

# Wood Magnum Tilt-Turn/Hopper

Unit Features.....	1
Authentic Divided Lite (ADL) and Simulated Divided Lite (SDL) Options.....	2
Optional Interior Square Simulated Divided Lite .....	3
Minimum and Maximum Measurements / Certified Sizes and Ratings .....	4
Unit Operation .....	5
Measurement Conversions .....	6
Section Details: Operating.....	7
Section Details: Direct Glaze.....	8
Section Details: Mullions for Operating Units .....	9



# Wood Magnum Tilt-Turn/Hopper

## Unit Features

Wood Magnum Tilt-Turn: WMTT

Wood Magnum Hopper: WMHOP

*NOTE: Wood Magnum Hopper not available with CE mark.*

### Frame:

- Frame thickness: 3 1/16" (78)
- Sill thickness: 1 11/16" (43)

### Sash:

- Operating Rail thickness: 2 1/4" (57)
- Operating Stile width: 3 5/32" (80)
- Operating Top and bottom rail width: 3 5/32" (80)

### Hardware:

- Tilt-Turn: Multi-point locking hardware with Bronze pistol grip handle
  - Optional Hardware Colors: White, Satin Chrome, Solid Brass, Bronze keyed or White keyed handle
  - Optional features: Turn restrictor, security key or additional scissor stay
  - Tilt-turn keyed stationary: Key operated lock allows authorized swing only
- Hopper: Bronze pistol grip handle
  - Optional Hardware Colors: White, Satin Chrome, or Solid Brass.
- Tilt Stay - Limiter on Hopper

### Weather Strip:

- Weather Strip: Resilient leaf type gasket. Color: Black

### Standard Insect Screen:

- Standard screen is roll formed aluminum
- Colors available: Pebble Gray, Bahama Brown, Evergreen, Bronze, Stone White, Ebony, Wineberry, Coconut Cream, Hampton Sage, Cashmere, Arctic White, Cumulus Gray, Desert Beige, Sierra White, Cadet Gray, Cascade Blue, French Vanilla, Bright Silver (pearlescent), or Copper (pearlescent)
- Screen mesh: Charcoal fiberglass
  - Optional screen mesh: Charcoal High Transparency Fiberglass Mesh, Charcoal Aluminum Wire, Black Aluminum Wire, Bright Aluminum Wire, Bright Aluminum Wire, or Bright Bronze Aluminum Wire
- Optional wood screen

### Glass and Glazing:

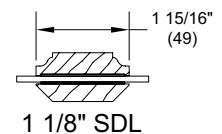
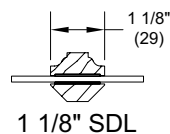
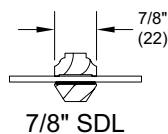
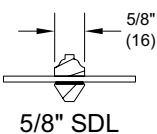
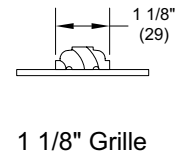
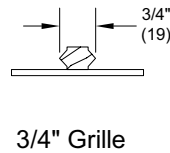
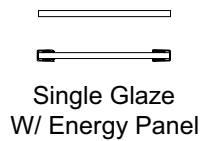
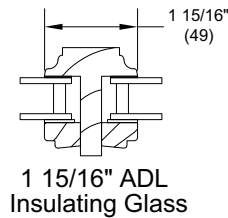
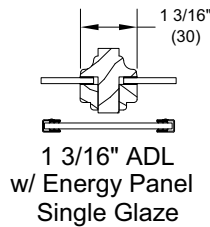
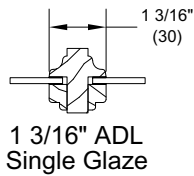
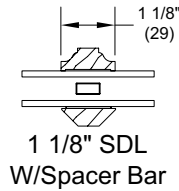
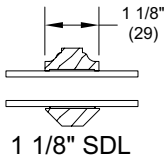
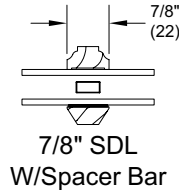
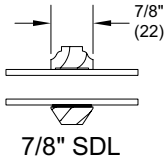
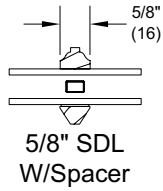
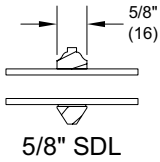
- Glazing Seal: Silicone glazed
- Glazing Type: Clear glass, optional glass types: Low E2 Argon, Low E3 Argon, Laminated, Tempered, Obscure, Bronze tint, Gray tint, and Reflective Bronze
- Optional Glazing Available: Low E1 Argon, Low E3 Argon, 1" Tripane Low E1 outer piece and Low E1 Argon inner piece, 1" Tripane Low E2 outer piece and Low E2 Krypton-Argon inner piece, 1" Tripane Low E3 outer piece and Low E1 Krypton-Argon, clear, tints, tempered, obscure, decorative glass options and others
- Insulating glass will be altitude adjusted with capillary tubes for higher elevations
- ADL glazing options not available with Argon

