

CHAPTER 20

WOOD CASEMASTER

Product Information

Unit Features	20.2
NFRC Values / Minimum and Maximum Values	20.3
Egress, Lite and Vent Information / Design Pressure	20.4
Measurement Conversion Values	20.5

Elevations and Sections

Elevations: Operating / Stationary	20.6
Elevations: Picture	20.7
Section Details: Operating / Stationary	20.8
Section Details: Picture	20.9
Section Details: Mullions	20.10
Section Details: Divided Lite Options	20.11
Daylight Opening Conversions	20.12
Elevations: Standard Divided Lite Patterns	20.13
Section Details: Construction	20.15

Bow and Bay Assemblies

Section Details: Bow or Bay, vertical	20.17
Section Details: Bow	20.18
Section Details: 30 and 45 Degree Bay, Horizontal	20.19
Section Details: 60 Degree Bay, Horizontal	20.20
Width Measurements: 30 Degree	20.21
Width Measurements: 45 Degree	20.22
Width Measurements: 60 Degree	20.23
Section Details: 90 Degree Bay	20.24

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.

WOOD CASEMASTER

UNIT FEATURES

Frame:

- Pine wood interior and exterior standard. Optional mahogany or vertical grain Douglas fir
- Frame width: 4 9/16" (116)
- Frame thickness: 1 3/16" (30 mm)

Sash:

- Pine wood interior and exterior standard. Optional mahogany or vertical grain Douglas fir
- Sash thickness: 1 3/4" (44 mm)
- Operating/Stationary stile width: 1 29/32" (48)
- Picture stile width: 1 29/32" (48)
- Operating/Stationary rail width: 2 5/16" (59)
- Picture rail width: 2 5/16" (59)

Interior and exterior finish:

- Treated bare wood or white primed (pine only)

Operating Hardware:

- Operating Hardware: Roto-gear with zinc base, steel drive and gear arms with an ABS operator cover
- 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

Weatherstripping:

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

Jamb Extensions:

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

Insect Screen:

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

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

Simulated Divided Lites (SDL):

- Interior / Exterior bars: 7/8" (22) or 1 1/8" (29) wide bars. Pine wood standard, optional mahogany or vertical grain Douglas fir. Finish to match interior and exterior
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative
- Installation method: Factory applied with acrylic foam tape

Grilles-between-the-glass (GBG):

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

Authentic Divided Lite (ADL):

- Bar (interior and exterior): single glazed 7/8" (22) wide bars, insulated glass 1 11/16" (43) wide bars: available in standard pine and optional mahogany or vertical grain Douglas fir. Finish to match interior and exterior
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative

Glass and Glazing:

- Glazing method: Insulated or single glazed, single glazed with energy panel. 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)
- Aluminum drip cap: Color: Bahama Brown, Bronze, Evergreen, Pebble Gray, White. Drip cap not designed to replace proper flashing
- Marvin SillGuard™
- Wood exterior mouldings: Brick Mould Casing, Flat casing, Mullion cover
- Remote 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, Motor control and locks

NOTE:

Values shown in parenthesis represent metric equivalents

For product specifications please refer to the CSI Product Specifications, contact your Marvin representative

WOOD CASEMASTER

NFRC VALUES / MINIMUM AND MAXIMUM MEASUREMENTS

NFRC Unit Values					
Glazing Type	U-Factor	R-Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Energy Star
Operator / Stationary					
Size Tested	24 x 59	24 x 59	24 x 59	24 x 59	
Single Glaze	0.80	1.25	0.59	0.61	-
Single Glaze with ADL	0.79	1.27	0.53	0.55	-
Single Glaze with EP	0.43	2.33	0.53	0.56	-
Single Glaze with EP and ADL	0.43	2.33	0.48	0.50	-
Single Glaze with Low E EP	0.34	2.94	0.40	0.46	N, NC
Single Glaze with Low E EP and ADL	0.34	2.94	0.40	0.46	NC, SC, S
Insulating glass	0.43	2.33	0.53	0.55	-
Insulating glass - SDL with spacer bars	0.43	2.33	0.48	0.50	-
Insulating Low E II glass	0.36	2.78	0.43	0.50	N, NC, SC, S
Insulating Low E II glass - SDL with spacer bars	0.36	2.78	0.39	0.45	N, NC, SC, S
Insulating Low E II glass - Argon	0.29	3.45	0.28	0.49	N, NC, SC, S
Insulating Low E II glass - Argon, SDL with spacer bars	0.30	3.33	0.25	0.43	N, NC, SC, S
Picture 1" IG					
Size Tested	47 x 59	47 x 59	47 x 59	47 x 59	
Insulating glass	0.45	2.22	0.58	0.63	-
Insulating glass - SDL with spacer bars	0.46	2.17	0.52	0.56	-
Insulating Low E II glass	0.33	3.03	0.32	0.55	N, NC, SC, S
Insulating Low E II glass - SDL with spacer bars	0.36	2.78	0.44	0.52	N, NC, SC, S
Insulating Low E II glass - Argon	0.28	3.57	0.32	0.55	N, NC, SC, S
Insulating Low E II glass - Argon, SDL with spacer bars	0.29	3.45	0.29	0.49	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 Department Hotline at (800-346-3363) for additional NFRC Unit Values.

Minimum and Maximum Measurements					
Glazing Type	Minimum RO Width	Minimum RO Height	Maximum RO Width	Maximum RO Height	Maximum RO Square Feet
Operator / Stationary					
Insulating Glass 3/4"	14 1/2" (368)	13 7/16" (341)	37" (939)	84 9/16" (2147)	18.9 Sq. feet (1.755 Sq. Meters)
Single Glaze	14 1/2" (368)	13 7/16" (341)	37" (939)	84 9/16" (2147)	18.9 Sq. feet (1.755 Sq. Meters)
Single Glaze with EP	14 1/2" (368)	13 7/16" (341)	37" (939)	84 9/16" (2147)	18.9 Sq. feet (1.755 Sq. Meters)
Picture					
Insulating Glass 3/4"	11" (279)	12 1/4" (311)	105" (2667)	105" (2667)	25.0 Sq. feet (2.32 Sq. Meters)
Insulating Glass 1"	11" (279)	12 1/4" (311)	120" (3048)	120" (3048)	49.0 Sq. feet (4.55 Sq. Meters)
Single Glaze	9 1/2" (241)	10 3/4" (273)	105" (2667)	105" (2667)	38.0 Sq. feet (3.53 Sq. Meters)
Single Glaze with EP	9 1/2" (241)	10 3/4" (273)	105" (2667)	105" (2667)	25.0 Sq. feet (2.32 Sq. Meters)

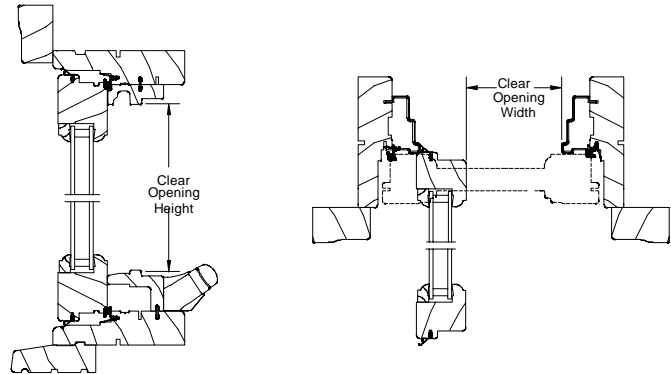
NOTE:

Operating units exceeding call number 2872 to 3672 require a sash limit device to meet product certification. Units exceeding standard sizes are not certified.

WOOD CASEMASTER

EGRESS, LITE AND VENT INFORMATION / DESIGN PRESSURE

Egress, Light and Vent Measurements - Casemaster						
Call #	Total Square Feet	Clear Opening Width	Clear Opening Height	Floor to Sill Height	Vent Opening (SQ. FT.)	Lite
Egress Openings						
1624	0.94	7.23	18.65	61.48	1.52	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	3.34	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	3.58	3.09
3232	4.30	23.23	26.65	53.48	5.12	4.57
3236	4.94	23.23	30.65	49.48	5.90	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



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 m²). 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 m²).

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.

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 5/8" and increase series 28 widths by 2 1/8".

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 shown are for standard units only. Refer to the Product Performance and Information Section for more information on Design Pressures. Widths greater than call number 28 meet a DP 50 rating with limited travel.

WOOD CASEMASTER

Built around you.™

MEASUREMENT CONVERSIONS

Measurement Conversions - Casemaster Operator / Stationary										
Size Referenced	Daylight Opening		Glass Size		Frame Size		Rough Opening		Masonry Opening (With Casing)	
Daylight Opening	Dimension Needed									
	Width		+ 1 1/16" (27)	Width		+ 5 1/2" (140)	Width		+ 6 1/2" (165)	Width + 9 1/8" (232)
Glass Size	Height		+ 1 1/16" (27)	Height		+ 7 1/4" (184)	Height		+ 7 3/4" (197)	Height + 9 1/16" (230)
	Width	- 1 1/16" (27)	Width		+ 4 7/16" (113)	Width		+ 5 7/16" (138)	Width + 8 1/16" (205)	
Frame Size (Including Subsill)	Height	- 1 1/16" (27)	Height		+ 6 3/16" (157)	Height		+ 6 11/16" (170)	Height + 8" (203)	
	Width	- 5 1/2" (140)	Width	- 4 7/16" (113)	Width		+ 1" (25)	Width	+ 3 5/8" (92)	
Rough Opening	Height	- 7 1/4" (184)	Height	- 6 3/16" (157)	Height		+ 1/2" (13)	Height	+ 1 13/16" (46)	
	Width	- 6 1/2" (165)	Width	- 5 7/16" (138)	Width	- 1" (25)	Width		+ 2 5/8" (67)	
Masonry Opening	Height	- 7 3/4" (197)	Height	- 6 11/16" (170)	Height	- 1/2" (13)	Height		+ 1 5/16" (33)	
	Width	- 9 1/8" (232)	Width	- 8 1/16" (205)	Width	- 3 5/8" (92)	Width	- 2 5/8" (67)		
Masonry Opening	Height	- 9 1/16" (230)	Height	- 8" (203)	Height	- 1 13/16" (46)	Height	- 1 5/16" (6)		

Egress Conversions

Standard Hinge: Rough Opening Width - 9", (229) Rough Opening Height - 5 7/8" (149) including subsill
 Series 28 Hinge: Rough Opening Width - 8 1/2" (216), Rough Opening Height - 5 7/8" (149) including subsill
 Egress Hinge: Rough Opening Width - 6 3/8" (162), Rough Opening Height - 5 7/8" (149) including subsill

Measurement Conversions - Picture										
Size Referenced	Daylight Opening		Glass Size		Frame Size		Rough Opening		Masonry Opening (With Casing)	
Daylight Opening	Dimension Needed									
	Width		+ 1 1/16" (27)	Width		+ 5 1/2" (140)	Width		+ 6 1/2" (165)	Width + 9 1/8" (232)
Glass Size	Height		+ 1 1/16" (27)	Height		+ 7 1/4" (184)	Height		+ 7 3/4" (197)	Height + 9 1/16" (230)
	Width	- 1 1/16" (27)	Width		+ 4 7/16" (113)	Width		+ 5 7/16" (138)	Width + 8 1/16" (205)	
Frame Size (Including Subsill)	Height	- 1 1/16" (27)	Height		+ 6 3/16" (157)	Height		+ 6 11/16" (170)	Height + 8" (203)	
	Width	- 5 1/2" (140)	Width	- 4 7/16" (113)	Width		+ 1" (25)	Width	+ 3 5/8" (92)	
Rough Opening	Height	- 7 1/4" (184)	Height	- 6 3/16" (157)	Height		+ 1/2" (13)	Height	+ 1 13/16" (46)	
	Width	- 6 1/2" (165)	Width	- 5 7/16" (138)	Width	- 1" (25)	Width		+ 2 5/8" (67)	
Masonry Opening	Height	- 7 3/4" (197)	Height	- 6 11/16" (170)	Height	- 1/2" (13)	Height		+ 1 5/16" (33)	
	Width	- 9 1/8" (232)	Width	- 8 1/16" (205)	Width	- 3 5/8" (92)	Width	- 2 5/8" (67)		
Masonry Opening	Height	- 9 1/16" (230)	Height	- 8" (203)	Height	- 1 13/16" (46)	Height	- 1 5/16" (6)		

