

Infinity Insert Glider

Unit Features

Infinity Insert Glider (XO/OX): NINGL

Infinity Insert Glider (XOX): NINTG

Infinity Insert Glider Picture: NINGP

Infinity Insert Glider Transom: NINGT

Ultrex® Pultruded Fiberglass Frame:

- Frame thickness: 7/8" (22) head jamb, 7/8" (22) side jamb, 25/32" (20) sill with 8° bevel
- Frame depth: 3 1/4" (83)
- 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)
- Different sash option allows unequal sash widths, unique lite cuts for each sash or different glazing in each sash
- 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™

Hardware:

- Lock and keeper:
 - Zinc die-cast
 - One sash lock on units up to 48" (1219) in height; two locks on units 48" (1219) and greater
- Rollers:
 - Roller housing is 10% glass filled nylon, roller is made up of an Acetal resin, axle is stainless steel, and roller bearing are nickel plated steel
 - Two roller assemblies are mechanically attached in routes in the bottom rail of the operator sash, 4 inches from each end
 - Sash greater then 36 13/32" (924) receive a third roller assembly, centered along bottom rail
- Pull:
 - Zinc die-cast
 - Units are pre-drilled at the factory
- Optional factory-applied Window Opening Control Device
 - Available on all operable units
 - Color: White, Sierra and Satin Taupe
 - This device works in accordance to ASTM F2090-10 standard specification for window fall prevention devices with emergency escape
 - System consisting of an acetal lever housed in an acetal shell on lower meeting stile of the operating sash and a stop on the lower rail of the stationary sash

Weather Strip:

- Frame:
 - Combination hollow vinyl bulb and flexible wand
 - Color: white or beige
- Sill:
 - Foam filled bulb, rigid HDPE bumps surround for easy operation and tear resistance
 - Color: white or beige
- Stationary meeting stile:
 - Weather strip interlock to seal against operating meeting stile
 - Color: beige
- Stationary units:
 - Continuous foam weather strip at perimeter of sash
 - Color of interior weatherstrip system: white or beige

Insect Screens:

- Factory installed
- Half screen to cover operable sash
- Frame color: matches exterior frame color
- Standard screen mesh material: charcoal fiberglass
 - Optional screen mesh material: high transparency
- Mitered color matched injection molded corner keys are visible

Infinity Insert Glider

- Pull tabs are integrated into the side of the screen Unit Features

Glass:

- Glazing seal: silicone bedding on interior and exterior
- Standard glass is insulating Low E2 with Argon or air
- Optional glazing available: Low E1 with Argon or air, Low E3 with Argon or air, Low E3/ERS with Argon or air, clear, tints, 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
- 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

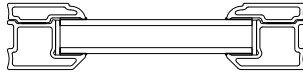
Simulated Divided Lites (SDL):

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

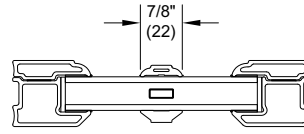
Gilles-Between-the-Glass (GBG):

- 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
- 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.

