

# CHAPTER 2

## CLAD CASEMASTER

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#### **NOTE:**

Specifications and technical data are subject to change without notice.

Allow 1/16" (2) tolerance on all measurements.

Metric measurements are shown in parenthesis.

For accessories dimensions and applications see the Accessories section of this manual.

For technical assistance about Marvin products you may call our Architectural Hotline 1-800-346-3363 or visit our website: [www.marvin.com](http://www.marvin.com).

# CLAD CASEMASTER

## UNIT FEATURES

### **Frame:**

- Interior: Pine wood interior standard. Optional white oak, cherry, mahogany, vertical grain Douglas fir
- Exterior: Extruded aluminum, .050" (1.3) thick
- Frame thickness: 1 3/16" (30) all the way around
- Frame width: 4 9/16" (116)

### **Sash:**

- Interior: Pine wood interior standard. Optional white oak, cherry, mahogany, vertical grain Douglas fir
- Exterior: Extruded aluminum, .050" (1.3) thick
- Sash thickness: 1 3/4" (44 mm)

### **Interior and exterior finish:**

- Interior finish: treated bare wood or white primed (pine only)
  - Exterior finish: Two coat finish system using Kynar® or Hylar® resins, meets or exceeds AAMA 2605 requirements.
- Standard Color: Stone White, Bahama Brown, Bronze, Pebble Gray, Evergreen. Select Color: Sierra White, Coconut Cream, French Vanilla, Cashmere, Desert Beige, Cumulus Gray, Cadet Gray, Ebony, Arctic White, Cascade Blue, Cobalt Blue, Hampton Sage, Sherwood Green and Wineberry. Contact your Marvin representative for details on custom colors.

### **Casement Hardware:**

- Operating Hardware: Roto-gear with zinc base, steel drive and gear arms with an ABS operator cover. Corrosion resistant hardware available
- Handles: Die-cast zinc folding handle standard. Color: Satin Taupe. Optional: White, Brass, Satin Chrome, Antique Brass, Bronze, Oil Rubbed Bronze, Satin Nickel
- Locks: One concealed lock on units smaller than series 32 height, two concealed sequential locks on units series 32 height and taller.

### **Casemaster Venting Picture Hardware:**

- Venting hardware: Stainless steel sliding mechanism attached to frame with a pivot point bracket attached to the sash.
- Locks: Two concealed locks. Color: Satin Taupe. Optional: White, Brass, Satin Chrome, Antique Brass, Bronze, Oil Rubbed Bronze, Satin Nickel
- Egress Hardware: Not available

### **Casement Weather Stripping:**

- Dual leaf and bulb weather strip at frame and sash. Color: Beige

### **Jamb Extensions:**

- Jamb extensions available for various wall thickness factory applied, finish to match interior

### **Casement Insect Screens:**

- Aluminum screen: Full screen standard. Frame color: Satin Taupe. Optional Stone White or Bronze. Optional wood screen available.
- Screen mesh: 18 by 16 Charcoal Fiberglass. Optional screen mesh: Charcoal aluminum wire, Black aluminum wire, Bright aluminum wire, or Bright Bronze aluminum wire

### **Casemaster Venting Picture Screen:**

- Reticulated foam bulb encased by fiberglass screen mesh. Color: Silver Gray.

### **Removable Interior Grilles:**

- Bar: Pine wood, 3/4" (19) or 1 1/8" (29) wide bars
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative

### **Interior / Exterior Simulated Divided Lites (SDL):**

- Interior bar: 7/8" (22) or 1 1/8" (29) wide bars. Pine wood standard, optional white oak, cherry, mahogany or vertical grain Douglas fir. Finish to match interior
- Exterior bar: Extruded aluminum clad, 7/8" (22) or 1 1/8" (29) wide bars, finish to match exterior
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative

### **Grilles-between-the-glass (GBG):**

- 11/16" (17mm) white contoured aluminum bar. Optional flat aluminum spacer bar, contact your Marvin representative

### **Glass and Glazing:**

- Glazing method: Insulated glass, hermetically sealed
- Glazing seal: Silicon glazed
- Glazing type: Clear glass, optional glass types: Low E II with Argon, Laminated, Tempered, Obscure, Bronze tint, Gray tint, and Reflective Bronze
- Insulated glass will be altitude adjusted for higher elevations, Argon gas not included

### **Accessories:**

- Installation brackets: 6 3/8" (162), 9 3/8" (238), or 15 3/8" (390)
- Masonry brackets: 6" (152) or 10" (254)
- Nailing fin: Head jamb fin/drip cap, side jamb and sill fin. Head nailing fin with drip cap not designed to replace proper flashing
- Marvin SillGuard™
- Aluminum extrusions: Brick mould casing, flat casing, mullion cover, frame expander, mullion expander, jamb extender
- Sash operators: 60" (1524), 96" (2438), 132" (3353) Pole crank operator
- Power drive (Electric operator): Motorized system shall replace crank handle on operating windows. Compatible with home automation systems (e.g. Honeywell Totalhome System), kit includes motor drive, transformer, and motor control. Locks are manual levers.

### **Note:**

Values shown in parenthesis represent metric equivalents  
For product specifications please refer to the CSI Product Specifications, contact your Marvin representative

# CLAD CASEMASTER

## NFRC VALUES

NFRC Unit Values					
Glazing Type	U-Factor	R-Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Energy Star
<b>Operator / Stationary</b>					
<b>Size Tested</b>	<b>24 x 59</b>	<b>24 x 59</b>	<b>24 x 59</b>	<b>24 x 59</b>	
Insulating glass	0.47	2.13	0.54	0.56	-
Insulating glass - SDL	0.47	2.13	0.49	0.51	-
Insulating glass - SDL with spacer bars	0.47	2.13	0.49	0.51	-
Insulating Low E II glass	0.35	2.86	0.29	0.49	N, NC, SC, S
Insulating Low E II glass - SDL	0.35	2.86	0.27	0.45	N, NC, SC, S
Insulating Low E II glass - SDL with spacer bars	0.36	2.78	0.27	0.45	NC, SC, S
Insulating Low E II glass - Argon	0.32	3.13	0.29	0.49	N, NC, SC, S
Insulating Low E II glass - Argon, SDL	0.32	3.13	0.26	0.45	N, NC, SC, S
Insulating Low E II glass - Argon, SDL with spacer bars	0.33	3.03	0.26	0.45	N, NC, SC, S
<b>Picture 1" IG</b>					
<b>Size Tested</b>	<b>47 x 59</b>	<b>47 x 59</b>	<b>47 x 59</b>	<b>47 x 59</b>	
Insulating glass	0.46	2.17	0.59	0.64	-
Insulating glass - SDL	0.46	2.17	0.53	0.57	-
Insulating glass - SDL with spacer bars	0.47	2.13	0.53	0.57	-
Insulating Low E II glass	0.33	3.03	0.32	0.56	N, NC, SC, S
Insulating Low E II glass - SDL	0.33	3.03	0.29	0.50	N, NC, SC, S
Insulating Low E II glass - SDL with spacer bars	0.35	2.86	0.29	0.50	N, NC, SC, S
Insulating Low E II glass - Argon	0.30	3.33	0.32	0.56	N, NC, SC, S
Insulating Low E II glass - Argon, SDL	0.30	3.33	0.29	0.50	N, NC, SC, S
Insulating Low E II glass - Argon, SDL with spacer bars	0.31	3.23	0.29	0.50	N, NC, SC, S
<b>Venting Picture 3/4" IG</b>					
<b>Size Tested</b>	<b>47 x 59</b>	<b>47 x 59</b>	<b>47 x 59</b>	<b>47 x 59</b>	
Insulating glass	0.48	2.08	0.65	0.62	-
Insulating glass - SDL	0.48	2.08	0.55	0.58	-
Insulating glass - SDL with spacer bars	0.48	2.08	0.55	0.58	-
Insulating Low E II glass	0.37	2.70	0.52	0.59	NC
Insulating Low E II glass - SDL	0.37	2.70	0.47	0.53	NC
Insulating Low E II glass - SDL with spacer bars	0.38	2.63	0.47	0.53	NC
Insulating Low E II glass - Argon	0.34	2.94	0.52	0.59	N, NC
Insulating Low E II glass - Argon, SDL	0.30	3.33	0.30	0.51	N, NC, SC, S
Insulating Low E II glass - Argon, SDL with spacer bars	0.31	3.23	0.30	0.51	N, NC, SC, S
<b>Venting Picture 1" IG</b>					
<b>Size Tested</b>	<b>47 x 59</b>	<b>47 x 59</b>	<b>47 x 59</b>	<b>47 x 59</b>	
Insulating glass	0.47	2.13	0.59	0.64	-
Insulating glass - SDL	0.47	2.13	0.53	0.57	-
Insulating glass - SDL with spacer bars	0.48	2.08	0.53	0.57	-
Insulating Low E II glass	0.37	2.70	0.51	0.59	NC
Insulating Low E II glass - SDL	0.37	2.70	0.45	0.53	NC
Insulating Low E II glass - SDL with spacer bars	0.35	2.86	0.29	0.50	N, NC, SC, S
Insulating Low E II glass - Argon	0.31	3.33	0.32	0.56	N, NC, SC, S
Insulating Low E II glass - Argon, SDL	0.31	3.33	0.29	0.50	N, NC, SC, S
Insulating Low E II glass - Argon, SDL with spacer bars	0.32	3.13	0.29	0.50	N, NC, SC, S

**NOTE:**

Product Values are determined using the National Fenestration Rating Council (NFRC) Procedures for determining fenestration product values.

**U-Value:** (Btu/hr-sq ft-°F) Lower the U-Value, the greater the resistance to heat flow and better its insulating value.

**R-Value:** (1/U-Value) Higher the R-Value, the greater the resistance to heat flow and better its insulating value.

**Visible Light Transmittance (VLT):** Percentage of visible light transmitted through the unit.

**Solar Heat Gain Coefficient (SHGC):** The lower a window's SHGC, the less solar heat it transmits, and the greater its shading ability.

Capillary tubes are required for IG units at high elevations. Argon will not be furnished in units with capillary tubes.

Contact the Architectural Hotline at (800-346-3363) for additional NFRC Unit Values.

# CLAD CASEMASTER

## MINIMUM AND MAXIMUM MEASUREMENTS

Minimum and Maximum Measurements					
Glazing Type	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum RO Square Feet
<b>Operator / Stationary</b>					
Insulating Glass 3/4" (19)	14 1/2" (368)	12 1/2" (317)	37" (939)	83 5/8" (2124)	18.9 Sq. feet (1.755 Sq. Meters)
<b>Picture</b>					
Insulating Glass 3/4" (19)	11" (279)	11 5/16" (287)	105" (2667)	105" (2667)	25.0 Sq. feet (2.32 Sq. Meters)
Insulating Glass 1" (25)	11 1/4" (286)	11 9/16" (294)	120" (3048)	120" (3048)	49.0 Sq. feet (4.55 Sq. Meters)
<b>Venting Picture</b>					
Insulating Glass 3/4" (19)	16" (406)	36" (914)	73" (1854)	83 5/8" (2124)	25.0 Sq. feet (2.32 Sq. Meters)
Insulating Glass 1" (25)	16" (406)	36" (914)	73" (1854)	83 5/8" (2124)	36.0 Sq. feet (3.34 Sq. Meters)

**NOTE:**

These minimum and maximum measurements are guidelines for configuring custom sized units, all measurements are specific to glass type. For assistance please contact our technical support hotline at 800-346-3363 or your Marvin representative.

# CLAD CASEMASTER

## EGRESS, LITE & VENT MEASUREMENTS

Egress, Lite and Vent Measurements - Casemaster						
Call #	Total Square Feet	Clear Opening Width	Clear Opening Height	Floor to Sill Height	Vent Opening (SQ. FT.)	Lite
1624	0.94	7.23	18.65	61.48	1.51	1.23
1632	1.34	7.23	26.65	53.48	2.16	1.81
1636	1.54	7.23	30.65	49.48	2.48	2.10
1640	1.74	7.23	34.65	45.48	2.81	2.39
1648	2.14	7.23	42.65	37.48	3.46	2.98
1656	2.54	7.23	50.65	29.48	4.10	3.56
1660	2.74	7.23	54.65	25.48	4.43	3.85
1664	2.94	7.23	58.65	21.48	4.75	4.14
1672	3.35	7.23	66.65	13.48	5.40	4.73
2024	1.45	11.23	18.65	61.48	2.03	1.69
2032	2.08	11.23	26.65	53.48	2.90	2.50
2036	2.39	11.23	30.65	49.48	3.37	2.90
2040	2.70	11.23	34.65	45.48	3.77	3.30
2048	3.33	11.23	42.65	37.48	4.64	4.11
2056	3.95	11.23	50.65	29.48	5.51	4.92
2060	4.26	11.23	54.65	25.48	5.95	5.32
2064	4.57	11.23	58.65	21.48	6.38	5.72
2072	5.20	11.23	66.65	13.48	7.25	6.53
2424	1.97	15.23	18.65	61.48	2.55	2.16
2432	2.82	15.23	26.65	53.48	3.64	3.19
2436	3.24	15.23	30.65	49.48	4.19	3.70
2440	3.66	15.23	34.65	45.48	4.73	4.22
2448	4.51	15.23	42.65	37.48	5.83	5.24
2456	5.36	15.23	50.65	29.48	6.92	6.27
2460	5.78	15.23	54.65	25.48	7.47	6.79
2464	6.20	15.23	58.65	21.48	8.01	7.30
2472	7.05	15.23	66.65	13.48	9.10	8.33
2824	2.64	20.35	18.65	61.48	3.07	2.63
2832	3.77	20.35	26.65	53.48	4.38	3.88
2836	4.33	20.35	30.65	49.48	5.04	4.50
2840	4.90	20.35	34.65	45.48	5.70	5.13
2848*	6.03	20.35	42.65	37.48	7.01	6.38
2856*	7.16	20.35	50.65	29.48	8.33	7.63
2860*	7.72	20.35	54.65	25.48	8.98	8.25
2864*	8.29	20.35	58.65	21.48	9.64	8.88
2872*	9.42	20.35	66.65	13.48	10.96	10.13
3224	3.01	23.23	18.65	61.48	3.59	3.09
3232	4.30	23.23	26.65	53.48	5.12	4.57
3236	4.94	23.23	30.65	49.48	5.89	5.30
3240	5.59	23.23	34.65	45.48	6.66	6.04
3248*	6.88	23.23	42.65	37.48	8.20	7.51
3256*	8.17	23.23	50.65	29.48	9.73	8.98
3260*	8.82	23.23	54.65	25.48	10.50	9.72
3264*	9.46	23.23	58.65	21.48	11.27	10.46
3272*	10.75	23.23	66.65	13.48	12.81	11.93
3624	3.53	27.23	18.65	61.48	4.11	3.56
3632	5.04	27.23	26.65	53.48	5.87	5.26
3636**	5.80	27.23	30.65	49.48	6.74	6.10
3640**	6.55	27.23	34.65	45.48	7.62	6.95
3648*	8.06	27.23	42.65	37.48	9.38	8.64
3656*	9.58	27.23	50.65	29.48	11.14	10.34
3660*	10.33	27.23	54.65	25.48	12.02	11.19
3664*	11.09	27.23	58.65	21.48	12.90	12.03
3672*	12.60	27.23	66.65	13.48	14.66	13.73

**NOTE**

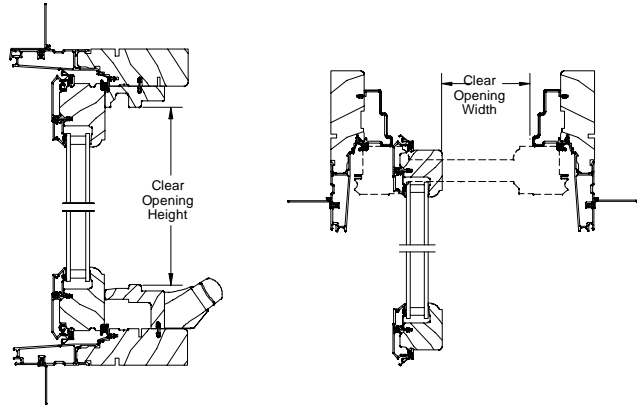
\* These windows meet national egress codes for fire evacuation. Local codes may differ.

\*\* These windows must be installed lower in the wall to meet the required floor to sill height of 44".

Floor to sill height is based on 6' - 10 1/4" from finished floor to rough opening header. Egress widths represent standard operating hardware.

Egress hardware may be used to increase the clear opening width of series 16, 20, 24, 32 and 36 widths by 2 11/16" and increase series 28 widths by 2 1/8".

### Casemaster - Operator



**International Building Code - 2000**

Section 1009 Emergency Escape and Rescue

**1009.2 Minimum size:** Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.53 m<sup>2</sup>). Exception: The minimum net clear opening for emergency escape and rescue openings on the ground level at grade is 5.0 square feet (0.46 m<sup>2</sup>).

**1009.2.1 Minimum dimensions:** The minimum net clear opening height dimension shall be 24 inches (610 mm). The net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.

