

# Infinity Casement and Awning

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## *Infinity Casement, Awning and Picture*

### Unit Features

Infinity Casement: NCA

Infinity Awning: NAWN

Infinity Casement Picture: NCAP

#### **Ultrex® Pultruded Fiberglass Frame:**

- Frame thickness: 1 5/16" (33)
- Frame depth: 2 5/32" (55)
- Exterior colors: Stone White, Sierra, Cashmere, Pebble Gray, Bahama Brown, Bronze
- Interior colors: Stone White, Sierra, EverWood™

#### **Ultrex® Pultruded Fiberglass Sash:**

- Sash thickness: 1 3/8" (35)
- Operating sash is removable for cleaning
- Sash are replaceable but cannot be re-glazed
- Exterior colors: Stone White, Sierra, Cashmere, Pebble Gray, Bahama Brown, Bronze
- Interior colors: Stone White, Sierra, EverWood™

#### **Casement Hardware:**

- Lock and keeper:
  - Multi-point locking mechanism that is actuated from a single point of operation. Lock mechanisms are concealed with only the actuator handle and escutcheon being visible to the interior. Keepers are mounted to the interior face of the sash and interlocks within concealed lock when actuated.
- Operator:
  - Concealed hinges with stainless steel tracks
  - Snubber: pulls the sash tight to the frame and provides positive engagement to secure the sash under structural load conditions
  - Dual arm roto-gear operator on units 24 3/8" (619) wide frame size and over
  - Split-arm roto-gear operator used on units less than 24 3/8" (619) wide
- Handle:
  - Die-cast folding crank handle
- Factory installed Window Opening Control Device (WOCD):
  - Minimum Frame OSM 18 5/32" (461) x 17 3/8" (441)
  - Maximum Frame OSM 40" (1016) x 60" (1524) or 36" (914) x 86" (2184)
  - WOCD locking assembly:
    - Factory installed
    - Die-cast
    - Color: White, Satin Taupe, Sierra
  - WOCD tether assembly: factory installed, glass filled nylon
    - Color: E-Gard color match

#### **Awning Hardware:**

- Lock and keeper:
  - Cam lock and stainless steel keeper system
- Operator:
  - Concealed hinges and steel tracks
  - Factory installed roto-gear operator
- Handle:
  - Die-cast folding crank handle
- Sash Limiter:
  - Factory installed or field applied

#### **Weather Strip:**

- Frame:
  - Extruded foam bulb weather strip that runs around the perimeter of the frame sealing against the interior face of the sash
    - Color: black
- Sash:
  - Extruded thermoplastic bulb that attaches to a kerf around the top, bottom and sides of the sash; sealing against the inner perimeter of the frame
    - Color: beige or black
    - Black is for Bahama Brown and Bronze exterior units

## Unit Features:

### Insect Screens:

- Full screen
- Roll formed aluminum frame
- Mitered corner key; injection molded, color matched to screen
- Color: Stone White, Satin Taupe, Sierra, EverWood™
- Standard screen mesh material: charcoal fiberglass
  - Optional screen mesh material: high transparency

### Glass:

- Glazing seal: silicone bedding on interior and exterior
- Standard glass: Low E2 with Argon or air
- Optional glazing available: Low E1 with Argon or air, Low E3 with Argon or air, or Low E3/ERS with Argon or air, tempered, obscure
- Decorative glass options include Glue Chip, Rain, Reed, Narrow Reed, or Frost
- Decorative glass is not available with Low E1, Low E3/ERS, or STC/OITC
- Rain, Reed and Narrow Reed not available with SDL
- SDL available on Frost, annealed or tempered glass
- SDL available on Glue Chip, tempered glass required
- Insulating glass will be altitude adjusted with capillary tubes for higher elevations
- Argon gas is not available for elevations that require capillary tubes

### Simulated Divided Lites (SDL):

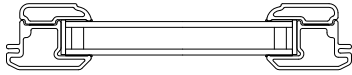
- 7/8" (22) or 1 1/8" (29) SDL bar (interior and exterior)
- 2 11/32" (30) simulated rail (interior and exterior)
- Exterior color: matched to unit exterior
- Interior color: matched to interior - ABS material
- Pattern: equal rectangular, cottage, prairie, check rail

