CHAPTER 19A

CLAD ULTIMATE REPLACEMENT CASEMENT

Product Information

Elevations and Sections

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 1-800-346-3363 or visit our website: www.marvin.com.

CLAD ULTIMATE REPLACEMENT CASEMENT

UNIT FEATURES

Frame:
- Interior: Pine wood interior is standard. Optional species including mahogany, vertical grain Douglas fir, cherry and white oak.
- Exterior: Extruded aluminum .050″(1.3) thick
- Frame thickness: 1 3/16″ (30) all the way around
- Frame width: Overall 3 1/4″ jambs (83) for replacement. For new construction or complete tearout from nailing fin plane to interior face of frame 2 3/16″ (56)
- Frame Bevel: Standard is no bevel, options available are 8 degree bevel and 14 degree bevel.

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 5/8″ (43)
- Standard interior wood sticking is ogee. Optional ovolo and square.
- Optional 3 9/16″ (90) bottom rail available.

Interior and exterior finish:
- Interior finish: Treated bare wood or white latex primed (pine only)
- Exterior finish: Two coat finish system using Kynar or Hylar resins, meets or exceeds AAMA 2605 requirements. Standard colors: Stone White, Pebble Gray, Bahama Brown, Bronze and 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:
- Hinges: One at the sill to the bottom rail, one at the head jamb to top rail. Hinges are steel coated with Eguard. Hinge track is stainless steel. Available with 18″ wash/egress hinge, 22″ wash/egress hinge. The hinges allow the end user the ability to slide the sash across the frame opening which causes the sash exterior to rotate towards the user for easy wash ability.
- Units under a 20″ frame OM width use standard 2 bar hinges.
- Operating Hardware: Single arm standard coated with Eguard.
- Units under 20″ frame OM use dyad operator.
- Handles: The standard operator handle set is a folding handle, zinc painted with the standard folding cover being molded plastic. Colors available: Satin Taupe (painted), White (painted), Bronze (painted), Satin Chrome (plated), Satin Nickel (plated), Oil Rubbed Bronze (plated), Brass (plated), Antique Brass (plated). Optional Crank Handle also available. Color options: Satin Taupe (painted), White (painted), Bronze (painted), Brass (plated).
- Locks: Are a multi-point sequential concealed locking system in the jamb opposite the hinge side. Lock sets are removable and non-handed. Standard tie bar, cams and keepers are steel coated with Eguard.

Awning Hardware:
- Hinges: There are two hinges that connect the stiles of the sash to the jambs of the frame. Hinges are steel coated with Eguard, and the hinge track is stainless steel.
- Operating Hardware: Single arm standard stainless steel coated with Eguard.
- Handles: The standard operator handle set is a folding handle, zinc painted with the standard folding cover being molded plastic. Colors available: Satin Taupe (painted), White (painted), Bronze (painted), Satin Chrome (plated), Satin Nickel (plated), Oil Rubbed Bronze (plated), Brass (plated), Antique Brass (plated). Optional Crank Handle also available. Color options: Satin Taupe (painted), White (painted), Bronze (painted), Brass (plated).
- Locks: Are a multi-point sequential concealed locking system in both jambs. Standard tie bar, cams and keepers are steel coated with Eguard.

Casement / Awning Stationary / Picture Units do not have hardware.

Weather Stripping:
- Sash weather strip is bulb shaped glass filled material, available in white, beige or black. Frame weather strip is a hollow foamed material bent around 90 degree corners to allow for seamless corner joints. It is only available in beige.

Jamb Extensions:
- Jamb extensions are available for various wall thickness factory applied up to 12″ (305) wide, finish to match interior.

Insect Screens:
- Aluminum screen surround: Full screen aluminum surround is standard. Surround color: Satin Taupe, optional Stone White or Bronze. Optional wood screen surround available.
- Screen mesh: 18 by 16 Charcoal Fiberglass standard. Optional screen mesh: Charcoal aluminum wire, bright aluminum wire, or bright bronze aluminum wire.
- Optional Charcoal High Transparency screen mesh (CH Hi-Tran) 20 x 20 fiberglass, for aluminum surround, standard on wood screen.

CLAD ULTIMATE REPLACEMENT CASEMENT

UNIT FEATURES

Insect Screens: (not applicable for Stationary / Picture units)

Removable Interior Grilles:
- Interior removable
- 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):
- available with or without spacer bars.
- Interior bar: 5/8″ (16), 7/8″ (22) or 1 1/8″ (29), 1 3/4″ (44) or 2 13/32″ (61)] wide bars. Pine wood standard, optional white oak, cherry, mahogany or vertical grain Douglas fir. Finish to match interior
- Exterior bar: Extruded aluminum clad, 5/8″ (16),7/8″ (22), 1 1/8″ (29), 1 3/4″ (44) or 2 13/32″ (61) wide bars, finish to match exterior
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative

Grilles-between-the-glass (GBG):
- 11/16″ (17) white contoured aluminum bar. Optional flat aluminum bar available.