**1009.3 Maximum height from the floor:** Emergency escape and rescue opening shall have the bottom of the clear opening not greater than 44 inches (1118 mm) measured from the floor.

**1009.4 Operational constraints:** Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates, or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with Section 1009.2 and such devices shall be releasable or removable from the inside without the use of a key, tool, or force greater than that which is required for normal operation of the escape and rescue opening.

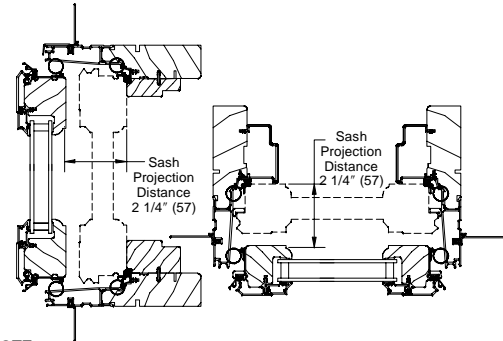
Code restrictions may vary depending on your local building codes.

# CLAD CASEMASTER

## LITE AND VENT VALUES

Venting Picture Lite and Ventilation Measurements							
Call #	Vent Opening (sq ft)	Volume of Air Movement Per Minute (cu ft) *	Daylight Opening (sq ft)	Call #	Vent Opening (sq ft)	Volume of Air Movement Per Minute (cu ft) *	Daylight Opening (sq ft)
1636	0.22	16.81	2.10	4036	0.33	25.11	6.90
1640	0.24	18.19	2.39	4040	0.35	26.49	7.86
1648	0.28	20.96	2.98	4048	0.39	29.26	9.78
1656	0.31	23.73	3.56	4056	0.42	32.03	11.69
1660	0.33	25.11	3.85	4060	0.44	33.41	12.65
1664	0.35	26.49	4.14	4064	0.46	34.08	13.61
1672	0.39	29.26	4.73	4072	0.50	37.57	15.53
2036	0.24	18.19	2.90	4836	0.37	27.88	8.50
2040	0.26	19.58	3.30	4840	0.39	29.26	9.68
2048	0.29	22.34	4.11	4848	0.42	32.03	12.05
2056	0.33	25.11	4.92	4856	0.46	34.80	14.41
2060	0.35	26.49	5.32	4860	0.48	36.18	15.59
2064	0.37	27.88	5.72	4864	0.50	37.57	16.77
2072	0.41	30.65	6.53	4872	0.53	40.33	19.13
2436	0.26	19.58	3.70	5636	0.41	30.65	10.10
2440	0.28	20.96	4.22	5640	0.42	32.03	11.51
2448	0.31	23.73	5.24	5648	0.46	34.80	14.31
2456	0.35	26.49	6.27	5656	0.50	37.57	17.12
2460	0.37	27.88	6.79	5660	0.52	38.95	18.52
2464	0.39	29.26	7.30	5664	0.53	40.33	19.92
2472	0.42	32.03	8.33	5672	0.57	43.10	22.73
2836	0.28	20.96	4.50	6036	0.42	32.03	10.90
2840	0.29	22.34	5.13	6040	0.44	33.41	12.42
2848	0.33	25.11	6.38	6048	0.48	36.18	15.45
2856	0.37	27.88	7.63	6056	0.52	38.95	18.47
2860	0.39	29.26	8.25	6060	0.53	40.33	19.99
2864	0.41	30.65	8.88	6064	0.55	41.72	21.50
2872	0.44	33.41	10.13	6072	0.59	44.48	24.53
3236	0.29	22.34	5.30	6436	0.44	33.41	11.71
3240	0.31	23.73	6.04	6440	0.46	34.80	13.33
3248	0.35	26.49	7.51	6448	0.50	37.57	16.58
3256	0.37	29.26	8.98	6456	0.53	40.33	19.83
3260	0.39	30.65	9.72	6460	0.55	41.72	21.46
3264	0.41	32.03	10.46	6464	0.57	43.10	23.08
3272	0.44	34.80	11.93	6472	0.61	45.87	26.33
3636	0.31	23.73	6.10	7236	0.48	36.18	13.31
3640	0.33	25.11	6.95	7240	0.50	37.57	15.15
3648	0.37	27.88	8.64	7248	0.53	40.33	18.85
3656	0.41	30.65	10.34	7256	0.57	43.10	22.54
3660	0.42	32.03	11.19	7260	0.59	44.48	24.39
3664	0.44	33.41	12.03	7264	0.61	45.87	26.24
3672	0.48	36.18	13.73	7272	0.65	48.64	29.93

Casemaster Venting Picture



**NOTE:**  
Vent position shown. Casemaster Venting Picture does not meet egress.

**Casemaster Venting Picture Window Air Volume Formula**

Stated volume is based on 1 MPH wind (88.0 ft/min). To determine volume for other speeds of wind, convert the wind speed from MPH to feet per minute and use the following equation:  
Volume in cubic feet per minute = Area \* Velocity of wind Example: For CN 1636 .224 \* 88.0 ft/min \* .853 = 16.81 cubic feet per minute (Volume of air).

# CLAD CASEMASTER

## DESIGN PRESSURE VALUES

Design Pressure Values - Casemaster						
Call #	16	20	24	28	32	36
	Width					
24	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50
32	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50
36	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50
40	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50
48	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50
56	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50
60	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50
64	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50
72	DP 50	DP 50	DP 50	DP 50	DP 50	DP 50

**NOTE:**

Design Pressure values represent Pounds Per Square Foot (PSF). Values indicated represent standard units only. Refer to the Product Performance and Information section for additional information on Design Pressures.

Widths greater than size 28 meet a DP 50 rating with limited travel.

Design Pressure Values - Casemaster Venting Picture												
Call #	16	20	24	28	32	36	40	48	56	60	64	72
	Width											
36	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP30	DP30	DP30
40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP30	DP30	DP30
48	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP30	DP30	DP30
56	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP30	DP30	DP30
60	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP30	DP30	DP30
64	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP30	DP30	DP30
72	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP40	DP30	DP30	DP30

**NOTE:**

Design Pressure values represent Pounds Per Square Foot (PSF). Values indicated represent standard units only. Refer to the Product Performance and Information section for additional information on Design Pressures.

# CLAD CASEMASTER

## MEASUREMENT CONVERSIONS

Measurement Conversions - Casemaster Operating / Stationary														
Size Referenced	Daylight Opening		Glass Size		Frame Size		Rough Opening		Masonry Opening (Without Casing)		Masonry Opening (With Brick Mould Casing)		Masonry Opening (With Flat Casing)	
Daylight Opening	Dimension Needed													
			Width	+ 1 1/16" (27)	Width	+ 5 1/2" (140)	Width	+ 6 1/2" (165)	Width	+ 6" (152)	Width	+ 8 5/8" (219)	Width	+ 12" (305)
		Height	+ 1 1/16" (27)	Height	+ 6 5/16" (160)	Height	+ 6 13/16" (173)	Height	+ 6 9/16" (167)	Height	+ 8 1/2" (216)	Height	+ 10 3/16" (259)	
Glass Size	Width	- 1 1/16" (27)		Width	+ 4 7/16" (113)	Width	+ 5 7/16" (138)	Width	+ 4 15/16" (125)	Width	+ 7 9/16" (192)	Width	+ 10 15/16" (278)	
	Height	- 1 1/16" (27)		Height	+ 5 1/4" (133)	Height	+ 5 3/4" (146)	Height	+ 5 1/2" (140)	Height	+ 7 7/16" (189)	Height	+ 9 1/8" (232)	
Frame Size	Width	- 5 1/2" (140)	Width	- 4 7/16" (113)		Width	+ 1" (25)	Width	+ 1/2" (13)	Width	+ 3 1/8" (79)	Width	+ 6 1/2" (165)	
	Height	- 6 5/16" (160)	Height	- 5 1/4" (133)		Height	+ 1/2" (13)	Height	+ 1/4" (6)	Height	+ 2 3/16" (40)	Height	+ 3 7/8" (98)	
Rough Opening	Width	- 6 1/2" (165)	Width	- 5 7/16" (138)	Width	- 1" (25)		Width	- 1/2" (13)	Width	+ 2 1/8" (54)	Width	+ 5 1/2" (140)	
	Height	- 6 13/16" (173)	Height	- 5 3/4" (146)	Height	- 1/2" (13)		Height	- 1/4" (6)	Height	+ 1 11/16" (43)	Height	+ 3 3/8" (86)	
Masonry Opening (Without Casing)	Width	- 6" (152)	Width	- 4 15/16" (125)	Width	- 1/2" (13)	Width	+ 1/2" (13)		Width	+ 2 5/8" (67)	Width	+ 6" (152)	
	Height	- 6 9/16" (167)	Height	- 5 1/2" (140)	Height	- 1/4" (6)	Height	+ 1/4" (6)		Height	+ 1 15/16" (49)	Height	+ 3 5/8" (92)	
Masonry Opening (With Brick Mould Casing)	Width	- 8 5/8" (219)	Width	- 7 9/16" (192)	Width	- 3 1/8" (79)	Width	- 2 1/8" (54)	Width	- 2 5/8" (67)		Width	+ 3 3/8" (86)	
	Height	- 8 1/2" (216)	Height	- 7 7/16" (189)	Height	- 2 3/16" (56)	Height	- 1 11/16" (43)	Height	- 1 15/16" (49)		Height	+ 1 11/16" (43)	
Masonry Opening (With Flat Casing)	Width	- 12" (305)	Width	- 10 15/16" (278)	Width	- 6 1/2" (165)	Width	- 5 1/2" (140)	Width	- 6" (152)	Width	- 3 3/8" (86)		
	Height	- 10 3/16" (259)	Height	- 9 1/8" (232)	Height	- 3 7/8" (98)	Height	- 3 3/8" (86)	Height	- 3 5/8" (92)	Height	- 1 11/16" (43)		

**NOTE:**  
Conversions represent units without dividers. Contact Marvin's for additional conversions.

### Egress Conversions

Standard Hinge: Rough Opening Width - 9" Rough Opening Height - 4 15/16"  
 Series 28 Hinge: Rough Opening Width - 8 1/2" Rough Opening Height - 4 15/16"  
 Egress Hinge: Rough opening Width - 6 3/8" Rough Opening Height - 4 15/16"

# CLAD CASEMASTER

## MEASUREMENT CONVERSIONS

Measurement Conversions - Picture 3/4" IG																				
Size Referenced	Daylight Opening	Glass Size		Frame Size		Rough Opening		Masonry Opening (Without Casing)		Masonry Opening (With Brick Mould Casing)		Masonry Opening (With Flat Casing)								
Daylight Opening	Dimension Needed																			
	Width		+ 1 1/16" (27)	Width		+ 5 1/2" (140)	Width		+ 6 1/2" (165)	Width		+ 6" (152)	Width		+ 8 5/8" (219)	Width		+ 12" (305)		
Glass Size	Height		+ 1 1/16" (27)	Height		+ 6 5/16" (160)	Height		+ 6 13/16" (173)	Height		+ 6 9/16" (167)	Height		+ 8 1/2" (216)	Height		+ 10 3/16" (259)		
	Width	- 1 1/16" (27)	Width		+ 4 7/16" (113)	Width		+ 5 7/16" (138)	Width		+ 4 15/16" (125)	Width		+ 7 9/16" (192)	Width		+ 10 15/16" (278)			
Frame Size	Height	- 1 1/16" (27)	Height		+ 5 1/4" (133)	Height		+ 5 3/4" (146)	Height		+ 5 1/2" (140)	Height		+ 7 7/16" (189)	Height		+ 9 1/8" (232)			
	Width	- 5 1/2" (140)	Width		- 4 7/16" (113)	Width		- 1" (25)	Width		+ 1" (25)	Width		+ 1/2" (13)	Width		+ 3 1/8" (79)	Width		+ 6 1/2" (165)
Rough Opening	Height	- 6 5/16" (160)	Height		- 5 1/4" (133)	Height		- 5 3/4" (146)	Height		+ 1/2" (13)	Height		+ 1/4" (6)	Height		+ 2 3/16" (40)	Height		+ 3 7/8" (98)
	Width	- 6 1/2" (165)	Width		- 5 7/16" (138)	Width		- 1" (25)	Width		+ 1/2" (13)	Width		- 1/2" (13)	Width		+ 2 1/8" (54)	Width		+ 5 1/2" (140)
Masonry Opening (Without Casing)	Height	- 6 13/16" (173)	Height		- 5 3/4" (146)	Height		- 1/2" (13)	Height		+ 1/4" (6)	Height		- 1/4" (6)	Height		+ 1 11/16" (43)	Height		+ 3 3/8" (86)
	Width	- 6" (152)	Width		- 4 15/16" (125)	Width		- 1/2" (13)	Width		+ 1/2" (13)	Width		+ 1/2" (13)	Width		+ 2 5/8" (67)	Width		+ 6" (152)
Masonry Opening (With Brick Mould Casing)	Height	- 6 9/16" (167)	Height		- 5 1/2" (140)	Height		- 1/4" (6)	Height		+ 1/4" (6)	Height		+ 1/4" (6)	Height		+ 1 15/16" (49)	Height		+ 3 5/8" (92)
	Width	- 8 5/8" (219)	Width		- 7 9/16" (192)	Width		- 3 1/8" (79)	Width		- 2 1/8" (54)	Width		- 2 5/8" (67)	Width		- 2 5/8" (67)	Width		+ 3 3/8" (86)
Masonry Opening (With Flat Casing)	Height	- 8 1/2" (216)	Height		- 7 7/16" (189)	Height		- 2 3/16" (56)	Height		- 1 11/16" (43)	Height		- 1 15/16" (49)	Height		- 1 15/16" (49)	Height		+ 1 11/16" (43)
	Width	- 12" (305)	Width		- 10 15/16" (278)	Width		- 6 1/2" (165)	Width		- 5 1/2" (140)	Width		- 6" (152)	Width		- 6" (152)	Width		- 3 3/8" (86)
	Height	- 10 3/16" (259)	Height		- 9 1/8" (232)	Height		- 3 7/8" (98)	Height		- 3 3/8" (86)	Height		- 3 5/8" (92)	Height		- 3 5/8" (92)	Height		- 1 11/16" (43)

**NOTE:**  
Conversions represent units without dividers. Contact Marvin's for additional conversions.

# CLAD CASEMASTER

## MEASUREMENT CONVERSIONS

Measurement Conversions - Picture 1" IG														
Size Referenced	Daylight Opening		Glass Size		Frame Size		Rough Opening		Masonry Opening (Without Casing)		Masonry Opening (With Brick Mould Casing)		Masonry Opening (With Flat Casing)	
Daylight Opening	Dimension Needed													
		Width		+ 1 1/16" (27)	Width	+ 5 1/2" (140)	Width	+ 6 1/2" (165)	Width	+ 6" (152)	Width	+ 8 5/8" (219)	Width	+ 12" (305)
	Height		+ 1 1/16" (27)	Height	+ 6 5/16" (160)	Height	+ 6 13/16" (173)	Height	+ 6 9/16" (167)	Height	+ 8 1/2" (216)	Height	+ 10 3/16" (259)	
Glass Size	Width	- 1 1/16" (27)			Width	+ 4 7/16" (113)	Width	+ 5 7/16" (138)	Width	+ 4 15/16" (125)	Width	+ 7 9/16" (192)	Width	+ 10 15/16" (278)
	Height	- 1 1/16" (27)			Height	+ 5 1/4" (133)	Height	+ 5 3/4" (146)	Height	+ 5 1/2" (140)	Height	+ 7 7/16" (189)	Height	+ 9 1/8" (232)
Frame Size	Width	- 5 1/2" (140)	Width	- 4 7/16" (113)			Width	+ 1" (25)	Width	+ 1/2" (13)	Width	+ 3 1/8" (79)	Width	+ 6 1/2" (165)
	Height	- 6 5/16" (160)	Height	- 5 1/4" (133)			Height	+ 1/2" (13)	Height	+ 1/4" (6)	Height	+ 2 3/16" (40)	Height	+ 3 7/8" (98)
Rough Opening	Width	- 6 1/2" (165)	Width	- 5 7/16" (138)	Width	- 1" (25)			Width	- 1/2" (13)	Width	+ 2 1/8" (54)	Width	+ 5 1/2" (140)
	Height	- 6 13/16" (173)	Height	- 5 3/4" (146)	Height	- 1/2" (13)			Height	- 1/4" (6)	Height	+ 1 11/16" (43)	Height	+ 3 3/8" (86)
Masonry Opening (Without Casing)	Width	- 6" (152)	Width	- 4 15/16" (125)	Width	- 1/2" (13)	Width	+ 1/2" (13)			Width	+ 2 5/8" (67)	Width	+ 6" (152)
	Height	- 6 9/16" (167)	Height	- 5 1/2" (140)	Height	- 1/4" (6)	Height	+ 1/4" (6)			Height	+ 1 15/16" (49)	Height	+ 3 5/8" (92)
Masonry Opening (With Brick Mould Casing)	Width	- 8 5/8" (219)	Width	- 7 9/16" (192)	Width	- 3 1/8" (79)	Width	- 2 1/8" (54)	Width	- 2 5/8" (67)			Width	+ 3 3/8" (86)
	Height	- 8 1/2" (216)	Height	- 7 7/16" (189)	Height	- 2 3/16" (56)	Height	- 1 11/16" (43)	Height	- 1 15/16" (49)			Height	+ 1 11/16" (43)
Masonry Opening (With Flat Casing)	Width	- 12" (305)	Width	- 10 15/16" (278)	Width	- 6 1/2" (165)	Width	- 5 1/2" (140)	Width	- 6" (152)	Width	- 3 3/8" (86)		
	Height	- 10 3/16" (259)	Height	- 9 1/8" (232)	Height	- 3 7/8" (98)	Height	- 3 3/8" (86)	Height	- 3 5/8" (92)	Height	- 1 11/16" (43)		