### Gilles-Between-the-Glass (GBG):

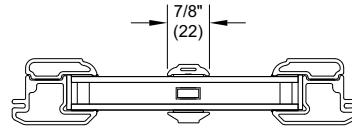
- 11/16" (18) or 1" (25) contoured aluminum bar
- Exterior: color matched to unit exterior
- The exterior GBG color is designed to best match the unit exterior color when used with Low E glass. The use of different types of glazing options may alter the exterior GBG color appearance.
- Interior color: White, Satin Taupe, Sierra, Bronze
- Pattern: equal rectangular, cottage, prairie, check rail

*NOTE: GBG may not be available or may require tempered glass if the glass size is greater than 16 square feet or if the short side dimension is greater than 48". Please contact your local Infinity Retailer or Infinity Support at 800-372-1072 to determine if GBG is available for glass sizes exceeding these dimensions.*

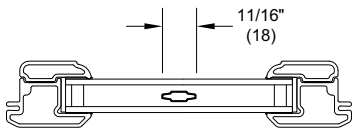
Lite Options



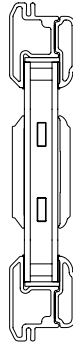
Insulating Glass



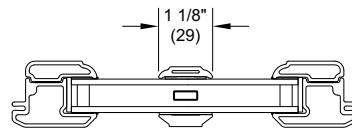
Insulating Glass  
7/8" SDL w/ spacer bar



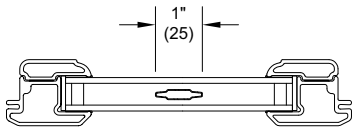
11/16" Insulating Glass  
GBG



Insulating Glass  
SDL Simulated Rail  
w/ spacer bar



Insulating Glass  
1 1/8" SDL w/ spacer bar



1" Insulating Glass  
GBG

**Minimum and Maximum Guidelines**

Minimum and Maximum Guidelines										
Unit Type	Frame Size								Glass Limits	
	Min Width		Min Height		Max Width		Max Height		Max Glass	
	in	mm	in	mm	in	mm	in	mm	ft <sup>2</sup>	m <sup>2</sup>
NCA	16 1/4	(413)	17 3/8	(441)	40	(1016)	60	(1524)	13 29/32	1.292
	16 1/4	(413)	17 3/8	(441)	36	(914)	86	(2184)	18 3/32	1.681
NAWN	17 1/2	(445)	17 3/8	(441)	60	(1524)	48	(1219)	17	1.579
NCAP/ NAWNP	14 1/4	(362)	14 1/4	(362)	86	(2184)	86	(2184)	30	2.787

*NOTE: For Glue Chip, Frost, and Rain, maximum short frame side is 63 1/8".*

*For Reed and Narrow Reed, vertical pattern orientation maximum frame width size 63 1/8".*

*For Reed and Narrow Reed, horizontal pattern orientation maximum sash height 63 1/8".*

*If frame height exceeds 76" or if frame width exceeds 73 1/2", short side dimension of frame cannot exceed 52 1/8".*

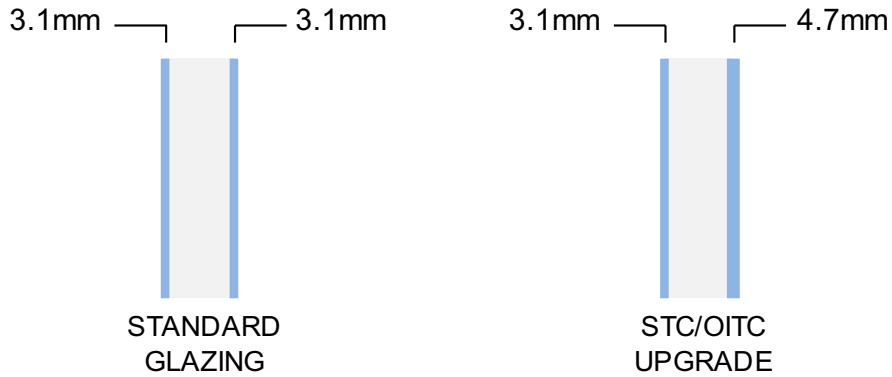
*Tempered glass may be required if the glass size is greater than 23 square feet. Please contact your local Infinity Retailer or Infinity Support at 800-372-1072 to determine available glass options on units exceeding this size.*