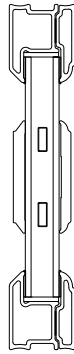
Lite Options



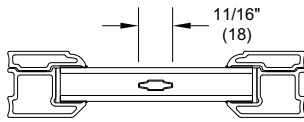
Insulating Glass



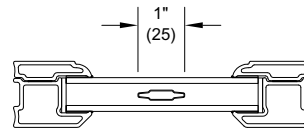
Insulating Glass
SDL w/ spacer bar



Insulating Glass
SDL Simulated Rail
w/spacer bar



11/16" Insulating Glass
GBG



1" Insulating Glass
GBG

Minimum and Maximum Guidelines

| Minimum and Maximum Inside Opening Guidelines | | | | | | | | | | | | |
|---|----------------|--------|------------|-------|-----------|--------|------------|--------|-----------------------|------------|-------------------------|------------|
| Unit Type | Inside Opening | | | | | | | | Glass Limits Operator | | Glass Limits Stationary | |
| | Min Width | | Min Height | | Max Width | | Max Height | | Sq. Feet | Sq. Meters | Sq. Feet | Sq. Meters |
| | in | mm | in | mm | in | mm | in | mm | | | | |
| Glider | 25 13/16 | (656) | 14 1/8 | (359) | 96 3/8 | (2448) | 71 3/4 | (1822) | 21 9/32 | 1.977 | 29 31/32 | 2.78 |
| Triple Sash | 49 5/16 | (1253) | 14 1/8 | (359) | 144 3/8 | (3667) | 71 3/4 | (1822) | 21 1/2 | 1.997 | 29 31/32 | 2.78 |
| Glider Picture | 14 1/2 | (368) | 13 15/16 | (354) | 72 3/8 | (1838) | 71 3/4 | (1822) | N/A | | 30 | 2.79 |
| Glider Transom | 14 1/2 | (368) | 13 15/16 | (354) | 72 3/8 | (1838) | 71 3/4 | (1822) | N/A | | 30 | 2.79 |

| Sash Ratio Guidelines | | | | | | | | | |
|-----------------------|-----------|-------|----------|--------|------------|-------|---------|--------|--------------------|
| Unit Type | Operating | | | | Stationary | | | | Maximum Sash Ratio |
| | Minimum | | Maximum | | Minimum | | Maximum | | |
| XO/OX Unit | 12 19/32 | (320) | 47 15/16 | (1218) | 12 3/16 | (310) | 66 | (1676) | 1/2 |
| XOX Unit | 12 19/32 | (320) | 48 3/8 | (1229) | 12 3/16 | (310) | 66 | (1676) | 1/3 |

NOTE: For Glue Chip, Frost, and Rain, maximum short frame for NINGP/NINGT is 63 1/8".

For Glue Chip, Frost, and Rain, maximum short frame for NINGL/NINTG (stationary sash) is 61 1/8".

For Reed and Narrow Reed, vertical pattern orientation maximum frame width size for NINGP/NINGT is 63 1/8".

For Reed and Narrow Reed, vertical pattern orientation maximum frame width size for NINGL/NINTG (stationary sash) is 61 1/8".

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

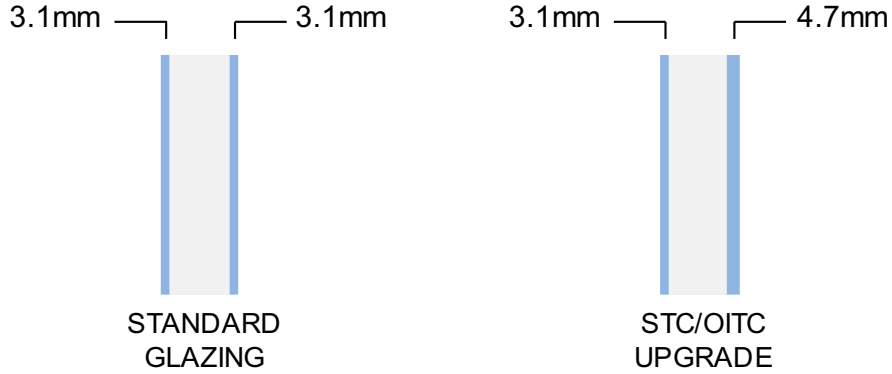
Tempered glass may be required if the glass size is greater than 23 square feet. Please contact your local Infinity Retailer or Infinity Support at 800-372-1072 to determine available glass options on units exceeding this size.

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 Insert Glider (XO/OX) Unequal | 1.57 | 4.5 | 20 | R-PG20-HS | 96 | (2438) | 71 3/4 | (1822) |
| Infinity Insert Glider (XO/OX) | 1.57 | 4.5 | 20 | R-PG20-HS | 96 | (2438) | 71 3/4 | (1822) |
| Infinity Insert Glider (XO/OX) Unequal | 1.57 | 4.5 | 30 | LC-PG30-HS | 72 | (1829) | 60 | (1524) |
| Infinity Insert Glider (XO/OX) | 1.57 | 4.5 | 30 | LC-PG30-HS | 72 | (1829) | 60 | (1524) |
| Infinity Insert Triple Sash Glider | 1.57 | 3.75 | 15 | R-PG15-HS | 144 | (3658) | 71 3/4 | (1822) |
| Infinity Insert Triple Sash Glider | 1.57 | 3.75 | 20 | R-PG20-HS | 144 | (3658) | 48 | (1219) |
| Infinity Insert Triple Sash Glider | 1.57 | 4.5 | 30 | LC-PG30-HS | 115 | (2921) | 60 | (1524) |

