

# Ultimate Wood Tilt Turn/Hopper

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**Unit Features**

Ultimate Wood Tilt Turn: WMTT

Ultimate Wood Tilt Turn Hopper: ULWTT HOP

*NOTE: Ultimate Wood Tilt Turn 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, Sierra White, Cadet Gray, Cascade Blue, Bright Silver (pearlescent), Copper (pearlescent), Clay, Gunmetal, Liberty Bronze (pearlescent), or Suede.
- 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

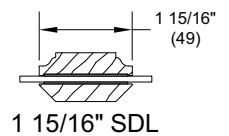
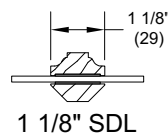
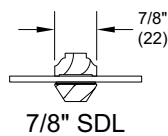
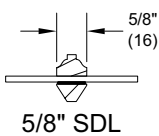
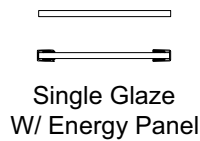
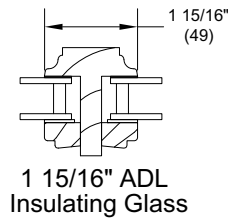
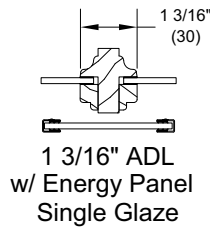
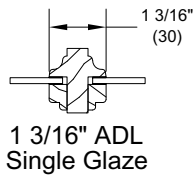
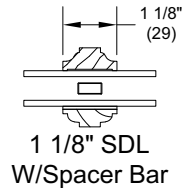
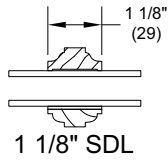
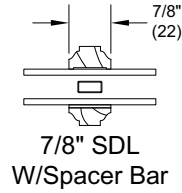
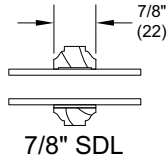
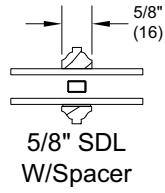
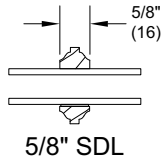
**Glass and Glazing:**

- Glazing Seal: Silicone glazed
- Glazing Type: Clear glass, optional glass types: Low E2 Argon, Low E3 Argon, Low E2/ERS Argon or air, Low E3/ERS Argon or air, 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:**

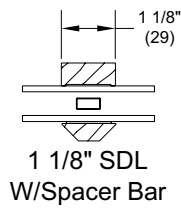
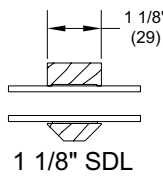
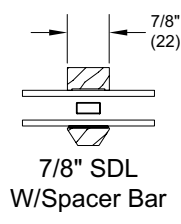
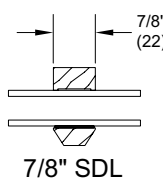
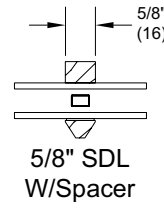
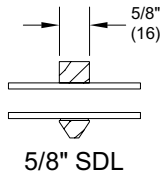
- Glazing method: Insulating
- Glazing seal: Silicone glazed
- Standard glass is 7/8" (22) insulating Low E2 Argon or air
- Optional dual glazing available: Low E1 Argon or air, Low E3 Argon or air, Low E2/ERS Argon or air, Low E3/ERS Argon or air, clear, laminated clear and tints, tempered, sandblasted
- 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

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



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

**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
Ultimate Wood Tilt Turn Hopper	Insulated Glass 7/8" (22) or 1" (25)	23	(584)	19 1/2	(495)	71	(1803)	64 1/2	(1638)

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
Ultimate Wood Tilt Turn Hopper	1.57	6	60	CW-PG40-AP	40	65	(1651)	49 3/4	(1264)
Ultimate Wood Tilt Turn	1.57	6.06	60.19	CW-PG40-DAW	40	49	(1245)	73 3/4	(1873)