Glass and Glazing:
- Glazing method: Insulating glass, hermetically sealed with 0.75″ (19) overall thickness.
- Glazing seal: Silicon glazed
- Glazing type: Low E II with Argon, optional clear glass, Laminated, Tempered, Obscure, Bronze tint, Gray tint and Reflective Bronze.
- Insulating glass will be altitude adjusted with capillary tubes for higher elevations. Argon gas is not available for elevations that require capillary tubes.

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, various special casings, mullion cover, frame expander, mullion expander, jamb extender
- Aluminum accessory kerf cover

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

CLAD ULTIMATE REPLACEMENT CASEMENT

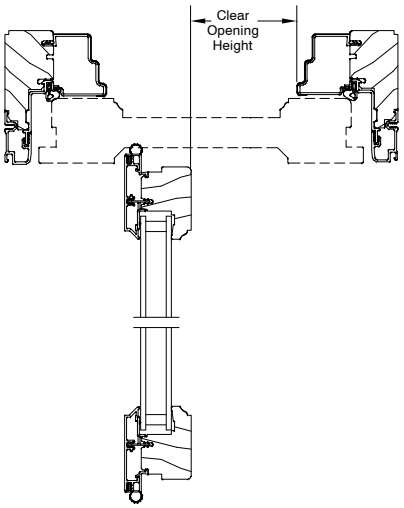
EGRESS, LITE AND VENT MEASUREMENTS

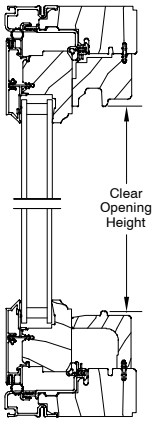
The table below outlines minimum egress and some common sizes. The table below was generated using 24.000″ minimum clear opening height, 20.000″ minimum clear opening width, and 5.700^2 ft. minimum clear opening area to determine if a size was egress compliant.

Clad Ultimate Replacement Casement Operator Egress, Lite, and Ventilation Measurements							
Frame OM Width 20″ and greater – 7.109″ (181) = Egress Width Frame OM width less than 20″ –9.592″ (244) = Egress Width Frame OM Height – 5.114″ (130) = Egress Height							
Frame OM Width	**Frame OM Height**	**Clear Opening (sq. ft.)**	**Clear Opening Width**	**Clear Opening Height**	**Vent Opening (sq. ft.)**	**Daylight Opening (sq. ft.)**	**Egress Compliant**
20.000	31.125	2.33	12.891	31.125	2.71	2.50	No
27.125	46.125	5.70	20.016	41.011	6.31	5.98	Yes
40.000	30.125	5.71	32.891	25.011	6.08	5.78	Yes
40.000	71.125	15.08	32.891	66.011	16.05	15.52	Yes
40.000	91.125	19.65	32.891	86.011	20.92	20.27	Yes

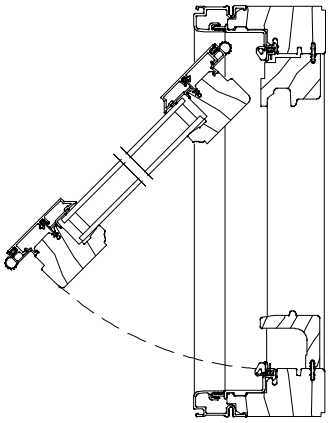
Note:
Daylight opening (sq. ft.) for a given frame size on Casement, Awning, Stationary/Picture are equal.

Casement – Operator





Awning – Vent Opening



NOTE:
Replacement Awning units under 32″ frame OM sash opening 4.750″. 32″ frame OM and over sash opening 11.50″.