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 | Air Space | Interior Glazing | STC | OITC |
|---------------|------------------|---------------|------------------|-----|------|
| Insert Glider | 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) | 30 | 27 |

Measurement Conversions: Equal Sash

| Insert Glider - 8 Degree Sill | | | | | | | |
|-------------------------------|------------------------|-----|-----------|-----------|-----------|-----------|--|
| Unit Measurements | | | | Width | | Height | |
| From | To | | | | | | |
| Inside Opening | | | in | mm | in | mm | |
| OM of Frame @ Exterior | Inside Opening | | + 3/8 | (10) | -1/4 | (6) | |
| Frame | | | in | mm | in | mm | |
| Daylight Opening | OM of Frame @ Exterior | × 2 | + 7 1/2 | (190) | + 5 7/16 | (138) | |
| Operating Sash | | | in | mm | in | mm | |
| OM of Frame @ Exterior | OM of Operating Sash | + 2 | -1/16 | (2) | -2 3/16 | (56) | |
| Daylight Opening | OM of Operating Sash | | + 3 21/32 | (93) | + 3 1/4 | (83) | |
| Stationary Sash | | | in | mm | in | mm | |
| OM of Frame @ Exterior | OM of Stationary Sash | + 2 | -1/2 | (12) | -2 3/16 | (56) | |
| Daylight Opening | OM of Stationary Sash | | + 3 1/4 | (83) | + 3 1/4 | (83) | |
| Glass | | | in | mm | in | mm | |
| Daylight Opening | Glass | | + 1 1/16 | (27) | + 1 1/16 | (27) | |
| Screen | | | in | mm | in | mm | |
| OM of Frame @ Exterior | OM of Screen | + 2 | -2 | (51) | -2 1/16 | (52) | |
| Daylight Opening | OM of Screen | | + 1 3/4 | (44) | + 3 13/32 | (86) | |

NOTE: IO to Frame Size Height conversion chart is on next page

Measurement Conversions: Triple Sash and Transom/Picture

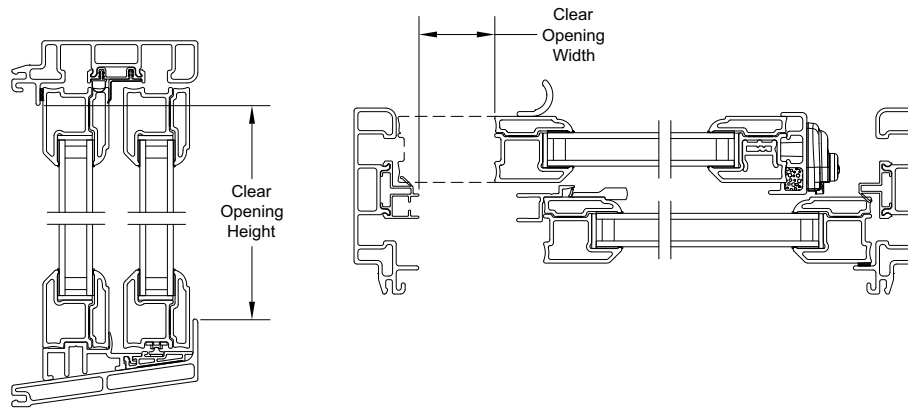
| Insert Triple Sash Glider (1:2:1) - 8 degree Sill | | | | | | |
|---|------------------------|-------|-----------|-------|-----------|-------|
| Unit Measurements | | Width | | | Height | |
| From | To | | in | mm | in | mm |
| Inside Opening | | | in | mm | in | mm |
| OM of Frame @ Exterior | Inside Opening | | + 3/8 | (10) | -1/4 | (6) |
| Frame | | | in | mm | in | mm |
| Daylight Opening (Oper) | OM of Frame @ Exterior | × 4 | + 13 3/32 | (333) | + 5 7/16 | (138) |
| Operating Sash | | | in | mm | in | mm |
| OM of Frame @ Exterior | OM of Operating Sash | ÷ 4 | + 29/32 | (23) | -2 3/16 | (56) |
| Daylight Opening | OM of Operating Sash | | + 3 21/32 | (93) | + 3 1/4 | (83) |
| Stationary Sash | | | in | mm | in | mm |
| OM of Frame @ Exterior | OM of Stationary Sash | + 2 | -1/32 | (1) | -2 3/16 | (56) |
| Daylight Opening | OM of Stationary Sash | | + 3 1/4 | (83) | + 3 1/4 | (83) |
| Glass | | | in | mm | in | mm |
| Daylight Opening | Glass | | + 1 1/16 | (27) | + 1 1/16 | (27) |
| Screen | | | in | mm | in | mm |
| OM of Frame @ Exterior | OM of Screen | ÷ 4 | -1 17/32 | (39) | -2 1/16 | (52) |
| Daylight Opening | OM of Screen | | + 1 3/4 | (44) | + 3 13/32 | (86) |