**Certified Sizes and Ratings**

Product	Air Tested to psf	Water Tested to psf	Design Pressure (DP)	Certification Rating	Max Overall Width		Max Overall Height	
					in	mm	in	mm
Infinity Casement	1.57	6.00	40.0	R-PG40-C	36	(914)	86	(2184)
Infinity Casement	1.57	6.00	40.0	LC-PG40-C	31	(787)	86	(2184)
Infinity Casement	1.57	6.00	40.0	LC-PG40-C	40	(1016)	60	(1524)
Infinity Casement	1.57	6.00	40.0	LC-PG40-C	36	(914)	72	(1829)
Infinity Casement	1.57	6.00	40.0	R-PG40-C	24 23/64	(619)	86	(2184)
Infinity Casement	1.57	6.00	40.0	LC-PG40-C	21 3/8	(543)	86	(2184)
Infinity Casement (clear view hinges)	1.57	6.00	40.0	LC-PG40-C	30 23/64	(771)	57	(1448)
Infinity Casement (clear view hinges)	1.57	6.00	40.0	R-PG40-C	30 23/64	(771)	72	(1829)
Infinity Awning	1.57	6.00	40.0	LC-PG40-AP	60	(1524)	48	(1219)
Infinity Casement Picture	1.57	6.00	40.0	LC-PG40-FW	86	(2184)	86	(2184)

**STC/OITC Glass Values**

This glazing option incorporates 3.1mm/4.7mm variable thickness glass to increase STC/OITC performance and improve sound abatement. Infinity's STC/OITC upgrade includes third party ASTM ratings and reports. STC/OITC ratings for this option and for standard 3.1mm/3.1mm insulating glass are shown in the attached chart.



Product Type	Exterior Glazing	Airspace	Interior Glazing	STC	OITC
Full Frame Casement	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	28	25
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	32	27
Full Frame Casement Picture	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	27	24
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	32	27
Full Frame Awning	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	29	25
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	33	28