NOTE:

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

WOOD CASEMASTER

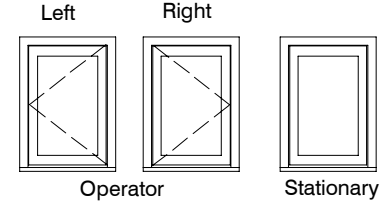
ELEVATIONS: OPERATING / STATIONARY

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.	1-7 5/8 (498)	1-11 5/8 (600)	2-3 5/8 (702)	2-7 5/8 (803)	2-11 5/8 (905)	3-3 5/8 (1006)
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)
Glass Size	11 9/16" (294)	15 9/16" (395)	19 9/16" (497)	23 9/16" (599)	27 9/16" (700)	31 9/16" (802)

Operation:



2-1 7/8 (657) 2-0 9/16 (624) 2-0 1/16 (611) 17 7/8" (454)						
2-9 7/8 (860) 2-8 9/16 (827) 2-8 1/16 (814) 25 7/8" (657)						
3-1 7/8 (962) 3-0 9/16 (929) 3-0 1/16 (916) 29 7/8" (759)						
3-5 7/8 (1064) 3-4 9/16 (1030) 3-4 1/16 (1018) 33 7/8" (860)						
4-1 7/8 (1267) 4-0 9/16 (1234) 4-0 1/16 (1221) 41 7/8" (1064)						
4-9 7/8 (1470) 4-8 9/16 (1437) 4-8 1/16 (1424) 49 7/8" (1267)						
5-1 7/8 (1572) 5-0 9/16 (1538) 5-0 1/16 (1526) 53 7/8" (1368)						
5-5 7/8 (1673) 5-4 9/16 (1640) 5-4 1/16 (1627) 57 7/8" (1470)						
6-1 7/8 (1876) 6-0 9/16 (1843) 6-0 1/16 (1830) 65 7/8" (1673)						

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.

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

WOOD 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. Opp.	3-7 5/8 (1108)	4-3 5/8 (1311)	4-11 5/8 (1514)	5-3 5/8 (1616)	5-7 5/8 (1718)	6-3 5/8 (1921)
Rgh. Opp.	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)
2-1 7/8 (657) 2-0 9/16(624) 2-0 1/16(611)						
2-9 7/8 (860) 2-8 9/16(827) 2-8 1/16(814)						
3-1 7/8 (962) 3-0 9/16 (929) 3-0 1/16 (916)						
3-5 7/8 (1064) 3-4 9/16(1030) 3-4 1/16(1018)						
4-1 7/8 (1267) 4-0 9/16 (1234) 4-0 1/16 (1221)						
4-9 7/8 (1470) 4-8 9/16 (1437) 4-8 1/16 (1424)						
5-1 7/8 (1572) 5-0 9/16 (1538) 5-0 1/16 (1526)						
5-5 7/8 (1673) 5-4 9/16 (1640) 5-4 1/16 (1627)						
6-1 7/8 (1876) 6-0 9/16 (1843) 6-0 1/16 (1830)						

NOTE:

Picture units may not be converted to operating units.

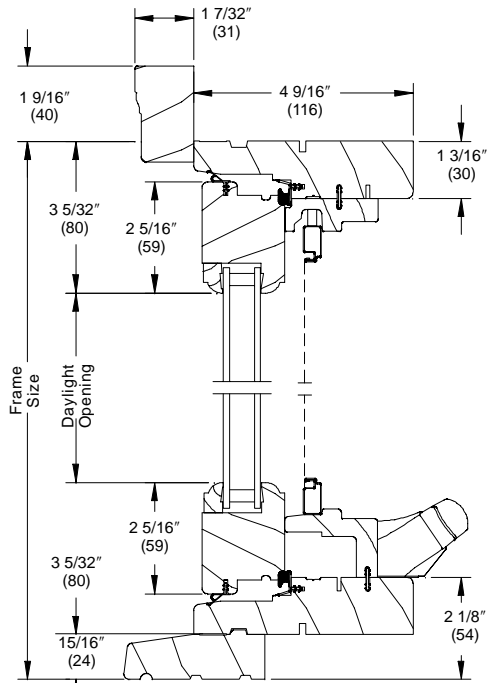
- = 3/4" (19) Insulated glass standard
- = 3/4" (19) or 1" (25) Insulated glass standard - specify thickness
- = 1" (25) Insulated glass standard

WOOD CASEMASTER

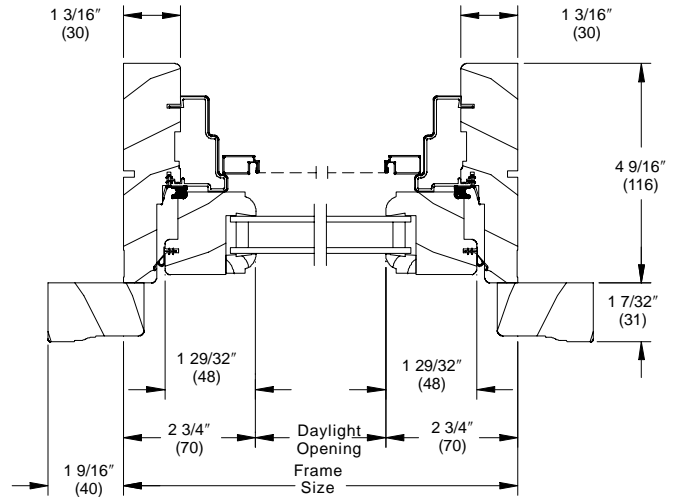
SECTION DETAILS: OPERATING / STATIONARY

SCALE: 3" = 1' 0"

Operating

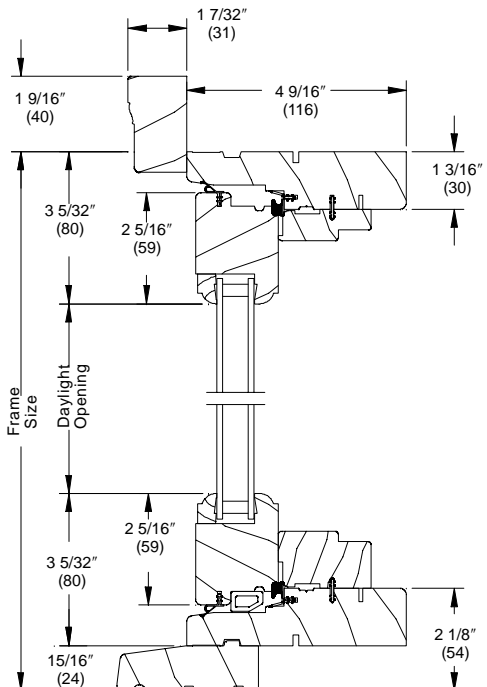


Head Jamb and Sill

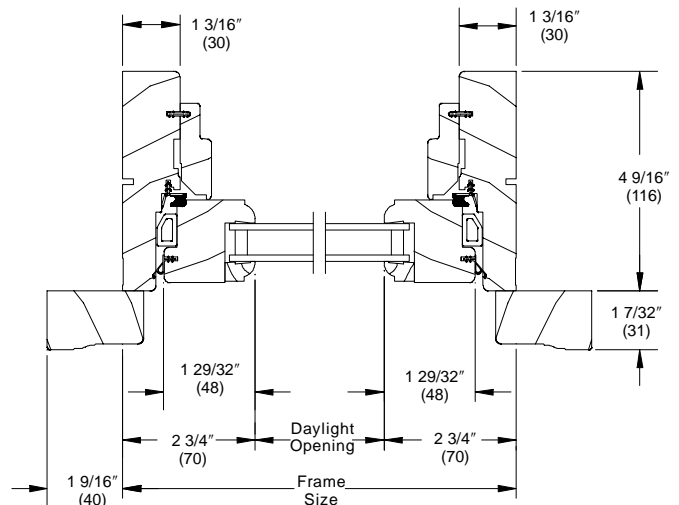


Jambs

Stationary



Head Jamb and Sill



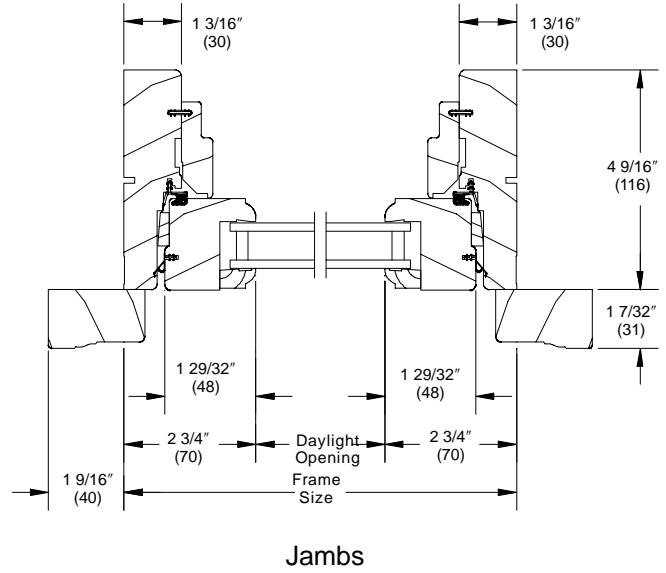
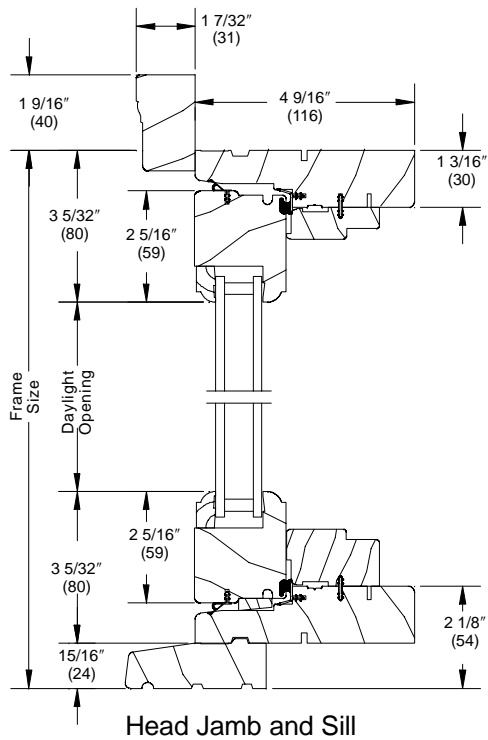
Jambs

WOOD CASEMASTER

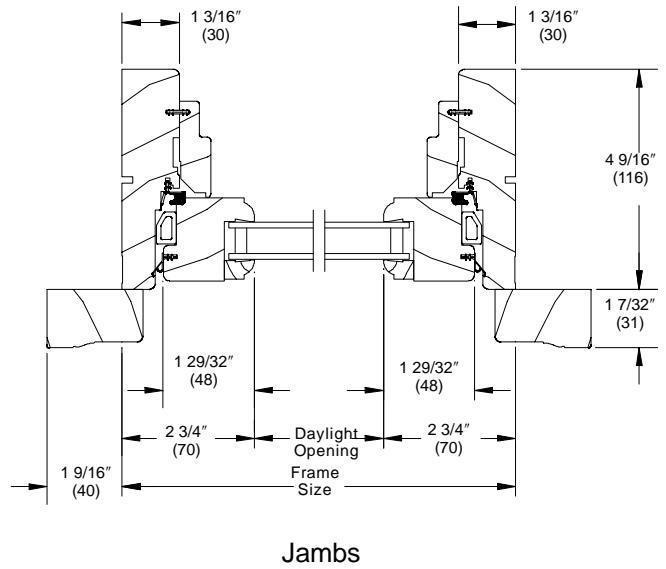
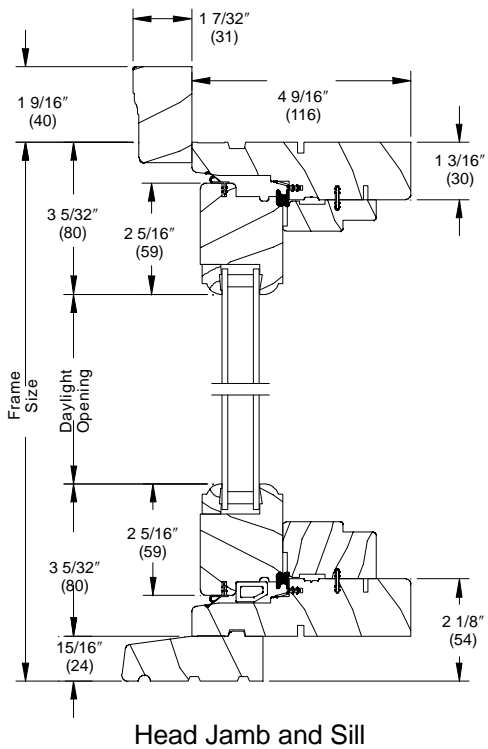
SECTION DETAILS: PICTURE