| Insert Glider Picture/Transom - 8 degree Sill | | | | | |
|---|------------------------|-------|----------|--------|----------|
| Unit Measurements | | Width | | Height | |
| From | To | | in | mm | in |
| Inside Opening | | | in | mm | in |
| OM of Frame @ Exterior | Inside Opening | | + 3/8 | (10) | + 1/4 |
| Frame | | | in | mm | in |
| Daylight Opening | OM of Frame @ Exterior | | + 5 3/16 | (132) | + 5 1/4 |
| Sash | | | in | mm | in |
| OM of Frame @ Exterior | OM of Sash | | -1 15/16 | (49) | -2 |
| Daylight Opening | OM of Sash | | + 3 1/4 | (83) | + 3 1/4 |
| Glass | | | in | mm | in |
| Daylight Opening | Glass | | + 1 1/16 | (27) | + 1 1/16 |

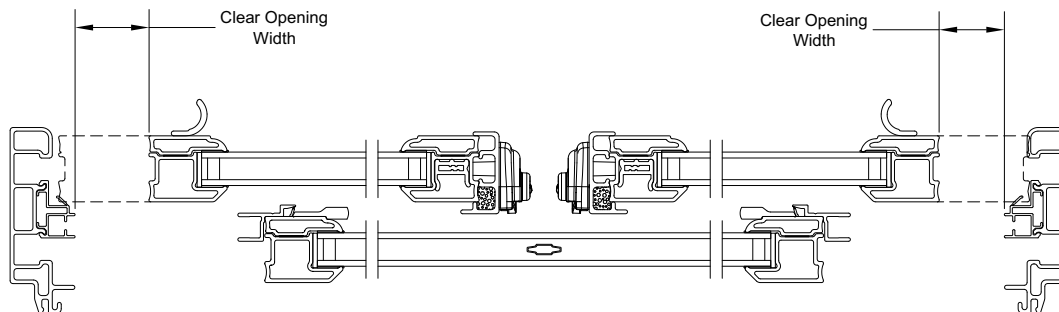
| Infinity Glider Measurement Conversions | | |
|---|-------------|-----|
| Inside Opening to Frame Size @ Exterior | | |
| Existing Sill Angle | Conversions | |
| 8° and greater | 1/4 | (6) |
| 7° | 3/16 | (5) |
| 6° | 1/8 | (3) |
| 5° | 1/16 | (2) |
| 4° | 0 | (0) |
| 3° | - 1/16 | (2) |
| 2° | - 1/8 | (3) |
| 1° | - 3/16 | (5) |
| 0° | - 1/4 | (6) |

Measurement Conversions: Egress

| Egress Conversions | | |
|---|--------------------------------------|--|
| Equal Sash Egress Minimum Opening and Conversions from Frame Size | | |
| Minimum Value for Net Clear Opening | Desired Dimension | Formula |
| 20 in | Egress opening width, in | = (NINGL frame OM width / 2) - 3.703 |
| 24 in | Egress opening height, in | = NINGL frame OM height - 3.173 |
| 5.7 ft ² | Egress opening area, ft ² | = ((Egress opening width, in) x (Egress opening height, in)) / 144 |



| Egress Conversions | | | |
|--|--------------------------------------|----------------|--|
| Triple Sash Egress Minimum Opening and Conversions from Frame Size | | | |
| Minimum Value for Net Clear Opening | Desired Dimension | Configurations | Formula |
| 20 in | Egress opening width, in | 1/4, 1/2, 1/4 | = (NINTG frame OM width / 4) - 2.672 |
| 20 in | Egress opening width, in | 1/3, 1/3, 1/3 | = (NINTG frame OM width) / 3 - 4.871 |
| 20 in | Egress opening width, in | Custom Ratio | contact Infinity Support to Confirm Egress |
| 24 in | Egress opening height, in | - | = NINTGS frame OM height - 3.173 |
| 5.7 ft ² | Egress opening area, ft ² | - | = ((Egress opening width, in) x (Egress opening height, in)) / 144 |

