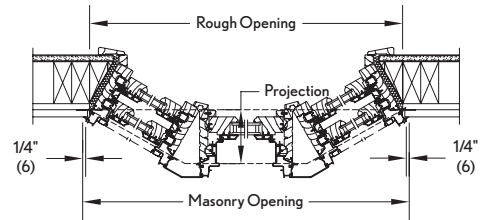
UNIT NO. (WIDTH)	ROUGH OPENING (WIDTH)	PROJECTION
16-16-16	4-10 5/16 (1481)	16 7/16" (418)
16-20-16	5-2 5/16 (1583)	16 7/16" (418)
16-24-16	5-6 5/16 (1684)	16 7/16" (418)
16-26-16	5-8 5/16 (1735)	16 7/16" (418)
16-28-16	5-10 5/16 (1786)	16 7/16" (418)
16-30-16	6-0 5/16 (1837)	16 7/16" (418)
16-32-16	6-2 5/16 (1887)	16 7/16" (418)
16-36-16	6-6 5/16 (1989)	16 7/16" (418)
16-40-16	6-10 5/16 (2091)	16 7/16" (418)
20-20-20	5-7 31/32 (1726)	19 9/32" (490)
20-24-20	5-11 31/32 (1828)	19 9/32" (490)
20-26-20	6-1 31/32 (1879)	19 9/32" (490)
20-28-20	6-3 31/32 (1929)	19 9/32" (490)
20-30-20	6-5 31/32 (1980)	19 9/32" (490)
20-32-20	6-7 31/32 (2031)	19 9/32" (490)
20-36-20	6-11 31/32 (2133)	19 9/32" (490)
20-40-20	7-3 31/32 (2234)	19 9/32" (490)
24-24-24	6-5 5/8 (1972)	22 1/8" (562)
24-26-24	6-7 5/8 (2022)	22 1/8" (562)
24-28-24	6-9 5/8 (2073)	22 1/8" (562)
24-30-24	6-11 5/8 (2124)	22 1/8" (562)
24-32-24	7-1 5/8 (2175)	22 1/8" (562)
24-36-24	7-5 5/8 (2276)	22 1/8" (562)
24-40-24	7-9 5/8 (2378)	22 1/8" (562)
26-26-26	6-10 7/16 (2094)	23 1/2" (597)
26-28-26	7-0 7/16 (2145)	23 1/2" (597)
26-30-26	7-2 7/16 (2196)	23 1/2" (597)
26-32-26	7-4 7/16 (2247)	23 1/2" (597)
26-36-26	7-8 7/16 (2348)	23 1/2" (597)
26-40-26	8-0 7/16 (2450)	23 1/2" (597)
28-28-28	7-3 9/32 (2217)	24 15/16" (633)
28-30-28	7-6 9/32 (2293)	24 15/16" (633)
28-32-28	7-7 9/32 (2318)	24 15/16" (633)
28-36-28	7-11 9/32 (2420)	24 15/16" (633)
28-40-28	8-3 9/32 (2522)	24 15/16" (633)
30-30-30	7-8 1/8 (2339)	26 11/32" (669)
30-32-30	7-10 1/8 (2390)	26 11/32" (669)
30-36-30	8-2 1/8 (2492)	26 11/32" (669)
30-40-30	8-6 1/8 (2593)	26 11/32" (669)
32-32-32	8-0 15/16 (2462)	27 3/4" (705)
32-36-32	8-4 15/16 (2564)	27 3/4" (705)
32-40-32	8-8 15/16 (2665)	27 3/4" (705)
36-36-36	8-10 19/32 (2709)	30 19/32" (777)
36-40-36	9-2 19/32 (2809)	30 19/32" (777)
40-40-40	9-8 1/4 (2953)	33 7/16" (849)

CLAD ULTIMATE DOUBLE HUNG BAY

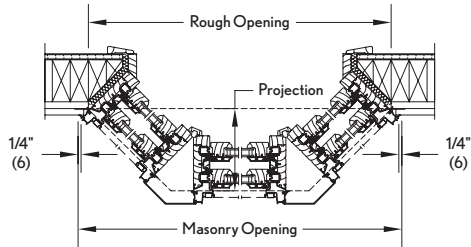
CONSTRUCTION DETAILS



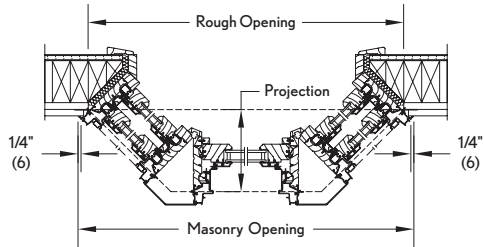
30° CLAD ULTIMATE DOUBLE HUNG BAY
JAMB DETAIL WITH OPERATOR CENTER UNIT



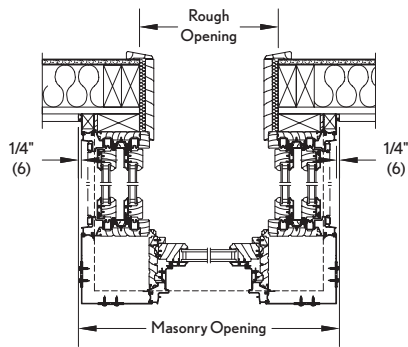
30° CLAD ULTIMATE DOUBLE HUNG BAY
JAMB DETAIL WITH PICTURE CENTER UNIT



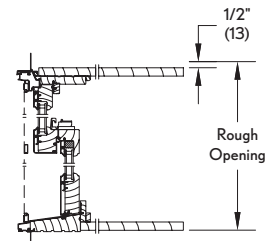
45° CLAD ULTIMATE DOUBLE HUNG BAY
JAMB DETAIL WITH OPERATOR CENTER UNIT



45° CLAD ULTIMATE DOUBLE HUNG BAY
JAMB DETAIL WITH PICTURE CENTER UNIT



90° CLAD ULTIMATE DOUBLE HUNG BAY
JAMB DETAIL WITH PICTURE CENTER UNIT



CLAD ULTIMATE DOUBLE HUNG BAY
HEAD JAMB AND SILL DETAIL

90° DOUBLE HUNG BAY FORMULA

TO CALCULATE PROJECTION

OM of Flanker (width) PLUS 6 1/16" (154) = PROJECTION

TO CALCULATE ROUGH OPENING

OM of Center Unit(s) (width) PLUS 15/8" (41) = ROUGH OPENING width

NOTES:

Please contact your local Marvin representative for masonry openings that include casings and subsills.














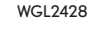
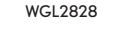
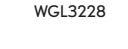







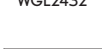
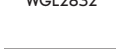
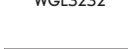
ROUGH OPENING HEIGHTS

UNIT NO. (HEIGHT)	ROUGH OPENING (HEIGHT)
12	2-9 5/32 (842)
14	3-1 5/32 (944)
16	3-5 5/32 (1045)
18	3-9 5/32 (1147)
20	4-1 5/32 (1249)
22	4-5 5/32 (1350)
24	4-9 5/32 (1452)
26	5-1 5/32 (1553)
28	5-5 5/32 (1655)
30	5-9 5/32 (1757)
32	6-1 5/32 (1858)
34	6-5 5/32 (1960)
36	6-9 5/32 (2061)

Above dimensions include head and seat boards.
If no head/seat board, deduct 1/4" (6) in rough opening height.

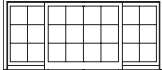
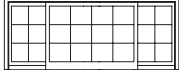


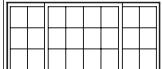
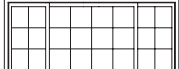
WOOD GLIDER

Mas. Opg. (mm)	3-4 11/16 (1033)	4-0 11/16 (1237)	4-8 11/16 (1440)	5-4 11/16 (1643)	6-0 11/16 (1846)
Rgh. Opg. (mm)	3-2 5/8 (981)	3-10 5/8 (1184)	4-6 5/8 (1387)	5-2 5/8 (1591)	5-10 5/8 (1794)
Frame Size (mm)	3-1 5/8 (956)	3-9 5/8 (1159)	4-5 5/8 (1362)	5-1 5/8 (1565)	5-9 5/8 (1768)
Glass Size (mm)	16" (406)	20" (508)	24" (610)	28" (711)	32" (813)

2-0 7/8 (632) 2-8 7/8 (835) 2-7 9/16 (802) 2-7 1/16 (789) 24" (609)	 WGL1616	 WGL2016			
3-0 7/8 (937) 2-11 9/16 (903) 2-11 1/16 (891) 28" (711)	 WGL1624	 WGL2024	 WGL2424	 WGL2824	
3-4 7/8 (1038) 3-3 9/16 (1005) 3-3 1/16 (992) 32" (813)	 WGL1632	 WGL2032	 WGL2432	 WGL2832	 WGL3228
3-8 7/8 (1140) 3-7 9/16 (1107) 3-7 1/16 (1094) 36" (914)	 WGL1636	 WGL2036	 WGL2436*	 WGL2836*	 WGL3236*
4-0 7/8 (1241) 3-11 9/16 (1208) 3-11 1/16 (1195) 40" (1016)	 WGL1640	 WGL2040	 WGL2440*	 WGL2840*	 WGL3240*
4-8 7/8 (1445) 4-7 9/16 (1411) 4-7 1/16 (1399) 48" (1219)	 WGL1648	 WGL2048	 WGL2448*	 WGL2848*	 WGL3248*

TRIPLE SASH

Mas. Opg. (mm)	7-5 9/16 (2275)	8-19/16 (2478)
Rgh. Opg. (mm)	7-3 1/2 (2223)	7-11 1/2 (2426)
Frame Size (mm)	7-2 1/2 (2197)	7-10 1/2 (2400)
Glass Size (mm)	20" (508) / 40" (1016) / 20" (508)	20" (508) / 48" (1219) / 20" (508)

3-4 7/8 (1038) 3-3 9/16 (1005) 3-3 1/16 (992) 32" (813)	 WGLTS20-4032-20	 WGLTS20-4832-20
4-0 7/8 (1241) 3-11 9/16 (1208) 3-11 1/16 (1195) 40" (1016)	 WGLTS20-4040-20	 WGLTS20-4840-20
4-8 7/8 (1445) 4-7 9/16 (1411) 4-7 1/16 (1399) 48" (1219)	 WGLTS20-4048-20	 WGLTS20-4848-20

MULTIPLE ASSEMBLY CONVERSIONS

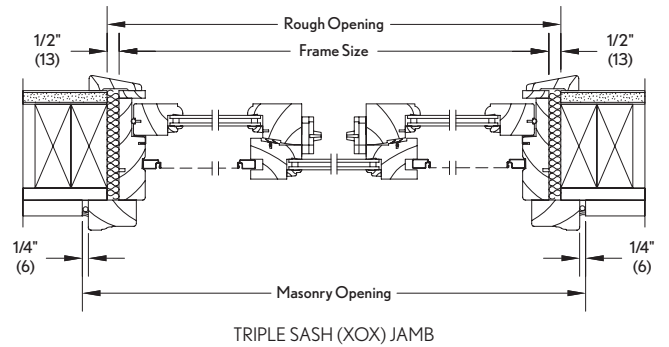
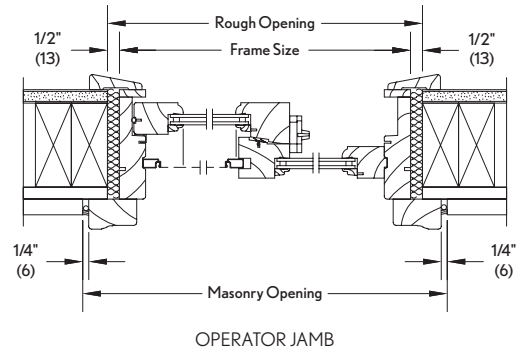
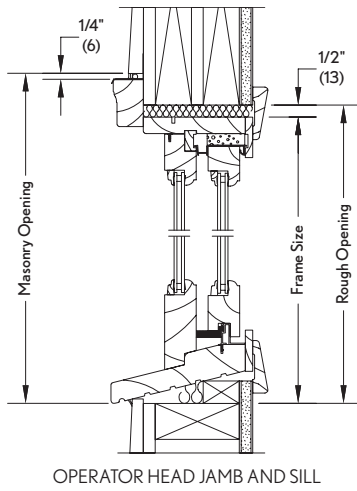
ROUGH OPENING		MASONRY OPENING WITH BMC	
Width	Height	Width	Height
Add all frame sizes plus 1" (25)	Add frame sizes plus 1/2" (13)	Add all frame sizes plus 3 1/16" (78)	Add frame sizes plus 1 13/16" (46)

NOTES:

Lite patterns shown are 3/4" (19) grilles or 7/8" (22) SDL.
 Lite patterns for 1 1/8" (29) grilles or SDL may vary.
 XO operation is standard. OX operation is optional. Both sides of triple sash units operate.
 * These windows meet national egress codes for fire evacuation. Local codes may differ.

WOOD GLIDER

CONSTRUCTION DETAILS



WOOD GLIDER

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
9/16" Insulating Glass Air	0.49	0.57	0.6	40	
9/16" Insulating Glass LoE 272 Air	0.38	0.31	0.52	49	
9/16" Insulating Glass LoE 272 Argon	0.33	0.31	0.52	53	
9/16" Insulating Glass LoE 366 Air	0.38	0.21	0.47	49	S
9/16" Insulating Glass LoE 366 Argon	0.33	0.21	0.47	53	SC, S
































































WOOD GLIDER COMBINATIONS

Measurement Conversion	Width	Height
Rough Opening to OM	-2 1/2" (64)	-2" (51)
Glass* to OM	(Glass width x2) PLUS 4 1/8" (105)	+5 9/16" (141)

*Glass size measurement conversions are not valid for triple sash picture units.

CLAD ULTIMATE GLIDER - XO, OX, XX

Mas. Opg. (mm)	3-0 (914)	3-6 (1067)	4-0 (1219)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)
Rgh. Opg. (mm)	3-0 1/2 (927)	3-6 1/2 (1080)	4-0 1/2 (1232)	4-6 1/2 (1384)	5-0 1/2 (1537)	5-6 1/2 (1689)	6-0 1/2 (1842)
Frame Size (mm)	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)	5-5 1/2 (1664)	5-11 1/2 (1816)

1-11 3/4 (603) 2-0 (610) 1-11 1/2 (597)							
2-5 3/4 (756) 2-6 (762) 2-5 1/2 (749)							
2-11 3/4 (908) 3-0 (914) 2-11 1/2 (902)							
3-5 3/4 (1060) 3-6 (1067) 3-5 1/2 (1054)							
3-11 3/4 (1213) 4-0 (1219) 3-11 1/2 (1207)							
4-5 3/4 (1365) 4-6 (1372) 4-5 1/2 (1359)							
4-11 3/4 (1518) 5-0 (1524) 4-11 1/2 (1511)							
5-5 3/4 (1670) 5-6 (1676) 5-5 1/2 (1664)							
5-11 3/4 (1822) 6-0 (1829) 5-11 1/2 (1816)							

NOTES:


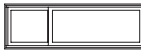
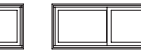















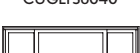








XO, OX, XX, XOX and O available. Both sides of triple sash units operate.

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

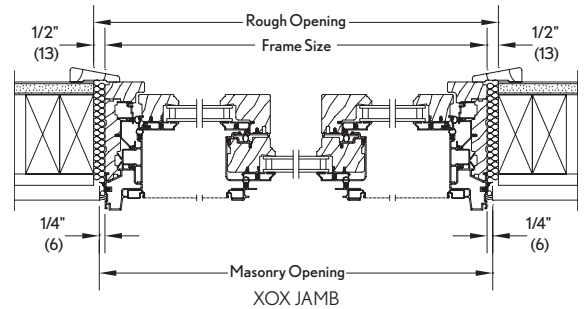
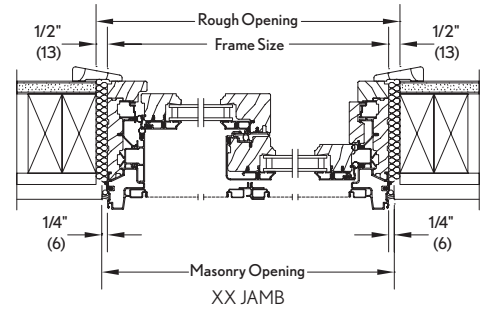
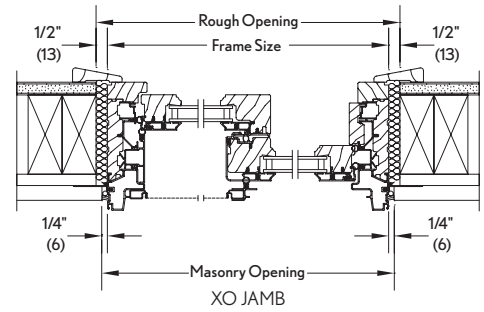
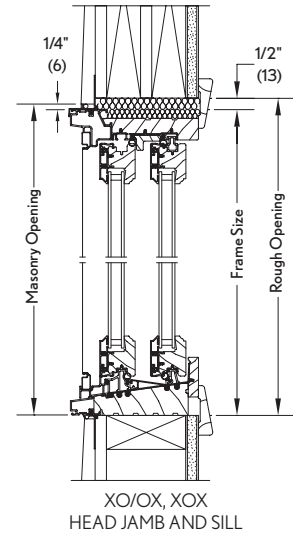
CLAD ULTIMATE GLIDER TRIPLE SASH - XOX

Mas. Opg. (mm)	6-0 (1829)	8-0 (2438)	10-0 (3048)
Rgh. Opg. (mm)	6-0 1/2 (1842)	8-0 1/2 (2451)	10-0 1/2 (3061)
Frame Size (mm)	5-11 1/2 (1816)	7-11 1/2 (2426)	9-11 1/2 (3035)

1-11 3/4 (603)	2-11 3/4 (908)	3-11 3/4 (1213)	4-5 3/4 (1365)	4-11 3/4 (1518)	5-5 3/4 (1670)	5-11 3/4 (1822)
2-0 (610)	3-0 (914)	4-0 (1219)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)
2-5 3/4 (756)	3-5 1/2 (902)	4-5 1/2 (1207)	4-5 1/2 (1359)	5-1 1/2 (1511)	5-5 1/2 (1664)	5-11 1/2 (1816)
2-6 (762)	2-11 1/2 (749)	3-11 1/2 (1207)	4-5 1/2 (1359)	5-1 1/2 (1511)	5-5 1/2 (1664)	5-11 1/2 (1816)

		
CUGLTS6020	CUGLTS8020	CUGLTS10020
		
CUGLTS6026	CUGLTS8026	CUGLTS10026
		
CUGLTS6030	CUGLTS8030	CUGLTS10030*
		
CUGLTS6036	CUGLTS8036	CUGLTS10036*
		
CUGLTS6040	CUGLTS8040*	CUGLTS10040*
		
CUGLTS6046	CUGLTS8046*	CUGLTS10046*
		
CUGLTS6050	CUGLTS8050*	CUGLTS10050*
		
CUGLTS6056	CUGLTS8056*	CUGLTS10056*
		
CUGLTS6060	CUGLTS8060*	CUGLTS10060*

CONSTRUCTION DETAILS


































































NOTES:

XO, OX, XX, XOX and O available. Both sides of triple sash units operate.

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

CLAD ULTIMATE GLIDER PICTURE - O

Mas. Opp. (mm)	3-0 (914)	3-6 (1067)	4-0 (1219)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)
Rgh. Opp. (mm)	3-0 1/2 (927)	3-6 1/2 (1080)	4-0 1/2 (1232)	4-6 1/2 (1384)	5-0 1/2 (1537)	5-6 1/2 (1689)	6-0 1/2 (1842)
Frame Size (mm)	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)	5-5 1/2 (1664)	5-11 1/2 (1816)

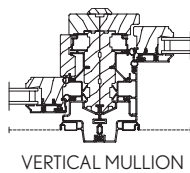
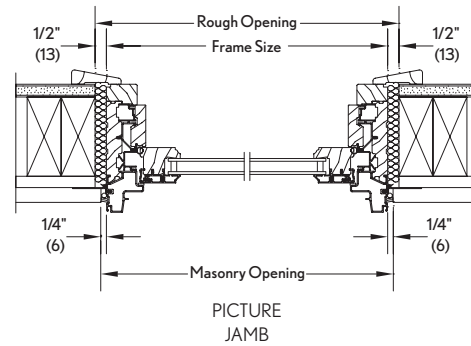
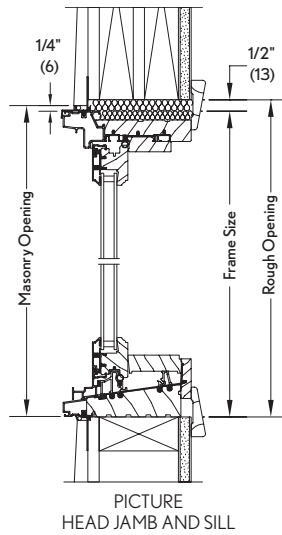
1-11 3/4 (603)							
2-0 (610)							
2-5 3/4 (756)							
2-11 3/4 (908)							
3-0 (914)							
2-11 1/2 (902)							
3-5 3/4 (1060)							
3-6 (1067)							
3-11 1/2 (1207)							
4-0 (1219)							
4-5 3/4 (1365)							
4-6 (1372)							
4-11 1/2 (1511)							
5-0 (1524)							
5-5 3/4 (1670)							
5-6 (1676)							
5-11 1/2 (1816)							

MULTIPLE ASSEMBLY CONVERSIONS

ROUGH OPENING		MASONRY OPENING WITHOUT BMC	
Width	Height	Width	Height
Add all frame sizes plus 1" (25)	Add frame sizes plus 1/2" (13)	Add all frame sizes plus 1/2" (13)	Add frame sizes plus 1/4" (6)

CLAD ULTIMATE GLIDER PICTURE UNIT

CONSTRUCTION DETAILS



CLAD ULTIMATE GLIDER

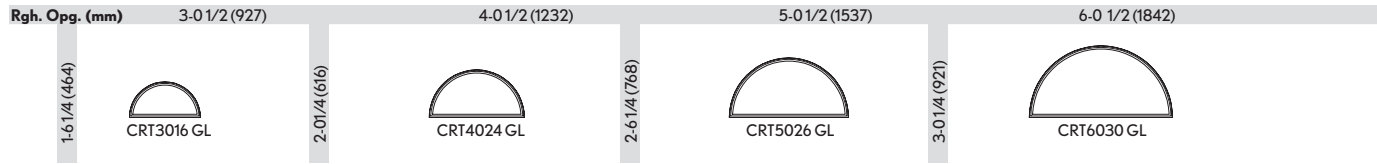
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" Insulating Glass Air	0.46	0.57	0.6	43	
11/16" Insulating Glass LoE 272 Air	0.33	0.31	0.52	53	
11/16" Insulating Glass LoE 272 Argon	0.3	0.3	0.52	56	N, NC, SC
11/16" Insulating Glass LoE 366 Air	0.33	0.21	0.47	53	SC, S
11/16" Insulating Glass LoE 366 Argon	0.29	0.2	0.47	57	N, NC, SC, S

CLAD ULTIMATE GLIDER PICTURE

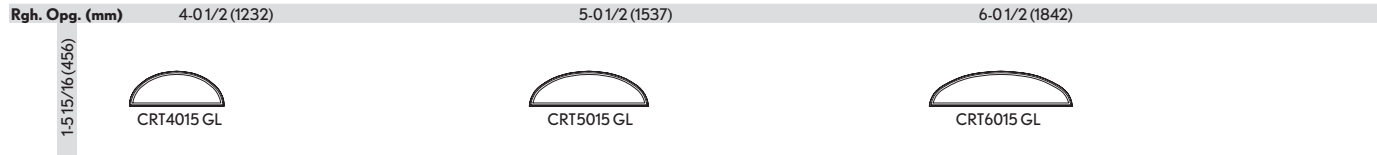
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
11/16" IG Air	0.45	0.6	0.63	44	
11/16" IG LoE 272 Air	0.31	0.32	0.55	55	NC
11/16" IG LoE 272 Argon	0.28	0.32	0.55	59	N, NC
11/16" IG LoE 366 Air	0.31	0.22	0.49	56	NC, SC, S
11/16" IG LoE 366 Argon	0.27	0.21	0.49	59	N, NC, SC, S