### CE Optional Glazing:

- Glazing method: Insulating
- Glazing seal: Silicone glazed
- Standard glass is 7/8" (22) insulating Low E2 Argon or air
- Optional dual glazing available: Low E1 Argon or air, Low E3 Argon or air, Low E2/ERS Argon or air, Low E3/ERS Argon or air, clear, laminated clear and tints, tempered, sandblasted
- Optional 1" Tripane glass types: Low E1/E1 Argon or Krypton-Argon, Low E2/E2 Argon or Krypton-Argon, Low E3/E1 Argon or Krypton-Argon
- Glass panes available in 3, 4, and 6 mm thicknesses
- Laminated panes available in 7.0 and 7.8 mm thicknesses
- Glazing will be altitude adjusted for higher elevations, Argon, Argon-Krypton, and Krypton gas not included

# Wood Magnum Tilt-Turn/Hopper

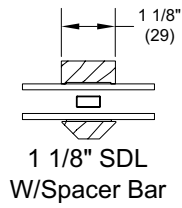
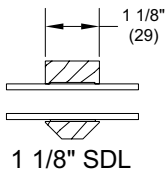
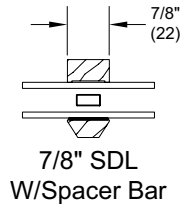
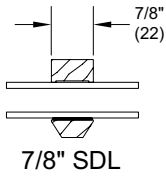
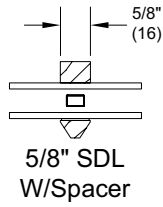
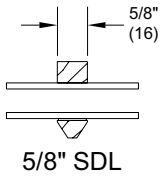
## Authentic Divided Lite (ADL) and Simulated Divided Lite (SDL) Options



NOTE: Single Glaze, ADL, and Energy Panel not available with CE mark.

# Wood Magnum Tilt-Turn/Hopper

## Optional Interior Square Simulated Divided Lite



**Minimum and Maximum Measurements / Certified Sizes and Ratings**

Minimum and Maximum Guidelines									
Unit Type		Min Frame Size Unit				Max Frame Size Unit			
		Width		Height		Width		Height	
		in	mm	in	mm	in	mm	in	mm
Magnum Hopper	Insulated Glass 7/8" (22) or 1" (25)	23	(584)	19 1/2	(495)	71	(1803)	64 1/2	(1638)

CE Minimum and Maximum Guidelines									
Unit Type		Min Frame Size Unit				Max Frame Size Unit			
		Width		Height		Width		Height	
		in	mm	in	mm	in	mm	in	mm
Wood Magnum Tilt Turn/Inswing Casement	Insulating Glass 7/8" (22) or 1" (25)	20	(508)	24	(610)	48	(1219)	72	(1829)

Product	Air Tested to psf	Water Tested to psf	Structural Tested to psf	Certification Rating	Design Pressure (DP)	Max Overall Width		Max Overall Height	
						in	mm	in	mm
Wood Magnum Hopper	1.57	6	60	CW-PG40-AP	40	65	(1651)	49 3/4	(1264)
Wood Magnum Tilt Turn	1.57	6.06	60.19	CW-PG40-DAW	40	49	(1245)	73 3/4	(1873)

