



Loewen

StormForce™ Technical Guide

Details, Sizing & Specifications

Elevate.

Every project begins with an innate desire to create something great.

History

Founded in 1905, Loewen has earned 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.



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Select standard window and door configurations are represented in this Loewen Window & Door Technical Guide. Numerous custom opportunities exist. Please contact your Authorized Loewen Dealer.

Information in this guide subject to change without notice.

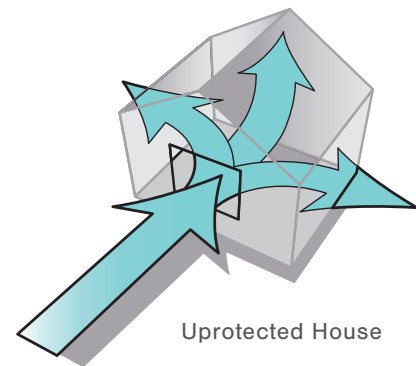
StormForce Series

Maximum Protection From Coastal Environments

Loewen StormForce products take the performance of our standard windows and doors to the extreme, maximum coastal protection - purposely designed to withstand all of nature's harshest elements - hurricanes, tropical storms, high winds, driving rain, sweltering heat and freezing cold.

StormForce is available in Casement, Awning, Picture/Direct Set, Specialty Windows, Double/Single Hung, Patio Doors, Terrace Doors and LiftSlide Doors.

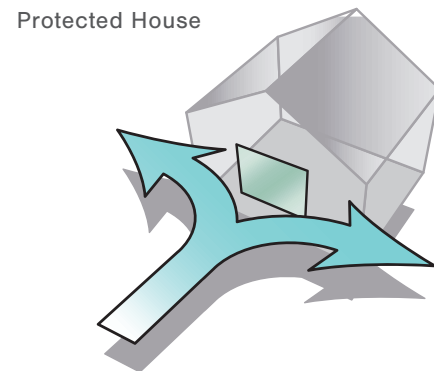
For the best performance, to enhance our woods' high natural resistance to moisture absorption, decay and insect infestation, every Loewen wood component is treated with a water repellent/wood preservative sealant before assembly.



Windborne wreckage can impact homes during windstorms and hurricanes, with gusting, pervasive winds to follow. To protect the integrity and interior of homes, windows and doors must resist penetration and remain in place and intact.

Impact designed laminated-glass windows and doors pass windborne debris impact tests, and even when broken, the glass fragments remain integral, adhering to the plastic interlayer, to preserve the building envelope.

With impact products rated up to DP 85, Loewen's superior design is able to withstand 9,000 cycles of positive and negative wind loading, 105 psf structural loading and the impact of a D-Missile* test.



*D-Missile certified products are tested to withstand impact from a 9 pound 2 x 4 stud, 8 feet in length, at an impact speed of 50 feet/second. Products are then tested to withstand 9,000 positive and negative wind loading cycles without failure of the building envelope.

All components in a StormForce window or door provide a number of additional benefits: enhanced security, excellent ultraviolet ray protection and increased sound attenuation.



Fenestration structurally enhanced to meet - and exceed - international residential code, Florida Building Code and other coastal requirements, including the stringent Dade County certification. 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.

StormForce delivers impact resistance, and superior thermal performance in an insulated glazing configuration with laminated glass products. StormForce frames and IG units are weather proof against all water and air infiltration and the energy efficient design meets specific regional building codes for U-Values in coastal areas from New York to Texas.



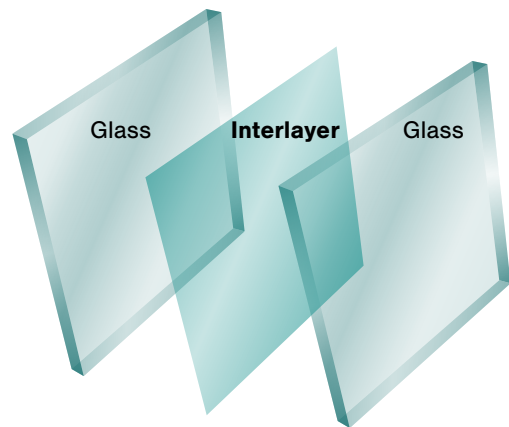
Florida Building Code

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.

StormForce Impact Glazing

All Loewen StormForce products use industry leading laminated glass produced by bonding a combination of plastic vinyl layers and polyester film between two panes of glass into a single sheet. Laminated glass has the look of ordinary glass but offers a fortification against accidental impact, forced entry, sun damage and noise that far surpasses that of standard glass.

Glazing options on Impact products include PVB and SGP in clear layers.



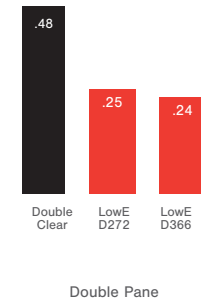
LowE Window Systems

LowE 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. LowE is a high-performance glazing system that offers great thermal value in a variety of climate zones.

LowE Compared With Clear Double Glass Units

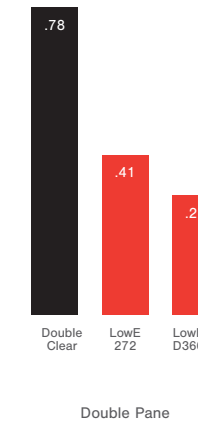
U-Value*

This chart illustrates the resistance of heat transfer through the glass. Lower U-Value indicates greater insulating capabilities. U-Value measured at center of glass.



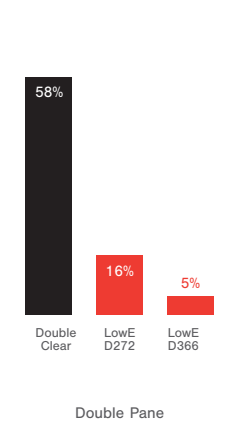
Solar Heat Gain (SHGC)*

This chart measures the ratio of solar heat gain through a glazing system compared to an unobstructed opening.



UV Transmittance*

This chart measures the percentage of ultraviolet radiated wavelengths allowed to be transmitted through the glazing system.



*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.

LowE Coating Options

We offer as many glazing configurations and LowE 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 (LoE3366)

LoE³ – 340 Ultimate Solar Control

- Greatly reduces oppressive solar heat gain & glare
- Best insulator (low u-value)
- Three layers of silver (LoE3340)

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 (LoE2272)

LoE – 180 Passive Solar Gain

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

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

StormForce Windows



For beautiful windows that can protect from environmental hazards and come in all custom sizes and shapes Loewen StormForce is the correct choice. Is year-round, all-season thermal protection a must have? StormForce can also be made with insulating glass and tinted configurations. This will reduce the total window U-factor, protecting against unwanted heat loss during seasons of cooler temperatures.

StormForce Awning & Casement Windows

Loewen pushout and rotogear operating windows provide superior ventilation and easy operation. Casements provide one of the highest thermal performance ratings of any operating window style. Loewen makes six distinct styles of AW/CA windows, and are available in specialty shapes.

StormForce Picture & Specialty

Loewen picture windows are designed for maximum views with a minimum of wood framework. The ideal combination of view and ventilation can be created by pairing non-operating units with awning and casement windows. Picture units can be built in a variety of different shapes.

Highlights:

- Maximum coastal protection - purposely designed to withstand all of nature's harshest elements - hurricanes, tropical storms, high winds, driving rain, sweltering heat and freezing cold.
- Unseen structural upgrades - no unsightly brackets or locks commonly seen on coastal products.
- Versatile and enhanced styling - wood interior standard with the choice of extruded aluminum cladding.
- Integrated structural sill block and metal nailing flange allows for maximum protection against water infiltration.
- Thermally broken aluminum sill and glazing options for maximum energy efficiency.
- Flexible bulb weather seal for optimal performance.

StormForce Double Hung Windows

Loewen Double Hung windows have been designed to complement the depth and character of the traditional North American home. We've combined superior strength and durability with maximum coastal protection and innovative efficiency options to deliver a window that has the progressive performance.

Highlights:

- Innovative balance system allows window to open and close smoothly.
- Single-handed lock/tilt mechanism allows for inward tilting of the sash for easy cleaning.
- Heavy meet rail improves performance when struck by a D-Missile.
- Interlock system and integral sill block details enhance the structural integrity of the window.



Product Model	FL #	Dual IG Glazing	Monolithic Glazing	Douglas Fir	Mahogany	Rectrangular	Cambertop	1/2 Round	1/4 Round	Full Round	Extended 1/2	Extended 1/4	Oval	Elliptical
Awning (AW)	13351	•		•	•	•								
	17485	•		•	•	•								
Push Out Awning (PAW)	13351	•		•	•	•								
Casement (CA)	13104	•	•	•	•	•	•				•	•		
Push Out Casement (PCA)	13104	•	•	•	•	•	•				•	•		
Casement Fixed (CAF)	13484	•		•	•	•	•	•	•	•	•	•	•	•
Picture (PS)	19052	•		•	•	•	•	•	•	•	•	•	•	•
Double Hung 'Liberty' (DH)	14692	•		•	•	•								
Single Hung 'Liberty' (SH)	14693	•		•	•	•	•				•			
Double Hung Fixed (DF)	14694	•		•	•	•	•	•			•	•		
Double Hung Transom (DT)	14695	•		•	•	•	•	•			•	•		

StormForce Doors



Loewen StormForce Door Panels combine rugged performance with architectural versatility. Available in Swinging Terrace and French Terrace Doors, Sliding Patio & French Patio Doors and LiftSlide Doors with all the features required for coastal protection with legendary Loewen Douglas Fir or Mahogany construction. StormForce doors equipped with standard multi-point hardware and stainless steel exposed components provide robust security and superior environmental performance.



StormForce LiftSlide Doors

The Loewen LiftSlide allows expansive glass panels to roll smoothly and easily during operation. With the touch of a hand, the LiftSlide mechanism rotates down to seal against water infiltration. LiftSlide Doors can be located in areas of extreme exposure where homeowners want a coastline, mountain or lake front vistas with minimal sightline interference.

With the high structural integrity and performance of LiftSlide doors, only raised threshold is available in StormForce For superior water protection an additional sill riser is available.

Liftslide Rails And Stiles are comprised of an aluminum/wood hybrid. Opening panels are equipped with 3G corrosion resistant stainless steel wheel assemblies with flat deformation resistant wheels and precision bearings.

- Aircraft grade aluminum extrusions with VG Douglas Fir or Mahogany interior.
- Aluminum corrosion resistant track with integral drains.
- Robust hardware can handle a maximum weight of 850 lbs per panel.



StormForce Terrace & French Terrace Doors

Traditional Terrace Doors hinge on the jamb so that one panel is fixed and the other operates. By contrast, French Terrace Doors are hinged on the outside to allow both doors to operate from the middle. Outswing versions of both styles are available as additional protection options.

Handle-activated stainless steel head and sill shoot bolts are standard with StormForce series. Additional lock points increase structural air/water performance and provide added security.

- Insulated sealed unit provides energy efficiency as well as impact resistance.
- Stainless steel support plates on top and bottom panels enhance structural integrity.
- Thick interlayer designed to resist Zone 3 D-Missile impact.
- Utilizes five-point stainless steel locking system, stainless steel strike plates and a sturdy astragal for superior impact performance.
- Tall sill enhances protection against water infiltration.



StormForce Sliding Patio Doors

Loewen Sliding Patio doors can open up the walls for larger living space. StormForce doors are weatherproof, safe, secure and easy to operate. Loewen uses laminated sash construction, thick, tempered safety glass and smooth tandem rollers. For added protection, Loewen builds an anti-lift device into every patio door. An optional foot lock is also available, as is manual three-point hardware.

- Anti-lift device.
- Zero clearance required.
- Standard integral sliding screens available.
- Standard multi-point locking hardware & foot lock mechanism.
- 2 1/4" thick sliding panels.
- Silicone-treated, woven pile and foam-filled Q-lon weatherstripping system.



Product Model	FL #	Dual IG Glazing	Monolithic Glazing	Douglas Fir	Mahogany	Mid Rail	Rectrangular	Cambertop	1/2 Round	Extended 1/2	Extended 1/4
Sliding Patio (WP2)	12531	•		•	•		•				
Sliding French Patio (FP2)	13103	•		•	•		•				
Terrace Outswing (TD1)	14369	•	•	•	•	•	•	•		•	•
Terrace Outswing (TD2) Hinged on jamb side	14369	•	•	•	•		•	•		•	•
Terrace Fixed Outswing (TDF)	14369	•	•	•	•	•	•	•		•	•
Terrace Inswing (TD1)	17221	•		•	•		•				
French Terrace Outswing (FD2)	14369	•	•	•	•	•	•	•		•	•
French Terrace Outswing (FD2) 1/2 Round	14369	•	•	•	•	•	•	•		•	•
French Terrace Inswing (FD2)	17221	•		•	•		•				
Terrace Transom (TDT1 or TDT2) 10' included	14370	•	•	•	•		•	•	•	•	
French Terrace Transom (FDT2) 10' included	14370	•	•	•	•		•	•	•	•	
10' Terrace Outswing (TD1)	14367	•	•	•	•		•				
10' Terrace Outswing (TD2) Hinged on jamb side.	14367	•	•	•	•		•				
10' French Terrace Outswing (FD2)	14367	•	•	•	•		•				
LiftSlide (per panel)	13353	•	•	•	•		•				

Color & Cladding

Superior Aluminum 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 airspace 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 many sizes and shapes
- Deliver unequaled environmental durability
- Provide a stable substrate that enhances colorfast paint performance

AAMA 2605 / 70% Kynar Finishes

Loewen's paint formula includes 70% Kynar 500 PVDF (polyvinylidene fluoride) resin, which offers the greatest resistance to weathering, fading and chalking. This ensures a beautiful finish that will last when cared for properly. With excellent appearance and durability, these paints meet the specifications of the American Architectural Manufacturers Association (AAMA) 2605.

Also available:

- Anodized Aluminum
- Cyprium Copper
- Cyprium Bronze



Window & Door 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.



Divided Lites & Grilles

Simulated Divided Lite (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.

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.



The Warranty

Support, Consideration and Service

Our solid warranty is the written proof of our commitment to quality. Loewen windows and doors are made to last, and we have always stood behind our product with unsurpassed support, followup, and service.

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.

20³

20/20/20
WARRANTY

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

Visit loewen.com for complete details.

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.
- Full 2 years labor warranty.

Competition Warranties

- May promote a longer warranty even if it is limited or not inclusive for all parts.
- May be prorated warranties that reduce the manufacturer's liability as the product ages.
- Vinyl and wood fiber clad exteriors 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.

StormForce Casement Window Sizes

Rough Opening	Width							
	16 1/2" 419	20 7/16" 519	24 3/8" 619	28 5/16" 719	30 1/4" 769	32 1/4" 819	36 3/16" 919	
	Frame							
	15 3/4" 400	19 11/16" 500	23 5/8" 600	27 9/16" 700	29 1/2" 750	31 1/2" 800	35 7/16" 900	
	Visible Glass							
	9 3/4" 247	13 11/16" 347	17 5/8" 447	21 9/16" 547	23 1/2" 597	25 1/2" 647	29 7/16" 747	
24 3/8" 619	23 5/8" 600	17 3/8" 442	CA1 0406	CA1 0506	CA1 0606	CA1 0706	CA1 7506	
28 5/16" 719	27 9/16" 700	21 5/16" 542	CA1 0407	CA1 0507	CA1 0607	CA1 0707	CA1 7507	CA1 0807
30 1/4" 769	29 1/2" 750	23 5/16" 592	CA1 0475	CA1 0575	CA1 0675	CA1 0775	CA1 7575	CA1 0875
32 1/4" 819	31 1/2" 800	25 1/4" 642	CA1 0408	CA1 0508	CA1 0608	CA1 0708	CA1 7508	CA1 0808
36 3/16" 919	35 7/16" 900	29 3/16" 742	CA1 0409	CA1 0509	CA1 0609	CA1 0709	CA1 7509	CA1 0809
40 1/8" 1019	39 3/8" 1000	33 1/8" 842	CA1 0410	CA1 0510	CA1 0610	CA1 0710	CA1 7510	CA1 0810
42" 1067	41 1/4" 1048	35 1/16" 890	CA1 0411	CA1 0511	CA1 0611	CA1 0711	CA1 7511	CA1 0811
48" 1219	47 1/4" 1200	41" 1042	CA1 0412	CA1 0512	CA1 0612	CA1 0712	CA1 7512	CA1 0812
55 7/8" 1419	55 1/8" 1400	48 7/8" 1242	CA1 0414	CA1 0514	CA1 0614	CA1 0714	CA1 7514	CA1 0814
59 13/16" 1519	59 1/16" 1500	52 13/16" 1342	CA1 0415	CA1 0515	CA1 0615	CA1 0715	CA1 7515	CA1 0815
63 3/4" 1619	63" 1600	56 3/4" 1442	CA1 0416	CA1 0516	CA1 0616	CA1 0716	CA1 7516	CA1 0816
71 5/8" 1819	70 7/8" 1800	64 5/8" 1642	CA1 0418	CA1 0518	CA1 0618	CA1 0718	CA1 7518	CA1 0818

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

US & Canadian Egress

Canadian Egress

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with sash moulding matching Push Out mouldings.
 - Sizes are shown as Impact IG.

StormForce Fixed Casement Window Sizes

Rough Opening	Width									
	16 1/2" 419	20 7/16" 519	24 3/8" 619	28 5/16" 719	30 1/4" 769	32 1/4" 819	36 3/16" 919	40 1/8" 1019	42" 1067	
	Frame									
	15 3/4" 400	19 11/16" 500	23 5/8" 600	27 9/16" 700	29 1/2" 750	31 1/2" 800	35 7/16" 900	39 3/8" 1000	41 1/4" 1048	
	Visible Glass									
	9 3/4" 247	13 11/16" 347	17 5/8" 447	21 9/16" 547	23 1/2" 597	25 1/2" 647	29 7/16" 747	33 3/8" 847	35 1/4" 895	
12 9/16" 319	11 13/16" 300	5 9/16" 142	CA1 0403	CA1 0503	CA1 0603	CA1 0703	CA1 7503	CA1 0803	CA1 0903	CA1 1003
16 1/2" 419	15 3/4" 400	9 1/2" 242	CA1 0404	CA1 0504	CA1 0604	CA1 0704	CA1 7504	CA1 0804	CA1 0904	CA1 1004
20 7/16" 519	19 11/16" 500	13 7/16" 342	CA1 0405	CA1 0505	CA1 0605	CA1 0705	CA1 7505	CA1 0805	CA1 0905	CA1 1005
24 3/8" 619	23 5/8" 600	17 3/8" 442	CA1 0406	CA1 0506	CA1 0606	CA1 0706	CA1 7506	CA1 0806	CA1 0906	CA1 1006
28 5/16" 719	27 9/16" 700	21 5/16" 542	CA1 0407	CA1 0507	CA1 0607	CA1 0707	CA1 7507	CA1 0807	CA1 0907	CA1 1007
30 1/4" 769	29 1/2" 750	23 5/16" 592	CA1 0475	CA1 0575	CA1 0675	CA1 0775	CA1 7575	CA1 0875	CA1 0975	CA1 1075
32 1/4" 819	31 1/2" 800	25 1/4" 642	CA1 0408	CA1 0508	CA1 0608	CA1 0708	CA1 7508	CA1 0808	CA1 0908	CA1 1008
36 3/16" 919	35 7/16" 900	29 3/16" 742	CA1 0409	CA1 0509	CA1 0609	CA1 0709	CA1 7509	CA1 0809	CA1 0909	CA1 1009
40 1/8" 1019	39 3/8" 1000	33 1/8" 842	CA1 0410	CA1 0510	CA1 0610	CA1 0710	CA1 7510	CA1 0810	CA1 0910	CA1 1010
42" 1067	41 1/4" 1048	35 1/16" 890	CA1 0411	CA1 0511	CA1 0611	CA1 0711	CA1 7511	CA1 0811	CA1 0911	CA1 1011
48" 1219	47 1/4" 1200	41" 1042	CA1 0412	CA1 0512	CA1 0612	CA1 0712	CA1 7512	CA1 0812	CA1 0912	CA1 1012
55 7/8" 1419	55 1/8" 1400	48 7/8" 1242	CA1 0414	CA1 0514	CA1 0614	CA1 0714	CA1 7514	CA1 0814	CA1 0914	CA1 1014
59 13/16" 1519	59 1/16" 1500	52 13/16" 1342	CA1 0415	CA1 0515	CA1 0615	CA1 0715	CA1 7515	CA1 0815	CA1 0915	CA1 1015
63 3/4" 1619	63" 1600	56 3/4" 1442	CA1 0416	CA1 0516	CA1 0616	CA1 0716	CA1 7516	CA1 0816	CA1 0916	CA1 1016
71 5/8" 1819	70 7/8" 1800	64 5/8" 1642	CA1 0418	CA1 0518	CA1 0618	CA1 0718	CA1 7518	CA1 0818	CA1 0918	CA1 1018
83 7/16" 2119	82 11/16" 2100	76 7/16" 1942	CA1 0421	CA1 0521	CA1 0621	CA1 0721	CA1 7521	CA1 0821	CA1 0921	CA1 1021
95 1/4" 2419	94 1/2" 2400	88 1/4" 2242			CA1 0624	CA1 0724	CA1 7524	CA1 0824	CA1 0924	CA1 1024

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

Only available with 10.1mm lami

Only available with 13.6mm lami

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with sash moulding matching Push Out mouldings.
 - Sizes are shown as Impact IG.

StormForce Fixed Casement Window Sizes (Cont.)