SCALE: 3" = 1' 0"

**Picture
1" Glass**



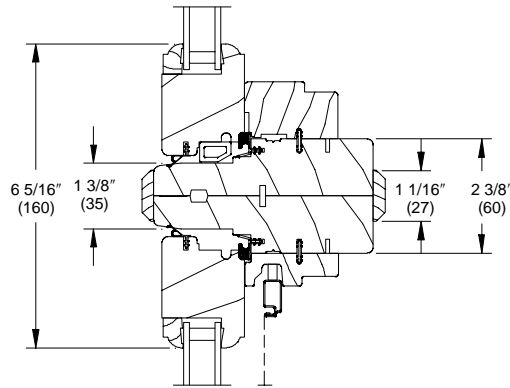
**Picture
3/4" Glass**



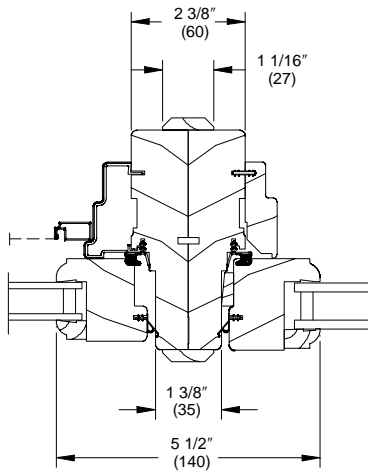
WOOD CASEMASTER

SECTION DETAILS: MULLIONS

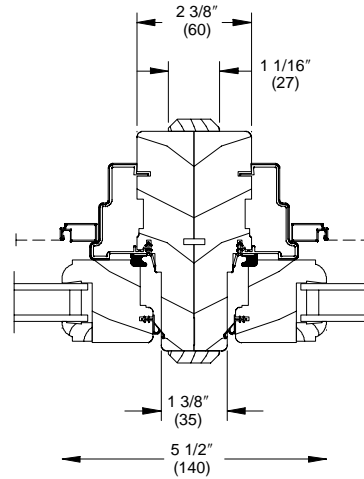
SCALE: 3" = 1' 0"