WOOD AND CLAD ROUND TOP GLIDER

CLAD GLIDER
RT1 TRUE HALF CIRCLE STANDARD SIZES DIRECT GLAZE

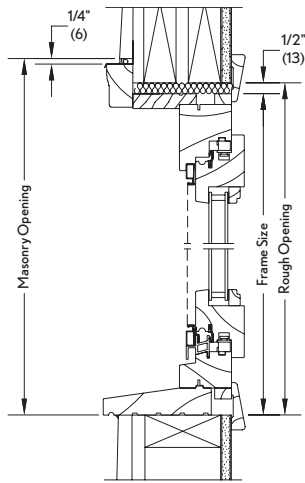


CLAD GLIDER
RT29 ELLIPTICAL STANDARD SIZES DIRECT GLAZE

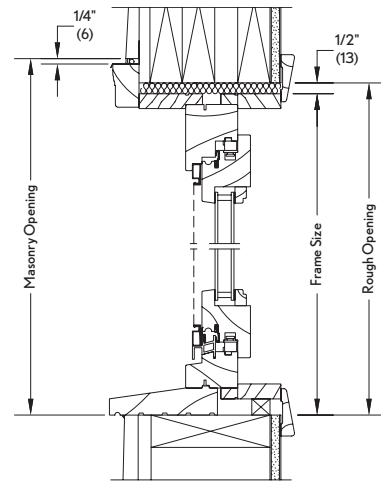


WOOD TILT TURN AND HOPPER

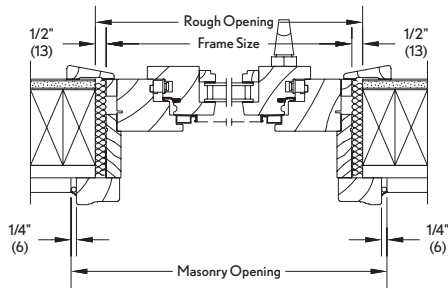
CONSTRUCTION DETAILS



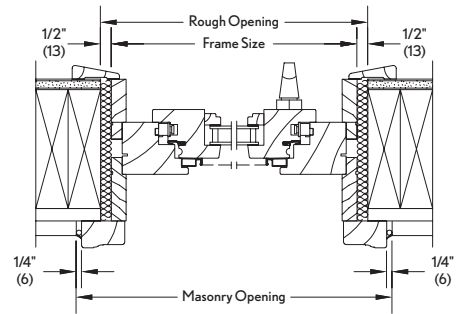
WOOD OPERATOR HEAD JAMB AND SILL
2X4 FRAME CONSTRUCTION



WOOD OPERATOR HEAD JAMB AND SILL
2X6 FRAME CONSTRUCTION



WOOD OPERATOR JAMB
2X4 FRAME CONSTRUCTION



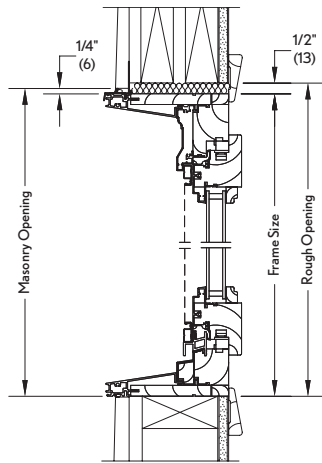
WOOD OPERATOR JAMB
2X6 FRAME CONSTRUCTION

WOOD TILT TURN/HOPPER

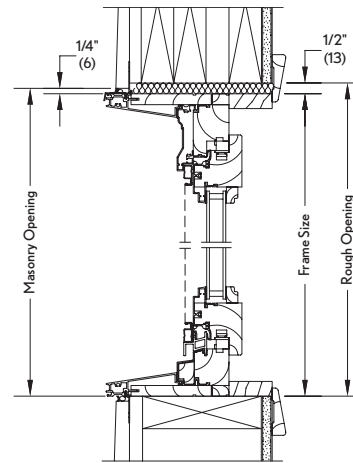
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
7/8" IG Air	0.41	0.5	0.53	46	
7/8" IG LoE 272 Air	0.31	0.27	0.46	58	NC, SC, S
7/8" IG LoE 272 Argon	0.28	0.27	0.46	61	N, NC, SC, S
7/8" IG LoE 366 Air	0.3	0.18	0.42	58	N, NC, SC, S
7/8" IG LoE 366 Argon	0.27	0.18	0.42	62	N, NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.23	0.37	0.44	69	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.21	0.37	0.44	72	N, NC
1" Tri-Pane LoE 272 Argon LoE 272	0.21	0.23	0.37	71	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.19	0.23	0.37	72	N, NC, SC, S

CLAD TILT TURN AND HOPPER

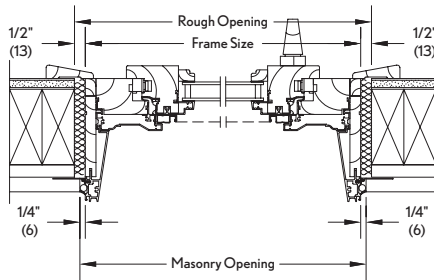
CONSTRUCTION DETAILS



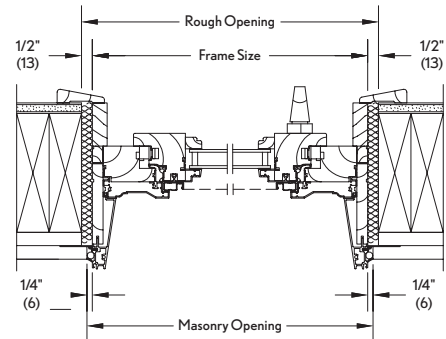
CLAD OPERATOR HEAD JAMB AND SILL
2X4 FRAME CONSTRUCTION



CLAD OPERATOR HEAD JAMB AND SILL
2X6 FRAME CONSTRUCTION



CLAD OPERATOR JAMB
2X4 FRAME CONSTRUCTION



CLAD OPERATOR JAMB
2X6 FRAME CONSTRUCTION

CLAD TILT TURN/HOPPER

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
7/8" IG Air	0.46	0.51	0.54	43	
7/8" IG LoE 272 Air	0.35	0.28	0.47	54	SC
7/8" IG LoE 272 Argon	0.32	0.27	0.47	58	NC, SC, S
7/8" IG LoE 366 Air	0.34	0.18	0.42	55	SC, S
7/8" IG LoE 366 Argon	0.31	0.18	0.42	58	NC, SC, S
1" Tri-Pane LoE 179 Argon LoE 179	0.26	0.37	0.45	61	N, NC
1" Tri-Pane LoE 179 Krypton-Argon LoE 179	0.24	0.38	0.45	61	N, NC
1" Tri-Pane LoE 272 Argon LoE 272	0.25	0.23	0.37	61	N, NC, SC, S
1" Tri-Pane LoE 272 Krypton-Argon LoE 272	0.23	0.23	0.37	61	N, NC, SC, S


WOOD AND CLAD MINIMUM AND MAXIMUM MEASUREMENTS

GLASS TYPE	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum Glass Size per Sash
Magnum Hopper					
Insulating Glass	24" (610)	20" (508)	72" (1829)	60" (1524)	210 Sq. Feet (195 Sq. Meters)
Tilt Turn Inswing Operator/Stationary					
Insulating Glass	See your Marvin representative for further information				


4 9/16" jamb or Hopper units that exceed frame size 64 x 48 (1626 x 1218) are not certified.

WOOD AND CLAD ROUND TOP MISCELLANEOUS


WOOD FULL CIRCLE AND ELLIPSE
RT27 FULL CIRCLE STANDARD SIZES IN SASH / DIRECT GLAZE

Rgh. Opp. (mm)	2-11/2 (648)	3-11/2 (953)	4-11/2 (1257)	5-11/2 (1562)	6-11/2 (1867)
2-11/2 (648)		3-11/2 (953)	4-11/2 (1257)	5-11/2 (1562)	6-11/2 (1867)
	WFCIR2750	WFCIR3950	WFCIR5150	WFCIR6350	WFCIR7550


WOOD FULL CIRCLE AND ELLIPSE
RT28 FULL ELLIPSE STANDARD SIZES IN SASH / DIRECT GLAZE

Rgh. Opp. (mm)	2-1 (635)	2-9 (838)	3-5 (1041)
3-1 (940)		4-1 (1245)	5-1 (1549)
	WFELP2436	WFELP3248	WFELP4060

CLAD FULL CIRCLE AND ELLIPSE
RT27 FULL CIRCLE STANDARD SIZES IN SASH / DIRECT GLAZE

Rgh. Opp. (mm)	2-11/2 (648)	3-11/2 (953)	4-11/2 (1257)	5-11/2 (1562)	6-11/2 (1867)
2-11/2 (648)		3-11/2 (953)	4-11/2 (1257)	5-11/2 (1562)	6-11/2 (1867)
	CFCIR2750	CFCIR3950	CFCIR5150	CFCIR6350	CFCIR7550

CLAD FULL CIRCLE AND ELLIPSE
RT28 FULL ELLIPSE STANDARD SIZES IN SASH / DIRECT GLAZE

Rgh. Opp. (mm)	2-1 (635)	2-9 (838)	3-5 (1041)
3-1 (940)		4-1 (1245)	5-1 (1549)
	CFELP2436*	CFELP3248	CFELP4060

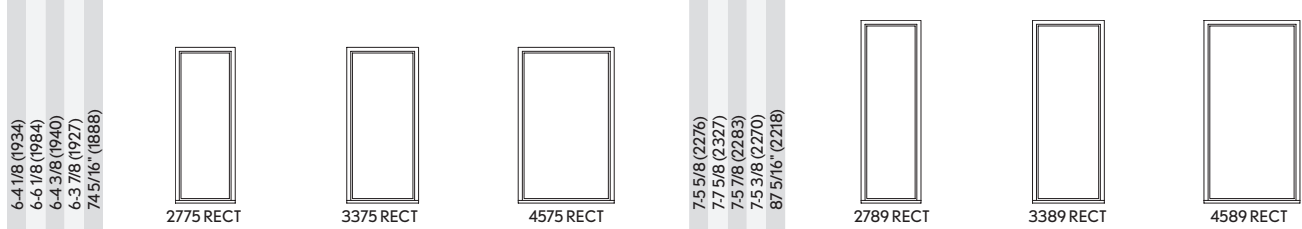
NOTES:

Please contact your local Marvin representative for masonry openings that include casings.

Available as direct glaze only.

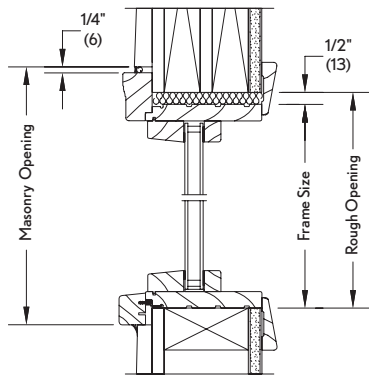
STANDARD TEMPERED DIRECT GLAZE RECTANGLES

Clad Mas. Opg. (mm)	2-3 13/16 (706)	2-9 13/16 (859)	3-9 13/16 (1164)	2-3 13/16 (706)	2-9 13/16 (859)	3-9 13/16 (1164)
Wood Mas. Opg. (mm)	2-4 5/16 (719)	3-0 7/16 (926)	4-0 7/16 (1230)	2-6 7/16 (773)	3-0 7/16 (926)	4-0 7/16 (1230)
Rgh. Opg. (mm)	2-4 5/16 (902)	2-10 5/16 (872)	3-10 5/16 (1176)	2-4 5/16 (719)	2-10 5/16 (872)	3-10 5/16 (1176)
Frame Size (mm)	2-3 5/16 (694)	2-9 5/16 (846)	3-9 5/16 (1151)	2-3 5/16 (694)	2-9 5/16 (846)	3-9 5/16 (1151)
Glass Size (mm)	25 3/4" (654)	31 3/4" (806)	43 3/4" (1111)	25 3/4" (654)	31 3/4" (806)	43 3/4" (1111)

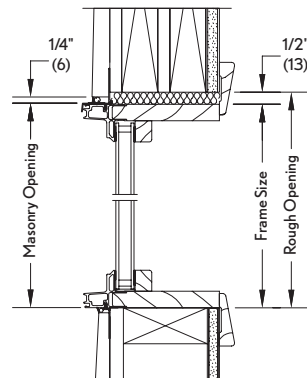


Wood Direct Glaze Rectangle: **WRECT**
Clad Direct Glaze Rectangle: **CRECT**

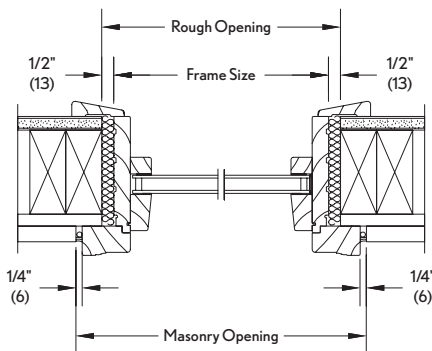
CONSTRUCTION DETAILS



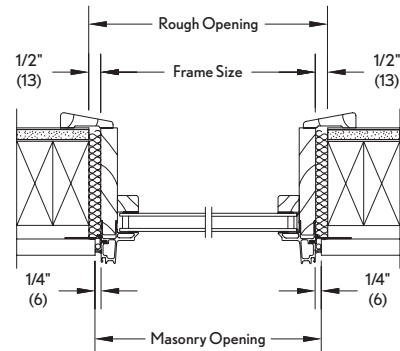
WOOD STANDARD TEMPERED DIRECT GLAZE HEAD JAMB AND SILL



CLAD STANDARD TEMPERED DIRECT GLAZE HEAD JAMB AND SILL



WOOD STANDARD TEMPERED DIRECT GLAZE JAMB



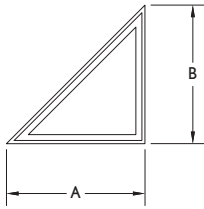
CLAD STANDARD TEMPERED DIRECT GLAZE JAMB

WOOD AND CLAD POLYGONS AND SPECIAL SHAPES

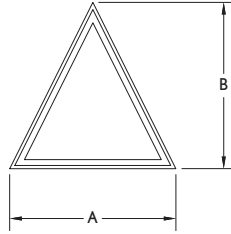
HOW TO SPECIFY DIMENSIONS

When ordering a trapezoid, triangle, or rectangle window, provide a sketch of the unit as viewed from the exterior, plus include key rough opening dimensions.

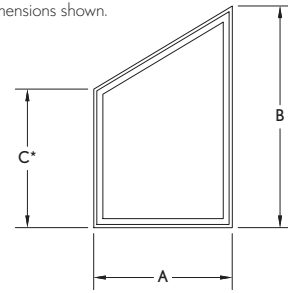
Example: To order a window of a trapezoid opening, provide the measurements of A, B, and C as indicated. For other shapes, give the dimensions shown.



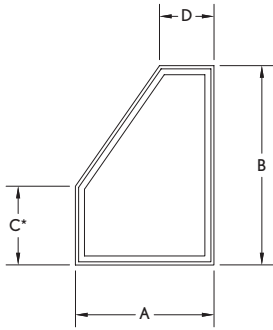
90° TRIANGLE



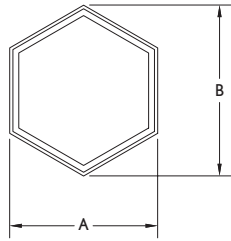
ISOSCELES TRIANGLE



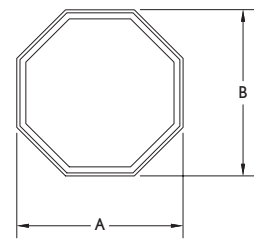
TRAPEZOID



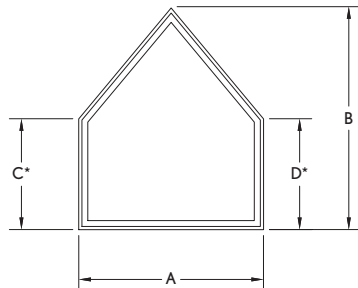
PENTAGON



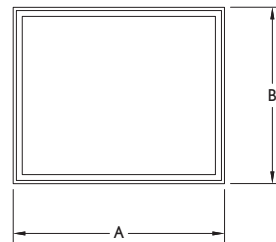
HEXAGON



OCTAGON



PENTAGON



RECTANGLE

NOTES:

Jamb extensions over 7 9/16" (192) will be edge glued.

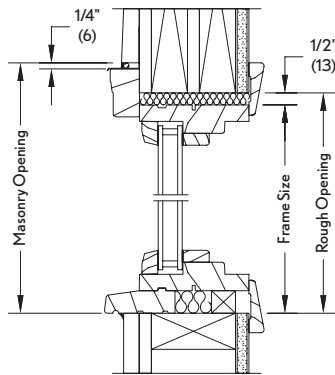
Some shapes shown are also available as in-sash. Check with local Marvin representative for availability.

*Please contact local Marvin representative for assistance if multiple special shape units are aligned with other units. Rough opening dimensions may vary.

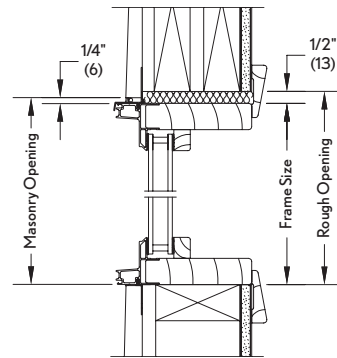
6" (152) minimum rough opening height.

WOOD AND CLAD POLYGONS AND SPECIAL SHAPES

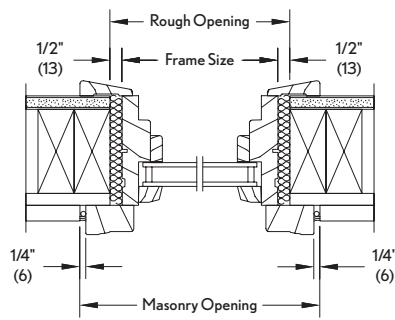
CONSTRUCTION DETAILS



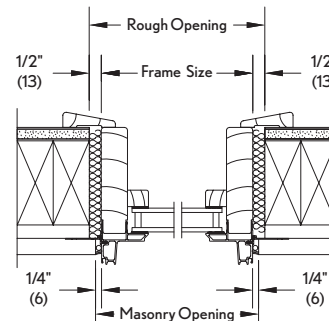
WOOD DIRECT GLAZE
HEAD JAMB AND SILL



CLAD DIRECT GLAZE
HEAD JAMB AND SILL



WOOD DIRECT GLAZE
JAMB



CLAD DIRECT GLAZE
JAMB

WOOD DIRECT GLAZE POLYGON 1"

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1" Insulating GlassAir	0.45	0.64	0.70	45	
1" Insulating GlassLoE 272 Air	0.30	0.35	0.61	56	N, NC
1" Insulating GlassLoE 272 Argon	0.27	0.35	0.61	60	N, NC
1" Insulating GlassLoE 366 Air	0.30	0.24	0.55	57	N, NC, SC, S
1" Insulating GlassLoE 366 Argon	0.26	0.23	0.55	61	N, NC, SC, S

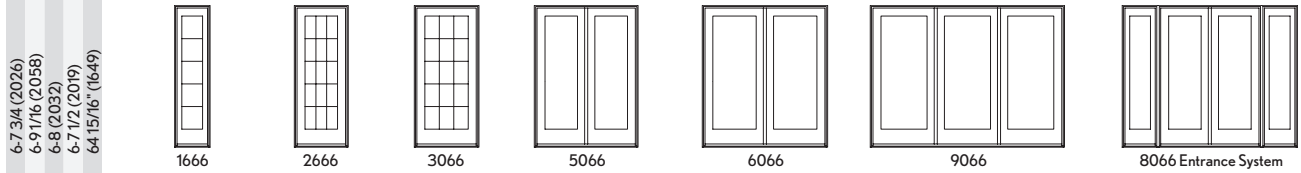
CLAD DIRECT GLAZE POLYGON

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1 1/8" Tri-Pane LoE 272 Argon LoE 272	0.20	0.30	0.48	65	N, NC, SC
1" Insulating GlassAir	0.47	0.64	0.69	42	
1" Insulating GlassLoE 272 Air	0.33	0.35	0.61	53	
1" Insulating GlassLoE 272 Argon	0.29	0.35	0.61	56	N, NC
1" Insulating GlassLoE 366 Air	0.32	0.24	0.54	53	NC, SC, S
1" Insulating GlassLoE 366 Argon	0.28	0.23	0.54	56	N, NC, SC, S
3/4" Insulating GlassAir	0.47	0.67	0.70	42	
3/4" Insulating GlassLoE 272 Air	0.32	0.36	0.62	53	NC
3/4" Insulating GlassLoE 272 Argon	0.29	0.36	0.62	57	N, NC
3/4" Insulating GlassLoE 366 Air	0.32	0.24	0.55	54	NC, SC, S
3/4" Insulating GlassLoE 366 Argon	0.28	0.23	0.55	57	N, NC, SC, S

ULTIMATE SWINGING FRENCH DOOR

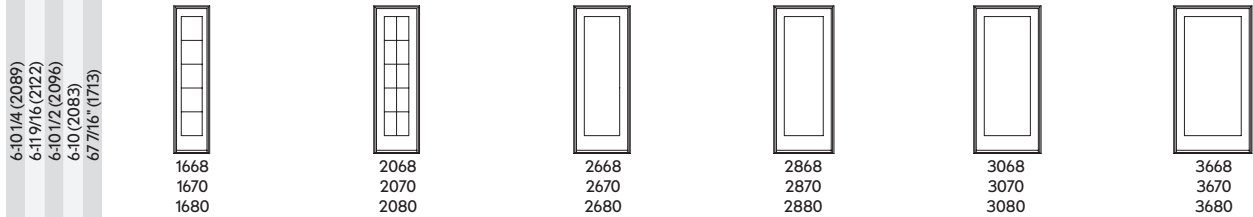
6/6 HEIGHT

Clad Mas. Opp. (mm)	1-8 3/8 (518)	2-7 1/8 (791)	3-1 1/8 (943)	4-11 1/2 (1511)	5-11 1/2 (1816)	8-9 7/8 (2689)	7-10 11/16 (2405)
Wood Mas. Opp. (mm)	1-11 (584)	2-9 3/4 (857)	3-3 3/4 (1010)	5-2 1/8 (1578)	6-2 1/8 (1883)	9-0 1/2 (2756)	8-1 5/16 (2472)
Rgh. Opp. (mm)	1-8 7/8 (530)	2-7 5/8 (803)	3-15/8 (956)	5-0 (1524)	6-0 (1829)	8-10 3/8 (2702)	7-11 3/16 (2418)
Frame Size (mm)	1-7 7/8 (505)	2-6 5/8 (778)	3-0 5/8 (930)	4-11 (1499)	5-11 (1803)	8-9 3/8 (2677)	7-10 3/16 (2392)
Glass Size (mm)	12 13/16" (325)	20 3/32" (510)	26 3/32" (663)	20 3/32" (510)	26 3/32" (663)	26 3/32" (663)	12 13/16" (325) / 20 3/32" (510)

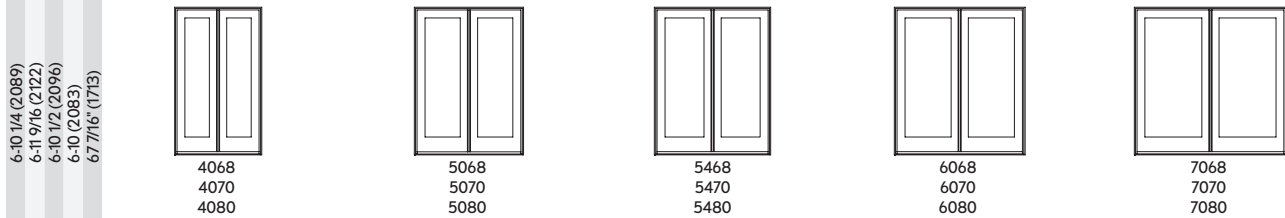


6/8 HEIGHT (7/0 AND 8/0 HEIGHTS SEE BELOW)

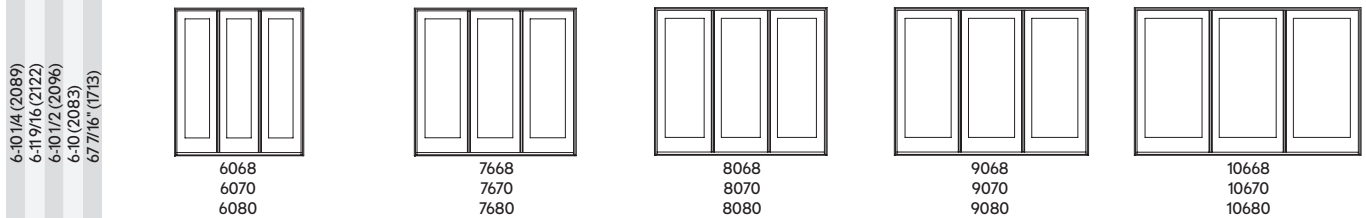
Clad Mas. Opp. (mm)	1-8 3/8 (518)	2-1 15/16 (659)	2-7 15/16 (811)	2-9 15/16 (862)	3-1 15/16 (946)	3-7 15/16 (1116)
Wood Mas. Opp. (mm)	1-11 (584)	2-4 9/16 (725)	2-10 9/16 (878)	3-0 9/16 (929)	3-4 9/16 (1030)	3-10 9/16 (1183)
Rgh. Opp. (mm)	1-8 7/8 (530)	2-2 7/16 (672)	2-8 7/16 (824)	2-10 7/16 (875)	3-2 7/16 (976)	3-8 7/16 (1129)
Frame Size (mm)	1-7 7/8 (505)	2-1 7/16 (646)	2-7 7/16 (799)	2-9 7/16 (849)	3-1 7/16 (951)	3-7 7/16 (1103)
Glass Size (mm)	12 13/16" (325)	14 29/32" (379)	20 29/32" (531)	22 29/32" (582)	26 29/32" (683)	32 29/32" (836)



Clad Mas. Opp. (mm)	4-1 1/8 (1248)	5-1 1/8 (1553)	5-5 1/8 (1654)	6-1 1/8 (1857)	7-1 1/8 (2162)
Wood Mas. Opp. (mm)	4-3 3/4 (1314)	5-3 3/4 (1619)	5-7 3/4 (1721)	6-3 3/4 (1924)	7-3 3/4 (2229)
Rgh. Opp. (mm)	4-15/8 (1260)	5-15/8 (1565)	5-5 5/8 (1667)	6-15/8 (1870)	7-15/8 (2175)
Frame Size (mm)	4-0 5/8 (1235)	5-0 5/8 (1540)	5-4 5/8 (1641)	6-0 5/8 (1845)	7-0 5/8 (2149)
Glass Size (mm)	14 29/32" (379)	20 29/32" (531)	22 29/32" (582)	26 29/32" (683)	32 29/32" (836)



Clad Mas. Opp. (mm)	6-0 5/16 (1837)	7-6 5/16 (2294)	8-0 5/16 (2446)	9-0 5/16 (2751)	10-6 5/16 (3208)
Wood Mas. Opp. (mm)	6-2 15/16 (1903)	7-8 15/16 (2361)	8-2 15/16 (2513)	9-2 15/16 (2818)	10-8 5/16 (3275)
Rgh. Opp. (mm)	6-0 13/16 (1849)	7-6 13/16 (2307)	8-0 13/16 (2459)	9-0 13/16 (2764)	10-6 13/16 (3221)
Frame Size (mm)	5-11 13/16 (1824)	7-5 13/16 (2281)	7-11 13/16 (2434)	8-11 13/16 (2738)	10-5 13/16 (3196)
Glass Size (mm)	14 29/32" (379)	20 29/32" (531)	22 29/32" (582)	26 29/32" (683)	32 29/32" (836)



NOTES:

Lite patterns shown are for standard grilles, SDL, and ADL in 6/6, 6/8, and 7/0 heights. The standard pattern for 8/0 heights is a 6 high lite cut.