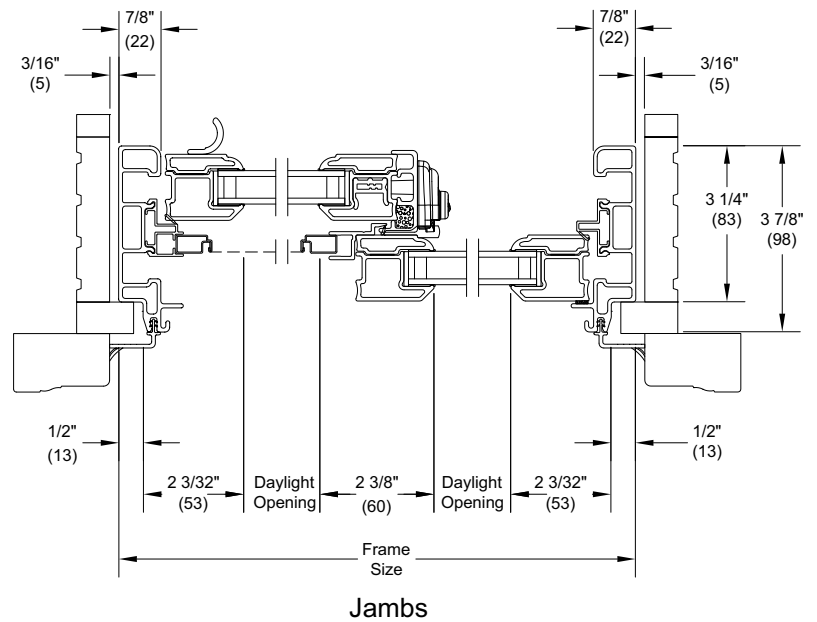
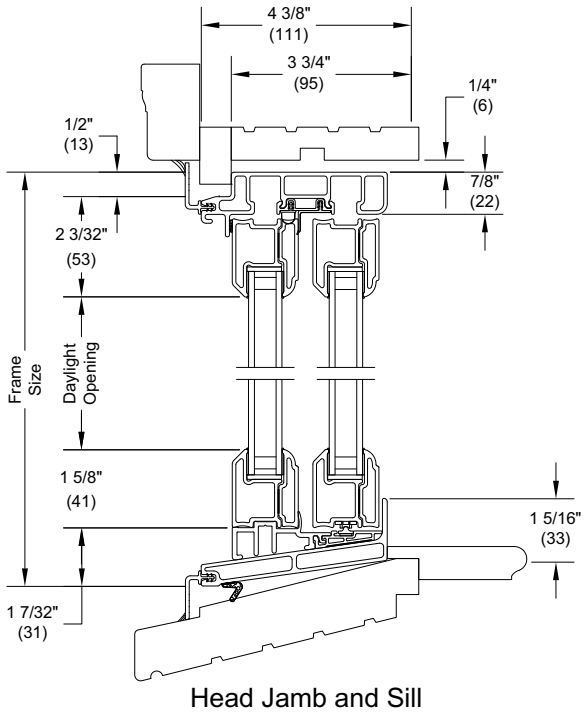
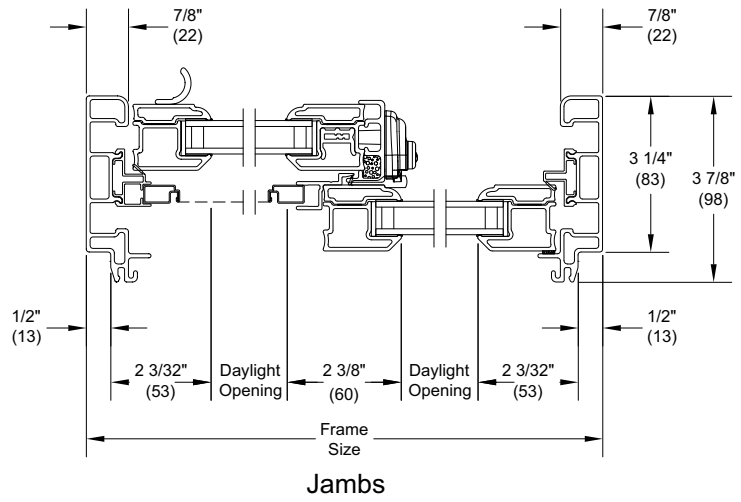
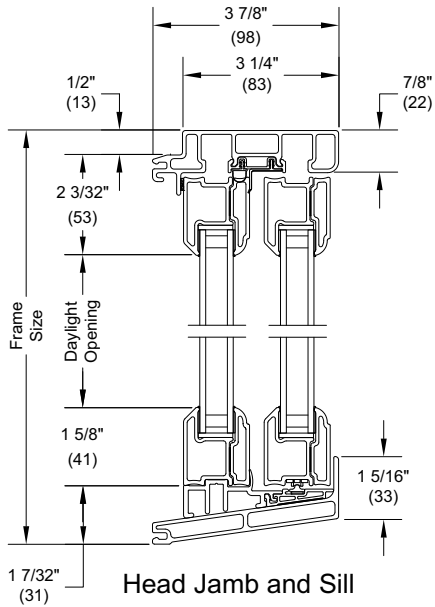