CLAD ULTIMATE REPLACEMENT CASEMENT

PRODUCT PERFORMANCE

NFRC Thermal and Solar Performance Values						
Clad Ultimate Replacement Casement Operator						
Glazing Type	U Factor	R Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Condensation Resistance	U.S. Energy Star
Insulating LoE II Glass	0.34	2.94	0.29	0.49	54	N, NC, SC, S
Insulating LoE II Glass SDL <1″	0.34	2.94	0.27	0.44	54	N, NC, SC, S
Insulating LoE II Glass SDL <1″ with spacer bar	0.35	2.86	0.27	0.44	54	N, NC, SC, S
Insulating LoE II Glass SDL >1″	0.34	2.94	0.24	0.40	54	N, NC, SC, S
Insulating LoE II Glass SDL >1″ with spacer bar	0.35	2.86	0.24	0.40	54	N, NC, SC, S
Insulating LoE II Glass GBG	0.34	2.94	0.27	0.44	54	N, NC, SC, S
Insulating LoE II Argon	0.31	3.23	0.29	0.49	57	N, NC, SC, S
Insulating LoE II Argon SDL <1″	0.31	3.23	0.26	0.44	57	N, NC, SC, S
Insulating LoE II Argon SDL <1″ with spacer bar	0.32	3.13	0.26	0.44	57	N, NC, SC, S
Insulating LoE II Argon SDL >1″	0.31	3.13	0.24	0.40	57	N, NC, SC, S
Insulating LoE II Argon SDL >1″ with spacer bar	0.32	3.13	0.24	.40	57	N, NC, SC, S
Insulating LoE II Argon GBG	0.31	3.23	0.26	0.44	57	N, NC, SC, S
Size Tested Frame OM 24 x 59						

Clad Ultimate Replacement Casement Awning						
Glazing Type	U Factor	R Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Condensation Resistance	U.S. Energy Star
Insulating LoE II Glass	0.34	2.94	0.29	0.49	52	N, NC, SC, S
Insulating LoE II Glass SDL <1″	0.34	2.94	0.27	0.44	52	N, NC, SC, S
Insulating LoE II Glass SDL <1″ with spacer bar	0.34	2.94	0.27	0.44	52	N, NC, SC, S
Insulating LoE II Glass SDL >1″	0.34	2.94	0.24	0.40	52	N, NC, SC, S
Insulating LoE II Glass SDL >1″ with spacer bar	0.34	2.94	0.24	0.40	52	N, NC, SC, S
Insulating LoE II Glass GBG	0.34	2.94	0.27	0.44	52	N, NC, SC, S
Insulating LoE II Argon	0.31	3.23	0.29	0.49	56	N, NC, SC, S
Insulating LoE II Argon SDL <1″	0.31	3.23	0.26	0.44	56	N, NC, SC, S
Insulating LoE II Argon SDL <1″ with spacer bar	0.32	3.13	0.26	0.44	56	N, NC, SC, S
Insulating LoE II Argon SDL >1″	0.31	3.23	0.24	0.40	56	N, NC, SC, S
Insulating LoE II Argon SDL >1″ with spacer bar	0.31	3.23	0.24	0.40	56	N, NC, SC, S
Insulating LoE II Argon GBG	0.31	3.23	0.26	0.44	56	N, NC, SC, S
Size Tested Frame OM 59 x 47						

Clad Ultimate Replacement Casement/Awning Picture						
Glazing Type	U Factor	R Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Condensation Resistance	U.S. Energy Star
Insulating LoE II Glass	0.32	3.13	0.33	0.57	53	N, NC, SC, S
Insulating LoE II Glass SDL <1″	0.32	3.13	0.30	0.51	53	N, NC, SC, S
Insulating LoE II Glass SDL <1″ with spacer bar	0.33	3.03	0.30	0.51	53	N, NC, SC, S
Insulating LoE II Glass SDL >1″	0.32	3.13	0.27	0.45	53	N, NC, SC, S
Insulating LoE II Glass SDL >1″ with spacer bar	0.34	2.94	0.27	0.45	53	N, NC, SC, S
Insulating LoE II Glass GBG	0.32	3.13	0.30	0.51	53	N, NC, SC, S
Insulating LoE II Argon	0.29	3.45	0.33	0.57	57	N, NC, SC, S
Insulating LoE II Argon SDL <1″	0.29	3.45	0.30	0.51	57	N, NC, SC, S
Insulating LoE II Argon SDL <1″ with spacer bar	0.30	3.33	0.30	0.51	57	N, NC, SC, S
Insulating LoE II Argon SDL >1″	0.29	3.45	0.27	0.45	57	N, NC, SC, S
Insulating LoE II Argon SDL >1″ with spacer bar	0.30	3.33	0.27	0.45	57	N, NC, SC, S
Insulating LoE II Argon GBG	0.29	3.45	0.30	0.51	57	N, NC, SC, S
Size Tested Frame OM 47 x 59						

NOTE: >1″ and <1″ are referring to the overall bar size.
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.
Solar Heat Gain Coefficient (SHGC): The lower a window's SHGC, the less solar heat it transmits, and the greater its shading ability.
Visible Light Transmittance (VLT): Percentage of visible light transmitted through the unit.
Condensation Resistance (CR): Condensation Resistance measures the ability of a product to resist the formation of condensation on the interior surface of a product.The higher the CR rating, the better that product is at resisting condensation formation.
Capillary tubes are required for IG units at high elevations. Argon will not be furnished in units with capillary tubes.
Values listed are common glazing options, call 800-346-3363 for additional NFRC unit values.