Rough Opening			Width							
			48" 1219	55 7/8" 1419	59 13/16" 1519	63 3/4" 1619	71 5/8" 1819	79 1/2" 2019	83 7/16" 2119	95 1/4" 2419
Frame			47 1/4" 1200	55 1/8" 1400	59 1/16" 1500	63" 1600	70 7/8" 1800	78 3/4" 2000	82 11/16" 2100	94 1/2" 2400
Visible Glass			41 1/4" 1047	49 1/8" 1247	53 1/16" 1347	56 15/16" 1447	64 13/16" 1647	72 11/16" 1847	76 5/8" 1947	88 7/16" 2247
12 9/16" 319	11 13/16" 300	5 9/16" 142	CA1 1203	CA1 1403	CA1 1503	CA1 1603	CA1 1803	CA1 2003		
16 1/2" 419	15 3/4" 400	9 1/2" 242	CA1 1204	CA1 1404	CA1 1504	CA1 1604	CA1 1804	CA1 2004		
20 7/16" 519	19 11/16" 500	13 7/16" 342	CA1 1205	CA1 1405	CA1 1505	CA1 1605	CA1 1805	CA1 2005		
24 3/8" 619	23 5/8" 600	17 3/8" 442	CA1 1206	CA1 1406	CA1 1506	CA1 1606	CA1 1806	CA1 2006	CA1 2106	CA1 2406
28 5/16" 719	27 9/16" 700	21 5/16" 542	CA1 1207	CA1 1407	CA1 1507	CA1 1607	CA1 1807	CA1 2007	CA1 2107	CA1 2407
30 1/4" 769	29 1/2" 750	23 5/16" 592	CA1 1275	CA1 1475	CA1 1575	CA1 1675	CA1 1875	CA1 2075	CA1 2175	CA1 2475
32 1/4" 819	31 1/2" 800	25 1/4" 642	CA1 1208	CA1 1408	CA1 1508	CA1 1608	CA1 1808	CA1 2008	CA1 2108	CA1 2408
36 3/16" 919	35 7/16" 900	29 3/16" 742	CA1 1209	CA1 1409	CA1 1509	CA1 1609	CA1 1809	CA1 2009	CA1 2109	CA1 2409
40 1/8" 1019	39 3/8" 1000	33 1/8" 842	CA1 1210	CA1 1410	CA1 1510	CA1 1610	CA1 1810	CA1 2010	CA1 2110	CA1 2410
42" 1067	41 1/4" 1048	35 1/16" 890	CA1 1211	CA1 1411	CA1 1511	CA1 1611	CA1 1811	CA1 2011	CA1 2111	CA1 2411
48" 1219	47 1/4" 1200	41" 1042	CA1 1212	CA1 1412	CA1 1512	CA1 1612	CA1 1812	CA1 2012	CA1 2112	CA1 2412
55 7/8" 1419	55 1/8" 1400	48 7/8" 1242	CA1 1214	CA1 1414	CA1 1514	CA1 1614	CA1 1814	CA1 2014	CA1 2114	CA1 2414
59 13/16" 1519	59 1/16" 1500	52 13/16" 1342	CA1 1215	CA1 1415	CA1 1515	CA1 1615	CA1 1815	CA1 2015	CA1 2115	CA1 2415
63 3/4" 1619	63" 1600	56 3/4" 1442	CA1 1216	CA1 1416	CA1 1516					
71 5/8" 1819	70 7/8" 1800	64 5/8" 1642	CA1 1218	CA1 1418	CA1 1518					
83 7/16" 2119	82 11/16" 2100	76 7/16" 1942	CA1 1221	CA1 1421	CA1 1521					
95 1/4" 2419	94 1/2" 2400	88 1/4" 2242	CA1 1224	CA1 1424	CA1 1524					

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with sash moulding matching Push Out mouldings.
 - Sizes are shown as Impact IG.

Only available with 10.1mm lami

Only available with 13.6mm lami

StormForce Cambertop Casement Window Sizes

Rough Opening			Width							
			16 1/2" 419	20 7/16" 519	24 3/8" 619	28 5/16" 719	30 1/4" 769	32 1/4" 819	36 3/16" 919	
Frame			15 3/4" 400	19 11/16" 500	23 5/8" 600	27 9/16" 700	29 1/2" 750	31 1/2" 800	35 7/16" 900	
Visible Glass			9 3/4" 247	13 11/16" 347	17 5/8" 447	21 9/16" 547	23 1/2" 597	25 1/2" 647	29 7/16" 747	
28 5/16" 719	27 9/16" 700	21 3/16" 538	CTC1 0407	CTC1 0507	CTC1 0607	CTC1 0707				
30 1/4" 769	29 1/2" 750	23 5/8" 588	CTC1 0475	CTC1 0575	CTC1 0675	CTC1 0775	CTC1 7575			
32 1/4" 819	31 1/2" 800	25 1/8" 638	CTC1 0408	CTC1 0508	CTC1 0608	CTC1 0708	CTC1 7508	CTC1 0808		
36 3/16" 919	35 7/16" 900	29 1/16" 738	CTC1 0409	CTC1 0509	CTC1 0609	CTC1 0709	CTC1 7509	CTC1 0809	CTC1 0909	
40 1/8" 1019	39 3/8" 1000	33" 838	CTC1 0410	CTC1 0510	CTC1 0610	CTC1 0710	CTC1 7510	CTC1 0810	CTC1 0910	
42" 1067	41 1/4" 1048	35 1/16" 890	CTC1 0411	CTC1 0511	CTC1 0611	CTC1 0711	CTC1 7511	CTC1 0811	CTC1 0911	
48" 1219	47 1/4" 1200	40 7/8" 1038	CTC1 0412	CTC1 0512	CTC1 0612	CTC1 0712	CTC1 7512	CTC1 0812	CTC1 0912	
55 7/8" 1419	55 1/8" 1400	48 3/4" 1238	CTC1 0414	CTC1 0514	CTC1 0614	CTC1 0714	CTC1 7514	CTC1 0814	CTC1 0914	
59 13/16" 1519	59 1/16" 1500	52 11/16" 1338	CTC1 0415	CTC1 0515	CTC1 0615	CTC1 0715	CTC1 7515	CTC1 0815	CTC1 0915	
63 3/4" 1619	63" 1600	56 5/8" 1438	CTC1 0416	CTC1 0516	CTC1 0616	CTC1 0716	CTC1 7516	CTC1 0816	CTC1 0916	
71 5/8" 1819	70 7/8" 1800	64 1/2" 1638	CTC1 0418	CTC1 0518	CTC1 0618	CTC1 0718	CTC1 7518	CTC1 0818	CTC1 0918	

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with sash moulding matching Push Out mouldings.
 - Sizes are shown as Impact IG.

StormForce Cambertop Casement Window Sizes

			Width				
Rough Opening			24 3/8" 619	28 5/16" 719	30 1/4" 769	32 1/4" 819	36 3/16" 919
Frame			23 5/8" 600	27 9/16" 700	29 1/2" 750	31 1/2" 800	35 7/16" 900
Visible Glass			17 5/8" 447	21 9/16" 547	23 1/2" 597	25 1/2" 647	29 7/16" 747
40 1/8" 1019	39 3/8" 1000	33 1/8" 842	CA1 0610	CA1 0710			
42" 1067	41 1/4" 1048	35 1/16" 890	CA1 0611	CA1 0711			
48" 1219	47 1/4" 1200	41" 1042	CA1 0612	CA1 0712	CA1 7512	CA1 0812	
55 7/8" 1419	55 1/8" 1400	48 7/8" 1242	CA1 0614	CA1 0714	CA1 7514	CA1 0814	CA1 0914
59 13/16" 1519	59 1/16" 1500	52 13/16" 1342	CA1 0615	CA1 0715	CA1 7515	CA1 0815	CA1 0915
63 3/4" 1619	63" 1600	56 3/4" 1442	CA1 0616	CA1 0716	CA1 7516	CA1 0816	CA1 0916
71 5/8" 1819	70 7/8" 1800	64 5/8" 1642	CA1 0618	CA1 0718	CA1 7518	CA1 0818	CA1 0918

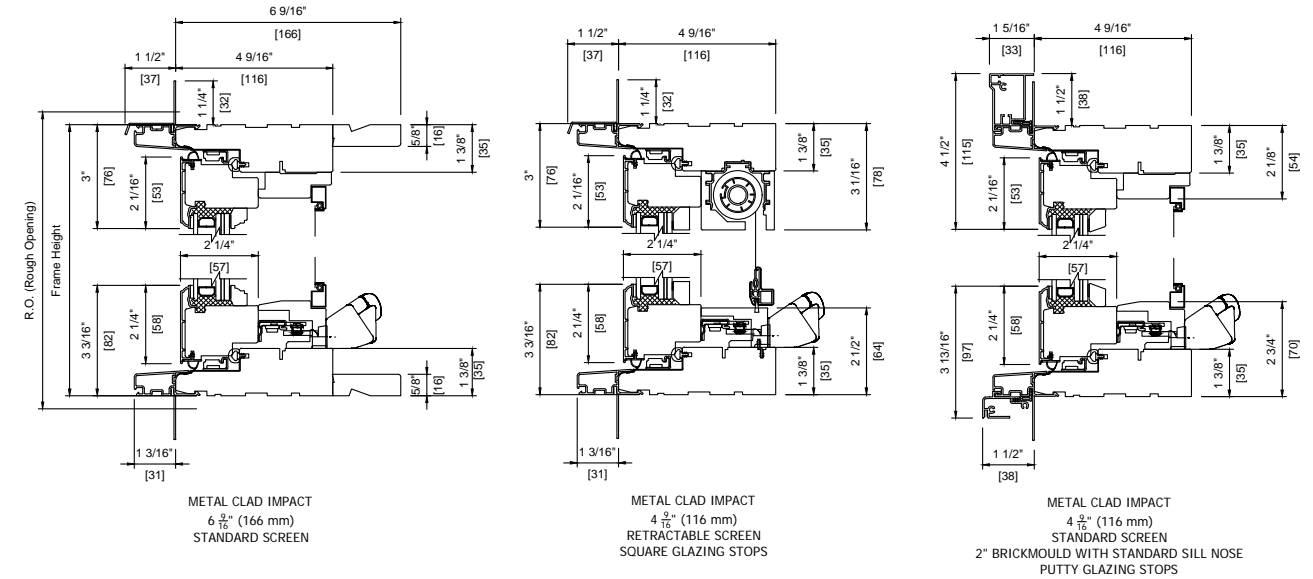
Height

Product Code

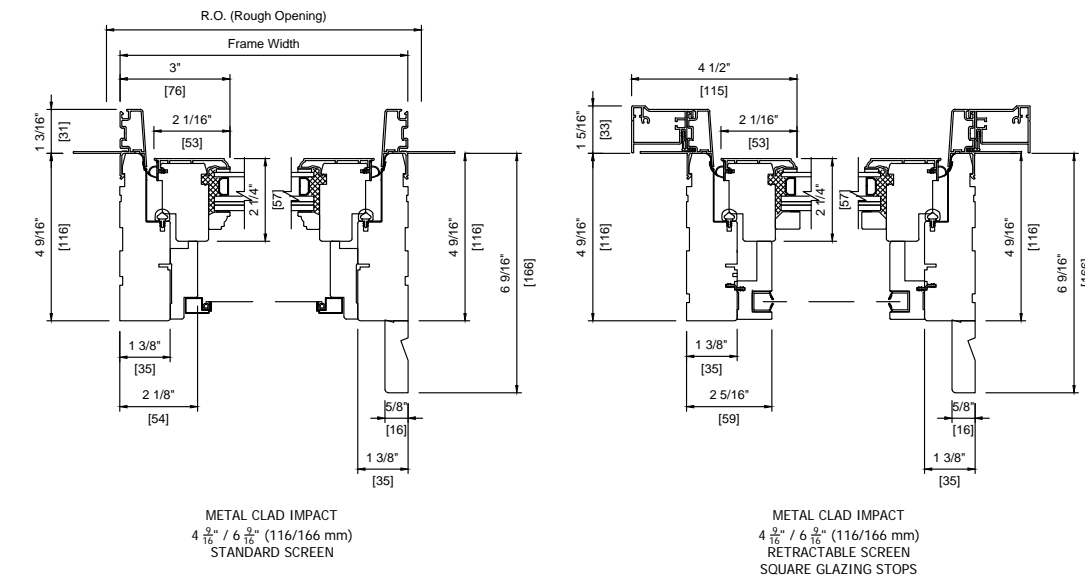
Glass Size = Visible Glass + 7/8" (22 mm)

StormForce Casement Window Detail

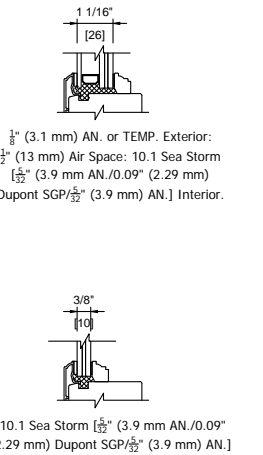
Head & Sill Detail



Plan View



Glazing Detail



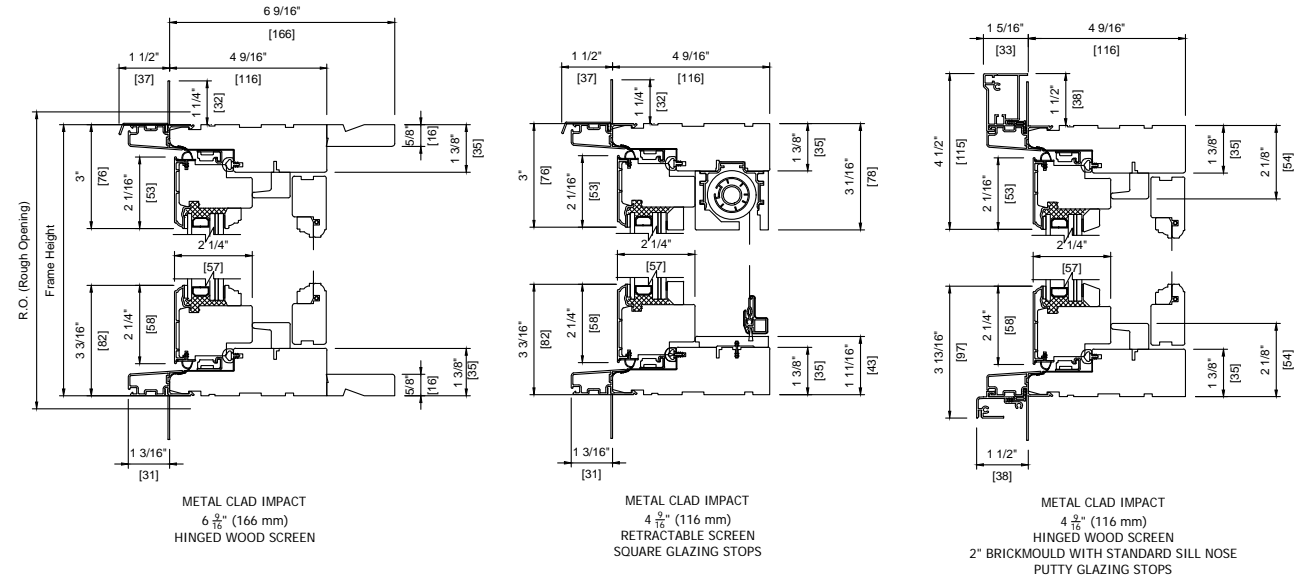
Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with sash moulding matching Push Out mouldings.
 - Sizes are shown as Impact IG.

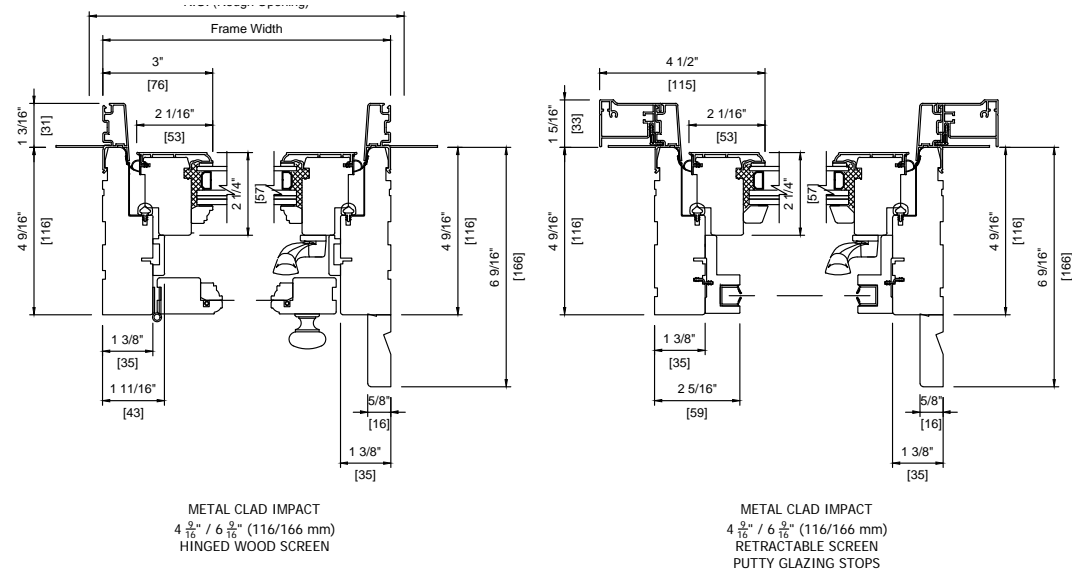
- Note:
- Other jamb widths available.
 - All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Pushout Casement Window Detail

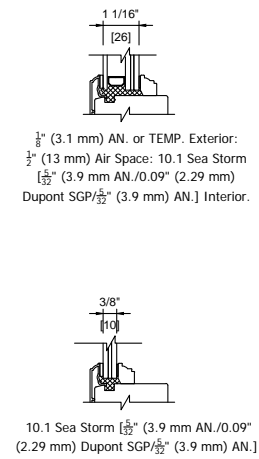
Head & Sill Detail



Plan View



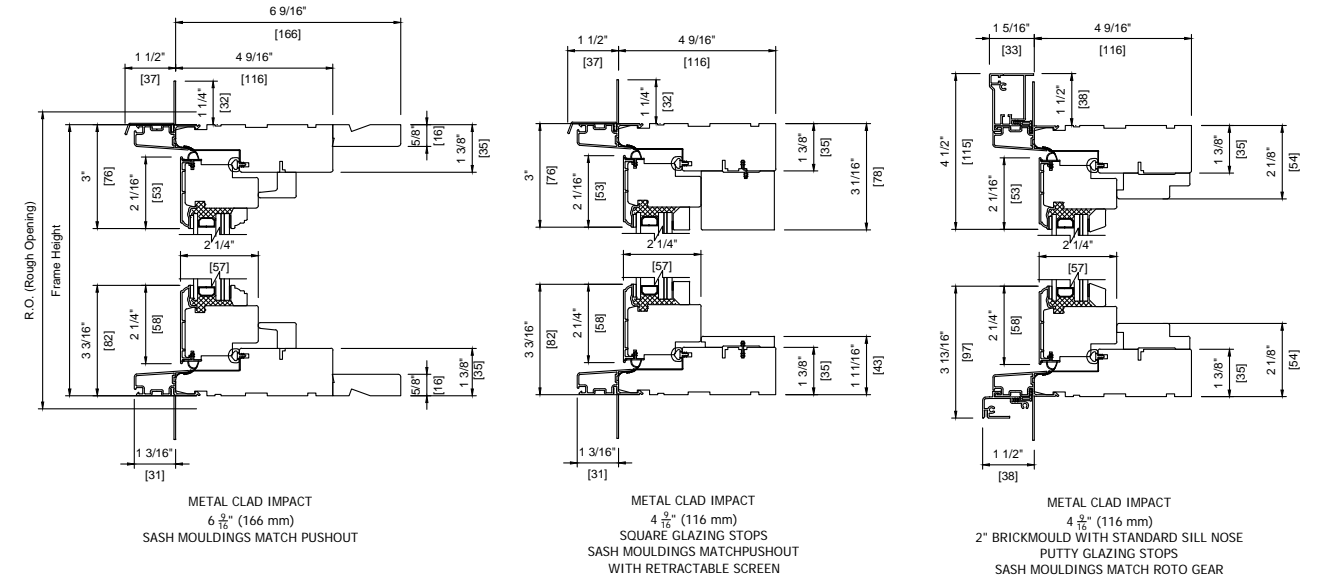
Glazing Detail



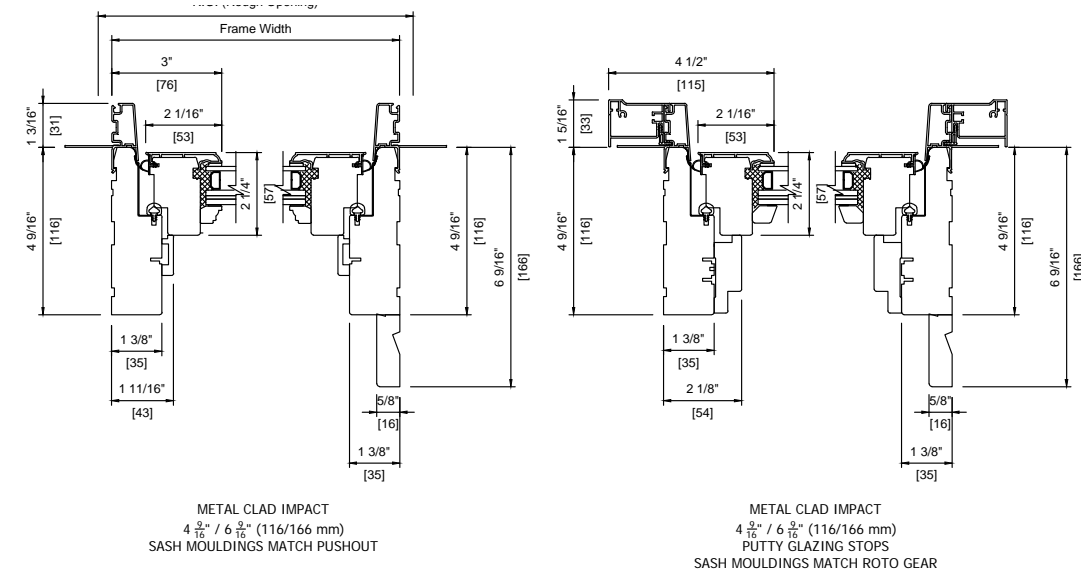
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Fixed Casement Window Detail