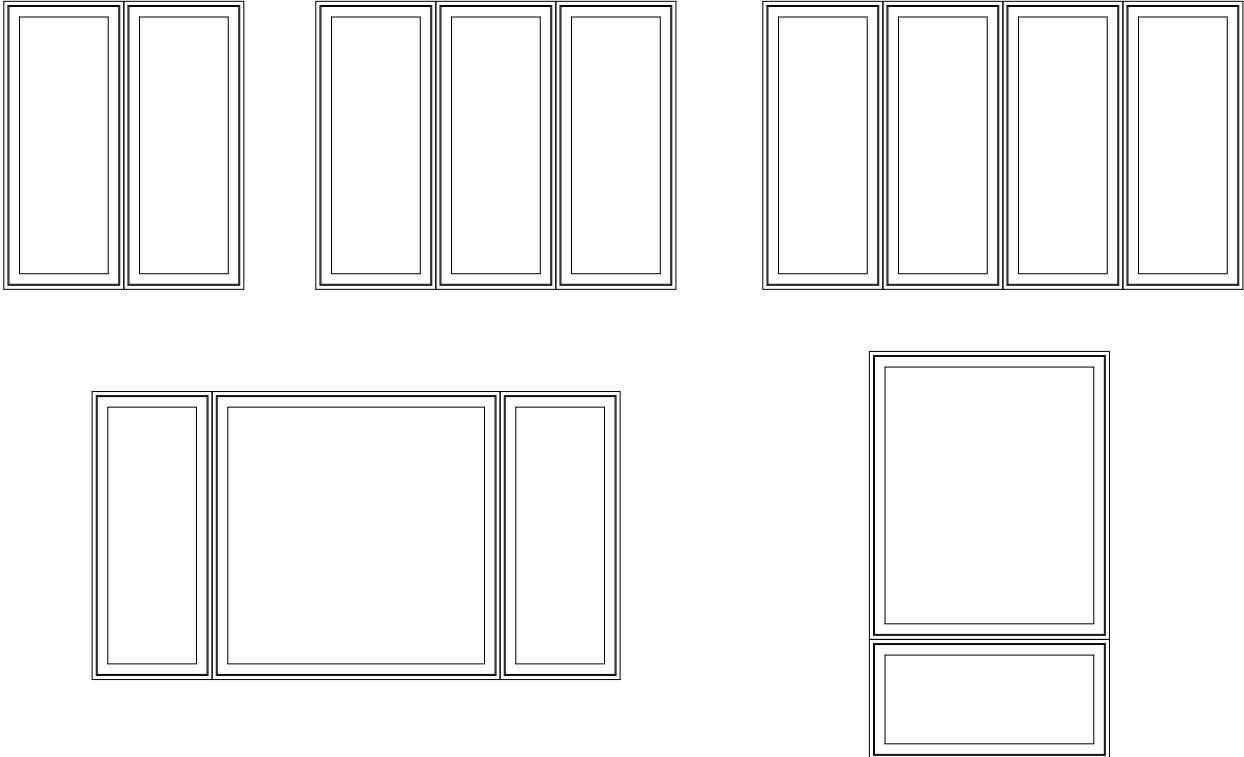


## Mulling Guidelines

### Factory Mullered Casement/Awning Assemblies

- Assemblies up to 4 units wide by 1 unit high
  - MAXIMUM ROUGH OPENING not to exceed 113" (2870) x 86 1/2" (2197)
- Assemblies up to 1 unit wide by 2 units high
  - MAXIMUM ROUGH OPENING not to exceed 73" (1854) x 96" (2438)

NOTE: Field mulling beyond the above limitations is not recommended.



### Rough Opening Assemblies

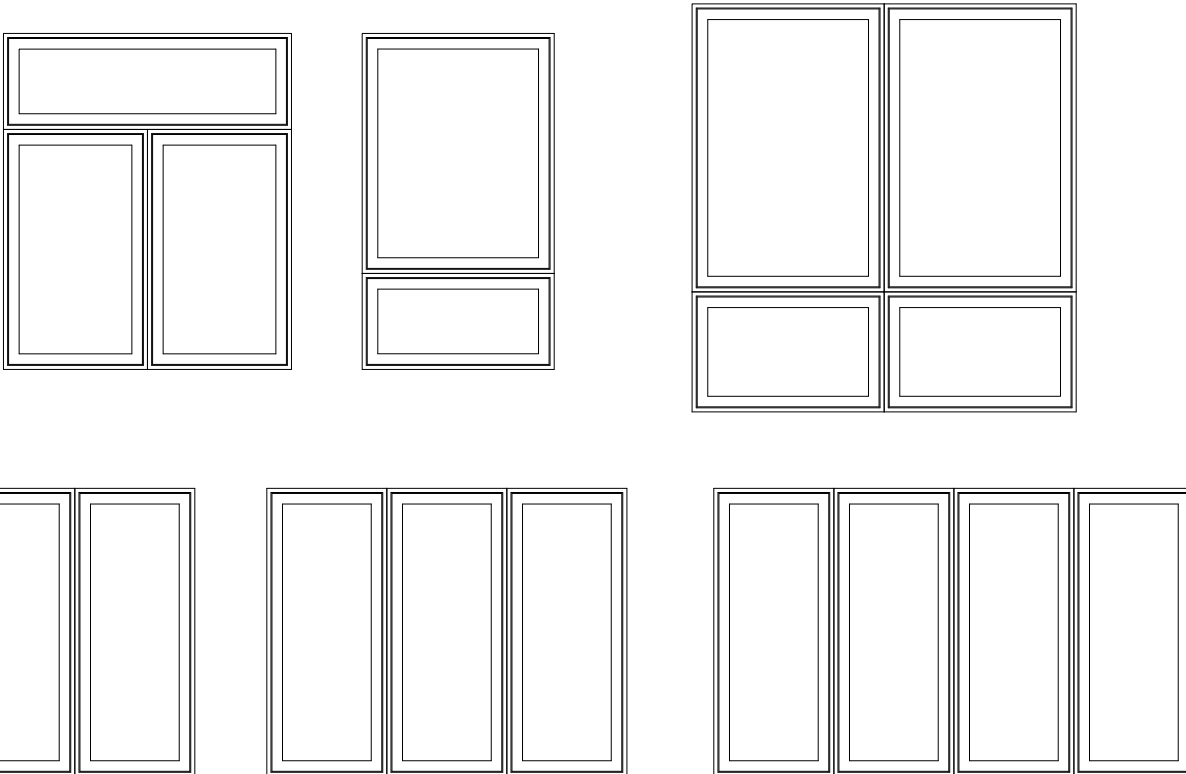
- WIDTH:
  - Frame Width = Single unit Rough Opening width MINUS 1"
  - Total Rough Opening Width = ADD all frame widths PLUS 1"
- HEIGHT:
  - Frame Height = Single unit Rough Opening height MINUS 1/2"
  - Total Rough Opening Height = ADD all frame heights PLUS 1/2"