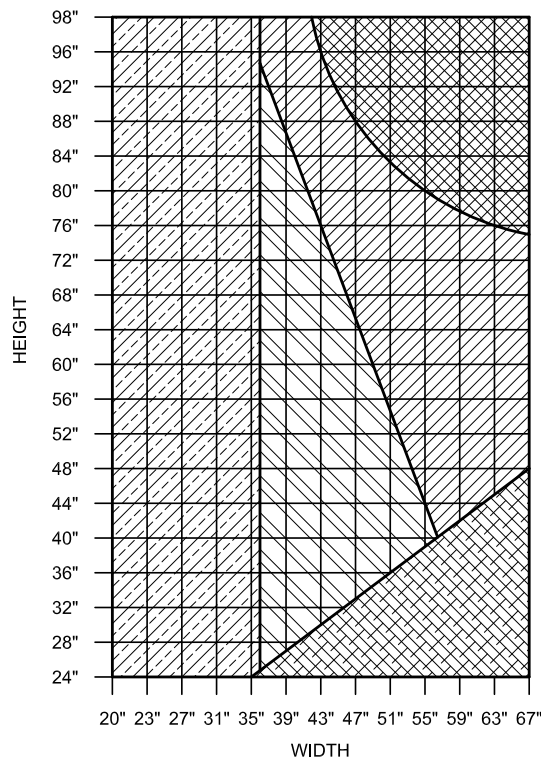
Product	Air Tested to psf	Water Tested to psf	Wind Load Resistance to psf	Certification Rating	Design Pressure (DP)	Max Overall Width		Max Overall Height	
						in	mm	in	mm
Ultimate Wood Tilt Turn Inswing Casement	1.57	4.18	62.66	CW-PG40-C	40	49	(1245)	73 3/4	(1873)






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

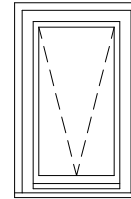
**Unit Operation**

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)

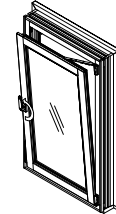
**Hardware Size Chart**



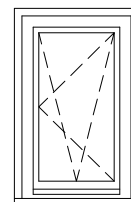
LEGEND	
	FOR UNITS IN THIS SIZE RANGE CONTACT MARVIN WINDOW ARCHITECTURAL DEPARTMENT
	UNITS IN THIS SIZE RANGE REQUIRE ADDITIONAL SCISSOR STAY HARDWARE
	ADDITIONAL OPTIONAL SCISSOR STAY AVAILABLE
	ADDITIONAL SCISSOR STAY NOT AVAILABLE UNDER 36"
	NOT AVAILABLE



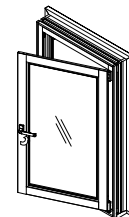
Hopper



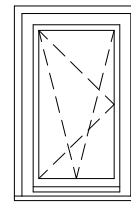
Tilt position



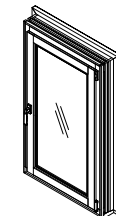
Left



Turn position



Right



Lock position

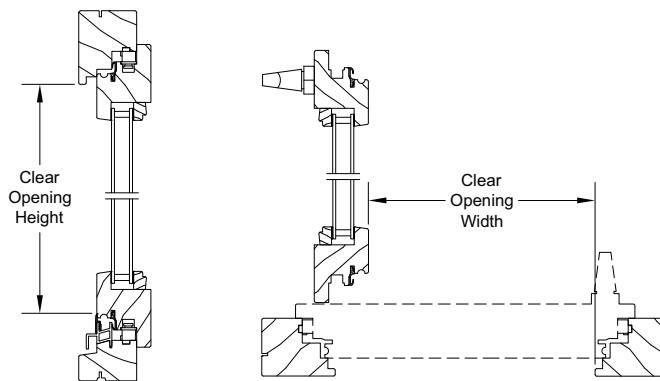
*NOTE: All operations are viewed from exterior.*

**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:**

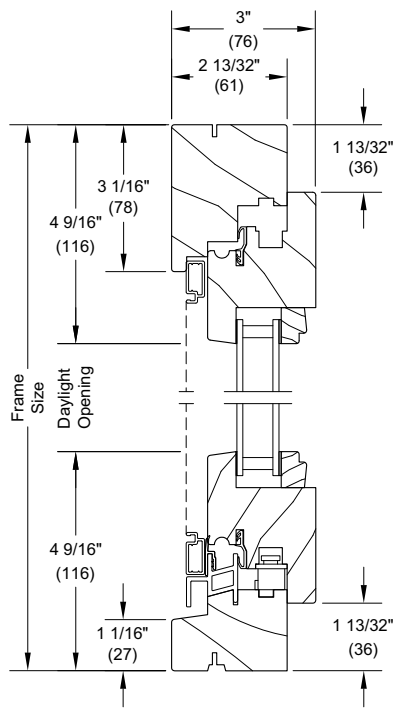
Rough Opening Width - 8 1/8" (206)