Horizontal Mullion
Stationary / Operator

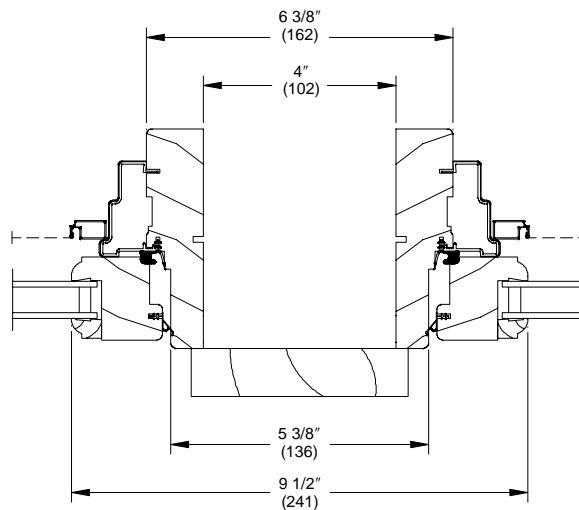


Vertical Mullion
Operator/Picture



Vertical Mullion
Operator/Operator

NOTE:
Interior trim
supplied by Marvin
applied by others



Vertical Mullion
Operator with 4" Space Mull

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

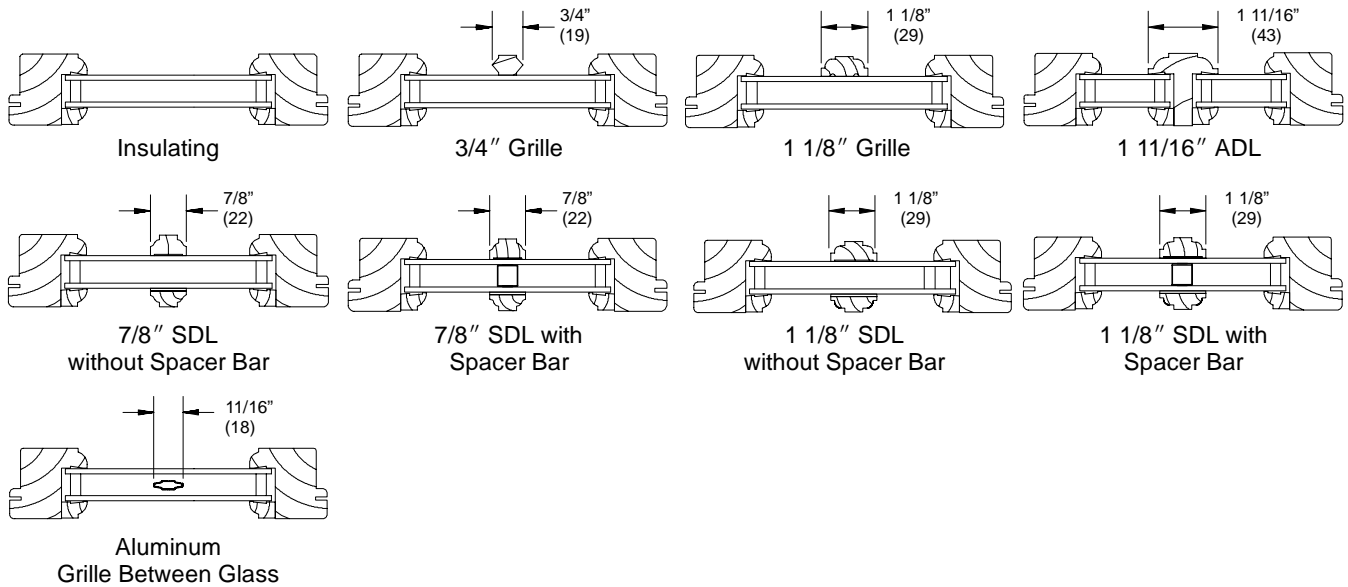
WOOD CASEMASTER

SECTION DETAILS: DIVIDED LITE OPTIONS

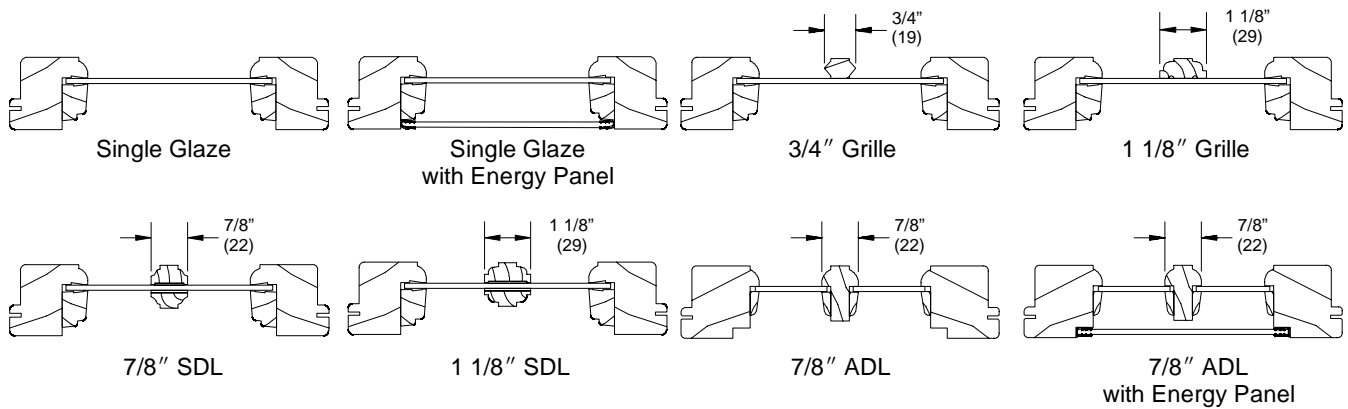
NOT TO SCALE

Operator

Insulating Glass

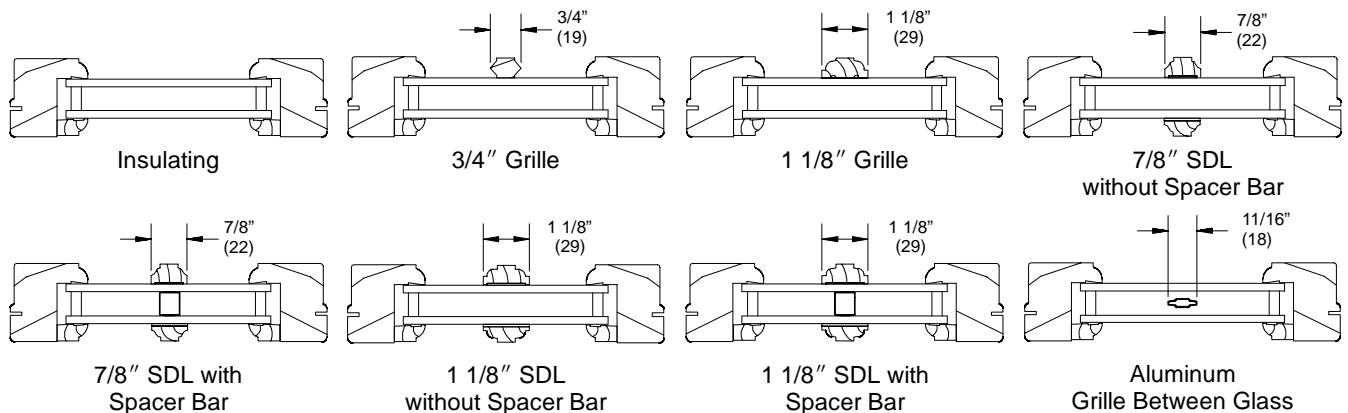


Single Glaze



Picture

Insulating Glass



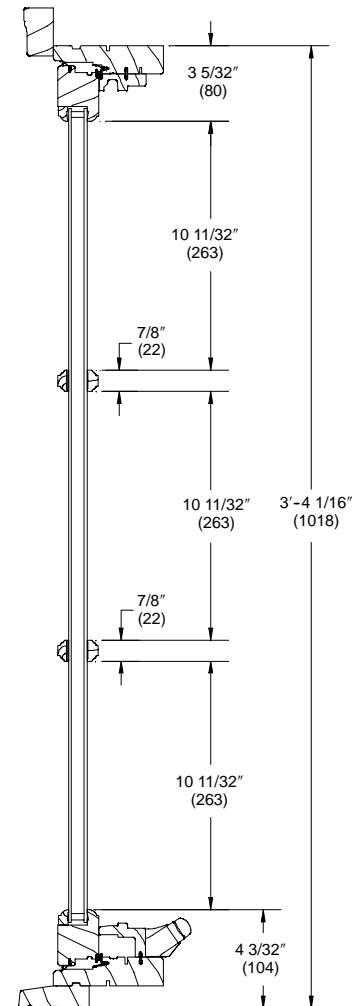
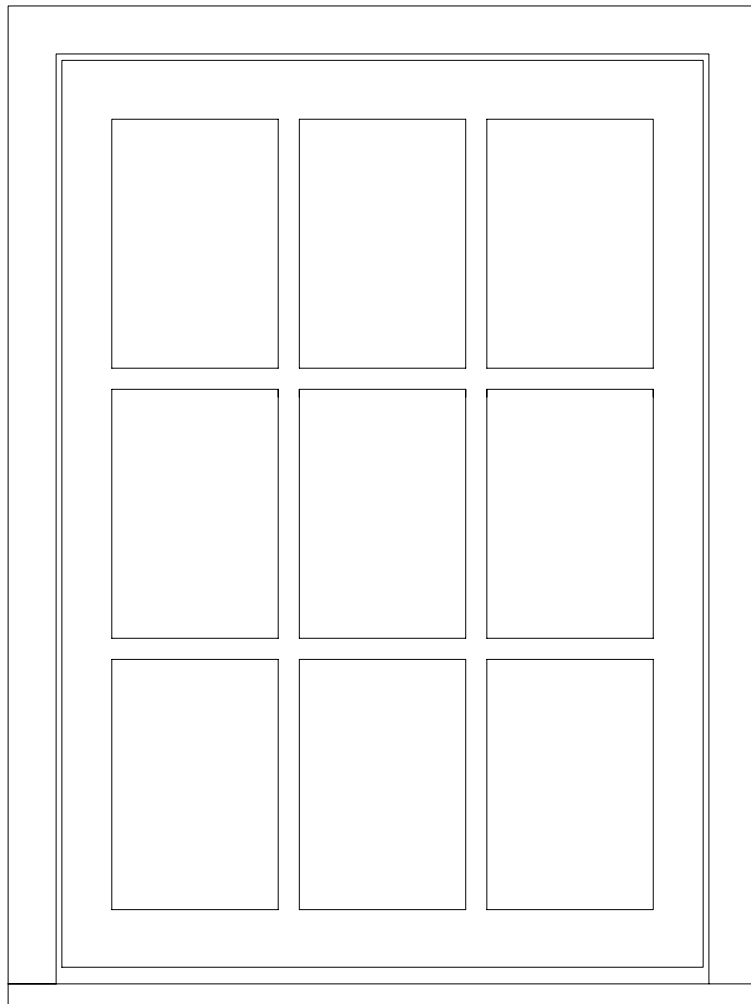
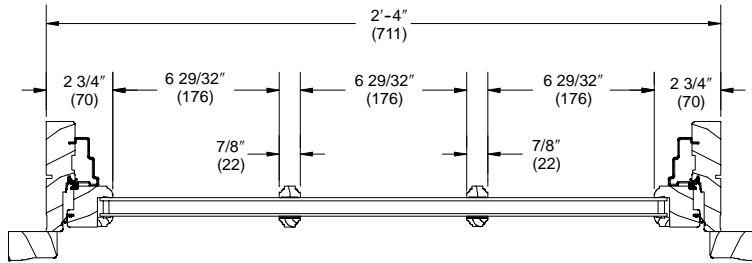
NOTE:

Grille = Removable interior divider
 SDL = Simulated divided lite
 ADL = Authentic divided lite

WOOD 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.

WOOD CASEMASTER

STANDARD RECTANGULAR DIVIDED LITE PATTERNS

NOT TO SCALE

3/4" Grille
7/8" Simulated Divided Lite (SDL)
7/8" Authentic Divided Lite (ADL) single glaze only

	1W	2W	2W	3W	3W	3W		4W	4W	5W	5W	6W	7W
2H													
	WCM1624	WCM2024	WCM2424	WCM2824	WCM3224	WCM3624		WCMP4024	WCMP4824	WCMP5624	WCMP6024	WCMP6424	WCMP7224
2H													
	WCM1632	WCM2032	WCM2432	WCM2832	WCM3232	WCM3632		WCMP4032	WCMP4832	WCMP5632	WCMP6032	WCMP6432	WCMP7232
2H													
	WCM1636	WCM2036	WCM2436	WCM2836	WCM3236	WCM3636		WCMP4036	WCMP4836	WCMP5636	WCMP6036	WCMP6436	WCMP7236
3H													
	WCM1640	WCM2040	WCM2440	WCM2840	WCM3240	WCM3640		WCMP4040	WCMP4840	WCMP5640	WCMP6040	WCMP6440	WCMP7240
3H													
	WCM1648	WCM2048	WCM2448	WCM2848	WCM3248	WCM3648		WCMP4048	WCMP4848	WCMP5648	WCMP6048	WCMP6448	WCMP7248
4H													
	WCM1656	WCM2056	WCM2456	WCM2856	WCM3256	WCM3656		WCMP4056	WCMP4856	WCMP5656	WCMP6056	WCMP6456	WCMP7256
4H													
	WCM1660	WCM2060	WCM2460	WCM2860	WCM3260	WCM3660		WCMP4060	WCMP4860	WCMP5660	WCMP6060	WCMP6460	WCMP7260
5H													
	WCM1664	WCM2064	WCM2464	WCM2864	WCM3264	WCM3664		WCMP4064	WCMP4864	WCMP5664	WCMP6064	WCMP6464	WCMP7264
5H													
	WCM1672	WCM2072	WCM2472	WCM2872	WCM3272	WCM3672		WCMP4072	WCMP4872	WCMP5672	WCMP6072	WCMP6472	WCMP7272

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.

WOOD CASEMASTER

STANDARD RECTANGULAR DIVIDED LITE PATTERNS

NOT TO SCALE

- 1 1/8" Grille
- 1 1/8" Simulated Divided Lite (SDL)
- 1 11/16" Authentic Divided Lite (ADL) Insulated glass only

	1W	2W	2W	2W	3W	3W		4W	4W	4W	5W	6W	6W
2H													
	WCM1624	WCM2024	WCM2424	WCM2824	WCM3224	WCM3624		WCMP4024	WCMP4824	WCMP5624	WCMP6024	WCMP6424	WCMP7224
2H													
	WCM1632	WCM2032	WCM2432	WCM2832	WCM3232	WCM3632		WCMP4032	WCMP4832	WCMP5632	WCMP6032	WCMP6432	WCMP7232
2H													
	WCM1636	WCM2036	WCM2436	WCM2836	WCM3236	WCM3636		WCMP4036	WCMP4836	WCMP5636	WCMP6036	WCMP6436	WCMP7236
3H													
	WCM1640	WCM2040	WCM2440	WCM2840	WCM3240	WCM3640		WCMP4040	WCMP4840	WCMP5640	WCMP6040	WCMP6440	WCMP7240
3H													
	WCM1648	WCM2048	WCM2448	WCM2848	WCM3248	WCM3648		WCMP4048	WCMP4848	WCMP5648	WCMP6048	WCMP6448	WCMP7248
3H													
	WCM1656	WCM2056	WCM2456	WCM2856	WCM3256	WCM3656		WCMP4056	WCMP4856	WCMP5656	WCMP6056	WCMP6456	WCMP7256
4H													
	WCM1660	WCM2060	WCM2460	WCM2860	WCM3260	WCM3660		WCMP4060	WCMP4860	WCMP5660	WCMP6060	WCMP6460	WCMP7260
4H													
	WCM1664	WCM2064	WCM2464	WCM2864	WCM3264	WCM3664		WCMP4064	WCMP4864	WCMP5664	WCMP6064	WCMP6464	WCMP7264
4H													
	WCM1672	WCM2072	WCM2472	WCM2872	WCM3272	WCM3672		WCMP4072	WCMP4872	WCMP5672	WCMP6072	WCMP6472	WCMP7272

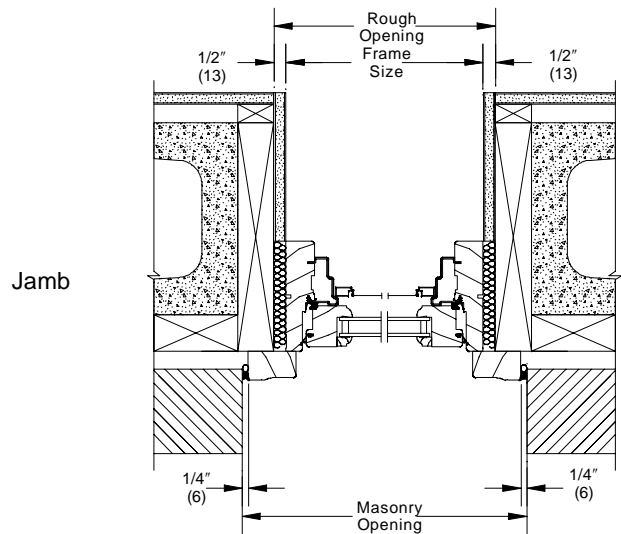
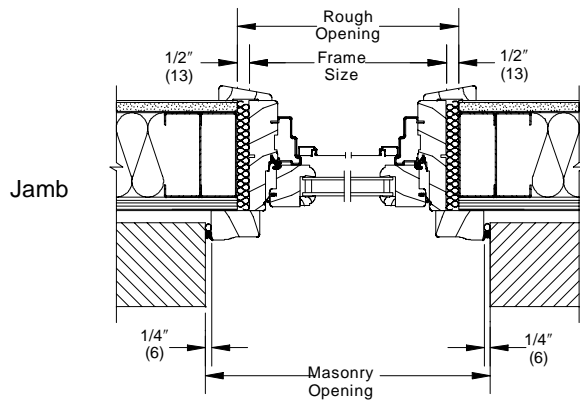
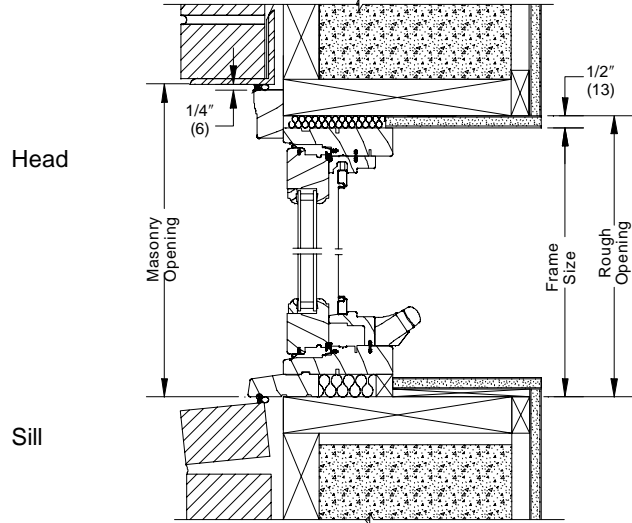
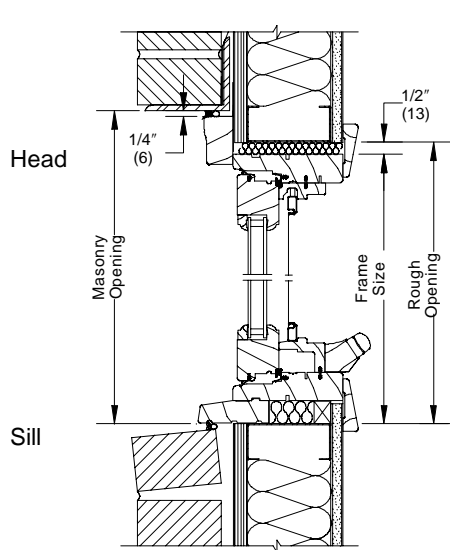
NOTE:

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.