**NOTE:**  
Conversions represent units without dividers. Contact Marvin's for additional conversions.

# CLAD CASEMASTER

## MEASUREMENT CONVERSIONS

Measurement Conversions - Venting Picture 3/4" IG and 1" IG														
Size Referenced	Daylight Opening		Glass Size		Frame Size		Rough Opening		Masonry Opening (Without Casing)		Masonry Opening (With Brick Mould Casing)		Masonry Opening (With Flat Casing)	
Daylight Opening	Dimension Needed													
		Width		+ 1 1/16" (27)	Width	+ 5 1/2" (140)	Width	+ 6 1/2" (165)	Width	+ 6" (152)	Width	+ 8 5/8" (219)	Width	+ 12" (305)
	Height		+ 1 1/16" (27)	Height	+ 6 5/16" (160)	Height	+ 6 13/16" (173)	Height	+ 6 5/16" (160)	Height	+ 8 1/2" (216)	Height	+ 10 3/16" (259)	
Glass Size	Width	- 1 1/16" (27)			Width	+ 4 7/16" (113)	Width	+ 5 7/16" (138)	Width	+ 4 15/16" (125)	Width	+ 7 9/16" (192)	Width	+ 10 15/16" (278)
	Height	- 1 1/16" (27)			Height	+ 5 1/4" (133)	Height	+ 5 3/4" (146)	Height	+ 5 1/2" (140)	Height	+ 7 7/16" (189)	Height	+ 9 1/8" (232)
Frame Size	Width	- 5 1/2" (140)	Width	- 4 7/16" (113)			Width	+ 1" (25)	Width	+ 1/2" (13)	Width	+ 3 9/8" (79)	Width	+ 6 1/2" (165)
	Height	- 6 5/16" (160)	Height	- 5 1/4" (133)			Height	+ 1/2" (13)	Height	+ 1/4" (6)	Height	+ 2 3/16" (40)	Height	+ 3 7/8" (98)
Rough Opening	Width	- 6 1/2" (165)	Width	- 5 7/16" (138)	Width	- 1" (25)			Width	- 1/2" (13)	Width	+ 2 1/8" (54)	Width	+ 5 1/2" (140)
	Height	- 6 13/16" (173)	Height	- 5 3/4" (146)	Height	- 1/2" (13)			Height	- 1/4" (6)	Height	+ 1 11/16" (43)	Height	+ 3 3/8" (86)
Masonry Opening (Without Casing)	Width	- 6" (152)	Width	- 4 15/16" (125)	Width	- 1/2" (13)	Width	+ 1/2" (13)			Width	+ 2 5/8" (67)	Width	+ 6" (152)
	Height	- 6 5/16" (160)	Height	- 5 1/2" (140)	Height	- 1/4" (6)	Height	+ 1/4" (6)			Height	+ 1 15/16" (49)	Height	+ 3 5/8" (92)
Masonry Opening (With Brick Mould Casing)	Width	- 8 5/8" (219)	Width	- 7 9/16" (192)	Width	- 3 1/8" (79)	Width	- 2 1/8" (54)	Width	- 2 5/8" (67)			Width	+ 3 3/8" (86)
	Height	- 8 1/2" (216)	Height	- 7 7/16" (189)	Height	- 2 3/16" (56)	Height	- 1 11/16" (43)	Height	- 1 15/16" (49)			Height	+ 1 11/16" (43)
Masonry Opening (With Flat Casing)	Width	- 12" (305)	Width	- 10 15/16" (278)	Width	- 6 1/2" (165)	Width	- 5 1/2" (140)	Width	- 6" (152)	Width	- 3 3/8" (86)		
	Height	- 10 3/16" (259)	Height	- 9 1/8" (232)	Height	- 3 7/8" (98)	Height	- 3 3/8" (86)	Height	- 3 5/8" (92)	Height	- 1 11/16" (43)		

**NOTE:** Conversions represent units without dividers. Contact Marvin's for additional conversions.

# CLAD CASEMASTER

## ELEVATIONS: OPERATING / STATIONARY

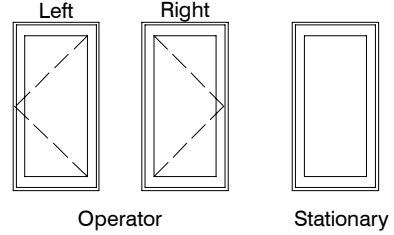
NOT TO SCALE

**CAUTION:** It is recommended that a minimum of 1/4" be added to the rough opening height when using a rigid sill pan product such as Marvin SillGuard™.

Mas. Opg. 1-4 1/2 (419) 1-8 1/2 (521) 2-0 1/2 (622) 2-4 1/2 (724) 2-8 1/2 (826) 3-0 1/2 (927)  
Rgh. Opg. 1-5 (431) 1-9 (533) 2-1 (635) 2-5 (737) 2-9 (838) 3-1 (940)  
Frame Size 1-4 (406) 1-8 (508) 2-0 (610) 2-4 (711) 2-8 (813) 3-0 (914)

1-11 3/8 (594) 1-11 5/8 (600) 1-11 1/8 (587)						
	CCM1624	CCM2024	CCM2424	CCM2824	CCM3224	CCM3624
2-7 3/8 (797) 2-7 5/8 (803) 2-7 1/8 (791)						
	CCM1632	CCM2032	CCM2432	CCM2832	CCM3232	CCM3632
2-11 3/8 (898) 2-11 5/8 (905) 2-11 1/8 (892)						
	CCM1636	CCM2036	CCM2436	CCM2836	CCM3236	CCM3636**
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 1/8 (994)						
	CCM1640	CCM2040	CCM2440	CCM2840	CCM3240	CCM3640**
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 1/8 (1197)						
	CCM1648	CCM2048	CCM2448	CCM2848*	CCM3248*	CCM3648*
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 1/8 (1400)						
	CCM1656	CCM2056	CCM2456	CCM2856*	CCM3256*	CCM3656*
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 1/8 (1502)						
	CCM1660	CCM2060	CCM2460	CCM2860*	CCM3260*	CCM3660*
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 1/8 (1603)						
	CCM1664	CCM2064	CCM2464	CCM2864*	CCM3264*	CCM3664*
5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 1/8 (1807)						
	CCM1672	CCM2072	CCM2472	CCM2872*	CCM3272*	CCM3672*

Operation:



**NOTE:**

Casemaster units available as an operator or stationary left or right hand hinged determined from the exterior.

\* These units meet national egress codes for fire evacuation. Local codes may differ.

\*\* Meets egress if installed lower in the wall.

# CLAD CASEMASTER

## ELEVATIONS: PICTURE

NOT TO SCALE

**CAUTION:** It is recommended that a minimum of 1/4" be added to the rough opening height when using a rigid sill pan product such as Marvin SillGuard™.

Mas. Opg.	3-4 1/2 (1029)	4-0 1/2 (1232)	4-8 1/2 (1435)	5-0 1/2 (1537)	5-4 1/2 (1638)	6-0 1/2 (1842)
Rgh. Opg.	3-5 (1041)	4-1 (1245)	4-9 (1448)	5-1 (1549)	5-5 (1651)	6-1 (1854)
Frame Size	3-4 (1016)	4-0 (1219)	4-8 (1422)	5-0 (1524)	5-4 (1626)	6-0 (1829)
1-11 3/8 (594)						
1-11 5/8 (600)						
1-11 1/8 (587)						
2-7 3/8 (797)						
2-7 5/8 (803)						
2-7 1/8 (791)						
2-11 3/8 (898)						
2-11 5/8 (905)						
2-11 1/8 (892)						
3-3 3/8 (1000)						
3-3 5/8 (1006)						
3-3 1/8 (994)						
3-11 3/8 (1203)						
3-11 5/8 (1210)					1"	1"
3-11 1/8 (1197)						
4-7 3/8 (1406)						
4-7 5/8 (1413)				1"	1"	1"
4-7 1/8 (1400)						
4-11 3/8 (1508)						
4-11 5/8 (1514)			1"	1"	1"	1"
4-11 1/8 (1502)						
5-3 3/8 (1610)						
5-3 5/8 (1616)		1"	1"	1"	1"	1"
5-3 1/8 (1603)						
5-11 3/8 (1813)						
5-11 5/8 (1819)		1"	1"	1"	1"	1"
5-11 1/8 (1807)						

**NOTE:**

Picture units may not be converted to operating units.

= Available in 3/4" or 1" IG Picture Units, specify 3/4" or 1"

= Available in 1" IG Picture Units

# CLAD CASEMASTER

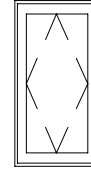
## ELEVATIONS: VENTING PICTURE 3/4" IG

NOT TO SCALE

**CAUTION:** It is recommended that a minimum of 1/4" be added to the rough opening height when using a rigid sill pan product such as Marvin SillGuard™.

Mas. Opg.	1-4 1/2 (419)	1-8 1/2 (521)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	3-0 1/2 (927)
Rgh. Opg.	1-5 (431)	1-9 (533)	2-1 (635)	2-5 (737)	2-9 (838)	3-1 (940)
Frame Size	1-4 (406)	1-8 (508)	2-0 (610)	2-4 (711)	2-8 (813)	3-0 (914)

Operation:



2-11 3/8 (898) 2-11 5/8 (905) 2-11 1/8 (892)						
	CCMVP1636	CCMVP2036	CCMVP2436	CCMVP2836	CCMVP3236	CCMVP3636
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 1/8 (994)						
	CCMVP1640	CCMVP2040	CCMVP2440	CCMVP2840	CCMVP3240	CCMVP3640
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 1/8 (1197)						
	CCMVP1648	CCMVP2048	CCMVP2448	CCMVP2848	CCMVP3248	CCMVP3648
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 1/8 (1400)						
	CCMVP1656	CCMVP2056	CCMVP2456	CCMVP2856	CCMVP3256	CCMVP3656
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 1/8 (1502)						
	CCMVP1660	CCMVP2060	CCMVP2460	CCMVP2860	CCMVP3260	CCMVP3660
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 1/8 (1603)						
	CCMVP1664	CCMVP2064	CCMVP2464	CCMVP2864	CCMVP3264	CCMVP3664
5-11 3/8 (1819) 5-11 5/8 (1819) 5-11 1/8 (1807)						
	CCMVP1672	CCMVP2072	CCMVP2472	CCMVP2872	CCMVP3272	CCMVP3672

**NOTE:**

Units may not be converted to operating units.  
Egress not available.

# CLAD CASEMASTER

## ELEVATIONS: VENTING PICTURE 3/4" IG and 1"

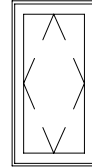
NOT TO SCALE

**CAUTION:** It is recommended that a minimum of 1/4" be added to the rough opening height when using a rigid sill pan product such as Marvin SillGuard™.

Mas. Opg.	3-4 1/2 (1029)	4-0 1/2 (1232)	4-8 1/2 (1435)	5-0 1/2 (1537)	5-4 1/2 (1638)	6-0 1/2 (1842)
Rgh. Opg.	3-5 (1041)	4-1 (1245)	4-9 (1448)	5-1 (1549)	5-5 (1651)	6-1 (1854)
Frame Size	3-4 (1016)	4-0 (1219)	4-8 (1422)	5-0 (1524)	5-4 (1626)	6-0 (1829)

2-11 3/8 (898) 2-11 5/8 (905) 2-11 7/8 (892)						
	CCMVP4036	CCMVP4836	CCMVP5636	CCMVP6036	CCMVP6436	CCMVP7236
3-3 3/8 (1000) 3-3 5/8 (1006) 3-3 7/8 (994)						
	CCMVP4040	CCMVP4840	CCMVP5640	CCMVP6040	CCMVP6440	CCMVP7240
3-11 3/8 (1203) 3-11 5/8 (1210) 3-11 7/8 (1197)						
	CCMVP4048	CCMVP4848	CCMVP5648	CCMVP6048	CCMVP6448	CCMVP7248
4-7 3/8 (1406) 4-7 5/8 (1413) 4-7 7/8 (1400)						
	CCMVP4056	CCMVP4856	CCMVP5656	CCMVP6056	CCMVP6456	CCMVP7256
4-11 3/8 (1508) 4-11 5/8 (1514) 4-11 7/8 (1502)						
	CCMVP4060	CCMVP4860	CCMVP5660	CCMVP6060	CCMVP6460	CCMVP7260
5-3 3/8 (1610) 5-3 5/8 (1616) 5-3 7/8 (1603)						
	CCMVP4064	CCMVP4864	CCMVP5664	CCMVP6064	CCMVP6464	CCMVP7264
5-11 3/8 (1813) 5-11 5/8 (1819) 5-11 7/8 (1807)						
	CCMVP4072	CCMVP4872	CCMVP5672	CCMVP6072	CCMVP6472	CCMVP7272

Operation:



**NOTE:**

Units may not be converted to operating units.  
Egress not available.

= Available in 3/4" or 1" IG Picture Units, specify 3/4" or 1"

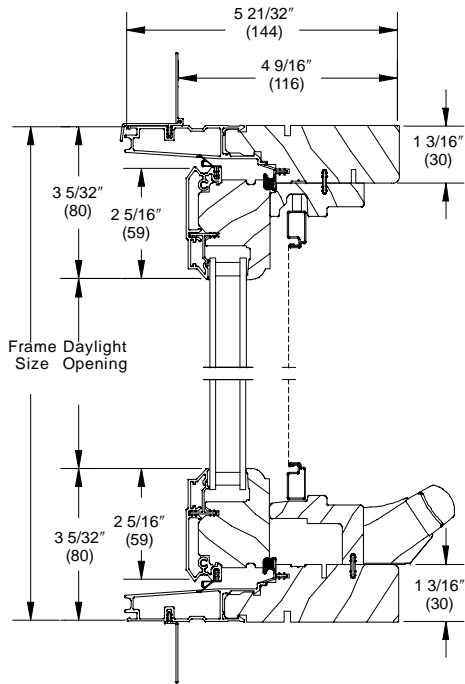
= Available in 1" IG Picture Units

# CLAD CASEMASTER

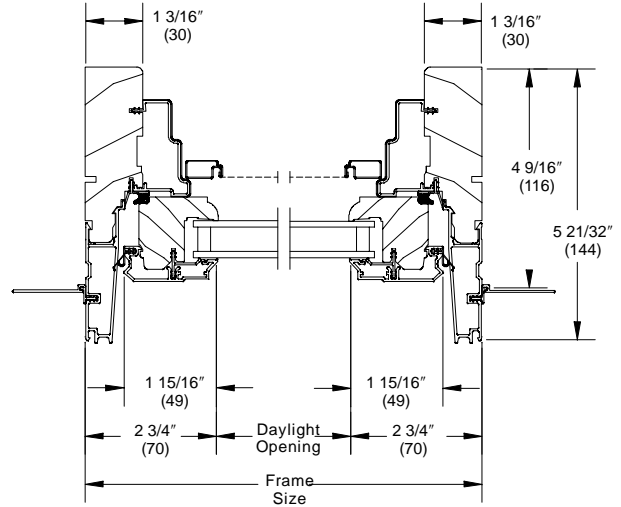
## SECTION DETAILS: OPERATING / STATIONARY

SCALE: 3" = 1' 0"