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



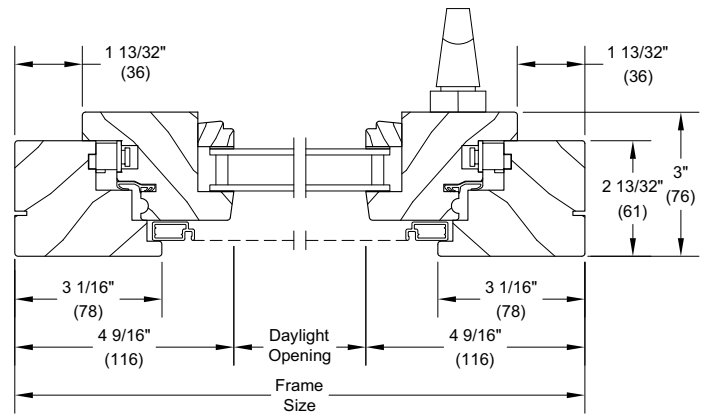
**Section Details: Operating**

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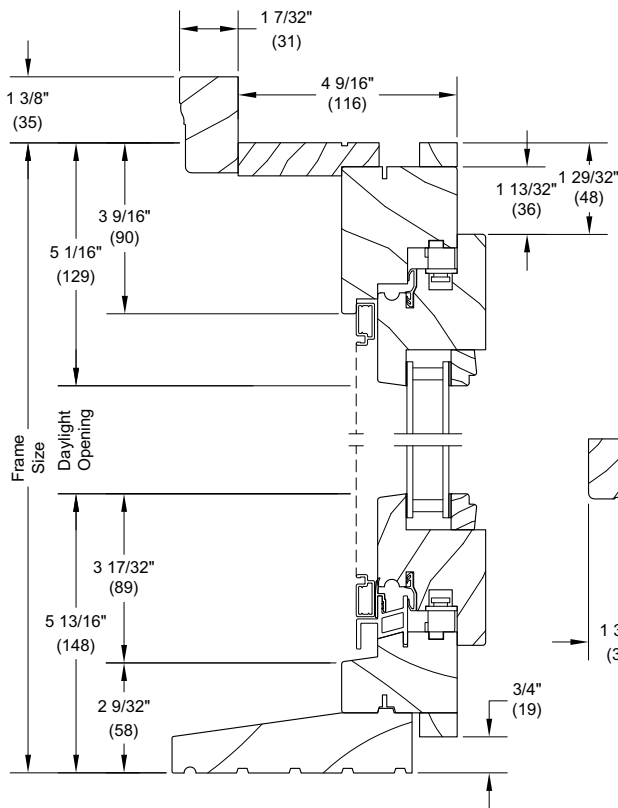