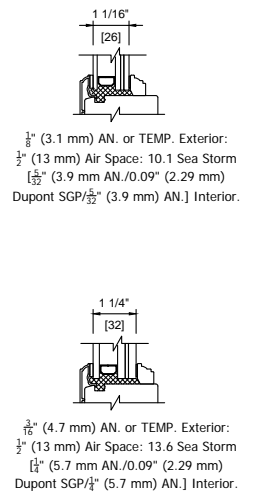
Head & Sill Detail



Plan View



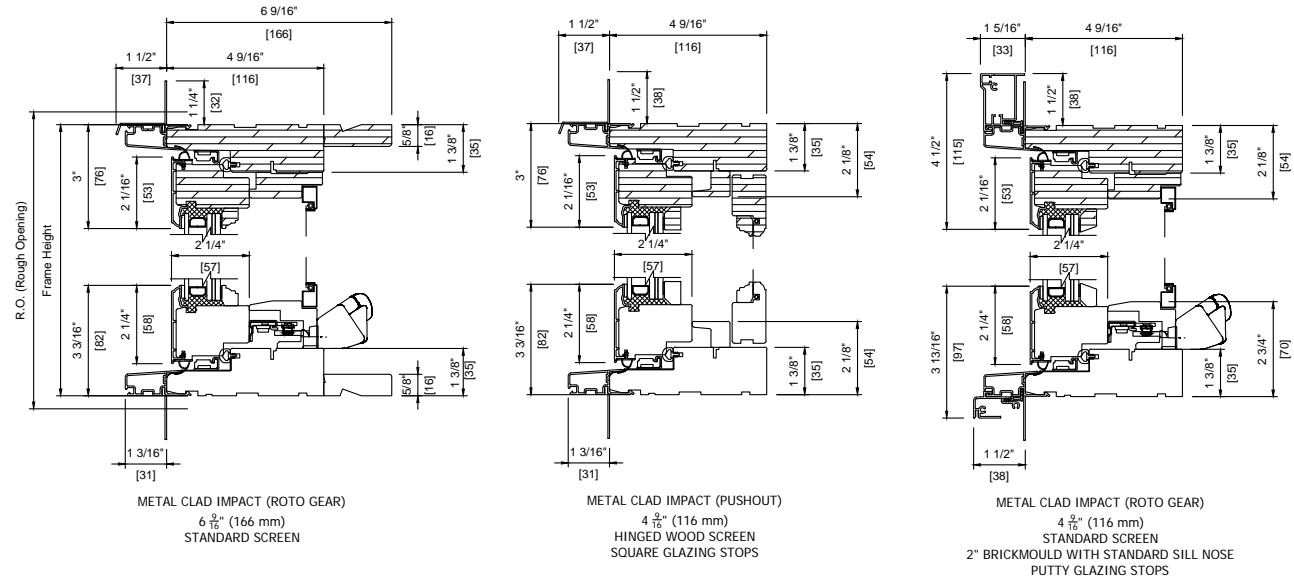
Glazing Detail



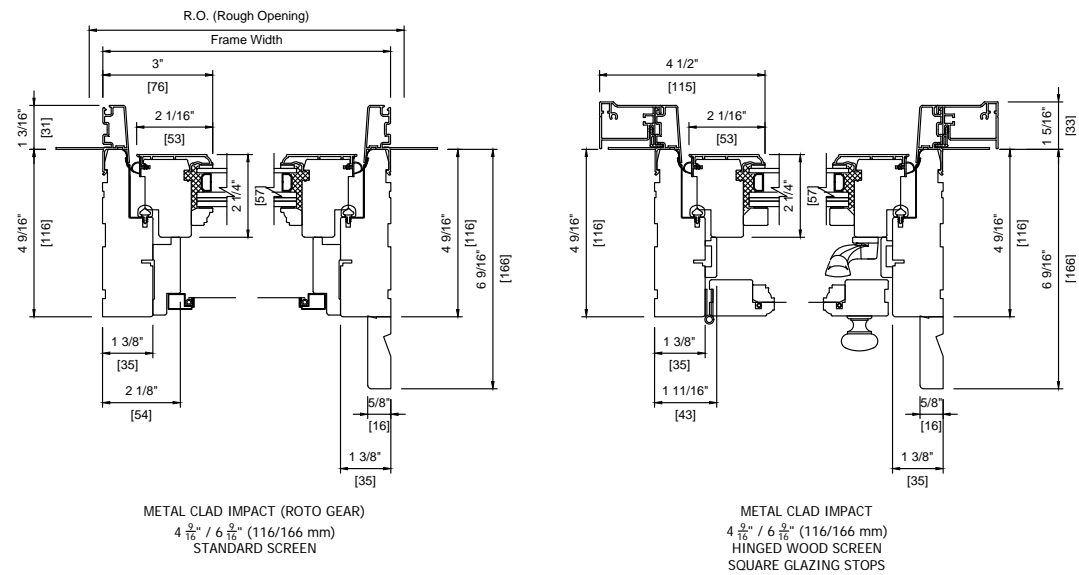
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Radius Top Casement Window Detail

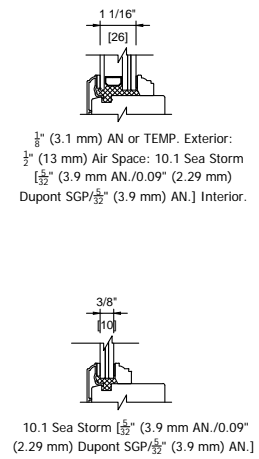
Head & Sill Detail



Plan View



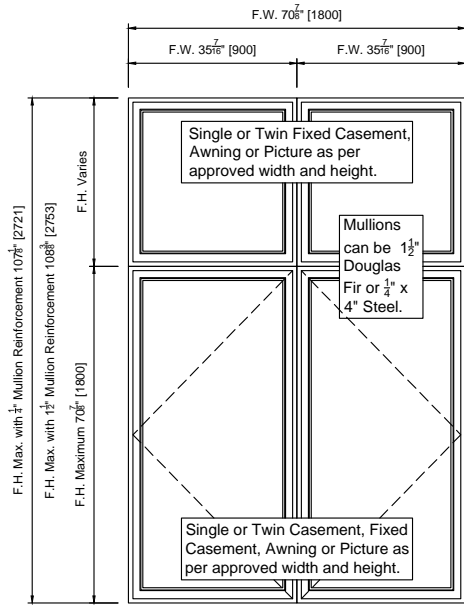
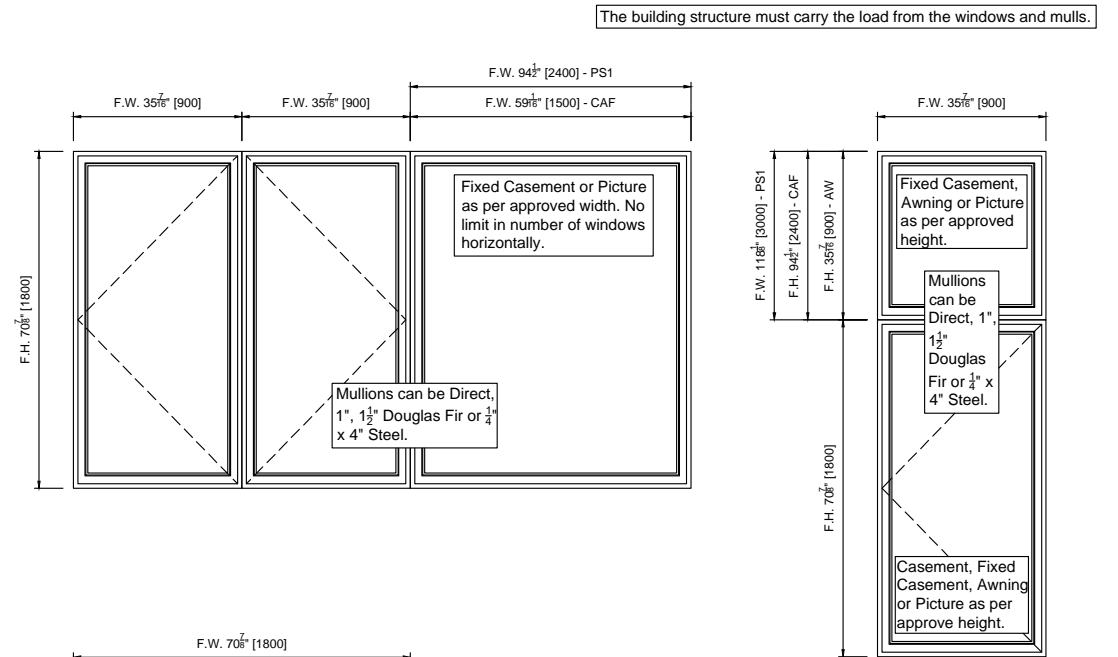
Glazing Detail



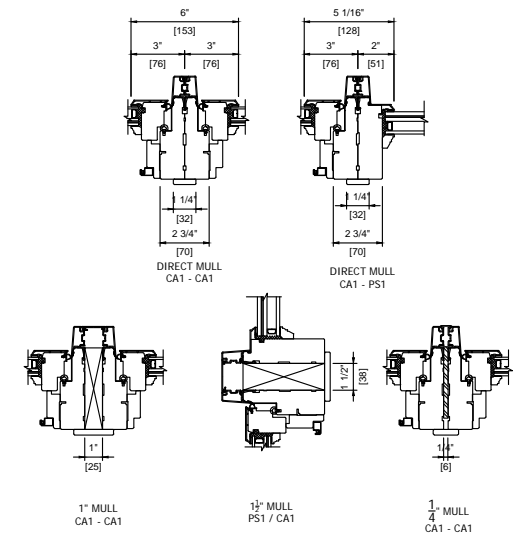
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Casement Window Combinations Detail

Elevations



Sections Detail (Mullion Examples)



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

StormForce Awning Zone 4 Window Sizes

Rough Opening			Width									
			24 3/8" 619	28 5/16" 719	30 1/4" 769	32 1/4" 819	36 3/16" 919	40 1/8" 1019	42" 1067	48" 1219	55 7/8" 1419	59 13/16" 1519
Height	Frame											
		Visible Glass	17 5/8" 447	21 9/16" 547	23 1/2" 597	25 1/2" 647	29 7/16" 747	33 3/8" 847	35 1/4" 895	41 1/4" 1047	49 1/8" 1247	53 1/16" 1347
16 1/2" 419	15 3/4" 400	9 1/2" 242	AW1 0604	AW1 0704	AW1 7504	AW1 0804	AW1 0904	AW1 1004	AW1 1104	AW1 1204	AW1 1404	
20 7/16" 519	19 11/16" 500	13 7/16" 342	AW1 0605	AW1 0705	AW1 7505	AW1 0805	AW1 0905	AW1 1005	AW1 1105	AW1 1205	AW1 1405	
24 3/8" 619	23 5/8" 600	17 3/8" 442	AW1 0606	AW1 0706	AW1 7506	AW1 0806	AW1 0906	AW1 1006	AW1 1106	AW1 1206		
28 5/16" 719	27 9/16" 700	21 5/16" 542	AW1 0607	AW1 0707	AW1 7507	AW1 0807	AW1 0907	AW1 1007	AW1 1107	AW1 1207	AW1 1407	AW1 1507
30 1/4" 769	29 1/2" 750	23 5/16" 592	AW1 0675	AW1 0775	AW1 7575	AW1 0875	AW1 0975	AW1 1075	AW1 1175	AW1 1275	AW1 1475	AW1 1575
32 1/4" 819	31 1/2" 800	25 1/4" 642	AW1 0608	AW1 0708	AW1 7508	AW1 0808	AW1 0908	AW1 1008	AW1 1108	AW1 1208	AW1 1408	AW1 1508
36 3/16" 919	35 7/16" 900	29 3/16" 742	AW1 0609	AW1 0709	AW1 7509	AW1 0809	AW1 0909	AW1 1009	AW1 1109	AW1 1209	AW1 1409	AW1 1509
40 1/8" 1019	39 3/8" 1000	33 1/8" 842	AW1 0610	AW1 0710	AW1 7510	AW1 0810	AW1 0910	AW1 1010	AW1 1110	AW1 1210		

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

Only available with Rotogear hardware

Only Available with Pushout hardware

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with sash moulding matching Push Out mouldings.
 - Sizes are shown as Impact IG.

StormForce Awning Zone 3 Window Sizes

Rough Opening			Width									
			20 7/16" 519	24 3/8" 619	28 5/16" 719	30 1/4" 769	32 1/4" 819	36 3/16" 919	40 1/8" 1019	42" 1067	48" 1219	
Height	Frame											
		Visible Glass	13 11/16" 347	17 5/8" 447	21 9/16" 547	23 1/2" 597	25 1/2" 647	29 7/16" 747	33 3/8" 847	35 1/4" 895	41 1/4" 1047	
16 1/2" 419	15 3/4" 400	9 1/2" 242	AW1 0504	AW1 0604	AW1 0704	AW1 7504	AW1 0804	AW1 0904	AW1 1004	AW1 1104	AW1 1204	
20 7/16" 519	19 11/16" 500	13 7/16" 342	AW1 0505	AW1 0605	AW1 0705	AW1 7505	AW1 0805	AW1 0905	AW1 1005	AW1 1105	AW1 1205	
24 3/8" 619	23 5/8" 600	17 3/8" 442	AW1 0506	AW1 0606	AW1 0706	AW1 7506	AW1 0806	AW1 0906	AW1 1006	AW1 1106	AW1 1206	
28 5/16" 719	27 9/16" 700	21 5/16" 542	AW1 0507	AW1 0607	AW1 0707	AW1 7507	AW1 0807	AW1 0907	AW1 1007	AW1 1107	AW1 1207	
30 1/4" 769	29 1/2" 750	23 5/16" 592	AW1 0575	AW1 0675	AW1 0775	AW1 7575	AW1 0875	AW1 0975	AW1 1075	AW1 1175	AW1 1275	
32 1/4" 819	31 1/2" 800	25 1/4" 642	AW1 0508	AW1 0608	AW1 0708	AW1 7508	AW1 0808	AW1 0908	AW1 1008	AW1 1108	AW1 1208	
36 3/16" 919	35 7/16" 900	29 3/16" 742	AW1 0509	AW1 0609	AW1 0709	AW1 7509	AW1 0809	AW1 0909	AW1 1009	AW1 1109	AW1 1209	
40 1/8" 1019	39 3/8" 1000	33 1/8" 842	AW1 0510	AW1 0610	AW1 0710	AW1 7510	AW1 0810	AW1 0910	AW1 1010	AW1 1110	AW1 1210	
42" 1067	41 1/4" 1048	35 1/16" 890	AW1 0511	AW1 0611	AW1 0711	AW1 7511	AW1 0811	AW1 0911	AW1 1011	AW1 1111	AW1 1211	
48" 1219	47 1/4" 1200	41" 1042	AW1 0512	AW1 0612	AW1 0712	AW1 7512	AW1 0812	AW1 0912	AW1 1012	AW1 1112	AW1 1212	

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

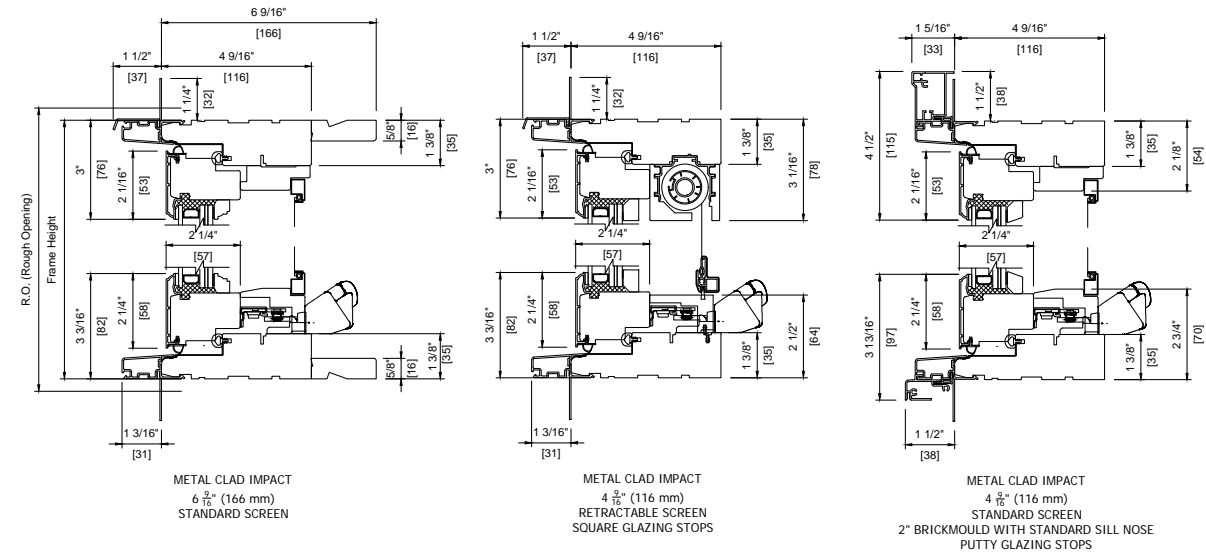
Only available with Rotogear hardware

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

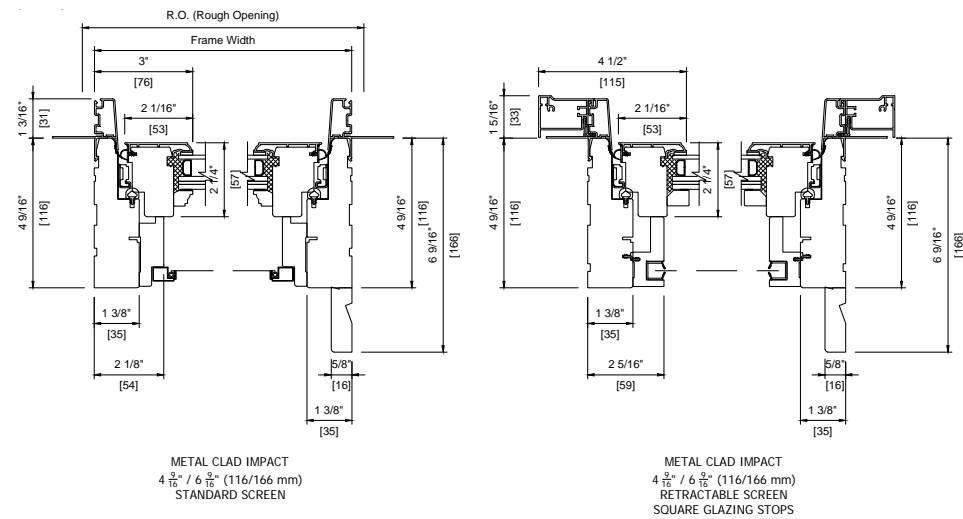
- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with sash moulding matching Push Out mouldings.
 - Sizes are shown as Impact IG.

StormForce Awning Window Zone 4 Detail

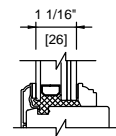
Head & Sill Detail



Plan View



Glazing Detail

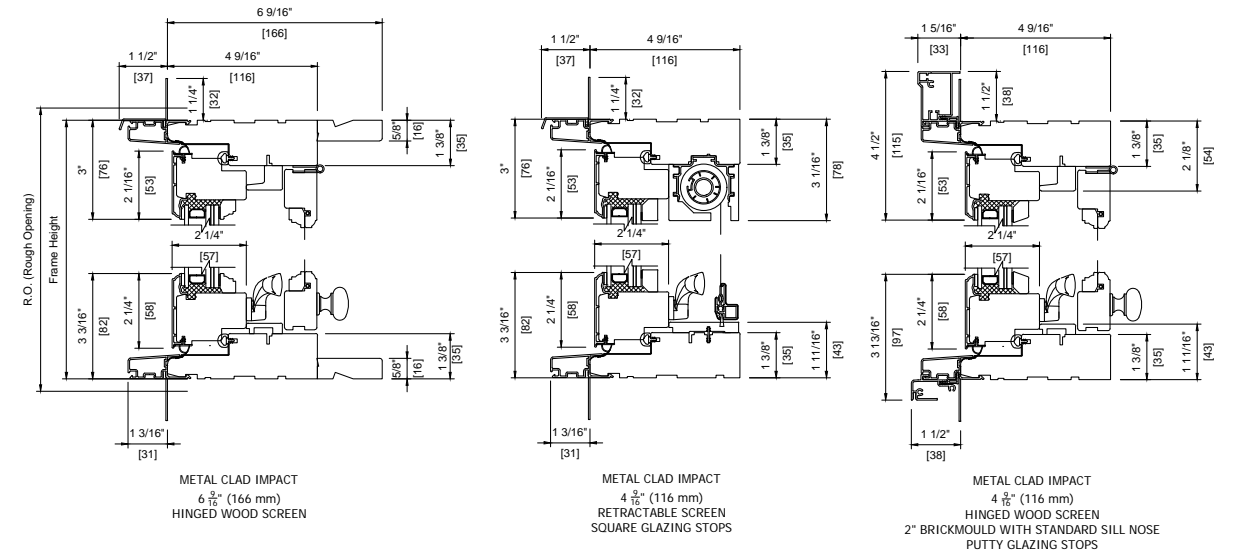


¹/₈" (3.1 mm) AN. or TEMP. Exterior:
¹/₂" (13 mm) Air Space: 10.1 Sea Storm
[⁵/₃₂" (3.9 mm AN./0.09" (2.29 mm)
Dupont SGP/⁵/₃₂" (3.9 mm) AN.] Interior.

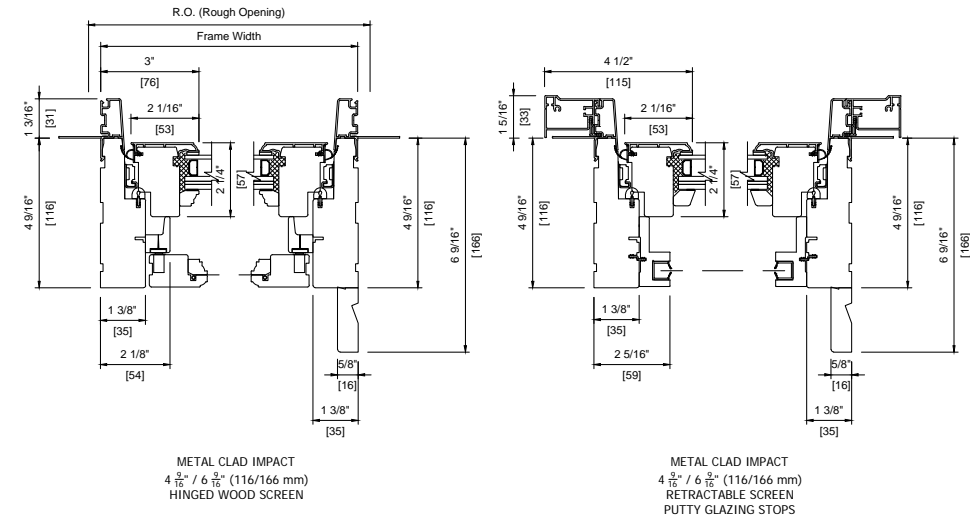
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Pushout Awning Window Zone 4 Detail

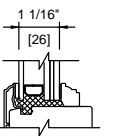
Head & Sill Detail



Plan View



Glazing Detail

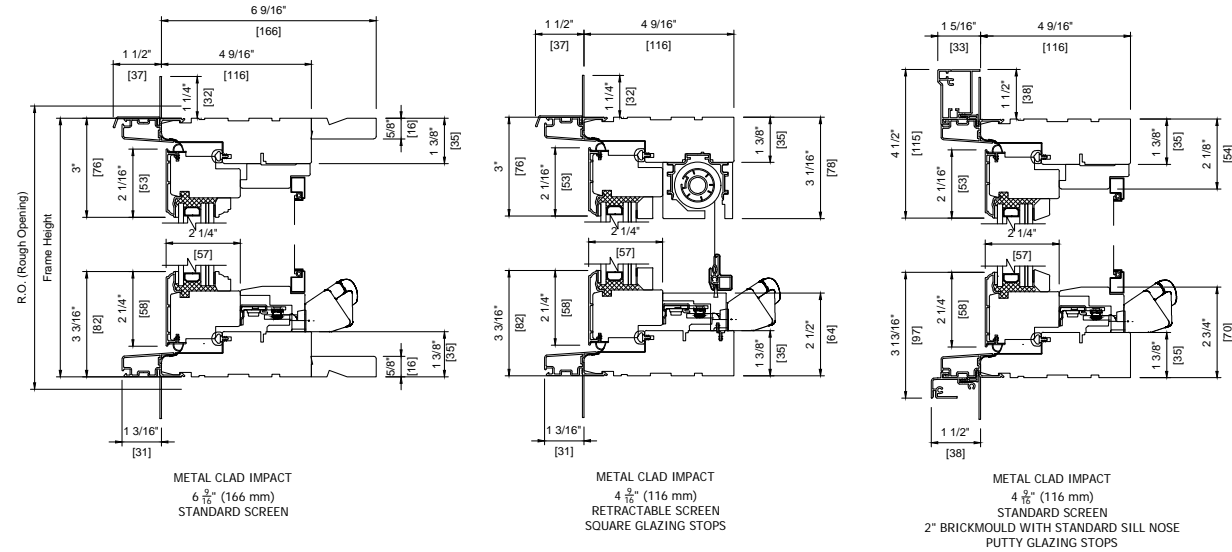


¹/₈" (3.1 mm) AN. or TEMP. Exterior:
¹/₂" (13 mm) Air Space: 10.1 Sea Storm
[⁵/₃₂" (3.9 mm AN./0.09" (2.29 mm)
Dupont SGP/⁵/₃₂" (3.9 mm) AN.] Interior.