## 1/2" Mull Reinforcement Guidelines

### Factory Mullered 1/2" Mull Reinforcement Casement/Awning Assemblies

- Assemblies up to 4 units wide by 1 unit high
  - MAXIMUM ROUGH OPENING not to exceed 113" (2870) x 96 1/2" (2451)
- Assemblies up to 1 unit wide by 2 units high
  - MAXIMUM ROUGH OPENING not to exceed 73" (1584) x 96 1/2" (2451)
- Assemblies up to 2 units wide by 2 units high
  - MAXIMUM ROUGH OPENING not to exceed 97 1/2" (2477) x 96 1/2" (2451)
  - MAXIMUM ROUGH OPENING not to exceed 113" (2870) x 86 1/2" (2197)

*NOTE: Field mulling beyond the above limitations is not recommended.*



### Rough Opening Assemblies

- WIDTH:
  - Frame Width = Single unit Rough Opening width MINUS 1"
  - Total Rough Opening Width = ADD all frame widths PLUS 1/2" for each Vertical Mull Reinforcement PLUS 1"
- HEIGHT:
  - Frame Height = Single unit Rough Opening height MINUS 1/2"
  - Total Rough Opening Height = ADD all frame heights PLUS 1/2" for each Horizontal Mull Reinforcement PLUS 1/2"

**Measurement Conversions: Operable Units**

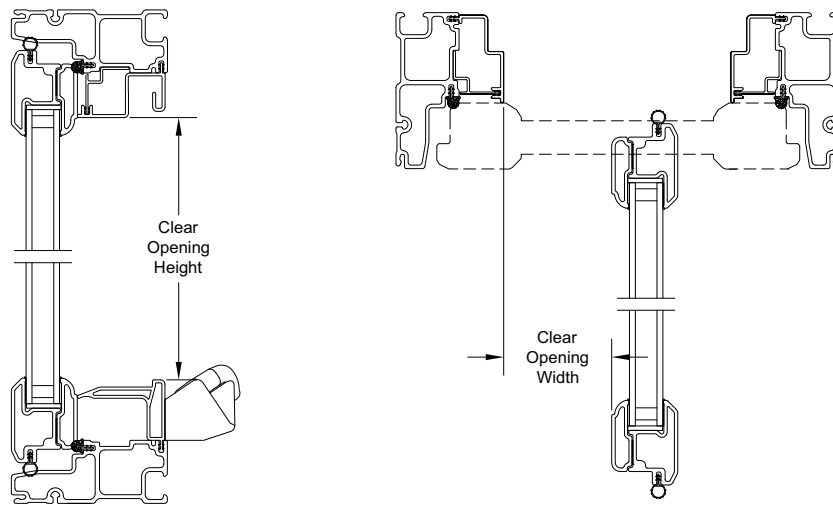
Unit Measurements - Operator Casement and Awning		Width		Height	
From	To				
<b>Rough Opening</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
MO with BMC	Rough Opening	-2 1/4	(57)	-1 11/16	(43)
Masonry Opening	Rough Opening	+ 1/2	(13)	+ 1/4	(6)
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Daylight Opening	Rough Opening	+ 6 7/32	(158)	+ 5 23/32	(145)
<b>Frame</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Daylight Opening	OM of Frame	+ 5 7/32	(132)	+ 5 7/32	(132)
<b>Sash</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	OM of Sash	-1 11/16	(43)	-1 11/16	(43)
Daylight Opening	OM of Sash	+ 3 17/32	(90)	+ 3 17/32	(90)
<b>Glass</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Daylight Opening	Glass	+ 1 1/16	(27)	+ 1 1/16	(27)
<b>Screen</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	OM of Screen, Non-EverWood	-3 7/8	(98)	-4 5/16	(109)
OM of Frame	OM of Screen, EverWood	-3 29/32	(99)	-4 5/16	(109)
Daylight Opening	Non-EverWood Screen OM	+ 1 11/32	(34)	+ 29/32	(23)
Daylight Opening	EverWood Screen OM	+ 1 5/16	(33)	+ 29/32	(23)