### Operating

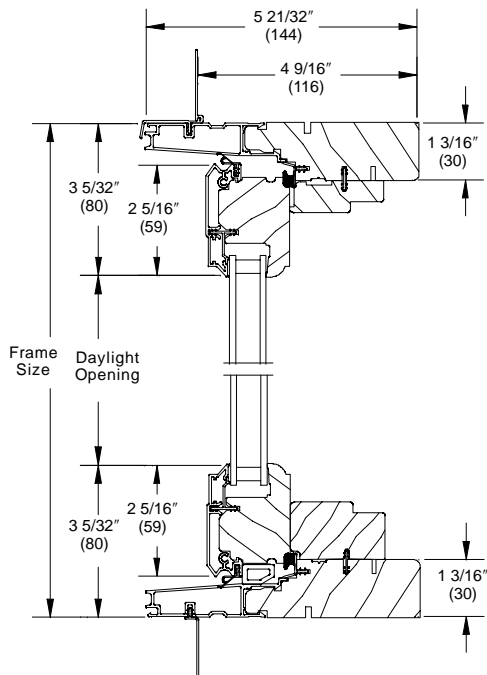


Head Jamb and Sill

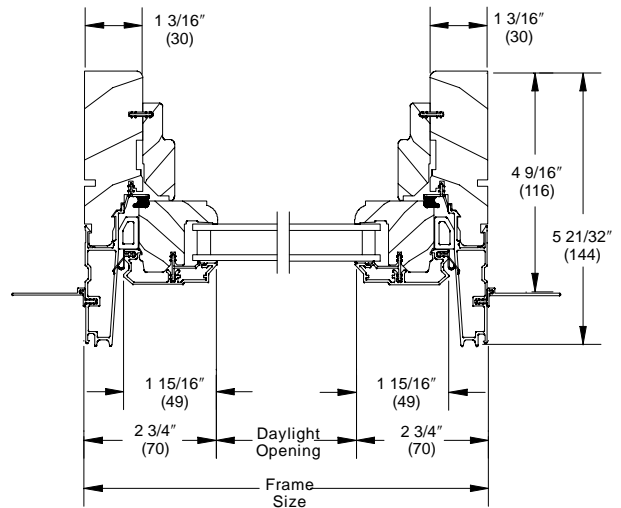


Jamb

### Stationary



Head Jamb and Sill



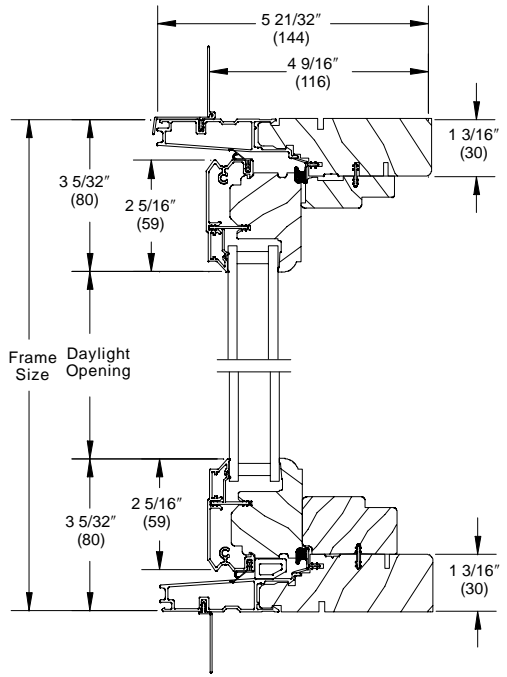
Jamb

# CLAD CASEMASTER

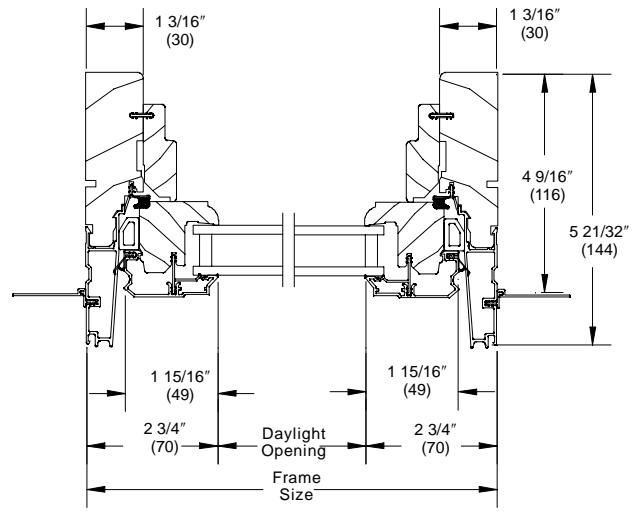
## SECTION DETAILS: PICTURE

SCALE: 3" = 1' 0"

### Picture



Head Jamb and Sill



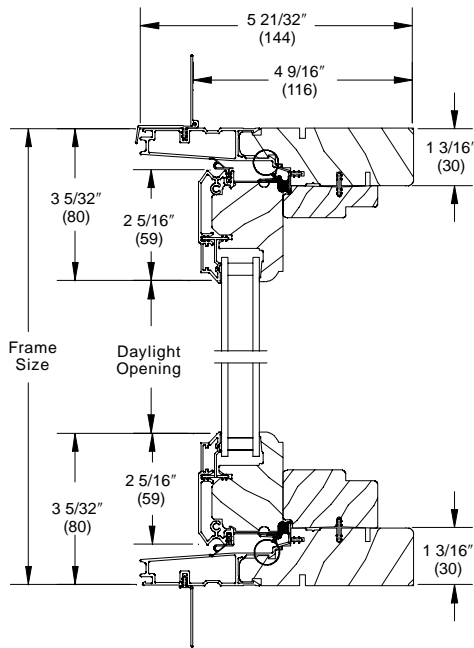
Jamb

# CLAD CASEMASTER

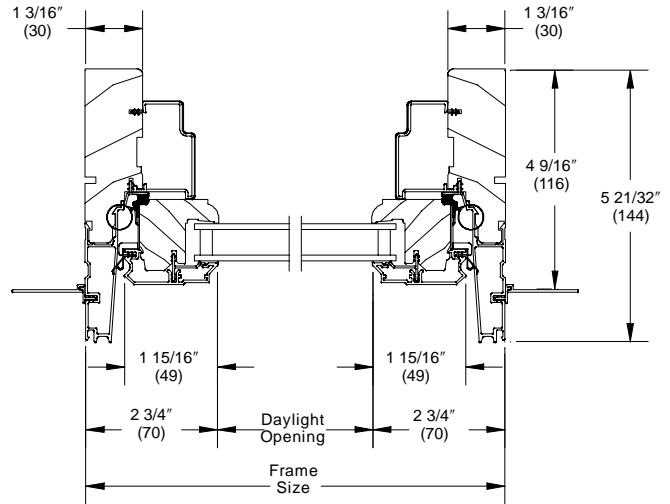
## SECTION DETAILS: VENTING PICTURE

SCALE: 3" = 1' 0"

### Venting Picture - 3/4" IG

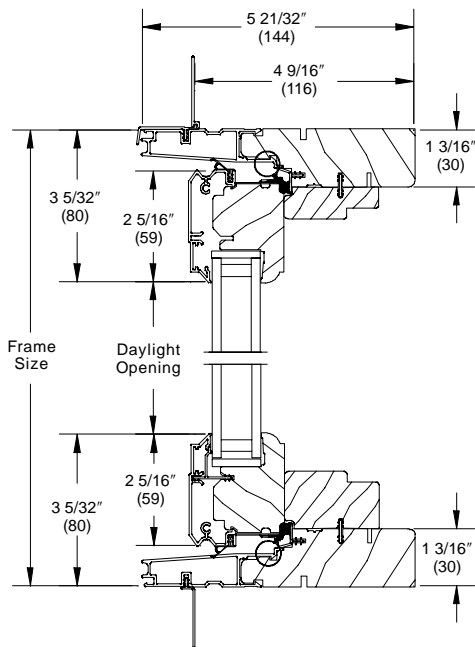


Head Jamb and Sill

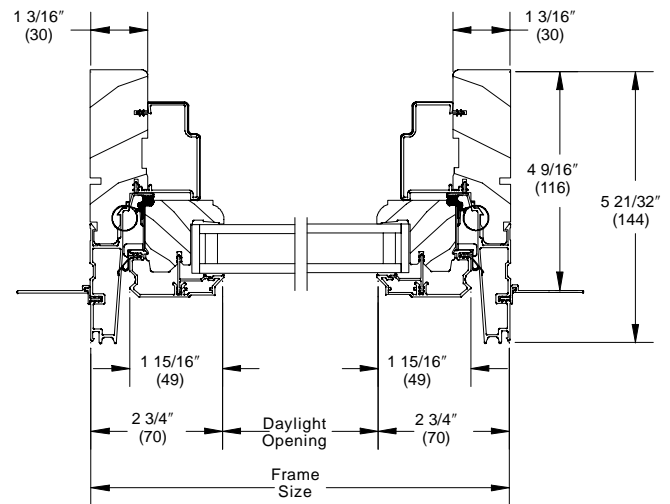


Jamb

### Venting Picture - 1" IG



Head Jamb and Sill



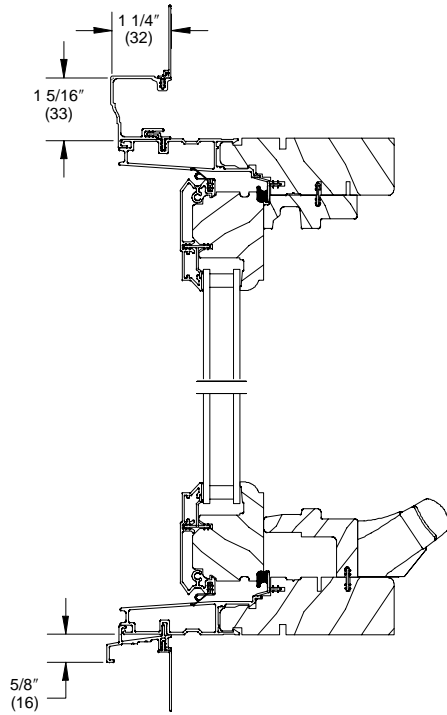
Jamb

# CLAD CASEMASTER

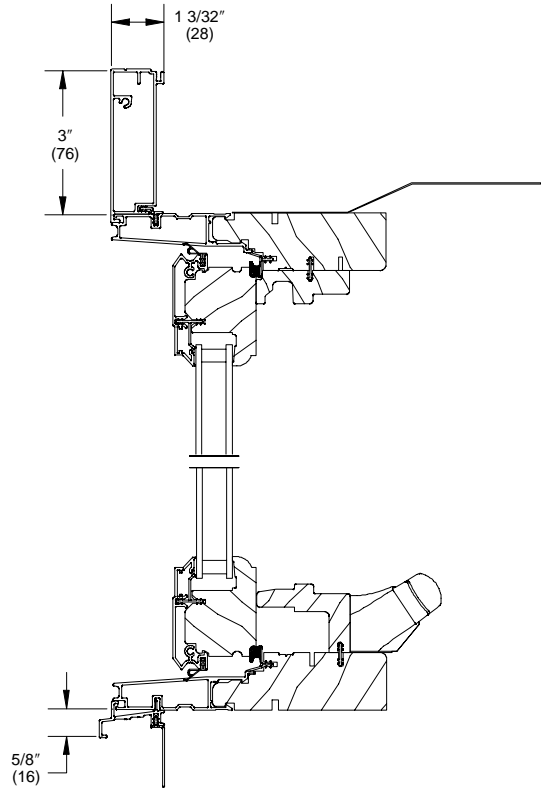
## SECTION DETAILS: CASINGS

SCALE: 3" = 1' 0"

### Casing Options



Head Jamb and Sill  
with Clad Brick Mould Casing

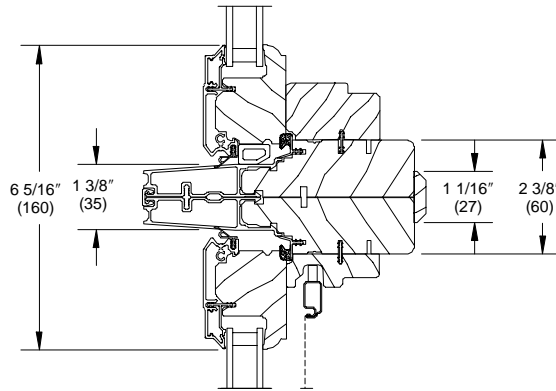


Head Jamb and Sill  
with Clad Flat Casing

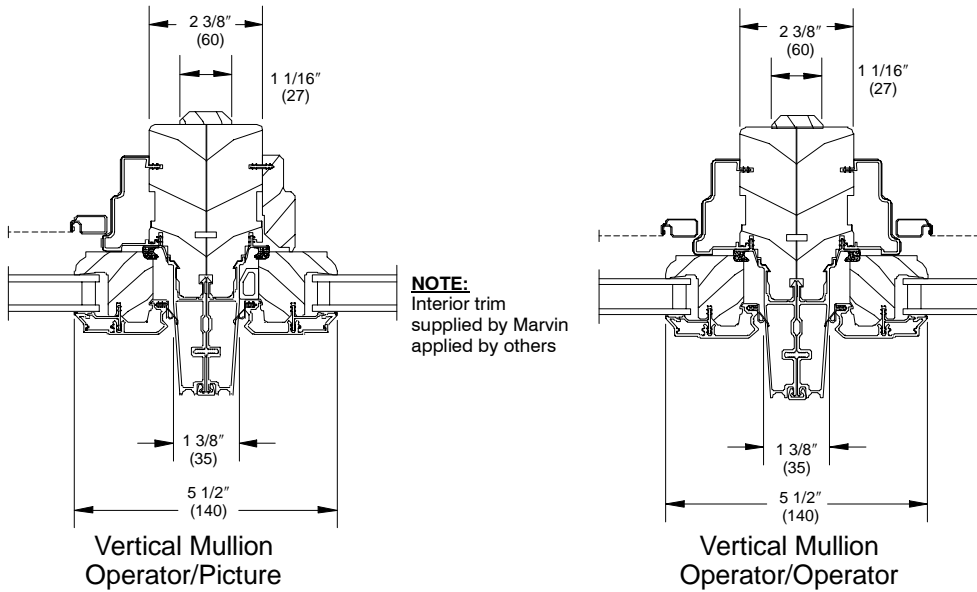
# CLAD CASEMASTER

## SECTION DETAILS: MULLIONS

SCALE: 3" = 1' 0"

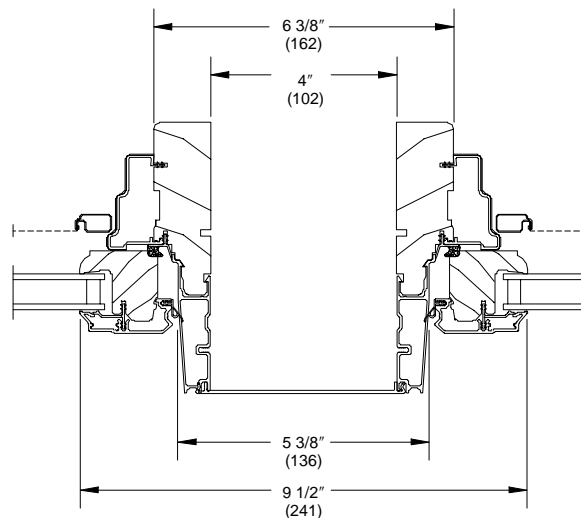


Horizontal Mullion  
Stationary / Operator



Vertical Mullion  
Operator/Picture

Vertical Mullion  
Operator/Operator



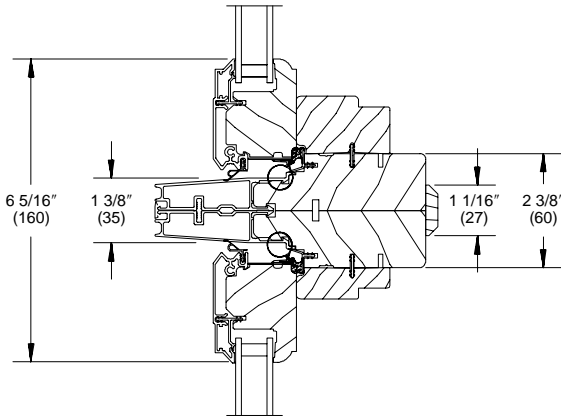
Vertical Mullion  
Operator with 4" Space Mull

**NOTE:**  
For information on structural mullions refer to the Product Performance and Information section.

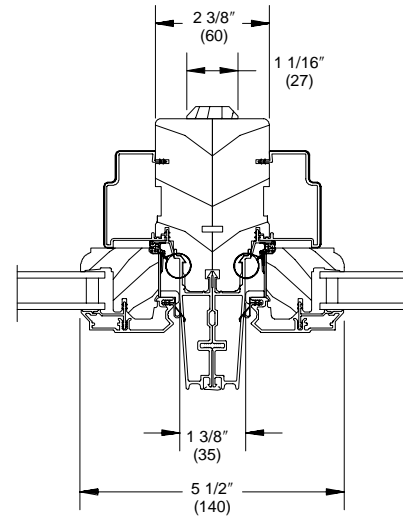
# CLAD CASEMASTER

## SECTION DETAILS: VENTING PICTURE MULLIONS

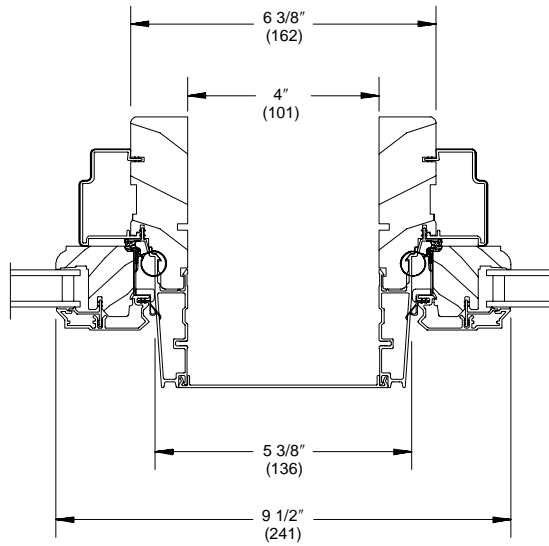
SCALE: 3" = 1' 0"