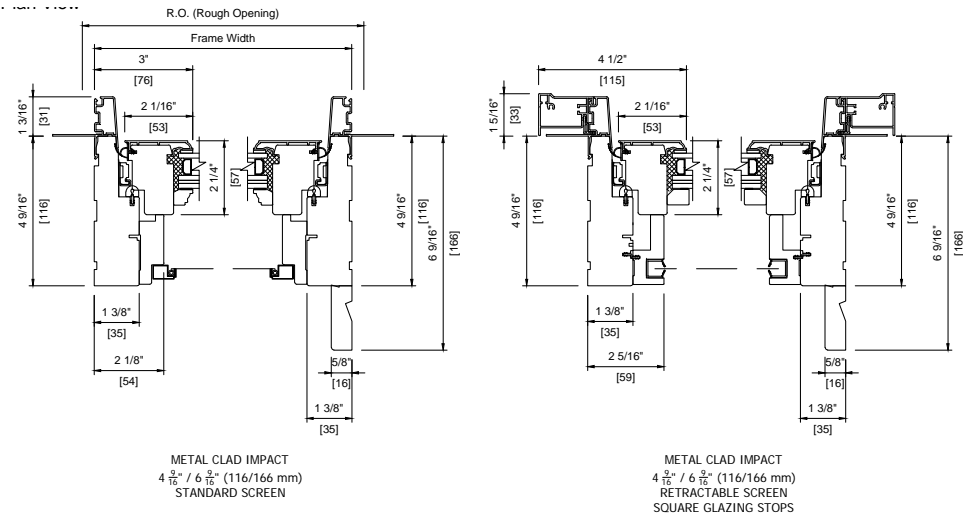
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Roto Gear Awning Window Zone 3 Detail

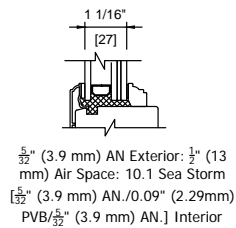
Head & Sill Detail



Plan View



Glazing Detail



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

StormForce Picture Window Sizes

Rough Opening	Width							
	20 7/16" 519	24 3/8" 619	28 5/16" 719	30 1/4" 769	32 1/4" 819	36 3/16" 919	40 1/8" 1019	
	Frame		Visible Glass					
	19 11/16" 500	23 5/8" 600	27 9/16" 700	29 1/2" 750	31 1/2" 800	35 7/16" 900	39 3/8" 1000	
		15 9/16" 396	19 1/2" 496	23 7/16" 596	25 7/16" 646	27 3/8" 696	31 5/16" 796	35 1/4" 896
20 7/16" 519	19 11/16" 500	15 9/16" 396	PS1 0505	PS1 0605	PS1 0705	PS1 7505	PS1 0805	PS1 0905
24 3/8" 619	23 5/8" 600	19 1/2" 496	PS1 0506	PS1 0606	PS1 0706	PS1 7506	PS1 0806	PS1 0906
28 5/16" 719	27 9/16" 700	23 7/16" 596	PS1 0507	PS1 0607	PS1 0707	PS1 7507	PS1 0807	PS1 0907
30 1/4" 769	29 1/2" 750	25 7/16" 646	PS1 0575	PS1 0675	PS1 0775	PS1 7575	PS1 0875	PS1 0975
32 1/4" 819	31 1/2" 800	27 3/8" 696	PS1 0508	PS1 0608	PS1 0708	PS1 7508	PS1 0808	PS1 0908
36 3/16" 919	35 7/16" 900	31 5/16" 796	PS1 0509	PS1 0609	PS1 0709	PS1 7509	PS1 0809	PS1 0909
40 1/8" 1019	39 3/8" 1000	35 1/4" 896	PS1 0510	PS1 0610	PS1 0710	PS1 7510	PS1 0810	PS1 0910
48" 1219	47 1/4" 1200	43 1/8" 1096	PS1 0512	PS1 0612	PS1 0712	PS1 7512	PS1 0812	PS1 0912
55 7/8" 1419	55 1/8" 1400	51" 1296	PS1 0514	PS1 0614	PS1 0714	PS1 7514	PS1 0814	PS1 0914
59 13/16" 1519	59 1/16" 1500	54 15/16" 1396	PS1 0515	PS1 0615	PS1 0715	PS1 7515	PS1 0815	PS1 0915
63 3/4" 1619	63" 1600	58 7/8" 1496	PS1 0516	PS1 0616	PS1 0716	PS1 7516	PS1 0816	PS1 0916
71 5/8" 1819	70 7/8" 1800	66" 1696	PS1 0518	PS1 0618	PS1 0718	PS1 7518	PS1 0818	PS1 0918
83 7/16" 2119	82 11/16" 2100	78 9/16" 1996	PS1 0521	PS1 0621	PS1 0721	PS1 7521	PS1 0821	PS1 0921
95 1/4" 2419	94 1/2" 2400	90 3/8" 2296	PS1 0524	PS1 0624	PS1 0724	PS1 7524	PS1 0824	PS1 0924
118 7/8" 3019	118 1/8" 3000	114" 2896		PS1 0630	PS1 0730	PS1 7530	PS1 0830	PS1 0930

Height

Product Code

Glass Size = Visible Glass + 1" (26 mm)

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

Note: • SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
• Sizes are shown as Impact IG.

StormForce Picture Window Sizes

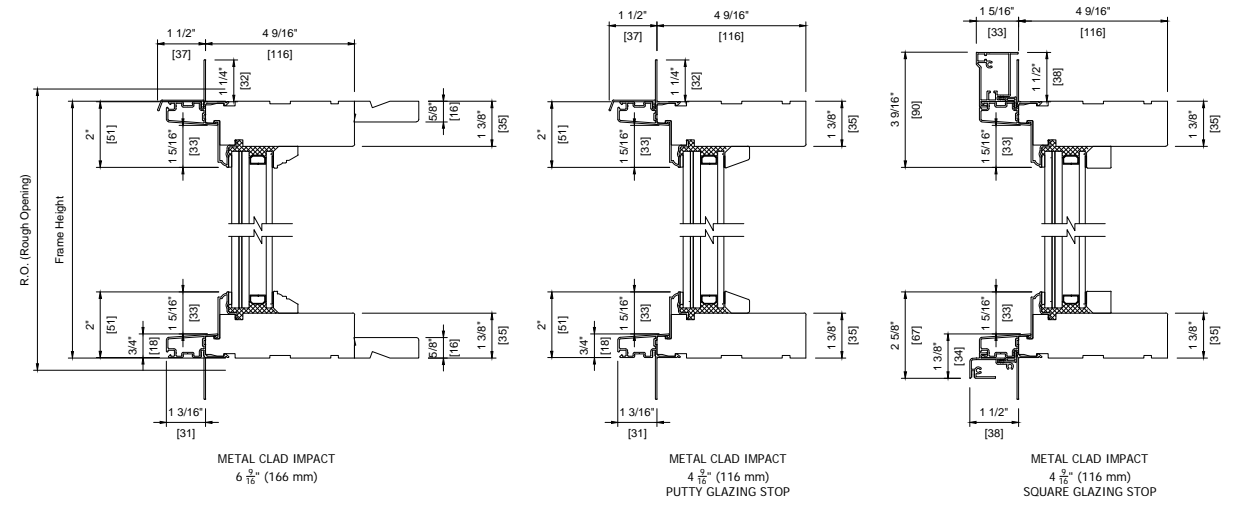
Rough Opening			Width									
Frame			48"	55 7/8"	59 13/16"	63 3/4"	71 5/8"	79 1/2"	83 7/16"	95 1/4"	118 7/8"	
Visible Glass			47 1/4"	55 1/8"	59 1/16"	63"	70 7/8"	78 3/4"	82 11/16"	94 1/2"	118 1/8"	
			1200	1400	1500	1600	1800	2000	2100	2400	3000	
			43 1/8"	51"	54 15/16"	58 7/8"	66"	74 5/8"	78 9/16"	90 3/8"	114"	
			1096	1296	1396	1496	1696	1896	1996	2296	2896	
20 7/16"	19 11/16"	15 9/16"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
519	500	396	1205	1405	1505	1605	1805	2005	2105	2405		
24 3/8"	23 5/8"	19 1/2"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
619	600	496	1206	1406	1506	1606	1806	2006	2106	2406	3006	
28 5/16"	27 9/16"	23 7/16"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
719	700	596	1207	1407	1507	1607	1807	2007	2107	2407	3007	
30 1/4"	29 1/2"	25 7/16"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
769	750	646	1275	1475	1575	1675	1875	2075	2175	2475	3075	
32 1/4"	31 1/2"	27 3/8"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
819	800	696	1208	1408	1508	1608	1808	2008	2108	2408	3008	
36 3/16"	35 7/16"	31 5/16"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
919	900	796	1209	1409	1509	1609	1809	2009	2109	2409	3009	
40 1/8"	39 3/8"	35 1/4"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
1019	1000	896	1210	1410	1510	1610	1810	2010	2110	2410	3010	
48"	47 1/4"	43 1/8"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
1219	1200	1096	1212	1412	1512	1612	1812	2012	2112	2412	3012	
55 7/8"	55 1/8"	51"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
1419	1400	1296	1214	1414	1514	1614	1814	2014	2114	2414	3014	
59 13/16"	59 1/16"	54 15/16"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
1519	1500	1396	1215	1415	1515	1615	1815	2015	2115	2415	3015	
63 3/4"	63"	58 7/8"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
1619	1600	1496	1216	1416	1516	1616	1816	2016	2116	2416		
71 5/8"	70 7/8"	66"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
1819	1800	1696	1218	1418	1518	1618	1818	2018	2118	2418		
83 7/16"	82 11/16"	78 9/16"	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	PS1	
2119	2100	1996	1221	1421	1521	1621	1821	2021	2121			
95 1/4"	94 1/2"	90 3/8"	PS1	PS1	PS1	PS1	PS1					
2419	2400	2296	1224	1424	1524	1624	1824					
118 7/8"	118 1/8"	114"	PS1	PS1	PS1							
3019	3000	2896	1230	1430	1530							

Product Code

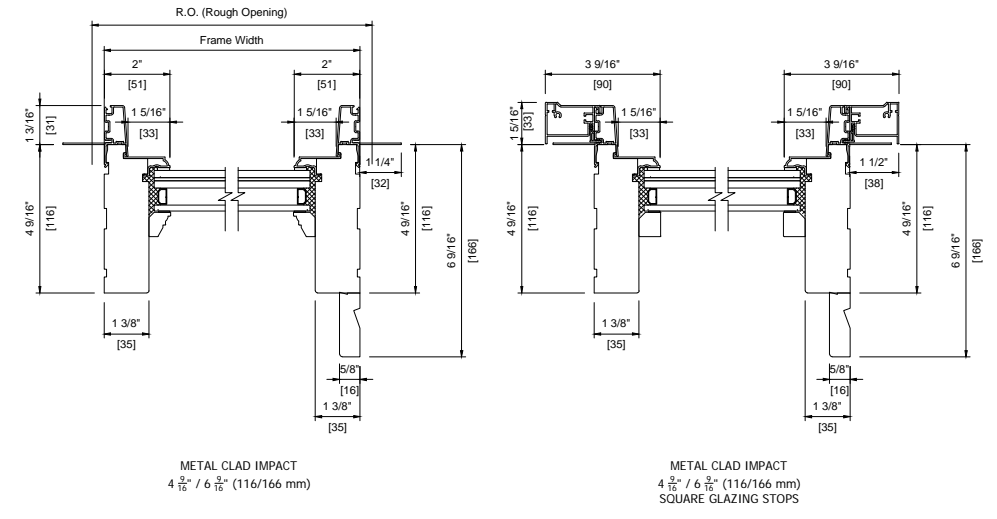
Glass Size = Visible Glass + 1" (26 mm)

StormForce Picture/Direct Set Window Detail

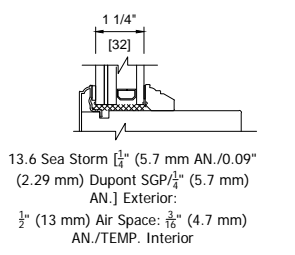
Head & Sill Detail



Plan View



Glazing Detail



13.6 Sea Storm 1 1/4" (5.7 mm AN/.0.09" (2.29 mm) Dupont SGP 1/4" (5.7 mm) AN.] Exterior:
 1/2" (13 mm) Air Space: 3/16" (4.7 mm) AN./TEMP. Interior

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

Note: • SDL/Grille patterns are dependent on SDL/Grille type and window size.
 Please verify SDL/Grille patterns before confirming your order.
 • Sizes are shown as Impact IG.

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

StormForce Double Hung Window Sizes

			Width								
Rough Opening			22 9/16" 573	26 9/16" 675	30 9/16" 777	32 9/16" 827	34 9/16" 878	36 9/16" 929	38 9/16" 980	42 9/16" 1081	46 9/16" 1183
Frame			21 13/16" 554	25 13/16" 656	29 13/16" 758	31 13/16" 808	33 13/16" 859	35 13/16" 910	37 13/16" 961	41 13/16" 1062	45 13/16" 1164
Visible Glass			15 1/16" 382	19 1/16" 484	23 1/16" 586	25 1/16" 636	27 1/16" 687	29 1/16" 738	31 1/16" 789	35 1/16" 890	39 1/16" 992
33 1/16" 839	32 5/16" 820	11" 280	DH1 1612	DH1 2012	DH1 2412	DH1 2612	DH1 2812	DH1 3012			
37" 940	36 1/4" 921	13" 330	DH1 1614	DH1 2014	DH1 2414	DH1 2614					
41" 1042	40 1/4" 1023	15" 381	DH1 1616	DH1 2016	DH1 2416	DH1 2616	DH1 2816	DH1 3016	DH1 3216	DH1 3616	DH1 4016
49" 1245	48 1/4" 1226	19" 483	DH1 1620	DH1 2020	DH1 2420	DH1 2620	DH1 2820	DH1 3020	DH1 3220	DH1 3620	DH1 4020
53 1/16" 1347	52 5/16" 1328	21" 534	DH1 1622	DH1 2022	DH1 2422	DH1 2622	DH1 2822	DH1 3022	DH1 3222	DH1 3622	DH1 4022
57" 1448	56 1/4" 1429	23" 584	DH1 1624	DH1 2024	DH1 2424	DH1 2624	DH1 2824	DH1 3024	DH1 3224	DH1 3624	DH1 4024
61" 1550	60 1/4" 1531	25" 635	DH1 1626	DH1 2026	DH1 2426	DH1 2626	DH1 2826	DH1 3026	DH1 3226	DH1 3626	DH1 4026
65" 1651	64 1/4" 1632	27" 686	DH1 1628	DH1 2028	DH1 2428	DH1 2628	DH1 2828	DH1 3028	DH1 3228	DH1 3628	DH1 4028
69" 1753	68 1/4" 1734	29" 737	DH1 1630	DH1 2030	DH1 2430	DH1 2630	DH1 2830	DH1 3030	DH1 3230	DH1 3630	DH1 4030
73 1/16" 1855	72 5/16" 1836	31" 788	DH1 1632	DH1 2032	DH1 2432	DH1 2632	DH1 2832	DH1 3032	DH1 3232	DH1 3632	DH1 4032
77" 1956	76 1/4" 1937	33" 838	DH1 1634	DH1 2034	DH1 2434	DH1 2634	DH1 2834	DH1 3034	DH1 3234	DH1 3634	
81" 2058	80 1/4" 2039	35" 889	DH1 1636	DH1 2036	DH1 2436	DH1 2636	DH1 2836	DH1 3036	DH1 3236	DH1 3636	
85" 2159	84 1/4" 2140	37" 940	DH1 1638	DH1 2038	DH1 2438	DH1 2638	DH1 2838	DH1 3038			

Product Code

Only Available in Liberty (non-tilt)
Glass Size = Visible Glass + 7/8" (22 mm)

US & Canadian Egress

Canadian Egress

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- Egress calculations are based on unit having minimum clear opening of: USA: 20" in width, 24" in height, with a total egress area of 5.7 sq ft CAN: 15" in width, 15" in height, with a total egress area of 3.8 sq ft
 - Please check your local building codes for any variation in Egress Standards from those stated above. For egress information, contact your Authorized Loewen Dealer.
 - SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Sizes are shown as Impact IG.

StormForce Fixed Double Hung Window Sizes

			Width					
Rough Opening			42 9/16" 1081	46 9/16" 1183	50 9/16" 1285	54 9/16" 1386	62 9/16" 1589	70 9/16" 1793
Frame			41 13/16" 1062	45 13/16" 1164	49 13/16" 1266	53 13/16" 1367	61 13/16" 1570	69 13/16" 1774
Visible Glass			35 1/16" 890	39 1/16" 992	43 1/16" 1094	47 1/16" 1195	55 1/16" 1398	63 1/16" 1602
33 1/16" 839	32 5/16" 820	24 1/16" 611	DF 3625	DF 4025	DF 4425	DF 4825	DF 5625	DF 6425
37" 940	36 1/4" 921	28 1/16" 712	DF 3629	DF 4029	DF 4429	DF 4829	DF 5629	DF 6429
41" 1042	40 1/4" 1023	32 1/16" 814	DF 3633	DF 4033	DF 4433	DF 4833	DF 5633	DF 6433
49" 1245	48 1/4" 1226	40 1/16" 1017	DF 3641	DF 4041	DF 4441	DF 4841	DF 5641	DF 6441
53 1/16" 1347	52 5/16" 1328	44 1/16" 1119	DF 3645	DF 4045	DF 4445	DF 4845	DF 5645	DF 6445
57" 1448	56 1/4" 1429	48 1/16" 1220	DF 3649	DF 4049	DF 4449	DF 4849	DF 5649	DF 6449
61" 1550	60 1/4" 1531	52 1/16" 1322	DF 3653	DF 4053	DF 4453	DF 4853	DF 5653	DF 6453
65" 1651	64 1/4" 1632	56" 1423	DF 3657	DF 4057	DF 4457	DF 4857	DF 5657	DF 6457
69" 1753	68 1/4" 1734	60 1/16" 1525	DF 3661	DF 4061	DF 4461	DF 4861	DF 5661	DF 6461
73 1/16" 1855	72 5/16" 1836	64 1/16" 1627	DF 3665	DF 4065	DF 4465	DF 4865	DF 5665	DF 6465
77" 1956	76 1/4" 1937	68 1/16" 1728	DF 3669	DF 4069	DF 4469	DF 4869	DF 5669	DF 6469
81" 2058	80 1/4" 2039	72 1/16" 1830	DF 3673	DF 4073	DF 4473	DF 4873	DF 5673	DF 6473
85" 2159	84 1/4" 2140	76" 1931	DF 3677	DF 4077	DF 4477	DF 4877	DF 5677	DF 6477

Product Code

Only Available in Grand Sash
Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- Please check your local building codes for any variation in Egress Standards from those stated above. For egress information, contact your Authorized Loewen Dealer.
 - SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Sizes are shown as Impact IG.