**Measurement Conversions: Picture**

Unit Measurement - Transom and Picture		Width		Height	
From	To				
<b>Rough Opening</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
MO with BMC	Rough Opening	-2 1/4	(57)	-1 11/16	(43)
Masonry Opening	Rough Opening	+ 1/2	(13)	+ 1/4	(6)
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Daylight Opening	Rough Opening	+ 6 7/32	(158)	+ 5 23/32	(145)
<b>Frame</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Daylight Opening	OM of Frame	+ 5 7/32	(132)	+ 5 7/32	(132)
<b>Sash</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	OM of Sash	-1 11/16	(43)	-1 11/16	(43)
Daylight Opening	OM of Sash	+ 3 17/32	(90)	+ 3 17/32	(90)
<b>Glass</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Daylight Opening	Glass	+ 1 1/16	(27)	+ 1 1/16	(27)

**Measurement Conversions: Egress - Easy Wash™**

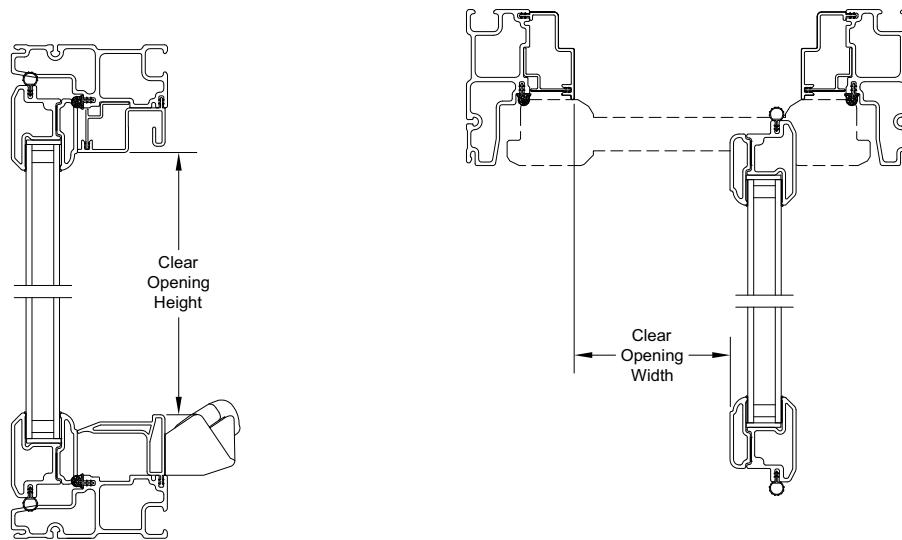
Egress Conversions		
Easy Wash™ Egress Minimum Opening and Conversions from Frame Size		
Minimum Value for Net Clear Opening	Desired Dimension	Formula
20 in	Egress opening width, in	= NCA frame OM width - 10.352
24 in	Egress opening height, in	= NCA frame OM height - 4.816
5.7 ft2	Egress opening area, ft2	= ((Egress opening width, in) x (Egress opening height, in)) / 144



Easy Wash™ Hinge

**Measurement Conversions: Egress - Clear View**

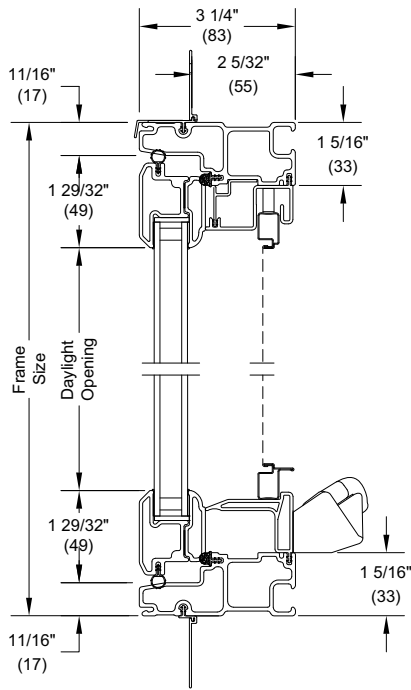
Egress Conversions		
Clear View™ Egress Minimum Opening and Conversions from Frame Size		
Minimum Value for Net Clear Opening	Desired Dimension	Formula
20 in	Egress opening width, in	= NCA frame OM width - 5.967
24 in	Egress opening height, in	= NCA frame OM height - 4.816
5.7 ft2	Egress opening area, ft2	= ((Egress opening width, in) x (Egress opening height, in)) / 144