Horizontal Mullion  
Venting Picture



Vertical Mullion  
Venting Picture



Vertical Mullion Picture with 4" Space Mull

**NOTE:**

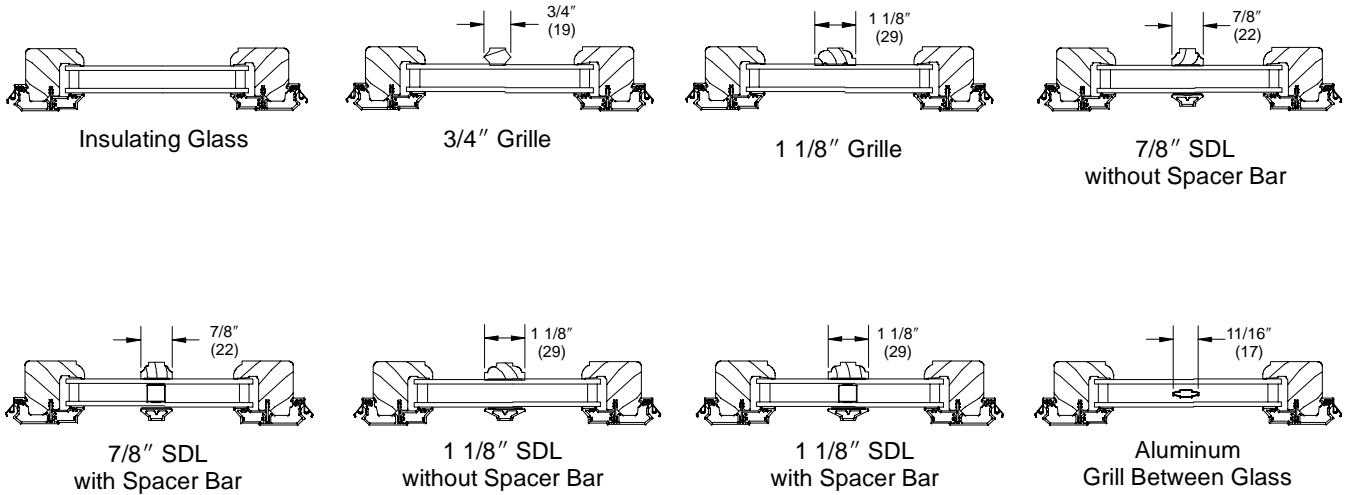
For information on structural mullions refer to the Product Performance and Information section.

# CLAD CASEMASTER

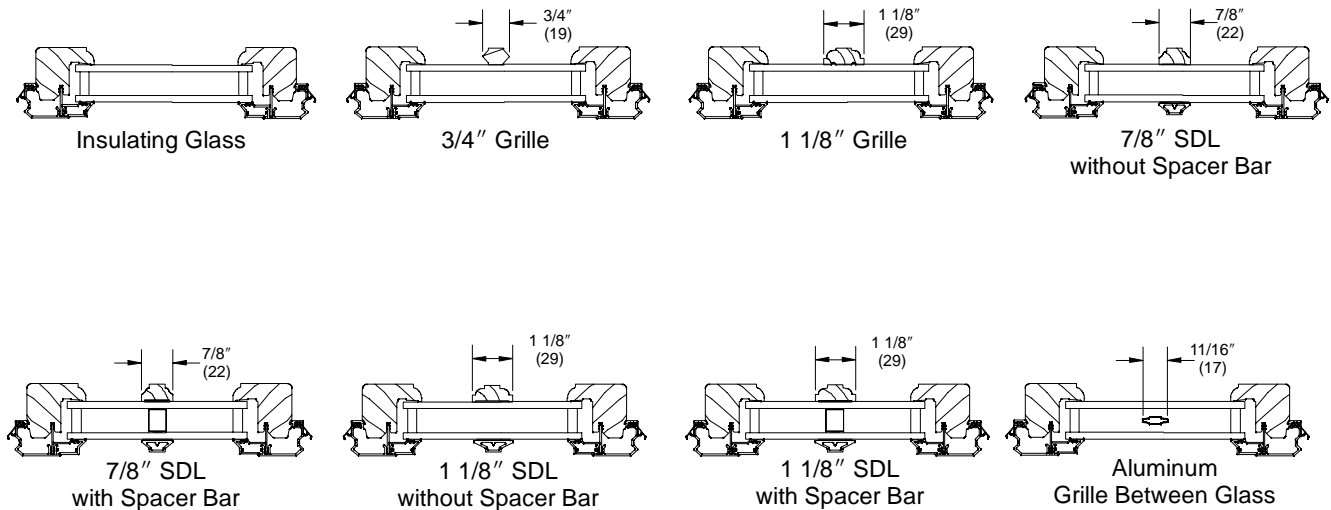
## SECTION DETAILS: DIVIDED LITE OPTIONS

NOT TO SCALE

### Operator 3/4" Insulating Glass



### Picture 1" Insulating Glass



**NOTE:**

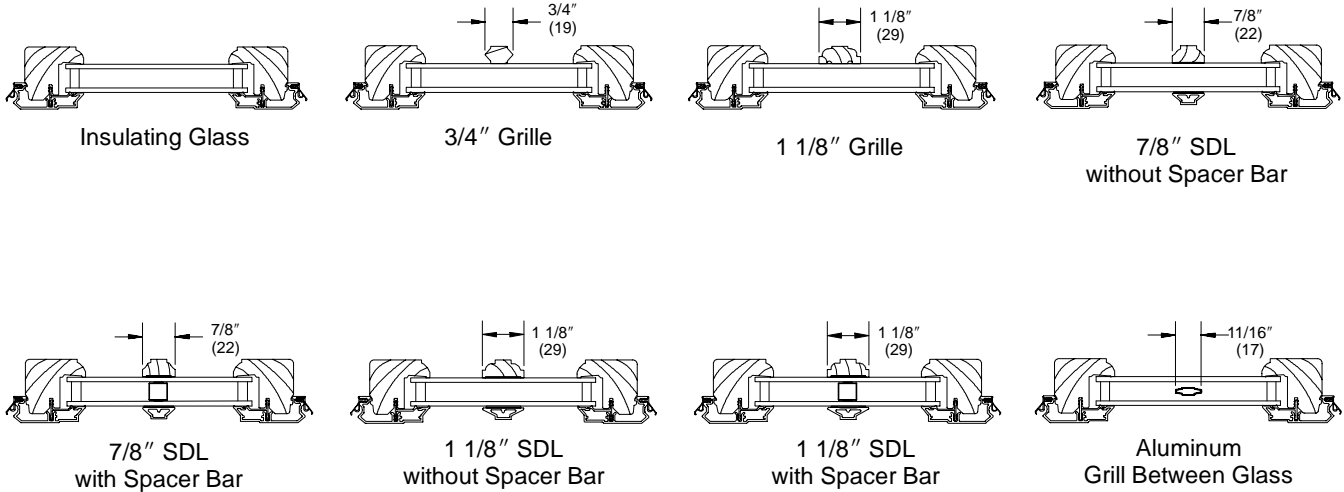
Grille = Removable interior divider  
SDL = Simulated divided lite

# CLAD CASEMASTER

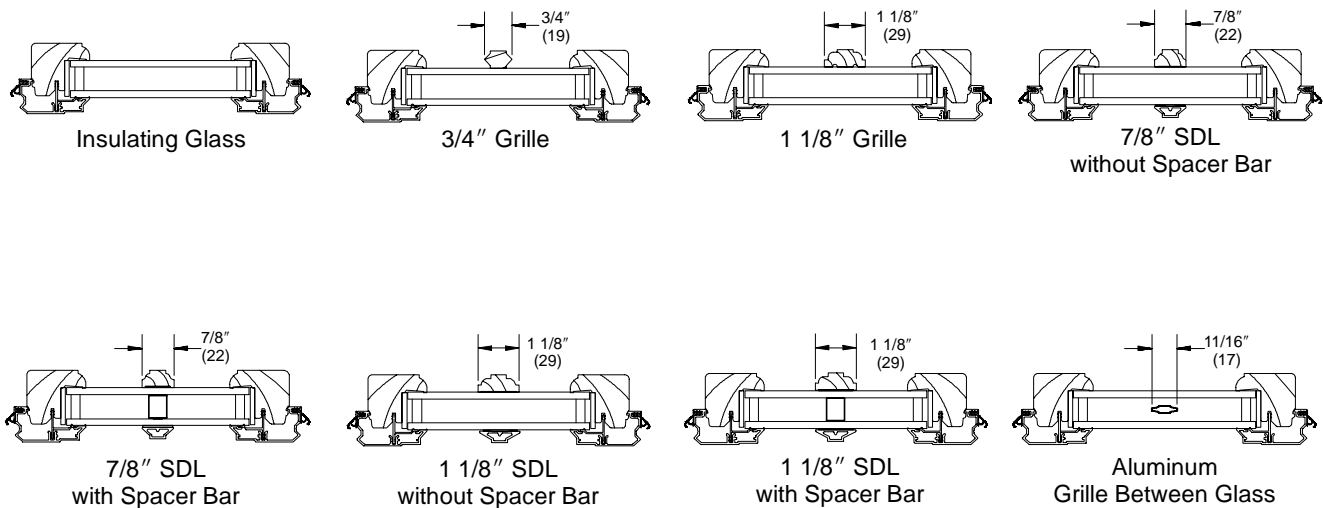
## SECTION DETAILS: DIVIDED LITE OPTIONS

NOT TO SCALE

### Venting Picture 3/4" Insulating Glass



### Venting Picture 1" Insulating Glass



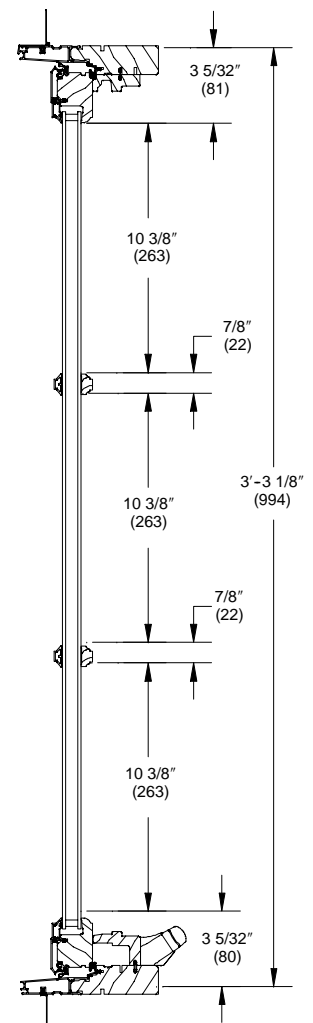
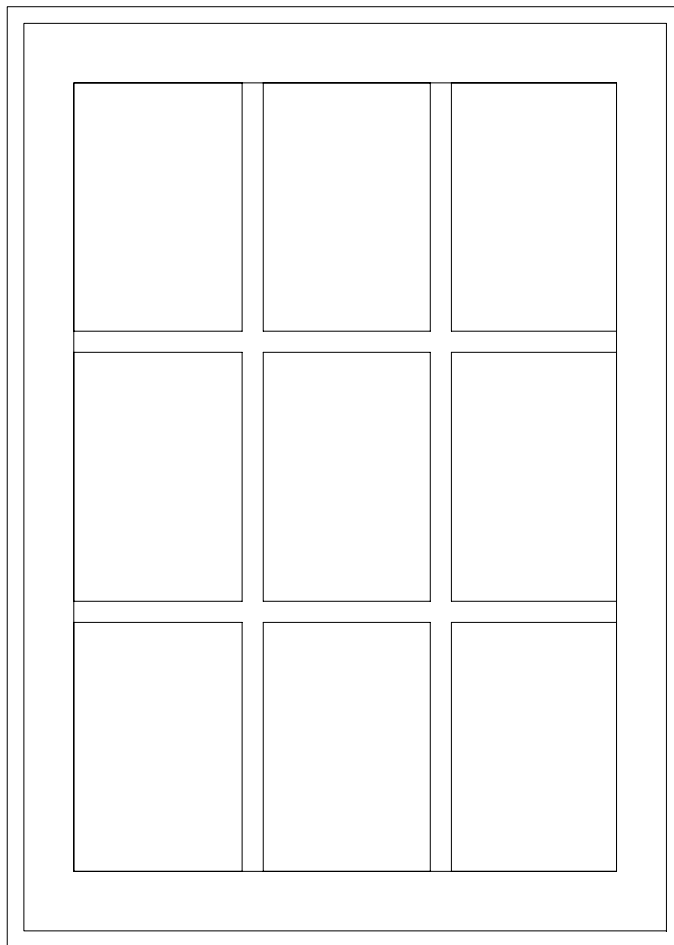
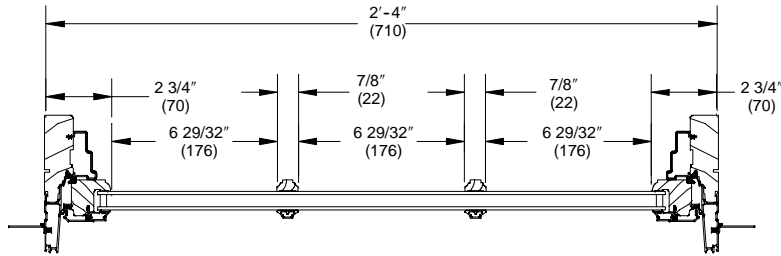
**NOTE:**

Grille = Removable interior divider  
SDL = Simulated divided lite

# CLAD CASEMASTER

## RECTANGULAR DAYLIGHT OPENING CONVERSIONS

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



Conversion Formula:

$$\frac{\text{DLO} - \text{Total Bar Width}}{\text{Number of Lites}} = \text{Individual DLO}$$

**NOTE:**

For additional information on individual daylight openings please contact your Marvin representative.

# CLAD CASEMASTER

## STANDARD RECTANGULAR DIVIDED LITE PATTERNS

NOT TO SCALE

3/4" Grille  
7/8" Simulated Divided Lite (SDL)

### Operator / Stationary

	1W	2W	2W	3W	3W	3W
2H						
	CCM1624	CCM2024	CCM2424	CCM2824	CCM3224	CCM3624
2H						
	CCM1632	CCM2032	CCM2432	CCM2832	CCM3232	CCM3632
2H						
	CCM1636	CCM2036	CCM2436	CCM2836	CCM3236	CCM3636
3H						
	CCM1640	CCM2040	CCM2440	CCM2840	CCM3240	CCM3640
3H						
	CCM1648	CCM2048	CCM2448	CCM2848	CCM3248	CCM3648
4H						
	CCM1656	CCM2056	CCM2456	CCM2856	CCM3256	CCM3656
4H						
	CCM1660	CCM2060	CCM2460	CCM2860	CCM3260	CCM3660
5H						
	CCM1664	CCM2064	CCM2464	CCM2864	CCM3264	CCM3664
5H						
	CCM1672	CCM2072	CCM2472	CCM2872	CCM3272	CCM3672

### Picture

	4W	4W	5W	5W	6W	7W
2H						
	CCMP4024	CCMP4824	CCMP5624	CCMP6024	CCMP6424	CCMP7224
2H						
	CCMP4032	CCMP4832	CCMP5632	CCMP6032	CCMP6432	CCMP7232
2H						
	CCMP4036	CCMP4836	CCMP5636	CCMP6036	CCMP6436	CCMP7236
3H						
	CCMP4040	CCMP4840	CCMP5640	CCMP6040	CCMP6440	CCMP7240
3H						
	CCMP4048	CCMP4848	CCMP5648	CCMP6048	CCMP6448	CCMP7248
4H						
	CCMP4056	CCMP4856	CCMP5656	CCMP6056	CCMP6456	CCMP7256
4H						
	CCMP4060	CCMP4860	CCMP5660	CCMP6060	CCMP6460	CCMP7260
5H						
	CCMP4064	CCMP4864	CCMP5664	CCMP6064	CCMP6464	CCMP7264
5H						
	CCMP4072	CCMP4872	CCMP5672	CCMP6072	CCMP6472	CCMP7272

**NOTE:**

Lite pattern identifications are shown at the top of each column and to the left of each row.  
 Height patterns indicated as 1H represent a 1 high lite pattern.  
 Width patterns indicated as 2W represent a 2 wide lite pattern.  
 Patterns vary depending on size of unit and type of divider.

