



TECHNICAL GUIDE

A technical guide to Loewen window and door details, sizing and specifications.

www.loewen.com



WE REALIZE THAT EVERY PROJECT BEGINS
FROM AN INNATE DESIRE TO CREATE
SOMETHING GREAT.

Select standard window and door configurations are represented in this [Loewen Technical Guide](#).
Numerous custom opportunities exist. Please contact your Authorized Loewen Dealer.
Information in this guide subject to change without notice.

FRONT COVER PHOTO: Cove House - Furman and Kiel Architects

BRAND OVERVIEW

HISTORY

Founded in 1905, Loewen has developed a reputation for inspirational products, design leadership and custom capability. Our history helps describe our journey and foundation on which the Loewen brand of windows and doors is built.

Loewen is a manufacturer of wood windows and doors designed and built for premium residential new construction, renovation/restoration and distinctive light commercial construction. Our product portfolio includes wood windows and doors with clear, primed or metal clad (aluminum, copper, bronze) exteriors. Our complete portfolio of fenestration products includes our VERO Collection, Cyprium™ Collection and StormForce™ Series.

We pride ourselves on products that are not only attractive but also cutting edge in their functionality. We achieve this through careful craftsmanship and by completely customizing our furniture-grade fit and finish.

PERFORMANCE

We take great pride in the fact that our windows and doors are among the highest performing in the industry. Performance keeps homes comfortable and energy efficient, and strength protects against the worst nature can deliver. We achieve this through a commitment to produce the highest quality products that we can, using only the highest quality materials. Loewen offers several solutions ideal for a variety of different environments, from the cold harsh northern climate, to the warm, sunny, south and tropical storm threatened regions.

Loewen products are engineered to comply and exceed building codes in North America. Each test is conducted by an independent agency and is based on extreme conditions and varying product sizes. Code compliance is a fundamental aspect of our product design. Many of our products meet the performance requirements for Energy Star in all United States climate zones. The National Fenestration Rating Council empirically shows that Loewen products are among the industry's best in terms of thermal performance.





90° Flush Track LiftSlide



Moriyama & Techima Architects • TORONTO HOUSE



Moriyama & Techima Architects • TORONTO HOUSE



NarrowFrame, Contemporary Look

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CYPRIMUM COLLECTION

Refer to our Cyprium Guide for more information

STORMFORCE™ SERIES

Refer to StormForce Technical Guide for our Impact certified products.





COMMITMENT

Our solid warranty is the written proof of our commitment to quality. Loewen will make it right, just as we have been doing throughout the long history of our company.

THE STRENGTH OF A WARRANTY is based on the quality of the windows and doors and the confidence of the company behind them.

When you have been building custom windows and doors for decades, you know that the first step in having a credible warranty is the integrity of your products. Loewen windows and doors are made to last, and we have always stood behind our product with unsurpassed support, followup, and service.



THE LOEWEN ADVANTAGE

- Full 20-year warranty on glass, wood components, and paint finishes on clad product.
- We guarantee our products for the full length of our warranty meaning our support does not reduce over time.
- Complete coverage for all color finishes on our aluminum clad exterior including protection against fading and chalking for 20 years.
- Full 10-year coastal warranty on painted finishes within one mile of the coastline.
- Fully supported warranty service with our network of Loewen experts and regional dealer inspections.
- 2 year labor warranty that covers repairs, replacement and installation.

OTHER WARRANTIES

- May promote a longer warranty even if it is limited or not inclusive for all parts.
- Prorated warranties that reduce the manufacturer's liability as the product ages.
- Vinyl and wood fiber clad exteriors that may carry a color fade only warranty or none at all.
- Warranties on paint that extend past those of the paint specifications will not extend the life of the paint finish and are always limited.
- Warranties that cover various distances from the coast often do not consider the specific effects of coastal weather conditions.
- Confusing language, for example, a lifetime warranty against corrosion for an exterior component that contains no metals really needs to cover against UV deterioration and chalking.

ARCHITECTURAL SERVICES



LOEWEN'S ARCHITECTURAL SERVICES division was created with the imagination and passion of Architects in mind. This consultative service exists to collaborate Loewen's technical expertise and manufacturing experience with visionaries who live to design, create and inspire.

CONTACT US BY EMAIL

architecture@loewen.com

CONTACT US BY PHONE

United States or Canada: 800.563.9367
Outside of North America: 204.326.6446

DEALER NETWORK

In addition to Loewen's Architectural Services, we also have a large dealer network including territory managers and sales professionals available throughout Canada and the United States to serve and assist the architectural community. These Lowen professionals are able to provide detailed information, service and pricing for all Loewen products. Loewen representatives are available for informative product demonstrations, office/site visits, architectural luncheons (which may qualify for AIA Continuing Education Credits), or other functions that require fenestration expertise.

PRODUCT SAMPLES & DISPLAYS

Portable product samples and displays are available through Loewen Territory Managers and the dealer network. These tools aid in understanding product differences and features.

Loewen products are displayed at trade and home shows, including both large national conferences and local exhibitions.



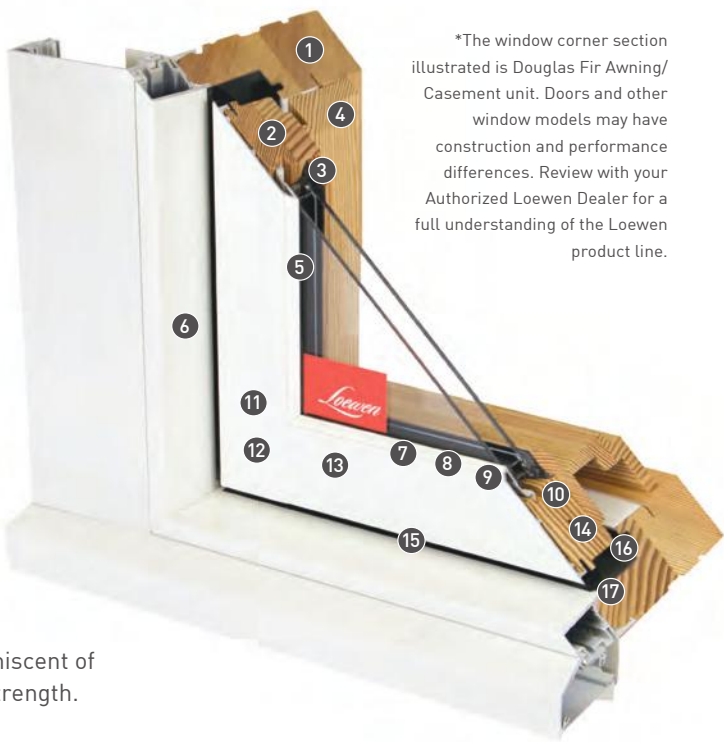
Blue Sky Architecture • SOLAR CREST

LOEWEN BASICS

LOEWEN WINDOWS ARE HIGHLY CUSTOMIZABLE. WHETHER YOU ARE LOOKING TO RETROFIT AN ELEGANT, TRADITIONAL-STYLE HOME, OR AIMING FOR A HIGHLY CONTEMPORARY LOOK, LOEWEN HAS THE IDEAL SOLUTION.

LOEWEN ENGINEERING RESULTS IN UNCOMMON STRENGTH AND DURABILITY, ENABLING DRAMATIC DESIGN, INNOVATION AND INSPIRATION.

- 1 Coastal Douglas Fir for strength and rigidity (Mahogany available).
- 2 Laminated sash for enhanced structural stability and a tight weather seal.
- 3 Dual seal on glass units for long hermetic seal life.
- 4 Natural clear wood interior, ideal for staining or painting.
- 5 Profiled sash edge for a finished look and integration with Simulated Divided Lite (SDL) bars.
- 6 Optional extruded aluminum cladding, for low maintenance, available in a wide range of colours. (Cyprium cladding available)
- 7 Minimal use of exposed exterior caulking on glass surface.
- 8 No metal-to-glass contact, for improved energy efficiency.
- 9 Triple seal glazing system on metal clad units to effectively block moisture infiltration.
- 10 Hidden venting channel to allow built-up condensation to escape, increasing seal and sash life.
- 11 Authentic stile and rail construction. No miters.
- 12 Mortise and tenon sash corner joinery, for structural stability.
- 13 Tall bottom rail to create a custom architectural look reminiscent of traditional joinery and to enhance structural stability and strength.
- 14 Airspace between wood and window cladding, for air circulation and added insulation value.
- 15 Secondary weatherstrip to deflect wind-driven rain from primary seal.
- 16 Continuous primary weather-stripping, for maximum protection against air and water infiltration.
- 17 Polypropylene liner for added protection from the weather.



*The window corner section illustrated is Douglas Fir Awning/Casement unit. Doors and other window models may have construction and performance differences. Review with your Authorized Loewen Dealer for a full understanding of the Loewen product line.

WOOD SPECIES & VERSATILITY



VERSATILITY IS ONE OF THE KEY ELEMENTS in the Loewen product offering — there are more than ten trillion possible combinations of standard Loewen products.

In addition to this massive standard selection matrix, Loewen products are available in custom shapes, sizes and configurations.

Each Loewen product, whether standard or custom, may be further personalized by choosing the Loewen Cyprium™ Collection or through the use of Simulated Divided Lites, exterior casing options and metal clad paint selection in a variety of colors and finishes. An array of hardware finishes further expand the variety and customization of each window order.

UNLIKE OTHER WINDOW MANUFACTURERS, we use only Coastal Douglas Fir or Mahogany in our frames and sashes. These tightly grained woods do more than just give our windows a rich, warm texture — they’re also naturally tough and resilient, yet remarkably workable, meaning they are ideal for precision milling and capable of holding the smallest, most intricate detailing.

To enhance our woods' high natural resistance to moisture absorption, decay and insect infestation, every Loewen wood component is treated with a water repellent/wood preservative sealant before assembly.

Douglas Fir is North America’s most plentiful softwood species, accounting for one-fifth of the continent’s total softwood reserves. It is extremely beautiful and durable, making it the ideal species for fenestration and a hallmark of the Loewen brand.



DOUGLAS FIR DURABILITY				Douglas Fir outperforms Hemlock & Pine.		
	Specific Gravity (density)	Impact Strength (height of drop causing complete failure)	Compression Strength (parallel to grain)	Compression Strength (perpendicular to grain)	Hardness (load perpendicular to grain)	Resistance to Decay
	Weight Over Volume	Inch	Psi	Psi	lbs	USFS Grade
Douglas Fir	0.48	31.0	7,230	800	710	Moderate
Mahogany	0.42	Untested	6,460	1,500	830	Moderate to very resistant
Western Hemlock	0.45	23.0	7,200	550	540	Slightly to non-resistant
Ponderosa Pine	0.40	19.0	5,320	580	420	Slightly to non-resistant

DOUGLAS FIR FASTENER RETENTION			This chart shows the force required to remove fasteners.		
	Nail	Screw	Hinge		
Douglas Fir	189 lbs	527 lbs	743 lbs		
Ponderosa Pine	98 lbs	392 lbs	486 lbs		

ENVIRONMENTAL COMMITMENT



ENVIRONMENTAL STEWARDSHIP is closely aligned with many of the core values that are present in Loewen. We understand our customers’ commitment to environmental sensibility and our brand reflects our commitment to alleviating our environmental footprint.

We practice environmental stewardship in not only our manufacturing processes, but in our product offering as well. Nearly 100% of the wood fiber used in the production of Loewen products is derived from forests that are Stewardship certified, Canadian Standards Association (CSA) certified, Sustainable Forestry Initiative (SFI) certified, or Programme for the Endorsement of Forest Certification (PEFC) certified. Canadian Standards Association (CSA) certified, Sustainable Forestry Initiative (SFI) certified, or Programme for the Endorsement of Forest Certification (PEFC) certified.

Loewen proudly demonstrates our stance on reducing the impact we make on the environment while providing peace of mind for environmentally conscious customers.



Loewen’s outstanding energy efficiency attributes and use of sustainable materials are ideal for use in structures designed under LEED (Leadership in Energy and Environmental Design).

LOEWEN IS A SOCIALLY RESPONSIBLE CORPORATION, buying ethically manufactured products and recognized for our leadership in energy conservation and environmental protection. We prove the success of our brand through our environmental commitment.

Loewen was the recipient of the Tree Canada Foundation Eterne Award, honoring us for “environmental leadership and commitment to taking action on global climate change through the planting of trees.”

We recycle virtually all of the wood waste created in the manufacturing process. We also recycle glass, aluminum, weatherstripping, solvents, motor oil and paper. And, during our frigid Canadian winters, we even heat our plant with sawdust.

We actively seek to reduce-reuse-recycle. We understand the real world dynamics of downcycling and so we aggressively design systems that are optimally efficient in consumption and produce windows of the highest quality, as to assure long product life.

To this end, our products are made to be repaired and can be removed and re-installed. Once again, product quality is at the crossroads of efficiency and responsible design.

By manufacturing wood windows and doors, we are using a renewable resource and an efficient natural insulator that will consume less energy than alternative materials in a home. And, because wood is the foundation of our business — everything that we do relies on this resource — we recognize that we must also replace this natural resource with new trees.



CERTIFICATIONS & RATINGS

LOEWEN WINDOWS AND DOORS are engineered to comply with — and exceed — building codes in North America and beyond. Each test is conducted by an independent agency, based on extreme conditions and varying product sizes. Code compliance is a fundamental aspect of Loewen design and engineering.



AFFILIATED ASSOCIATIONS

NATIONAL FENESTRATION RATING COUNCIL (NFRC)

Our products are empirically shown to be among the industry’s best in terms of thermal performance.



WINDOW AND DOOR MANUFACTURERS ASSOCIATION (WDMA)

Hallmark Certification verifies that manufactured products are the same as tested products.



ENERGY STAR PARTNER

Many Loewen windows and doors meet the performance requirements for energy star in all United States climate zones.



EFFICIENT WINDOWS COLLABORATIVE

Loewen is a founding member of the U.S. Department of Energy’s Efficient Windows Collaborative.



FLORIDA BUILDING CODE

The Florida Building Code is the strictest code in the United States for resistance to wind-borne debris and wind-loading for fenestration products. Many Loewen certified products meet high velocity wind zone 4 standards.



TDI - TEXAS DEPARTMENT OF INSURANCE

The Texas Department of Insurance is a dynamic leader in responsible state, national, and global regulation, consumer protection, and market viability.

All products may not meet all certifications.

COLORS & CLADDING

LOEWEN USES ONLY PRE-FINISHED extruded aluminum cladding to better protect window and door exteriors and eliminate the need for painting. Our thick extruded aluminum cladding retains its shape, resists denting and lasts longer than roll-formed aluminum. In addition, Loewen’s window cladding is set away from the underlying wood, creating an air space that improves thermal performance.



The broad variation in Loewen sizes, shapes and designs and the demanding environmental conditions that our product encounters require an alloy that has the ability to:

- Withstand serious impact without sustaining damage.
- Allow intricate extrusion detailing.
- Provide the malleability necessary to clad the many sizes and shapes we offer.
- Deliver the unequaled environmental durability for which aluminum is known.
- Provide a substrate that enhances colorfast paint performance.

AMMA 2605 / 70% KYNAR FINISHES

Loewen’s expansive finish palette provides the perfect finishing touch for fulfilling your vision, while also providing industry leading quality and performance to up hold it. Loewen’s paint formula includes 70% Kynar 500 PVDF (polyvinylidene fluoride) resin, which offers the greatest resistance to weathering, fade and chalking. This ensures a beautiful finish that will last for decades when cared for properly. With their excellent appearance and durability, these paints meet the specifications of the American Architectural Manufacturers Association (AAMA) 2605.