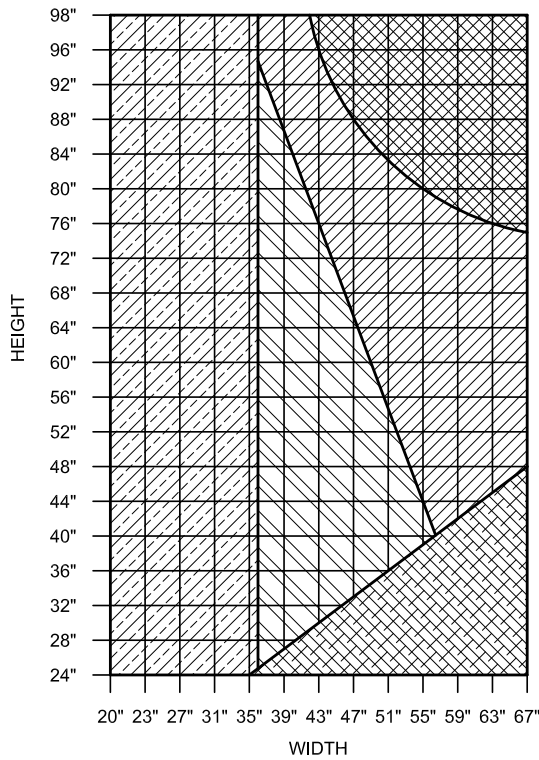
Product	Air Tested to psf	Water Tested to psf	Wind Load Resistance to psf	Certification Rating	Design Pressure (DP)	Max Overall Width		Max Overall Height	
						in	mm	in	mm
Wood Magnum Inswing Casement	1.57	4.18	62.66	CW-PG40-C	40	49	(1245)	73 3/4	(1873)






NOTE: For CE ratings, please refer to CE Performance Section.

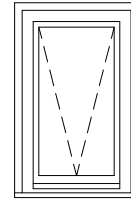
## Unit Operation

Tilt-Turn Handle Location			
Frame Size Height 2 13/32" Jamb Unit		Handle Height from Bottom of Sash	
24" - 27 7/8"	(610-708)	7 7/16"	(189)
27 15/16" - 35 3/4"	(710 - 908)	11 1/16"	(281)
35 13/16" - 43 5/8"	(910 - 1108)	17"	(432)
43 11/16" - 51 1/2"	(1110 - 1308)	20 15/16"	(532)
51 9/16" - 75 1/8"	(1310 - 1908)	22 7/8"	(581)
75 3/16" - 96"	(1910 - 2489)	40 1/16"	(1018)

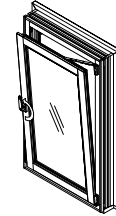
**Hardware Size Chart**



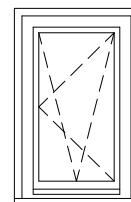
LEGEND	
	FOR UNITS IN THIS SIZE RANGE CONTACT MARVIN WINDOW ARCHITECTURAL DEPARTMENT
	UNITS IN THIS SIZE RANGE REQUIRE ADDITIONAL SCISSOR STAY HARDWARE
	ADDITIONAL OPTIONAL SCISSOR STAY AVAILABLE
	ADDITIONAL SCISSOR STAY NOT AVAILABLE UNDER 36"
	NOT AVAILABLE



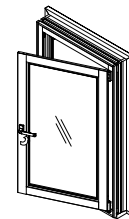
Hopper



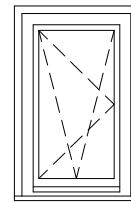
Tilt position



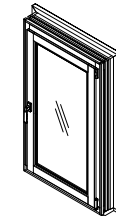
Left



Turn position



Right



Lock position

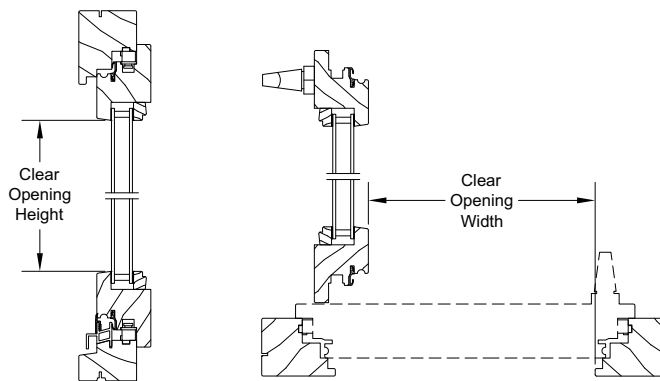
*NOTE: All operations are viewed from exterior.*