# CLAD CASEMASTER

## STANDARD RECTANGULAR DIVIDED LITE PATTERNS

NOT TO SCALE

1 1/8" Grille  
1 1/8" Simulated Divided Lite (SDL)

### Operator / Stationary

	1W	2W	2W	2W	3W	3W
2H						
	CCM1624	CCM2024	CCM2424	CCM2824	CCM3224	CCM3624
2H						
	CCM1632	CCM2032	CCM2432	CCM2832	CCM3232	CCM3632
2H						
	CCM1636	CCM2036	CCM2436	CCM2836	CCM3236	CCM3636
3H						
	CCM1640	CCM2040	CCM2440	CCM2840	CCM3240	CCM3640
3H						
	CCM1648	CCM2048	CCM2448	CCM2848	CCM3248	CCM3648
3H						
	CCM1656	CCM2056	CCM2456	CCM2856	CCM3256	CCM3656
4H						
	CCM1660	CCM2060	CCM2460	CCM2860	CCM3260	CCM3660
4H						
	CCM1664	CCM2064	CCM2464	CCM2864	CCM3264	CCM3664
4H						
	CCM1672	CCM2072	CCM2472	CCM2872	CCM3272	CCM3672

### Picture

	4W	4W	5W	5W	6W	6W
2H						
	CCMP4024	CCMP4824	CCMP5624	CCMP6024	CCMP6424	CCMP7224
2H						
	CCMP4032	CCMP4832	CCMP5632	CCMP6032	CCMP6432	CCMP7232
2H						
	CCMP4036	CCMP4836	CCMP5636	CCMP6036	CCMP6436	CCMP7236
3H						
	CCMP4040	CCMP4840	CCMP5640	CCMP6040	CCMP6440	CCMP7240
3H						
	CCMP4048	CCMP4848	CCMP5648	CCMP6048	CCMP6448	CCMP7248
4H						
	CCMP4056	CCMP4856	CCMP5656	CCMP6056	CCMP6456	CCMP7256
4H						
	CCMP4060	CCMP4860	CCMP5660	CCMP6060	CCMP6460	CCMP7260
4H						
	CCMP4064	CCMP4864	CCMP5664	CCMP6064	CCMP6464	CCMP7264
4H						
	CCMP4072	CCMP4872	CCMP5672	CCMP6072	CCMP6472	CCMP7272

**NOTE:**

Lite pattern identifications are shown at the top of each column and to the left of each row.  
Height patterns indicated as 1H represent a 1 high lite pattern.  
Width patterns indicated as 2W represent a 2 wide lite pattern.  
Patterns vary depending on size of unit and type of divider.





















































































# CLAD CASEMASTER

## STANDARD RECTANGULAR DIVIDED LITE PATTERNS

NOT TO SCALE

3/4" Grille  
7/8" Simulated Divided Lite (SDL)

### Venting Picture

	1W	2W	2W	3W	3W	3W	4W	4W	5W	5W	6W	7W
2H	 CCMVP1636	 CCMVP2036	 CCMVP2436	 CCMVP2836	 CCMVP3236	 CCMVP3636	 CCMVP4036	 CCMVP4836	 CCMVP5636	 CCMVP6036	 CCMVP6436	 CCMVP7236
3H	 CCMVP1640	 CCMVP2040	 CCMVP2440	 CCMVP2840	 CCMVP3240	 CCMVP3640	 CCMVP4040	 CCMVP4840	 CCMVP5640	 CCMVP6040	 CCMVP6440	 CCMVP7240
3H	 CCMVP1648	 CCMVP2048	 CCMVP2448	 CCMVP2848	 CCMVP3248	 CCMVP3648	 CCMVP4048	 CCMVP4848	 CCMVP5648	 CCMVP6048	 CCMVP6448	 CCMVP7248
4H	 CCMVP1656	 CCMVP2056	 CCMVP2456	 CCMVP2856	 CCMVP3256	 CCMVP3656	 CCMVP4056	 CCMVP4856	 CCMVP5656	 CCMVP6056	 CCMVP6456	 CCMVP7256
4H	 CCMVP1660	 CCMVP2060	 CCMVP2460	 CCMVP2860	 CCMVP3260	 CCMVP3660	 CCMVP4060	 CCMVP4860	 CCMVP5660	 CCMVP6060	 CCMVP6460	 CCMVP7260
5H	 CCMVP1664	 CCMVP2064	 CCMVP2464	 CCMVP2864	 CCMVP3264	 CCMVP3664	 CCMVP4064	 CCMVP4864	 CCMVP5664	 CCMVP6064	 CCMVP6464	 CCMVP7264
5H	 CCMVP1672	 CCMVP2072	 CCMVP2472	 CCMVP2872	 CCMVP3272	 CCMVP3672	 CCMVP4072	 CCMVP4872	 CCMVP5672	 CCMVP6072	 CCMVP6472	 CCMVP7272

**NOTE:**

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Width patterns indicated as 2W represent a 2 wide lite pattern.  
Patterns vary depending on size of unit and type of divider.

# CLAD CASEMASTER





















































































## STANDARD RECTANGULAR DIVIDED LITE PATTERNS

NOT TO SCALE

1 1/8" Grille

1 1/8" Simulated Divided Lite (SDL)

### Venting Picture

	1W	2W	2W	2W	3W	3W	4W	4W	5W	5W	6W	6W
2H												
	CCMVP1636	CCMVP2036	CCMVP2436	CCMVP2836	CCMVP3236	CCMVP3636	CCMVP4036	CCMVP4836	CCMVP5636	CCMVP6036	CCMVP6436	CCMVP7236
3H												
	CCMVP1640	CCMVP2040	CCMVP2440	CCMVP2840	CCMVP3240	CCMVP3640	CCMVP4040	CCMVP4840	CCMVP5640	CCMVP6040	CCMVP6440	CCMVP7240
3H												
	CCMVP1648	CCMVP2048	CCMVP2448	CCMVP2848	CCMVP3248	CCMVP3648	CCMVP4048	CCMVP4048	CCMVP5648	CCMVP6048	CCMVP6448	CCMVP7248
3H												
	CCMVP1656	CCMVP2056	CCMVP2456	CCMVP2856	CCMVP3256	CCMVP3656	CCMVP4056	CCMVP4056	CCMVP5656	CCMVP6056	CCMVP6456	CCMVP7256
4H												
	CCMVP1660	CCMVP2060	CCMVP2460	CCMVP2860	CCMVP3260	CCMVP3660	CCMVP4060	CCMVP4060	CCMVP5660	CCMVP6060	CCMVP6460	CCMVP7260
4H												
	CCMVP1664	CCMVP2064	CCMVP2464	CCMVP2864	CCMVP3264	CCMVP3664	CCMVP4064	CCMVP4064	CCMVP5664	CCMVP6064	CCMVP6464	CCMVP7264
4H												
	CCMVP1672	CCMVP2072	CCMVP2472	CCMVP2872	CCMVP3272	CCMVP3672	CCMVP4072	CCMVP4072	CCMVP5672	CCMVP6072	CCMVP6472	CCMVP7272

**NOTE:**

Lite pattern identifications are shown at the top of each column and to the left of each row.

Height patterns indicated as 1H represent a 1 high lite pattern.

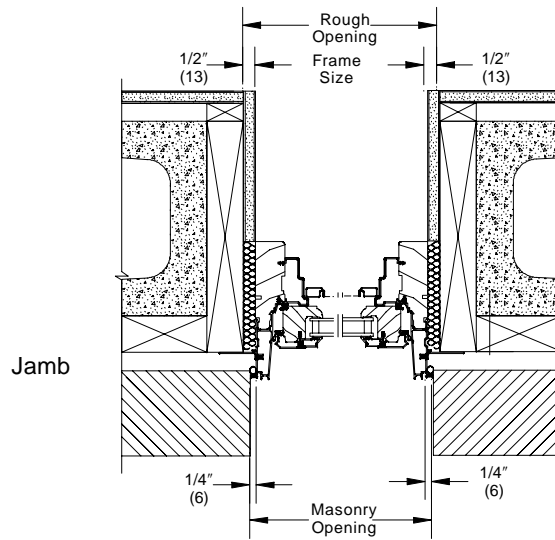
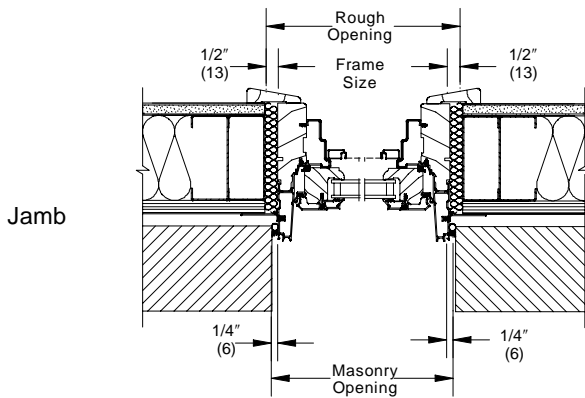
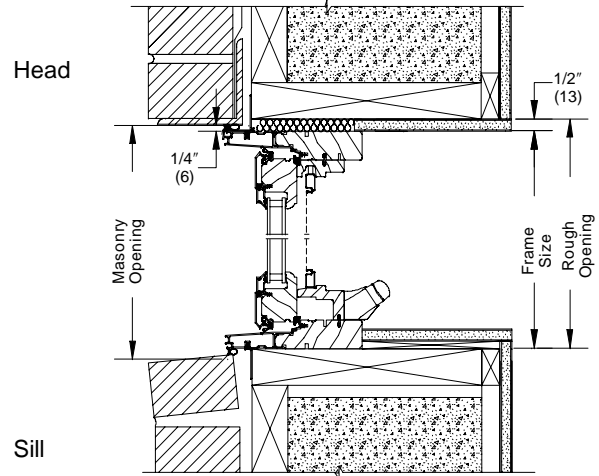
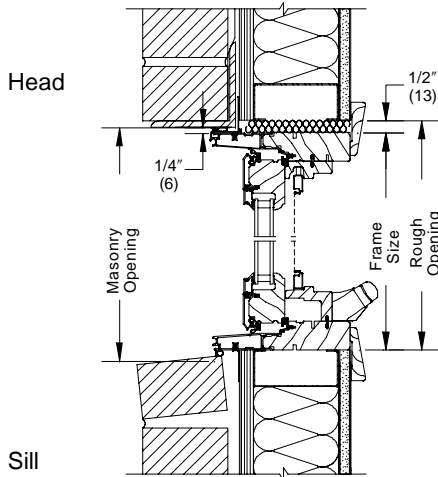
Width patterns indicated as 2W represent a 2 wide lite pattern.

Patterns vary depending on size of unit and type of divider.

# CLAD CASEMASTER

## SECTION DETAILS: CONSTRUCTION

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



Brick Veneer with Steel Stud Construction

Brick Veneer with Concrete Block Construction

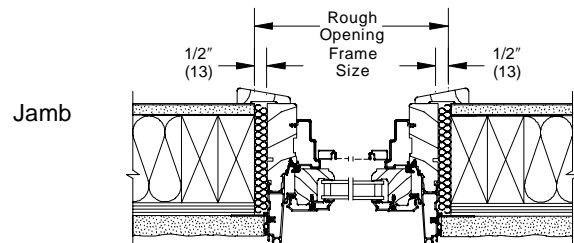
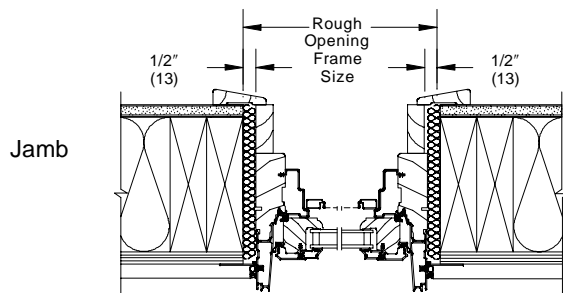
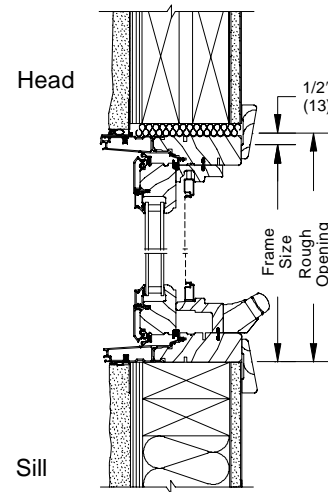
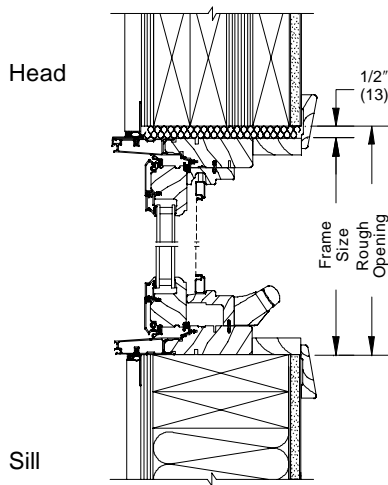
**NOTE:**

The above wall sections represent typical wall conditions, these details are not intended as installation instructions. Please refer to the installation instructions provided with the purchased units.

# CLAD CASEMASTER

## SECTION DETAILS: CONSTRUCTION

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



Wood Siding with 2x6  
Frame Construction

Stucco with 2x4  
Frame Construction

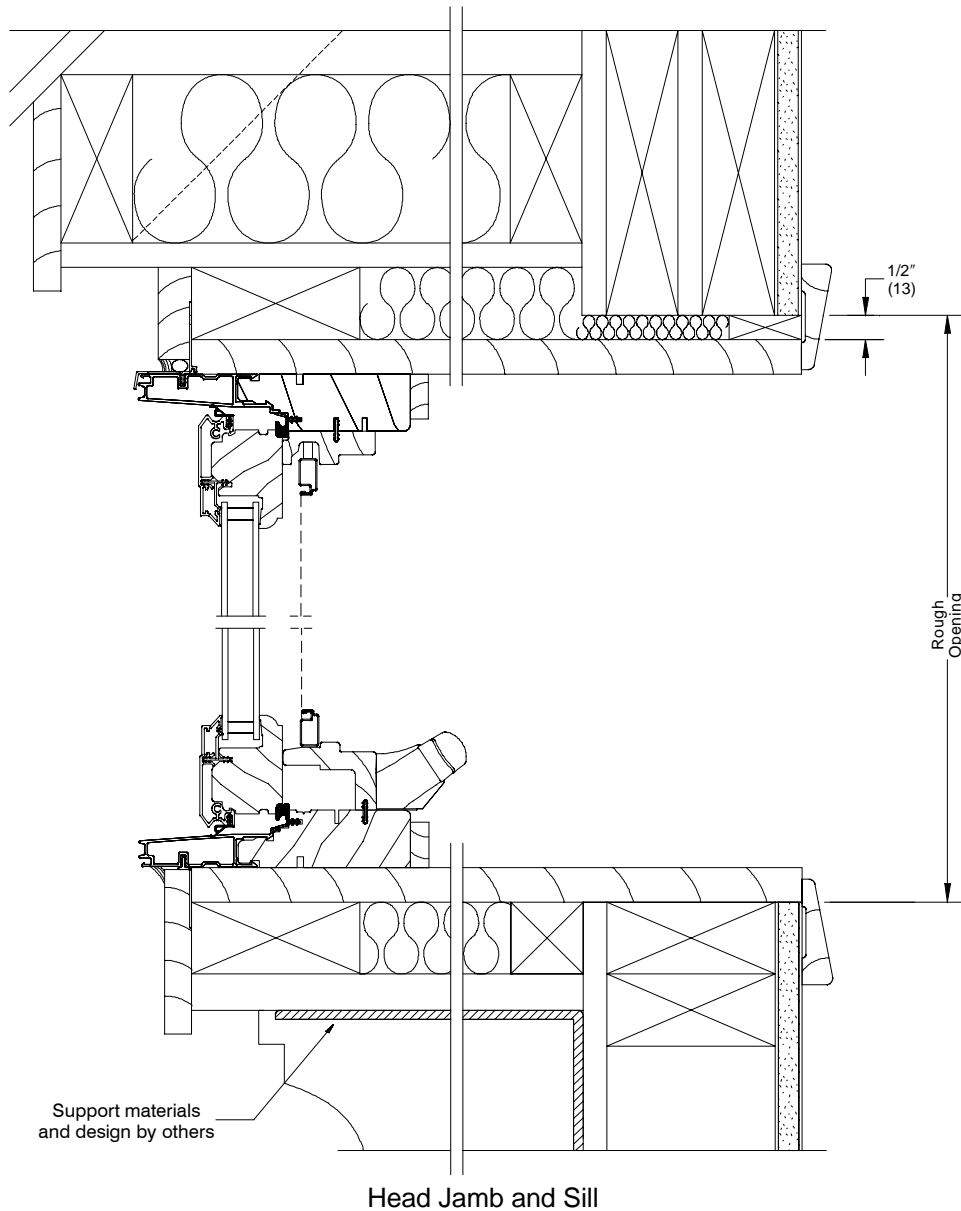
**NOTE:**

The above wall sections represent typical wall conditions, these details are not intended as installation instructions. Please refer to the installation instructions provided with the purchased units.

# CLAD CASEMASTER BOW/BAY

## SECTION DETAILS: BOW OR BAY

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



**NOTE:**

Bows and Bays also available with Venting Picture unit.  
Masonry opening measurements represent units without brick mould casing.  
Rough and masonry opening heights listed include head and seatboards. If head or seatboards are not specified, subtract 11/16" (17) for each board. See vertical cross section above.  
Construction materials supplied by others.