20³

2012/2020

WARRANTY

Loewen metal clad products carry a 20 year warranty covering paint, glass and wood components.

Visit loewen.com for complete details.



LOEWEN'S EXPANSIVE FINISH PALETTE PROVIDES THE PERFECT FINISHING TOUCH FOR FULFILLING YOUR VISION.

STANDARD COLOR PALETTE

Alpine White	White	Linen	Country Road	Sedona Brown	Cappuccino
Kodiak	Cranberry	Graphite	Stone Grey	Woodland Green	Hartford Green
Tuscany Brown	Midnight Bronze	Black	Sable		

ARCHITECTURAL COLOR PALETTE

Antique White	Ash Grey	Dover Grey	Seashell	Winter Wheat	Driftwood
Sahara Sand	Stonybrook	Riverbed	Portobello	Rocky Mountain	Harvest Gold
Bonfire	Candy Apple	Canyon Red	River Rouge	Bordeaux	Canadian Thistle
Newport Blue	Chesapeake Blue	Mediterranean Blue	Deep Sea	Admiral Blue	Charcoal
Pebblestone	Barnacle	Moss	Olive Grove	Sea Grass	Liberty Green
Silver	Champagne	Classic Copper	Pearl	Pewter	Sage Green
Ivy	Forest Green	Island Hunter			

INTRODUCING MATTE FINISHES

Reduced lustre matte finish for a metal look in architectural palette (AAMA) 2605.

Steel Matte BronzeSteel Matte Black

ANODIZED FINISHES

For a durable alternative to paints and organic coatings, our Anodized Finishes offer a rich matte look that reduces sunlight glare and allows the aluminum to maintain its metallic appearance. In addition to the aesthetically desirable etching, our Anodized Finishing also increases resistance to abrasion on aluminum. This aluminum is 100 per cent recyclable and uses a water-based process with no volatile organic compounds for eco-friendliness.

Clear	Champagne	Light Bronze	Copper
Medium Bronze	Dark Bronze	Extra Dark Bronze	Black

Colors may not be exactly as shown. Contact your Authorized Loewen Dealer for actual metal samples of the Loewen Metal Clad Color Spectrum.

WINDOW HARDWARE

SELECTING A STYLE AND FINISH that reflects your unique taste is a critical part of creating the right look.

But choosing hardware involves more than just appearance — function and operation are essential, which is why Loewen offers a wide range of handles, locking systems and other hardware choices — from the most traditional to the most contemporary. Hardware must also offer intelligent design and flexibility. This is why Loewen provides designs such as the foldaway handle, useful when drapes or blinds fit tight against a window or when access space is limited.

For hard-to-reach windows, optional motorized operators can be activated by a simple wall switch or battery operated remote control.



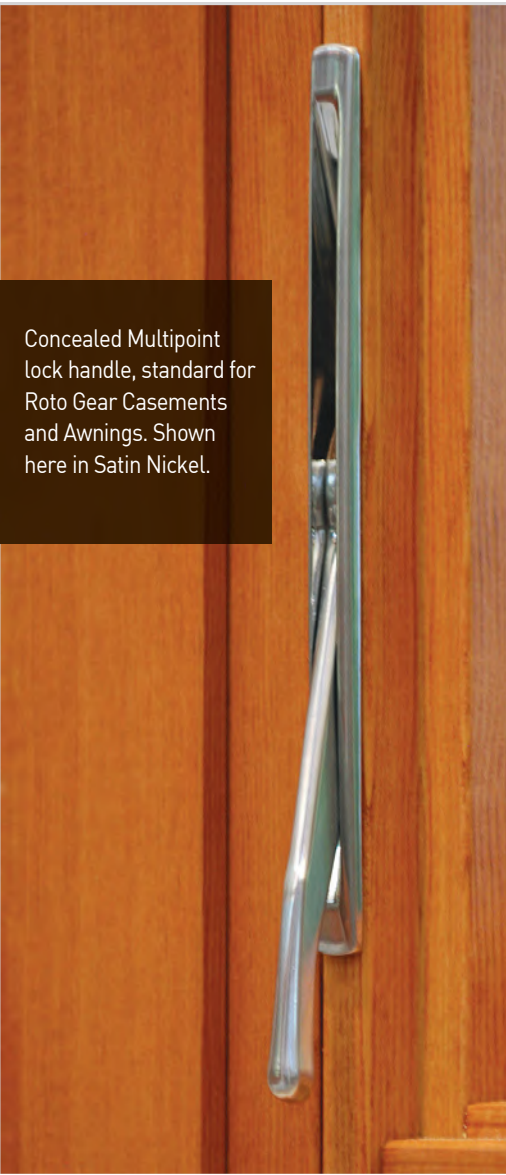
Hannover Casement and Awning Handle and Cover
(Oil Rubbed Bronze)



Provence Casement and Awning Handle and Cover
(Oil Rubbed Bronze)



Tango Casement and Awning Handle and Cover
(Satin Nickel)



Concealed Multipoint
lock handle, standard for
Roto Gear Casements
and Awnings. Shown
here in Satin Nickel.

FINISHES



Oil Rubbed Bronze



Antique Brass



Bright Brass



Satin Nickel



Brushed Chrome



Black



Bronze



Sandstone



Linen



Push Out Casement/Awning Screen Knob
(Brushed Chrome)



Push Out Casement/Awning Screen Hinge
(Linen)



Double/Single Hung Sash Lock
(Oil Rubbed Bronze)



Push Out Casement/Awning Locking Handle
(Antique Brass)



Double/Single Hung Sash Lift
(Oil Rubbed Bronze)

DOOR HARDWARE

LOEWEN DOORS are available with a wide range of hardware options.

We constantly review our hardware selection and new options are regularly added. Consult your Authorized Loewen Dealer for the most current information.



TERRACE DOOR AND BIFOLD HANDLE SETS

- Satin Nickel
- Black
- Oil Rubbed Bronze
- Polished Brass
- Brushed Chrome

- Satin Nickel
- Antique Brass
- Oil Rubbed Bronze
- Polished Brass
- Brushed Chrome

- Satin Nickel
- Black
- Antique Brass
- Oil Rubbed Bronze
- Brushed Chrome

- Satin Nickel
- Black
- Dark Bronze Metallic
- Polished Brass

- Satin Nickel
- Polished Chrome / Satin Chrome
- Polished Brass / Satin Brass
- Polished Brass

PATIO DOOR AND MULTISLIDE MULTIPOINT HANDLE SETS

Selected handles are available in Resista or PVD finish coatings. Theses are extremely durable finishes that are suitable for harsh environments such as coastal locations. Oil Rubbed Bronze finishes are living finishes that wear and change over time and with use. This is an expected and desired effect with ORB finishes.

Handle sets for Sliding Doors are available in a wide selection of styles and finishes. Finishes chart on page A15.

- Satin Nickel
- Black Matt
- Antique Brass
- Bronze (PVD)
- Oil Rubbed Bronze

- Satin Nickel
- Black
- Antique Brass
- Bronze (PVD)
- Oil Rubbed Bronze

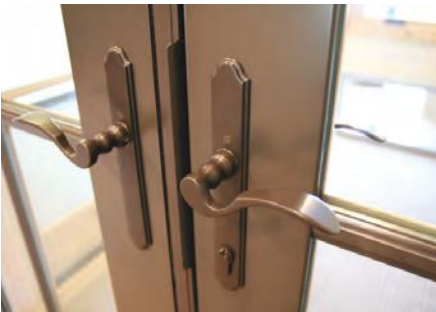
- Oil Rubbed Bronze
- Black
- Satin Nickel

- Satin Nickel
- Bronze PVD
- Black

SINGLE POINT HANDLE SET

- Brushed Chrome
- Satin Nickel
- Faux Bronze
- Antique Brass
- Oil Rubbed Bronze
- Bright Brass (PVD)

DOOR HARDWARE



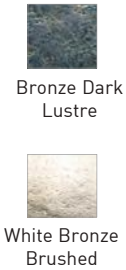
BiFold shoot bolt.



LIFTSLIDE DOOR HANDLE SETS



Interior Flush Handle
(Silicone Bronze Dark)



Bronze Dark
Lustre

White Bronze
Brushed



Marcos Handle
(Satin Nickel)



Bright Brass (PVD)



Oil Rubbed Bronze



Twin Point Lockset
(Black)

BIFOLD DOOR
TWIN-POINT LOCKSET



Bronze



Brushed
Stainless Steel



White

TERRACE & BIFOLD DOOR HARDWARE FINISH OPTIONS

	Meran	Rodos	Verona	Dallas	Athinia	Shropshire	Churchill	BiFold Twin Point	BiFold Shoot Bolt
Satin Nickel	●*	●*	●*	●*	●*				
Polished Brass	●*	●*	●*	●*	●*				●
Black	●	●	●	●				●	
Oil Rubbed Bronze	●	●	●						
Brushed Chrome	●*	●*	●*						
Antique Brass	●*	●*	●*						
Dark Bronze Metallic				●					
Polished Brass w/Satin Brass					●				
Polished Chrome w/Satin Chrome					●				
Rustic Bronze						●	●		
Bronze								●†	●
White								●	
Brushed Stainless Steel								●	●

MULTISLIDE & PATIO DOOR HARDWARE FINISH OPTIONS

	Fontana	Botticelli	Verona	Volo	Flush Handle	Signature Single Point	Churchill
Satin Nickel	●†	●†	●*	●†	●†	●†	
Black	●	●	●	●	●		
Oil Rubbed Bronze	●	●	●	●		●	
Bronze	●†	●†		●†	●†	●	
Antique Brass	●	●	●*			●	
Bright (or Polished) Brass			●*			●†	
Brushed Chrome			●*				
Faux Bronze						●	
Rustic Bronze							●

LIFTSLIDE DOOR HARDWARE FINISH OPTIONS

	LLS Flush Handle Set	LLS Marcos
Silicone Bronze Dark	●	
Bronze Dark Luster	●	
White Bronze Brushed	●	
Satin Nickel		●
Oil Rubbed Bronze		●
Bright Brass		●

*Available in Resista finishes.

†Available in PVD finishes.

Selected handles are available in Resista(R) or PVD finish coatings. These are extremely durable finishes that are suitable for harsh environments such as coastal locations. Oil Rubbed Bronze finishes are living finishes that wear and change over time and with use. This is an expected and desired effect with ORB finishes.

GLAZING OPTIONS

Loewen Sealed Units offer ideal solutions for any environment. With countless glazing configurations and Low E coating options, we ensure that you can choose the perfect blend of protection and comfort - no matter where you live.



HEAT-SMART® REINVENTED

We are proud to introduce the next generation of Heat-Smart® industry leading technologies.

- Loewen standard 1/8" (3 mm) double strength glass offers greater strength and clarity over thinner glass, making our products more insulative, more soundproof, more resistant to impact and considerably more resistant to stresses caused by fluctuations in temperature.
- Loewen standard sealed units contain argon gas* and machine applied primary and secondary sealants reducing the chance of seal failure, improving argon gas retention, and increasing strength.

HEAT-SMART® WINDOW SYSTEMS

Heat-Smart® Window Systems offer varying levels of thermal protection. They also protect furnishings by screening out much of the damaging ultraviolet radiation that causes fading and related damage. The charts on the next page show the comparative performance of each Loewen Window System. Heat-Smart® is a high-performance glazing system that offers great thermal value in a variety of climate zones.



HEAT-SMART® DOUBLE

Double glazed, with one or more layers of Low E coating and one 1/2" (13 mm) air space filled with argon gas and thermally efficient spacer bar.



HEAT-SMART® TRIPLE

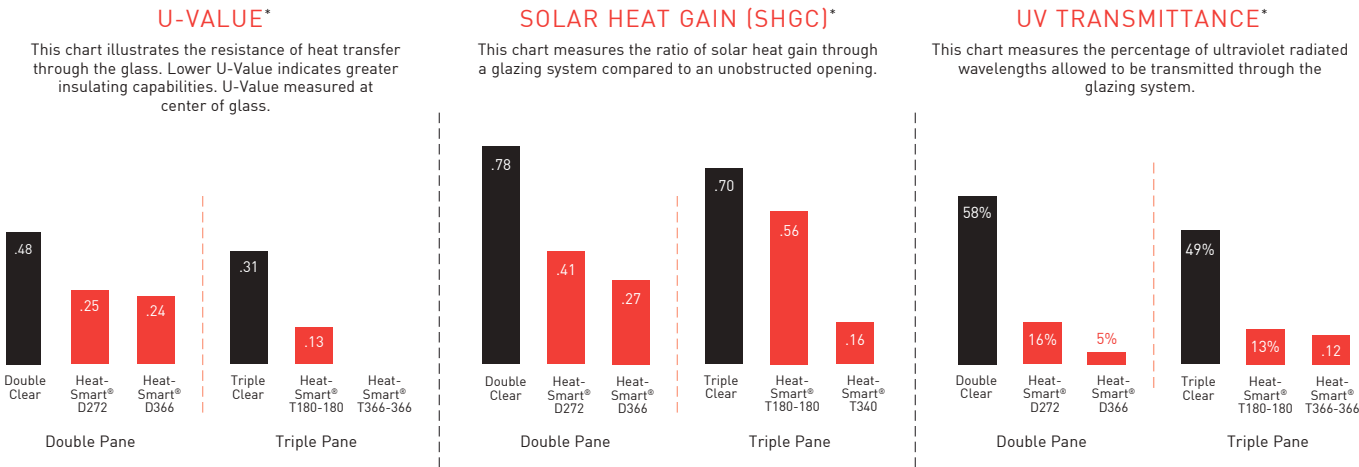
Triple glazed, with multiple layers of Low E coatings and two 1/2" (13 mm) air spaces filled with argon gas and thermally efficient spacer bar.

EXAMPLE:



* Windows & doors with capillary tubes for high elevations do not have argon

HEAT-SMART® COMPARED WITH CLEAR DOUBLE & TRIPLE PANE GLASS UNITS



*ASHRAE calculated values Window 5.2 | 1/2" airspace (13 mm) | Does not apply to sealed units with capillary tubes installed

Note: Information in these charts compares the center of glass performance levels of the sealed unit only when manufactured with different glazing options. They are not representative of overall window performance, which depends on many factors including grille options, such as simulated divided lites, grilles between glass, product size and configuration. This information cannot be used to calculate energy performance, to determine resistance to condensation or to develop assumptions about suitability for use or compliance with energy codes. For overall performance of specific windows or doors, refer to "NFRC U-factor and SHGC/VT" information.

Low E COATING OPTIONS

We offer as many glazing configurations and Low E coatings as there are climates so our window performance can be built to provide comfort in any environment.