## Measurement Conversions

Scale: 1 1/2" = 1' 0"

Unit Measurements - 2 13/32" Jambs		Width		Height	
From	To				
<b>Rough Opening</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 1/4	(57)	-1 11/16	(43)
<b>Sash</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	OM of Sash	-2 13/16	(71)	-4 3/32	(104)
Daylight Opening	OM of Sash	+ 6 5/16	(160)	+ 6 5/16	(160)
<b>Glass</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Daylight Opening	Glass	+ 1 1/8	(29)	+ 1 1/8	(29)

Unit Measurements - 4 9/16" Jambs		Width		Height	
From	To				
<b>Rough Opening</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	Rough Opening	+ 1	(25)	+ 1/2	(13)
Masonry Opening w/BMC	Rough Opening	-2 1/4	(57)	-1 11/16	(43)
<b>Sash</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
OM of Frame	OM of Sash	-3 27/32	(98)	-4 9/16	(116)
Daylight Opening	OM of Sash	+ 6 5/16	(160)	+ 6 5/16	(160)
<b>Glass</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Daylight Opening	Glass	+ 1 1/8	(29)	+ 1 1/8	(29)



### Net Clear Opening:

Rough Opening Width - 8 1/8" (206)

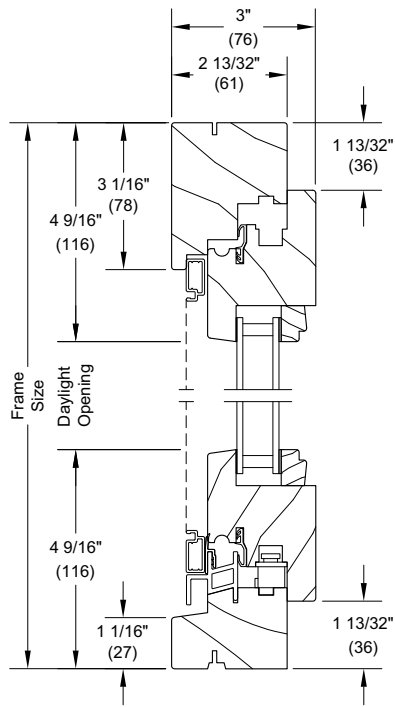
Rough Opening Height - 7 3/4" (197)



# Wood Magnum Tilt-Turn/Hopper

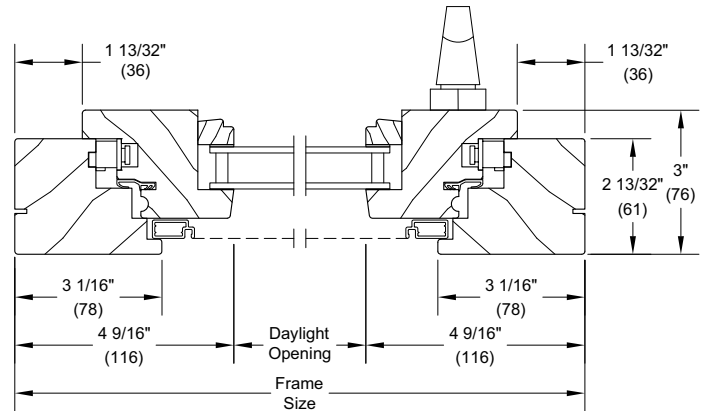
## Section Details: Operating

Scale: 3" = 1' 0"