**How To Specify:**

To specify a bay assembly using standard units, components and mull configuration must be indicated. For example: A 30 degree assembly with 2460 flankers and a 4860 center unit uses the following product identification: CBAY 20-4860-24 30°

- CBAY = Product identification
- 24 = 1st flanker unit width
- 4860 = Center unit width and height
- 24 = 2nd flanker unit width
- 30 = Assembly degree

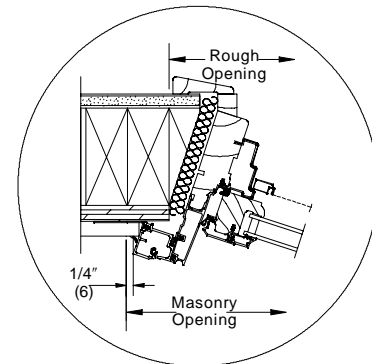
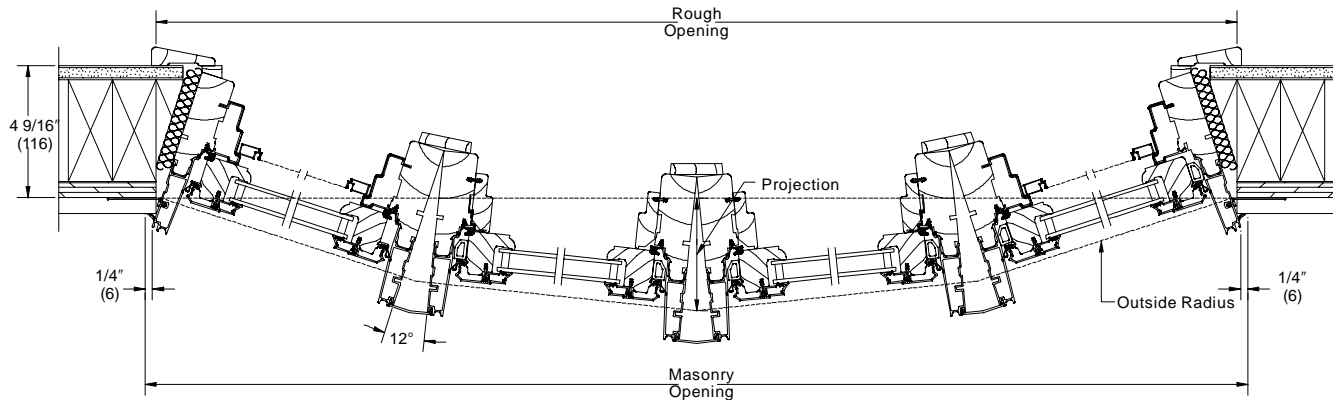
If standard units are not used, indicate unit rough openings instead of call numbers.

Height Measurements			
Height	Rough Opening Height		Masonry Opening Height
24	2-1	(635)	2-0 3/4 (629)
32	2-9	(838)	2-8 3/4 (832)
36	3-1	(940)	3-0 3/4 (933)
40	3-5	(1041)	3-4 3/4 (1035)
48	4-1	(1245)	4-0 3/4 (1238)
56	4-9	(1448)	4-8 3/4 (1441)
60	5-1	(1549)	5-0 3/4 (1543)
64	5-5	(1651)	5-4 3/4 (1645)
72	6-1	(1859)	6-0 3/4 (1848)

# CLAD CASEMASTER BOW

## SECTION DETAILS: BOW

NOT TO SCALE



Bow with Optional  
Clad Brick Mold Casing

Width Measurements				
3 - WIDE				
Width	Outside Radius	M.O. Width	R.O. Width	Projection
16	6-9 1/8 (2061)	4-2 5/32 (1274)	4-1 9/16 (1259)	3 13/32\" (87)
20	8-4 1/4 (2546)	5-1 31/32 (1574)	5-1 3/8 (1560)	4 1/4\" (108)
24	9-11 3/8 (3032)	6-1 25/32 (1875)	6-1 7/32 (1860)	5 3/32\" (129)
28	11-6 1/2 (3518)	7-1 5/8 (2175)	7-1 1/32 (2160)	5 29/32\" (150)
32	13-1 5/8 (4004)	8-1 7/16 (2475)	8-0 7/8 (2461)	6 3/4\" (172)
36	14-8 13/16 (4491)	9-1 9/32 (2776)	9-0 11/16 (2761)	7 9/16\" (193)
4 - WIDE				
16	6-9 1/8 (2061)	5-6 1/4 (1683)	5-5 7/16 (1663)	6 27/32\" (174)
20	8-4 1/4 (2546)	6-9 13/16 (2078)	6-9 (2058)	8 1/2\" (216)
24	9-11 3/8 (3032)	8-1 3/8 (2474)	8-0 9/16 (2453)	10 5/32\" (258)
28	11-6 1/2 (3518)	9-4 15/16 (2869)	9-4 1/8 (2849)	11 13/16\" (300)
32	13-1 5/8 (4004)	10-8 1/2 (3264)	10-7 23/32 (3344)	13 15/32\" (342)
36	14-8 13/16 (4491)	12-0 1/16 (3660)	11-11 9/32 (3639)	15 1/8\" (384)
5 - WIDE				
16	6-9 1/8 (2061)	6-9 5/8 (2074)	6-8 5/8 (2048)	10 7/32\" (260)
20	8-4 1/4 (2546)	8-4 3/4 (2560)	8-3 3/4 (2534)	12 11/16\" (322)
24	9-11 3/8 (3032)	9-11 29/32 (3046)	9-10 7/8 (3020)	15 1/8\" (385)
28	11-6 1/2 (3518)	11-7 1/32 (3532)	11-6 (3506)	17 19/32\" (447)
32	13-1 5/8 (4004)	13-2 5/32 (4018)	13-1 5/32 (3992)	20 1/16\" (510)
36	14-8 13/16 (4491)	14-9 9/32 (4503)	14-8 9/32 (4578)	22 1/2\" (572)
6 - WIDE				
16	6-9 1/8 (2061)	8-0 1/8 (2442)	7-10 29/32 (2411)	15 1/4\" (387)
20	8-4 1/4 (2546)	9-10 5/8 (3013)	9-9 13/32 (2982)	18 29/32\" (480)
24	9-11 3/8 (3032)	11-9 3/32 (3584)	11-7 7/8 (3553)	22 9/16\" (573)
28	11-6 1/2 (3518)	13-7 19/32 (4156)	13-6 3/8 (4428)	26 7/32\" (666)
32	13-1 5/8 (4004)	15-6 3/32 (4727)	15-4 7/8 (4696)	29 7/8\" (759)
36	14-8 13/16 (4491)	17-4 19/32 (5298)	17-3 3/8 (5267)	33 17/32\" (852)

### How to Specify

For standard bow assembly, note the product type, size identification/s, configuration, number of units wide and operation/s. Example: CCM2456 Bow 3W LSR.

For custom sized units and assemblies use the individual unit rough opening size in place of the standard size identification/s. To obtain more information on custom bows please contact your Marvin representative.

### NOTE:

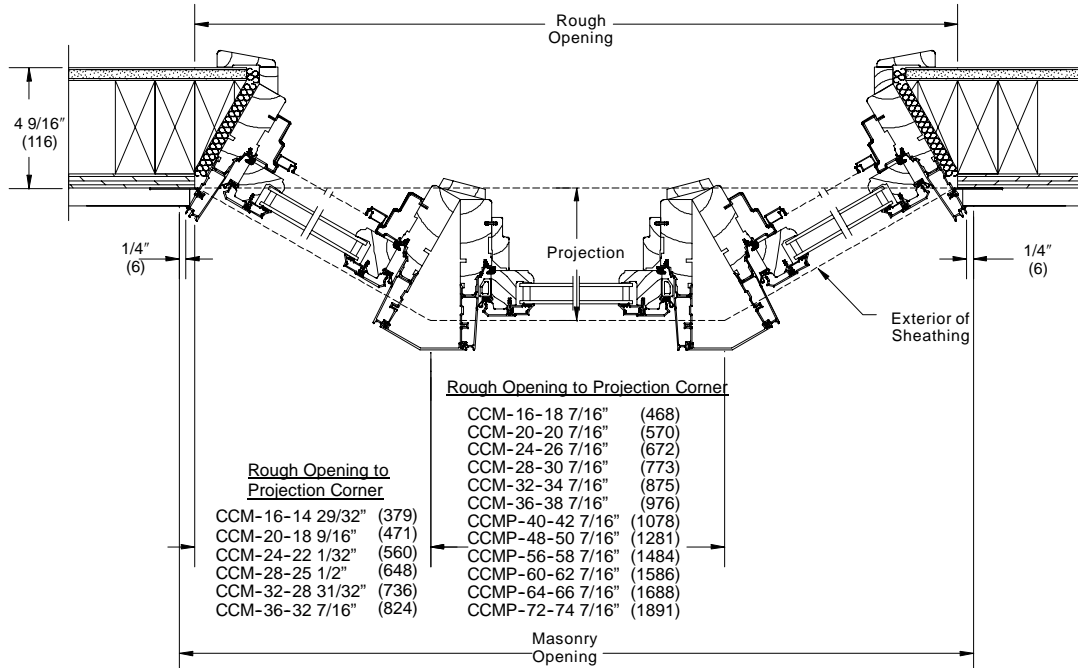
Bows and Bays also available with Venting Picture unit. Unit widths represent units without brick mould casing. For 3 wide bow masonry opening width using clad brick mould casing add 2 23/32\" (69) to the rough opening width. For a 4 wide + 3 1/32\" (77), 5 wide + 3 9/16\" (90), and 6 wide + 3 21/32\" (93). Construction materials supplied by others.

# CLAD CASEMASTER BAY

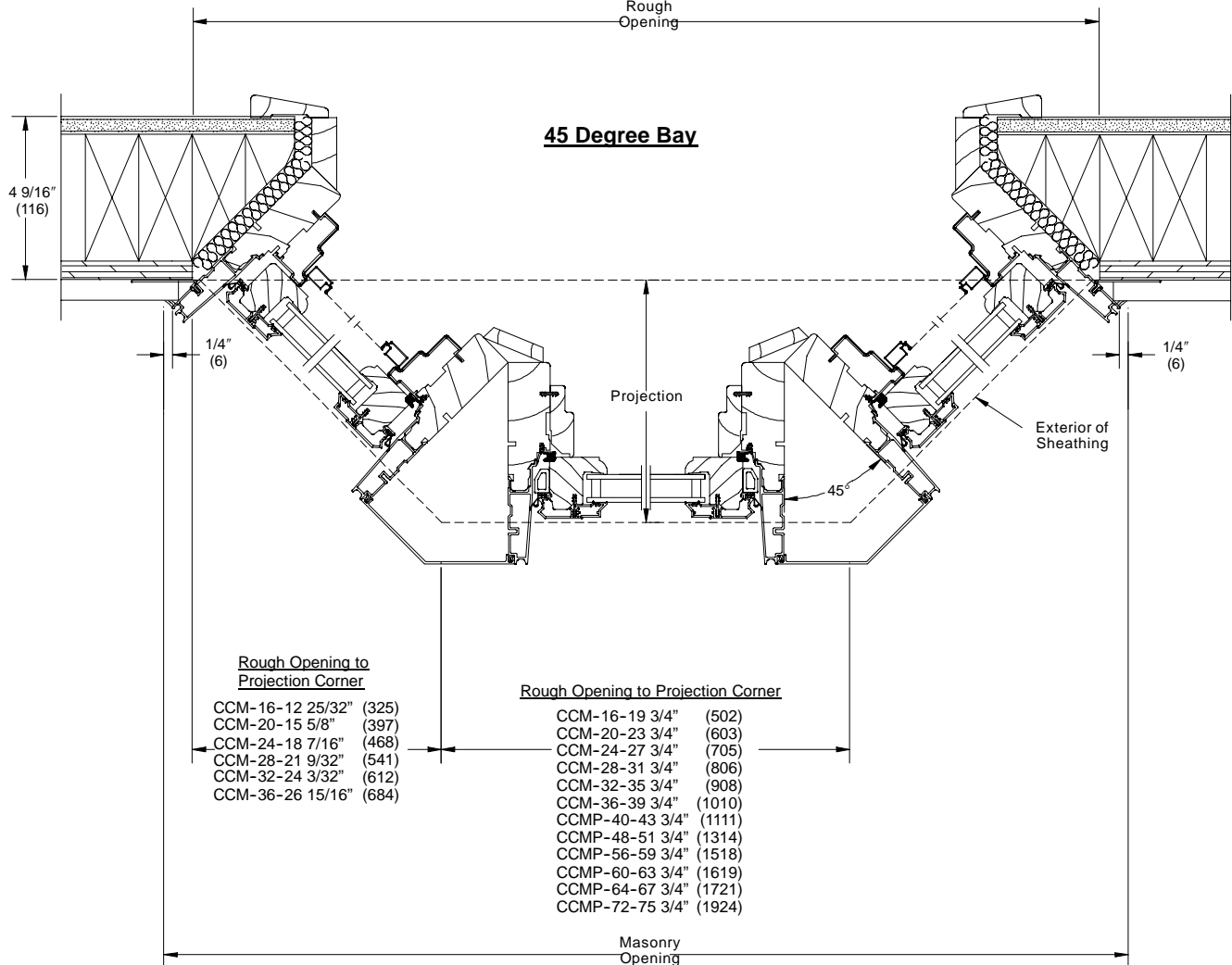
## SECTION DETAILS: 30 / 45 DEGREES

NOT TO SCALE

### 30 Degree Bay



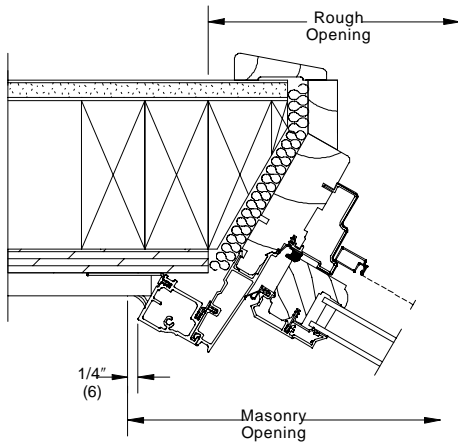
### 45 Degree Bay



# CLAD CASEMASTER BAY

## 30 DEGREE WIDTH MEASUREMENTS

### Brick Mould Casing

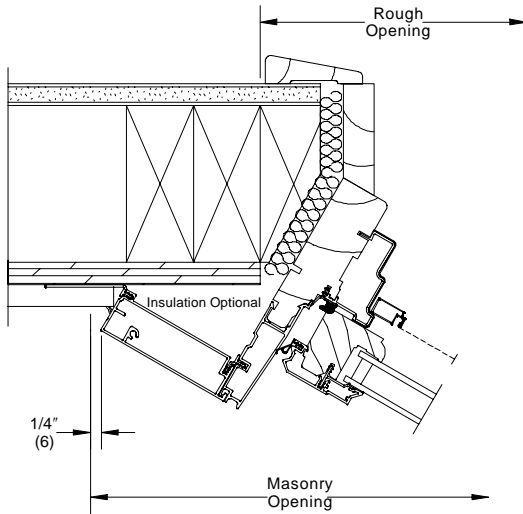


30 Degree CCM Bay with standard Brick Mould Casing.

Bow or bay assemblies with clad brick mould casing use an enclosed profile casing.

For 30 degree bay masonry opening widths using Clad Brick Mould Casing, add 3 25/32" (96) to the rough opening width.

### Flat Casing



30 Degree CCM Bay with optional 3 1/2" Flat Casing.

For 30 degree bay masonry opening widths using Clad Flat Casing, add 7 13/64" (183) to the rough opening width.