StormForce Double Hung Transom Window Sizes

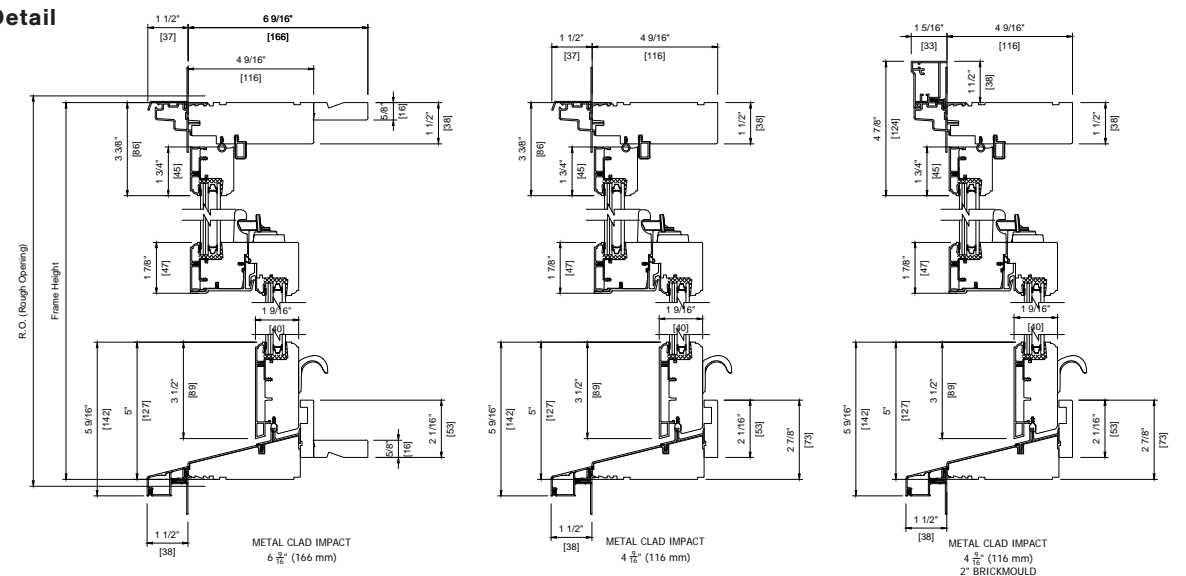
		Width										
Height	Rough Opening			22 9/16"	26 9/16"	30 9/16"	32 9/16"	34 9/16"	36 9/16"	38 9/16"	42 9/16"	46 9/16"
	Frame			573	675	777	827	878	929	980	1081	1183
	Visible Glass			15 1/16"	19 1/16"	23 1/16"	25 1/16"	27 1/16"	29 1/16"	31 1/16"	35 1/16"	39 1/16"
			382	484	586	636	687	738	789	890	992	
22 9/16"	21 13/16"	15 1/16"	DT 1616	DT 2016	DT 2416	DT 2616	DT 2816	DT 3016	DT 3216	DT 3616	DT 4016	
573	554	382										
24 9/16"	23 13/16"	17 1/16"	DT 1618	DT 2018	DT 2418	DT 2618	DT 2818	DT 3018	DT 3218	DT 3618	DT 4018	
624	605	433										
26 9/16"	25 13/16"	19 1/16"	DT 1620	DT 2020	DT 2420	DT 2620	DT 2820	DT 3020	DT 3220	DT 3620	DT 4020	
675	656	484										

Product Code

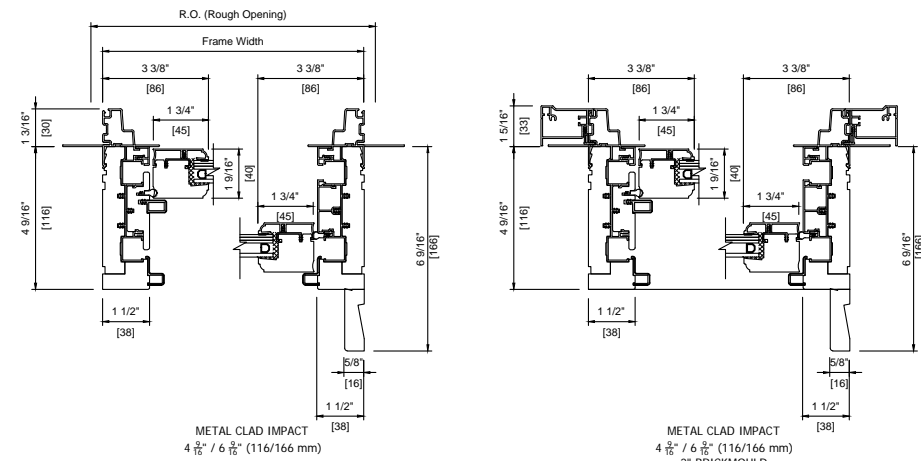
Only Available in Grand Sash
Glass Size = Visible Glass + 7/8" (22 mm)

StormForce Double/Single Hung - Liberty (Non-Tilting) Window Detail

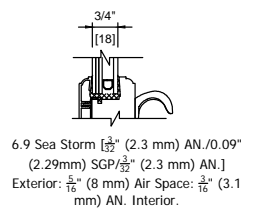
Head & Sill Detail



Plan View



Glazing Detail



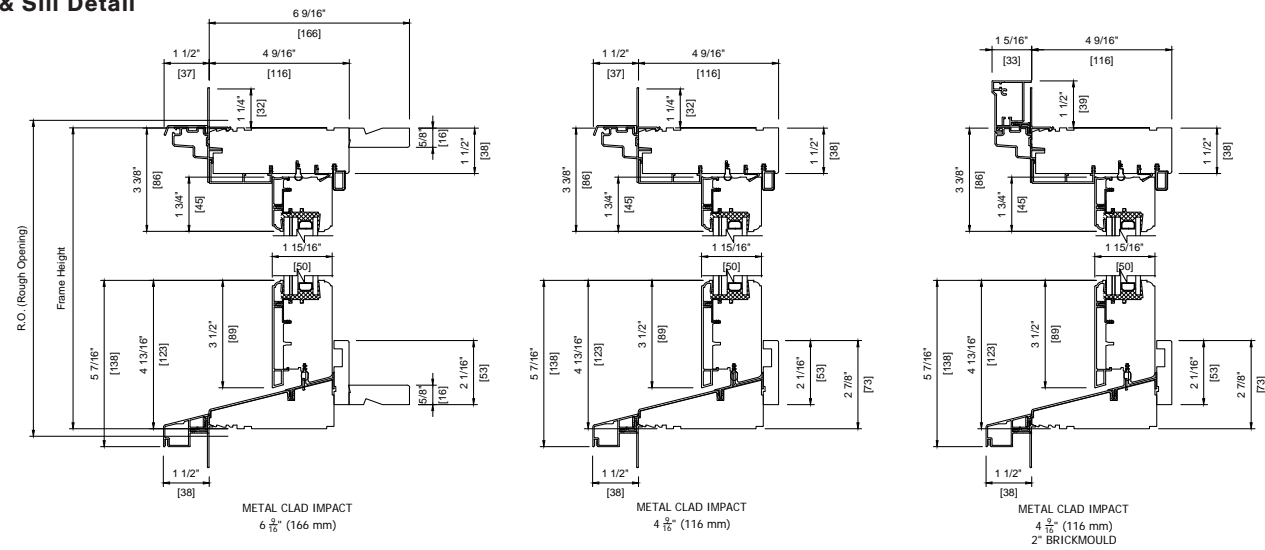
Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- Please check your local building codes for any variation in Egress Standards from those stated above. For egress information, contact your Authorized Loewen Dealer.
 - SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Sizes are shown as Impact IG.

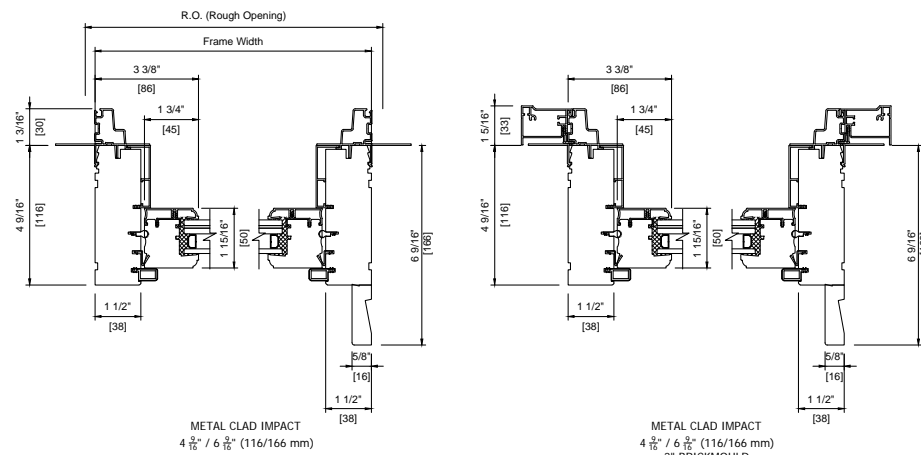
- Note:
- Other jamb widths available.
 - All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Fixed Double Hung Window Detail

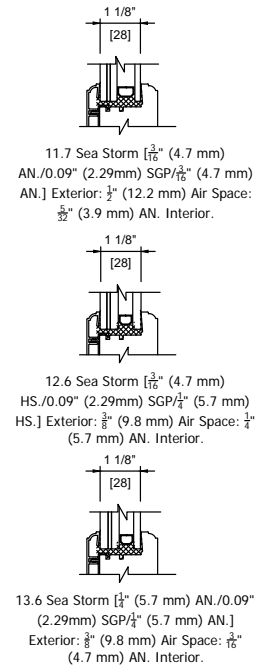
Head & Sill Detail



Plan View



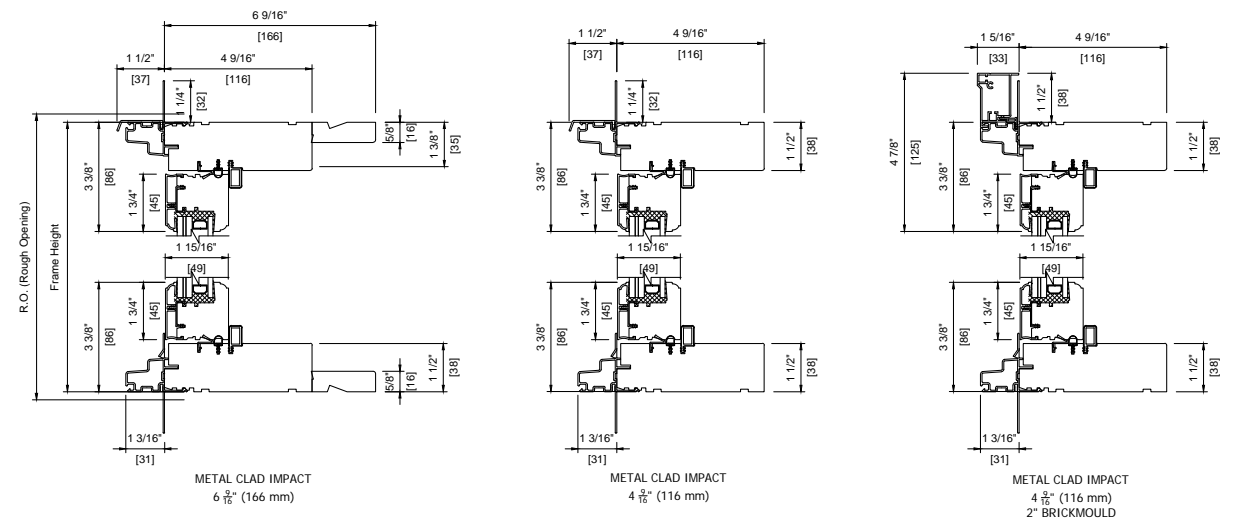
Glazing Detail



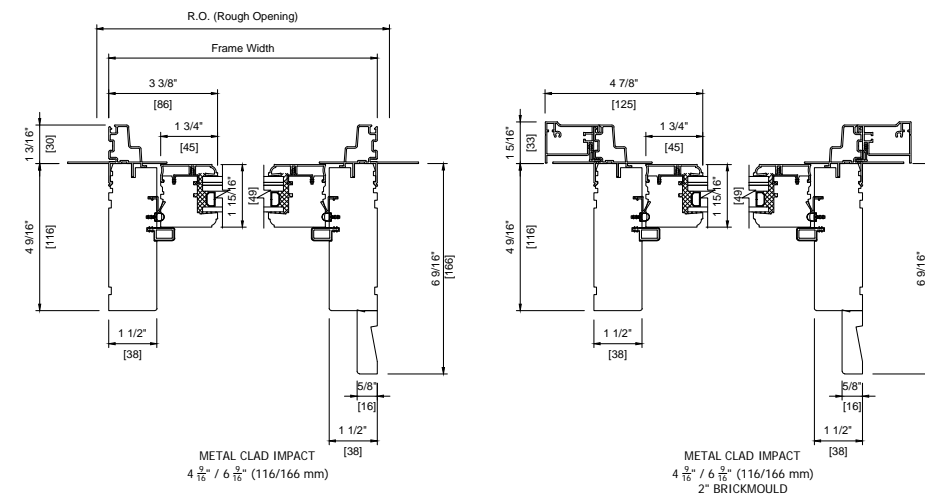
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Double Hung Transom Window Detail

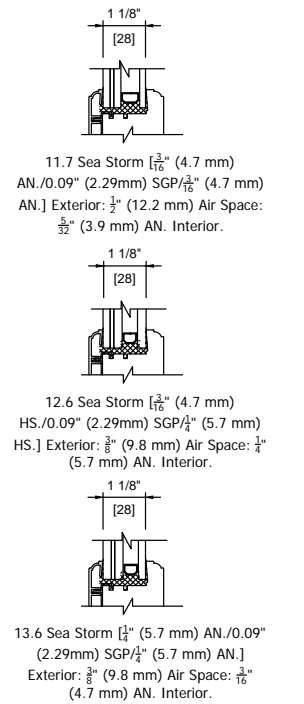
Head & Sill Detail



Plan View



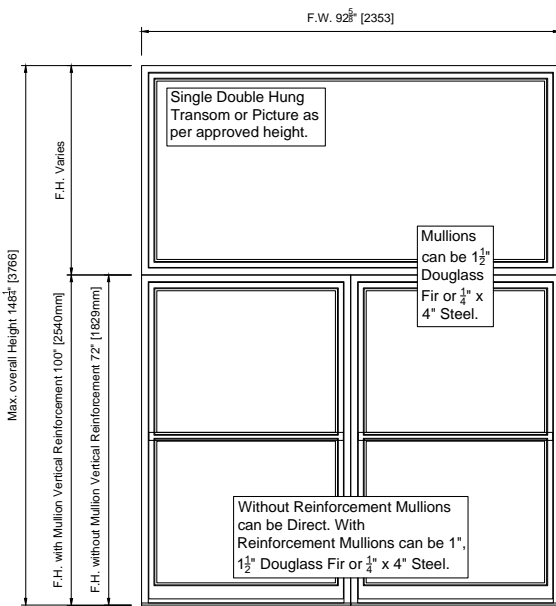
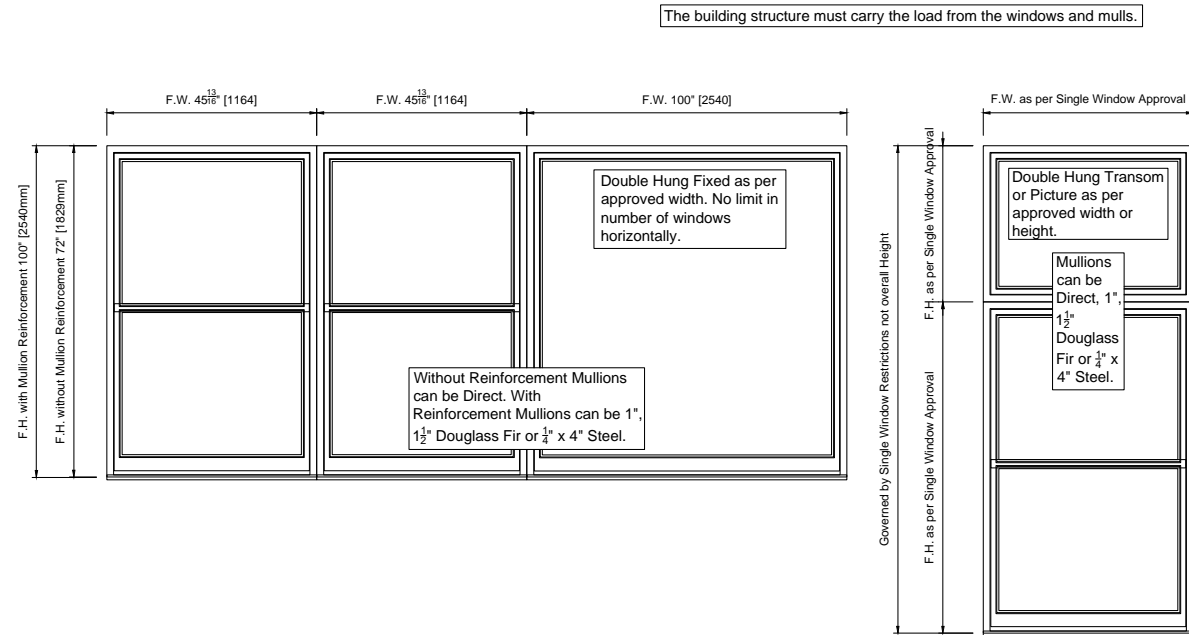
Glazing Detail



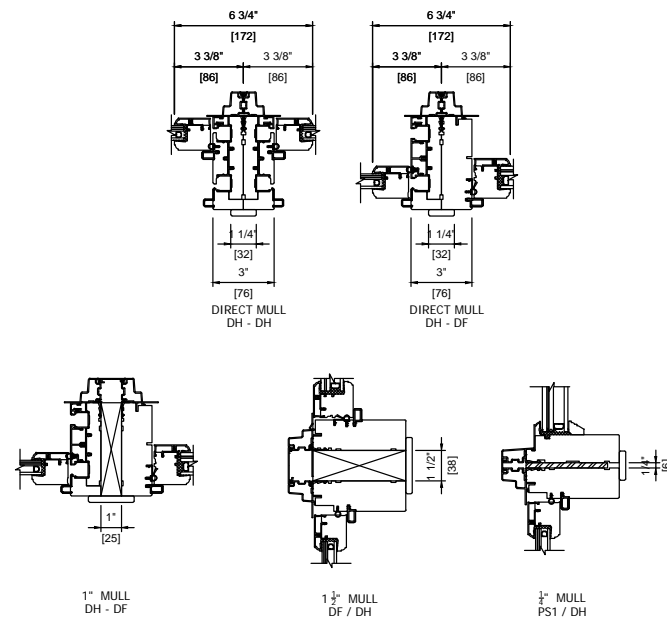
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

Double Hung Window Combinations Mullion Detail

Elevations



Section Detail (Mullion Examples)



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

Reference FL # 14692 for complete installation instructions and sizing restriction.
http://www.floridabuilding.org/upload/PR_Instl_Docs/FL14692_R0_II_Drawing%201740.pdf

StormForce Outswing Terrace Door Sizes

Rough Opening	Width							
	18 7/16"	24 3/8"	31 1/4"	34 1/2"	37 1/8"	41 1/16"	44 5/8"	
	469	619	793	876	943	1043	1134	
	Frame							
	17 11/16"	23 5/8"	30 1/2"	33 3/4"	36 3/8"	40 5/16"	43 7/8"	
	450	600	774	857	924	1024	1115	
	Visible Glass							
	7 3/16"	13 1/16"	19 15/16"	23 3/16"	25 13/16"	29 3/4"	33 3/8"	
	182	332	506	589	656	756	847	
16 5/16"	15 3/4"	9 11/16"	* TDT1	* TDT1	* TDT1	* TDT1	* TDT1	* TDT1
415	400	246	0404	0604	0704	0804	0904	1004
24 3/16"	23 5/8"	17 9/16"	* TDT1	* TDT1	* TDT1	* TDT1	* TDT1	* TDT1
615	600	446	0406	0606	0706	0806	0906	1006
80 1/8"	79 1/2"	63 7/8"	^ VTD1	^ VTD1	TD1	TD1	TD1	TD1
2035	2020	1623	0420	0620	0720	0820	0920	1020
81 7/8"	81 5/16"	65 11/16"	^ VTD1	^ VTD1	TD1	TD1	TD1	TD1
2080	2065	1668	0421	0621	0721	0821	0921	1021
86 9/16"	86"	70 3/8"	^ VTD1	^ VTD1	TD1	TD1	TD1	TD1
2199	2184	1787	0470	0670	0770	0870	0970	1070
95 1/16"	94 1/2"	78 7/8"	^ VTD1	^ VTD1	TD1	TD1	TD1	TD1
2415	2400	2003	0424	0624	0724	0824	0924	1024
99 5/8"	99 1/16"	83 7/16"			TD1	TD1	TD1	TD1
2531	2516	2119			0725	0825	0925	1025
106 7/8"	106 5/16"	90 11/16"			TD1	TD1	TD1	TD1
2715	2700	2303			0727	0827	0927	

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

- Transom Units
- Venting or Fixed

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

Note: • SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
• Sizes are shown as Impact IG.

StormForce Outswing Cambertop Terrace Door Sizes

Rough Opening		Width					Product Code
		31 1/4" 793	34 1/2" 876	37 1/8" 943	41 1/16" 1043	44 5/8" 1134	
		Frame					
		Visible Glass					
		19 15/16" 506	23 3/16" 589	25 13/16" 656	29 3/4" 756	33 3/8" 847	
80 1/8" 2035	79 1/2" 2020	63 15/16" 1624	CTTD1 0720	CTTD1 0820	CTTD1 0920	CTTD1 1020	CTTD1 1120
81 7/8" 2080	81 5/16" 2065	65 11/16" 1668	CTTD1 0721	CTTD1 0821	CTTD1 0921	CTTD1 1021	CTTD1 1121
86 9/16" 2199	86" 2184	70 3/8" 1787	CTTD1 0770	CTTD1 0870	CTTD1 0970	CTTD1 1070	CTTD1 1170
95 1/16" 2415	94 1/2" 2400	78 7/8" 2003	CTTD1 0724	CTTD1 0824	CTTD1 0924	CTTD1 1024	CTTD1 1124
98" 2489	97 3/8" 2474	81 3/4" 2077	CTTD1 0780	CTTD1 0880	CTTD1 0980	CTTD1 1080	CTTD1 1180
99 5/8" 2531	99 1/16" 2516	83 7/16" 2119	CTTD1 0725	CTTD1 0825	CTTD1 0925	CTTD1 1025	CTTD1 1125
106 7/8" 2715	106 5/16" 2700	90 11/16" 2303	CTTD1 0727	CTTD1 0827	CTTD1 0927		

Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Sizes are shown as Impact IG.

StormForce Outswing Quarter Round Terrace Door Sizes

Rough Opening		Width			Product Code
		31 1/4" 793	34 1/2" 876	37 1/8" 943	
		Frame			
		Visible Glass			
		19 15/16" 506	23 3/16" 589	25 13/16" 656	
80 1/8" 2035	79 1/2" 2020	63 3/8" 1610	CTTD1 0720	CTTD1 0820	
81 7/8" 2080	81 5/16" 2065	65 3/16" 1655	CTTD1 0721	CTTD1 0821	CTTD1 0921
86 9/16" 2199	86" 2184	69 7/8" 1774	CTTD1 0770	CTTD1 0870	CTTD1 0970
95 1/16" 2415	94 1/2" 2400	78 3/8" 1990	CTTD1 0724	CTTD1 0824	CTTD1 0924
99 5/8" 2531	99 1/16" 2516	82 15/16" 2106	CTTD1 0725	CTTD1 0825	CTTD1 0925
106 7/8" 2715	106 5/16" 2700	90 3/16" 2290	CTTD1 0727	CTTD1 0827	CTTD1 0927

Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Sizes are shown as Impact IG.