LoE³ – 366 ULTIMATE PERFORMANCE

- Highest level of year-round comfort for every climate
- Better insulator (low u-value) and solar heat blockage (low SHGC)
- Three layers of silver (low E cubed 366)

LoE³ – 340 ULTIMATE SOLAR CONTROL

- Greatly reduces oppressive solar heat gain & glare
- Best insulator (low u-value)
- Three layers of silver (low E cubed 340)

LoE² – 180 PASSIVE SOLAR GAIN

- Ideal for passive solar applications
- Good insulator (low u-value) and high solar heat gain
- One layer of silver

LoE² – 272 ALL-CLIMATE

- Year-round, well balanced performance and comfort
- Better insulator (low u-value) and moderate solar heat blockage
- Two layers of silver (low E squared 272)

LoE – i89 ROOMSIDE LoE

- Indoor lite, surface #4 (double) or #6 (triple) reflecting more heat back into the room
- Enhanced insulation (lowers u-value)
- Iridium Tin Oxide coating

SPECIALTY GLAZING

ADDED VALUE SOLUTIONS

NEAT® GLASS OR PRESERVE™ PROTECTIVE FILM

Neat® Glass is an ultra smooth surface made from silicon dioxide that harnesses UV rays to loosen dirt. Neat® Glass helps leave windows spotless with a quick rinse of water and preserves their cleanliness longer. Neat® Glass also comes with Preserve as a standard to protect the Neat® Glass surface.

Loewen windows may also be equipped with added value solutions, such as Preserve™ protective film. Preserve is made from a low-density polyethylene and water-based adhesive that helps reduce cleanup costs and masking off for painting and staining. Available for the exterior or interior of your windows, Preserve™ peels off quickly and easily.

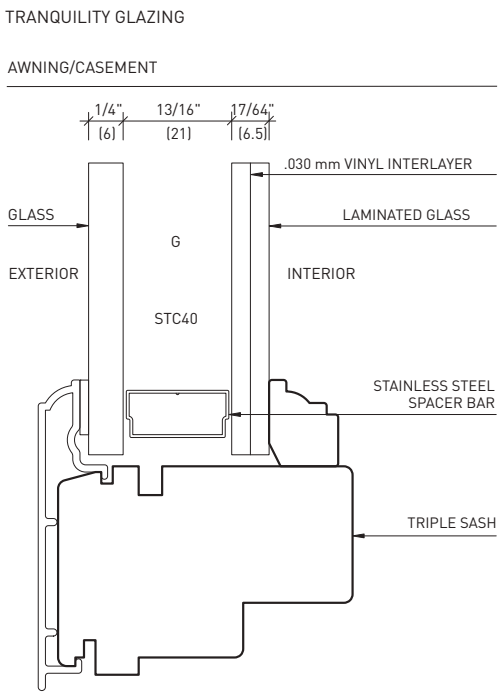
TRANQUILITY®

SOLUTIONS TO TRAFFIC & OTHER URBAN NOISE

Loewen’s heavy frames, thick glass and superior fit and finish result in above-average sound attenuation. For problem applications, we’ve developed an upgraded glazing system that offers even better resistance to sound transmission.

TRANQUILITY® GLAZING SYSTEMS GREATLY REDUCE SOUND TRANSMISSION

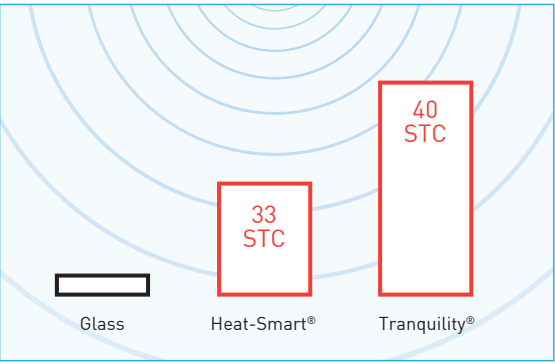
- Tranquility® Glazing Systems consist of a 1/4" (6 mm) glass on the exterior, a 13/16" (21 mm) argon filled space, and a 9/32" (7 mm) laminate pane of glass on the interior.
- Operating casement units test out at STC40 (no storm panel is required to achieve this rating). Visit www.loewen.com for details.
- Laminated glass used in the sealed unit provides increased security and helps to filter out damaging ultraviolet rays.



TRANQUILITY®

SOUND TRANSMISSION CLASS (STC)

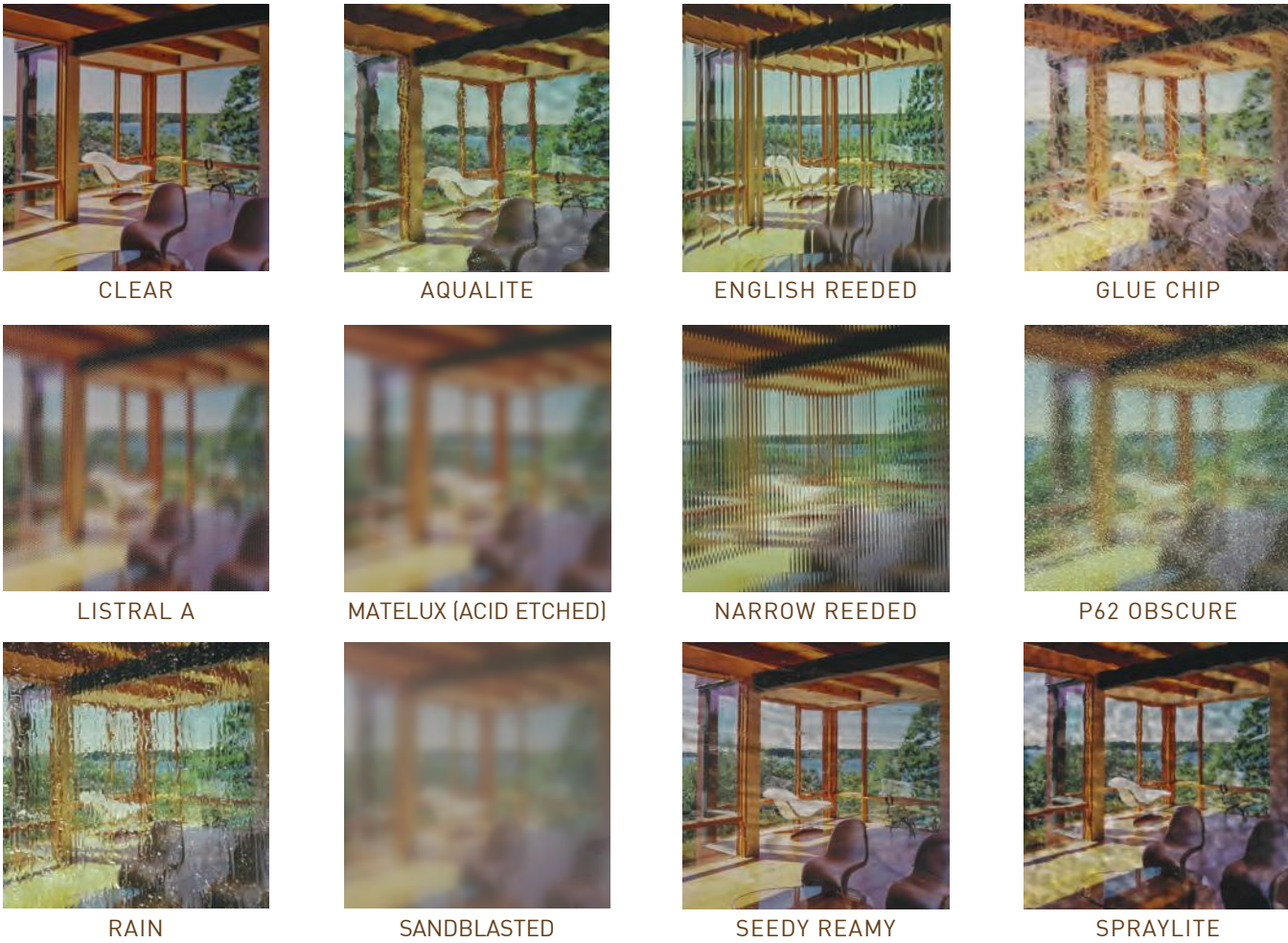
Using a single number, the STC rating identifies the sound transmission reduction of a glazing unit over a range of frequencies.



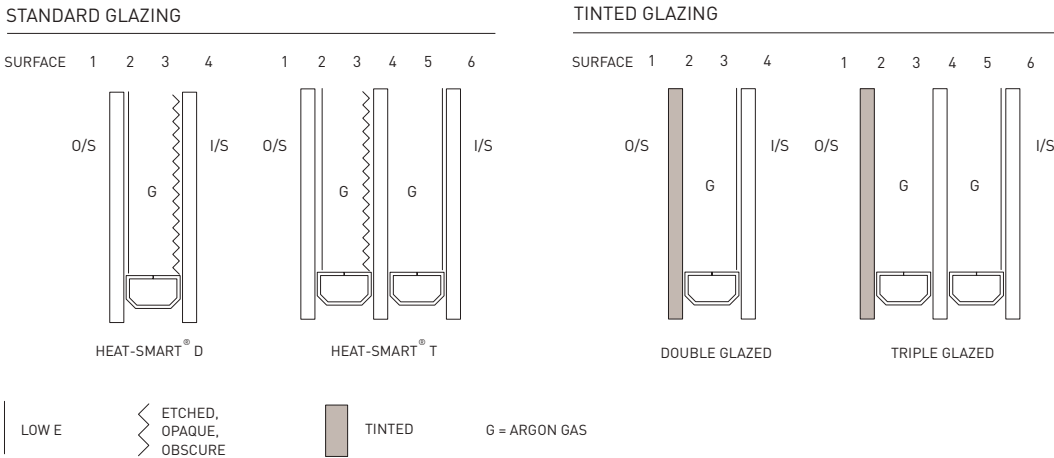
Tranquility® available on product configured for triple pane only.

SPECIALTY GLAZING

Additional options include a wide variety of novelty glass treatments. These images are a sample of the offerings that can be added to selected Loewen windows and doors. Please contact your local dealer for the full range of options and applications.




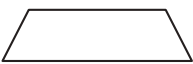







HEAT-SMART® GLAZING FABRICATION



SIMULATED DIVIDED LITES & GRILLES

SDL BARS ADD A DISTINCTIVE DESIGN FEATURE to full-size panes of glass. Wood or metal bars securely bonded to the outer surfaces of the sealed glass unit simulate the appearance of traditional true divided lites. Available with straight or radius bars.

EXTERIOR BAR OPTIONS

























	OGEE	PUTTY
CROSS SECTION*		
5/8" [16]		
3/4" [19]		
7/8" [22]		
1 1/8" [30]		
2" [51]		

A22

See Cyprum section for Cyprum profiles
* Cross sections shown in 7/8" [22 mm] profile size.

Additional airspace bars (between the glass) complete a convincing reproduction of a multi-paned window or door. Our spacer bars function among the best in the industry and provide an intriguing aesthetic appearance in stainless steel or black color options. Wide shadow bars fill more of the airspace replicating the look of True Divided Lites. Narrow shadow bars also provide a similar appearance while allowing for improved sealed unit performance.

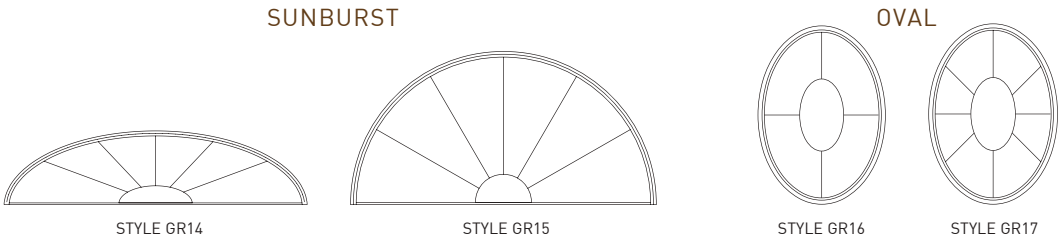
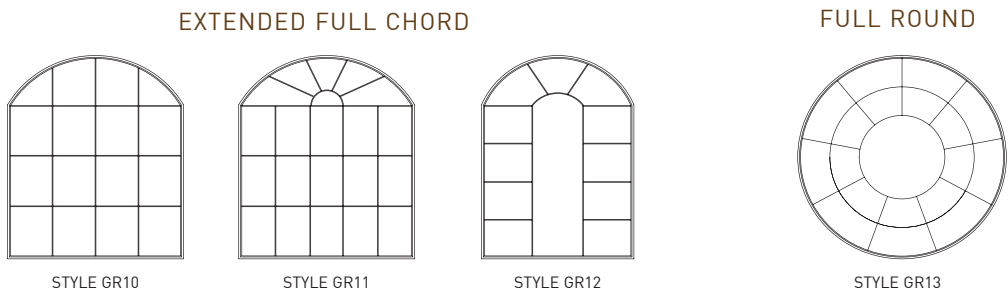
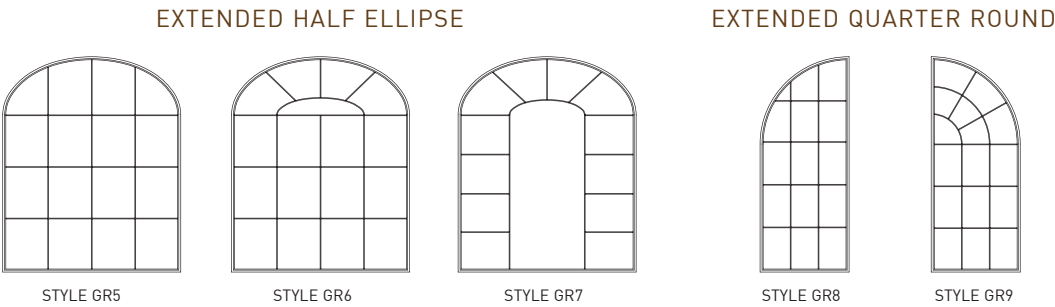
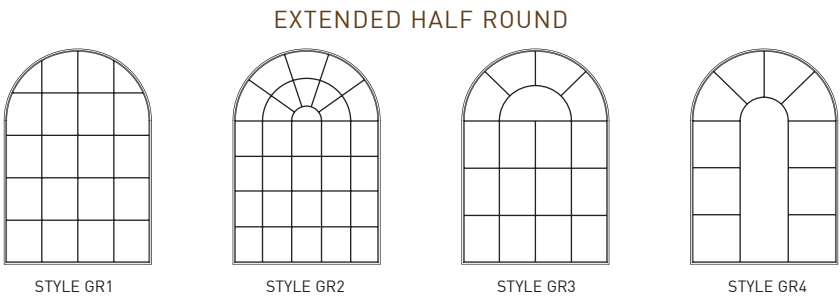
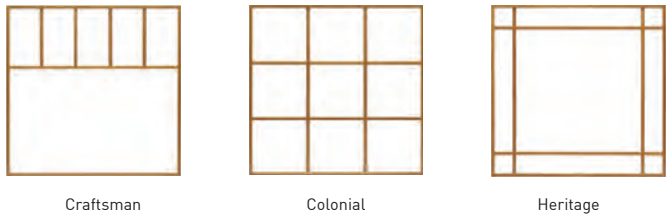
INTERIOR BAR OPTIONS

	OGEE	PUTTY	SQUARE	DOUBLE HUNG OGEE
CROSS SECTION*				
5/8" [16]				
3/4" [19]				
7/8" [22]				
1 1/8" [30]				
2" [51]				

A23

See Cyprum section for Cyprum profiles
* Cross sections shown in 7/8" [22 mm] profile size.