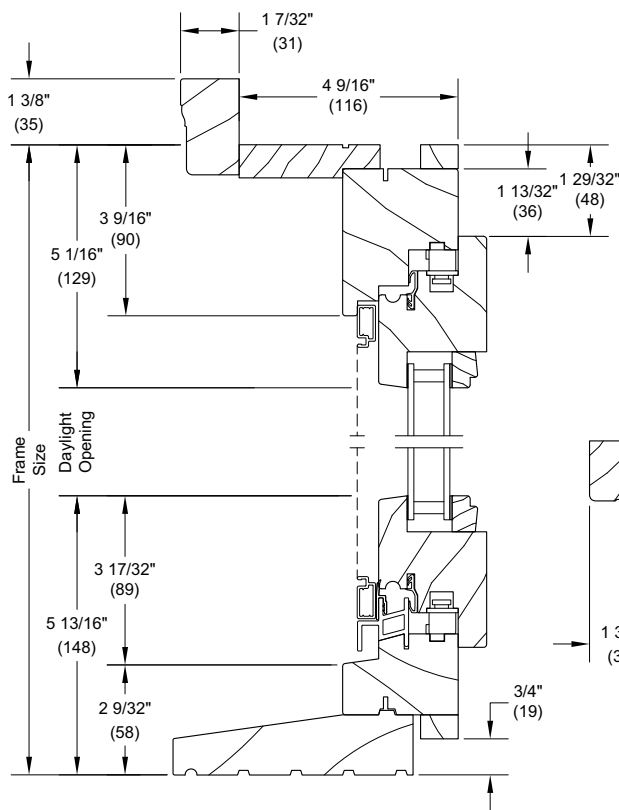


Head Jamb and Sill

### Operating 2 13/32" Jamb

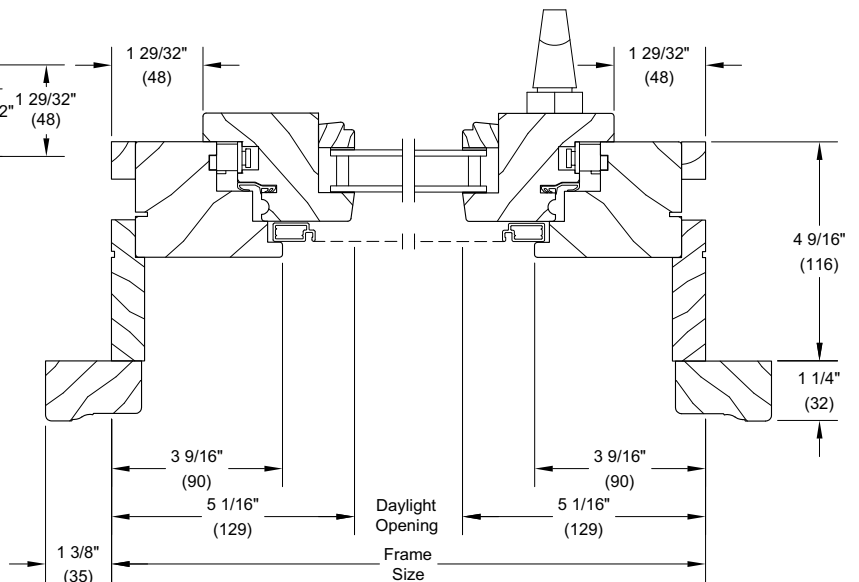


Jamb



Head Jamb and Sill

### Operating 4 9/16" Jamb



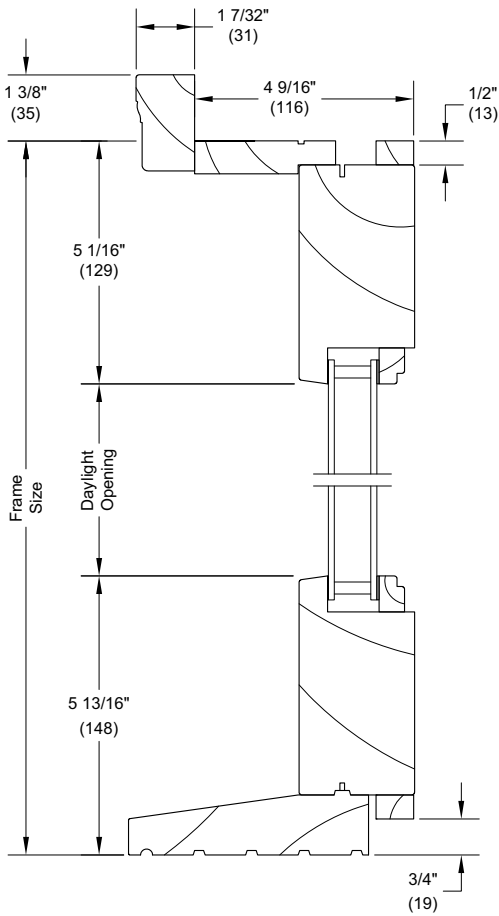
Jamb

# Wood Magnum Tilt-Turn/Hopper

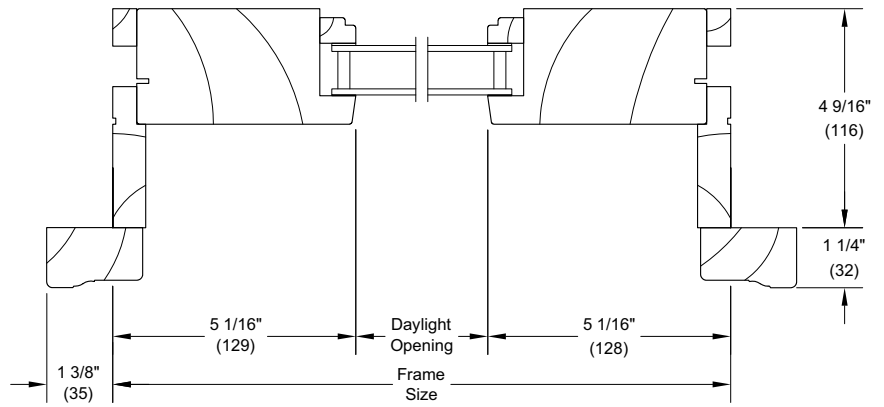
## Section Details: Direct Glaze

Scale: 3" = 1' 0"