All glass is tempered.

Elevations as viewed from the exterior.

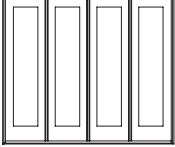
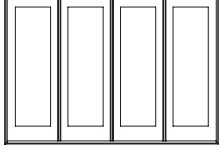
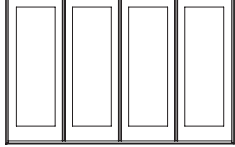
Please contact your local Marvin representative for masonry openings that include casings and sills.

	7/0 Height	8/0 Height
Clad Mas. Opp. (mm)	7-2 1/4 (2191)	7-11 3/4 (2432)
Wood Mas. Opp. (mm)	7-3 9/16 (2224)	8-1 1/16 (2465)
Rgh. Opp. (mm)	7-2 1/2 (2197)	8-0 (2438)
Frame Size (mm)	7-2 (2184)	7-11 1/2 (2426)
Glass Size (mm)	71 7/16" (1815)	80 15/16" (2056)

ULTIMATE SWINGING FRENCH DOOR

6/8 HEIGHT (7/0 AND 8/0 HEIGHTS SEE BELOW)

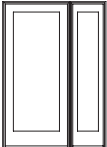

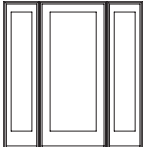
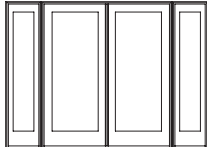
Clad Mas. Opg. (mm)	7-1 1/2 (2426)	9-1 1/2 (3035)	10-7 1/2 (3239)
Wood Mas. Opg. (mm)	8-2 1/8 (2492)	10-2 1/8 (3102)	10-10 1/8 (3305)
Rgh. Opg. (mm)	8-0 (2438)	10-0 (3048)	10-8 (3251)
Frame Size (mm)	7-11 (2413)	9-11 (3023)	10-7 (3226)
Glass Size (mm)	14 29/32" (379)	20 29/32" (531)	22 29/32" (582)

6-10 1/4 (2089) 6-11 9/16 (2122) 6-10 1/2 (2096) 6-10 (2083) 67 7/16" (1713)	 8068 8070 8080	 10068 10070 10080	 10868 10870 10880
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Clad Mas. Opg. (mm)	11-11 1/2 (3645)	13-11 1/2 (4255)
Wood Mas. Opg. (mm)	12-2 1/8 (3712)	14-2 1/8 (4321)
Rgh. Opg. (mm)	12-0 (3658)	14-0 (4267)
Frame Size (mm)	11-11 (3632)	13-11 (4242)
Glass Size (mm)	26 29/32" (683)	32 29/32" (836)

6-10 1/4 (2089) 6-11 9/16 (2122) 6-10 1/2 (2096) 6-10 (2083) 67 7/16" (1713)	 12068 12070 12080	 14068 14070 14080
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Clad Mas. Opg. (mm)	4-7 9/16 (1411)	4-7 9/16 (1411)	6-1 1/8 (1857)	9-0 5/16 (2751)
Wood Mas. Opg. (mm)	4-10 3/16 (1478)	4-10 3/16 (1478)	6-3 3/4 (1924)	9-2 5/16 (2802)
Rgh. Opg. (mm)	4-8 1/16 (1424)	4-8 1/16 (1424)	6-1 5/8 (1870)	9-0 13/16 (2764)
Frame Size (mm)	4-7 1/16 (1399)	4-7 1/16 (1399)	6-0 5/8 (1845)	8-11 13/16 (2739)
Glass Size (mm)	26 29/32" (683) / 12 13/16" (325)	12 13/16" (325) / 26 29/32" (683)	12 13/16" (325) / 26 29/32" (683) / 12 13/32" (325)	12 13/16" (325) / 26 29/32" (683) / 12 13/16" (325)

6-10 1/4 (2089) 6-11 9/16 (2122) 6-10 1/2 (2096) 6-10 (2083) 67 7/16" (1713)	 4668 XO ENTRANCE 4670 XO ENTRANCE 4680 XO ENTRANCE	 4668 OX ENTRANCE 4670 OX ENTRANCE 4680 OX ENTRANCE	 6268 ENTRANCE 6270 ENTRANCE 6280 ENTRANCE	 9268 ENTRANCE 9270 ENTRANCE 9280 ENTRANCE
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Clad Ultimate Inswing French Door: **CUIFD**
 Clad Ultimate Outswing French Door: **CUOFD**
 Wood Ultimate Inswing French Door: **WUIFD**
 Wood Ultimate Outswing French Door: **WUOFD**

NOTES:

Lite patterns shown are for standard grilles, SDL, and ADL in 6/6, 6/8, and 7/0 heights. The standard pattern for 8/0 heights is a 6 high lite cut.

All glass is tempered.

Elevations as viewed from the exterior.

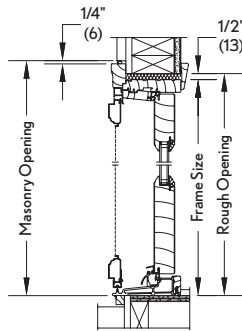
Please contact your local Marvin representative for masonry openings that include casings and subsills.

7/0 AND 8/0 HEIGHTS:		
	7/0 Height	8/0 Height
Clad Mas. Opg. (mm)	7-2 1/4 (2191)	7-11 3/4 (2432)
Wood Mas. Opg. (mm)	7-3 9/16 (2224)	8-1 1/16 (2465)
Rgh. Opg. (mm)	7-2 1/2 (2197)	8-0 (2438)
Frame Size (mm)	7-2 (2184)	7-11 1/2 (2426)
Glass Size (mm)	71 7/16" (1815)	80 15/16" (2056)

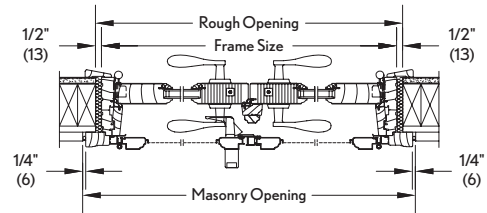
ULTIMATE INSWING FRENCH DOOR

CONSTRUCTION DETAILS

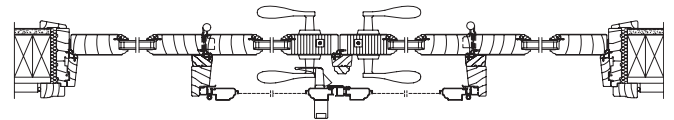
After February, 2011 visit Marvin.com for new Ultimate Inswing French Door construction details and energy data.



WOOD HEAD JAMB AND SILL
WITH STANDARD SWINGING SCREEN



WOOD 2 PANEL JAMB
XX LHI WITH STANDARD SWINGING SCREEN



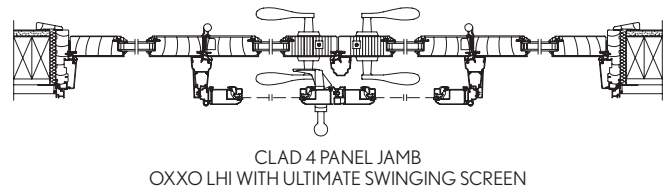
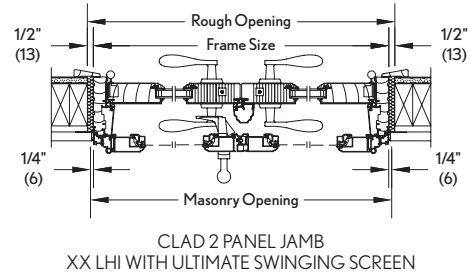
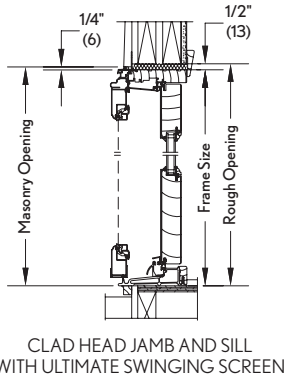
WOOD 4 PANEL JAMB
OXXO LHI WITH STANDARD SWINGING SCREEN

WOOD ULTIMATE INSWING FRENCH DOOR

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1/8" SG	0.72	0.49	0.50	12	
1/8" SG w/EP	0.42	0.44	0.46	47	
1/8" SG w/LoE EA EP	0.35	0.37	0.42	56	
3/4" Insulating GlassAir	0.42	0.44	0.46	46	
3/4" Insulating GlassLoE 272 Air	0.33	0.24	0.40	58	
3/4" Insulating GlassLoE 272 Argon	0.30	0.24	0.40	62	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.32	0.16	0.36	59	N, NC, SC, S
3/4" Insulating GlassLoE 366 Argon	0.30	0.16	0.36	62	N, NC, SC, S

ULTIMATE INSWING FRENCH DOOR

After February, 2011 visit Marvin.com for new Ultimate Inswing French Door construction details and energy data.

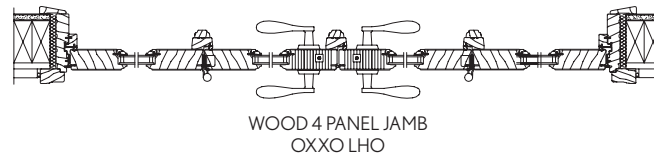
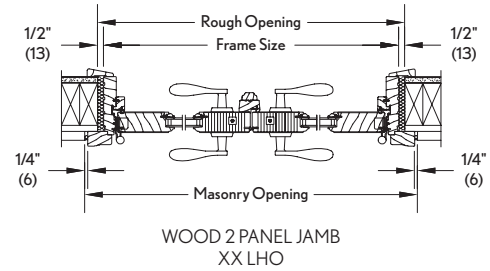
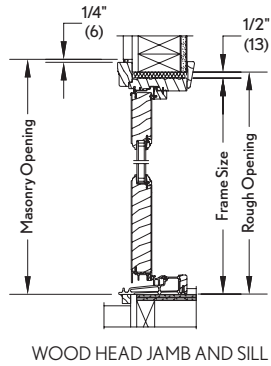


CLAD ULTIMATE INSWING FRENCH DOOR

ENERGY DATA	U-Factor	R-Value	SHGC	VT	ENERGY STAR
3/4" Insulating GlassAir	0.43	2.3	0.43	0.45	
3/4" Insulating GlassLoE 272 Air	0.34	2.9	0.24	0.39	
3/4" Insulating GlassLoE 272 Argon	0.30	3.3	0.23	0.39	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.33	3.0	0.16	0.35	
3/4" Insulating GlassLoE 366 Argon	0.30	3.3	0.16	0.35	N, NC, SC, S

ULTIMATE OUTSWING FRENCH DOOR

CONSTRUCTION DETAILS



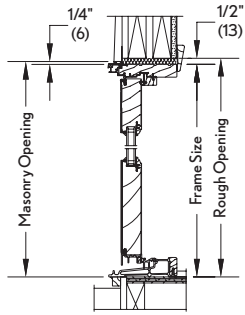
WOOD ULTIMATE OUTSWING FRENCH DOOR

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1/8" SG	0.73	0.49	0.50	12	
1/8" SG w/EP	0.43	0.44	0.46	47	
1/8" SG w/LoE EA EP	0.36	0.37	0.42	55	
3/4" Insulating GlassAir	0.43	0.44	0.46	45	
3/4" Insulating GlassLoE 272 Air	0.33	0.24	0.40	58	
3/4" Insulating GlassLoE 272 Argon	0.31	0.24	0.40	62	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.33	0.16	0.36	59	
3/4" Insulating GlassLoE 366 Argon	0.30	0.16	0.36	62	N, NC, SC, S

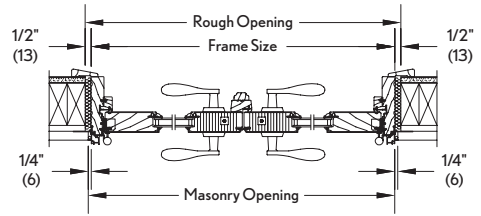
WOOD ULTIMATE OUTSWING FRENCH DOOR SIDELITE

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1/8" SG	0.70	0.45	0.47	12	
1/8" SG w/EP	0.42	0.41	0.42	46	
1/8" SG w/LoE EA EP	0.35	0.34	0.39	55	
3/4" Insulating GlassAir	0.42	0.41	0.42	45	
3/4" Insulating GlassLoE 272 Air	0.33	0.22	0.37	58	
3/4" Insulating GlassLoE 272 Argon	0.31	0.22	0.37	62	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.33	0.15	0.33	59	
3/4" Insulating GlassLoE 366 Argon	0.31	0.15	0.33	62	N, NC, SC, S

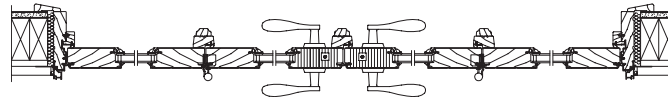
ULTIMATE OUTSWING FRENCH DOOR



CLAD HEAD JAMB AND SILL



CLAD 2 PANEL JAMB
XX LHO



CLAD 4 PANEL JAMB
OXXO LHO

CLAD ULTIMATE OUTSWING FRENCH DOOR

ENERGY DATA	U-Factor	R-Value	SHGC	VT	ENERGY STAR
3/4" Insulating GlassAir	0.42	2.4	0.43	0.45	
3/4" Insulating GlassLoE 272 Air	0.33	3.0	0.24	0.39	
3/4" Insulating GlassLoE 272 Argon	0.30	3.3	0.23	0.39	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.32	3.1	0.16	0.35	N, NC, SC, S
3/4" Insulating GlassLoE 366 Argon	0.30	3.3	0.16	0.35	N, NC, SC, S

CLAD ULTIMATE OUTSWING FRENCH DOOR SIDELITE

ENERGY DATA	U-Factor	R-Value	SHGC	VT	ENERGY STAR
3/4" Insulating GlassAir	0.44	2.3	0.43	0.45	
3/4" Insulating GlassLoE 272 Air	0.35	2.9	0.24	0.39	
3/4" Insulating GlassLoE 272 Argon	0.32	3.1	0.23	0.39	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.34	2.9	0.16	0.35	
3/4" Insulating GlassLoE 366 Argon	0.32	3.1	0.16	0.35	N, NC, SC, S

ULTIMATE SWINGING FRENCH DOOR TRANSOMS

1 FRAME 1 SASH 1/6 HEIGHT (2/0 AND 2/6 HEIGHTS SEE BELOW)

Clad Mas. Opp. (mm)	1-8 3/8 (518)	2-1 15/16 (659)	2-7 15/16 (811)	2-9 15/16 (862)	3-1 15/16 (964)	3-7 15/16 (1116)	4-1 1/8 (1248)
Wood Mas. Opp. (mm)	1-11 (584)	2-4 9/16 (725)	2-10 9/16 (878)	3-0 9/16 (929)	3-4 9/16 (1030)	3-10 9/16 (1183)	4-3 3/4 (1314)
Rgh. Opp. (mm)	1-8 7/8 (530)	2-2 7/16 (672)	2-8 7/16 (824)	2-10 7/16 (875)	3-2 7/16 (976)	3-8 7/16 (1129)	4-1 5/8 (1260)
Frame Size (mm)	1-7 7/8 (505)	2-1 7/16 (646)	2-7 7/16 (799)	2-9 7/16 (849)	3-1 7/16 (951)	3-7 7/16 (1103)	4-0 5/8 (1235)
Glass Size (mm)	12 13/16" (325)	14 29/32" (379)	20 29/32" (531)	22 29/32" (582)	26 29/32" (683)	32 29/32" (836)	38 3/32" (968)

1-6 1/4 (464)							
1-8 1/4 (514)	1616	2016	2616	2816	3016	3616	4016
1-6 1/2 (470)	1620	2020	2620	2820	3020	3620	4020
1-6 (457)	1626	2026	2626	2826	3026	3626	4026
10 5/8" (270)							

Clad Mas. Opp. (mm)	5-1 1/8 (1553)	5-5 1/8 (1654)	6-1 1/8 (1857)	7-1 1/8 (2162)
Wood Mas. Opp. (mm)	5-3 3/4 (1619)	5-7 3/4 (1721)	6-3 3/4 (1924)	7-3 3/4 (2229)
Rgh. Opp. (mm)	5-1 5/8 (1565)	5-5 5/8 (1667)	6-1 5/8 (1870)	7-1 5/8 (2175)
Frame Size (mm)	5-0 5/8 (1540)	5-4 5/8 (1641)	6-0 5/8 (1845)	7-0 5/8 (2149)
Glass Size (mm)	50 3/32" (1272)	54 3/32" (1374)	62 3/32" (1577)	74 3/32" (1882)

1-6 1/4 (464)				
1-8 1/4 (514)	5016	5416	6016	7016
1-6 1/2 (470)	5020	5420	6020	7020
1-6 (457)	5026	5426	6026	7026
10 5/8" (270)				

1 FRAME 2 SASH 1/6 HEIGHT (2/0 AND 2/6 HEIGHTS SEE BELOW)

Clad Mas. Opp. (mm)	4-1 1/8 (1248)	5-1 1/8 (1553)	5-5 1/8 (1654)	6-1 1/8 (1857)	7-1 1/8 (2162)
Wood Mas. Opp. (mm)	4-3 3/4 (1314)	5-3 3/4 (1619)	5-7 3/4 (1721)	6-3 3/4 (1924)	7-3 3/4 (2229)
Rgh. Opp. (mm)	4-1 5/8 (1260)	5-1 5/8 (1565)	5-5 5/8 (1667)	6-1 5/8 (1870)	7-1 5/8 (2175)
Frame Size (mm)	4-0 5/8 (1235)	5-0 5/8 (1540)	5-4 5/8 (1641)	6-0 5/8 (1845)	7-0 5/8 (2149)
Glass Size (mm)	14 29/32" (319)	20 29/32" (531)	22 29/32" (582)	26 29/32" (683)	32 29/32" (836)

1-6 1/4 (464)					
1-8 1/4 (514)	4016	5016	5416	6016	7016
1-6 1/2 (470)	4020	5020	5420	6020	7020
1-6 (457)	4026	5026	5426	6026	7026
10 5/8" (270)					

1 FRAME 3 SASH 1/6 HEIGHT (2/0 AND 2/6 HEIGHTS SEE BELOW)

Clad Mas. Opp. (mm)	6-0 5/16 (1837)	7-6 5/16 (2294)	8-0 5/16 (2446)	9-0 5/16 (2751)	10-6 5/16 (3208)
Wood Mas. Opp. (mm)	6-2 15/16 (1903)	7-8 15/16 (2361)	8-2 15/16 (2513)	9-2 15/16 (2818)	10-8 15/16 (3275)
Rgh. Opp. (mm)	6-0 13/16 (1849)	7-6 13/16 (2307)	8-0 13/16 (2459)	9-0 13/16 (2764)	10-6 13/16 (3221)
Frame Size (mm)	5-11 13/16 (1824)	7-5 13/16 (2281)	7-11 13/16 (2434)	8-11 13/16 (2738)	10-5 13/16 (3196)
Glass Size (mm)	14 29/32" (379)	20 29/32" (531)	22 29/32" (582)	26 29/32" (683)	32 29/32" (836)

1-6 1/4 (464)					
1-8 1/4 (514)	6016	7616	8016	9016	10616
1-6 1/2 (470)	6020	7620	8020	9020	10620
1-6 (457)	6026	7626	8026	9026	10626
10 5/8" (270)					

Clad Ultimate Inswing French Door Transoms: **CUIFDT**
 Clad Ultimate Outswing French Door Transoms: **CUOFDT**
 Wood Ultimate Inswing French Door Transoms: **WUIFDT**
 Wood Ultimate Outswing French Door Transoms: **WUOFDT**

NOTES:

Some transoms available factory mullled.

For stand alone wood units in masonry openings add 11/16" (17) to the masonry opening height only.

Please contact your local Marvin representative for information on structural mulling guidelines.

Please contact your local Marvin representative for masonry openings that include casings and sills.

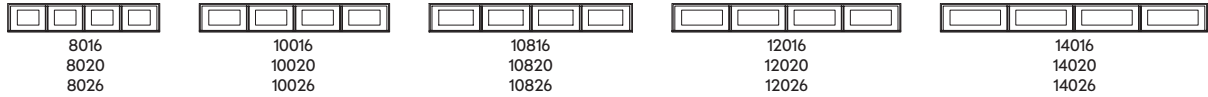
	2/0 Height	2/6 Height
Clad Mas. Opp. (mm)	2-0 1/4 (616)	2-6 1/4 (768)
Wood Mas. Opp. (mm)	2-2 1/4 (667)	2-8 1/4 (819)
Rgh. Opp. (mm)	2-0 1/2 (622)	2-6 1/2 (775)
Frame Size (mm)	2-0 (610)	2-6 (762)
Glass Size (mm)	16 5/8" (422)	22 5/8" (575)

ULTIMATE SWINGING FRENCH DOOR TRANSOMS

1 FRAME 4 SASH 1/6 HEIGHT (2/0 AND 2/6 HEIGHTS SEE BELOW)

Clad Mas. Opg. (mm)	7-11 1/2 (2426)	9-11 1/2 (3035)	10-7 1/2 (3239)	11-11 1/2 (3645)	13-11 1/2 (4255)
Wood Mas. Opg. (mm)	8-2 1/8 (2492)	10-2 1/8 (3102)	10-10 1/8 (3305)	12-2 1/8 (3712)	14-2 1/8 (4321)
Rgh. Opg. (mm)	8-0 (2438)	10-0 (3048)	10-8 (3251)	12-0 (3658)	14-0 (4267)
Frame Size (mm)	7-11 (2413)	9-11 (3023)	10-7 (3226)	11-11 (3632)	13-11 (4242)
Glass Size (mm)	14 29/32" (379)	20 29/32" (531)	22 29/32" (582)	26 29/32" (683)	32 29/32" (836)

1-6 1/4 (464)
1-8 1/4 (514)
1-6 1/2 (470)
1-6 (457)
10 5/8" (270)



WOOD MINIMUM AND MAXIMUM MEASUREMENTS

GLASS TYPE	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum Glass Size per Sash
Insulating Glass	24" (610)	20" (508)	72" (610)	65" (1651)	21.0 Sq. Feet (195 Sq. Meters)

4 9/16 jamb or Hopper units that exceed frame size 64 x 48 (1626 x 1218) are not certified.

CLAD MINIMUM AND MAXIMUM MEASUREMENTS

GLASS TYPE	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum Glass Size per Sash
Insulating Glass	24" (610)	20" (508)	72" (610)	60" (1524)	21.0 Sq. Feet (195 Sq. Meters)

4 9/16 jamb or Hopper units that exceed frame size 64 x 48 (1626 x 1218) are not certified.

NOTES:

Some transoms available factory mullled.

For stand alone wood units in masonry openings add 11/16" (17) to the masonry opening height only.

Please contact your local Marvin representative for information on structural mulling guidelines.

Please contact your local Marvin representative for masonry openings that include casings and subsills.