**Head Jamb and Sill**

**Operating  
2 13/32" Jamb**

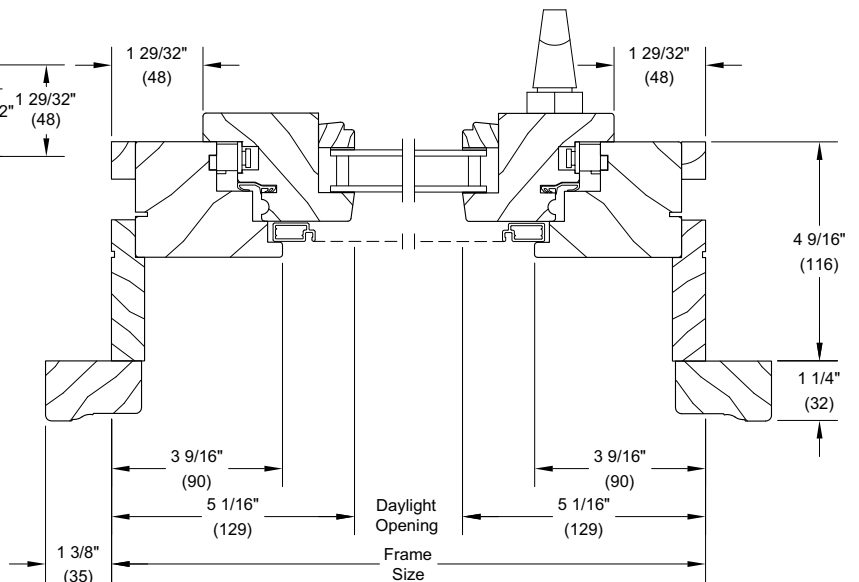


**Jamb**



**Head Jamb and Sill**

**Operating  
4 9/16" Jamb**

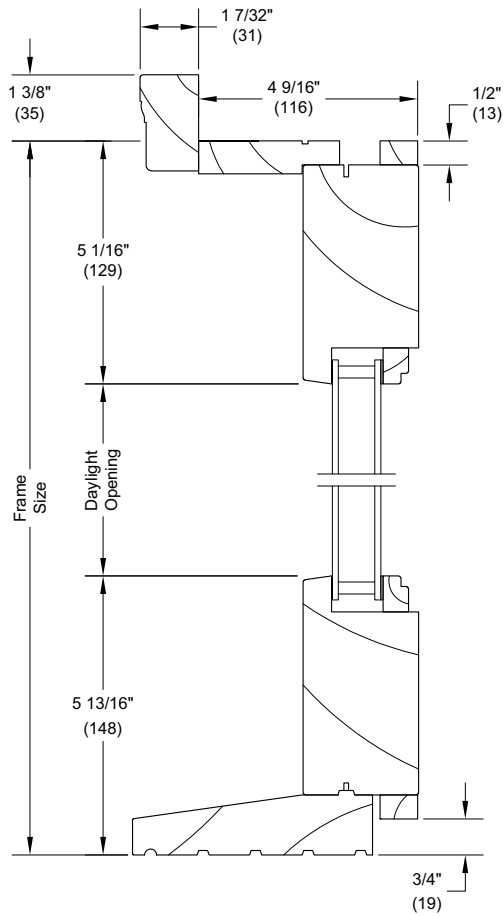


**Jamb**

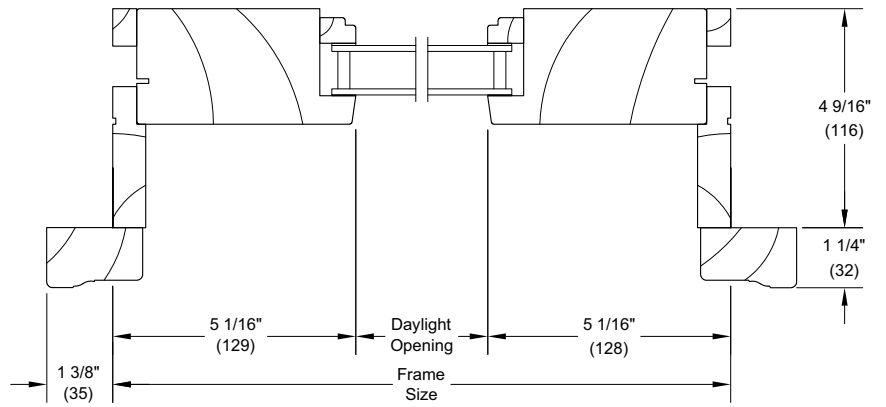
**Section Details: Direct Glaze**

Scale: 3" = 1' 0"