NOTE: Must meet/exceed all three minimum values to meet egress. Limited travel may affect egress opening width.

For 1/3, 1/3, 1/3 configuration, egress formula requires that only one sash be open at a time and sash stop in header is allowed to float.

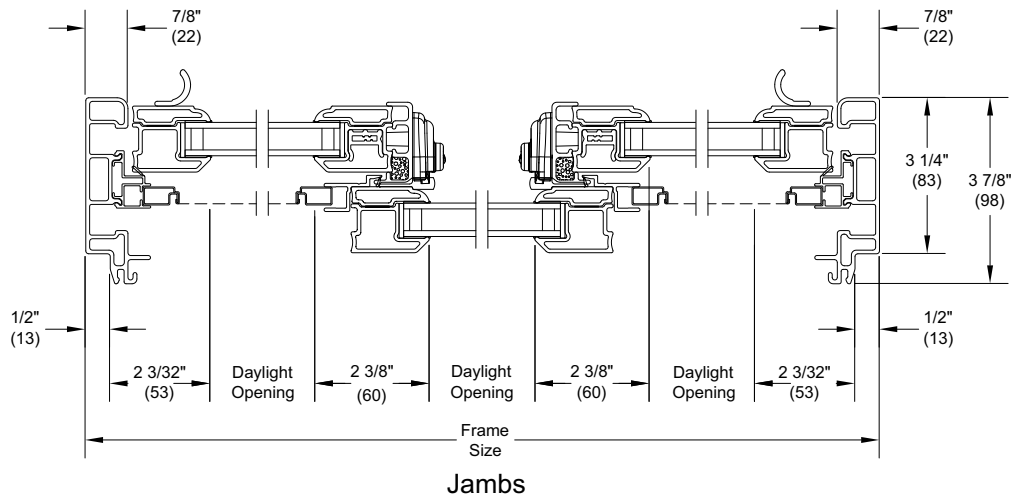
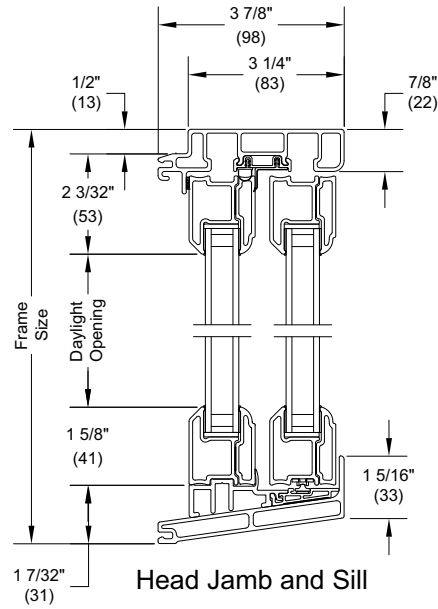
Section Details: Equal Sash

Scale: 3" = 1' 0"