### 4 9/16" Jamb

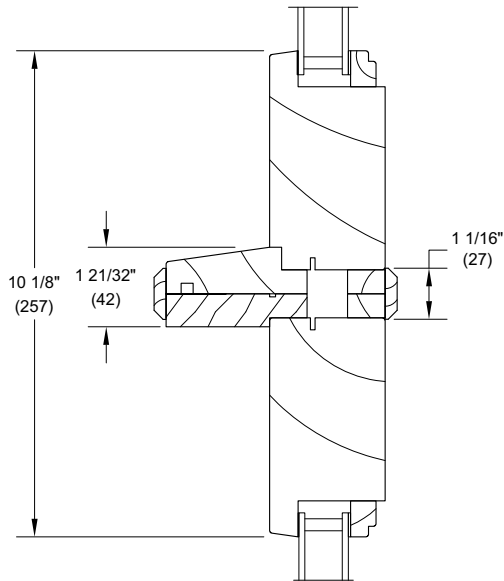


Head Jamb and Sill

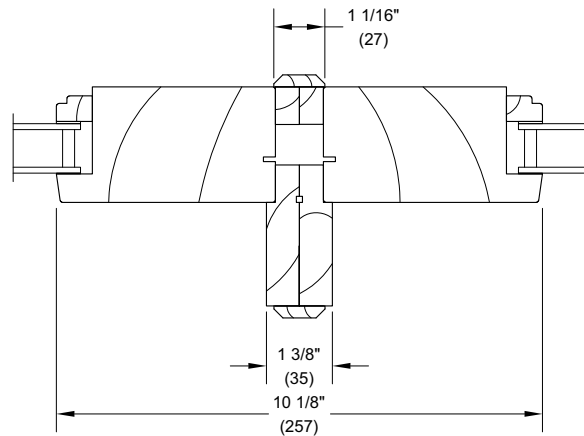


Jamb

### Direct Glaze Mullion



Horizontal Mullion



Vertical Mullion

# Wood Magnum Tilt-Turn/Hopper

## Section Details: Mullions for Operating Units

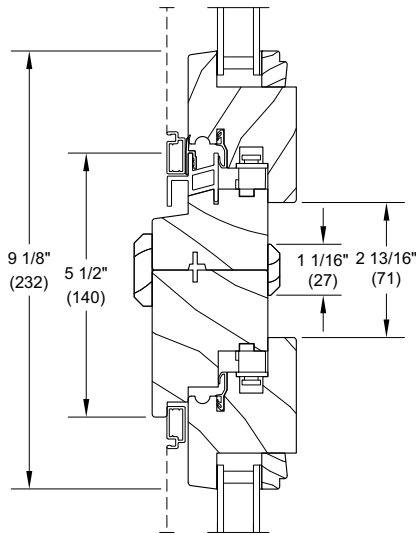
Scale: 3" - 1' 0"