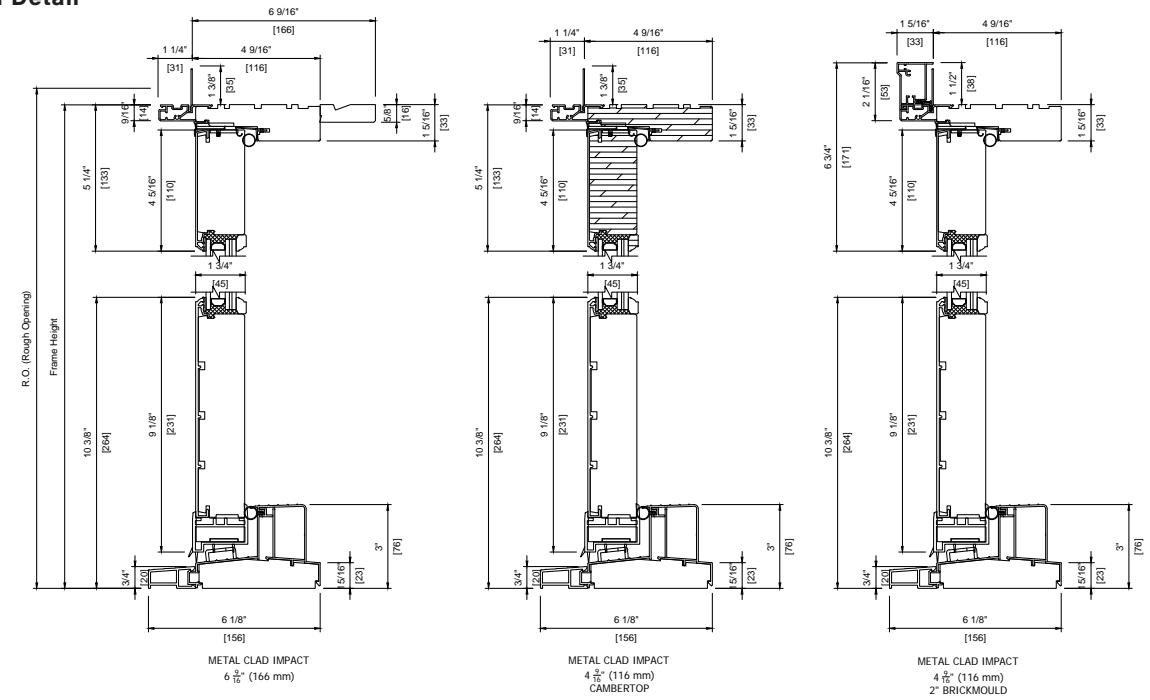
StormForce Inswing Terrace Door Sizes

		Width			
Rough Opening		31 1/4" 793	34 1/2" 876	37 1/8" 943	
Frame		30 1/2" 774	33 3/4" 857	36 3/8" 924	
Visible Glass		19 15/16" 506	23 3/16" 589	25 13/16" 656	
80 1/8" 2035	79 1/2" 2020	63 7/8" 1623	TD1 0720	TD1 0820	TD1 0920
81 7/8" 2080	81 5/16" 2065	65 11/16" 1668	TD1 0721	TD1 0821	TD1 0921
86 9/16" 2199	86" 2184	70 3/8" 1787	TD1 0770	TD1 0870	TD1 0970
95 1/16" 2415	94 1/2" 2400	78 7/8" 2003	TD1 0724	TD1 0824	TD1 0924

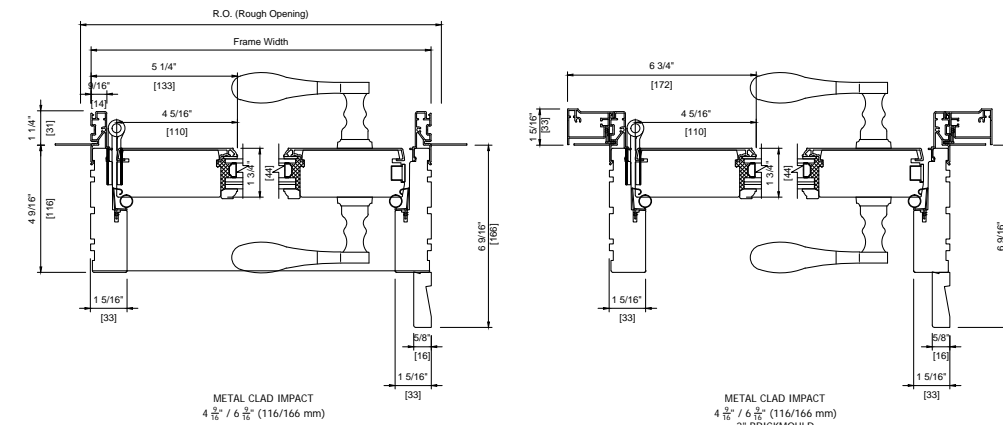
Product Code
Glass Size = Visible Glass + 7/8" (22 mm)

StormForce Outswing Terrace Door Detail

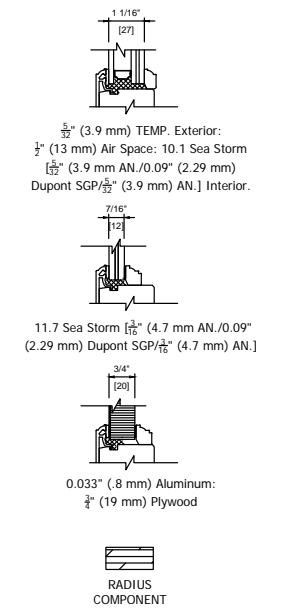
Head & Sill Detail



Plan View



Glazing Detail



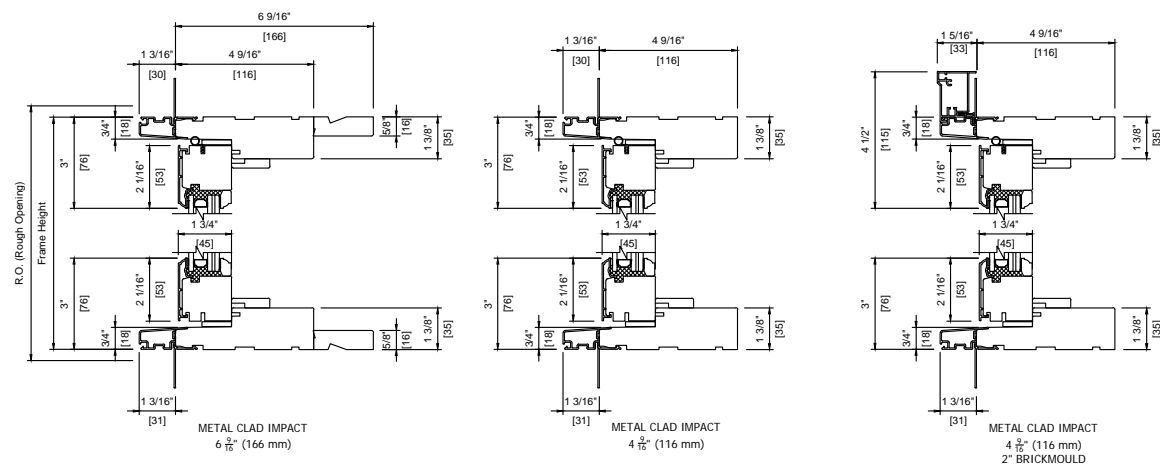
Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Sizes are shown as Impact IG.

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

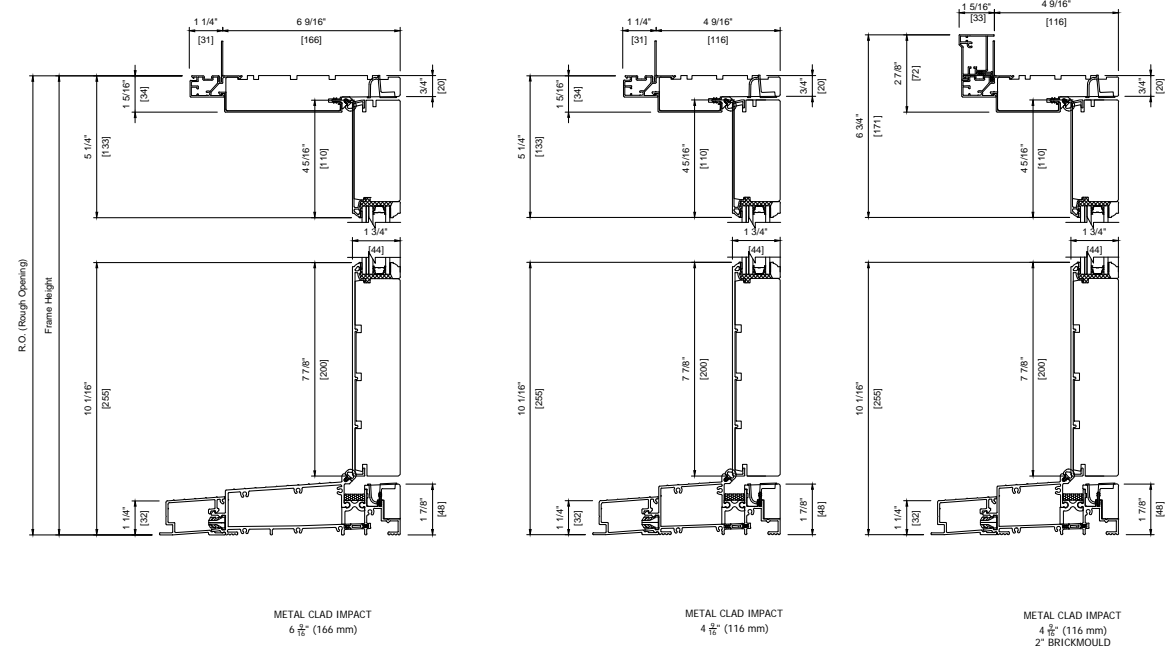
StormForce Terrace Door Transom Detail

Head & Sill Detail

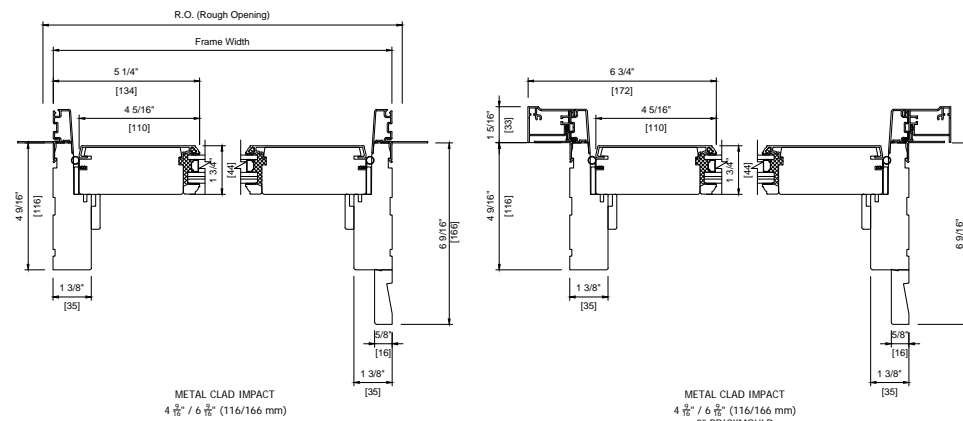


StormForce Inswing Impact Terrace Door Detail

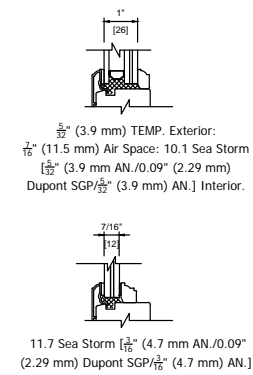
Head & Sill Detail



Plan View

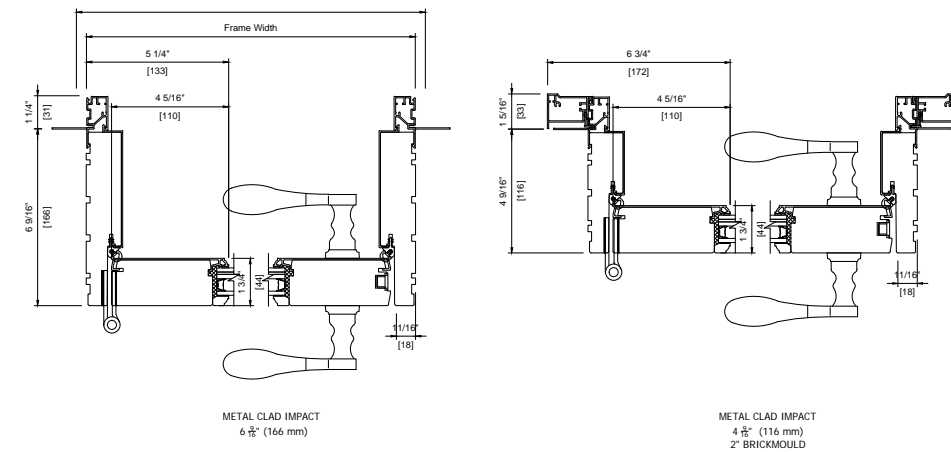


Glazing Detail

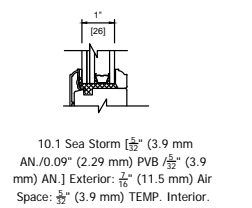


Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

Plan View



Glazing Detail

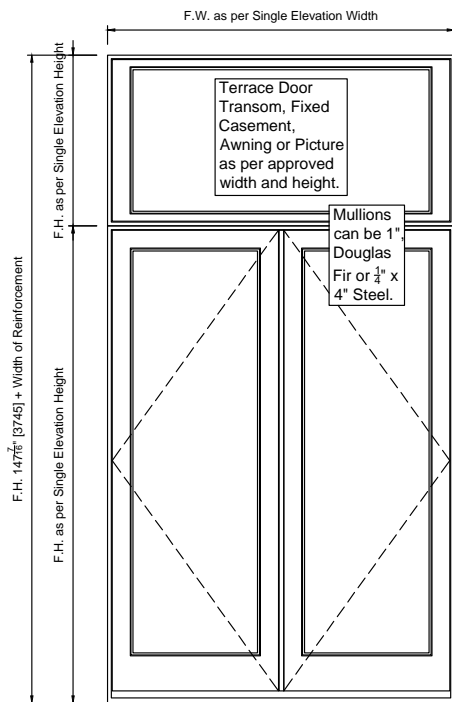
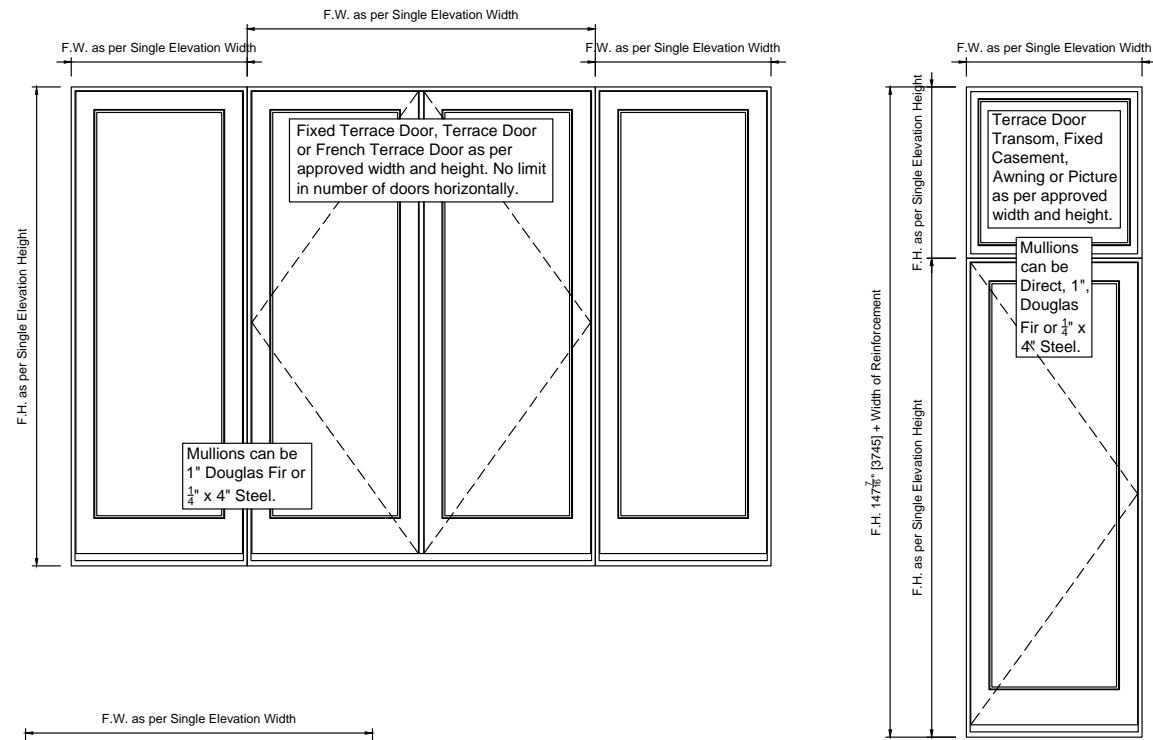


Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

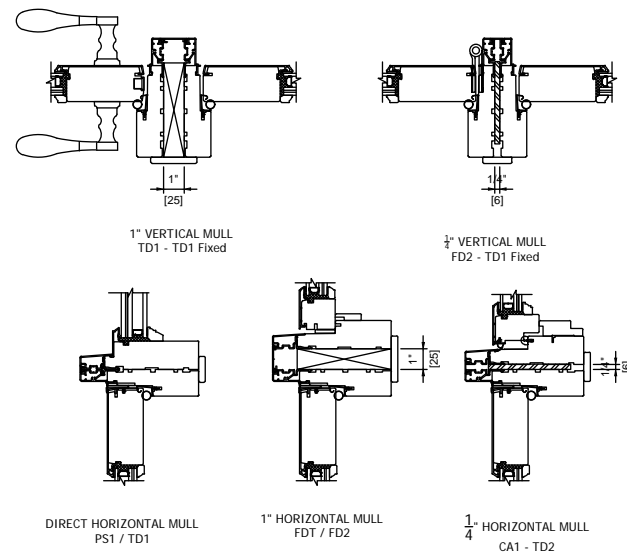
StormForce Outswing Terrace/French Terrace Door Combinations Mullion Detail

Elevations

The building structure must carry the load from the windows and mulls.



Section Detail (Mullion Examples)



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

Reference FL # 14369 for complete installation instructions and sizing restriction.
http://www.floridabuilding.org/upload/PR_Instl_Docs/FL14369_R1_II_Drawing%201640A.pdf

StormForce Outswing French Terrace Door Sizes

Width

Rough Opening	Width						
	47 1/4" 1200	60 15/16" 1548	67 1/2" 1714	72 3/4" 1848	80 5/8" 2048	87 13/16" 2230	
	Frame						
	46 1/2" 1181	60 3/16" 1529	66 3/4" 1695	72" 1829	79 7/8" 2029	87 1/16" 2211	
	Visible Glass						
	13 1/16" 332	19 15/16" 506	23 3/16" 589	25 13/16" 656	29 3/4" 756	33 3/8" 847	
16 5/16" 415	15 3/4" 400	9 11/16" 246	*FDT2 1204	*FDT2 1504	*FDT2 1604	*FDT2 1804	*FDT2 2204
24 3/16" 615	23 5/8" 600	17 9/16" 446	*FDT2 1206	*FDT2 1506	*FDT2 1606	*FDT2 1806	*FDT2 2206
80 1/8" 2035	79 1/2" 2020	63 7/8" 1623	FD2 1220	FD2 1520	FD2 1620	FD2 1820	FD2 2220
81 7/8" 2080	81 5/16" 2065	65 11/16" 1668	FD2 1221	FD2 1521	FD2 1621	FD2 1821	FD2 2221
86 9/16" 2199	86" 2184	70 3/8" 1787	FD2 1270	FD2 1570	FD2 1670	FD2 1870	FD2 2270
95 1/16" 2415	94 1/2" 2400	78 7/8" 2003	FD2 1224	FD2 1524	FD2 1624	FD2 1824	FD2 2224
99 5/8" 2531	99 1/16" 2516	83 7/16" 2119	FD2 1225	FD2 1525	FD2 1625	FD2 1825	FD2 2225
106 7/8" 2715	106 5/16" 2700	90 11/16" 2303	FD2 1227	FD2 1527	FD2 1627	FD2 1827	

Height

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

Transom Units

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

Note: • SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
• Sizes are shown as Impact IG.

StormForce Outswing Cambertop French Terrace Door Sizes

Rough Opening			Width					
			47 1/4" 1200	60 15/16" 1548	67 1/2" 1714	72 3/4" 1848	80 5/8" 2048	87 13/16" 2230
			Frame					
			Visible Glass					
			13 1/16" 332	19 15/16" 506	23 3/16" 589	25 13/16" 656	29 3/4" 756	33 3/8" 847
80 1/8" 2035	79 1/2" 2020	63 3/4" 1619	FD2 1220	FD2 1520	FD2 1620	FD2 1820	FD2 2020	FD2 2220
81 7/8" 2080	81 5/16" 2065	65 1/2" 1664	FD2 1221	FD2 1521	FD2 1621	FD2 1821	FD2 2021	FD2 2221
86 9/16" 2199	86" 2184	70 3/16" 1783	FD2 1270	FD2 1570	FD2 1670	FD2 1870	FD2 2070	FD2 2270
95 1/16" 2415	94 1/2" 2400	78 3/4" 1999	FD2 1224	FD2 1524	FD2 1624	FD2 1824	FD2 2024	FD2 2224
99 5/8" 2531	99 1/16" 2516	83 5/16" 2115	FD2 1225	FD2 1525	FD2 1625	FD2 1825	FD2 2025	FD2 2225
106 7/8" 2715	106 5/16" 2700	90 1/2" 2299	FD2 1227	FD2 1527	FD2 1627	FD2 1827		

Product Code

Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Sizes are shown as Impact IG.