2/0 AND 2/6 HEIGHTS:		
	2/0 Height	2/6 Height
Clad Mas. Opg. (mm)	2-0 1/4 (616)	2-6 1/4 (768)
Wood Mas. Opg. (mm)	2-2 1/4 (667)	2-8 1/4 (819)
Rgh. Opg. (mm)	2-0 1/2 (622)	2-6 1/2 (775)
Frame Size (mm)	2-0 (610)	2-6 (762)
Glass Size (mm)	16 5/8" (422)	22 5/8" (575)

ULTIMATE SWINGING FRENCH DOOR TRANSOMS

CLAD ULTIMATE OUTSWING FRENCH DOOR TRANSOMS

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating GlassAir	0.45	0.50	0.53	44	
3/4" Insulating GlassLoE 272 Air	0.34	0.27	0.46	56	SC, S
3/4" Insulating GlassLoE 272 Argon	0.31	0.27	0.46	60	NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.33	0.19	0.41	57	SC, S
3/4" Insulating GlassLoE 366 Argon	0.30	0.18	0.41	60	N, NC, SC, S

WOOD ULTIMATE OUTSWING FRENCH DOOR TRANSOMS

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1/8" SG	0.78	0.56	0.58	12	
1/8" SG w/EP	0.43	0.50	0.53	46	
1/8" SG w/LoE EA EP	0.35	0.42	0.48	54	
3/4" Insulating GlassAir	0.43	0.50	0.53	45	
3/4" Insulating GlassLoE 272 Air	0.32	0.27	0.46	58	NC, SC, S
3/4" Insulating GlassLoE 272 Argon	0.29	0.27	0.46	61	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.32	0.18	0.41	58	NC, SC, S
3/4" Insulating GlassLoE 366 Argon	0.29	0.18	0.41	62	N, NC, SC, S

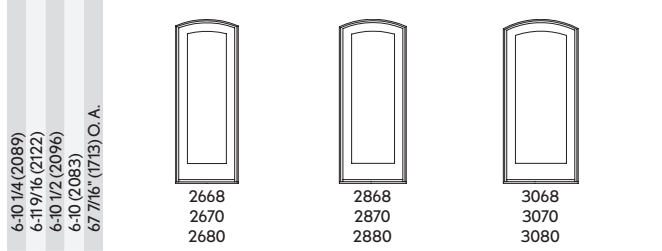
WOOD ULTIMATE OUTSWING FRENCH DOOR SIDELITE TRANSOMS

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1/8" SG	0.82	0.61	0.63	12	
1/8" SG w/EP	0.44	0.55	0.58	46	
1/8" SG w/LoE EA EP	0.35	0.46	0.53	54	
3/4" Insulating GlassAir	0.44	0.55	0.58	45	
3/4" Insulating GlassLoE 272 Air	0.32	0.30	0.50	57	NC, SC
3/4" Insulating GlassLoE 272 Argon	0.28	0.29	0.50	61	N, NC, SC
3/4" Insulating GlassLoE 366 Air	0.31	0.20	0.45	58	NC, SC, S
3/4" Insulating GlassLoE 366 Argon	0.28	0.19	0.45	62	N, NC, SC, S

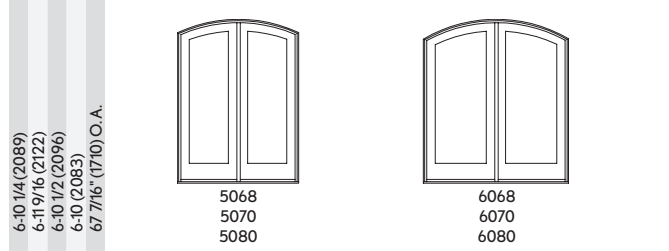
ULTIMATE ARCH TOP FRENCH DOOR

6/8 HEIGHT (7/0 AND 8/0 HEIGHTS SEE BELOW)

Clad Mas. Opg. (mm)	2-7 15/16 (811)	2-9 15/16 (862)	3-1 15/16 (946)
Wood Mas. Opg. (mm)	2-10 9/16 (878)	3-0 9/16 (929)	3-4 9/16 (1030)
Rgh. Opg. (mm)	2-8 7/16 (824)	2-10 7/16 (875)	3-2 7/16 (976)
Frame Size (mm)	2-7 7/16 (799)	2-9 7/16 (849)	3-1 7/16 (951)
Glass Size (mm)	20 29/32" (531)	22 29/32" (582)	26 29/32" (683)



Clad Mas. Opg. (mm)	5-1 1/8 (1553)	6-1 1/8 (1857)
Wood Mas. Opg. (mm)	5-3 3/4 (1619)	6-3 3/4 (1924)
Rgh. Opg. (mm)	5-1 5/8 (1565)	6-1 5/8 (1870)
Frame Size (mm)	5-0 5/8 (1540)	6-0 5/8 (1845)
Glass Size (mm)	20 29/32" (531)	26 29/32" (683)



Clad Ultimate Inswing Arch Top French Door: **CUIAF**
Clad Ultimate Outswing Arch Top French Door: **CUOAF**

Wood Ultimate Inswing Arch Top French Door: **WUIAF**
Wood Ultimate Outswing Arch Top French Door: **WUOAF**

WOOD ULTIMATE INSWING ARCH TOP FRENCH DOOR

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1/8" SG	0.72	0.49	0.50	12	
1/8" SG w/EP	0.42	0.44	0.46	47	
1/8" SG w/LoE EA EP	0.35	0.37	0.42	56	
3/4" Insulating GlassAir	0.42	0.44	0.46	46	
3/4" Insulating GlassLoE 272 Air	0.33	0.24	0.40	58	
3/4" Insulating GlassLoE 272 Argon	0.30	0.24	0.40	62	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.32	0.16	0.36	59	N, NC, SC, S
3/4" Insulating GlassLoE 366 Argon	0.30	0.16	0.36	62	N, NC, SC, S

WOOD ULTIMATE OUTSWING ARCH TOP FRENCH DOOR

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1/8" SG	0.73	0.49	0.50	12	
1/8" SG w/EP	0.43	0.44	0.46	47	
1/8" SG w/LoE EA EP	0.36	0.37	0.42	55	
3/4" Insulating GlassAir	0.43	0.44	0.46	45	
3/4" Insulating GlassLoE 272 Air	0.33	0.24	0.40	58	
3/4" Insulating GlassLoE 272 Argon	0.31	0.24	0.40	62	N, NC, SC, S
3/4" Insulating GlassLoE 366 Air	0.33	0.16	0.36	59	
3/4" Insulating GlassLoE 366 Argon	0.30	0.16	0.36	62	N, NC, SC, S

NOTES:

Lite patterns shown are for standard grilles, and SDL in 6/8 and 7/0 heights. The standard lite pattern for 8/0 height is a 6 high lite cut.

Standard rough opening radius on a single panel door is 40 1/2". Standard rough opening radius on a double panel door is 72 1/2".

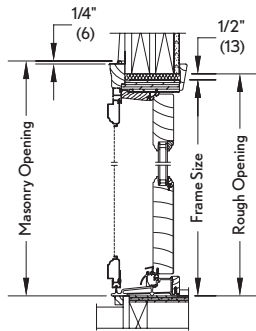
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7/0 AND 8/0 HEIGHTS:

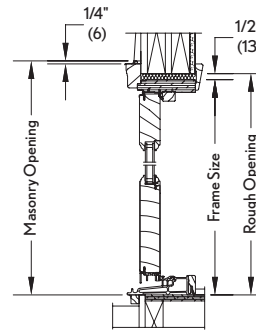
	7/0 Height	8/0 Height
Clad Mas. Opg. (mm)	7-2 1/4 (2191)	7-11 3/4 (2432)
Wood Mas. Opg. (mm)	7-2 1/4 (2191)	7-11 3/4 (2432)
Rgh. Opg. (mm)	7-2 1/2 (2197)	8-0 (2438)
Frame Size (mm)	7-2 (2184)	7-11 1/2 (2426)
Glass Size (mm)	71 7/16" (1815) O. A.	80 15/16" (2056) O. A.

ULTIMATE ARCH TOP FRENCH DOOR

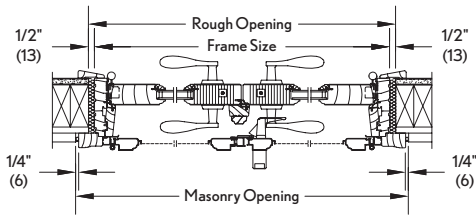
CONSTRUCTION DETAILS



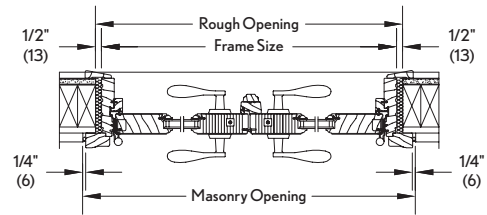
WOOD INSWING HEAD JAMB AND SILL
WITH STANDARD SWINGING SCREEN



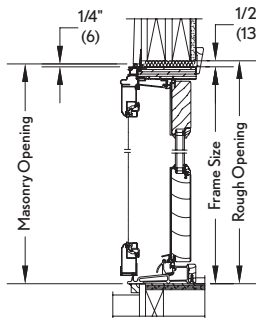
WOOD OUTSWING HEAD JAMB AND SILL



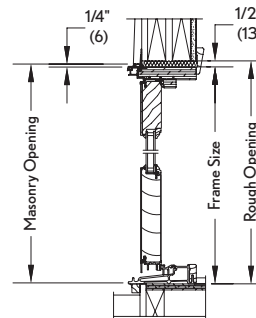
WOOD INSWING 2 PANEL JAMB
XX RHI WITH STANDARD SWINGING SCREEN



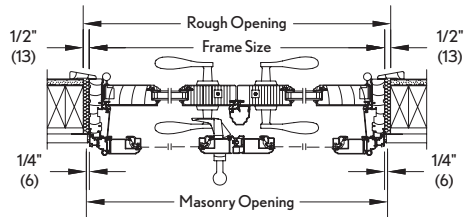
WOOD OUTSWING 2 PANEL JAMB
XX RHO



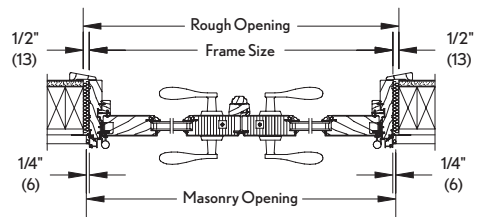
CLAD INSWING HEAD JAMB AND SILL
WITH ULTIMATE SWINGING SCREEN



CLAD OUTSWING HEAD JAMB AND SILL



CLAD INSWING 2 PANEL JAMB
XX LHI WITH ULTIMATE SWINGING SCREEN

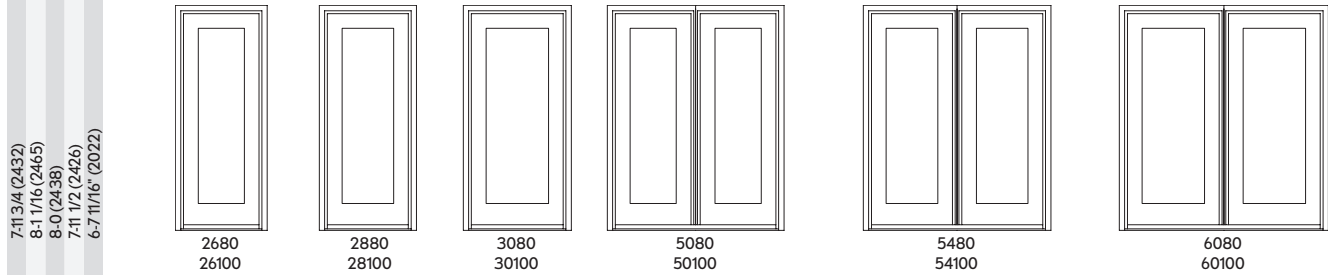


CLAD OUTSWING 2 PANEL JAMB
XX LHO

2 1/4" SWINGING FRENCH DOOR

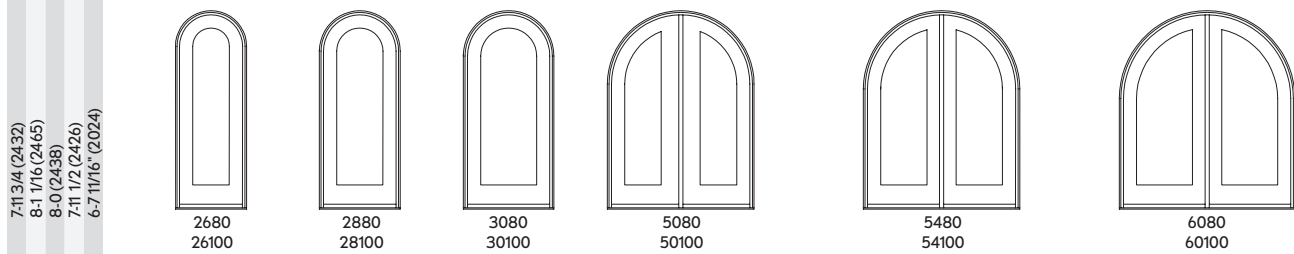
8/0 HEIGHT RECTANGLE INSWING AND OUTSWING (10/0 HEIGHT SEE BELOW)

Clad Mas. Opg. (mm)	2-7 15/16 (811)	2-9 15/16 (862)	3-1 15/16 (964)	5-1 1/8 (1533)	5-5 1/8 (1654)	6-1 1/8 (1857)
Wood Mas. Opg. (mm)	2-10 9/16 (878)	3-0 9/16 (929)	3-4 9/16 (1030)	5-3 3/4 (1619)	5-7 3/4 (1721)	6-3 3/4 (1924)
Rgh. Opg. (mm)	2-8 7/16 (824)	2-10 7/16 (875)	3-2 7/16 (976)	5-1 5/8 (1565)	5-5 5/8 (1667)	6-1 5/8 (1870)
Frame Size (mm)	2-7 7/16 (799)	2-9 7/16 (849)	3-1 7/16 (951)	5-0 5/8 (1540)	5-4 5/8 (1641)	6-0 5/8 (1845)
Glass Size (mm)	1-6 13/32" (468)	1-8 13/32" (518)	2-0 13/32" (620)	1-6 13/32" (468)	1-8 13/32" (518)	2-0 13/32" (620)



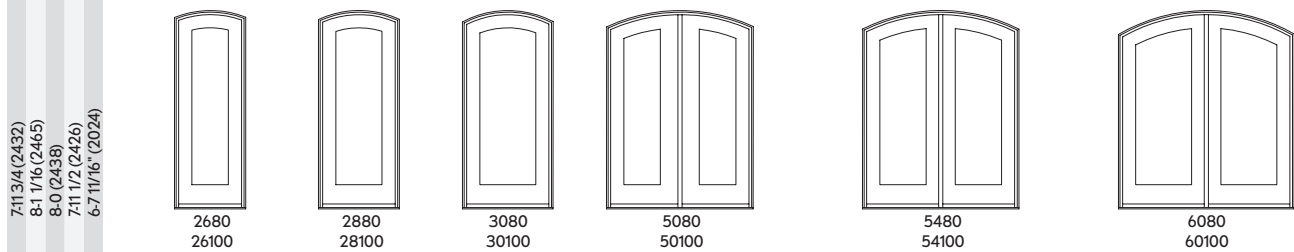
8/0 HEIGHT ARCHTOP RT2 INSWING AND OUTSWING (10/0 HEIGHT SEE BELOW)

Clad Mas. Opg. (mm)	2-7 15/16 (811)	2-9 15/16 (862)	3-1 15/16 (964)	5-1 1/8 (1533)	5-5 1/8 (1654)	6-1 1/8 (1857)
Wood Mas. Opg. (mm)	2-10 9/16 (878)	3-0 9/16 (929)	3-4 9/16 (1030)	5-3 3/4 (1619)	5-7 3/4 (1721)	6-3 3/4 (1924)
Rgh. Opg. (mm)	2-8 7/16 (824)	2-10 7/16 (875)	3-2 7/16 (976)	5-1 5/8 (1565)	5-5 5/8 (1667)	6-1 5/8 (1870)
Frame Size (mm)	2-7 7/16 (799)	2-9 7/16 (849)	3-1 7/16 (951)	5-0 5/8 (1540)	5-4 5/8 (1641)	6-0 5/8 (1845)
Glass Size (mm)	1-6 13/32" (468)	1-8 13/32" (518)	2-0 13/32" (620)	1-6 13/32" (468)	1-8 13/32" (518)	2-0 13/32" (620)



8/0 HEIGHT ARCHTOP RT6 INSWING AND OUTSWING (10/0 HEIGHT SEE BELOW)

Clad Mas. Opg. (mm)	2-7 15/16 (811)	2-9 15/16 (862)	3-1 15/16 (964)	5-1 1/8 (1533)	5-5 1/8 (1654)	6-1 1/8 (1857)
Wood Mas. Opg. (mm)	2-10 9/16 (878)	3-0 9/16 (929)	3-4 9/16 (1030)	5-3 3/4 (1619)	5-7 3/4 (1721)	6-3 3/4 (1924)
Rgh. Opg. (mm)	2-8 7/16 (824)	2-10 7/16 (875)	3-2 7/16 (976)	5-1 5/8 (1565)	5-5 5/8 (1667)	6-1 5/8 (1870)
Frame Size (mm)	2-7 7/16 (799)	2-9 7/16 (849)	3-1 7/16 (951)	5-0 5/8 (1540)	5-4 5/8 (1641)	6-0 5/8 (1845)
Glass Size (mm)	1-6 13/32" (468)	1-8 13/32" (518)	2-0 13/32" (620)	1-6 13/32" (468)	1-8 13/32" (518)	2-0 13/32" (620)



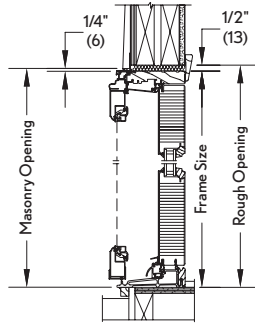
Clad 2 1/4" Inswing French Door: **CMIFD**
 Clad 2 1/4" Outswing French Door: **CMOFD**
 Wood 2 1/4" Inswing French Door: **WMIFD**
 Wood 2 1/4" Outswing French Door: **WMOFD**

10/0 HEIGHT

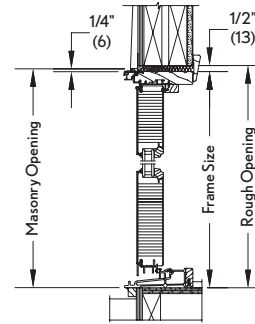
	10/0 Height
Clad Mas. Opg. (mm)	9-1 3/4 (2788)
Wood Mas. Opg. (mm)	10-1 1/16 (3075)
Rgh. Opg. (mm)	10-0 (3048)
Frame Size (mm)	9-11 1/2 (3035)
Glass Size (mm)	8-7 11/16" (2634)

2 1/4" SWINGING FRENCH DOOR

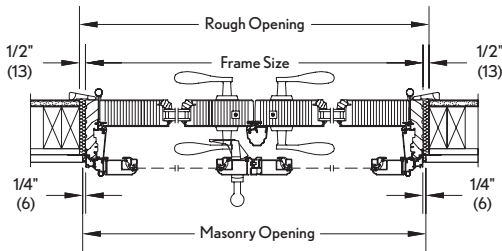
CONSTRUCTION DETAILS CLAD



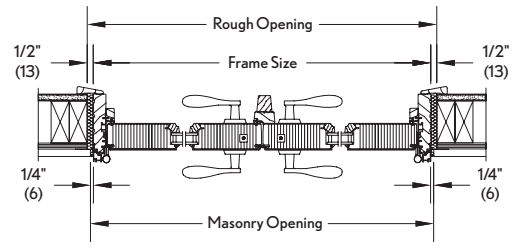
CLAD INSWING HEAD JAMB AND SILL WITH ULTIMATE SWINGING SCREEN



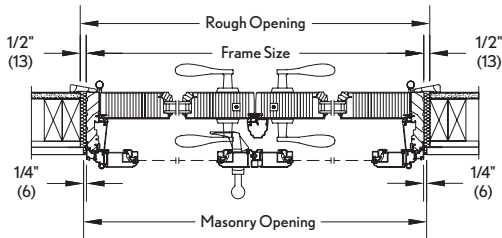
CLAD OUTSWING HEAD JAMB AND SILL



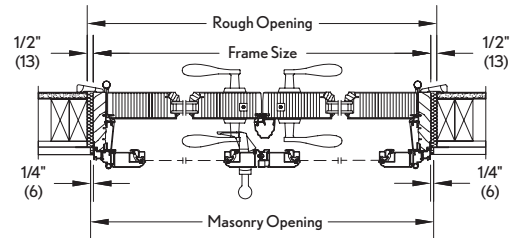
CLAD INSWING 2 PANEL JAMB XXLHI WITH ULTIMATE SWINGING SCREEN



CLAD OUTSWING 2 PANEL JAMB XXRHO



CLAD ARCHTOP INSWING 2 PANEL JAMB XXR RT6 WITH ULTIMATE SWINGING SCREEN



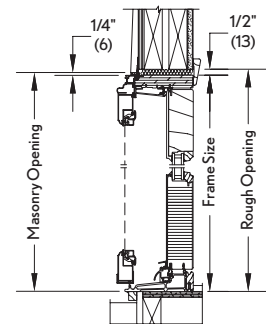
CLAD ARCHTOP INSWING 2 PANEL JAMB XXL RT2

CLAD 2 1/4" INSWING FRENCH DOOR

ENERGY DATA	U-Factor	R-Value	SHGC	VT	ENERGY STAR
1" Insulating Glass LoE 366 Air	0.31	3.2	0.14	0.31	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.29	3.4	0.14	0.31	N, NC, SC, S
7/8" Insulating Glass Air	0.40	2.5	0.36	0.39	
7/8" Insulating Glass LoE 272 Air	0.32	3.1	0.20	0.34	N, NC, SC, S
7/8" Insulating Glass LoE 272 Argon	0.30	3.3	0.20	0.34	N, NC, SC, S

CLAD 2 1/4" OUTSWING FRENCH DOOR

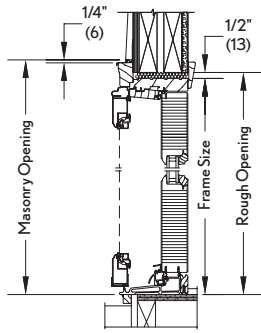
ENERGY DATA	U-Factor	R-Value	SHGC	VT	ENERGY STAR
1" Insulating Glass LoE 366 Air	0.32	3.1	0.14	0.31	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.30	3.3	0.14	0.31	N, NC, SC, S
7/8" Insulating Glass Air	0.40	2.5	0.37	0.39	
7/8" Insulating Glass LoE 272 Air	0.32	3.1	0.20	0.34	N, NC, SC, S
7/8" Insulating Glass LoE 272 Argon	0.30	3.3	0.20	0.34	N, NC, SC, S



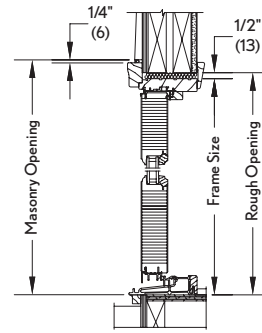
CLAD ARCHTOP INSWING HEAD JAMB AND SILL RT2 AND RT6 WITH ULTIMATE SWINGING SCREEN

2 1/4" SWINGING FRENCH DOOR

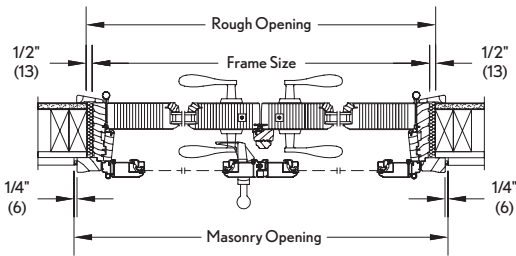
CONSTRUCTION DETAILS WOOD



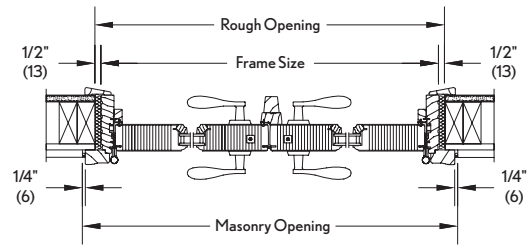
WOOD INSWING HEAD JAMB AND SILL WITH ULTIMATE SWINGING SCREEN



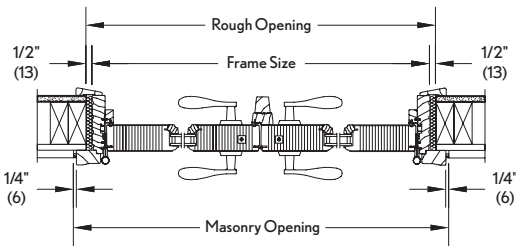
WOOD OUTSWING HEAD JAMB AND SILL



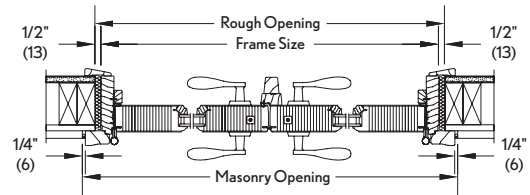
WOOD INSWING 2 PANEL JAMB XXLHI WITH ULTIMATE SWINGING SCREEN



WOOD OUTSWING 2 PANEL JAMB XXRHO



WOOD ARCHTOP OUTSWING 2 PANEL JAMB XXR RT6



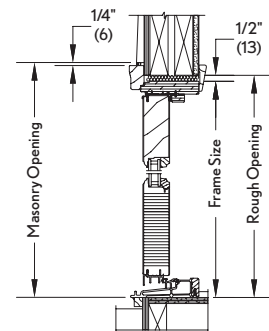
WOOD ARCHTOP OUTSWING 2 PANEL JAMB XXL RT2

WOOD 2 1/4" INSWING FRENCH DOOR

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1" Insulating Glass LoE 366 Air	0.31	0.14	0.32	56	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.28	0.14	0.32	60	N, NC, SC, S
7/8" Insulating Glass Air	0.39	0.38	0.40	45	
7/8" Insulating Glass LoE 272 Air	0.31	0.21	0.35	56	N, NC, SC, S
7/8" Insulating Glass LoE 272 Argon	0.29	0.21	0.35	59	N, NC, SC, S