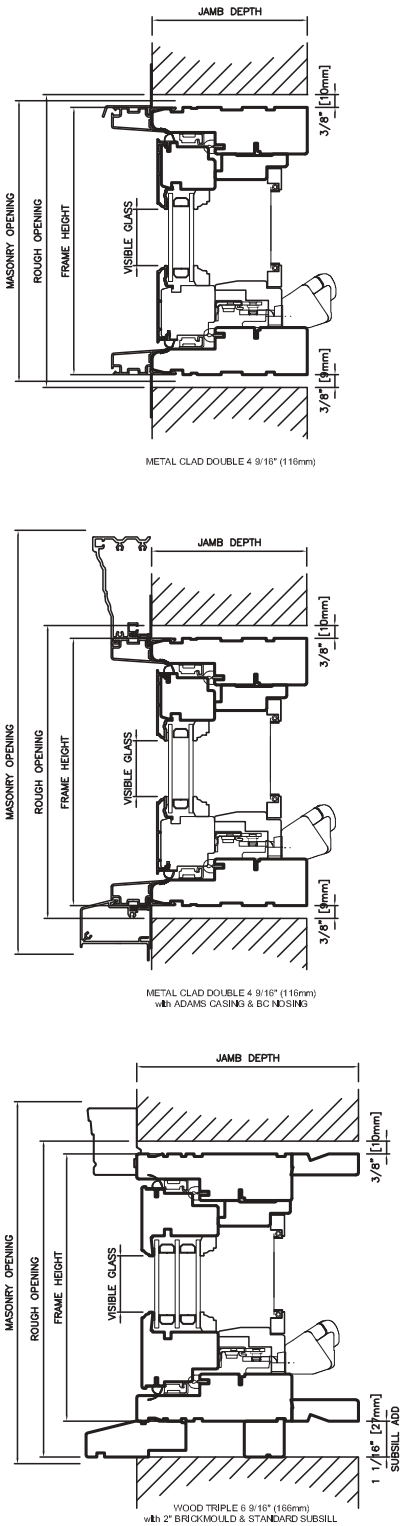
SIMULATED DIVIDED LITE (SDL) STANDARD PATTERNS



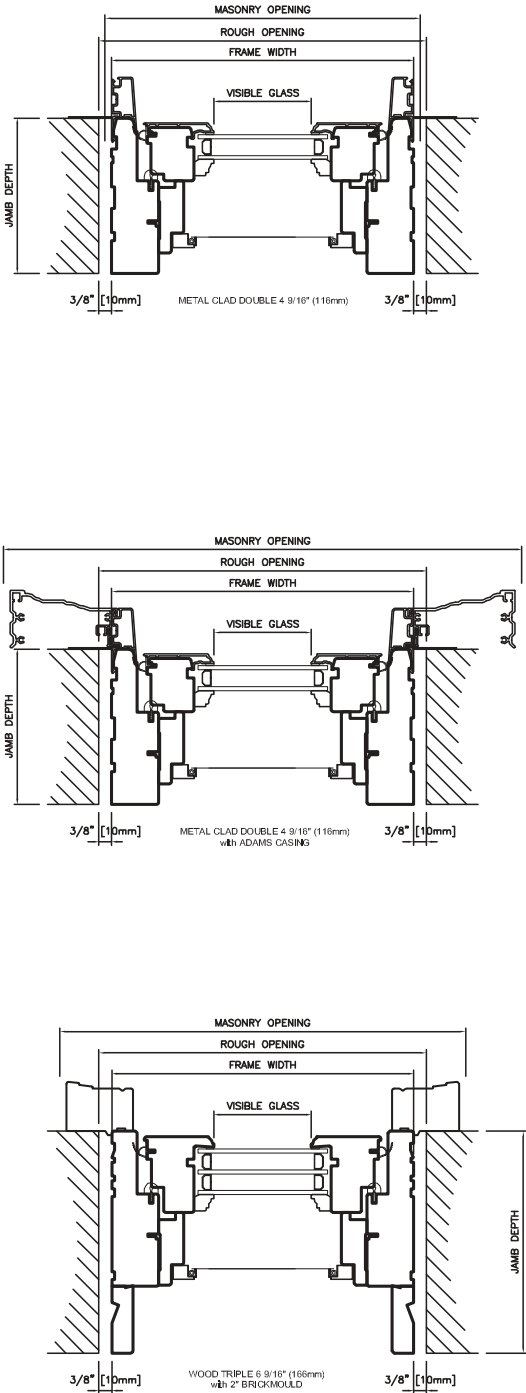
Note: Number of grille bars and spacing is determined by the size of the unit. Grille type may not be available in all units. Custom patterns available by approval.

CASING, JAMB AND OPENING DEFINITIONS

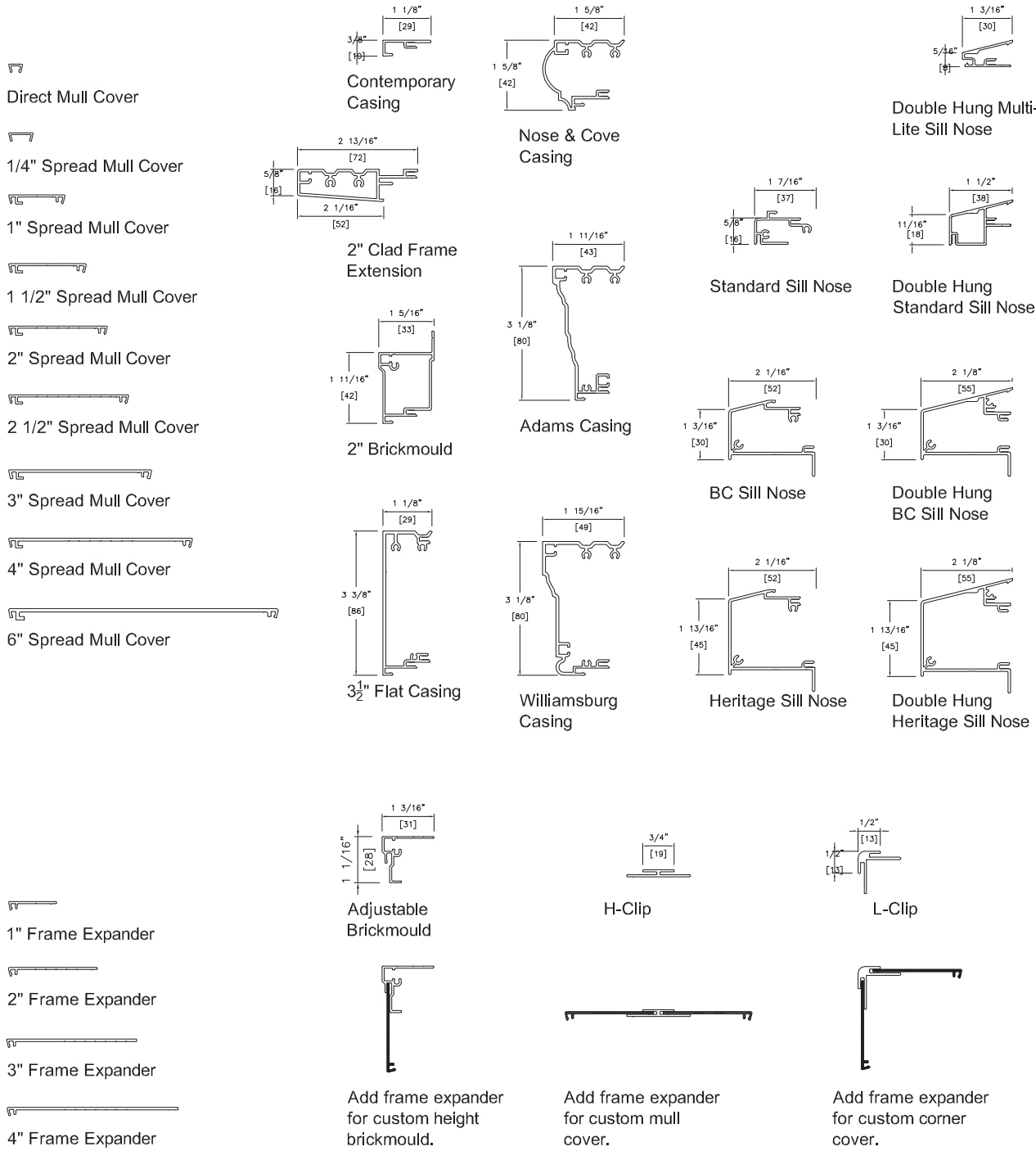
HEAD & SILL DETAIL



PLAN VIEW



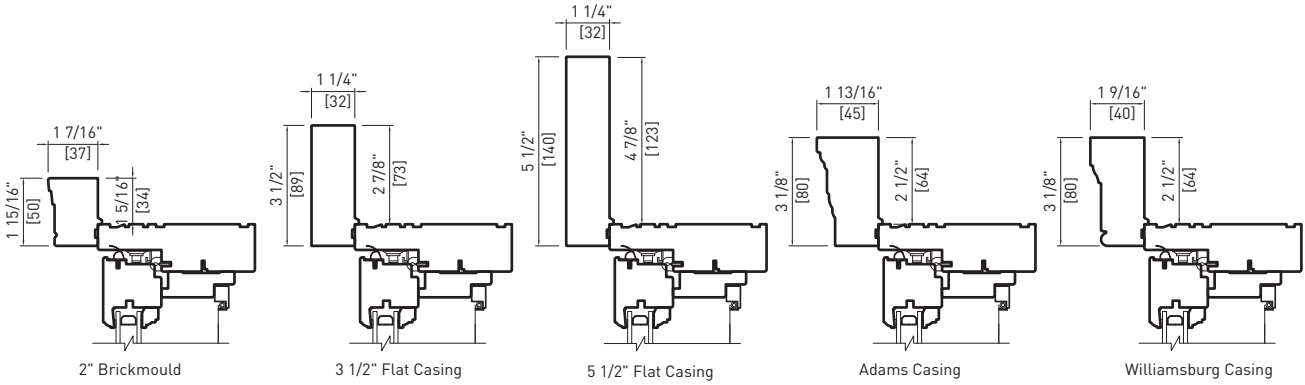
METAL CLAD CASING, SILL NOSE & ACCESSORIES



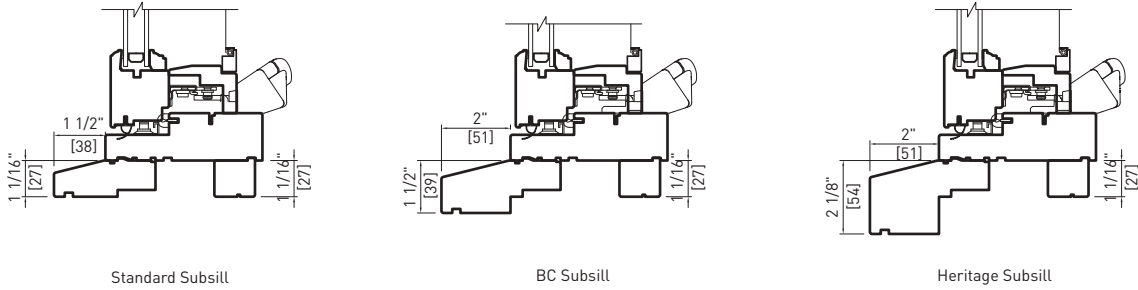
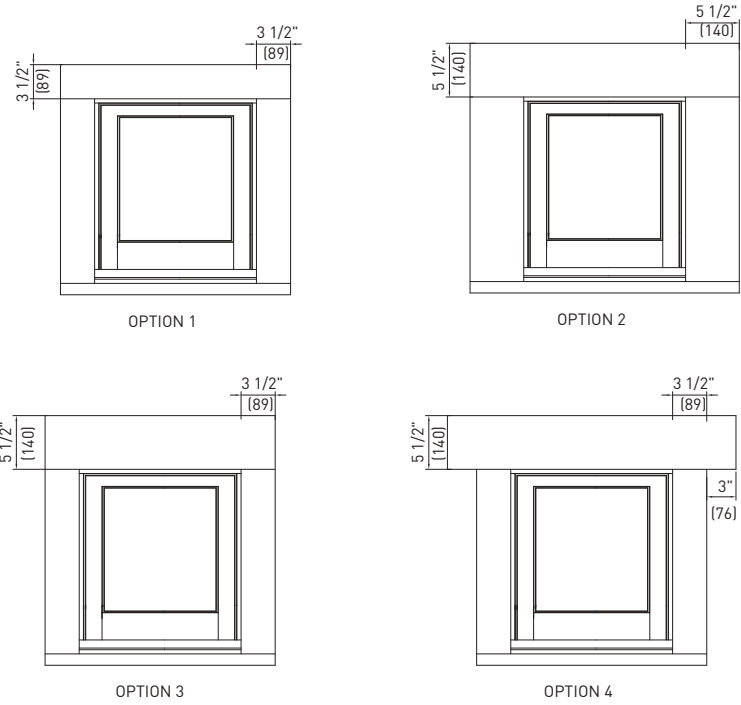
Note: • Other jamb widths available.

Information is subject to change without notice. | CAD Download: www.loewen.com/architect | Installation Instructions: www.loewen.com

WOOD EXTERIOR CASING OPTIONS



FLAT CASING OPTION



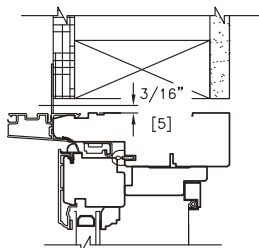
Note: • Other jamb widths available.

Information is subject to change without notice. | CAD Download: www.loewen.com/architect | Installation Instructions: www.loewen.com

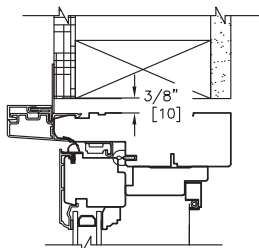
MASONRY OPENING
METAL CLAD

CASING OPTIONS

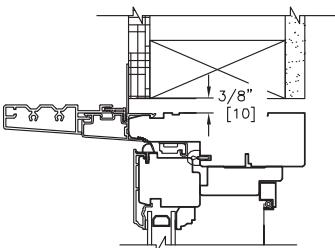
Frame Cladding Only.
Add 3/16" (5mm) to
Frame Dimensions at
Head & Sides.



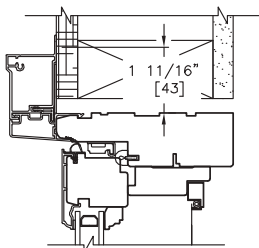
Contemporary Casing.
Add 3/8" (10mm) to
Frame Dimensions at
Head & Sides.



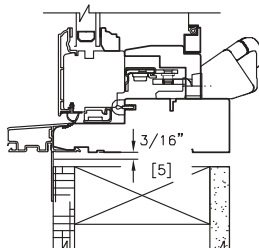
2" Clad Frame Extension.
Add 3/8" (10mm) to
Frame Dimensions at
Head & Sides.



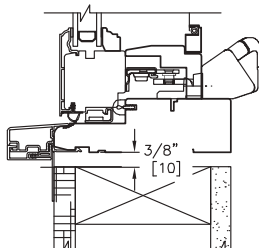
2" Brickmould.
Add 1 11/16" (43mm) to
Frame Dimensions at
Head & Sides.



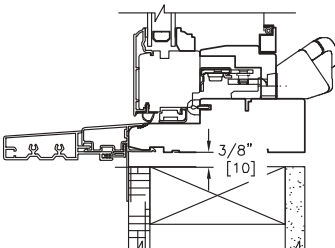
SILL NOSE OPTIONS



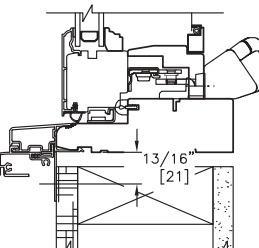
Frame Cladding Only.
Add 3/16" (5mm) to
Frame Dimension at Sill.