StormForce Inswing French Terrace Door Sizes

Rough Opening			Width			
			47 1/4" 1200	60 15/16" 1548	67 1/2" 1714	72 3/4" 1848
			Frame			
			Visible Glass			
			13 1/16" 332	19 15/16" 506	23 3/16" 589	25 13/16" 656
80 1/8" 2035	79 1/2" 2020	63 7/8" 1623	FD2 1220	FD2 1520	FD2 1620	FD2 1820
81 7/8" 2080	81 5/16" 2065	65 11/16" 1668	FD2 1221	FD2 1521	FD2 1621	FD2 1821
86 9/16" 2199	86" 2184	70 3/8" 1787	FD2 1270	FD2 1570	FD2 1670	FD2 1870
95 1/16" 2415	94 1/2" 2400	78 7/8" 2003	FD2 1224	FD2 1524	FD2 1624	FD2 1824

Product Code

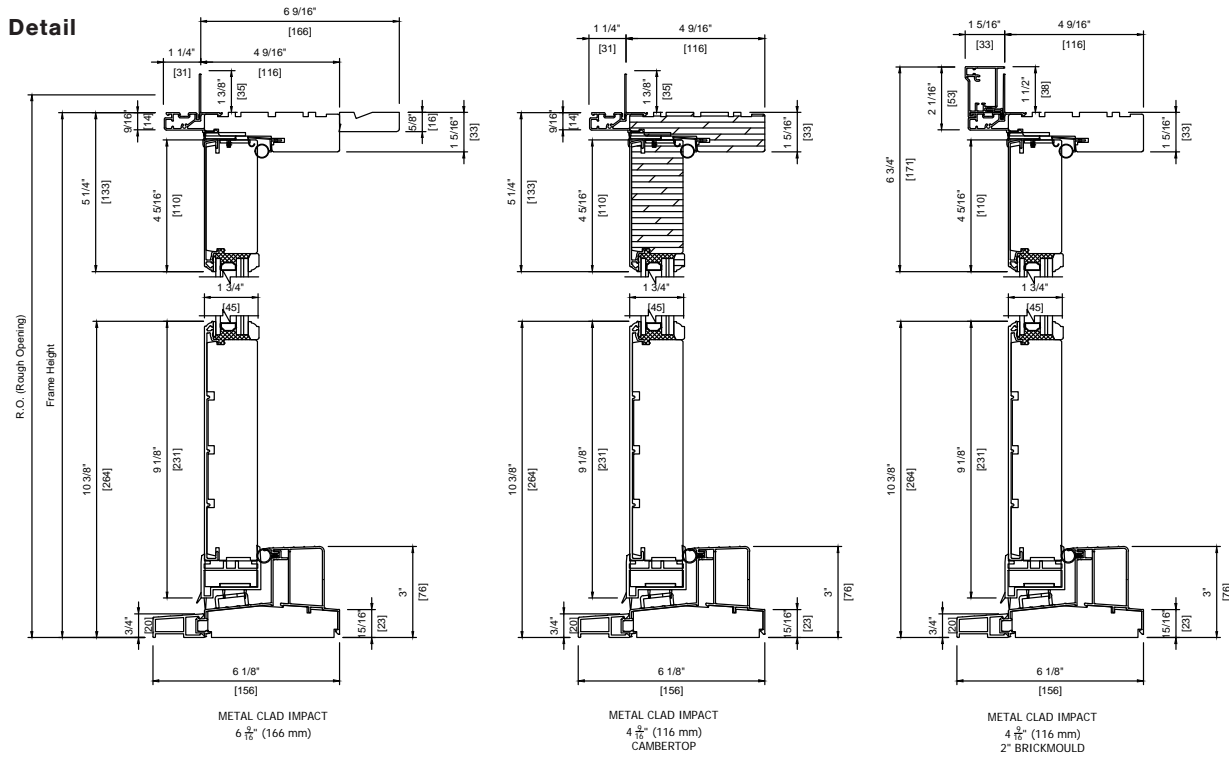
Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

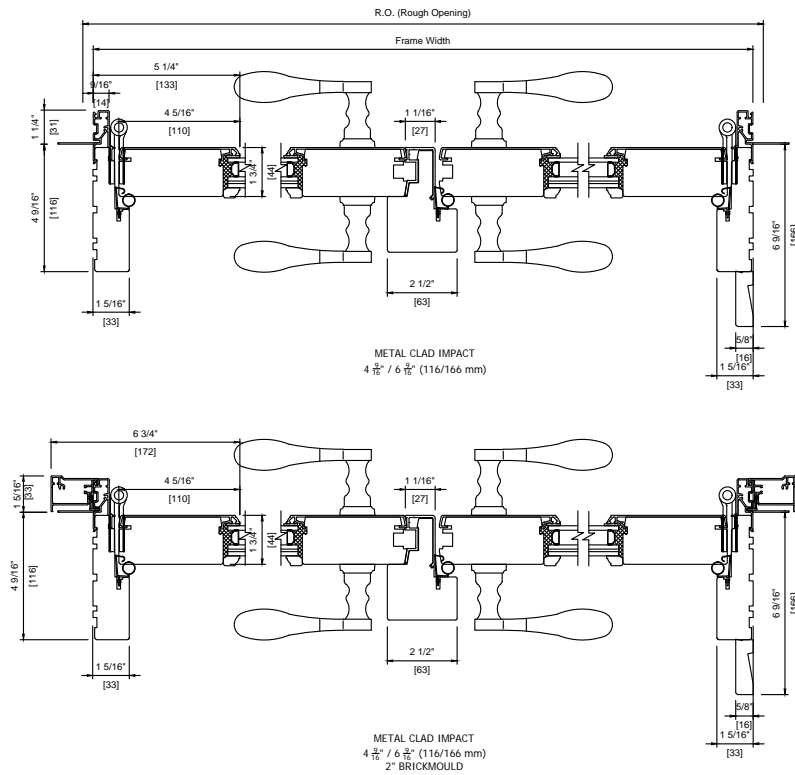
- Note:
- SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Sizes are shown as Impact IG.

StormForce Outswing French Terrace Door Detail

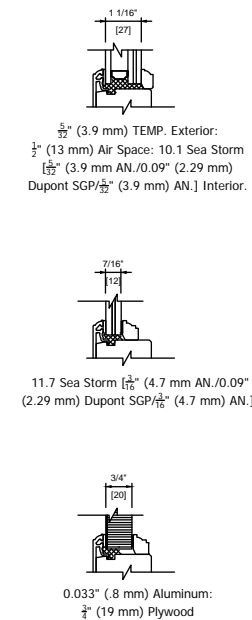
Head & Sill Detail



Plan View



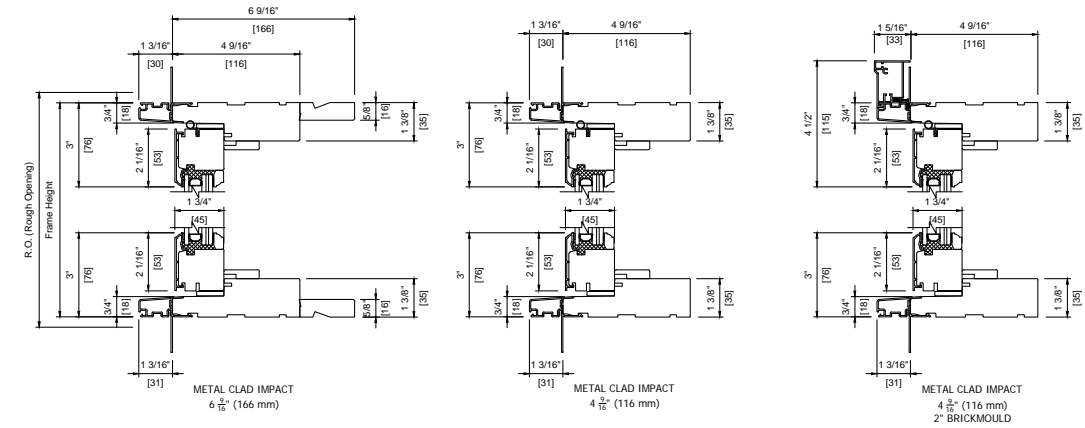
Glazing Detail



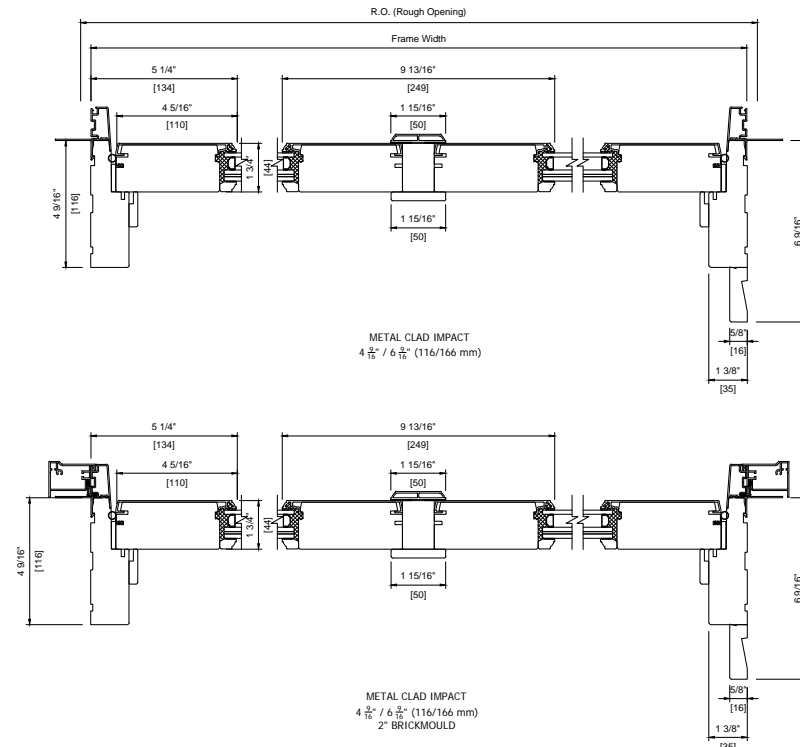
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce French Terrace Door Transom Detail

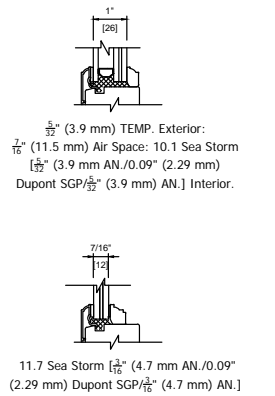
Head & Sill Detail



Plan View



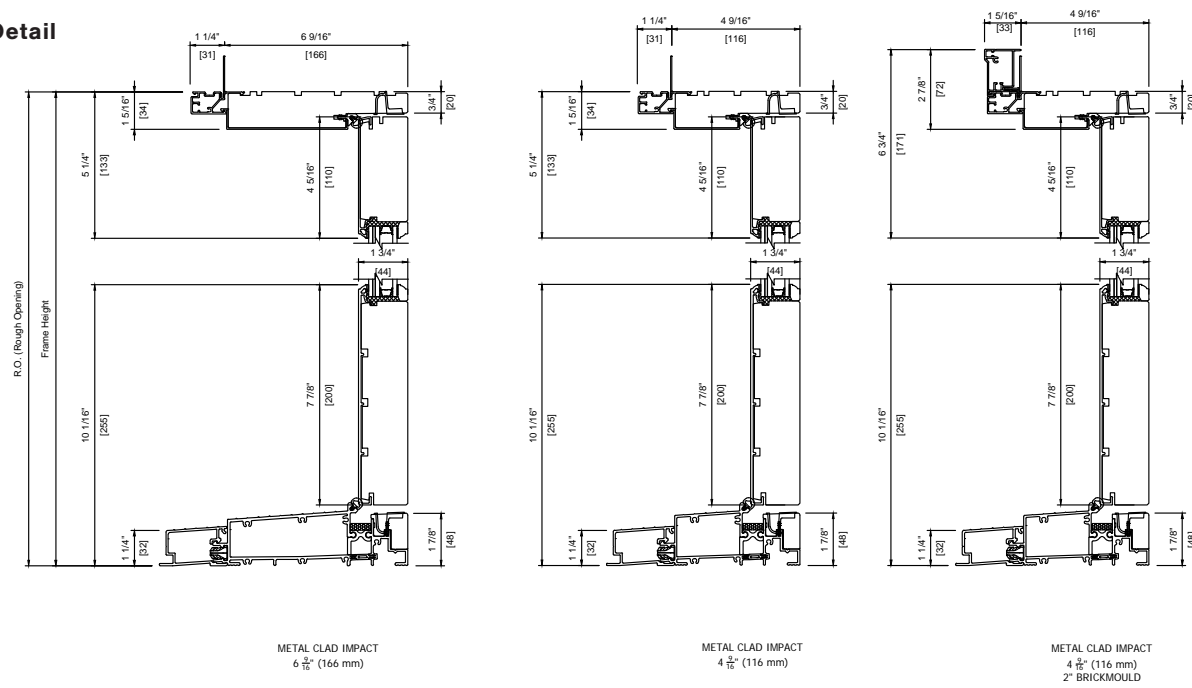
Glazing Detail



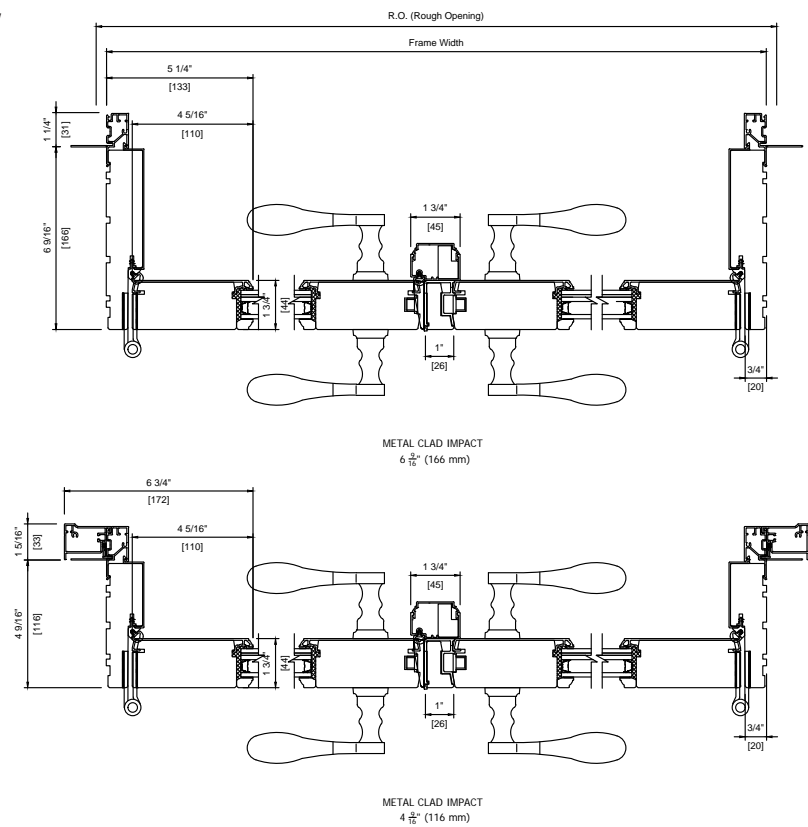
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Inswing Terrace Door Detail

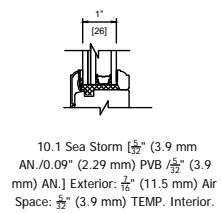
Head & Sill Detail



Plan View



Glazing Detail



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

StormForce Outswing 10' Terrace/French Terrace Door Sizes

		Width						
Rough Opening		31 1/4" 793	34 1/2" 876	38 5/8" 981	47 1/4" 1200	60 15/16" 1548	67 1/2" 1714	75 3/4" 1924
	Frame	30 1/2" 774	33 3/4" 857	37 7/8" 962	46 1/2" 1181	60 3/16" 1529	66 3/4" 1695	75" 1905
	Visible Glass	19 15/16" 506	23 3/16" 589	24 1/4" 616	13 1/16" 332	19 15/16" 506	23 3/16" 589	24 1/4" 616
80 1/8" 2035	79 1/2" 2020	63 7/8" 1623	TD1 0732	TD1 0832	TD1 0932			
81 7/8" 2080	81 5/16" 2065	65 11/16" 1668				FD2 1232	FD2 1532	FD2 1632

Product Code
Glass Size = Visible Glass + 7/8" (22 mm)

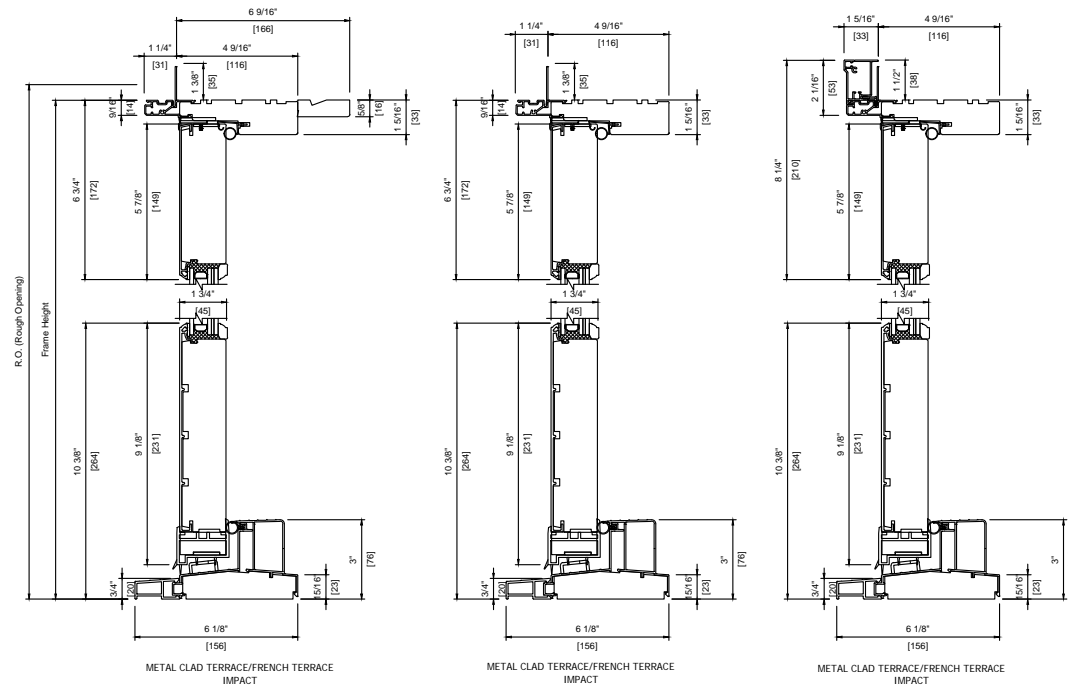
Height

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

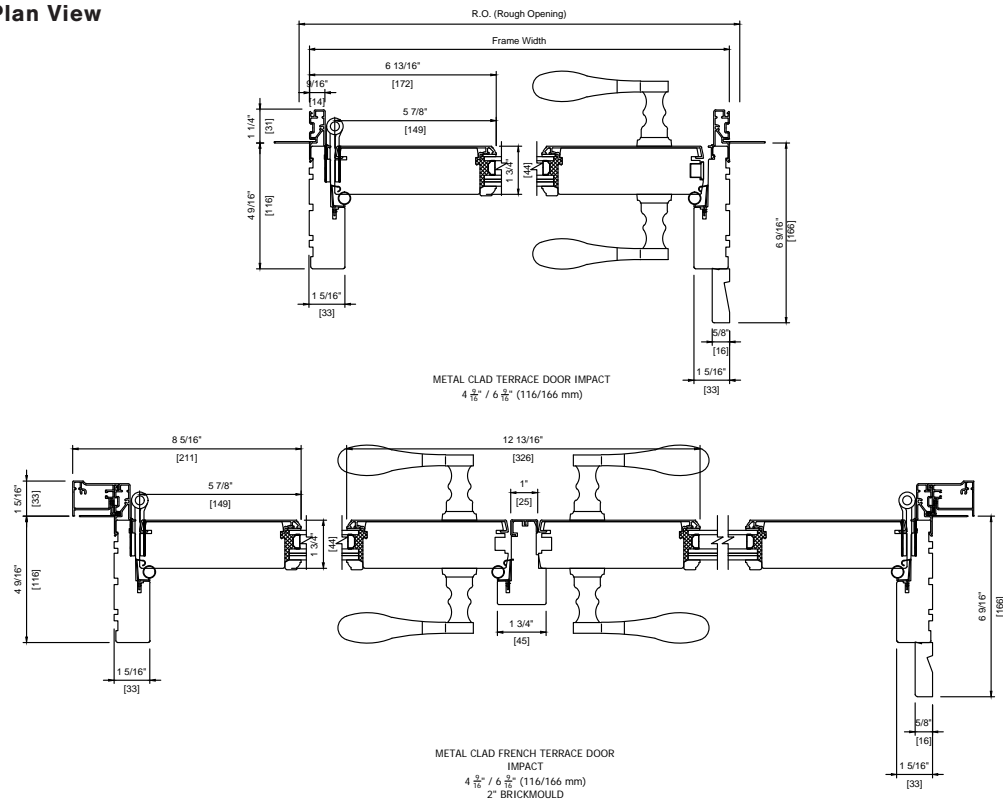
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce Outswing 10' Terrace/French Terrace Door Detail

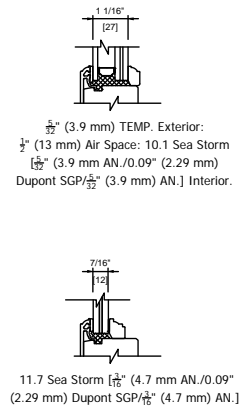
Head & Sill Detail



Plan View



Glazing Detail



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

StormForce Patio Door 2-Wide Door Sizes

		Width			
Rough Opening	Frame	Visible Glass			
		59 13/16" 1519	71 5/8" 1819	95 1/4" 2419	
		59 1/16" 1500	70 7/8" 1800	94 1/2" 2400	
80 1/8" 2035	79 1/2" 2020	70 1/2" 1790	WP2 1520	WP2 1820	WP2 2420
81 7/8" 2080	81 5/16" 2065	72 1/4" 1835	WP2 1568	WP2 1868	WP2 2468
83 1/4" 2115	82 11/16" 2100	73 5/8" 1870	WP2 1521	WP2 1821	WP2 2421
86 9/16" 2199	86" 2184	76 15/16" 1954	WP2 1570	WP2 1870	WP2 2470
95 1/16" 2415	94 1/2" 2400	85 7/16" 2170	WP2 1524	WP2 1824	WP2 2424

Product Code

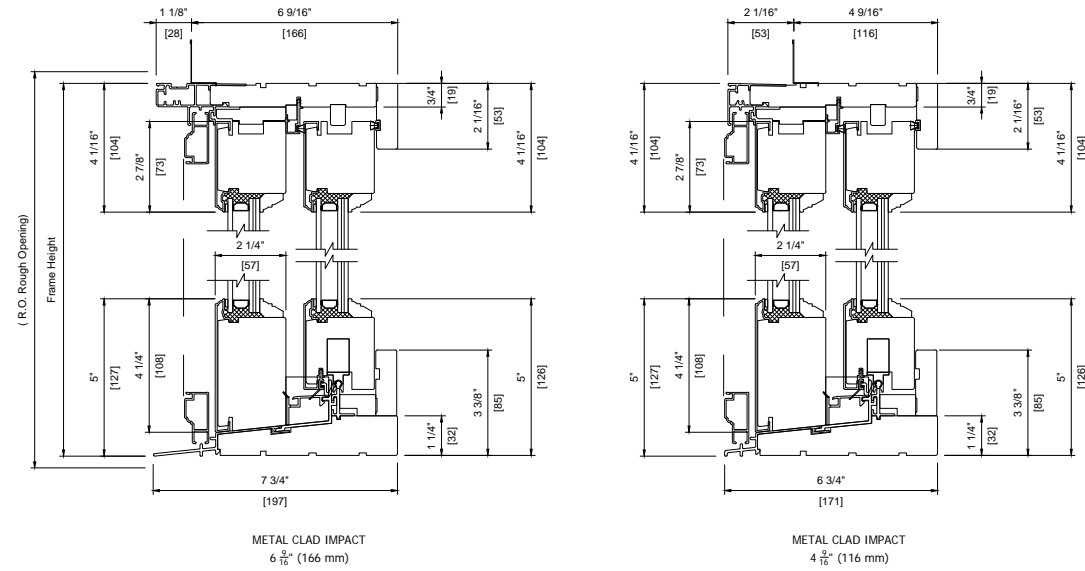
Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

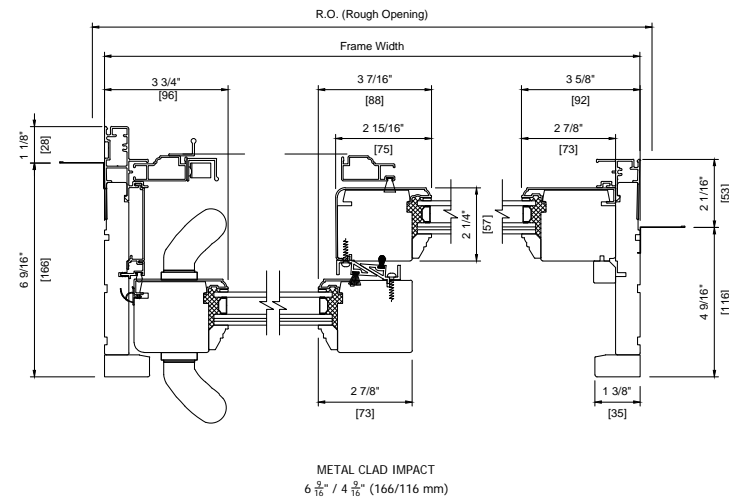
Note: • SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.