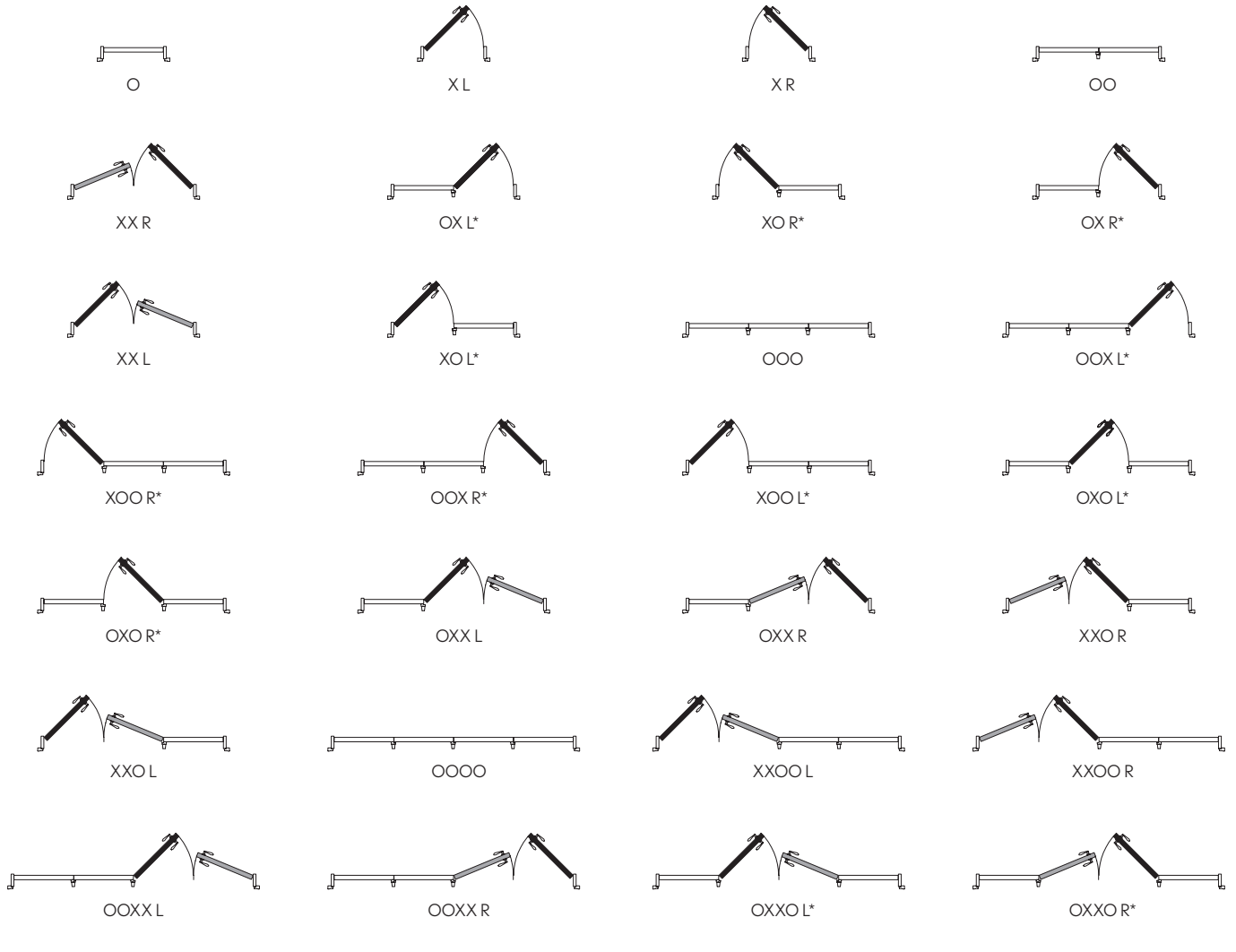
WOOD 2 1/4" OUTSWING FRENCH DOOR

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1" Insulating Glass LoE 366 Air	0.31	0.14	0.32	56	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.29	0.14	0.32	59	N, NC, SC, S
7/8" Insulating Glass Air	0.40	0.38	0.40	44	
7/8" Insulating Glass LoE 272 Air	0.31	0.21	0.35	56	N, NC, SC, S
7/8" Insulating Glass LoE 272 Argon	0.29	0.21	0.35	59	N, NC, SC, S

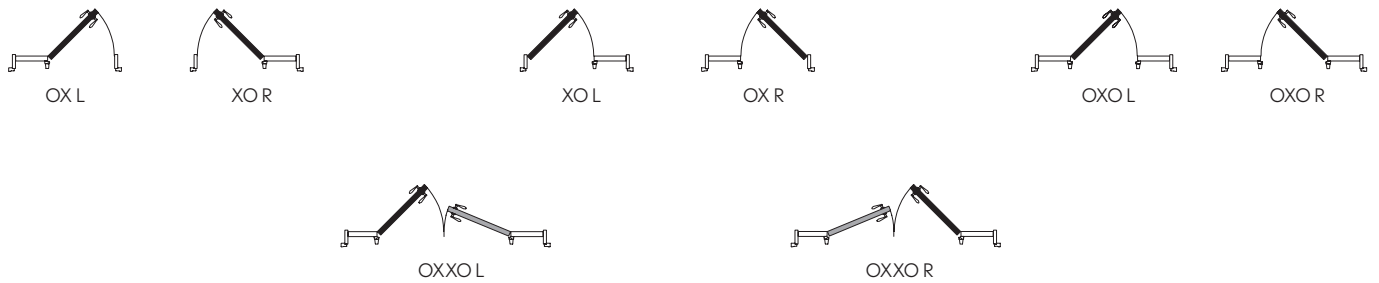


WOOD ARCHTOP OUTSWING HEAD JAMB AND SILL RT2 AND RT6

ULTIMATE INSWING PANEL HINGING CONFIGURATIONS





ENTRANCE SYSTEMS



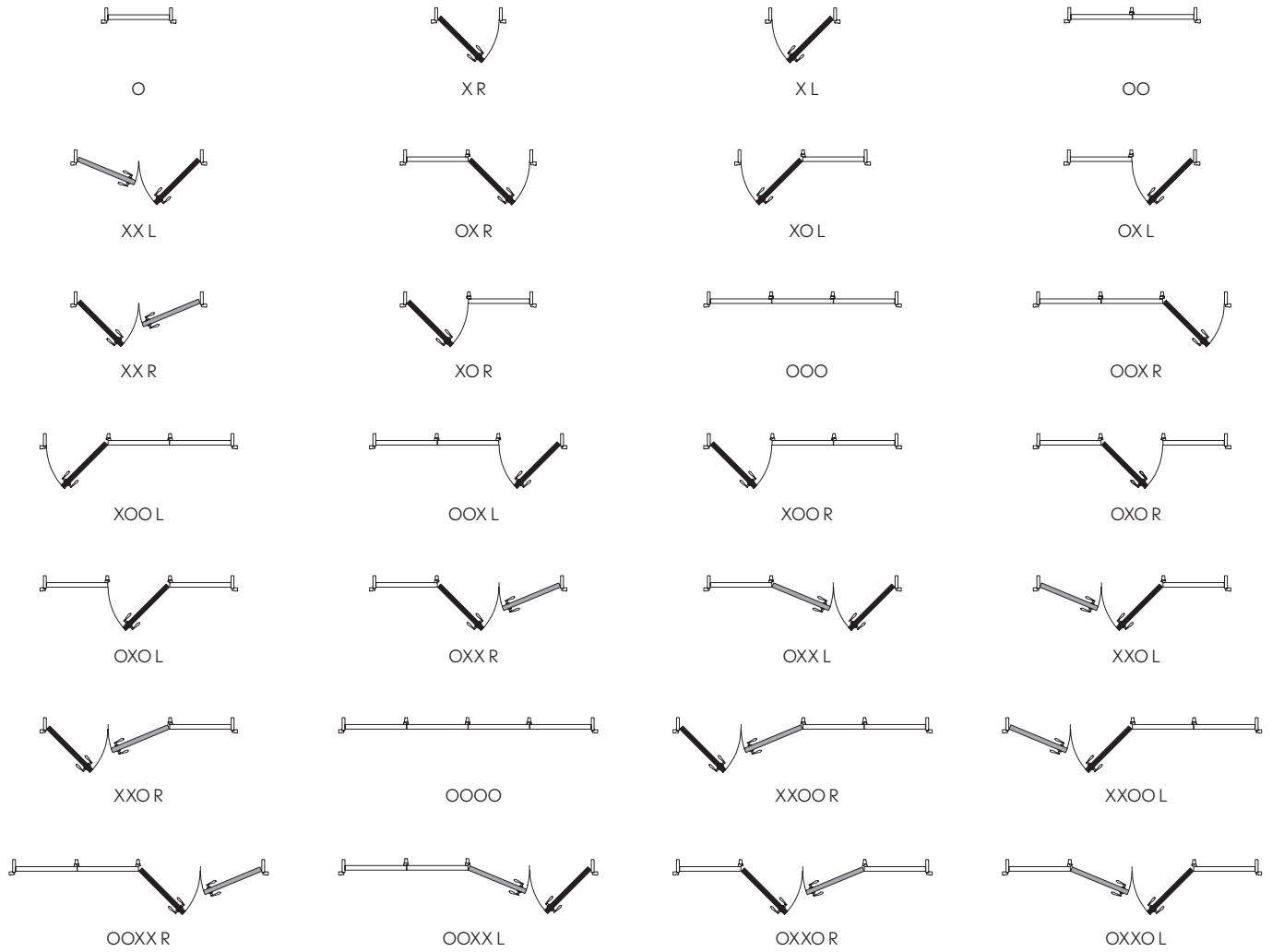
NOTES:

O: STATIONARY X: OPERATING L: LEFT HAND R: RIGHT HAND

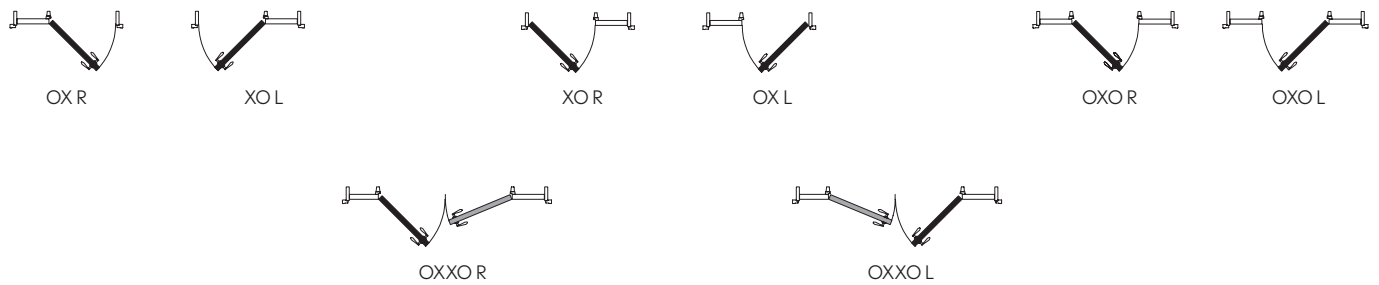
* Available with sliding top hung aluminum screen.

-  Stationary Panel
-  Active Panel
-  Inactive Panel

ULTIMATE OUTSWING PANEL HINGING CONFIGURATIONS



ENTRANCE SYSTEMS





NOTES:

O: STATIONARY X: OPERATING L: LEFT HAND R: RIGHT HAND

Wood doors are available with wood combo/storm and screens, contact your local Marvin representative.

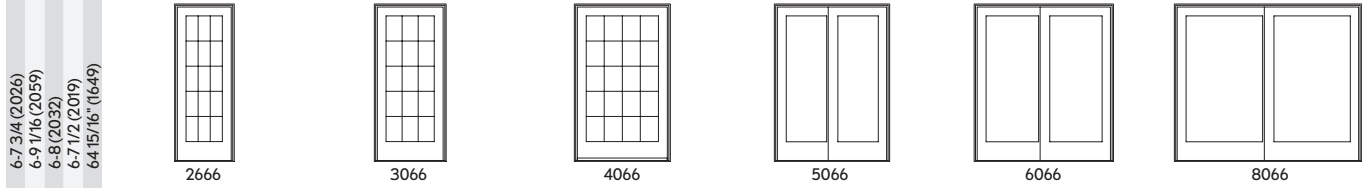
* Available with sliding top hung aluminum screen.

-  Stationary Panel
-  Active Panel
-  Inactive Panel

ULTIMATE SLIDING FRENCH DOOR

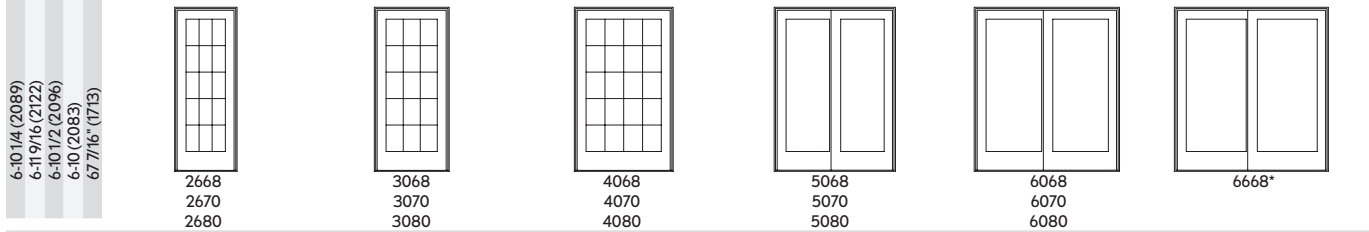
6/6 HEIGHT

Clad Mas. Opg. (mm)	2-7 1/8 (791)	3-1 1/8 (943)	4-1 1/8 (1248)	4-1 1/2 (1511)	5-1 1/2 (1816)	7-1 1/2 (2426)
Wood Mas. Opg. (mm)	2-9 3/4 (857)	3-3 3/4 (1010)	4-3 3/4 (1314)	5-2 1/8 (1578)	6-2 1/8 (1883)	8-2 1/8 (2492)
Rgh. Opg. (mm)	2-7 5/8 (803)	3-1 5/8 (956)	4-1 5/8 (1260)	5-0 (1524)	6-0 (1829)	8-0 (2438)
Frame Size (mm)	2-6 5/8 (778)	3-0 5/8 (930)	4-0 5/8 (1235)	4-11 (1499)	5-11 (1803)	7-11 (2413)
Glass Size (mm)	20 3/32" (510)	26 3/32" (663)	38 3/32" (968)	22 1/4" (565)	28 1/4" (718)	40 1/4" (1022)

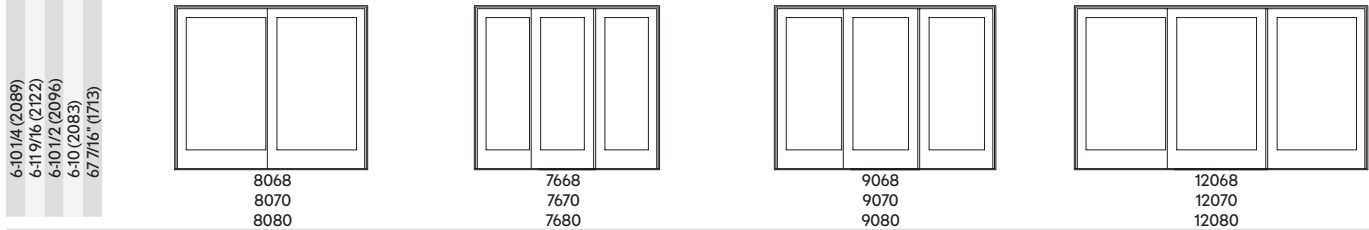


6/8 HEIGHT (7/0 AND 8/0 HEIGHT SEE BELOW)

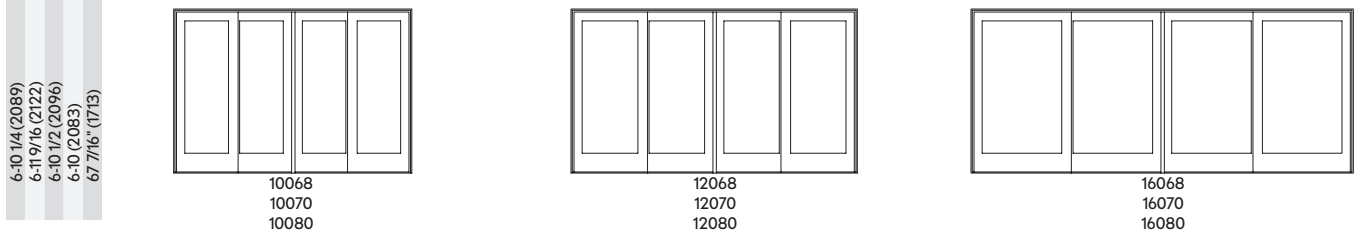
Clad Mas. Opg. (mm)	2-7 15/16 (811)	3-1 15/16 (964)	4-1 15/16 (1268)	5-1 1/8 (1553)	6-1 1/8 (1857)	6-5 1/2 (1969)
Wood Mas. Opg. (mm)	2-10 9/16 (878)	3-4 9/16 (1030)	4-4 9/16 (1335)	5-3 3/4 (1619)	6-3 3/4 (1924)	N/A
Rgh. Opg. (mm)	2-8 7/16 (824)	3-2 7/16 (976)	4-2 7/16 (1281)	5-1 5/8 (1565)	6-1 5/8 (1870)	6-6 (1981)
Frame Size (mm)	2-7 7/16 (799)	3-1 7/16 (951)	4-1 7/16 (1256)	5-0 5/8 (1540)	6-0 5/8 (1845)	6-5 (1956)
Glass Size (mm)	20 29/32" (531)	26 29/32" (683)	38 29/32" (988)	23 1/16" (586)	29 1/16" (738)	31 1/4" (794)



Clad Mas. Opg. (mm)	8-1 1/8 (2467)	7-9 1/4 (2368)	9-3 1/4 (2825)	12-3 1/4 (3739)
Wood Mas. Opg. (mm)	8-3 3/4 (2534)	7-11 7/8 (2435)	9-5 7/8 (2892)	12-5 7/8 (3806)
Rgh. Opg. (mm)	8-1 5/8 (2480)	7-9 3/4 (2381)	9-3 3/4 (2838)	12-3 3/4 (3852)
Frame Size (mm)	8-0 5/8 (2454)	7-8 3/4 (2355)	9-2 3/4 (2813)	12-2 3/4 (3727)
Glass Size (mm)	41 1/16" (1043)	23 1/16" (586)	29 1/16" (738)	41 1/16" (1043)



Clad Mas. Opg. (mm)	9-1 1/2 (3035)	11-1 1/2 (3645)	15-1 1/2 (4864)
Wood Mas. Opg. (mm)	10-2 1/8 (3102)	12-2 1/8 (3712)	16-2 1/8 (4931)
Rgh. Opg. (mm)	10-0 (3048)	12-0 (3658)	16-0 (4877)
Frame Size (mm)	9-11 (3023)	11-11 (3632)	15-11 (4851)
Glass Size (mm)	23 1/16" (586)	29 1/16" (738)	41 1/16" (1043)



Clad Ultimate Sliding French Door: **CUSFD**
 Wood Ultimate Sliding French Door: **WUSFD**

NOTES:

Lite patterns shown are for standard grilles, SDL, and ADL in 6/6 and 6/8 heights. The standard lite pattern for 8/0 height is a 6 high lite cut.

All glass is tempered

Right or left hand operation is determined by the direction the door panel travels to open position, as viewed from exterior. OXXO can be ordered L active or R active

Available in clad 6-8 height only.

Please contact your local Marvin representative for masonry openings that include casings and subsills.

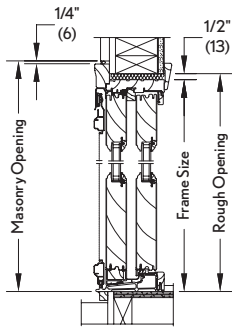
NOT TO SCALE

7/0 AND 8/0 HEIGHT

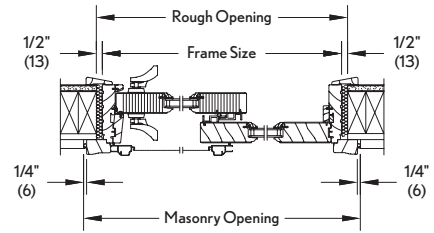
	7/0 Height	8/0 Height
Clad Mas. Opg. (mm)	7-2 1/4 (2191)	7-11 3/4 (2432)
Wood Mas. Opg. (mm)	7-3 9/16 (2224)	8-1 1/16 (2465)
Rgh. Opg. (mm)	7-2 1/2 (2197)	8-0 (2438)
Frame Size (mm)	7-2 (2184)	7-11 1/2 (2426)
Glass Size (mm)	71 7/16" (1815)	80 15/16" (2056)

ULTIMATE SLIDING FRENCH DOOR

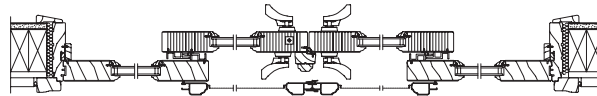
CONSTRUCTION DETAILS WOOD



WOOD ULTIMATE SLIDING FRENCH DOOR
HEAD JAMB AND SILL WITH ULTIMATE
TOP HUNG SCREEN



WOOD ULTIMATE SLIDING FRENCH DOOR
2 PANEL JAMB XO WITH ULTIMATE
TOP HUNG SCREEN



WOOD ULTIMATE SLIDING FRENCH DOOR
4 PANEL JAMB OXOX WITH ULTIMATE
TOP HUNG SCREEN

WOOD ULTIMATE SLIDING FRENCH DOOR

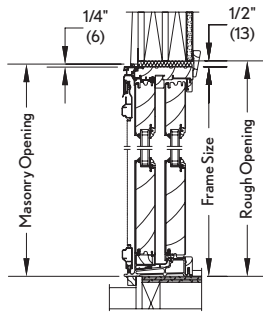
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.43	0.49	0.51	45	
3/4" Insulating Glass LoE 272 Air	0.32	0.27	0.45	56	N, NC, SC, S
3/4" Insulating Glass LoE 272 Argon	0.29	0.26	0.45	59	N, NC, SC, S
3/4" Insulating Glass LoE 366 Air	0.32	0.18	0.40	56	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.29	0.18	0.40	59	N, NC, SC, S

CLAD ULTIMATE SLIDING FRENCH DOOR

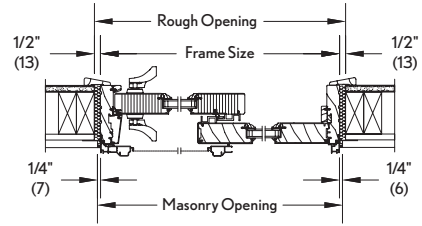
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.44	0.49	0.51	43	
3/4" Insulating Glass LoE 272 Air	0.33	0.27	0.45	54	
3/4" Insulating Glass LoE 272 Argon	0.30	0.27	0.45	58	N, NC, SC, S
3/4" Insulating Glass LoE 366 Air	0.33	0.18	0.40	55	
3/4" Insulating Glass LoE 366 Argon	0.30	0.18	0.40	58	N, NC, SC, S

ULTIMATE SLIDING FRENCH DOOR

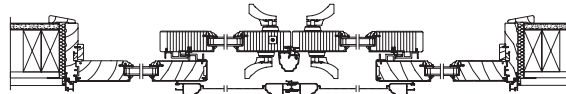
CONSTRUCTION DETAILS CLAD



CLAD ULTIMATE SLIDING FRENCH DOOR
HEAD JAMB AND SILL WITH ULTIMATE
TOP HUNG SCREEN



CLAD ULTIMATE SLIDING FRENCH DOOR
2 PANEL JAMB XO R WITH ULTIMATE
TOP HUNG SCREEN



CLAD ULTIMATE SLIDING FRENCH DOOR
4 PANEL JAMB OXXO R WITH ULTIMATE
TOP HUNG SCREEN

NET CLEAR OPENINGS WOOD AND CLAD SLIDING FRENCH DOOR

HEIGHT

Unit Type	Unit Size	Net Clear Openings
6/6	6-6 Height	75 1/16" (1907)
6/8	6-8 Height	77 9/16" (1970)
8/0	8-0 Height	91 1/16" (2313)

WIDTH

Unit Type	Unit Size	Net Clear Openings
OX	5066	21 11/16" (551)
OX	6066	27 11/16" (703)
OX	8066	39 11/16" (1008)
OX	5068/5080	22 1/2" (572)
OXO	7668/7680	22 1/2" (572)
OXXO	10068/10080	45 7/16" (1180)
OX	6068/6080	28 1/2" (724)
OXO	9068/9080	28 1/2" (724)
OXXO	12068/12080	57 7/16" (1459)
OX	6668*	30 11/16" (779)
OX	8068/8080	40 1/2" (1029)
OXO	12068/12080	40 1/2" (1029)
OXXO	16068/16080	81 7/16" (2069)

* Available in clad only.