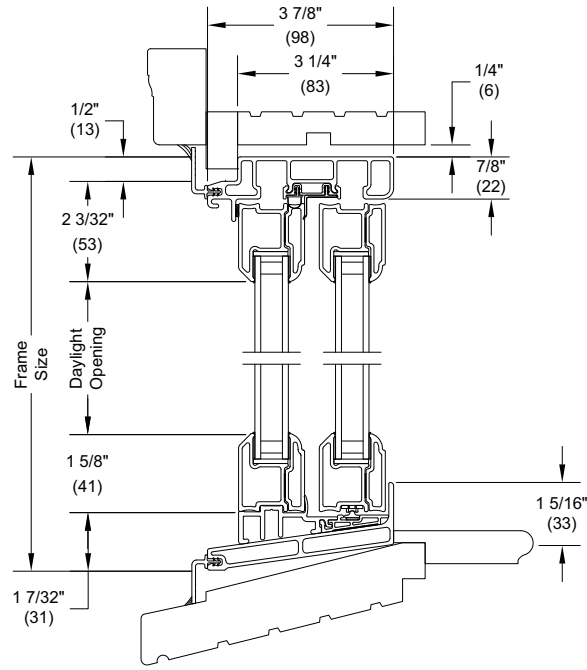
Section Details: Triple Sash

Scale: 3" = 1' 0"

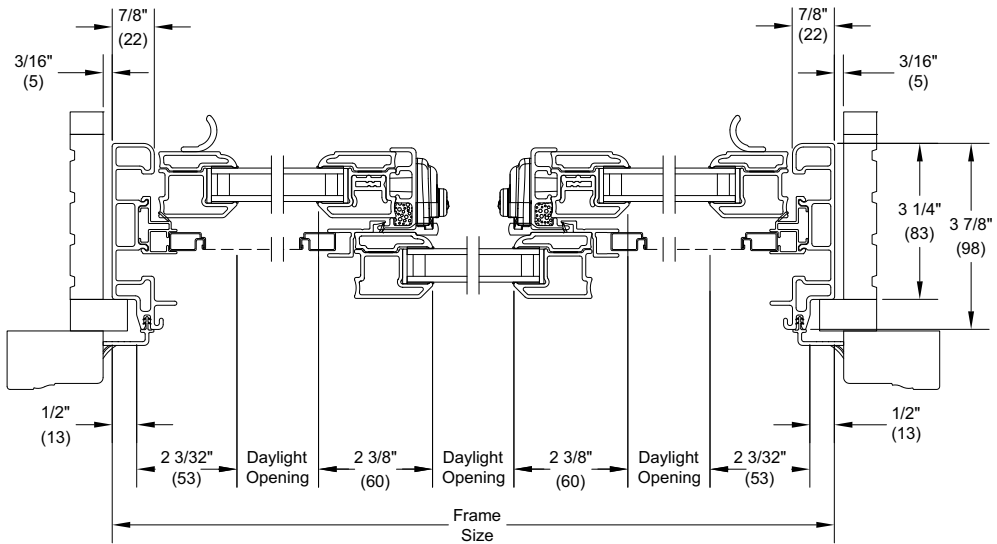


Section Details: Triple Sash

Scale: 3" = 1' 0"