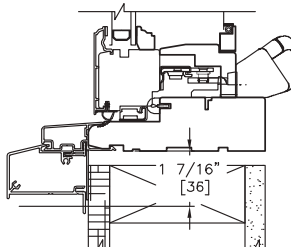
Contemporary Casing.
Add 3/8" (10mm) to
Frame Dimension at Sill.



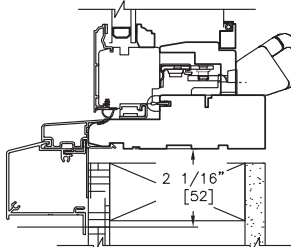
2" Clad Frame Extension.
Add 3/8" (10mm) to
Frame Dimension at Sill.



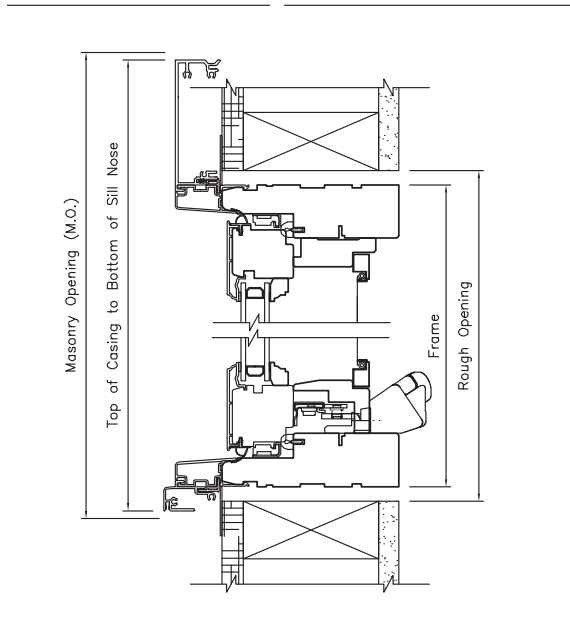
Standard Sill Nose.
Add 13/16" (21mm) to
Frame Dimension at Sill.



BC Sill Nose.
Add 1 7/16" (36mm) to
Frame Dimension at Sill.



Heritage Sill Nose.
Add 2 1/16" (52mm) to
Frame Dimension at Sill.

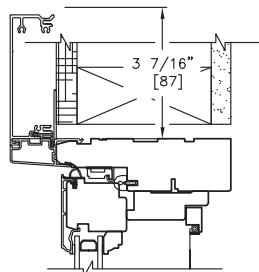


Note: • Other jamb widths available.

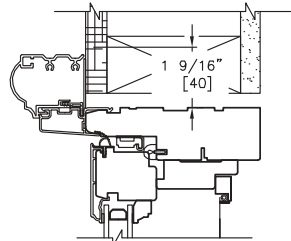
MASONRY OPENING
METAL CLAD

CASING OPTIONS

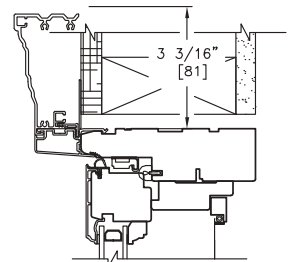
3 1/2" Flat Casing.
Add 3 7/16" (87mm) to
Frame Dimensions at
Head & Sides.



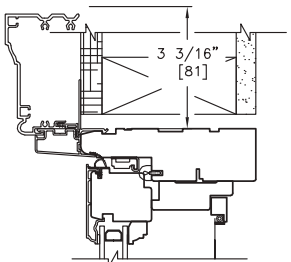
Nose & Cove Casing.
Add 1 9/16" (40mm) to
Frame Dimensions at
Head & Sides.



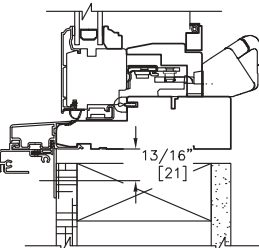
Adams Casing.
Add 3 3/16" (81mm) to
Frame Dimensions at
Head & Sides.



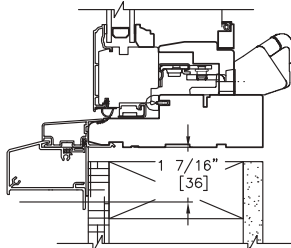
Williamsburg Casing.
Add 3 3/16" (81mm) to
Frame Dimensions at
Head & Sides.



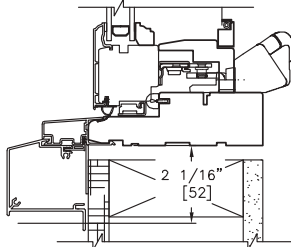
SILL NOSE OPTIONS



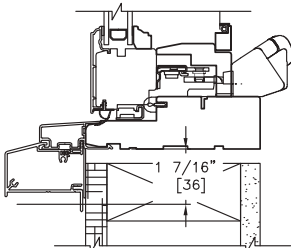
Standard Sill Nose.
Add 13/16" (21mm) to
Frame Dimension at Sill.



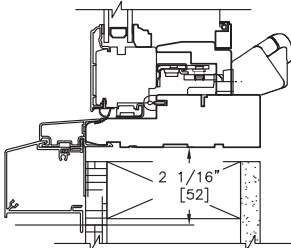
BC Sill Nose.
Add 1 7/16" (36mm) to
Frame Dimension at Sill.



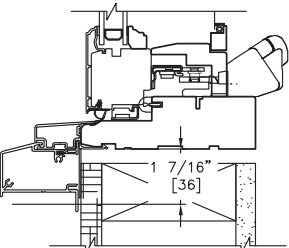
Heritage Sill Nose.
Add 2 1/16" (52mm) to
Frame Dimension at Sill.



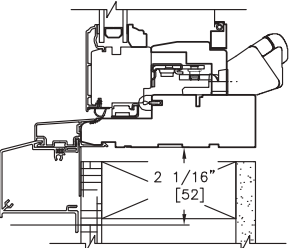
BC Sill Nose.
Add 1 7/16" (36mm) to
Frame Dimension at Sill.



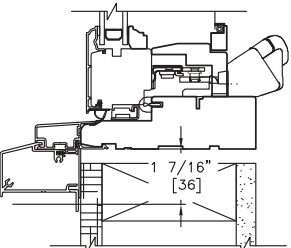
Heritage Sill Nose.
Add 2 1/16" (52mm) to
Frame Dimension at Sill.



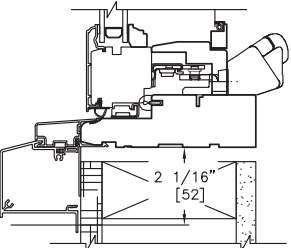
BC Sill Nose.
Add 1 7/16" (36mm) to
Frame Dimension at Sill.



Heritage Sill Nose.
Add 2 1/16" (52mm) to
Frame Dimension at Sill.



BC Sill Nose.
Add 1 7/16" (36mm) to
Frame Dimension at Sill.



Heritage Sill Nose.
Add 2 1/16" (52mm) to
Frame Dimension at Sill.

EXAMPLE #1: CA1 7515 with 2" Brickmould & Standard sill nose.
Frame dimensions, 29 1/2" (750mm) x 59 1/16" (1500mm).
Masonry width = 29 1/2" (750mm) + [1 11/16" (43mm) x 2] = 32 7/8" (836mm)
Masonry height = 59 1/16" (1500mm) + 1 11/16" (43mm) + 13/16" (21mm) = 61 9/16" (1564mm)

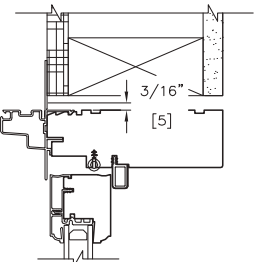
EXAMPLE #2: CA1 0918 with Adams casing & BC sill nose.
Frame dimensions, 35 7/16" (900mm) x 70 7/8" (1800mm).
Masonry width = 35 7/16" (900mm) + [3 3/16" (81mm) x 2] = 41 13/16" (1062mm)
Masonry height = 70 7/8" (1800mm) + 3 3/16" (81mm) + 1 7/16" (36mm) = 75 1/2" (1917mm)

Note: • Other jamb widths available.

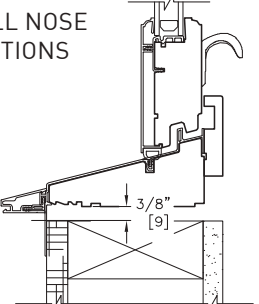
MASONRY OPENING
METAL CLAD - DOUBLE HUNG

CASING OPTIONS

Frame Cladding Only.
Add 3/16" (5mm) to
Frame Dimensions at
Head & Sides.

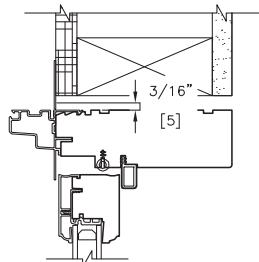


SILL NOSE
OPTIONS

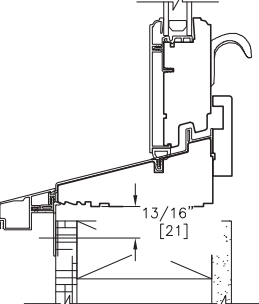


Multi Lite Sill Nose.
Add 3/8" (9mm) to Frame
Dimension at Sill.

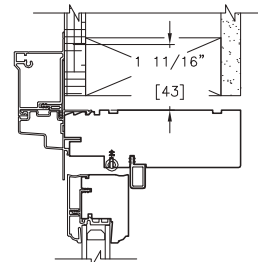
Frame Cladding Only.
Add 3/16" (5mm) to
Frame Dimensions at
Head & Sides.



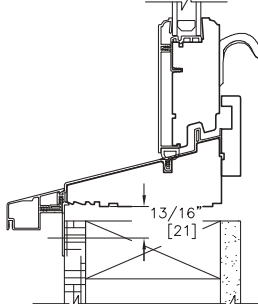
Standard Sill Nose.
Add 13/16" (21mm) to
Frame Dimension at Sill.



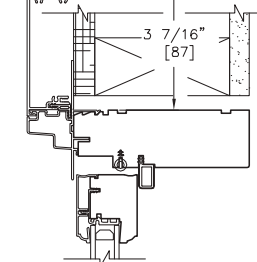
2" Brickmould.
Add 1 11/16" (43mm) to
Frame Dimensions at
Head & Sides.



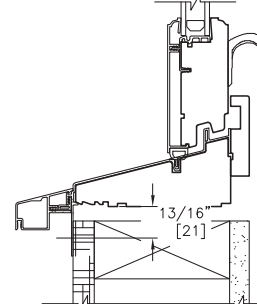
Standard Sill Nose.
Add 13/16" (21mm) to
Frame Dimension at Sill.

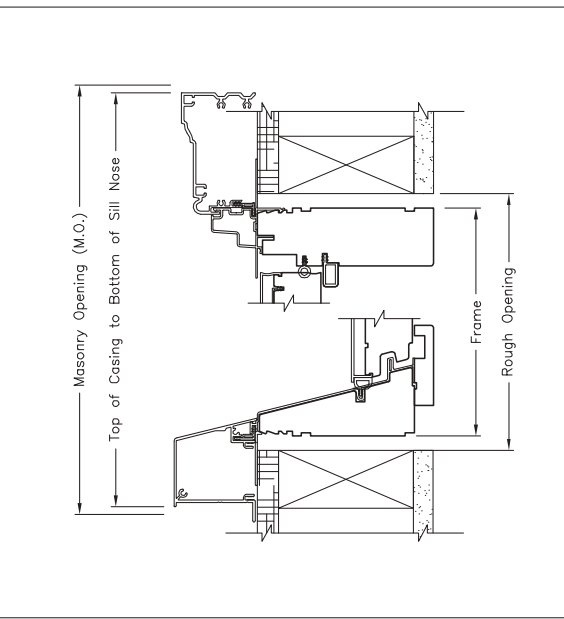


3 1/2" Flat Casing.
Add 3 7/16" (87mm) to
Frame Dimensions at
Head & Sides.



Standard Sill Nose.
Add 13/16" (21mm) to
Frame Dimension at Sill.





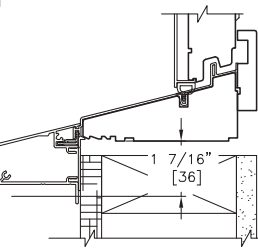
Masonry Opening (M.O.)

Top of Casing to Bottom of Sill Nose

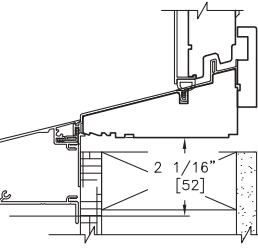
Frame

Rough Opening

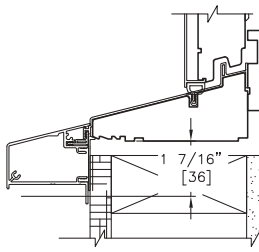
BC Sill Nose.
Add 1 7/16" (36mm) to
Frame Dimension at Sill.



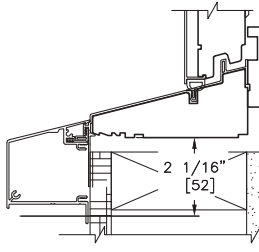
Heritage Sill Nose.
Add 2 1/16" (52mm) to
Frame Dimension at Sill.



BC Sill Nose.
Add 1 7/16" (36mm) to
Frame Dimension at Sill.



Heritage Sill Nose.
Add 2 1/16" (52mm) to
Frame Dimension at Sill.

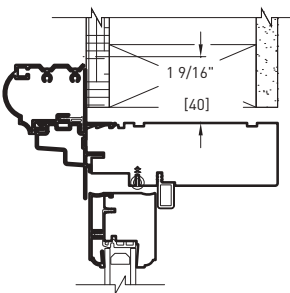


Note: • Other jamb widths available.

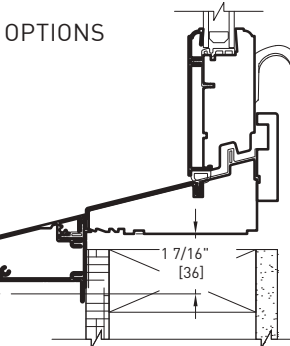
MASONRY OPENING
METAL CLAD - DOUBLE HUNG

CASING OPTIONS

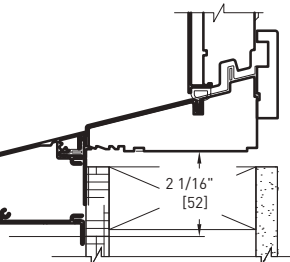
NOSE & COVE CASING.
ADD 1 9/16" (40 mm)
TO FRAME DIMENSIONS
AT HEAD & SIDES.



SILL NOSE OPTIONS

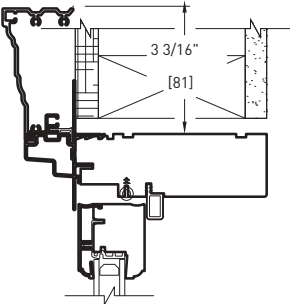


BC SILL NOSE.
ADD 1 7/16" (36 mm) TO
FRAME DIMENSION AT SILL.