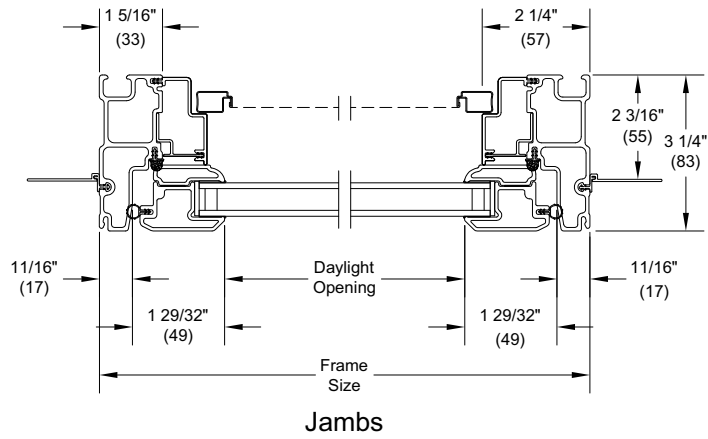
Clear View™ Hinge

**Section Details: Operating and Picture**

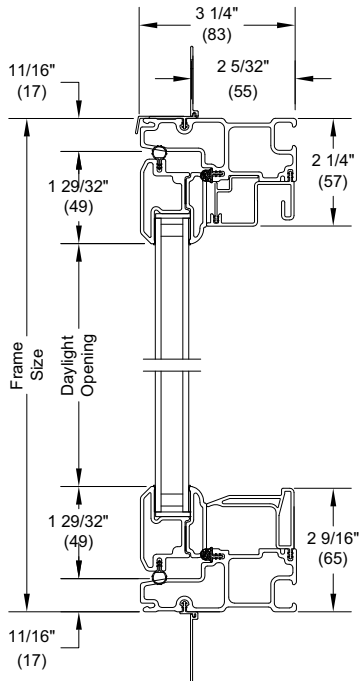
Scale: 3" = 1' 0"



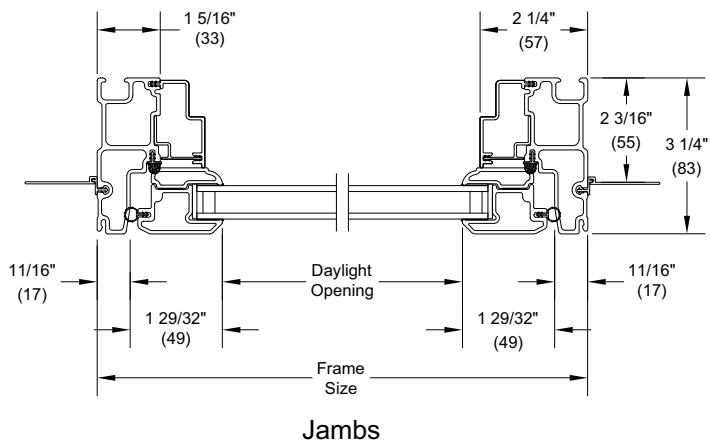
Head Jamb and Sill



Jambs



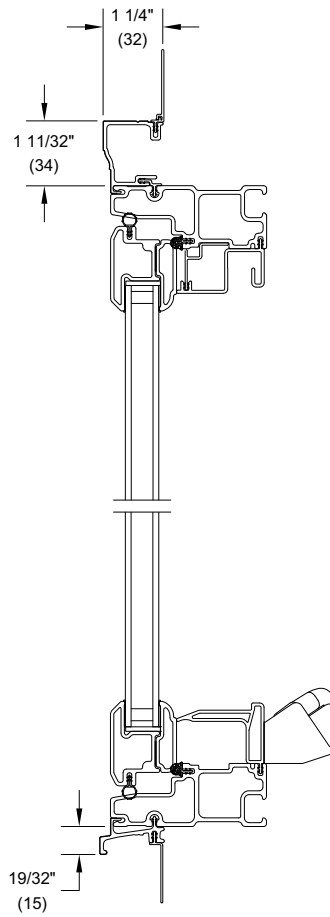
Head Jamb and Sill



Jambs

Section Details: Casing Options

Scale: 3" = 1' 0"