WOOD CASEMASTER

SECTION DETAILS: CONSTRUCTION

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



Brick Veneer with Steel Stud Construction

Brick Veneer with Concrete Block Construction

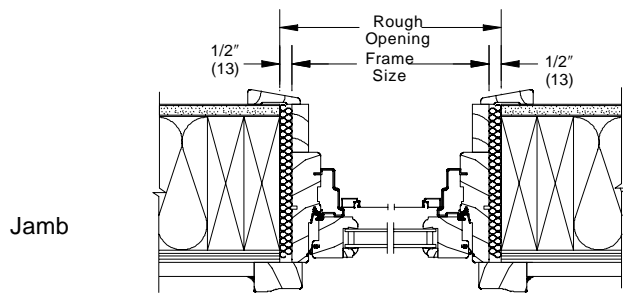
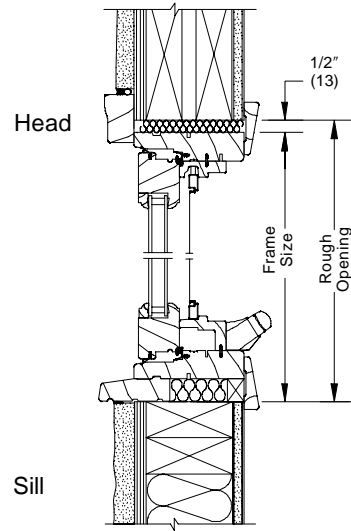
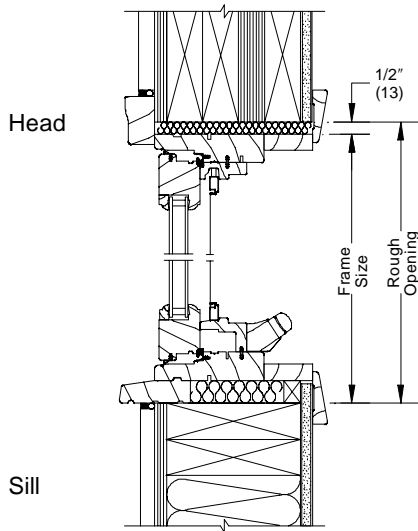
NOTE:

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.

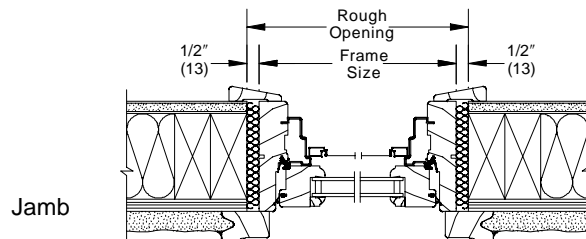
WOOD CASEMASTER

SECTION DETAILS: CONSTRUCTION

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



Wood Siding with 2x6
Frame Construction



Stucco with 2x4
Frame Construction

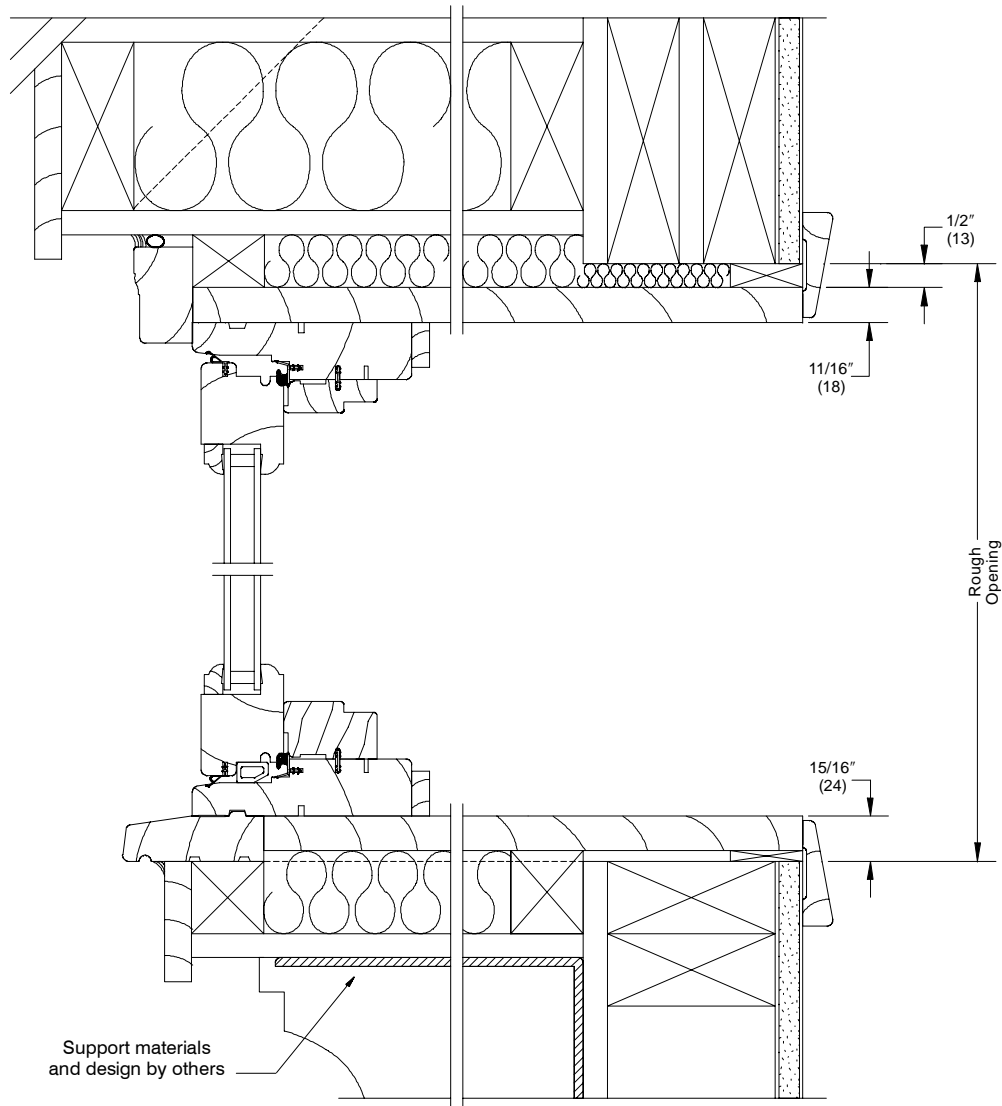
NOTE:

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.

WOOD CASEMASTER BOW/BAY

SECTION DETAILS: BOW OR BAY

SCALE: 3" = 1' 0"



Head Jamb and Sill

NOTE:

Masonry opening measurements represent units with brick mould casing.
 Rough and masonry opening heights listed include headboard, If headboard is not specified, Subtract 11/16" (17).
 Seatboard does not effect opening height. 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: WBAY 24-4860-24 30°

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

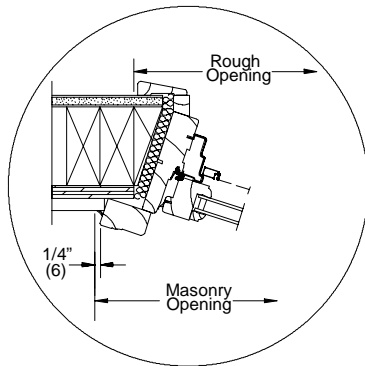
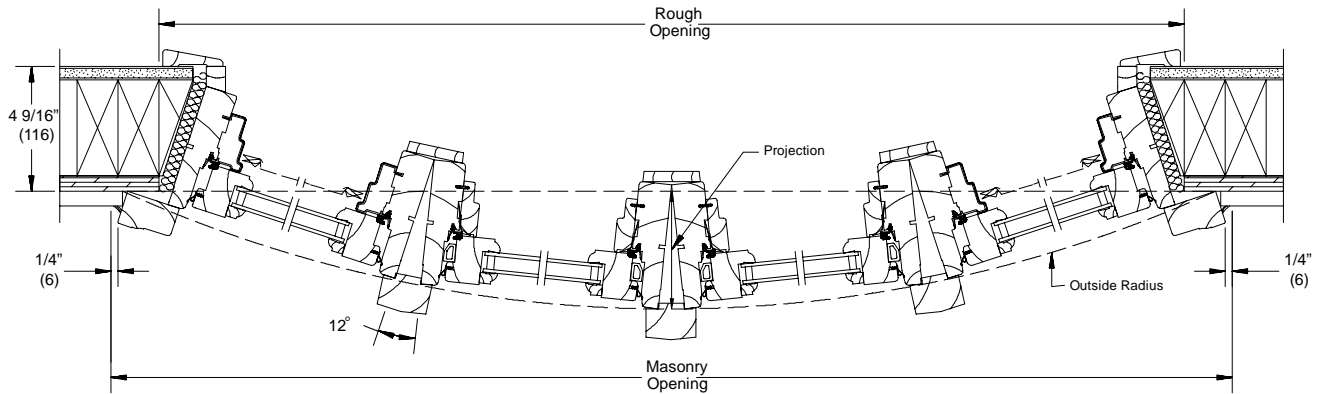
If standard units are not used, indicate unit rough openings instead of call numbers.

Height Measurements		
Height	Rough Opening Height	Masonry Opening Height
24	2-1 1/4 (641)	2-1 7/8 (657)
32	2-9 1/4 (845)	2-9 7/8 (860)
36	3-1 1/4 (946)	3-1 7/8 (962)
40	3-5 1/4 (1048)	3-5 7/8 (1064)
48	4-1 1/4 (1251)	4-1 7/8 (1267)
56	4-9 1/4 (1454)	4-9 7/8 (1470)
60	5-1 1/4 (1556)	5-1 7/8 (1572)
64	5-5 1/4 (1657)	5-5 7/8 (1673)
72	6-1 1/4 (1861)	6-1 7/8 (1876)

WOOD CASEMASTER BOW

SECTION DETAILS: BOW

NOT TO SCALE



Bow with Standard
Brick Mould Casing

Width Measurements				
3 - WIDE				
Width	Outside Radius	M.O. Width	R.O. Width	Projection
16	6-9 1/8 (2060)	4-5 9/32 (1353)	4-2 1/16 (1272)	3 3/4" (95)
20	8-4 1/4 (2546)	5-5 3/32 (1654)	5-1 7/8 (1572)	4 9/16" (116)
24	9-11 3/8 (3032)	6-4 29/32 (1954)	6-1 11/16 (1872)	5 13/32" (138)
28	11-6 1/2 (3518)	7-4 3/4 (2254)	7-2 17/32 (2173)	5 1/4" (159)
32	13-1 5/8 (4004)	8-4 9/16 (2555)	8-1 11/32 (2473)	6 1/16" (180)
36	14-8 25/32 (4490)	9-4 13/32 (2855)	9-1 3/16 (2773)	7 29/32" (201)
4 - WIDE				
16	6-9 1/8 (2060)	5-9 5/16 (1761)	5-5 3/4 (1670)	7 27/32" (187)
20	8-4 1/4 (2546)	7-0 7/8 (2156)	6-9 5/16 (2066)	9 1/2" (229)
24	9-11 3/8 (3032)	8-4 7/16 (2551)	8-0 7/8 (2461)	10 21/32" (271)
28	11-6 1/2 (3518)	9-8 (2947)	9-4 7/16 (2856)	12 5/16" (313)
32	13-1 21/32 (4004)	10-11 9/16 (3342)	10-8 (3252)	13 31/32" (355)
36	14-8 25/32 (4490)	12-3 1/8 (3738)	11-11 19/32 (3647)	15 5/8" (397)
5 - WIDE				
16	6-9 1/8 (2060)	7-0 5/8 (2149)	6-8 21/32 (2049)	10 27/32" (276)
20	8-4 1/4 (2546)	8-7 3/4 (2635)	8-3 13/16 (2535)	13 5/16" (338)
24	9-11 3/8 (3032)	10-2 7/8 (3121)	9-10 15/16 (3021)	15 25/32" (401)
28	11-6 1/2 (3518)	11-10 1/32 (3607)	11-6 1/16 (3507)	18 7/32" (463)
32	13-1 21/32 (4004)	13-5 5/32 (4093)	13-1 7/32 (3993)	20 11/16" (526)
36	14-8 25/32 (4490)	15-0 9/32 (4579)	14-8 11/32 (4479)	23 5/32" (588)
6 - WIDE				
16	6-9 1/8 (2060)	8-2 31/32 (2514)	7-10 5/8 (2404)	16 1/32" (407)
20	8-4 1/4 (2546)	10-1 15/32 (3086)	9-9 1/8 (2975)	19 11/16" (500)
24	9-11 3/8 (3032)	11-11 31/32 (3657)	11-7 5/8 (3546)	23 11/32" (593)
28	11-6 1/2 (3518)	13-10 15/32 (4228)	13-6 3/32 (4118)	27 (686)
32	13-1 21/32 (4004)	15-8 31/32 (4800)	15-4 19/32 (4689)	30 21/32" (779)
36	14-8 25/32 (4490)	17-7 7/16 (5371)	17-3 3/32 (5260)	34 5/16" (871)