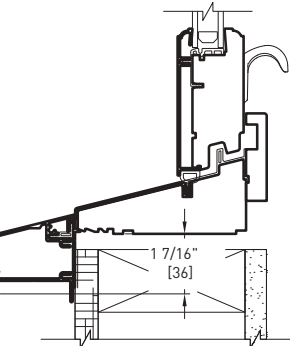


HERITAGE SILL NOSE.
ADD 2 1/16" (52 mm)
TO FRAME DIMENSION AT SILL.

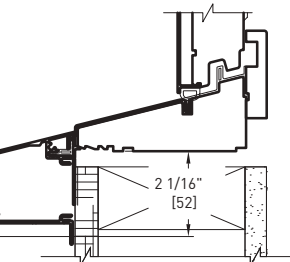
ADAMS CASING.
ADD 3 3/16" (81 mm)
TO FRAME DIMENSIONS
AT HEAD & SIDES.



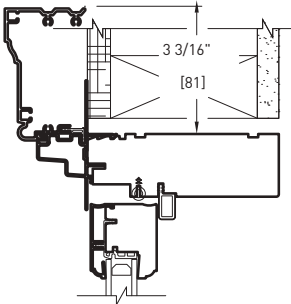
BC SILL NOSE.
ADD 1 7/16" (36 mm) TO
FRAME DIMENSION AT SILL.



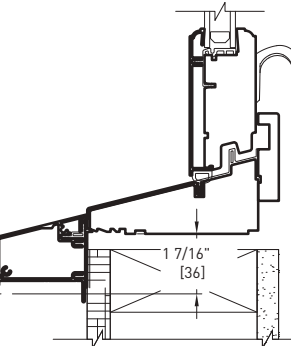
HERITAGE SILL NOSE.
ADD 2 1/16" (52 mm)
TO FRAME DIMENSION AT SILL.



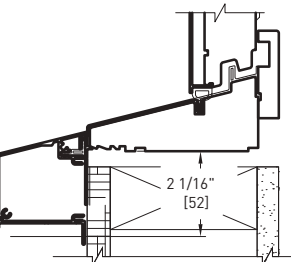
WILLIAMSBURG CASING.
ADD 3 3/16" (81 mm)
TO FRAME DIMENSIONS
AT HEAD & SIDES.



BC SILL NOSE.
ADD 1 7/16" (36 mm) TO
FRAME DIMENSION AT SILL.



HERITAGE SILL NOSE.
ADD 2 1/16" (52 mm)
TO FRAME DIMENSION AT SILL.



EXAMPLE #1: DH1 2828 with Frame Cladding Only & Standard sill nose.
Frame dimensions, 33 1/16" (859 mm) x 64 1/14" (1632 mm).
Masonry width = 33 13/16" (859 mm) + [3/16" (5 mm) x 2] = 34 3/16" (869 mm)
Masonry height = 64 1/14" (1632 mm) + 3/16" (5 mm) + 13/16" (21 mm) = 65 1/4" (1658 mm)

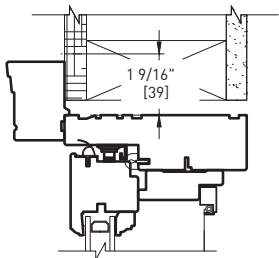
EXAMPLE #2: DH1 3238 with Nose & Cove casing & Heritage sill nose.
Frame dimensions, 37 13/16" (961 mm) x 84 1/4" (2140 mm).
Masonry width = 37 13/16" (961 mm) + [1 9/16" (40 mm) x 2] = 40 15/16" (1041 mm)
Masonry height = 84 1/4" (2140 mm) + 1 9/16" (40 mm) + 2 1/16" (52 mm) = 87 7/8" (2232 mm)

Note: • Other jamb widths available.

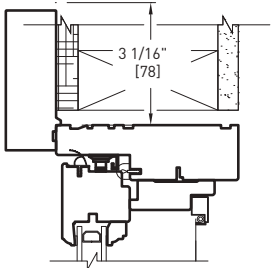
MASONRY OPENING
WOOD EXTERIOR

CASING OPTIONS

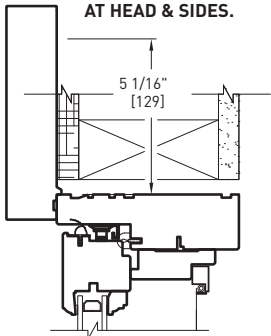
2" BRICKMOULD.
ADD 1 9/16" (39 mm) TO FRAME
DIMENSIONS AT HEAD & SIDES.



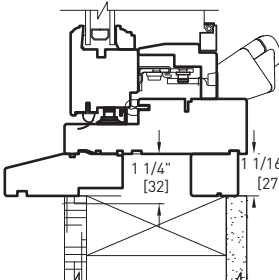
3 1/2" FLAT CASING.
ADD 3 3/16" (78 mm) TO FRAME
DIMENSIONS AT HEAD & SIDES.



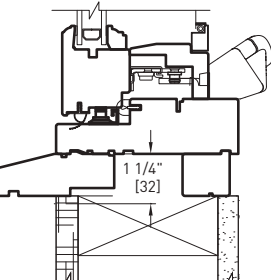
5 1/2" FLAT CASING.
ADD 5 1/16" (129 mm)
TO FRAME DIMENSIONS
AT HEAD & SIDES.



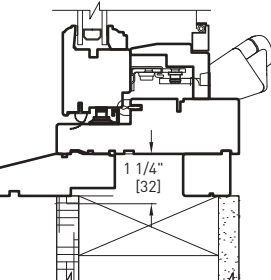
SILL NOSE
OPTIONS



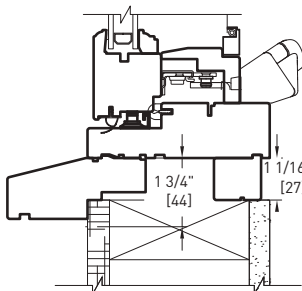
STANDARD SUB SILL.
ADD 1 1/4" (32 mm) TO
FRAME DIMENSION AT SILL.



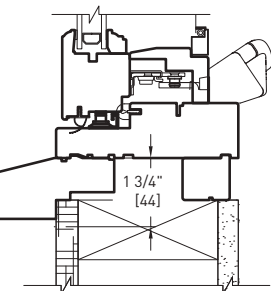
STANDARD SUB SILL.
ADD 1 1/4" (32 mm) TO
FRAME DIMENSION AT SILL.



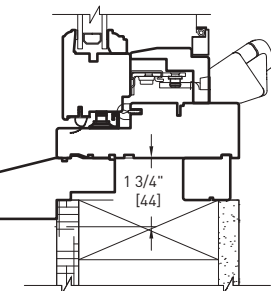
STANDARD SUB SILL.
ADD 1 1/4" (32 mm) TO
FRAME DIMENSION AT SILL.



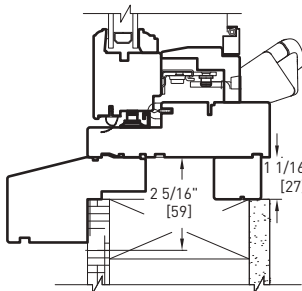
BC SUB SILL.
ADD 1 3/4" (44 mm) TO
FRAME DIMENSION AT SILL.



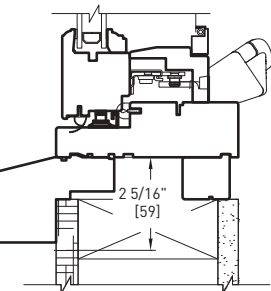
BC SUB SILL.
ADD 1 3/4" (44 mm) TO
FRAME DIMENSION AT SILL.



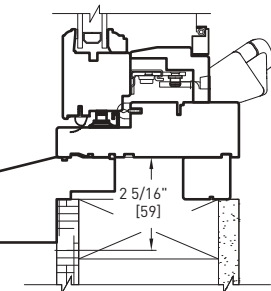
BC SUB SILL.
ADD 1 3/4" (44 mm) TO
FRAME DIMENSION AT SILL.



HERITAGE SUB SILL.
ADD 2 5/16" (59 mm) TO
FRAME DIMENSION AT SILL.



HERITAGE SUB SILL.
ADD 2 5/16" (59 mm) TO
FRAME DIMENSION AT SILL.



HERITAGE SUB SILL.
ADD 2 5/16" (59 mm) TO
FRAME DIMENSION AT SILL.

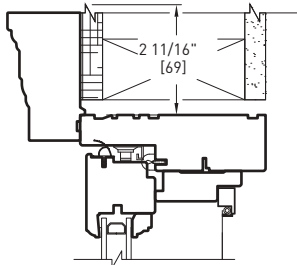
Note: • Other jamb widths available.

Information is subject to change without notice. | CAD Download: www.loewen.com/architect | Installation Instructions: www.loewen.com

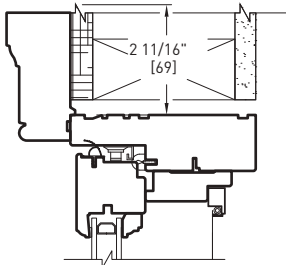
MASONRY OPENING
WOOD EXTERIOR

CASING OPTIONS

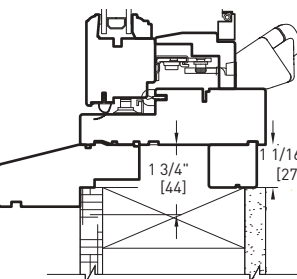
ADAMS CASING.
ADD 2 11/16" (69 mm)
TO FRAME DIMENSIONS
AT HEAD & SIDES.



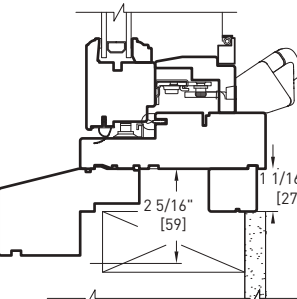
WILLIAMSBURG CASING.
ADD 2 11/16" (69 mm)
TO FRAME DIMENSIONS
AT HEAD & SIDES.



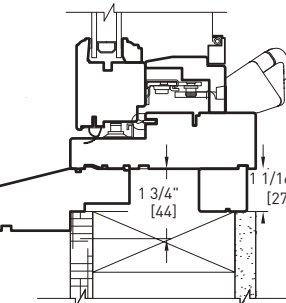
SUB SILL OPTIONS



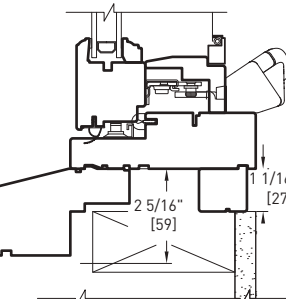
BC SUB SILL.
ADD 1 3/4" (44 mm) TO FRAME
DIMENSION AT SILL.



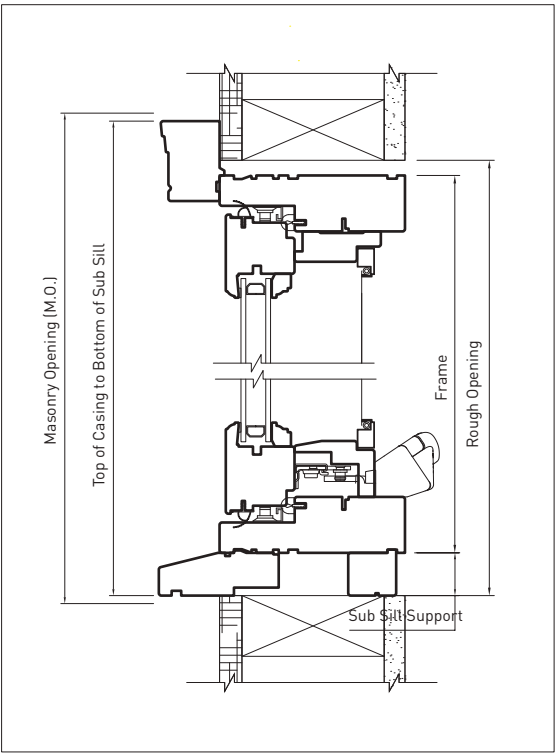
HERITAGE SUB SILL.
ADD 2 5/16" (59 mm) TO
FRAME DIMENSION AT SILL.



BC SUB SILL.
ADD 1 3/4" (44 mm) TO FRAME
DIMENSION AT SILL.



HERITAGE SUB SILL.
ADD 2 5/16" (59 mm) TO
FRAME DIMENSION AT SILL.



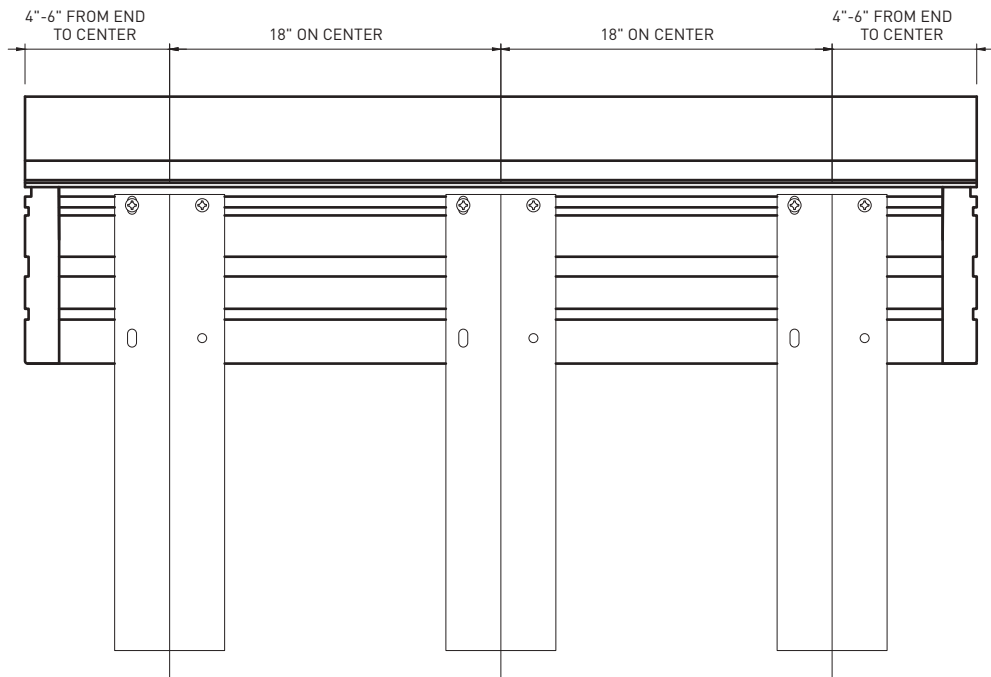
EXAMPLE #1: CA1 7515 with 2" Brickmould & Standard sill nose.
Frame dimensions, 29 1/2" (750mm) x 59 1/16" (1500mm).
Masonry width = 29 1/2" (750mm) + [1 9/16" (39mm) x 2] = 32 5/8" (828mm)
Masonry height = 59 1/16" (1500mm) + 1 9/16" (39mm) + 1 1/4" (32mm) = 61 15/16" (1571mm)

EXAMPLE #2: CA1 0918 with Adams casing & BC sill nose.
Frame dimensions, 35 7/16" (900mm) x 70 7/8" (1800mm).
Masonry width = 35 7/16" (900mm) + [2 11/16" (69mm) x 2] = 40 13/16" (1038mm)
Masonry height = 70 7/8" (1800mm) + 2 11/16" (69mm) + 1 3/4" (44mm) = 75 5/16" (1913mm)

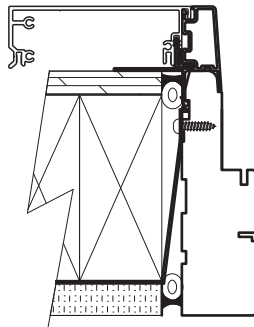
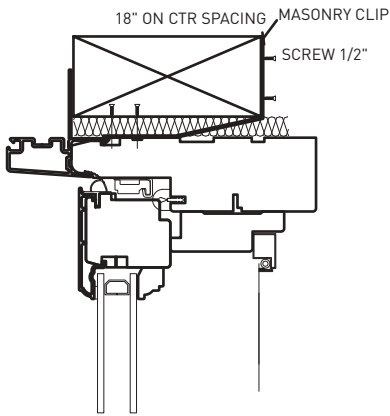
Note: • Other jamb widths available.