ULTIMATE SLIDING FRENCH DOOR TRANSOMS

1 FRAME 1 SASH 1/6 HEIGHT (2/0 AND 2/6 HEIGHTS SEE BELOW)

Clad Mas. Opp. (mm)	2-7 15/16 (811)	3-1 15/16 (964)	4-1 15/16 (1268)	5-1 1/8 (1553)	6-1 1/8 (1857)	8-1 1/8 (2467)
Wood Mas. Opp. (mm)	2-10 9/16 (878)	3-4 9/16 (1030)	4-4 9/16 (1335)	5-3 3/4 (1619)	6-3 3/4 (1924)	8-3 3/4 (2534)
Rgh. Opp. (mm)	2-8 7/16 (824)	3-2 7/16 (976)	4-2 7/16 (1281)	5-1 5/8 (1565)	6-1 5/8 (1870)	8-1 5/8 (2480)
Frame Size (mm)	2-7 7/16 (799)	3-1 7/16 (951)	4-1 7/16 (1256)	5-0 5/8 (1540)	6-0 5/8 (1845)	8-0 5/8 (2454)
Glass Size (mm)	20 29/32" (531)	26 29/32" (683)	38 29/32" (988)	50 3/32" (1272)	62 3/32" (1577)	86 3/32" (2187)

1-6 1/4 (464)						
1-8 1/4 (514)	2616	3016	4016	5016	6016	8016
1-6 1/2 (470)	2620	3020	4020	5020	6020	8020
1-6 (457)	2626	3026	4026	5026	6026	8026
10 5/8" (270)						

1 FRAME 1 SASH WITH CENTER STILE 1/6 HEIGHT (2/0 AND 2/6 HEIGHTS SEE BELOW)

Clad Mas. Opp. (mm)	5-1 1/8 (1553)	6-1 1/8 (1857)	8-1 1/8 (2467)
Wood Mas. Opp. (mm)	5-3 3/4 (1619)	6-3 3/4 (1924)	8-3 3/4 (2534)
Rgh. Opp. (mm)	5-1 5/8 (1565)	6-1 5/8 (1870)	8-1 5/8 (2480)
Frame Size (mm)	5-0 5/8 (1540)	6-0 5/8 (1845)	8-0 5/8 (2454)
Glass Size (mm)	20 29/32" (531)	26 29/32" (683)	38 29/32" (988)

1-6 1/4 (464)			
1-8 1/4 (514)	5016	6016	8016
1-6 1/2 (470)	5020	6020	8020
1-6 (457)	5026	6026	8026
10 5/8" (270)			

1 FRAME 2 SASH WITH CENTER STILE 1/6 HEIGHT (2/0 AND 2/6 HEIGHTS SEE BELOW)

Clad Mas. Opp. (mm)	7-9 1/4 (2369)	9-3 1/4 (2826)	12-3 1/4 (3740)
Wood Mas. Opp. (mm)	7-11 7/8 (2435)	9-5 7/8 (2892)	12-5 7/8 (3807)
Rgh. Opp. (mm)	7-9 3/4 (2381)	9-3 3/4 (2838)	12-3 3/4 (3753)
Frame Size (mm)	7-8 3/4 (2356)	9-2 3/4 (2813)	12-2 3/4 (3727)
Glass Size (mm)	20 29/32" (531)	26 29/32" (683)	38 29/32" (988)

1-6 1/4 (464)			
1-8 1/4 (514)	7616	9016	12016
1-6 1/2 (470)	7620	9020	12020
1-6 (457)	7626	9026	12026
10 5/8" (270)			

1 FRAME 2 SASH WITH 2 CENTER STILE 1/6 HEIGHT (2/0 AND 2/6 HEIGHTS SEE BELOW)

Clad Mas. Opp. (mm)	9-11 1/2 (3035)	11-11 1/2 (3645)	15-11 1/2 (4864)
Wood Mas. Opp. (mm)	10-2 1/8 (3102)	12-2 1/8 (3712)	16-2 1/8 (4931)
Rgh. Opp. (mm)	10-0 (3048)	12-0 (3658)	16-0 (4877)
Frame Size (mm)	9-11 (3023)	11-11 (3632)	15-11 (4851)
Glass Size (mm)	20 29/32" (531)	26 29/32" (683)	38 29/32" (988)

1-6 1/4 (464)			
1-8 1/4 (514)	10016	12016	16016
1-6 1/2 (470)	10020	12020	16020
1-6 (457)	10026	12026	16026
10 5/8" (270)			

Clad Ultimate Sliding French Door Transom: **CUSFT**
 Wood Ultimate Sliding French Door Transom: **WUSFT**

NOTES:

Some transoms available factory mullled.

For stand alone wood units in masonry openings add 11/16" (17) to the masonry opening height only.

Please contact your local Marvin representative for information on structural mulling guidelines.

Please contact your local Marvin representative for masonry openings that include casings and subsills.

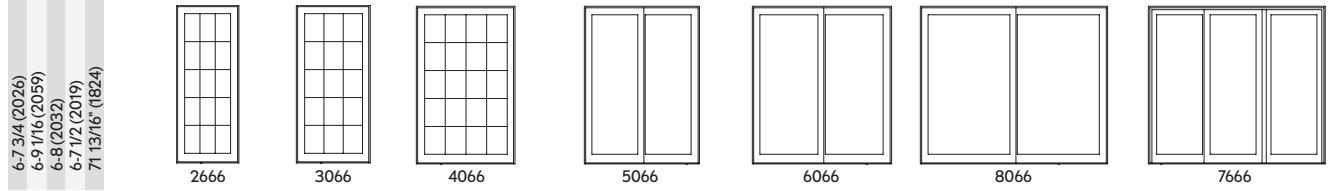
2/0 AND 2/6 HEIGHTS:

	2/0 Height	2/6 Height
Clad Mas. Opp. (mm)	2-0 1/4 (616)	2-6 1/4 (768)
Wood Mas. Opp. (mm)	2-2 1/4 (667)	2-8 1/4 (819)
Rgh. Opp. (mm)	2-0 1/2 (622)	2-6 1/2 (775)
Frame Size (mm)	2-0 (610)	2-6 (762)
Glass Size (mm)	16 5/8" (422)	22 5/8" (575)

SLIDING PATIO DOOR

6/6 HEIGHT

Clad Mas. Opg. (mm)	2-8 7/16 (824)	3-2 7/16 (976)	4-2 7/16 (1281)	4-11 1/2 (1511)	5-11 1/2 (1816)	7-11 1/2 (2426)	7-6 13/16 (2307)
Wood Mas. Opg. (mm)	2-11 1/16 (891)	3-5 1/16 (1043)	4-5 1/16 (1348)	5-2 1/8 (1578)	6-2 1/8 (1883)	8-2 1/8 (2492)	7-9 7/16 (2373)
Rgh. Opg. (mm)	2-8 15/16 (837)	3-2 15/16 (989)	4-2 15/16 (1294)	5-0 (1524)	6-0 (1829)	8-0 (2438)	7-7 5/16 (2319)
Frame Size (mm)	2-7 15/16 (812)	3-1 15/16 (964)	4-1 15/16 (1268)	4-11 (1499)	5-11 (1803)	7-11 (2413)	7-6 5/16 (2294)
Glass Size (mm)	24 15/16" (633)	30 15/16" (786)	42 15/16" (1091)	24 15/16" (633)	30 15/16" (786)	42 15/16" (1091)	24 15/16" (633)



Clad Mas. Opg. (mm)	9-0 13/16 (2764)	12-0 13/16 (3678)
Wood Mas. Opg. (mm)	9-3 7/16 (2831)	12-3 7/16 (3745)
Rgh. Opg. (mm)	9-15/16" (2777)	12-15/16 (3691)
Frame Size (mm)	9-0 5/16 (2751)	12-0 5/16 (3666)
Glass Size (mm)	30 15/16" (786)	42 15/16" (1091)



Clad Sliding Patio Door: **CSPD**
 Wood Sliding Patio Door: **WSPD**

NET CLEAR OPENINGS WOOD AND CLAD SLIDING PATIO DOOR

HEIGHT	Unit Size	Net Clear Openings
6/6	6-6 Height	75 1/16" (1907)
6/8	6-8 Height	77 9/16" (1971)
8/0	8-0 Height	91 1/16" (2313)

WIDTH	Unit Size	Net Clear Openings
OX	5066	22 1/2" (571)
OXO	7666	22 1/2" (571)
OX	6066	28 1/2" (724)
OXO	9066	28 1/2" (724)
OX	8066	40 1/2" (1028)
OXO	12066	40 1/2" (1028)
OX	5068/5080	23 1/4" (591)
OXO	7668/7680	23 1/4" (591)
OXXO	10068/10080	47 1/16" (1196)
OX	6068/6080	29 1/4" (743)
OXO	9068/9080	29 1/4" (743)
OXXO	12068/12080	59 1/16" (1501)
OX	6668*	31 1/2" (800)
OX	8068/8080	41 1/4" (1048)
OXO	12068/12080	41 1/4" (1048)
OXXO	16068	83 1/16" (2110)

NOTES:

Lite patterns shown are for standard grilles and SDL.

All glass is tempered.

Right or left hand operation is determined by the direction the door panel travels to open position, as viewed from exterior.

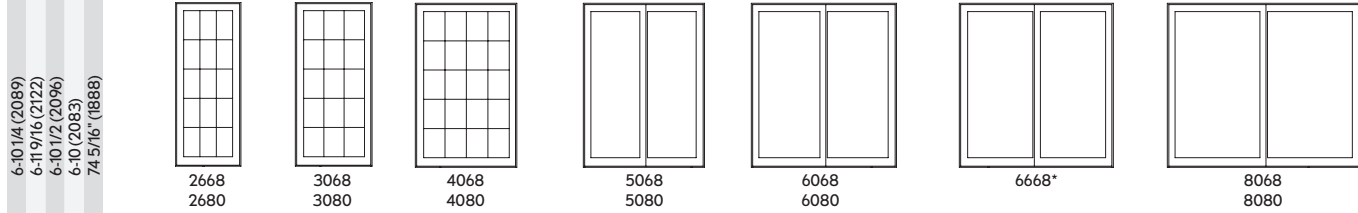
Please contact your local Marvin representative for masonry openings that include casings and subsills.

* Available in clad only.

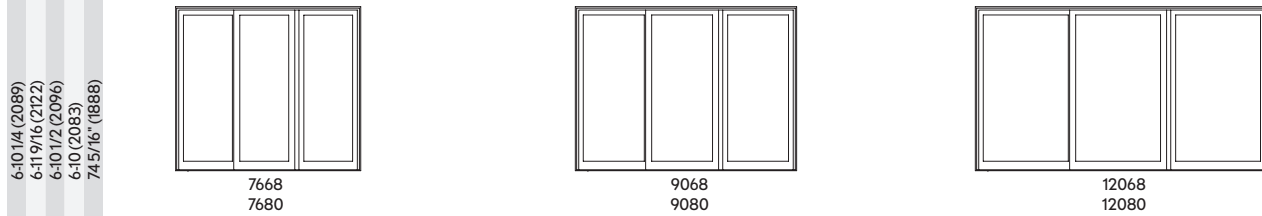
SLIDING PATIO DOOR

6/8 HEIGHT (8/0 HEIGHT SEE BELOW)

Clad Mas. Opg. (mm)	2-9 1/4 (845)	3-3 1/4 (997)	4-3 1/4 (1302)	5-1 1/8 (1553)	6-1 1/8 (1857)	6-5 1/2 (1969)	8-1 1/8 (2467)
Wood Mas. Opg. (mm)	2-11 7/8 (911)	3-5 7/8 (1064)	4-5 7/8 (1368)	5-3 3/4 (1619)	6-3 3/4 (1924)	n/a	8-3 3/4 (2534)
Rgh. Opg. (mm)	2-9 3/4 (857)	3-3 3/4 (1010)	4-3 3/4 (1314)	5-1 5/8 (1565)	6-1 5/8 (1870)	6-6 (1981)	8-1 5/8 (2480)
Frame Size (mm)	2-8 3/4 (833)	3-2 3/4 (985)	4-2 3/4 (1290)	5-0 5/8 (1540)	6-0 5/8 (1845)	6-5 (1956)	8-0 5/8 (2454)
Glass Size (mm)	25 3/4" (654)	31 3/4" (806)	43 3/4" (1111)	25 3/4" (654)	31 3/4" (806)	33 15/16" (862)	43 3/4" (1111)



Clad Mas. Opg. (mm)	7-9 1/4 (2368)	9-3 1/4 (2825)	12-3 1/4 (3740)
Wood Mas. Opg. (mm)	7-11 7/8 (2434)	9-5 7/8 (2892)	12-5 7/8 (3807)
Rgh. Opg. (mm)	7-9 3/4 (2380)	9-3 3/4 (2838)	12-3 3/4 (3753)
Frame Size (mm)	7-8 3/4 (2355)	9-2 3/4 (2812)	12-2 3/4 (3727)
Glass Size (mm)	25 3/4" (654)	31 3/4" (806)	43 3/4" (1111)



Clad Mas. Opg. (mm)	9-11 1/2 (3035)	11-11 1/2 (3645)
Wood Mas. Opg. (mm)	10-2 1/8 (3102)	12-2 1/8 (3712)
Rgh. Opg. (mm)	10-0 (3048)	12-0 (3658)
Frame Size (mm)	9-11 (3023)	11-11 (3632)
Glass Size (mm)	25 3/4" (654)	31 3/4" (806)



Clad Sliding Patio Door: **CSPD**

Wood Sliding Patio Door: **WSPD**

NOTES:

Lite patterns shown are for standard grilles and SDL 6/8 heights. The standard lite pattern for 8/0 height is a 6 high lite cut.

All glass is tempered.

Right or left hand operation is determined by the direction the door panel travels to open position, as viewed from exterior.

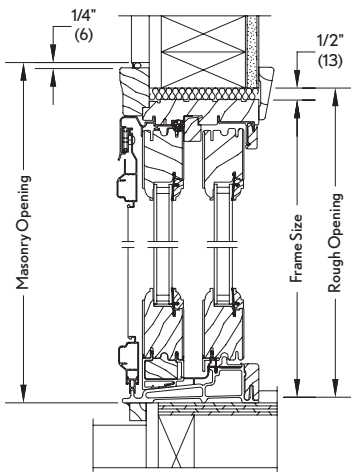
Please contact your local Marvin representative for masonry openings that include casings and subsills.

* Available in clad only.

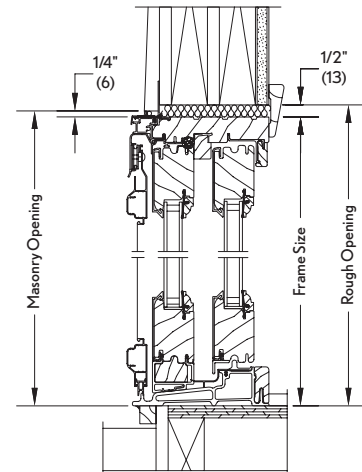
8/0 HEIGHT	
	8/0 Height
Clad Mas. Opg. (mm)	7-11 3/4 (2432)
Wood Mas. Opg. (mm)	8-1 1/16 (2465)
Rgh. Opg. (mm)	8-0 (2438)
Frame Size (mm)	7-11 1/2 (2426)
Glass Size (mm)	87 13/16" (2230)

SLIDING PATIO DOOR

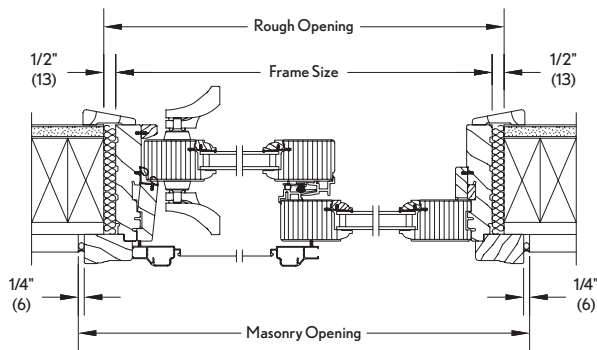
CONSTRUCTION DETAILS



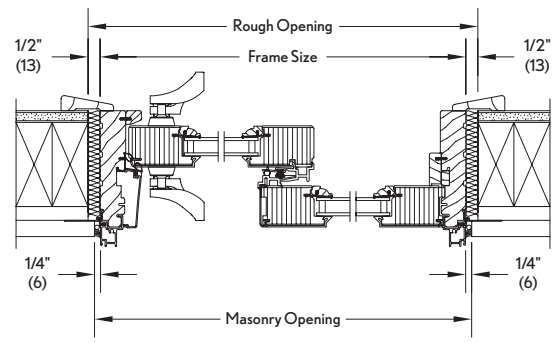
WOOD HEAD JAMB AND SILL
WITH ULTIMATE TOP HUNG SCREEN



CLAD HEAD JAMB AND SILL
WITH ULTIMATE TOP HUNG SCREEN



WOOD JAMB
XO



CLAD JAMB
XO

WOOD SLIDING PATIO DOOR

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.45	0.59	0.62	44	
3/4" Insulating Glass LoE 272 Air	0.32	0.32	0.54	55	
3/4" Insulating Glass LoE 272 Argon	0.29	0.31	0.54	58	
3/4" Insulating Glass LoE 366 Air	0.32	0.21	0.49	56	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.21	0.49	59	N, NC, SC, S

CLAD SLIDING PATIO DOOR

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.47	0.59	0.62	43	
3/4" Insulating Glass LoE 272 Air	0.33	0.32	0.54	53	
3/4" Insulating Glass LoE 272 Argon	0.30	0.32	0.54	56	
3/4" Insulating Glass LoE 366 Air	0.33	0.21	0.49	54	
3/4" Insulating Glass LoE 366 Argon	0.30	0.21	0.49	57	N, NC, SC, S

DIRECT GLAZE DOOR TRANSOMS

1/0 HEIGHT (1/2 AND 1/6 HEIGHTS SEE BELOW)

Clad Mas. Opg. (mm)	2-1 15/16 (659)	2-7 15/16 (811)	2-9 15/16 (862)	3-1 15/16 (964)	3-7 15/16 (1116)	5-1 1/8 (1553)
Wood Mas. Opg. (mm)	2-4 9/16 (726)	2-10 9/16 (878)	3-0 9/16 (929)	3-4 9/16 (1030)	3-10 9/16 (1183)	5-3 3/4 (1619)
Rgh. Opg. (mm)	2-2 7/16 (672)	2-8 7/16 (824)	2-10 7/16 (875)	3-2 7/16 (976)	3-8 7/16 (1129)	5-15/8 (1565)
Frame Size (mm)	2-1 7/16 (646)	2-7 7/16 (799)	2-9 7/16 (849)	3-1 7/16 (951)	3-7 7/16 (1103)	5-0 5/8 (1540)
Glass Size (mm)	23 7/8" (606)	29 7/8" (759)	31 7/8" (810)	35 7/8" (911)	41 7/8" (1064)	59 1/16" (1500)

1-1/4 (311)						
1-2 1/4 (362)	2010	2610	2810	3010	3610	5010
1-1/2 (318)	2012	2612	2812	3012	3612	5012
1-0 (305)	2016	2616	2816	3016	3616	5016
10 7/16" (265)						

Clad Mas. Opg. (mm)	5-5 1/8 (1654)	6-1 1/8 (1857)	7-1 1/8 (2161)	8-1 1/8 (2467)
Wood Mas. Opg. (mm)	5-7 3/4 (1721)	6-3 3/4 (1924)	7-3 3/4 (2229)	8-3 3/4 (2534)
Rgh. Opg. (mm)	5-5 5/8 (1667)	6-15/8 (1870)	7-15/8 (2175)	8-15/8 (2480)
Frame Size (mm)	5-4 5/8 (1641)	6-0 5/8 (1845)	7-0 5/8 (2149)	8-0 5/8 (2454)
Glass Size (mm)	63 1/16" (1602)	71 1/16" (1805)	83 1/16" (2110)	95 1/16" (2415)

1-1/4 (311)				
1-2 1/4 (362)	5410	6010	7010	8010
1-1/2 (318)	5412	6012	7012	8012
1-0 (305)	5416	6016	7016	8016
10 7/16" (265)				

WOOD DIRECT GLAZE DOOR TRANSOMS

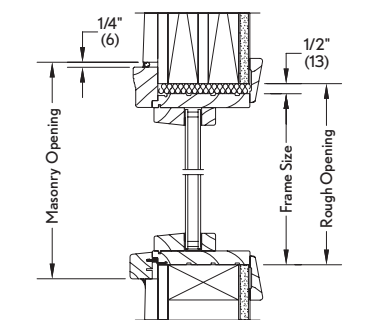
ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
3/4" Insulating Glass Air	0.46	0.69	0.73	45	
3/4" Insulating Glass LoE 272 Air	0.30	0.37	0.64	57	N, NC
3/4" Insulating Glass LoE 272 Argon	0.26	0.37	0.64	61	N, NC
3/4" Insulating Glass LoE 366 Air	0.30	0.25	0.57	58	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.26	0.24	0.57	62	N, NC, SC, S

Clad Door Direct Glaze Transom: **CDRTR**
 Wood Door Direct Glaze Transom: **WDRTR**

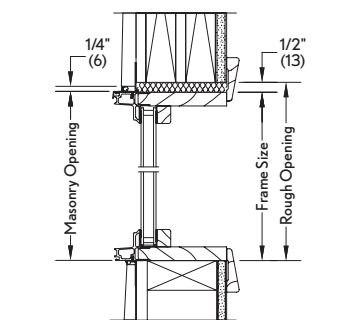
NOTES:
 Please contact your local Marvin representative for masonry openings that include casings and subsills.

	1/2 Height	1/6 Height
Clad Mas. Opg. (mm)	1-2 1/4 (362)	1-6 1/4 (464)
Wood Mas. Opg. (mm)	1-4 1/4 (413)	1-8 1/4 (514)
Rgh. Opg. (mm)	1-2 1/2 (368)	1-6 1/2 (470)
Frame Size (mm)	1-2 (356)	1-6 (457)
Glass Size (mm)	12 7/16" (316)	16 7/16" (418)

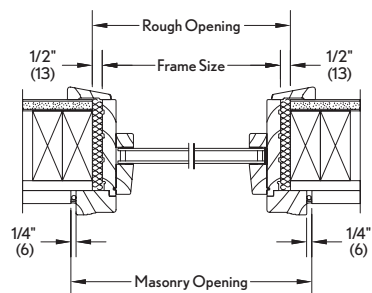
CONSTRUCTION DETAILS



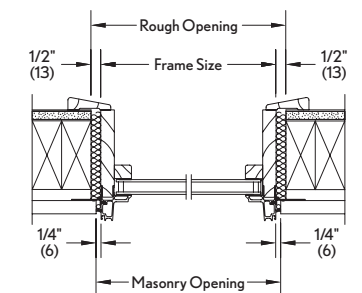
WOOD DIRECT GLAZE HEAD JAMB AND SILL



CLAD DIRECT GLAZE HEAD JAMB AND SILL



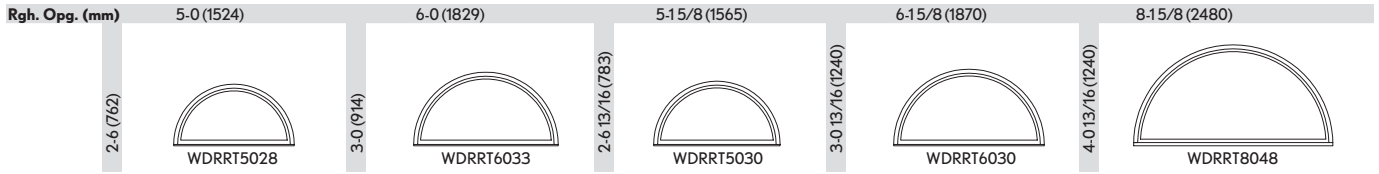
WOOD DIRECT GLAZE JAMB



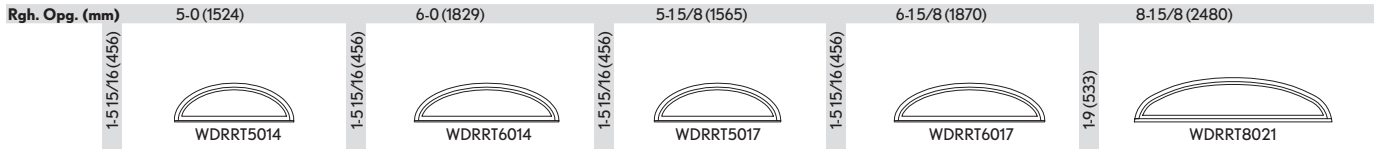
CLAD DIRECT GLAZE JAMB

WOOD ROUND TOP DOORS

RT1 TRUE HALF CIRCLE STANDARD SIZES DIRECT GLAZE



RT29 ELLIPTICAL STANDARD SIZES DIRECT GLAZE



WOOD DIRECT GLAZE ROUND TOP 3/4"

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1/8" SG	0.92	0.75	0.78	12	
1/8" SG w/EP	0.46	0.68	0.71	44	
1/8" SG w/LoE EA EP	0.35	0.56	0.65	52	
3/4" Insulating Glass Air	0.45	0.67	0.71	43	
3/4" Insulating Glass LoE 272 Air	0.31	0.36	0.62	55	N, NC
3/4" Insulating Glass LoE 272 Argon	0.27	0.36	0.62	58	N, NC
3/4" Insulating Glass LoE 366 Air	0.30	0.24	0.56	55	N, NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.26	0.24	0.56	59	N, NC, SC, S

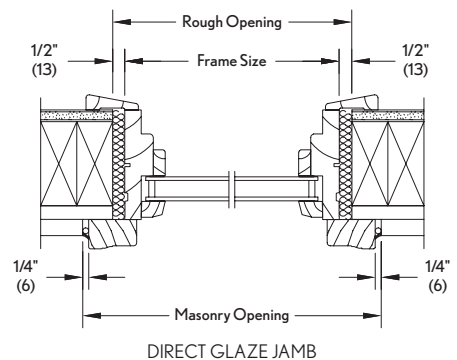
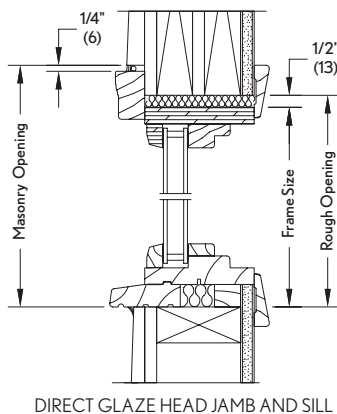
NOTES:

If these units are not used as transoms, add 15/16" (24) to rough opening heights for sill.