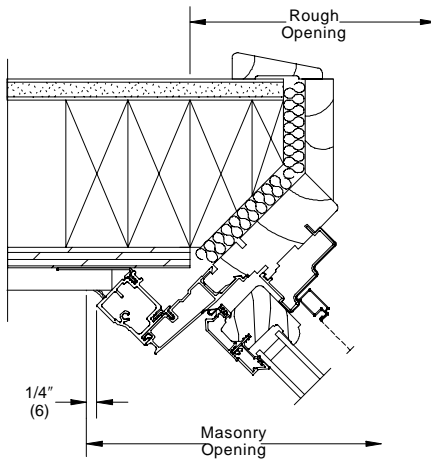
### 30 Degree Width Measurements Casemaster Flankers and Center Units

Unit Number	Masonry Opening	Rough Opening	Projection
16-16-16	4-1 7/8" (1267)	4-0 21/32" (1236)	8 5/8" (219)
16-20-16	4-5 7/8" (1368)	4-4 21/32" (1337)	8 5/8" (219)
16-24-16	4-9 7/8" (1470)	4-8 21/32" (1439)	8 5/8" (219)
16-28-16	5-1 7/8" (1571)	5-0 21/32" (1541)	8 5/8" (219)
16-32-16	5-5 7/8" (1673)	5-4 21/32" (1642)	8 5/8" (219)
16-36-16	5-9 7/8" (1775)	5-8 21/32" (1744)	8 5/8" (219)
16-40-16	6-1 7/8" (1876)	6-0 21/32" (1845)	8 5/8" (219)
16-48-16	6-9 7/8" (2079)	6-8 21/32" (2049)	8 5/8" (219)
16-56-16	7-5 7/8" (2283)	7-4 21/32" (2252)	8 5/8" (219)
16-60-16	7-9 7/8" (2384)	7-8 21/32" (2353)	8 5/8" (219)
16-64-16	8-1 7/8" (2486)	8-0 21/32" (2455)	8 5/8" (219)
16-72-16	8-9 7/8" (2689)	8-8 21/32" (2658)	8 5/8" (219)
20-20-20	5-0 25/32" (1544)	4-11 9/16" (1513)	10 5/8" (270)
20-24-20	5-4 25/32" (1646)	5-3 9/16" (1615)	10 5/8" (270)
20-28-20	5-8 25/32" (1747)	5-7 9/16" (1716)	10 5/8" (270)
20-32-20	6-0 25/32" (1849)	5-11 9/16" (1818)	10 5/8" (270)
20-36-20	6-4 25/32" (1951)	6-3 9/16" (1920)	10 5/8" (270)
20-40-20	6-8 25/32" (2052)	6-7 9/16" (2021)	10 5/8" (270)
20-48-20	7-4 25/32" (2255)	7-3 9/16" (2224)	10 5/8" (270)
20-56-20	8-0 25/32" (2459)	7-11 9/16" (2428)	10 5/8" (270)
20-60-20	8-4 25/32" (2560)	8-3 9/16" (2529)	10 5/8" (270)
20-64-20	8-8 25/32" (2662)	8-7 9/16" (2631)	10 5/8" (270)
20-72-20	9-4 25/32" (2865)	9-3 9/16" (2834)	10 5/8" (270)
24-24-24	5-11 23/32" (1822)	5-10 1/2" (1791)	12 5/8" (320)
24-28-24	6-3 23/32" (1923)	6-2 1/2" (1892)	12 5/8" (320)
24-32-24	6-7 23/32" (2025)	6-6 1/2" (1994)	12 5/8" (320)
24-36-24	6-11 23/32" (2127)	6-10 1/2" (2096)	12 5/8" (320)
24-40-24	7-3 23/32" (2228)	7-2 1/2" (2197)	12 5/8" (320)
24-48-24	7-11 23/32" (2431)	7-10 1/2" (2400)	12 5/8" (320)
24-56-24	8-7 23/32" (2635)	8-6 1/2" (2604)	12 5/8" (320)
24-60-24	8-11 23/32" (2736)	8-10 1/2" (2705)	12 5/8" (320)
24-64-24	9-3 23/32" (2838)	9-2 1/2" (2807)	12 5/8" (320)
24-72-24	9-11 23/32" (3041)	9-10 1/2" (3010)	12 5/8" (320)
28-28-28	6-10 21/32" (2099)	6-9 7/16" (2068)	14 5/8" (371)
28-32-28	7-2 21/32" (2201)	7-1 7/16" (2170)	14 5/8" (371)
28-36-28	7-6 21/32" (2303)	7-5 7/16" (2272)	14 5/8" (371)
28-40-28	7-10 21/32" (2404)	7-9 7/16" (2373)	14 5/8" (371)
28-48-28	8-6 21/32" (2607)	8-5 7/16" (2576)	14 5/8" (371)
28-56-28	9-2 21/32" (2811)	9-1 7/16" (2780)	14 5/8" (371)
28-60-28	9-6 21/32" (2912)	9-5 7/16" (2881)	14 5/8" (371)
28-64-28	9-10 21/32" (3014)	9-9 7/16" (2983)	14 5/8" (371)
28-72-28	10-6 21/32" (3217)	10-5 7/16" (3186)	14 5/8" (371)
32-32-32	7-9 9/16" (2377)	7-8 11/32" (2346)	16 5/8" (422)
32-36-32	8-1 9/16" (2479)	8-0 11/32" (2448)	16 5/8" (422)
32-40-32	8-5 9/16" (2580)	8-4 11/32" (2549)	16 5/8" (422)
32-48-32	9-1 9/16" (2783)	9-0 11/32" (2752)	16 5/8" (422)
32-56-32	9-9 9/16" (2987)	9-8 11/32" (2956)	16 5/8" (422)
32-60-32	10-1 9/16" (3088)	10-0 11/32" (3057)	16 5/8" (422)
32-64-32	10-5 9/16" (3190)	10-4 11/32" (3159)	16 5/8" (422)
32-72-32	11-1 9/16" (3393)	11-0 11/32" (3362)	16 5/8" (422)
36-36-36	8-8 1/2" (2655)	8-7 9/32" (2624)	18 5/8" (473)
36-40-36	9-0 1/2" (2756)	8-11 9/32" (2725)	18 5/8" (473)
36-48-36	9-8 1/2" (2959)	9-7 9/32" (2928)	18 5/8" (473)
36-56-36	10-4 1/2" (3163)	10-3 9/32" (3132)	18 5/8" (473)
36-60-36	10-8 1/2" (3264)	10-7 9/32" (3233)	18 5/8" (473)
36-64-36	11-0 1/2" (3366)	10-11 9/32" (3335)	18 5/8" (473)
36-72-36	11-8 1/2" (3569)	11-7 9/32" (3538)	18 5/8" (473)

# CLAD CASEMASTER BAY

## 45 DEGREE WIDTH MEASUREMENTS

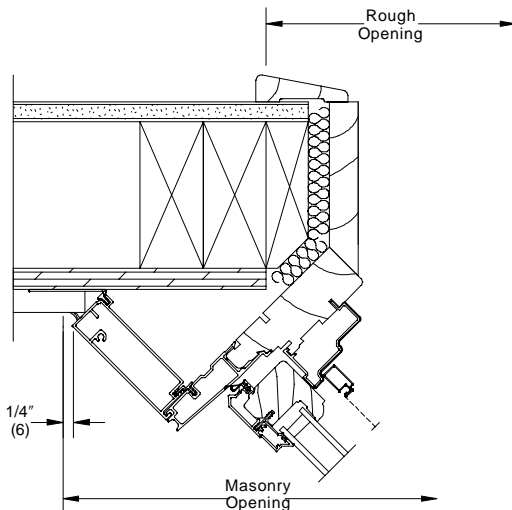
### Brick Mould Casing



45 Degree CCM Bay with standard Brick Mould Casing.

Bow or bay assemblies with clad brick mould casing use an enclosed profile casing. For 45 degree bay masonry opening widths using Clad Brick Mould Casing, add 3 7/8" (98) to the rough opening width.

### Flat Casing



45 Degree CCM Bay with optional 3 1/2" Flat Casing

For 45 degree bay masonry opening widths using Clad Flat Casing, add 6 1/16" (154) to the rough opening width.

### 45 Degree Width Measurements Casemaster Flankers and Center Units

Unit Number	Masonry Opening	Rough Opening	Projection
16-16-16	3-11 1/8" (1197)	3-9 5/16" (1151)	12 21/32" (321)
16-20-16	4-3 1/8" (1299)	4-1 5/16" (1253)	12 21/32" (321)
16-24-16	4-7 1/8" (1400)	4-5 5/16" (1355)	12 21/32" (321)
16-28-16	4-11 1/8" (1502)	4-9 5/16" (1456)	12 21/32" (321)
16-32-16	5-3 1/8" (1603)	5-1 5/16" (1558)	12 21/32" (321)
16-36-16	5-7 1/8" (1705)	5-5 5/16" (1659)	12 21/32" (321)
16-40-16	5-11 1/8" (1807)	5-9 5/16" (1761)	12 21/32" (321)
16-48-16	6-7 1/8" (2010)	6-5 5/16" (1964)	12 21/32" (321)
16-56-16	7-3 1/8" (2213)	7-1 5/16" (2167)	12 21/32" (321)
16-60-16	7-7 1/8" (2315)	7-5 5/16" (2269)	12 21/32" (321)
16-64-16	7-11 1/8" (2416)	7-9 5/16" (2371)	12 21/32" (321)
16-72-16	8-7 1/8" (2619)	8-5 5/16" (2574)	12 21/32" (321)
20-20-20	4-8 25/32" (1442)	4-6 31/32" (1397)	15 15/32" (393)
20-24-20	5-0 25/32" (1544)	4-10 31/32" (1498)	15 15/32" (393)
20-28-20	5-4 25/32" (1646)	5-2 31/32" (1600)	15 15/32" (393)
20-32-20	5-8 25/32" (1747)	5-6 31/32" (1701)	15 15/32" (393)
20-36-20	6-0 25/32" (1849)	5-10 31/32" (1803)	15 15/32" (393)
20-40-20	6-4 25/32" (1950)	6-2 31/32" (1905)	15 15/32" (393)
20-48-20	7-0 25/32" (2154)	6-10 31/32" (2108)	15 15/32" (393)
20-56-20	7-8 25/32" (2357)	7-6 31/32" (2311)	15 15/32" (393)
20-60-20	8-0 25/32" (2458)	7-10 31/32" (2413)	15 15/32" (393)
20-64-20	8-4 25/32" (2560)	8-2 31/32" (2514)	15 15/32" (393)
20-72-20	9-0 25/32" (2763)	8-10 31/32" (2717)	15 15/32" (393)
24-24-24	5-6 7/16" (1688)	5-4 5/8" (1642)	18 5/16" (465)
24-28-24	5-10 7/16" (1789)	5-8 5/8" (1744)	18 5/16" (465)
24-32-24	6-2 7/16" (1891)	6-0 5/8" (1845)	18 5/16" (465)
24-36-24	6-6 7/16" (1992)	6-4 5/8" (1947)	18 5/16" (465)
24-40-24	6-10 7/16" (2094)	6-8 5/8" (2048)	18 5/16" (465)
24-48-24	7-6 7/16" (2297)	7-4 5/8" (2252)	18 5/16" (465)
24-56-24	8-2 7/16" (2500)	8-0 5/8" (2455)	18 5/16" (465)
24-60-24	8-6 7/16" (2602)	8-4 5/8" (2556)	18 5/16" (465)
24-64-24	8-10 7/16" (2704)	8-8 5/8" (2658)	18 5/16" (465)
24-72-24	9-6 7/16" (2907)	9-4 5/8" (2861)	18 5/16" (465)
28-28-28	6-4 3/32" (1933)	6-2 9/32" (1887)	21 1/8" (537)
28-32-28	6-8 3/32" (2034)	6-6 9/32" (1989)	21 1/8" (537)
28-36-28	7-0 3/32" (2136)	6-10 9/32" (2090)	21 1/8" (537)
28-40-28	7-4 3/32" (2238)	7-2 9/32" (2192)	21 1/8" (537)
28-48-28	8-0 3/32" (2441)	7-10 9/32" (2395)	21 1/8" (537)
28-56-28	8-8 3/32" (2649)	8-6 9/32" (2598)	21 1/8" (537)
28-60-28	9-0 3/32" (2746)	8-10 9/32" (2700)	21 1/8" (537)
28-64-28	9-4 3/32" (2847)	9-2 9/32" (2802)	21 1/8" (537)
28-72-28	10-0 3/32" (3050)	9-10 9/32" (3005)	21 1/8" (537)
32-32-32	7-1 3/4" (2178)	6-11 15/16" (2133)	23 31/32" (609)
32-36-32	7-5 3/4" (2280)	7-3 15/16" (2234)	23 31/32" (609)
32-40-32	7-9 3/4" (2381)	7-7 15/16" (2336)	23 31/32" (609)
32-48-32	8-5 3/4" (2585)	8-3 15/16" (2539)	23 31/32" (609)
32-56-32	9-1 3/4" (2788)	8-11 15/16" (2742)	23 31/32" (609)
32-60-32	9-5 3/4" (2889)	9-3 15/16" (2844)	23 31/32" (609)
32-64-32	9-9 3/4" (2991)	9-7 15/16" (2945)	23 31/32" (609)
32-72-32	10-5 3/4" (3194)	10-3 15/16" (3149)	23 31/32" (609)
36-36-36	7-11 13/32" (2423)	7-9 19/32" (2378)	26 25/32" (681)
36-40-36	8-3 13/32" (2525)	8-1 19/32" (2479)	26 25/32" (681)
36-48-36	8-11 13/32" (2728)	8-9 19/32" (2683)	26 25/32" (681)
36-56-36	9-7 13/32" (2931)	9-5 19/32" (2886)	26 25/32" (681)
36-60-36	9-11 13/32" (3033)	9-9 19/32" (2987)	26 25/32" (681)
36-64-36	10-3 13/32" (3135)	10-1 19/32" (3089)	26 25/32" (681)
36-72-36	10-11 13/32" (3338)	10-9 19/32" (3292)	26 25/32" (681)

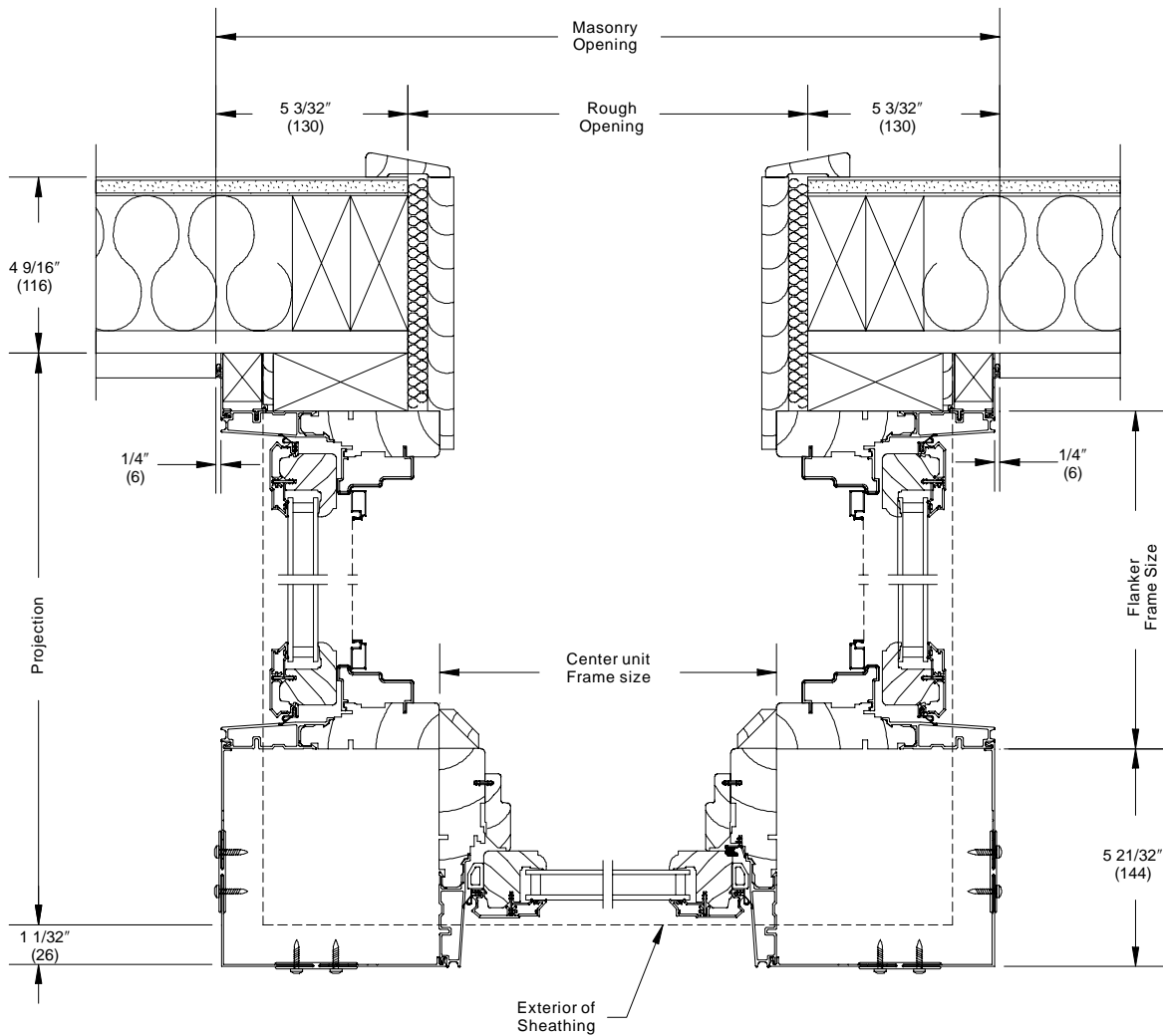
**NOTE:**

Masonry opening heights are based on units with standard brick mould casing applied. Refer to vertical cross section page for height information.

# CLAD CASEMASTER BAY

## SECTION DETAILS: 90 DEGREE BAY

NOT TO SCALE



**Measurement Conversions:**

Rough Opening = Center unit frame size width +  $1 \frac{5}{8}''$  (41)

Masonry Opening = Rough opening +  $10 \frac{3}{16}''$  (259)

Projection = Flanker unit frame size width +  $6 \frac{1}{16}''$  (154)