Information is subject to change without notice. | CAD Download: www.loewen.com/architect | Installation Instructions: www.loewen.com

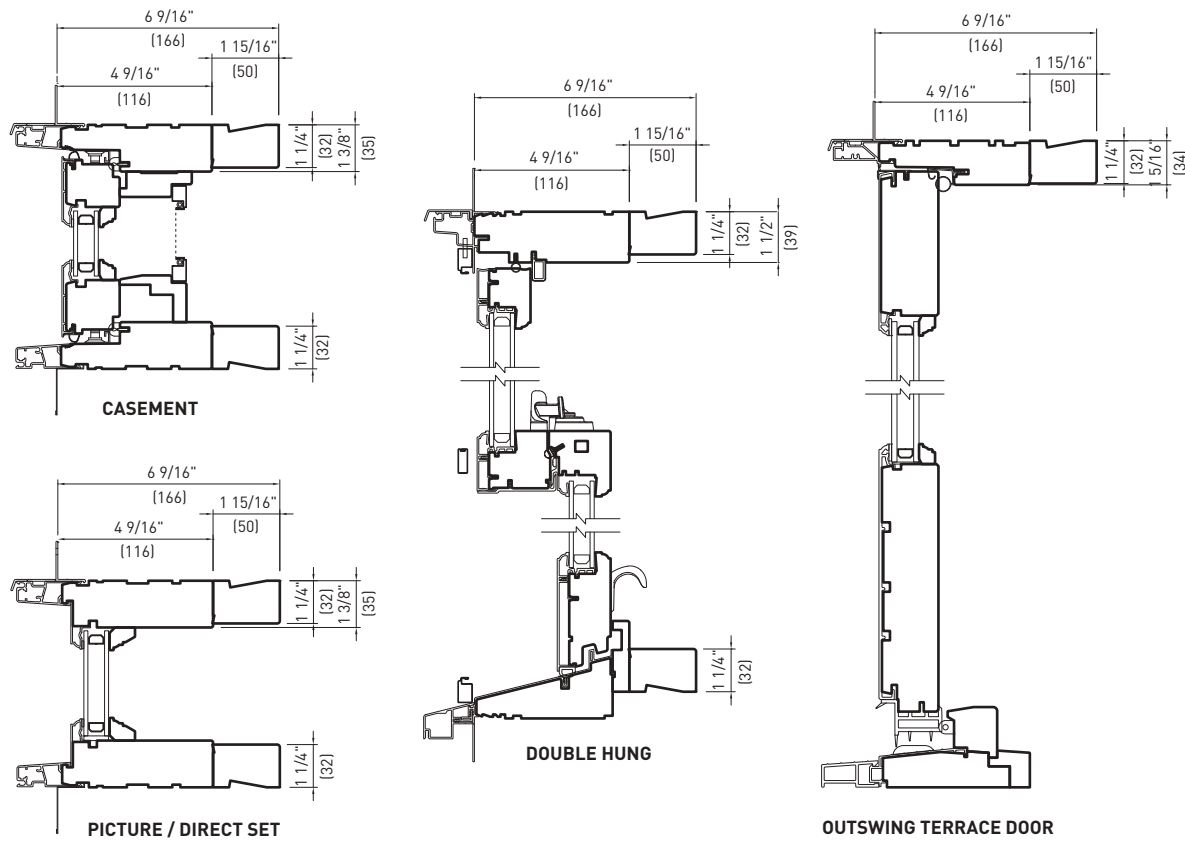
MASONRY CLIP INSTALLATION
UNIVERSAL



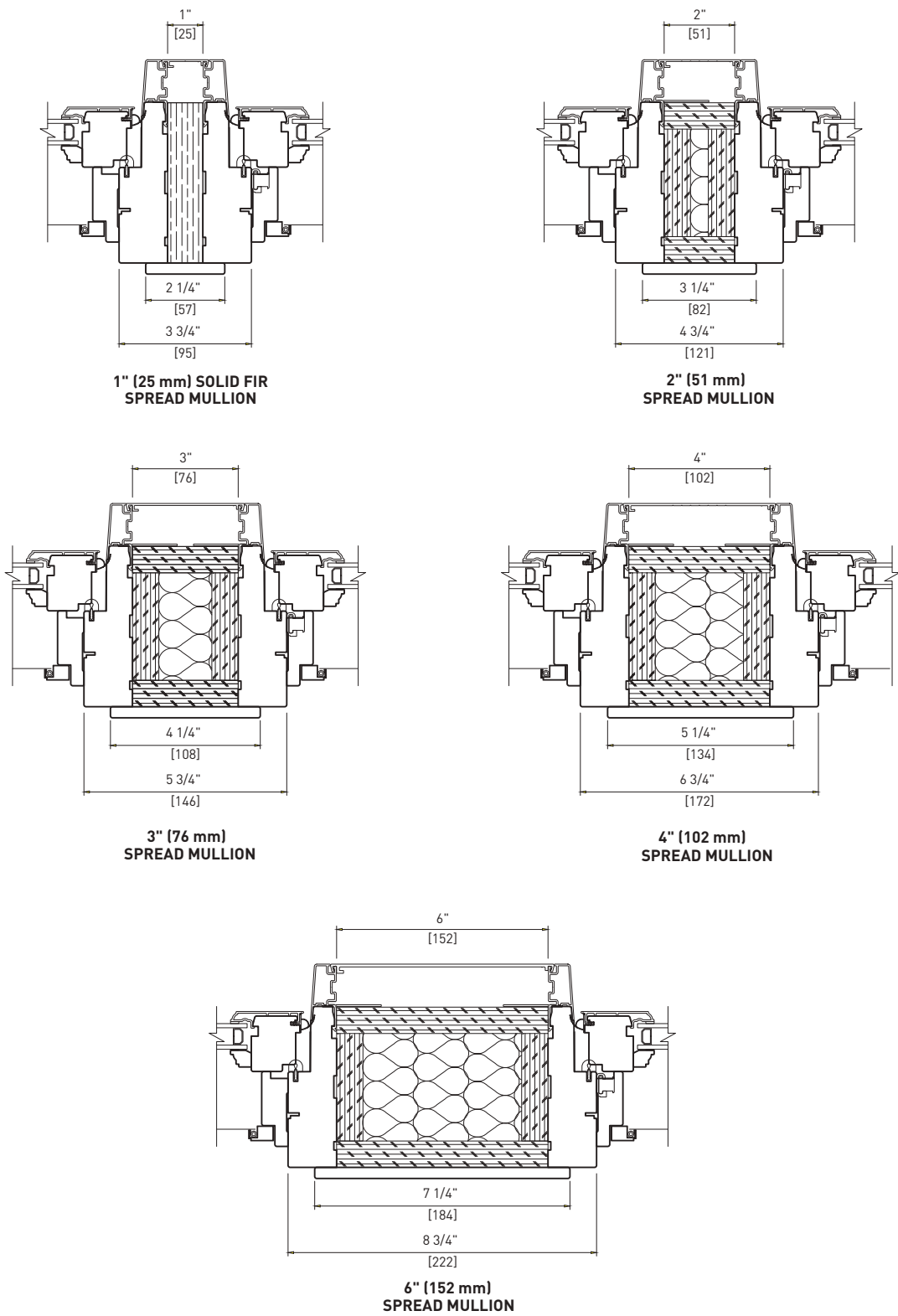
1. Start installation of masonry clips 4" to 6" from the ends of the unit to the center of the clip.
2. After placing both of the outermost clips on the unit, install the remainder of the clips moving inward to the center of the unit, placing each clip approximately 18" on center.
3. Fasten clips to unit using two 5/8" #8 Panhead screws.



32MM JAMB EXTENSION (1 1/4")



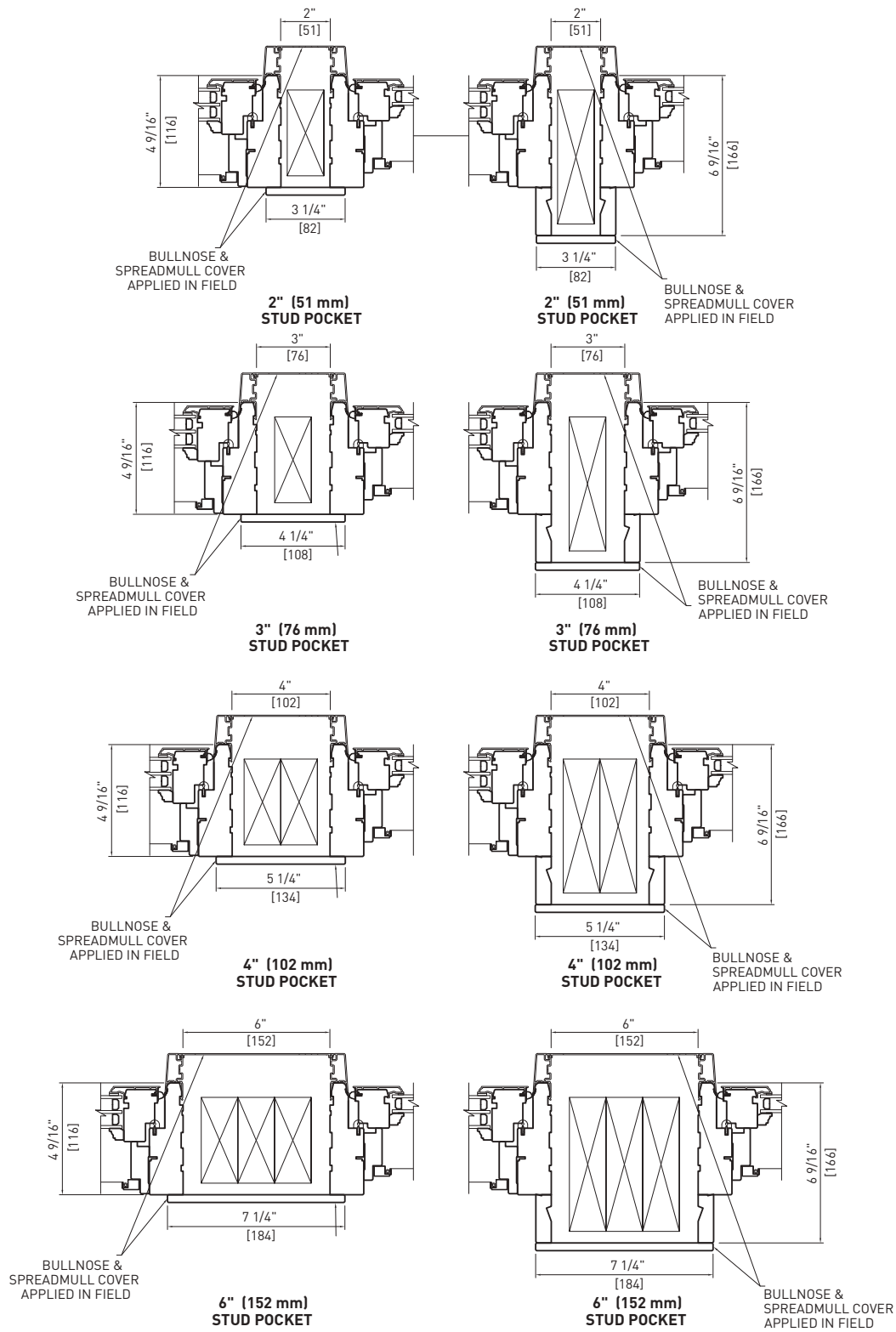
METAL CLAD
SPREAD MULLIONS



Note:

- Other jamb widths available.
- All dimensions to have +/- 1/16" (2 mm) tolerance.

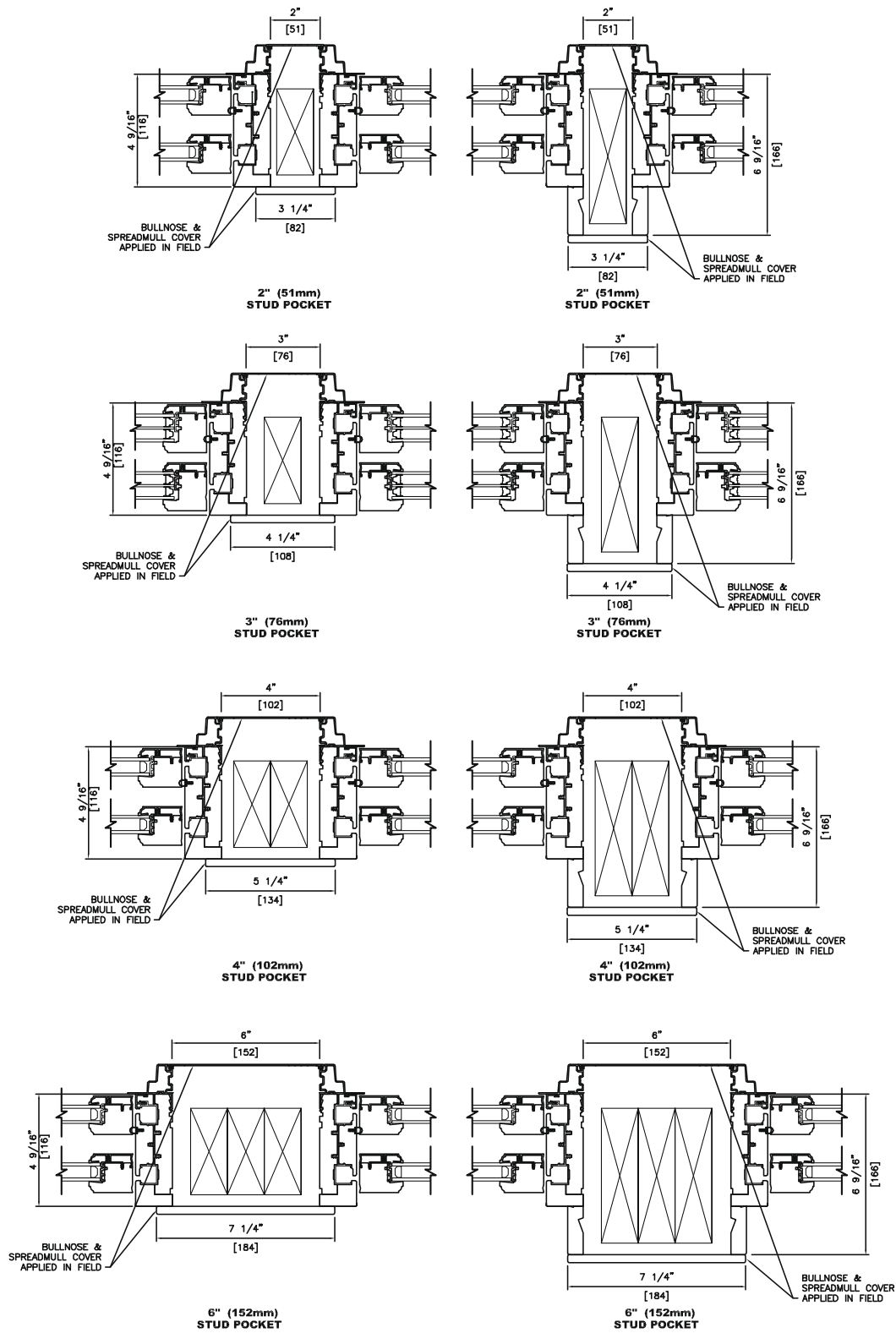
METAL CLAD STUD POCKET
DETAIL



Note:

- Other jamb widths available.
- All dimensions to have +/- 1/16" (2 mm) tolerance.
- Framing member designed and supplied by others.