**4 9/16" Jamb**

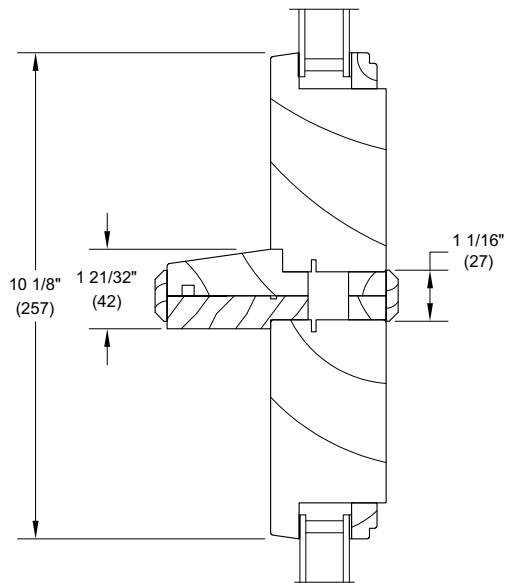


**Head Jamb and Sill**

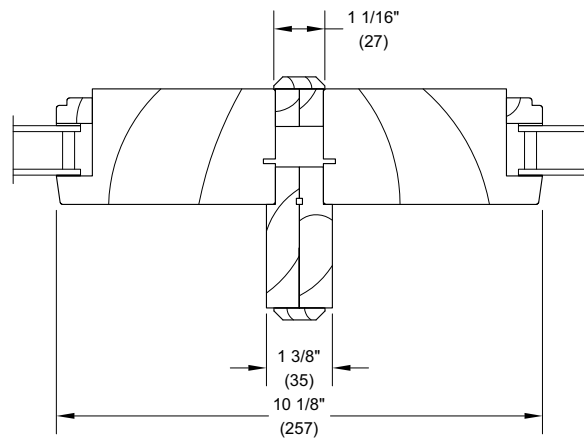


**Jamb**

**Direct Glaze Mullion**



**Horizontal Mullion**



**Vertical Mullion**

**Section Details: Mullions for Operating Units**

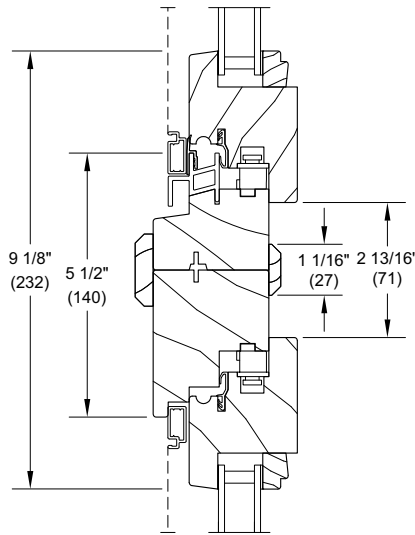
Scale: 3" - 1' 0"

**Jamb Extension Policy for Multiples Assemblies**

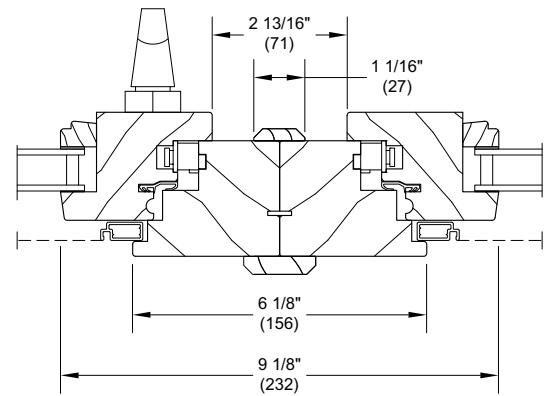
To provide the necessary structural integrity for multiple width and height assemblies, 4 9/16" (116) exterior jamb extensions must be applied around the perimeter and between the shortest intermediate mullions.

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

**Operating  
2 13/32" Jamb**

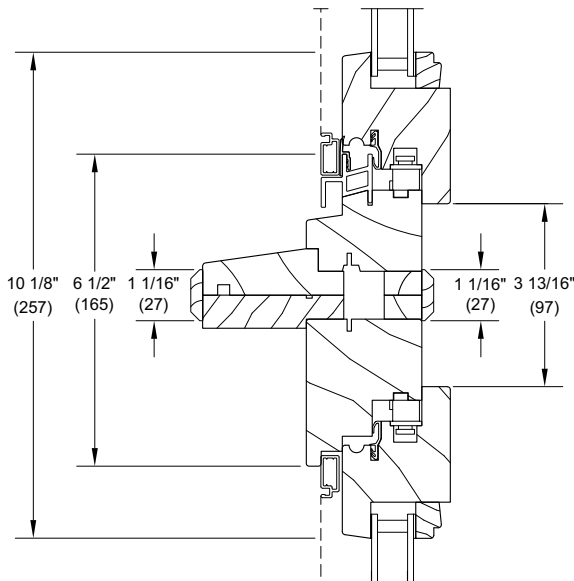


Horizontal Mullion

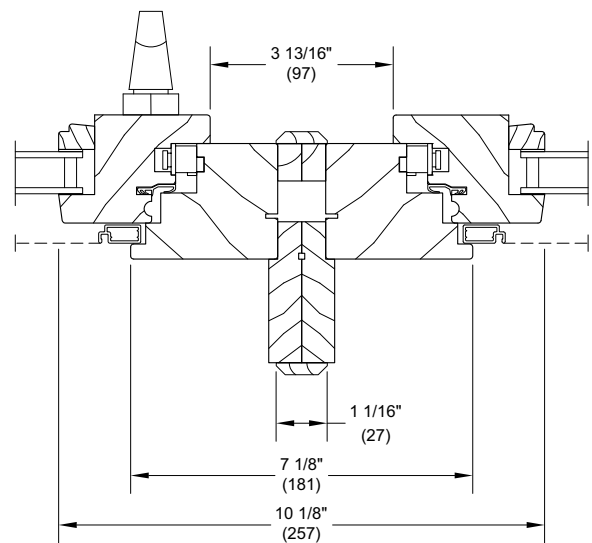


Vertical Mullion

**Operating  
4 9/16" Jamb**



Horizontal Mullion



Vertical Mullion

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

- Mullered assemblies up to 64" (1626) x 71 1/8" (1807) as a 1H x multi-width
- Mullered 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