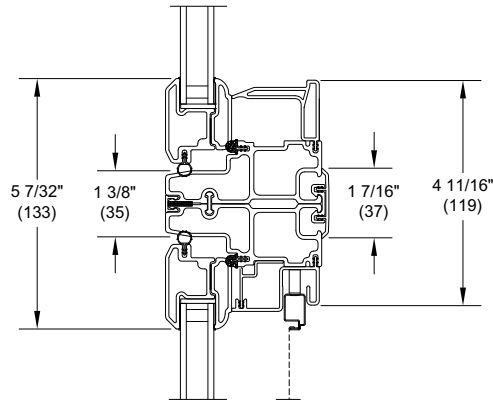


Brick Mould Casing

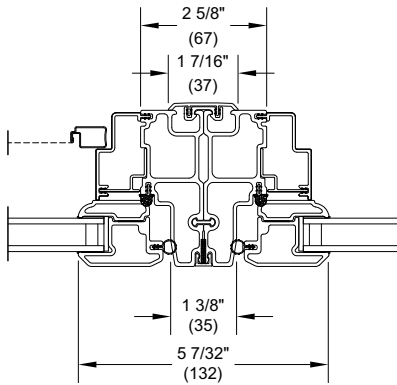


Section Details: Mullions

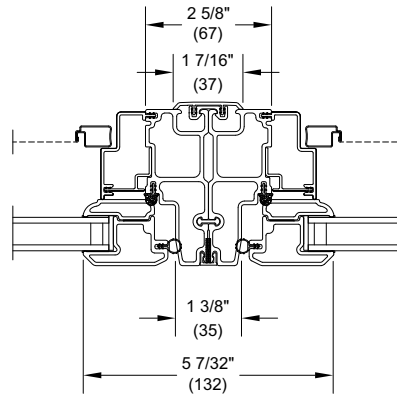
Scale: 3" = 1' 0"



Horizontal  
Mullion-Operator/Picture



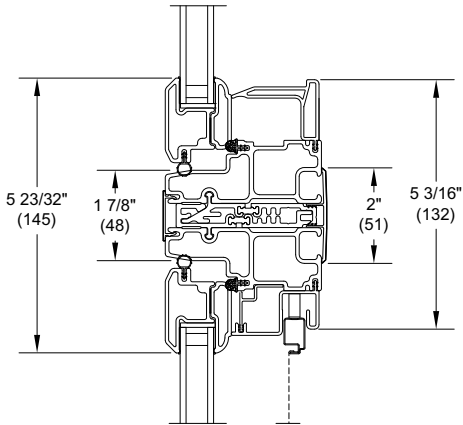
Vertical  
Mullion-Operator/Picture



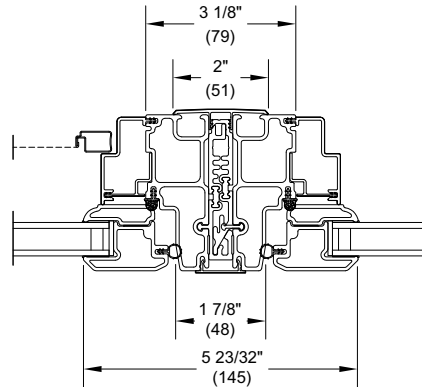
Vertical  
Mullion-Operator/Operator

**Section Details: 1/2" Mull Reinforcement**

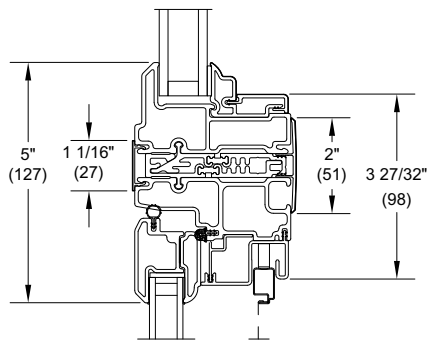
Scale: 3" = 1' 0"



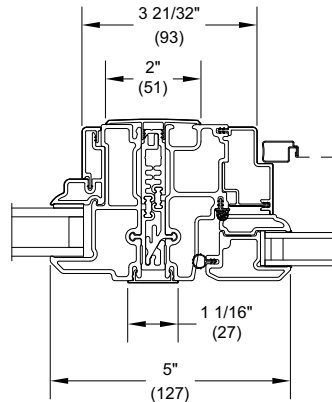
1/2" Mull Reinforcement  
Picture/Operator  
NCAP,NAWNP/NCA,NAWN



1/2" Mull Reinforcement  
Operator/Picture  
NCA,NAWN/NCAP,NAWNP



1/2 " Mull  
Reinforcement  
NCA,NAWN/NDGRT,NPDG



1/2" Mull  
Reinforcement  
NCA,NAWN/NPDG

Interior Frame Accessories

Scale: 3" = 1' 0"