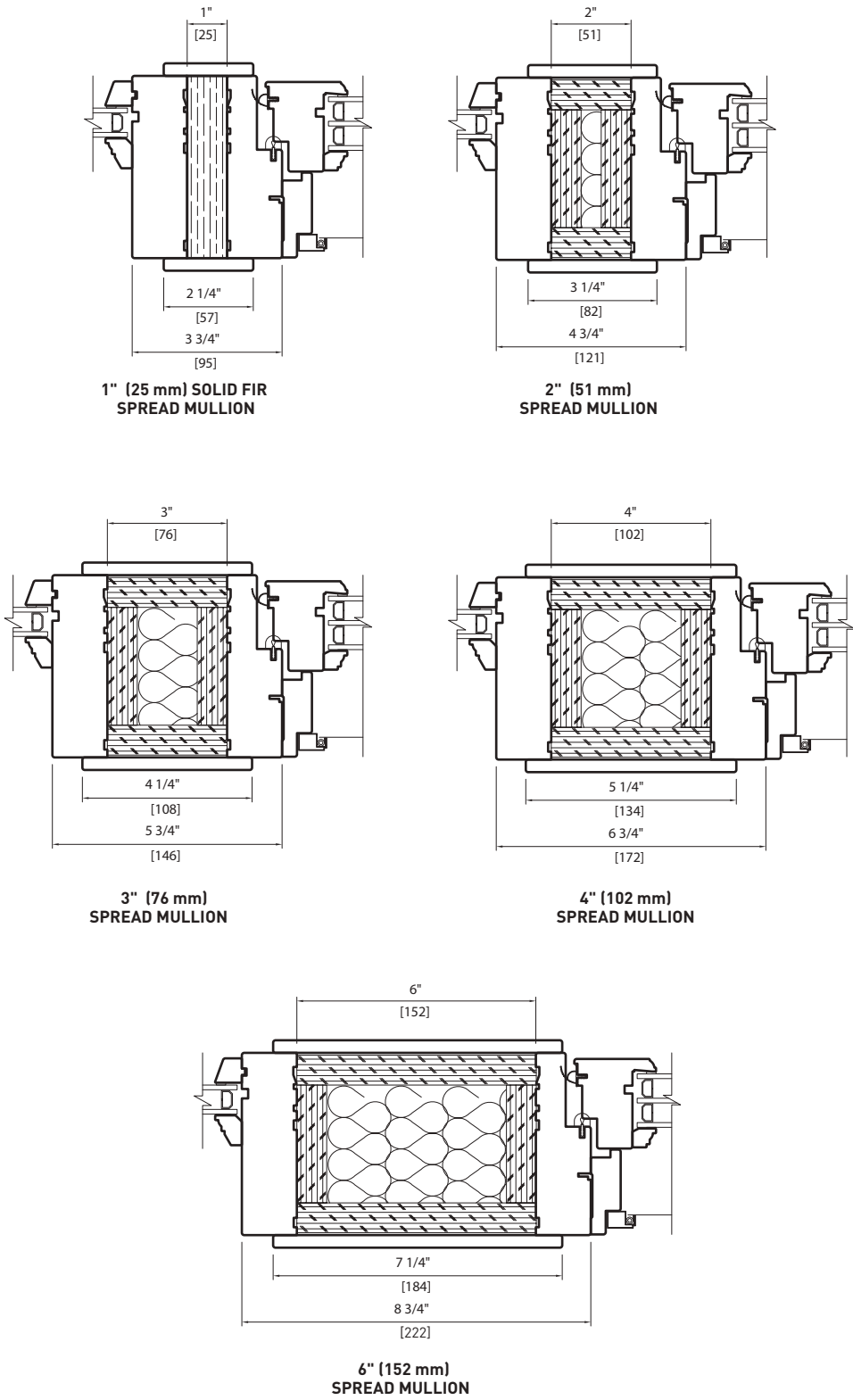
METAL CLAD STUD POCKET
DETAIL - DOUBLE HUNG



Note:

- Other jamb widths available.
- All dimensions to have +/- 1/16" [2 mm] tolerance.
- Framing member designed and supplied by others.

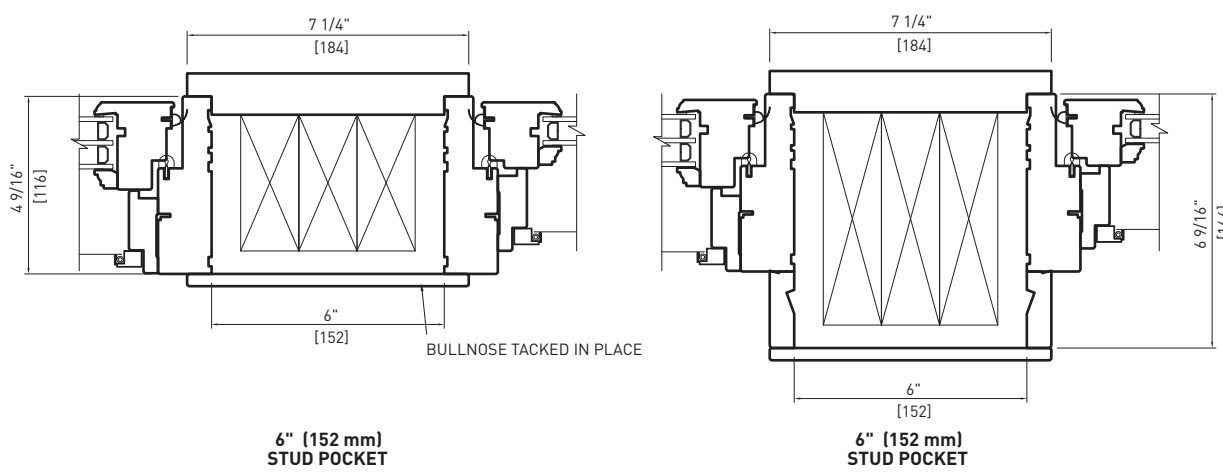
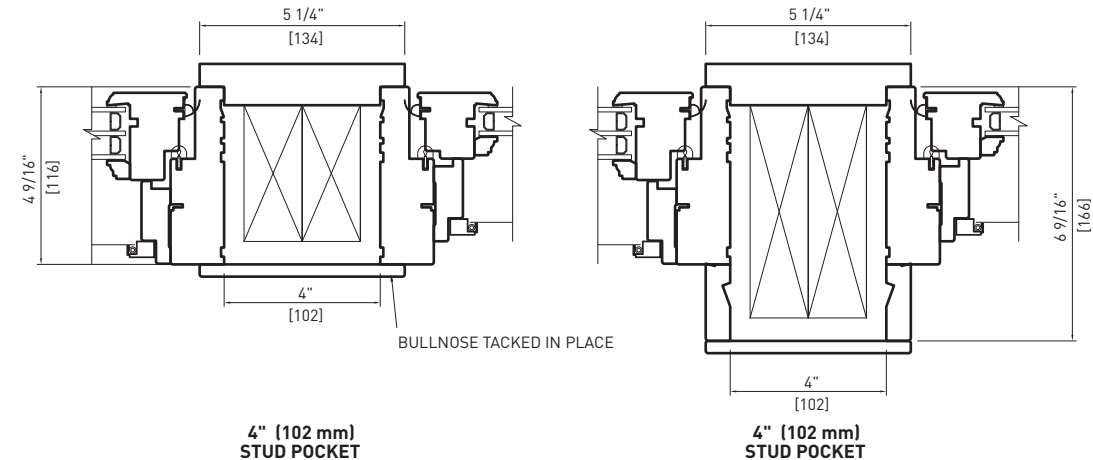
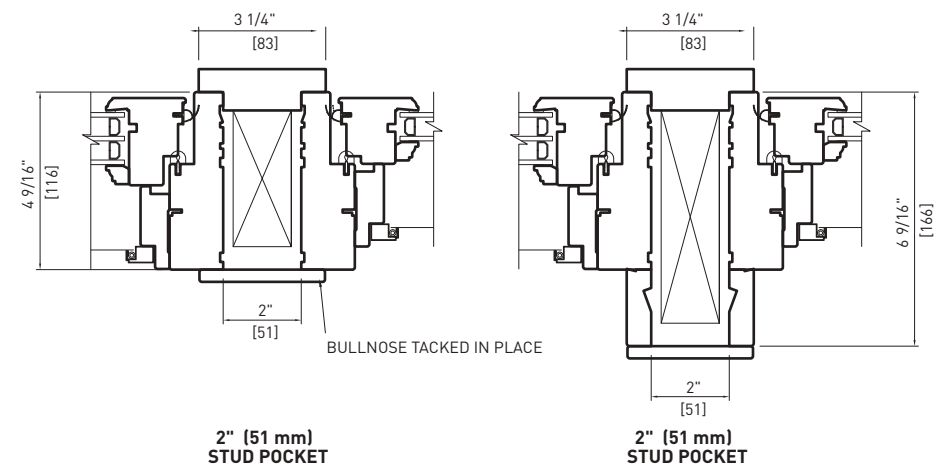
WOOD EXTERIOR SPREAD
MULLIONS



Note:

- Other jamb widths available.
- All dimensions to have +/- 1/16" [2 mm] tolerance.

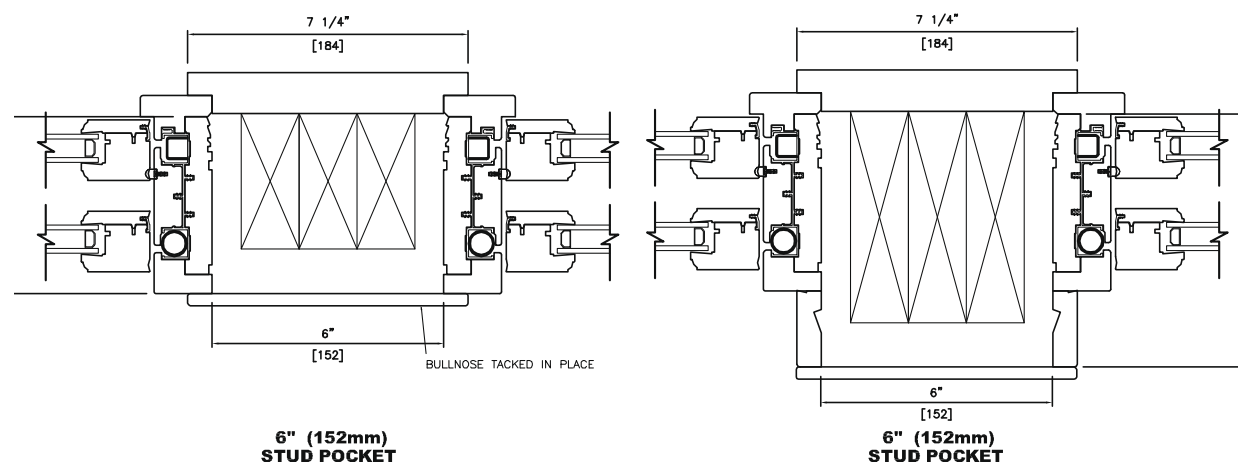
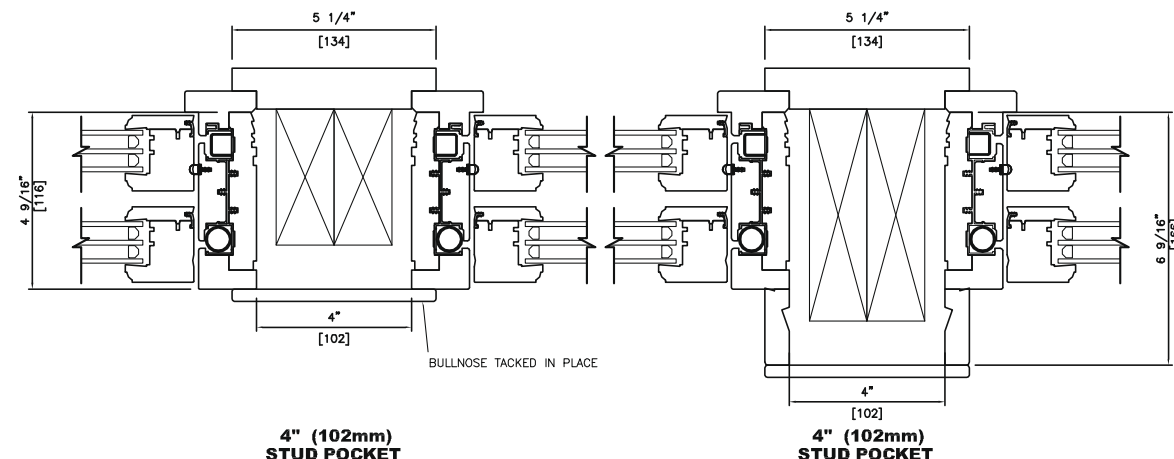
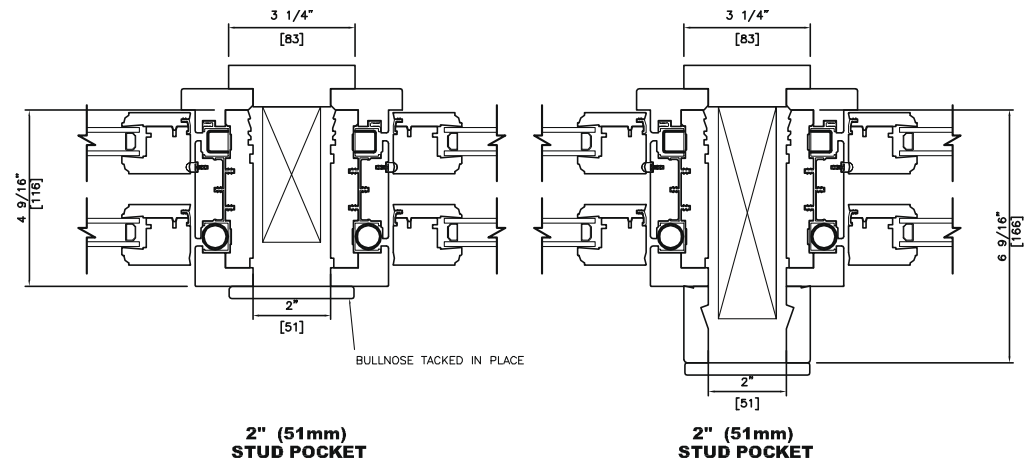
WOOD EXTERIOR STUD POCKET
DETAIL



Note:

- Other jamb widths available.
- All dimensions to have +/- 1/16" [2 mm] tolerance.
- Framing member designed and supplied by others.

WOOD EXTERIOR STUD POCKET
DETAIL - DOUBLE HUNG



Note:

- Other jamb widths available.
- All dimensions to have +/- 1/16" [2 mm] tolerance.
- Framing member designed and supplied by others.