How to Specify

For standard bow assembly, note the product type, size identification/s, configuration, number of units wide and operation/s. Example: WCM2456 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:

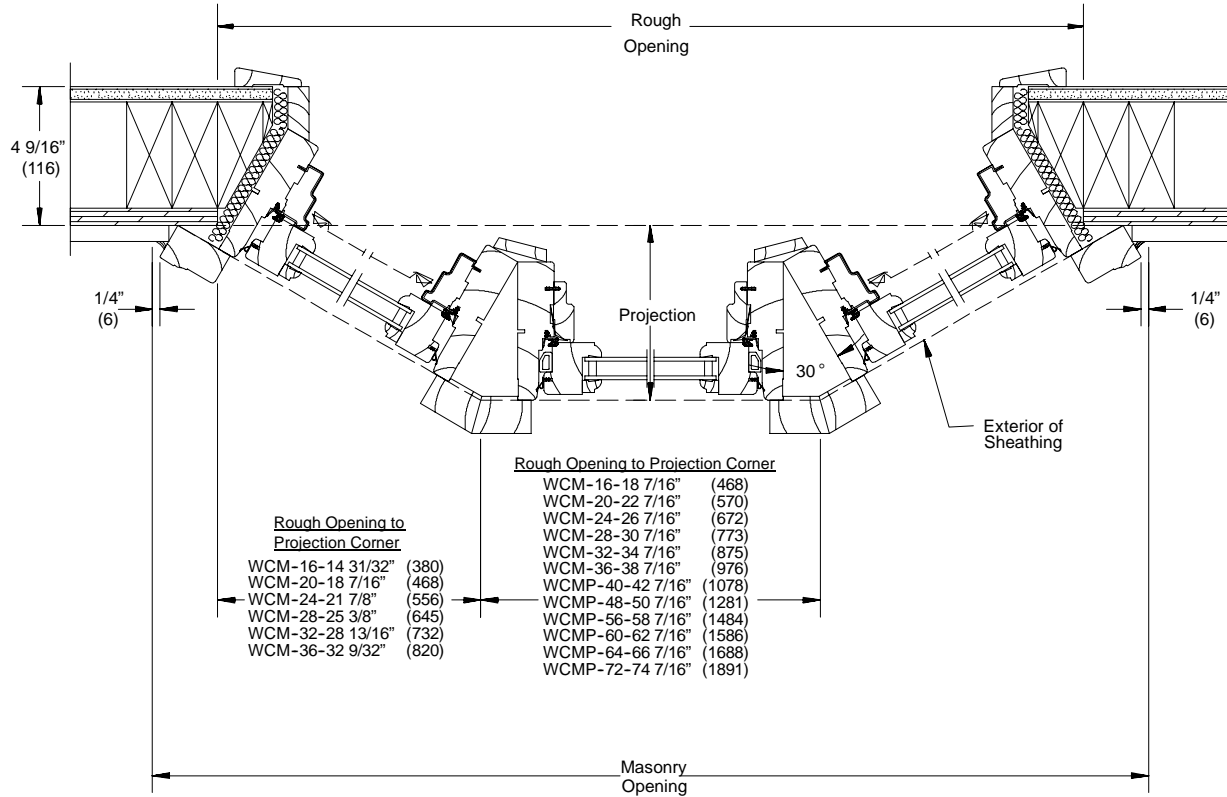
Masonry opening measurements represent units with brick mould casing.
Construction materials supplied by others.

WOOD CASEMASTER BAY

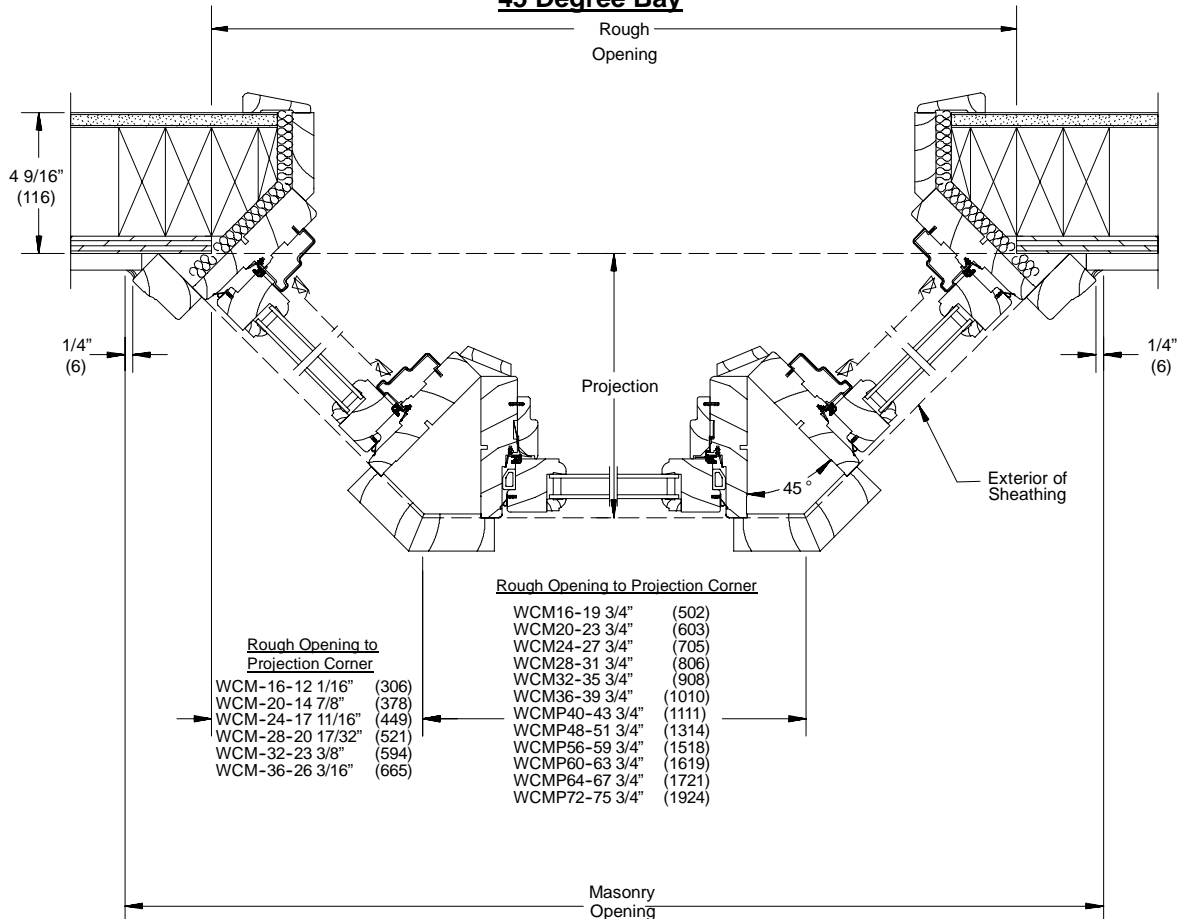
SECTION DETAILS: 30 AND 45 DEGREE BAY

NOT TO SCALE

30 Degree Bay



45 Degree Bay

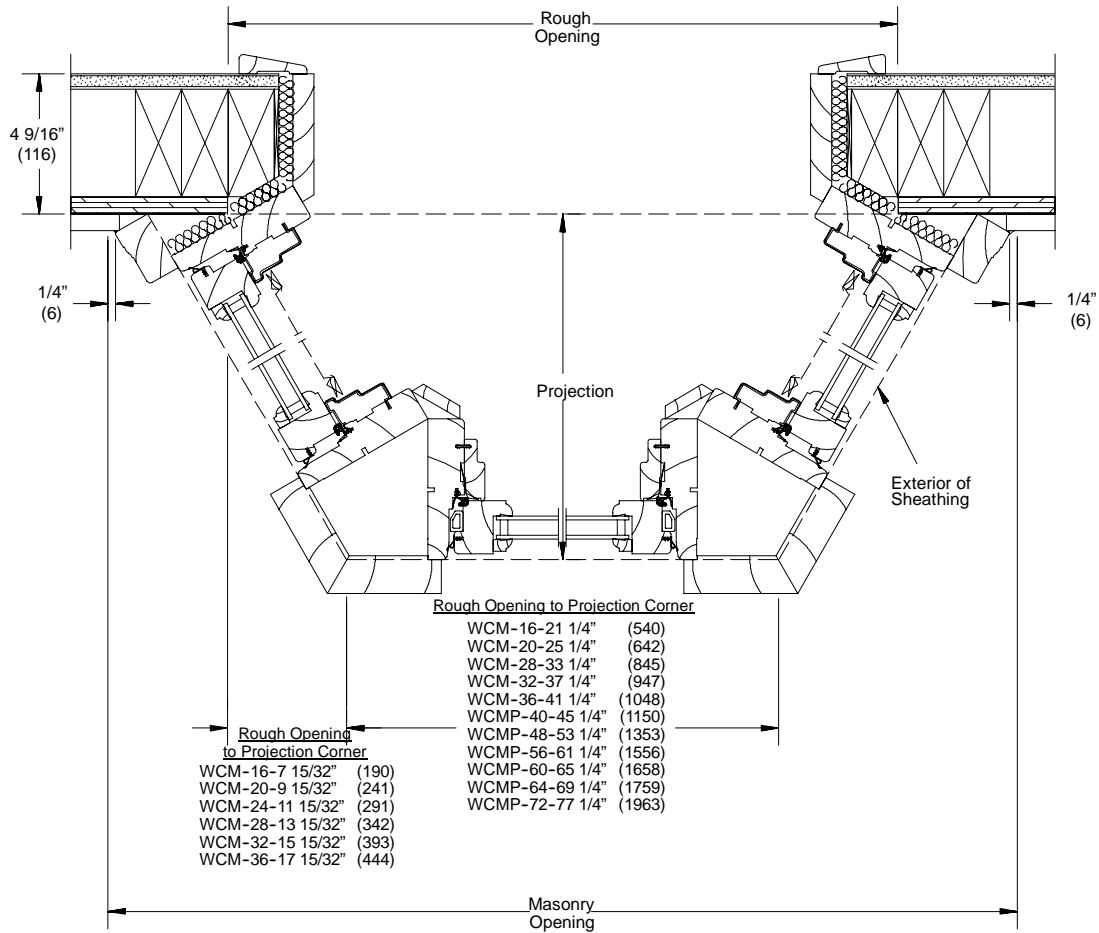


WOOD CASEMASTER BAY

SECTION DETAILS: 60 DEGREE BAY

NOT TO SCALE

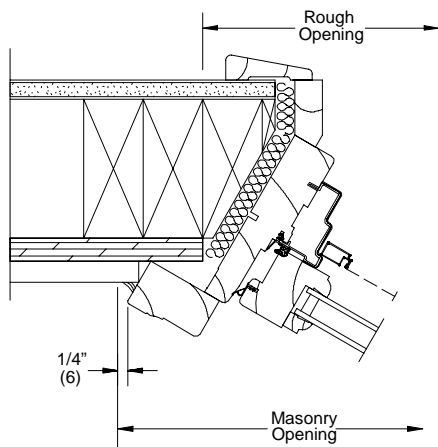
60 Degree Bay



WOOD CASEMASTER BAY

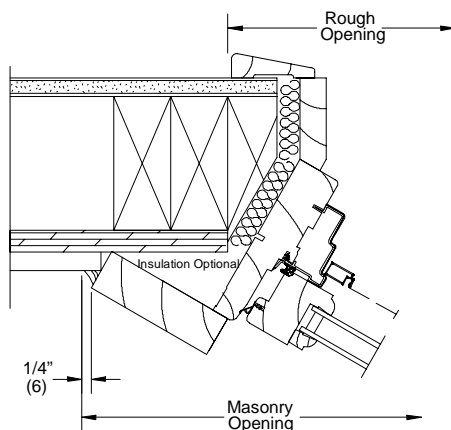
30 DEGREE WIDTH MEASUREMENTS

Brick Mould Casing



30 Degree WCM Bay with standard Brick Mould Casing

Flat Casing



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

For 30 degree bay masonry opening widths using 3 1/2" (89) Flat Casing, add 6 27/32" (174) to the rough opening width.