### Jamb Extension Policy for Multiples Assemblies

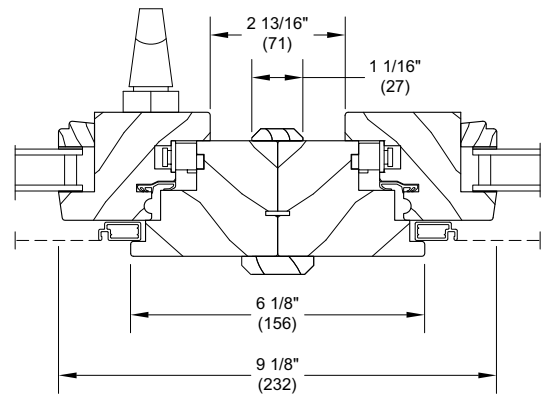
To provide the necessary structural integrity for multiple width and height assemblies, 4 9/16" (116) exterior jamb extensions must be applied around the perimeter and between the shortest intermediate mullions.

Total assembly Rough Opening or Masonry Opening must be specified to assure individual unit sizes will be appropriately calculated.

### Operating 2 13/32" Jamb

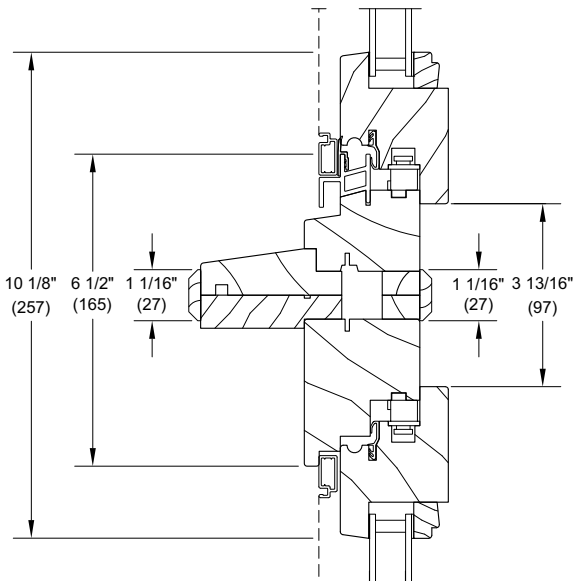


Horizontal Mullion

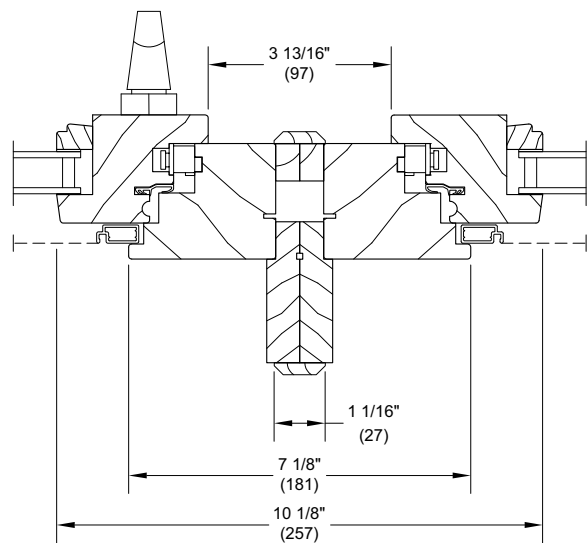


Vertical Mullion

### Operating 4 9/16" Jamb



Horizontal Mullion



Vertical Mullion

### CE Mulling Options will match UCA family mulling rules:

- Mullied assemblies up to 64" (1626) x 71 1/8" (1807) as a 1H x multi-width
- Mullied assemblies with 1" (25) LVL or 3/8" (10) aluminum mull reinforcement up to 122" (3099) x 104 1/4" (2638) as a multi-wide or multi-high assembly