WOOD DIRECT GLAZE ROUND TOP 1"

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1" Insulating Glass Air	0.45	0.64	0.70	45	
1" Insulating Glass LoE 272 Air	0.30	0.35	0.61	56	N, NC
1" Insulating Glass LoE 272 Argon	0.27	0.35	0.61	60	N, NC
1" Insulating Glass LoE 366 Air	0.30	0.24	0.55	57	N, NC, SC, S
1" Insulating Glass LoE 366 Argon	0.26	0.23	0.55	61	N, NC, SC, S

CONSTRUCTION DETAILS



CLAD ROUND TOP DOORS

RT1 TRUE HALF CIRCLE STANDARD SIZES DIRECT GLAZE

Rgh. Opg. (mm)	5-0 (1524)	6-0 (1829)	5-15/8 (1565)	6-15/8 (1870)	8-15/8 (2480)
2-6 (762)		2-1 15/16 (897)		2-6 13/16 (783)	
	CDRRT5028	CDRRT6033	CDRRT5030	3-0 13/16 (935)	
				4-0 13/16 (1240)	
					CDRRT8048

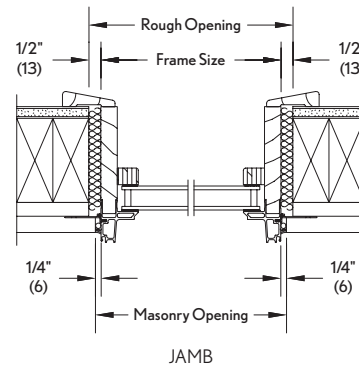
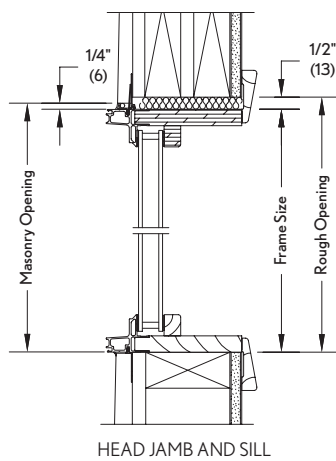
RT29 ELLIPTICAL STANDARD SIZES DIRECT GLAZE

Rgh. Opg. (mm)	5-0 (1524)	6-0 (1829)	5-15/8 (1565)	6-15/8 (1870)	8-15/8 (2480)
1-5 15/16 (456)		1-5 15/16 (456)		1-5 15/16 (456)	
	CDRRT5014	CDRRT6014	CDRRT5017	1-5 15/16 (456)	
				1-9 (533)	
					CDRRT8021

CLAD DIRECT GLAZE ROUND TOP (ABJF)

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
1 1/8" Tri-Pane LoE 272 Argon LoE 272	0.20	0.31	0.49	65	N, NC
1" Insulating Glass Air	0.48	0.66	0.72	42	
1" Insulating Glass LoE 272 Air	0.33	0.36	0.63	53	
1" Insulating Glass LoE 272 Argon	0.29	0.36	0.63	56	N, NC
1" Insulating Glass LoE 366 Air	0.32	0.24	0.56	53	NC, SC, S
1" Insulating Glass LoE 366 Argon	0.28	0.24	0.56	57	N, NC, SC, S
3/4" Insulating Glass Air	0.48	0.69	0.73	42	
3/4" Insulating Glass LoE 272 Air	0.33	0.37	0.64	54	
3/4" Insulating Glass LoE 272 Argon	0.29	0.37	0.64	57	N, NC
3/4" Insulating Glass LoE 366 Air	0.32	0.25	0.57	54	NC, SC, S
3/4" Insulating Glass LoE 366 Argon	0.28	0.24	0.57	58	N, NC, SC, S

CONSTRUCTION DETAILS



NOTES:

Please contact your local Marvin representative for masonry openings that include casings and subsills.

WOOD AND CLAD ROUND TOP GUIDE

WOOD ROUND TOP GUIDE TO STANDARD ROUND TOPS AND THE UNITS THEY FIT OVER

Ultimate Casement/AWNING SERIES	
Unit Type	RT Call Number
1W20 CM	WRT2010 CM WQCIR2020 CM
1W24 CM/AWN	WRT2412 CM WQCIR2424 CM WRT24__CM*
1W28 CM/AWN	WRT2814 CM WQCIR2828 CM WRT28__CM*
1W32CM or 2W16 CM	WRT3216 CM WQCIR3232 CM WRT32__CM*
1W36 CM/AWN	WRT3618 CM WQCIR3636 CM WRT36__CM*
1W40 AWN, 2W20 CM or 1W40 CMP	WRT4020 CM WQCIR4040 CM WRT4017 CM WRT40__CM*
1W48 AWN, 2W24 CM or 1W48 CMP	WRT4824 CM WQCIR4848 CM WRT4817 CM WRT48__CM*
1W56 CMP or 2W28 CM	WRT5628 CM WRT5617 CM WRT56__CM*
1W60 CMP or 3W20 CM	WRT6026 CM
1W64 CMP or 2W32 CM	WRT6432 CM
1W72 CMP or 2W36 CM or 3W24 CM	WRT7236 CM WRT7217 CM WRT72__CM*
3W28 CM/AWN	WRT8442 CM WRT8417CM
2W48 AWN or 4W24 CM	WRT9648 CM
24-60-24 TPU	WRT10854 CM
5W24 CM/AWN	WRT12060 CM

ULTIMATE DOUBLE HUNG SERIES	
Unit Type	RT Call Number
1W20 DH	WRT25__DH*
1W24 DH	WRT2914 DH WRT29__DH*
1W26 DH	WRT3115 DH WRT31__DH*
1W28 DH	WRT3316 DH WRT33__DH*
1W30 DH	WRT3517 DH WRT35__DH*
1W32 DH	WRT3718 DH WRT37__DH*
1W36 DH	WRT4120 DH WRT41__DH*
1W40 DH	WRT4522 DH WRT45__DH*
2W20 DH	WRT5025 DH WRT5118 DH WRT51__DH*
2W24 DH	WRT5828 DH WRT5918 DH WRT59__DH*
2W28 DH	WRT6632 DH WRT6718 DH WRT67__DH*
2W32 DH	WRT7437 DH WRT7518 DH WRT75__DH*

DOOR SERIES	
Unit Type	RT Call Number
5066	WDR RT 5029
FDR/Uit. FD, SPD, SFD	WDR RT 5016
6066	WDR RT 6034
FDR/Uit. FD, SPD, SFD	WDR RT 6016
5068/70/80, SFD	WDR RT 5030
FRD/Uit. FD, SPD	WDR RT 5017
6068/70/80, SPD	WDR RT 6036
FDR/Uit. FD, SFD	WDR RT 6017

CLAD ROUND TOP GUIDE TO STANDARD ROUND TOPS AND THE UNITS THEY FIT OVER

Ultimate Casement/AWNING SERIES	
Unit Type	RT Call Number
1W20 CM	CRT2010 CM COCIR2020 CM
1W24 CM/AWN	CRT2412 CM COCIR2424 CM CRT24__CM*
1W28 CM/AWN	CRT2814 CM COCIR2828 CM CRT28__CM*
1W32CM or 2W16 CM	CRT3216 CM COCIR3232 CM CRT32__CM*
1W36 CM/AWN	CRT3618 CM COCIR3636 CM CRT36__CM*
1W40 AWN, 2W20 CM or 1W40 CMP	CRT4020 CM COCIR4040 CM CRT4017 CM CRT40__CM*
1W48 AWN, 2W24 CM or 1W48 CMP	CRT4824 CM COCIR4848 CM CRT4817 CM CRT48__CM*
1W56 CMP or 2W28 CM	CRT5628 CM CRT5617 CM CRT56__CM*
1W60 CMP or 3W20 CM	CRT6026 CM
1W64 CMP or 2W32 CM	CRT6432 CM
1W72 CMP or 2W36 CM or 3W24 CM	CRT7236 CM CRT7217 CM CRT72__CM*
3W28 CM/AWN	CRT8442 CM CRT8417CM
2W48 AWN or 4W24 CM	CRT9648 CM
24-60-24 TPU	CRT10854 CM
5W24 CM/AWN	CRT12060 CM

ULTIMATE DOUBLE HUNG SERIES	
Unit Type	RT Call Number
1W20 DH	CRT25__DH*
1W24 DH	CRT2914 DH CRT29__DH*
1W26 DH	CRT3115 DH CRT31__DH*
1W28 DH	CRT3316 DH CRT33__DH*
1W30 DH	CRT3517 DH CRT35__DH*
1W32 DH	CRT3718 DH CRT37__DH*
1W36 DH	CRT4120 DH CRT41__DH*
1W40 DH	CRT4522 DH CRT45__DH*
2W20 DH	CRT5025 DH CRT5118 DH CRT51__DH*
2W24 DH	CRT5828 DH CRT5918 DH CRT59__DH*
2W28 DH	CRT6632 DH CRT6718 DH CRT67__DH*
2W32 DH	CRT7437 DH CRT7518 DH CRT75__DH*

DOOR SERIES	
Unit Type	RT Call Number
5066, SPD	CDR RT 5029
FDR/Uit. FD, SFD	CDR RT 5016
6066 SPD	CDR RT 6034
FDR/Uit. FD, SFD	CDR RT 6016
5068/70/80	CDR RT 5030
FRD, SPD, SFD	CDR RT 5017
6068/70/80	CDR RT 6036
FDR, SPD, SFD	CDR RT 6017

GLIDER SERIES	
Unit Type	RT Call Number
1W30 Glider	CRT3016 GL
1W40 Glider	CRT4024 GL CRT4015 GL
1W50 Glider	CRT5026 GL CRT5015 GL
1W60 Glider	CRT6030 GL CRT6015 GL

NOTES:

* The underscore indicates that a range of heights are available for eyebrow above springline units. For example 24__ means 24 wide and a range of heights.

WOOD AND CLAD ULTIMATE LIFT AND SLIDE DOOR

PROMOTED SIZE MATRIX

STACKED PANEL UNITS

TRADITIONAL PANELS

2 Panel (OX,XO) - Stacked

FS	71 3/4	95 3/4	119 3/4	143 3/4
Call Number				
85 5/16	6070	8070	10070	12070
97 5/16	6080	8080	10080	12080
1215/16	60100	80100	100100	120100

3 Panel (OXX,XXO) -- Stacked

FS	102 15/16	138 15/16	174 15/16	210 15/16
Call Number				
85 5/16	9070	12070	15070	18070
97 5/16	9080	12080	15080	18080
1215/16	90100	120100	150100	180100

4 Panel (OXXX,XXXO) -- Stacked

FS	134 3/16	182 3/16	230 3/16	278 3/16
Call Number				
85 5/16	12070	16070	20070	24070
97 5/16	12080	16080	20080	24080
1215/16	120100	160100	200100	240100

4 Panel (OX--XO) Bi--Parting -- Stacked

FS	140 3/8	188 3/8	236 3/8	284 3/8
Call Number				
85 5/16	12070	16070	20070	24070
97 5/16	12080	16080	20080	24080
1215/16	120100	160100	200100	240100

6 Panel (OXX--XXO) Bi--Parting -- Stacked

FS	202 7/8	274 7/8	346 7/8	418 7/8
United Inch - Pricing Frame Size				
85 5/16	18070	24070	30070	36070
97 5/16	18080	24080	30080	36080
1215/16	180100	240100	300100	360100

8 Panel (OXXX--XXXO) Bi--Parting -- Stacked

FS	265 5/16	361 5/16	457 5/16	553 5/16
Call Number				
85 5/16	24070	32070	40070	48070
97 5/16	24080	32080	40080	48080
1215/16	240100	320100	400100	480100

CONTEMPORARY PANELS

2 Panel (OX,XO) - Stacked

FS	73 3/4	97 3/4	121 3/4	145 3/4
Call Number				
85 5/16	6070	8070	10070	12070
97 5/16	6080	8080	10080	12080
1215/16	60100	80100	100100	120100

3 Panel (OXX,XXO) -- Stacked

FS	106 15/16	142 15/16	178 15/16	214 15/16
Call Number				
85 5/16	9070	12070	15070	18070
97 5/16	9080	12080	15080	18080
1215/16	90100	120100	150100	180100

4 Panel (OXXX,XXXO) -- Stacked

FS	140 3/16	188 3/16	236 3/16	284 3/16
Call Number				
85 5/16	12070	16070	20070	24070
97 5/16	12080	16080	20080	24080
1215/16	120100	160100	200100	240100

4 Panel (OX--XO) Bi--Parting -- Stacked

FS	144 3/8	192 3/8	240 3/8	288 3/8
Call Number				
85 5/16	12070	16070	20070	24070
97 5/16	12080	16080	20080	24080
1215/16	120100	160100	200100	240100

6 Panel (OXX--XXO) Bi--Parting -- Stacked

FS	210 7/8	282 7/8	354 7/8	426 7/8
Call Number				
85 5/16	18070	24070	30070	36070
97 5/16	18080	24080	30080	36080
1215/16	180100	240100	300100	360100

8 Panel (OXXX--XXXO) Bi--Parting -- Stacked

FS	277 5/16	373 5/16	469 5/16	565 5/16
Call Number				
85 5/16	24070	32070	40070	48070
97 5/16	24080	32080	40080	48080
1215/16	240100	320100	400100	480100

WOOD AND CLAD ULTIMATE LIFT AND SLIDE DOOR

PROMOTED SIZE MATRIX

TRADITIONAL PANELS

1 Pocket / 2 Panels (PXX,XXP)

FS	72 5/16	96 5/16	120 5/16	144 5/16
Call Number				
85 5/16	6070	8070	10070	12070
97 5/16	6080	8080	10080	12080
1215/16	60100	80100	100100	120100

1 Pocket / 3 Panels (PXXX,XXXP)

FS	103 9/16	139 9/16	175 9/16	211 9/16
Call Number				
85 5/16	9070	12070	15070	18070
97 5/16	9080	12080	15080	18080
1215/16	90100	120100	150100	180100

1 Pocket / 4 Panels (PXXXX,XXXXP)

FS	134 3/4	182 3/4	230 3/4	278 3/4
Call Number				
85 5/16	12070	16070	20070	24070
97 5/16	12080	16080	20080	24080
1215/16	120100	160100	200100	240100

2 Pockets / 2 Panels (PX--XP) Bi--Parting

FS	79 1/16	103 1/16	127 1/16	151 1/16
Call Number				
85 5/16	6070	8070	10070	12070
97 5/16	6080	8080	10080	12080
1215/16	60100	80100	100100	120100

2 Pockets / 4 Panels (PXX--XXP) Bi--Parting

FS	141 9/16	189 9/16	237 9/16	285 9/16
Call Number				
85 5/16	12070	16070	20070	24070
97 5/16	12080	16080	20080	24080
1215/16	120100	160100	200100	240100

2 Pockets / 6 Panels (PXXX--XXXP) Bi--Parting

FS	204	376	340	420
Call Number				
85 5/16	18070	24070	30070	36070
97 5/16	18080	24080	30080	36080
1215/16	180100	240100	300100	360100

2 Pockets / 8 Panels (PXXXX--XXXXP) Bi--Parting

FS	266 1/2	362 1/2	458 1/2	554 1/2
Call Number				
85 5/16	24070	32070	40070	48070
97 5/16	24080	32080	40080	48080
1215/16	240100	320100	400100	480100

POCKET PANEL UNITS

CONTEMPORARY PANELS

1 Pocket / 2 Panels (PXX,XXP)

FS	74 5/16	98 5/16	122 5/16	146 5/16
Call Number				
85 5/16	6070	8070	10070	12070
97 5/16	6080	8080	10080	12080
1215/16	60100	80100	100100	120100

1 Pocket / 3 Panels (PXXX,XXXP)

FS	107 9/16	143 9/16	179 9/16	215 9/16
Call Number				
85 5/16	9070	12070	15070	18070
97 5/16	9080	12080	15080	18080
1215/16	90100	120100	150100	180100

1 Pocket / 4 Panels (PXXXX,XXXXP)

FS	140 3/4	188 3/4	236 3/4	284 3/4
Call Number				
85 5/16	12070	16070	20070	24070
97 5/16	12080	16080	20080	24080
1215/16	120100	160100	200100	240100

2 Pockets / 2 Panels (PX--XP) Bi--Parting

FS	79 1/16	103 1/16	127 1/16	151 1/16
Call Number				
85 5/16	6070	8070	10070	12070
97 5/16	6080	8080	10080	12080
1215/16	60100	80100	100100	120100

2 Pockets / 4 Panels (PXX--XXP) Bi--Parting

FS	145 9/16	193 9/16	241 9/16	289 9/16
Call Number				
85 5/16	12070	16070	20070	24070
97 5/16	12080	16080	20080	24080
1215/16	120100	160100	200100	240100

2 Pockets / 6 Panels (PXXX--XXXP) Bi--Parting

FS	212	284	356	428
Call Number				
85 5/16	18070	24070	30070	36070
97 5/16	18080	24080	30080	36080
1215/16	180100	240100	300100	360100

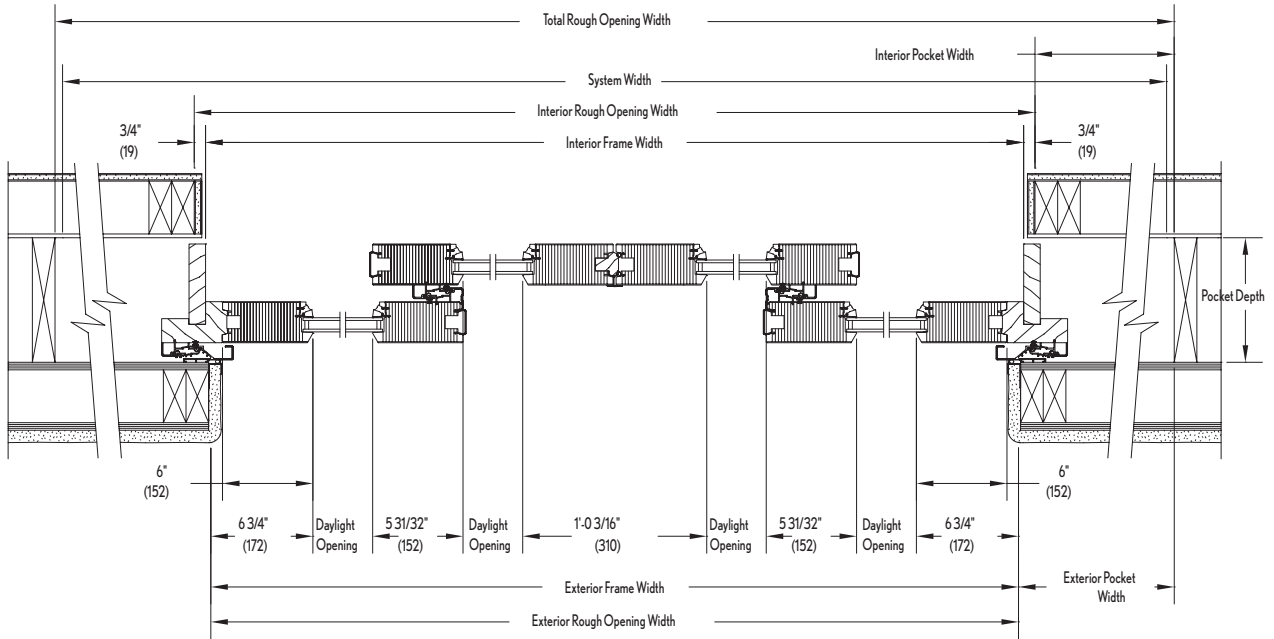
2 Pockets / 8 Panels (PXXXX--XXXXP) Bi--Parting

FS	278 1/2	374 1/2	470 1/2	566 1/2
Call Number				
85 5/16	24070	32070	40070	48070
97 5/16	24080	32080	40080	48080
1215/16	240100	320100	400100	480100

WOOD ULTIMATE LIFT AND SLIDE DOOR

CONSTRUCTION DETAILS

TRADITIONAL PANELS



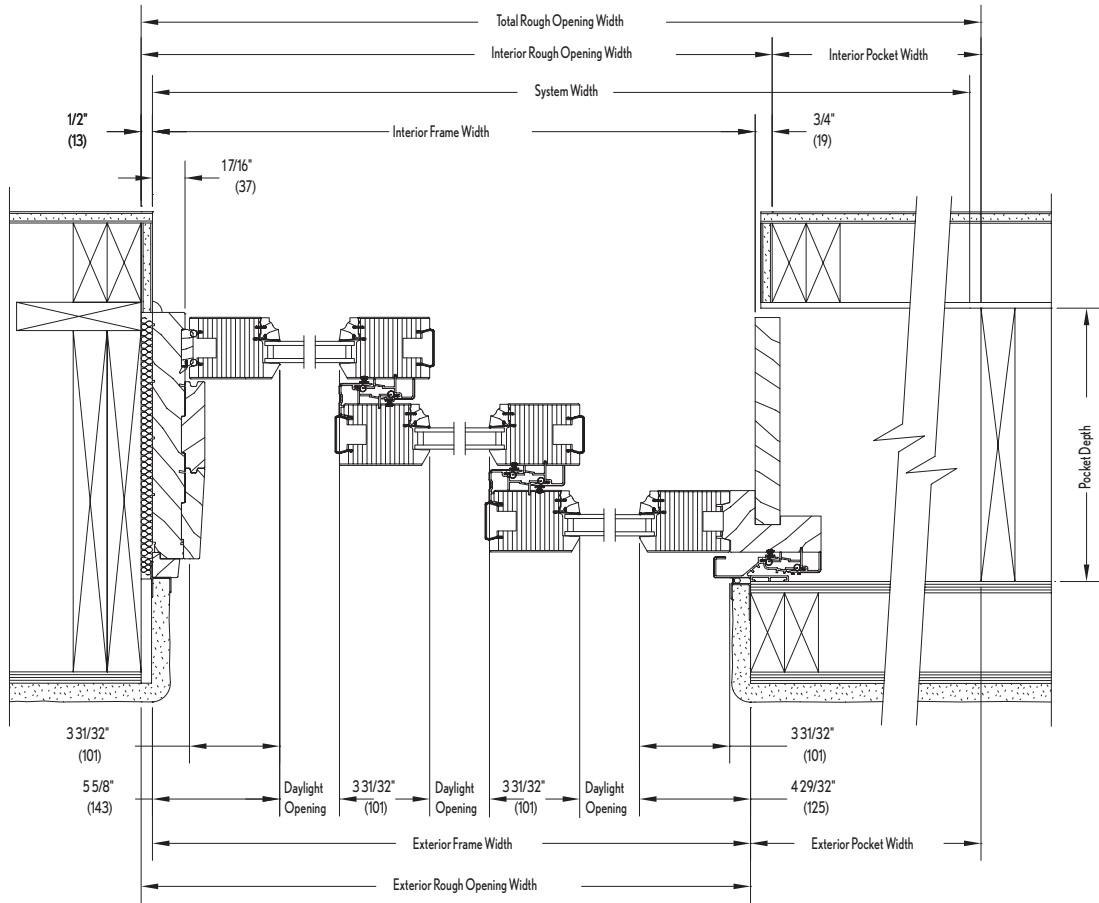
WOOD ULTIMATE LIFT AND SLIDE DOOR - TRADITIONAL

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
7/8" Insulating Glass Air	0.41	0.43	0.47	41	
7/8" Insulating Glass LoE 272 Air	0.31	0.24	0.41	51	N, NC, SC, S
7/8" Insulating Glass LoE 272 Argon	0.29	0.24	0.41	54	N, NC, SC, S
7/8" Insulating Glass LoE 366 Air	0.31	0.17	0.37	52	N, NC, SC, S
7/8" Insulating Glass LoE 366 Argon	0.28	0.16	0.37	55	N, NC, SC, S

WOOD ULTIMATE LIFT AND SLIDE DOOR

CONSTRUCTION DETAILS

CONTEMPORARY PANELS



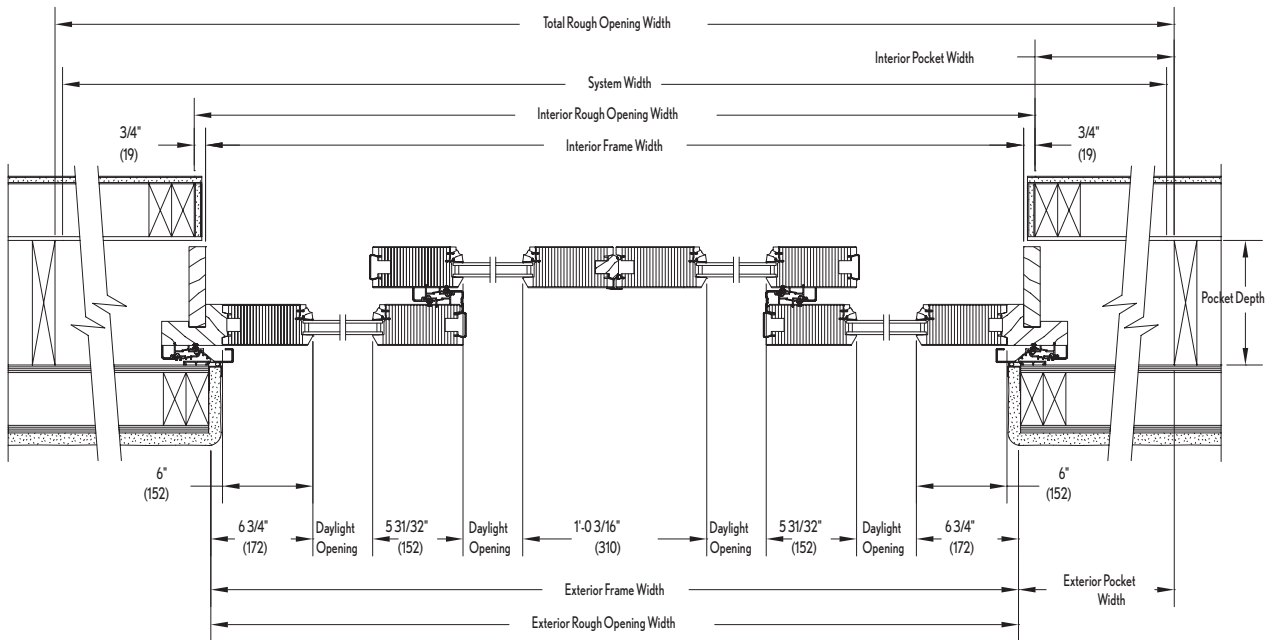
WOOD ULTIMATE LIFT AND SLIDE DOOR - CONTEMPORARY