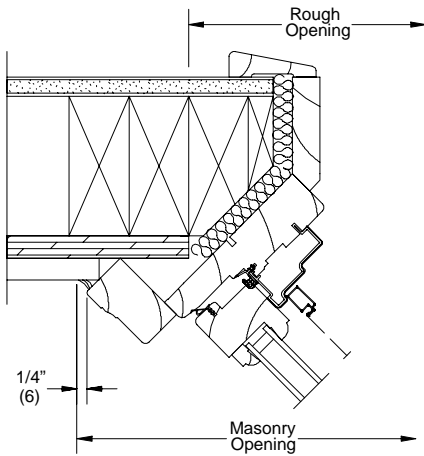
30 Degree Width Measurements Casemaster flankers and center units

Unit Number	Masonry Opening	Rough Opening	Projection
16-16-16	4-4 23/32 (1339)	4-0 3/8 (1229)	9 3/8" (239)
16-20-16	4-8 23/32 (1441)	4-4 3/8 (1330)	9 3/8" (239)
16-24-16	5-0 23/32 (1543)	4-8 3/8 (1432)	9 3/8" (239)
16-28-16	5-4 23/32 (1644)	5-0 3/8 (1533)	9 3/8" (239)
16-32-16	5-8 23/32 (1746)	5-4 3/8 (1635)	9 3/8" (239)
16-36-16	6-0 23/32 (1847)	5-8 3/8 (1737)	9 3/8" (239)
16-40-16	6-4 23/32 (1949)	6-0 3/8 (1838)	9 3/8" (239)
16-48-16	7-0 23/32 (2152)	6-8 3/8 (2041)	9 3/8" (239)
16-56-16	7-8 23/32 (2355)	7-4 3/8 (2245)	9 3/8" (239)
16-60-16	8-0 23/32 (2457)	7-8 3/8 (2346)	9 3/8" (239)
16-64-16	8-4 23/32 (2559)	8-0 3/8 (2448)	9 3/8" (239)
16-72-16	9-0 23/32 (2762)	8-8 3/8 (2651)	9 3/8" (239)
20-20-20	5-3 21/32 (1617)	4-11 9/32 (1506)	11 3/8" (289)
20-24-20	5-7 21/32 (1719)	5-3 9/32 (1608)	11 3/8" (289)
20-28-20	5-11 21/32 (1820)	5-7 9/32 (1709)	11 3/8" (289)
20-32-20	6-3 21/32 (1922)	5-11 9/32 (1811)	11 3/8" (289)
20-36-20	6-7 21/32 (2023)	6-3 9/32 (1913)	11 3/8" (289)
20-40-20	6-11 21/32 (2125)	6-7 9/32 (2014)	11 3/8" (289)
20-48-20	7-7 21/32 (2328)	7-3 9/32 (2217)	11 3/8" (289)
20-56-20	8-3 21/32 (2531)	7-11 9/32 (2421)	11 3/8" (289)
20-60-20	8-7 21/32 (2633)	8-3 9/32 (2522)	11 3/8" (289)
20-64-20	8-11 21/32 (2735)	8-7 9/32 (2624)	11 3/8" (289)
20-72-20	9-7 21/32 (2938)	9-3 9/32 (2827)	11 3/8" (289)
24-24-24	6-2 19/32 (1895)	5-10 7/32 (1784)	13 3/8" (340)
24-28-24	6-6 19/32 (1996)	6-2 7/32 (1885)	13 3/8" (340)
24-32-24	6-10 19/32 (2098)	6-6 7/32 (1987)	13 3/8" (340)
24-36-24	7-2 19/32 (2199)	6-10 7/32 (2089)	13 3/8" (340)
24-40-24	7-6 19/32 (2301)	7-2 7/32 (2190)	13 3/8" (340)
24-48-24	8-2 19/32 (2504)	7-10 7/32 (2393)	13 3/8" (340)
24-56-24	8-10 19/32 (2707)	8-6 7/32 (2597)	13 3/8" (340)
24-60-24	9-2 19/32 (2809)	8-10 7/32 (2698)	13 3/8" (340)
24-64-24	9-6 19/32 (2911)	9-2 7/32 (2800)	13 3/8" (340)
24-72-24	10-2 19/32 (3114)	9-10 7/32 (3003)	13 3/8" (340)
28-28-28	7-1 1/2 (2172)	6-9 5/32 (2061)	15 3/8" (391)
28-32-28	7-5 1/2 (2274)	7-1 5/32 (2163)	15 3/8" (391)
28-36-28	7-9 1/2 (2375)	7-5 5/32 (2265)	15 3/8" (391)
28-40-28	8-1 1/2 (2477)	7-9 5/32 (2366)	15 3/8" (391)
28-48-28	8-9 1/2 (2680)	8-5 5/32 (2569)	15 3/8" (391)
28-56-28	9-5 1/2 (2883)	9-1 5/32 (2773)	15 3/8" (391)
28-60-28	9-9 1/2 (2985)	9-5 5/32 (2874)	15 3/8" (391)
28-64-28	10-1 1/2 (3087)	9-9 5/32 (2976)	15 3/8" (391)
28-72-28	10-9 1/2 (3290)	10-5 5/32 (3179)	15 3/8" (391)
32-32-32	8-0 7/16 (2450)	7-8 3/32 (2339)	17 3/8" (442)
32-36-32	8-4 7/16 (2251)	8-0 3/32 (2441)	17 3/8" (442)
32-40-32	8-8 7/16 (2653)	8-4 3/32 (2542)	17 3/8" (442)
32-48-32	9-4 7/16 (2856)	9-0 3/32 (2745)	17 3/8" (442)
32-56-32	10-0 7/16 (3059)	9-8 3/32 (2949)	17 3/8" (442)
32-60-32	10-4 7/16 (3161)	10-0 3/32 (3050)	17 3/8" (442)
32-64-32	10-8 7/16 (3262)	10-4 3/32 (3152)	17 3/8" (442)
32-72-32	11-4 7/16 (3466)	11-0 3/32 (3355)	17 3/8" (442)
36-36-36	8-11 3/8 (2727)	8-7 (2617)	19 3/8" (493)
36-40-36	9-3 3/8 (2829)	8-11 (2718)	19 3/8" (493)
36-48-36	9-11 3/8 (3032)	9-7 (2921)	19 3/8" (493)
36-56-36	10-7 3/8 (3235)	10-3 (3125)	19 3/8" (493)
36-60-36	10-11 3/8 (3337)	10-7 (3226)	19 3/8" (493)
36-64-36	11-3 3/8 (3438)	10-11 (3328)	19 3/8" (493)
36-72-36	11-11 3/8 (3642)	11-7 (3531)	19 3/8" (493)

WOOD CASEMASTER BAY

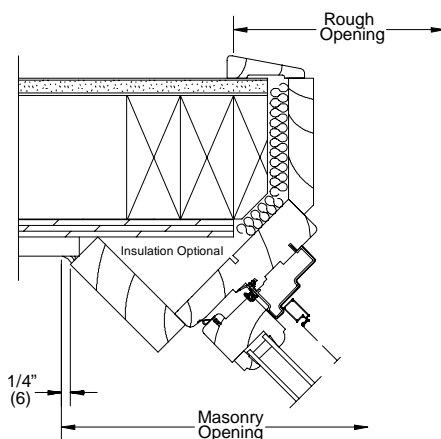
45 DEGREE WIDTH MEASUREMENTS

Brick Mould Casing



45 Degree WCM Bay with standard Brick Mould Casing

Flat Casing



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

For 45 degree bay masonry opening widths using 3 1/2" (89) Flat Casing, add 7 19/32" (193) to the rough opening width.

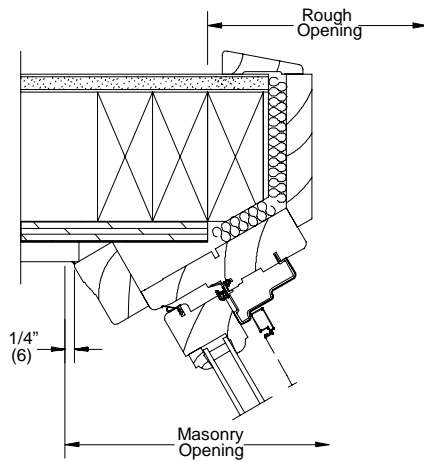
45 Degree Width Measurements Casemaster flankers and center units

Unit Number	Masonry Opening	Rough Opening	Projection
16-16-16	4-1 9/16 (1259)	3-7 7/8 (1114)	13 3/4" (349)
16-20-16	4-5 9/16 (1360)	3-11 7/8 (1216)	13 3/4" (349)
16-24-16	4-9 9/16 (1462)	4-3 7/8 (1318)	13 3/4" (349)
16-28-16	5-1 9/16 (1564)	4-7 7/8 (1419)	13 3/4" (349)
16-32-16	5-5 9/16 (1665)	4-11 7/8 (1521)	13 3/4" (349)
16-36-16	5-9 9/16 (1767)	5-3 7/8 (1622)	13 3/4" (349)
16-40-16	6-1 9/16 (1868)	5-7 7/8 (1724)	13 3/4" (349)
16-48-16	6-9 9/16 (2072)	6-3 7/8 (1927)	13 3/4" (349)
16-56-16	7-5 9/16 (2275)	6-11 7/8 (2130)	13 3/4" (349)
16-60-16	7-9 9/16 (2376)	7-3 7/8 (2232)	13 3/4" (349)
16-64-16	8-1 9/16 (2478)	7-7 7/8 (2334)	13 3/4" (349)
16-72-16	8-9 9/16 (2681)	8-3 7/8 (2537)	13 3/4" (349)
20-20-20	4-11 7/32 (1504)	4-5 17/32 (1360)	16 9/16" (421)
20-24-20	5-3 7/32 (1606)	4-9 17/32 (1461)	16 9/16" (421)
20-28-20	5-7 7/32 (1707)	5-1 17/32 (1563)	16 9/16" (421)
20-32-20	5-11 7/32 (1809)	5-5 17/32 (1664)	16 9/16" (421)
20-36-20	6-3 7/32 (1910)	5-9 17/32 (1766)	16 9/16" (421)
20-40-20	6-7 7/32 (2012)	6-1 17/32 (1868)	16 9/16" (421)
20-48-20	7-3 7/32 (2215)	6-9 17/32 (2071)	16 9/16" (421)
20-56-20	7-11 7/32 (2418)	7-5 17/32 (2274)	16 9/16" (421)
20-60-20	8-3 7/32 (2520)	7-9 17/32 (2376)	16 9/16" (421)
20-64-20	8-7 7/32 (2622)	8-1 17/32 (2477)	16 9/16" (421)
20-72-20	9-3 7/32 (2825)	8-9 17/32 (2680)	16 9/16" (421)
24-24-24	5-8 7/8 (1749)	5-3 3/16 (1605)	19 13/32" (493)
24-28-24	6-0 7/8 (1851)	5-7 3/16 (1706)	19 13/32" (493)
24-32-24	6-4 7/8 (1953)	5-11 3/16 (1808)	19 13/32" (493)
24-36-24	6-8 7/8 (2054)	6-3 3/16 (1910)	19 13/32" (493)
24-40-24	7-0 7/8 (2156)	6-7 3/16 (2011)	19 13/32" (493)
24-48-24	7-8 7/8 (2359)	7-3 3/16 (2214)	19 13/32" (493)
24-56-24	8-4 7/8 (2562)	7-11 3/16 (2418)	19 13/32" (493)
24-60-24	8-8 7/8 (2664)	8-3 3/16 (2519)	19 13/32" (493)
24-64-24	9-0 7/8 (2765)	8-7 3/16 (2621)	19 13/32" (493)
24-72-24	9-8 7/8 (2969)	9-3 3/16 (2824)	19 13/32" (493)
28-28-28	6-6 17/32 (1995)	6-0 27/32 (1850)	22 7/32" (565)
28-32-28	6-10 17/32 (2096)	6-4 27/32 (1952)	22 7/32" (565)
28-36-28	7-2 17/32 (2198)	6-8 27/32 (2053)	22 7/32" (565)
28-40-28	7-6 17/32 (2299)	7-0 27/32 (2155)	22 7/32" (565)
28-48-28	8-2 17/32 (2503)	7-8 27/32 (2358)	22 7/32" (565)
28-56-28	8-10 17/32 (2706)	8-4 27/32 (2561)	22 7/32" (565)
28-60-28	9-2 17/32 (2806)	8-8 27/32 (2663)	22 7/32" (565)
28-64-28	9-6 17/32 (2909)	9-0 27/32 (2765)	22 7/32" (565)
28-72-28	10-2 17/32 (3112)	9-8 27/32 (2968)	22 7/32" (565)
32-32-32	7-4 3/16 (2240)	6-10 1/2 (2095)	25 1/16" (637)
32-36-32	7-8 3/16 (2342)	7-2 1/2 (2197)	25 1/16" (637)
32-40-32	8-0 3/16 (2443)	7-6 1/2 (2299)	25 1/16" (637)
32-48-32	8-8 3/16 (2646)	8-2 1/2 (2502)	25 1/16" (637)
32-56-32	9-4 3/16 (2850)	8-10 1/2 (2705)	25 1/16" (637)
32-60-32	9-8 3/16 (2951)	9-2 1/2 (2807)	25 1/16" (637)
32-64-32	10-0 3/16 (3053)	9-6 1/2 (2908)	25 1/16" (637)
32-72-32	10-8 3/16 (3256)	10-2 1/2 (3111)	25 1/16" (637)
36-36-36	8-1 27/32 (2485)	7-8 5/32 (2341)	27 7/8" (709)
36-40-36	8-5 27/32 (2587)	8-0 5/32 (2442)	27 7/8" (709)
36-48-36	9-1 27/32 (2790)	8-8 5/32 (2646)	27 7/8" (709)
36-56-36	9-9 27/32 (2993)	9-4 5/32 (284)	27 7/8" (709)
36-60-36	10-1 27/32 (3095)	9-8 5/32 (2950)	27 7/8" (709)
36-64-36	10-5 27/32 (3196)	10-0 5/32 (3052)	27 7/8" (709)
36-72-36	11-1 27/32 (3400)	10-8 5/32 (3255)	27 7/8" (709)