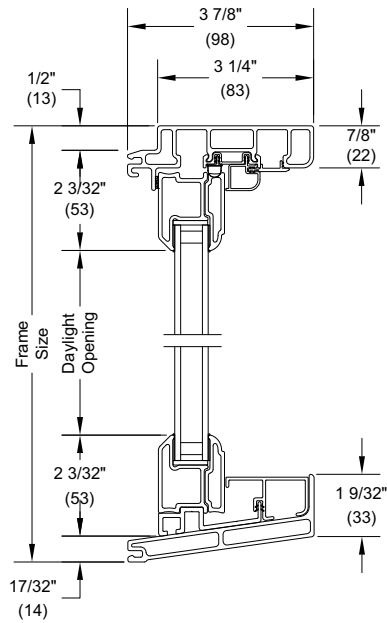
Head Jamb and Sill



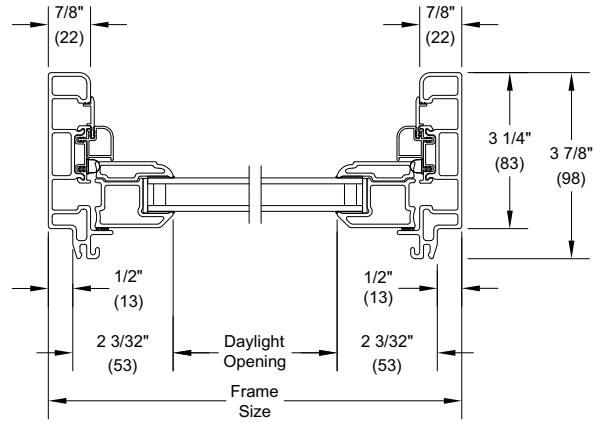
Jamb

Section Details: Picture/Transom

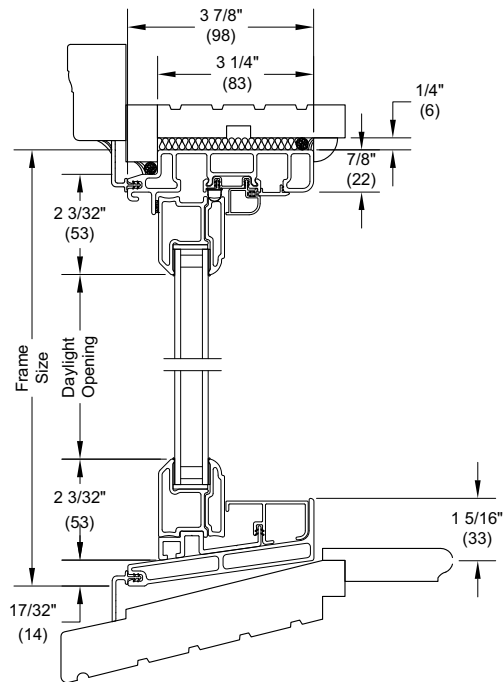
Scale: 3" = 1' 0"



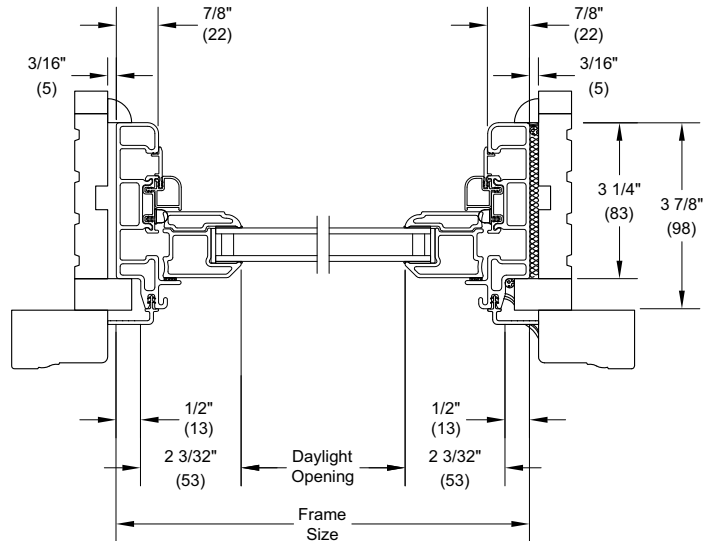
Head Jamb and Sill



Jamb



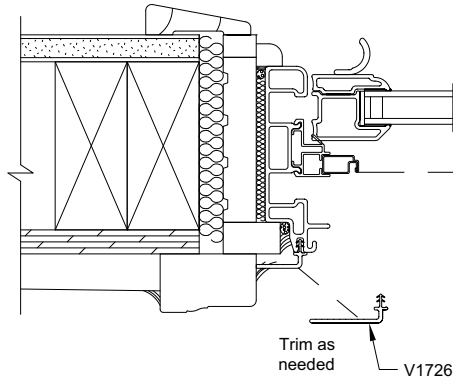
Head Jamb and Sill



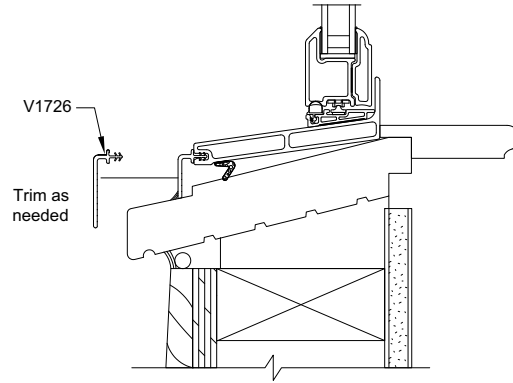
Jamb

Section Details: Frame Expander and Panning Application

Scale: 3" = 1' 0"



Jamb Frame Expander



Sill Frame Expander