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
7/8" Insulating Glass Air	0.43	0.51	0.55	43	
7/8" Insulating Glass LoE 272 Air	0.32	0.28	0.48	53	N, NC, SC, S
7/8" Insulating Glass LoE 272 Argon	0.29	0.28	0.48	56	N, NC, SC, S
7/8" Insulating Glass LoE 366 Air	0.31	0.19	0.43	53	N, NC, SC, S
7/8" Insulating Glass LoE 366 Argon	0.28	0.19	0.43	56	N, NC, SC, S

CLAD ULTIMATE LIFT AND SLIDE DOOR

CONSTRUCTION DETAILS

PXX-XXP TRADITIONAL PANELS - BI PARTING



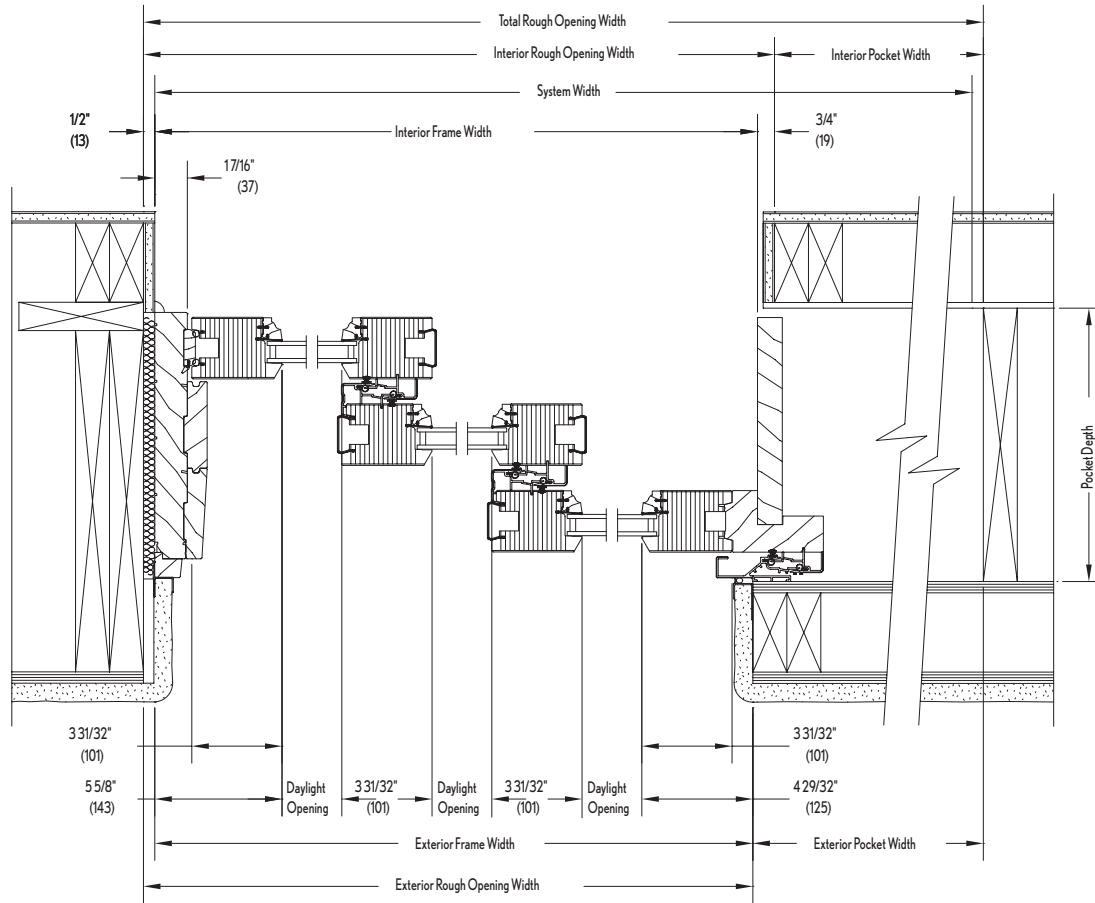
CLAD ULTIMATE LIFT AND SLIDE DOOR - TRADITIONAL

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
7/8" Insulating Glass Air	0.41	0.43	0.47	41	
7/8" Insulating Glass LoE 272 Air	0.31	0.24	0.41	51	N, NC, SC, S
7/8" Insulating Glass LoE-272 Argon	0.29	0.24	0.41	54	N, NC, SC, S
7/8" Insulating Glass LoE 366 Air	0.31	0.17	0.37	52	N, NC, SC, S
7/8" Insulating Glass LoE 366 Argon	0.28	0.16	0.37	55	N, NC, SC, S

CLAD ULTIMATE LIFT AND SLIDE DOOR

CONSTRUCTION DETAILS

XXXP CONTEMPORARY PANELS - UNI - DIRECTIONAL



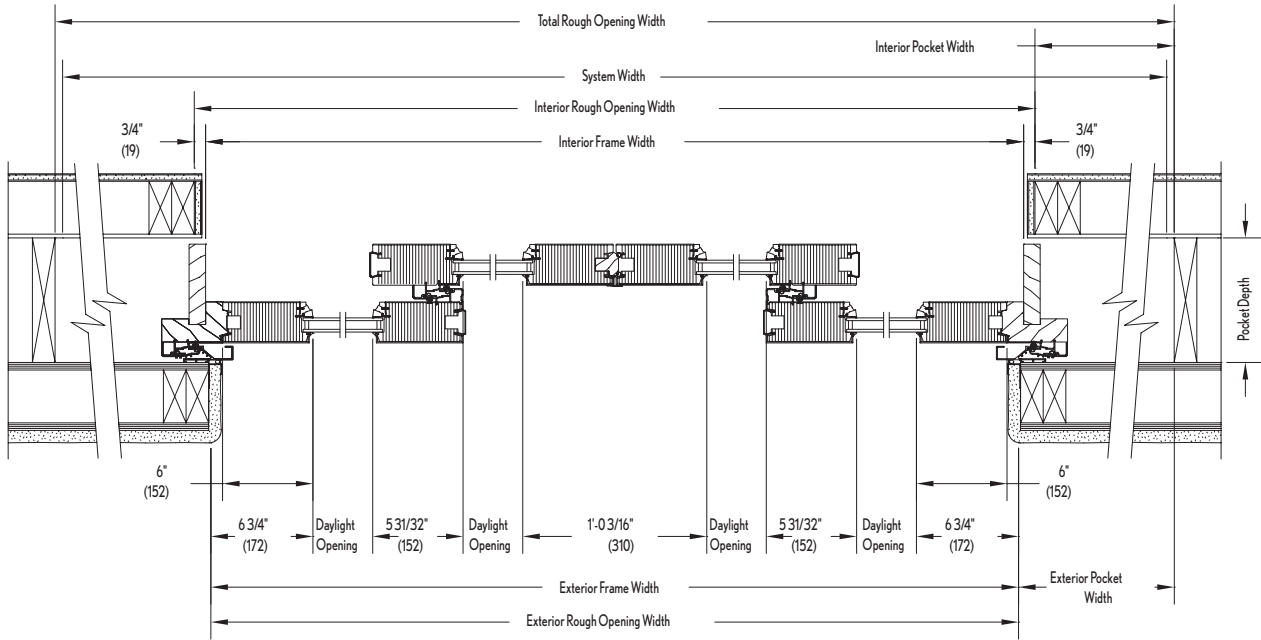
CLAD ULTIMATE LIFT AND SLIDE DOOR - CONTEMPORARY

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
7/8" Insulating Glass Air	0.44	0.51	0.55	41	
7/8" Insulating Glass LoE 272 Air	0.33	0.28	0.48	51	
7/8" Insulating Glass LoE 272 Argon	0.30	0.28	0.48	54	N, NC, SC, S
7/8" Insulating Glass LoE 366 Air	0.33	0.19	0.43	52	
7/8" Insulating Glass LoE 366 Argon	0.30	0.19	0.43	54	N, NC, SC, S

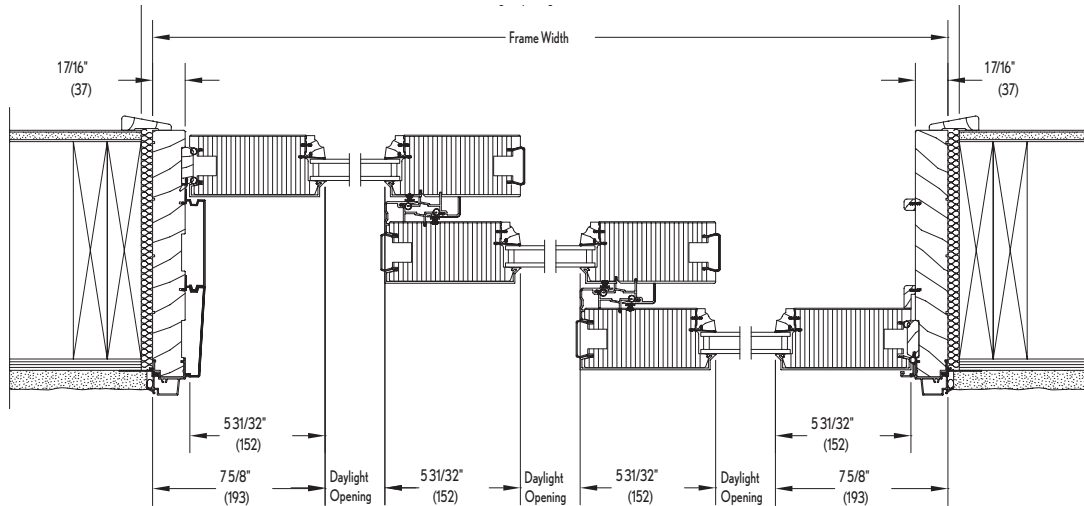
CLAD ULTIMATE LIFT AND SLIDE DOOR

CONSTRUCTION DETAILS

PXX-XXP TRADITIONAL PANELS - BI PARTING



XXO TRADITIONAL PANELS- UNI - DIRECTIONAL



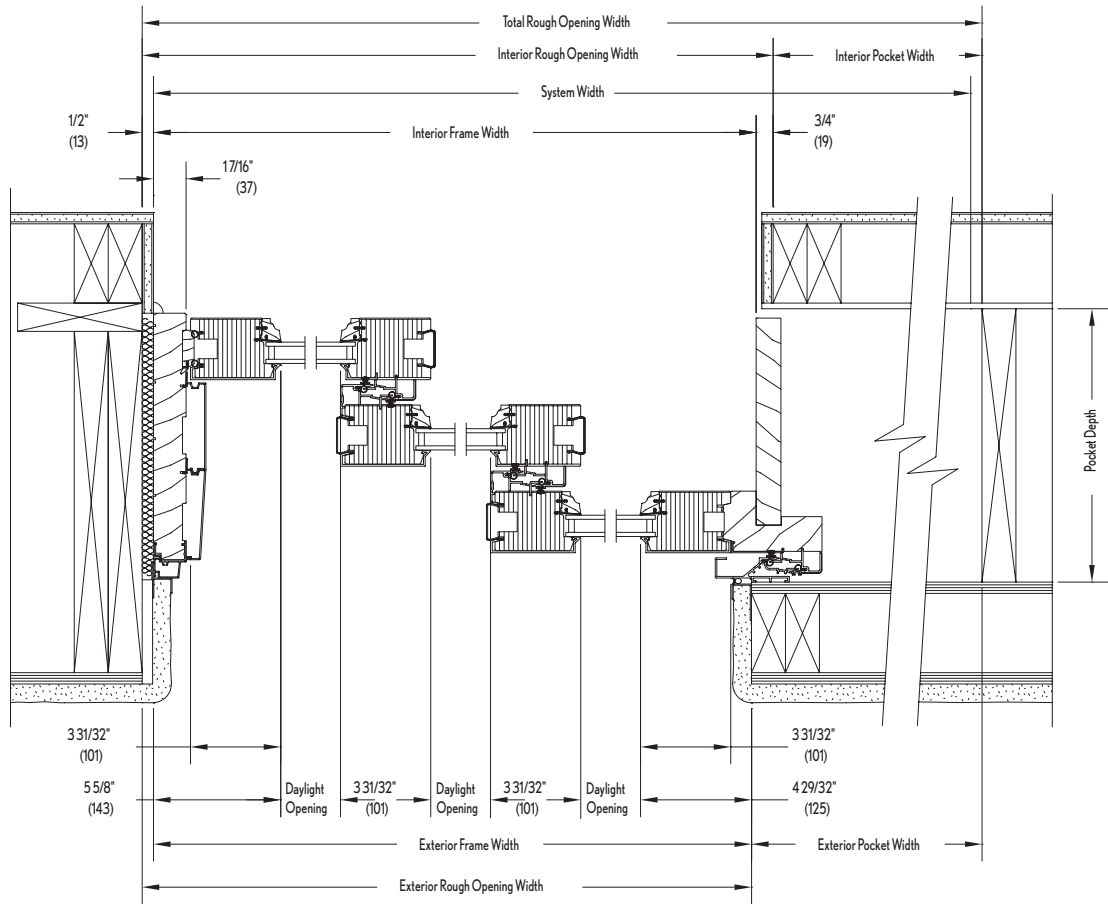
CLAD ULTIMATE LIFT AND SLIDE DOOR - TRADITIONAL

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
7/8" Insulating Glass Air	0.41	0.43	0.47	41	
7/8" Insulating Glass LoE 272 Air	0.31	0.24	0.41	51	N, NC, SC, S
7/8" Insulating Glass LoE 272 Argon	0.29	0.24	0.41	54	N, NC, SC, S
7/8" Insulating Glass LoE 366 Air	0.31	0.17	0.37	52	N, NC, SC, S
7/8" Insulating Glass LoE 366 Argon	0.28	0.16	0.37	55	N, NC, SC, S

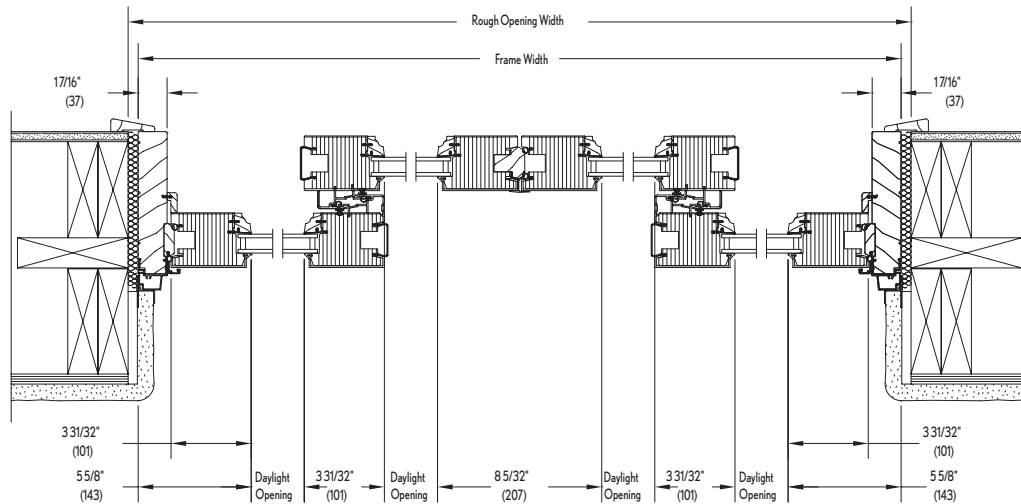
CLAD ULTIMATE LIFT AND SLIDE DOOR

CONSTRUCTION DETAILS

XXXP CONTEMPORARY PANELS - UNI - DIRECTIONAL



OX-XO CONTEMPORARY PANELS - BI-PARTING



CLAD ULTIMATE LIFT AND SLIDE DOOR - CONTEMPORARY

ENERGY DATA	U-Factor	SHGC	VT	CR	ENERGY STAR
7/8" Insulating Glass Air	0.44	0.51	0.55	41	
7/8" Insulating Glass LoE 272 Air	0.33	0.28	0.48	51	
7/8" Insulating Glass LoE 272 Argon	0.30	0.28	0.48	54	N, NC, SC, S
7/8" Insulating Glass LoE 366 Air	0.33	0.19	0.43	52	
7/8" Insulating Glass LoE 366 Argon	0.30	0.19	0.43	54	N, NC, SC, S

NOT TO SCALE

WOOD AND CLAD/WOOD WINDOW AND DOOR LIMITED WARRANTY

This Limited Warranty applies to Marvin® windows and patio doors purchased from an authorized Marvin dealer, and extends to the owner of the structure in which the products are originally installed. This Limited Warranty is fully transferable. This Limited Warranty is applicable only to product installed in the U.S.A. and Canada. For information on warranties available in other countries, please contact Marvin at the address or phone number below.

GLASS COMPONENTS

Glass warranties apply to factory-installed glass or Marvin-supplied glass installed by Marvin-authorized service personnel. Clear insulating glass with stainless steel spacers is warranted against seal failure resulting in visible obstruction through the glass for twenty (20) years from the original date of purchase. Glass is warranted against stress cracks caused by manufacturing defects for ten (10) years from the original date of purchase. All other glass and glass features are provided with the same warranties, limitations, and exclusions Marvin receives from its supplier; contact Marvin for further details.

NON-GLASS COMPONENTS

Non-glass components are warranted to be free from manufacturing defects for ten (10) years from the original date of purchase. Except as provided in Marvin's Limited Warranty Supplement for Products in Coastal Environments, Kynar® finishes and hardware are warranted to be free from manufacturing defects for ten (10) years, and anodized finishes and other specialty finishes are warranted to be free from manufacturing defects for five (5) years, from the original date of purchase. Electric operators and other motorized accessories are provided with the same warranties, limitations, and exclusions Marvin receives from its supplier; contact Marvin for further details.

EXCLUSIVE REMEDY

If a covered defect appears during the term of the applicable warranty, Marvin will, at its option, repair or replace the product or component, or refund the price paid for the defective product or component. Removal, installation, finishing, refinishing, and disposal costs and services are not included. Marvin will endeavor to supply original replacement parts; however, replacement parts may differ from the original parts. Replacement parts, including upgrades, are warranted for the remainder of the original product warranty.

EXCLUSIONS

Damage, defects, or problems resulting from causes outside Marvin's control are excluded from coverage under the Limited Warranty. Such causes include, without limitation:

Installation, Maintenance, and Acts of God

- installation not in conformance with Marvin's installation instructions and applicable building codes
- improper or non-standard field finishing
- non-standard installation, such as non-vertical or sloped glazing, upside down, or out-of square
- installation or use in applications exceeding design standards
- field mulls; field finishes
- insulating glass installed above 5000 feet without capillary tubes (except as specifically provided in the Marvin Limited Warranty High Altitude Supplement)
- installation or use near pools, saunas, hot tubs, or other high-humidity environments
- failure to follow Marvin's care and maintenance instructions
- failure to properly treat, seal, and maintain exposed wood
- use of brick wash, razor blades or other inappropriate cleaners or chemicals
- misuse, abuse, modification, alteration, accident, negligence
- shifting or settling of the structure in which the product is installed
- extreme weather events, extreme or unusual atmospheric conditions
- normal wear and tear; normal discoloration or fading of finishes
- variation in wood color, texture, and grain
- glass imperfections consistent with ASTM or other industry standards, which do not affect structural integrity
- war, insurrection, civil unrest, terrorism, or other Acts of God

Warp Bow, twist, and warp shall not be considered defects unless in excess of $1/4$ " in the plane of the door. Doors 8' or higher ordered without multi-point hardware are not performance-certified and are not warranted against bow, twist, or warp.

Moisture Management Products installed in wall systems that do not allow for proper moisture management, such as exterior insulation and finish systems (EIFS) or "synthetic stucco" without effective engineered drainage systems, are not covered under the Limited Warranty.

Thermal Efficiency Marvin does not warrant the amount or percentage of argon or other inert gas present in insulating glass at any time after manufacture. Inert gas dissipates over time, and may be ineffective in products manufactured with capillary tubes. Thermal efficiencies vary with the application of the product. Marvin does not warrant a specific level of thermal efficiency will be maintained by inert gas, low emissivity coatings, or other product features.

Effective Date:
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WOOD AND CLAD/WOOD WINDOW AND DOOR LIMITED WARRANTY CONTINUED

Condensation Condensation is not a product defect, but the result of excess humidity. Condensation, frost, or mold, mildew, or fungus on product surfaces is not covered by the Limited Warranty.

Corrosion Finish failure or corrosion of aluminum cladding, anodized and other specialty finishes, hardware, or other components due to environmental conditions such as air pollutants, acid rain, salt, sand, chemicals, or other corrosive substances is not covered by the Limited Warranty. Corrosion, deterioration, or wear of aluminum cladding and hardware in products installed within one (1) mile of a seacoast is not covered, except as provided in Marvin's Limited Warranty Supplement for Products in Coastal Environments. Anodized and other specialty finishes and non-Coastal Hardware installed within one (1) mile of a seacoast are not warranted.

Screens Screens are not designed to, and will not prevent falls.

DISCLAIMERS, LIMITATIONS, AND ADDITIONAL TERMS AND CONDITIONS

Disclaimers This Limited Warranty is the only warranty, written or oral, express or implied, provided by Marvin. No dealer, employee, or agent of Marvin, nor any third party, may create or assume any other liability, obligation, or responsibility on behalf of Marvin. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. Any implied warranty which cannot be disclaimed under applicable law will be limited in duration to the shortest permissible term and, in any event, will not exceed the term of the applicable express limited warranty; the requirements for presenting any claim so affected will be as provided in this Limited Warranty. Any product or component not specifically subject to this Limited Warranty or another written Marvin product warranty is provided AS IS and without warranty. This Limited Warranty gives you specific legal rights and you may also have other rights, which may vary from state to state. THIS WARRANTY IS NOT A WARRANTY OF FUTURE PERFORMANCE OR A STATEMENT OF THE USEFUL LIFE OF ANY MARVIN PRODUCT, BUT ONLY A WARRANTY TO REPAIR, REPLACE, OR REFUND.

Limitations IN NO EVENT WILL MARVIN BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. IN NO EVENT WILL MARVIN'S LIABILITY EXCEED THE PRICE PAID FOR THE AFFECTED PRODUCT OR COMPONENT. The limitations of warranty and liability set forth herein shall survive and apply, even if the exclusive remedy set forth in this Limited Warranty is found to have failed of its essential purpose.

Certifications and Ratings Many standard Marvin products are labeled with the Window & Door Manufacturers Association (WDMA) Hallmark Certification. WDMA Certification is based on the performance of a single sample of the product at the time of manufacture. Many standard Marvin products are labeled with National Fenestration Rating Council (NFRC) ratings. NFRC ratings are based on a combination of computer simulations and physical testing of product samples. Certifications and ratings typically apply to single products only; however certain factory-mulled or combined product configurations may also be certified. Performance of individual products may vary and will change over time, depending upon the conditions of use. WDMA certifications and NFRC ratings are not performance warranties. For details on Hallmark Certification, go to www.WDMA.com. For details on NFRC Energy Performance ratings, go to www.NFRC.org.

Suitability Determining the suitability and compliance with local or other applicable building codes or standards, of all building components, including the use of any Marvin product, and the design and installation of any flashing or sealing system, is the responsibility of the buyer, user, architect, contractor, installer, and/or other construction professional. Marvin will not be liable for any problem or damage relating to inappropriate or faulty building design or construction, maintenance, installation, or selection of products. Windows and doors are only one element of a structure; Marvin does not warrant that third party certification of a building or project to any specific standard will be achieved through the use of any Marvin product.

No Waiver Marvin may, in its discretion, extend benefits beyond what is covered under this Limited Warranty. Any such extension shall apply only to the specific instance in which it is granted, and shall not constitute a waiver of Marvin's right to strictly enforce the exclusions, disclaimers, and limitations set forth in this Limited Warranty in any or all other circumstances.

Warranty Claims All warranty claims must be made within sixty (60) days of the appearance of the defect. To make a warranty claim, contact your local Marvin dealer or distributor. If you do not know the name of your local dealer or distributor, use the "Where to Buy" feature at www.marvin.com, or call 800-533-6898 to locate the one nearest you. If, after five days, your dealer or distributor has not responded, send a written request to Marvin Windows and Doors, PO Box 100, Warroad, MN 56763, Attn: Warranty Department. Include the following information: your name, address, and telephone number, the date you purchased your product, the name of the dealer or distributor from whom you purchased your product, a description of product, order number, specific definition of problem or defect, actions you have taken and contacts you have made with your local dealer or distributor. Once we've received your letter, we will respond to your claim promptly.

Effective Date:
2011-01-01

To see how windows and doors can be *Built around you*® by Marvin, please visit your local Marvin dealer. To find a dealer nearest you, visit marvin.com or call 1-888-819-2470. Your Marvin dealers are window and door professionals and are available to help you choose the best Marvin product to suit your needs.

In Canada, call 1-800-263-6161.

Marvin.com

Marvin Windows and Doors, Warroad, MN 56763

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Information regarding status of patent applications, and product features and specifications is subject to change without prior notice.