WOOD CASEMASTER BAY

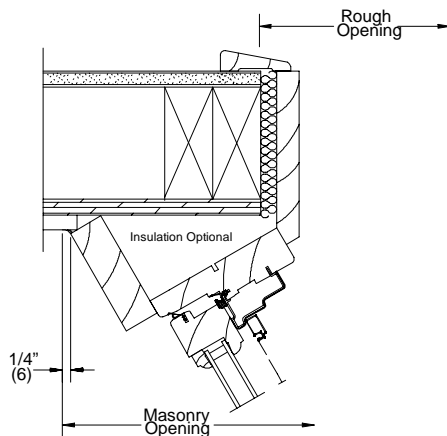
60 DEGREE WIDTH MEASUREMENTS

Brick Mould Casing



60 Degree WCM Bay with standard Brick Mould Casing

Flat Casing



60 Degree WCM Bay with optional 3 1/2" Flat Casing

For 60 degree bay masonry opening widths using 3 1/2" (89) Flat Casing, add 7 5/32" (233) to the rough opening width.

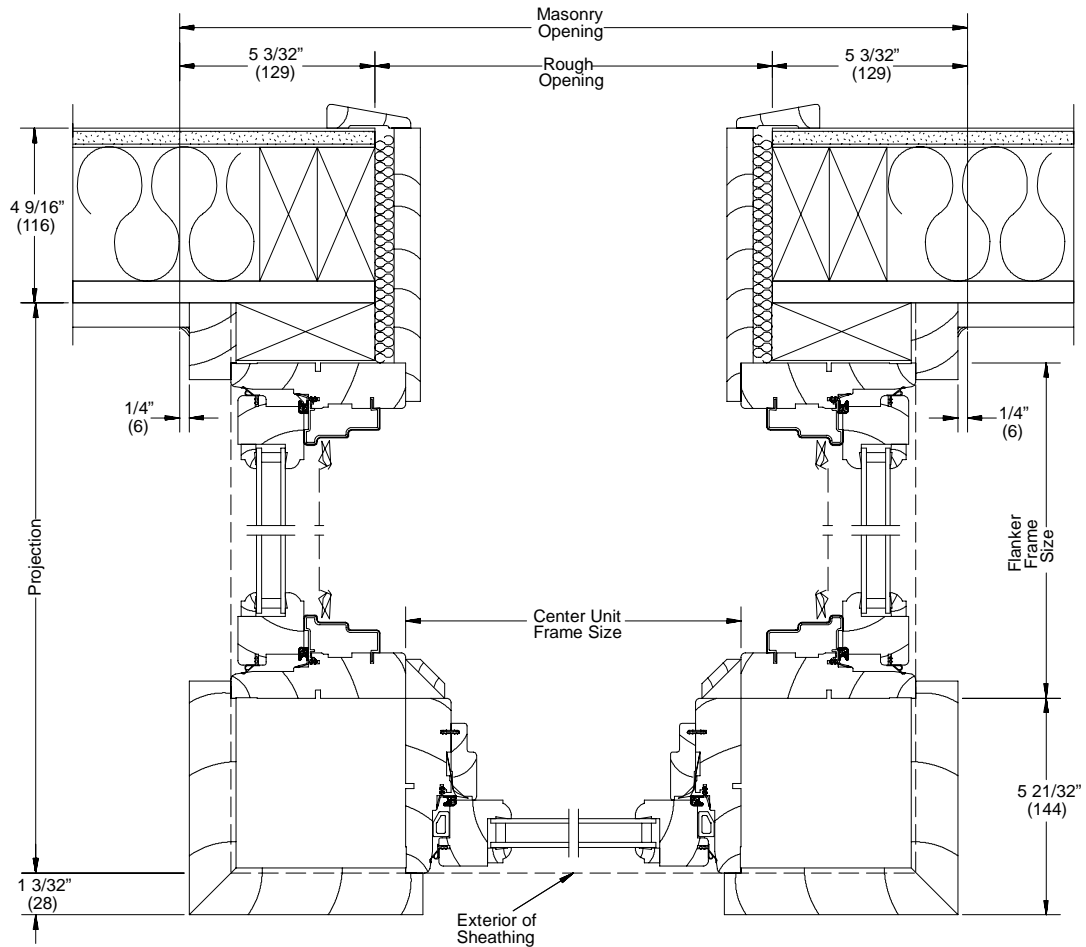
60 Degree Width Measurements Casemaster flankers and center units

Unit Number	Masonry Opening	Rough Opening	Projection
20-20-20	4-4 1/8 (1324)	3-8 7/32 (1123)	20 15/16" (532)
20-24-20	4-8 1/8 (1426)	4-0 7/32 (1225)	20 115/16" (532)
20-28-20	5-0 1/8 (1527)	4-4 7/32 (1326)	20 15/16" (532)
20-32-20	5-4 1/8 (1629)	4-8 7/32 (1428)	20 15/16" (532)
20-36-20	5-8 1/8 (1731)	5-0 7/32 (1529)	20 15/16" (532)
20-40-20	6-0 1/8 (1832)	5-4 7/32 (1631)	20 15/16" (532)
20-48-20	6-8 1/8 (2035)	6-0 7/32 (1834)	20 15/16" (532)
20-56-20	7-4 1/8 (2239)	6-8 7/32 (2037)	20 15/16" (532)
20-60-20	7-8 1/8 (2340)	7-0 7/32 (2139)	20 15/16" (532)
20-64-20	8-0 1/8 (2442)	7-4 7/32 (2241)	20 15/16" (532)
20-72-20	8-8 1/8 (2645)	8-0 7/32 (2444)	20 15/16" (532)
24-24-24	5-0 1/8 (1527)	4-4 7/32 (1326)	24 13/32" (620)
24-28-24	5-4 1/8 (1629)	4-8 7/32 (1428)	24 13/32" (620)
24-32-24	5-8 1/8 (1731)	5-0 7/32 (1529)	24 13/32" (620)
24-36-24	6-0 1/8 (1832)	5-4 7/32 (1631)	24 13/32" (620)
24-40-24	6-4 1/8 (1934)	5-8 7/32 (1733)	24 13/32" (620)
24-48-24	7-0 1/8 (2137)	6-4 7/32 (1936)	24 13/32" (620)
24-56-24	7-8 1/8 (2340)	7-0 7/32 (2139)	24 13/32" (620)
24-60-24	8-0 1/8 (2442)	7-4 7/32 (2241)	24 13/32" (620)
24-64-24	8-4 1/8 (2543)	7-8 7/32 (2342)	24 13/32" (620)
24-72-24	9-0 1/8 (2747)	8-4 7/32 (2545)	24 13/32" (620)
28-28-28	5-8 1/8 (1731)	5-0 7/32 (1529)	27 7/8" (708)
28-32-28	6-0 1/8 (1832)	5-4 7/32 (1631)	27 7/8" (708)
28-36-28	6-4 1/8 (1934)	5-8 7/32 (1733)	27 7/8" (708)
28-40-28	6-8 1/8 (2035)	6-0 7/32 (1834)	27 7/8" (708)
28-48-28	7-4 1/8 (2239)	6-8 7/32 (2037)	27 7/8" (708)
28-56-28	8-0 1/8 (2442)	7-4 7/32 (2241)	27 7/8" (708)
28-60-28	8-4 1/8 (2543)	7-8 7/32 (2342)	27 7/8" (708)
28-64-28	8-8 1/8 (2645)	8-0 7/32 (2444)	27 7/8" (708)
28-72-28	9-4 1/8 (2848)	8-8 7/32 (2647)	27 7/8" (708)
32-32-32	6-4 1/8 (1934)	5-8 7/32 (1733)	31 11/32" (796)
32-36-32	6-8 1/8 (2035)	6-0 7/32 (1834)	31 11/32" (796)
32-40-32	7-0 1/8 (2137)	6-4 7/32 (1936)	31 11/32" (796)
32-48-32	7-8 1/8 (2340)	7-0 7/32 (2139)	31 11/32" (796)
32-56-32	8-4 1/8 (2543)	7-8 7/32 (2342)	31 11/32" (796)
32-60-32	8-8 1/8 (2645)	8-0 7/32 (2444)	31 11/32" (796)
32-64-32	9-0 1/8 (2747)	8-4 7/32 (2545)	31 11/32" (796)
32-72-32	9-8 1/8 (2950)	9-0 7/32 (2749)	31 11/32" (796)
36-36-36	7-0 1/8 (2137)	6-4 7/32 (1936)	34 13/16" (884)
36-40-36	7-4 1/8 (2239)	6-8 7/32 (2037)	34 13/16" (884)
36-48-36	8-0 1/8 (2442)	7-4 7/32 (2241)	34 13/16" (884)
36-56-36	8-8 1/8 (2645)	8-0 7/32 (2444)	34 13/16" (884)
36-60-36	9-0 1/8 (2747)	8-4 7/32 (2545)	34 13/16" (884)
36-64-36	9-4 1/8 (2848)	8-8 7/32 (2647)	34 13/16" (884)
36-72-36	10-0 1/8 (3051)	9-4 7/32 (2850)	34 13/16" (884)

WOOD CASEMASTER BAY

SECTION DETAILS: 90 DEGREE BAY

NOT TO SCALE



Measurement Conversions:

Rough Opening = Center unit frame size width + 1 5/8" (41)

Masonry Opening = Rough opening + 10 3/16" (259)

Projection = Flanker unit frame size width + 6 1/16" (154)