StormForce Patio Door Detail

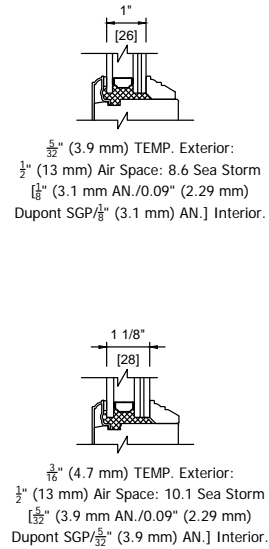
Head & Sill Detail



Plan View



Glazing Detail



Note: • SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
• O = Fixed, X = Operating

StormForce French Patio Door 2-Wide Door Sizes

Rough Opening	Width			
	Frame			
	Visible Glass			
	59 13/16" 1519	71 5/8" 1819	95 1/4" 2419	
	59 1/16" 1500	70 7/8" 1800	94 1/2" 2400	
	21 13/16" 538	27 1/16" 688	38 7/8" 988	
80 1/8" 2035	79 1/2" 2020	64" 1626	FP2 1520	FP2 1820
81 7/8" 2080	81 5/16" 2065	65 13/16" 1671	FP2 1568	FP2 1868
83 1/4" 2115	82 11/16" 2100	67 3/16" 1706	FP2 1521	FP2 1821
86 9/16" 2199	86" 2184	70 1/2" 1790	FP2 1570	FP2 1870
95 1/16" 2415	94 1/2" 2400	79" 2006	FP2 1524	FP2 1824
106 7/8" 2715	106 5/16" 2700	90 13/16" 2306	FP2 1527	FP2 1827

Product Code

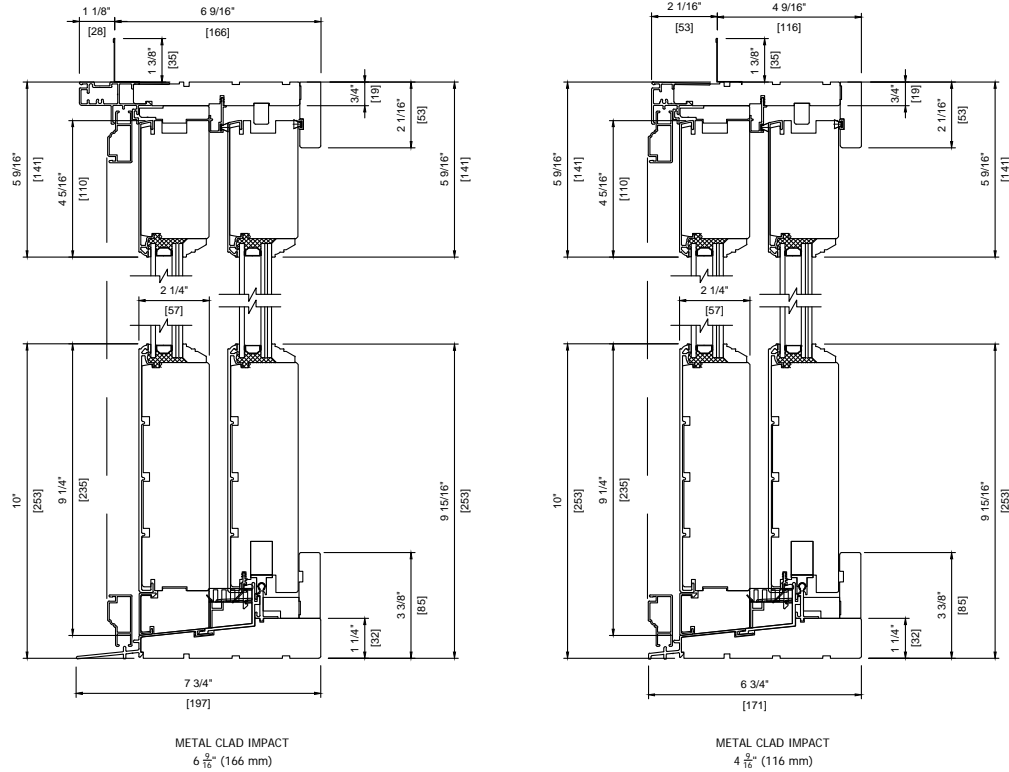
Glass Size = Visible Glass + 7/8" (22 mm)

Standard sizes shown. Additional sizes may be available. Custom sizes can be ordered.

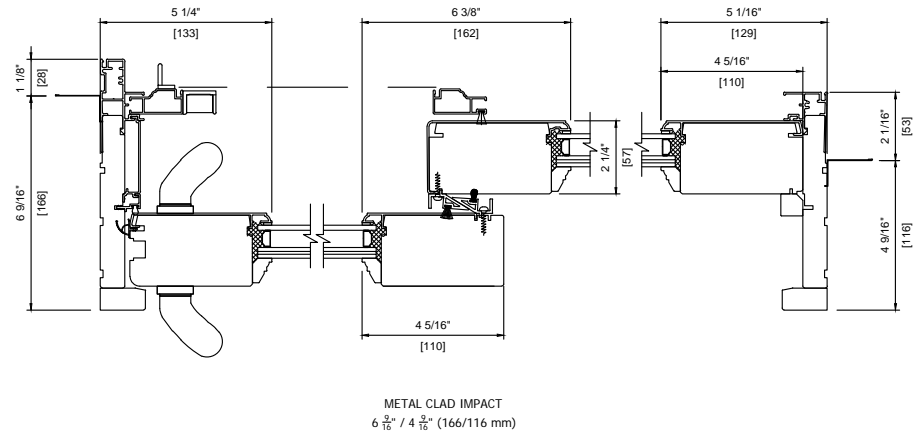
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2 mm) tolerance.

StormForce French Patio Door 2 Wide Detail

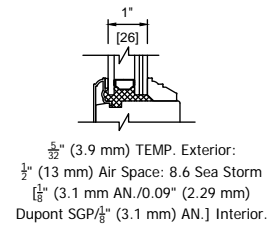
Head & Sill Detail



Plan View



Glazing Detail



Note:

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

StormForce LiftSlide Stacking Door Sizes

		Width					Maximum Width						
Rough Opening		73" 1859	106" 2692	139" 3531	172" 4369	205" 5207	121" 3074	178 4497 1/16"	235 5970 1/16"	292 7419 1/16"	349 8867 1/16"		
	System	72" 1829	105" 2667	138" 3505	171" 4343	204" 5182	120" 3049	177 4497 1/16"	234 5945 1/16"	291 7393 1/16"	348 8841 1/16"		
	Panel	36" 914	36" 914	36" 914	36" 914	36" 914	60" 1524	60" 1524	60" 1524	60" 1524	60" 1524		
	Jamb	8 1/16" 204	11 7/8" 302	15 3/4" 400	19 5/8" 498	23 7/16" 596	8 1/16" 204	11 7/8" 302	15 3/4" 400	19 5/8" 498	23 7/16" 596		
	88 7/16" 52246	87 7/16" 2221	84" 2134	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO
	100 7/16" 2551	99 7/16" 2526	96" 2438	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO
112 7/16" 2856	111 7/16" 2831	108" 2743	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	
124 7/16" 3161	123 7/16" 3135	120" 3048	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	
144" 3658	143" 3632	139 9/16" 3545	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	

Product Code

Glass Size = Visible Glass + 1 3/8" (35 mm)

See Chart for Allowable DP

DP 70 Allowable

(See Cross Section for Still Riser Restrictions)

Custom Sizes Available.

- Note:**
- Sizes shown are typical details.
 - Additional sizes and configurations available.
 - Screen options may be available depending on size and configuration.
 - Raised threshold available with a maximum of 6 panels per sill (12 in a bi-parting configuration; 2 per track).
 - Consult your Authorized Dealer for details.
 - All dimensions to have +/- 1/16" (2 mm) tolerance.
 - O = Fixed, X = Operating, P = Pocketing

- The preparation of the rough opening for large openings such as those required by, but not limited to, LiftSlide doors have unique requirements. Structural headers that allow for deflection no greater than 1/8" along the unsupported length once the header is fully loaded are required. Special care needs to be taken when installing any unit including transoms above such large opening units. Loewen is not responsible for site measurements or the determination of structural and architectural requirements for the installation of large opening products such as but not limited to, Liftslide doors. Site specifications are the responsibility of building professionals or engineers to determine.

StormForce LiftSlide Bi-Parting Door Sizes

Rough Opening		Width					Maximum Width					
		73" 1859	106" 2692	139" 3531	172" 4369	205" 5207	121" 3074	178 1/16" 4497	235 1/16" 5970	292 1/16" 7419	349 1/16" 8867	
System		72" 1829	105" 2667	138" 3505	171" 4343	204" 5182	120" 3049	177 1/16" 4497	234 1/16" 5945	291 1/16" 7393	348 1/16" 8841	
Panel		36" 914	36" 914	36" 914	36" 914	36" 914	60" 1524	60" 1524	60" 1524	60" 1524	60" 1524	
Jamb		8 1/16" 204	11 7/8" 302	15 3/4" 400	19 5/8" 498	23 7/16" 596	8 1/16" 204	11 7/8" 302	15 3/4" 400	19 5/8" 498	23 7/16" 596	
88 7/16" 52246	87 7/16" 2221	84" 2134	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO
100 7/16" 2551	99 7/16" 2526	96" 2438	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO
112 7/16" 2856	111 7/16" 2831	108" 2743	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO
124 7/16" 3161	123 7/16" 3135	120" 3048	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO
144" 3658	143" 3632	139 9/16" 3545	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO	OX XO	OXX XXO	OXXX XXXO	OXXXX XXXXO	OXXXXX XXXXXO

Height

Product Code

Allowable Design Pressure (All Doors)

MAXIMUM FRAME HEIGHT (IN.)	MAXIMUM PANEL WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)	MAXIMUM FRAME HEIGHT (IN.)	MAXIMUM PANEL WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)
143	60	50	120	60	59
	54	55		54	66
	48	62	108	51	70
	42	70		60	66
132	60	54	102	56	70
	54	60		60	70
	48	67			
	46	70			

Glass Size = Visible Glass + 1 3/8" (35 mm)

See Chart for Allowable DP

DP 70 Allowable

(See Cross Section for Still Riser Restrictions)

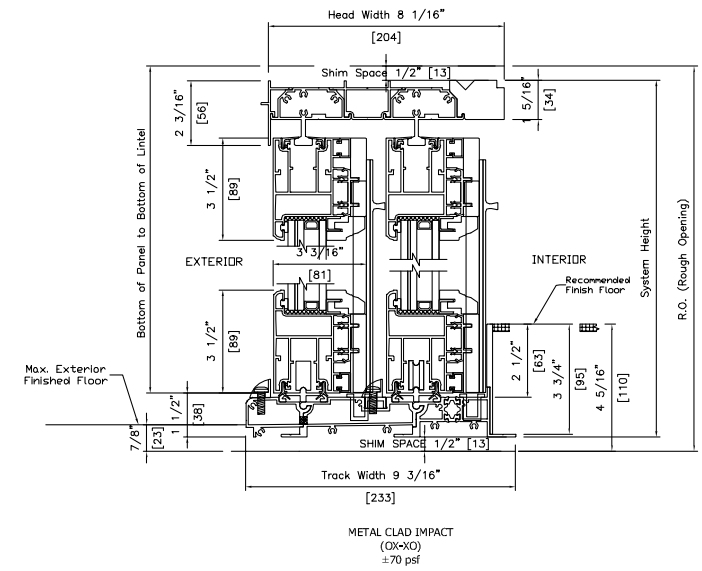
Custom Sizes Available.

- Note:
- Sizes shown are typical details.
 - Additional sizes and configurations available.
 - Screen options may be available depending on size and configuration.
 - Raised threshold available with a maximum of 6 panels per sill (12 in a bi-parting configuration; 2 per track).
 - Consult your Authorized Dealer for details.
 - All dimensions to have +/- 1/16" (2 mm) tolerance.
 - O = Fixed, X = Operating, P = Pocketing

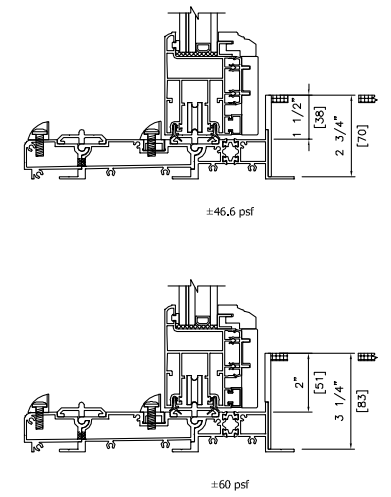
- The preparation of the rough opening for large openings such as those required by, but not limited to, LiftSlide doors have unique requirements. Structural headers that allow for deflection no greater than 1/8" along the unsupported length once the header is fully loaded are required. Special care needs to be taken when installing any unit including transoms above such large opening units. Loewen is not responsible for site measurements or the determination of structural and architectural requirements for the installation of large opening products such as but not limited to, Liftslide doors. Site specifications are the responsibility of building professionals or engineers to determine.

StormForce LiftSlide Door Jamb Detail

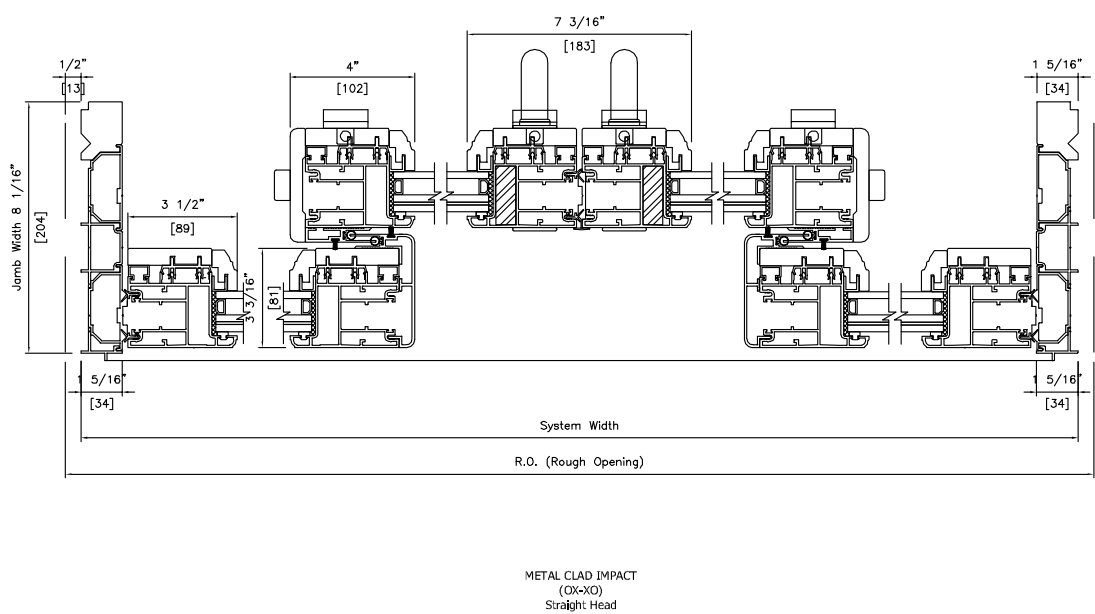
Head & Sill Detail



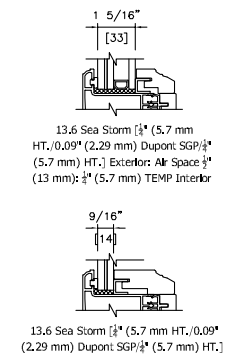
Optional Risers



Plan View



Glazing Detail



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

StormForce LiftSlide Stacking With Pocket Door Sizes

Rough Opening			Width						Maximum Width					
			39 11/16" 1008	72 5/8" 1845	105 5/8" 2683	138 5/8" 3521	171 5/8" 4360	204 5/8" 5198	63 11/16" 1618	120 11/16" 3065	177 11/16" 4513	234 11/16" 5961	291 11/16" 7410	348 3/4" 8858
System			79" 2007	112" 2844	144 15/16" 3682	177 15/16" 4520	211" 5359	244" 6197	127" 3226	184" 4674	241" 6122	298 1/16" 7570	355 1/16" 9019	412 1/16" 10467
Panel			36" 914	36" 914	36" 914	36" 914	36" 914	36" 914	60" 1524	60" 1524	60" 1524	60" 1524	60" 1524	60" 1524
Jamb			8 1/8" 206	9 11/16" 246	13 1/2" 343	17 3/8" 442	21 1/4" 539	25 1/16" 637	8 1/8" 206	9 11/16" 246	13 9/16" 344	17 3/8" 442	21 1/4" 539	25 1/16" 637
Pocket			7 1/16" 179	9 5/8" 245	13 9/16" 344	17 3/8" 441	21 3/16" 538	25 1/16" 636	7 1/16" 179	9 5/8" 245	13 9/16" 344	17 3/8" 441	21 3/16" 538	25 1/16" 636
88 7/16" 52246	87 7/16" 2221	84" 2134	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP
100 7/16" 2551	99 7/16" 2526	96" 2438	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP
112 7/16" 2856	111 7/16" 2831	108" 2743	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP
124 7/16" 3161	123 7/16" 3135	120" 3048	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP
144" 3658	143" 3632	139 9/16" 3545	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP	PX XP	PXX XXP	PXXX XXXP	PXXXX XXXXP	PXXXXX XXXXXP	PXXXXXX XXXXXXP

Product Code

Glass Size = Visible Glass + 1 3/8" (35 mm)

See Chart for Allowable DP

DP 70 Allowable

(See Cross Section for Still Riser Restrictions)

Custom Sizes Available.

- Note:
- Sizes shown are typical details.
 - Additional sizes and configurations available.
 - Screen options may be available depending on size and configuration.
 - Raised threshold available with a maximum of 6 panels per sill (12 in a bi-parting configuration; 2 per track).
 - Consult your Authorized Dealer for details.
 - All dimensions to have +/- 1/16" (2 mm) tolerance.
 - O = Fixed, X = Operating, P = Pocketing
 - The preparation of the rough opening for large openings such as those required by, but not limited to, LiftSlide doors have unique requirements. Structural headers that allow for deflection no greater than 1/8" along the unsupported length once the header is fully loaded are required. Special care needs to be taken when installing any unit including transoms above such large opening units. Loewen is not responsible for site measurements or the determination of structural and architectural requirements for the installation of large opening products such as but not limited to, Liftslide doors. Site specifications are the responsibility of building professionals or engineers to determine.

StormForce LiftSlide Bi-Parting With Pocket Door Sizes

Rough Opening			Width						Maximum Width					
			75 7/16" 1917	141 3/8" 3591	207 3/8" 5267	273 3/8" 6944	339 5/16" 8619	405 5/16" 10294	123 1/2" 3137	237 7/16" 6031	351 7/16" 8927	465 1/2" 11824	579 1/2" 14719	693 1/2" 17614
System			155 1/8" 3940	221" 5614	287" 7290	351 1/16" 8967	419" 10643	484 15/16" 12318	251 3/16" 6380	365 1/8" 9274	479 1/8" 12170	593 3/16" 15067	707 3/16" 17963	821 3/16" 20858
Panel			36" 914	36" 914	36" 914	36" 914	36" 914	36" 914	60" 1524	60" 1524	60" 1524	60" 1524	60" 1524	60" 1524
Jamb			8 1/8" 206	9 11/16" 246	13 1/2" 343	17 3/8" 442	21 1/4" 539	25 1/16" 637	8 1/8" 206	9 11/16" 246	13 9/16" 344	17 3/8" 442	21 1/4" 539	25 1/16" 637
Pocket			7 1/16" 179	9 5/8" 245	13 9/16" 344	17 3/8" 441	21 3/16" 538	25 1/16" 636	7 1/16" 179	9 5/8" 245	13 9/16" 344	17 3/8" 441	21 3/16" 538	25 1/16" 636
88 7/16" 52246	87 7/16" 2221	84" 2134	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP
100 7/16" 2551	99 7/16" 2526	96" 2438	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP
112 7/16" 2856	111 7/16" 2831	108" 2743	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP
124 7/16" 3161	123 7/16" 3135	120" 3048	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP
144" 3658	143" 3632	139 9/16" 3545	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP	PX-XP	PXX-XXP	PXXX- XXXP	PXXXX- XXXXP	PXXXXX- XXXXXP	PXXXXXX- XXXXXXP

Product Code

Glass Size = Visible Glass + 1 3/8" (35 mm)

See Chart for Allowable DP

DP 70 Allowable

(See Cross Section for Still Riser Restrictions)

Allowable Design Pressure (All Doors)

MAXIMUM FRAME HEIGHT (IN.)	MAXIMUM PANEL WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)	MAXIMUM FRAME HEIGHT (IN.)	MAXIMUM PANEL WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)
143	60	50	120	60	59
	54	55		54	66
	48	62		51	70
	42	70	108	60	66
60	54	56		70	
132	54	60	102	60	70
	48	67			
	46	70			

Custom Sizes Available.

- Note:
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