CLAD ULTIMATE REPLACEMENT CASEMENT

STRUCTURAL VALUES / HANDING DETERMINATION

Structural Performance Values							
Casement Operator							
WDMA Verified Performance					CSA A-440.1 Ratings		
Frame Size Tested	Design Pressure DP	101/I.S. 2-97 Rating	101/I.S. 2/NAFS-02 Rating	101/I.S. 2/A440-05 Rating	Air	Water	Wind
36 X 96 1/8″	+50/-50	C-C50	C-C50	C-C50	A3	B3	C3
40 X 92″	+50/-50	C-C50	C-C50	C-C50	A3	B3	C3

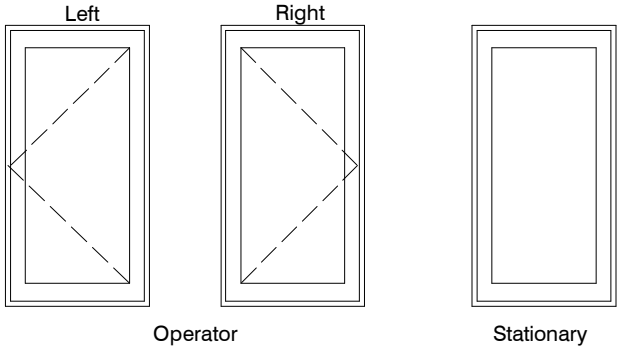
Awning Operator							
WDMA Verified Performance					CSA A-440.1 Ratings		
Size Tested	Design Pressure DP	101/I.S. 2-97 Rating	101/I.S. 2/NAFS-02 Rating	101/I.S. 2/A440-05 Rating	Air	Water	Wind
72 X 63 1/8″	+50/-50	AP-C50	AP-C50	AP-C50	A3	B3	C3

Stationary / **Picture**							
WDMA Verified Performance					CSA A-440.1 Ratings		
Size Tested	Design Pressure DP	101/I.S. 2-97 Rating	101/I.S. 2/NAFS-02 Rating	101/I.S. 2/A440-05 Rating	Air	Water	Wind
64 X 96 1/8″	+50/-50	F-C50	F-C50	F-C50	A3	B3	C3
96 1/8 X 64″	+50/-50	F-C50	F-C50	F-C50	A3	B3	C3

NOTE:
Values shown are for 1-lite units, Multiple assemblies and sizes larger than tested are not represented by listed values.
Products with higher performance may or may not be available, please call 800-346-3363 for further information.

Handing Determination

Clad Ultimate Replacement Casement units are available as an operator left or right hand hinged determined from exterior or stationary



CLAD ULTIMATE REPLACEMENT CASEMENT

MINIMUM AND MAXIMUM MEASUREMENTS

Minimum and Maximum Measurements - Casement					
Glazing Type	**Minimum Frame OM Width**	**Minimum Frame OM Height**	**Maximum Frame OM Width**	**Maximum Frame OM Height**	**Maximum Sash Weight**
Operator					**Operator**
Insulating Glass 3/4″ (19)	13 1/2″ (343)	11 1/2″ (292)	40″ (1016)	*	150 lbs.

* If width is greater than 36″ (914) = 92″ (2237)
If width is less than or equal to 36″ (914) = 96 1/8″ (2442)

NOTE:
These minimum and maximum measurements are guidelines for configuring custom sized units, all measurements are specific to glass type. For assistance please call 800-346-3363 or your Marvin representative.

Minimum and Maximum Measurements - Awning				
Glazing Type	**Minimum Frame OM Width**	**Minimum Frame OM Height**	**Maximum Frame OM Width**	**Maximum Frame OM Height**
Operator				
Insulating Glass 3/4″ (19)	16″ (406)	11 1/2″ (292)	72″ (1829)	63 1/8″ (1603)

NOTE:
These minimum and maximum measurements are guidelines for configuring custom sized units, all measurements are specific to glass type. For assistance please call 800-346-3363 or your Marvin representative.

Minimum and Maximum Measurements - Casement/Awning Stationary/Picture				
Glazing Type	**Minimum Frame OM Width**	**Minimum Frame OM Height**	**Maximum Frame OM Width**	**Maximum Frame OM Height**
Picture				
Insulating Glass 3/4″ (19)	12″ (305)	11 1/2″ (292)	64″ (1626)	96 1/8″ (2442)
Insulating Glass 3/4″ (19)	12″ (305)	11 1/2″ (292)	96 1/8″ (2442)	64″ (1626)

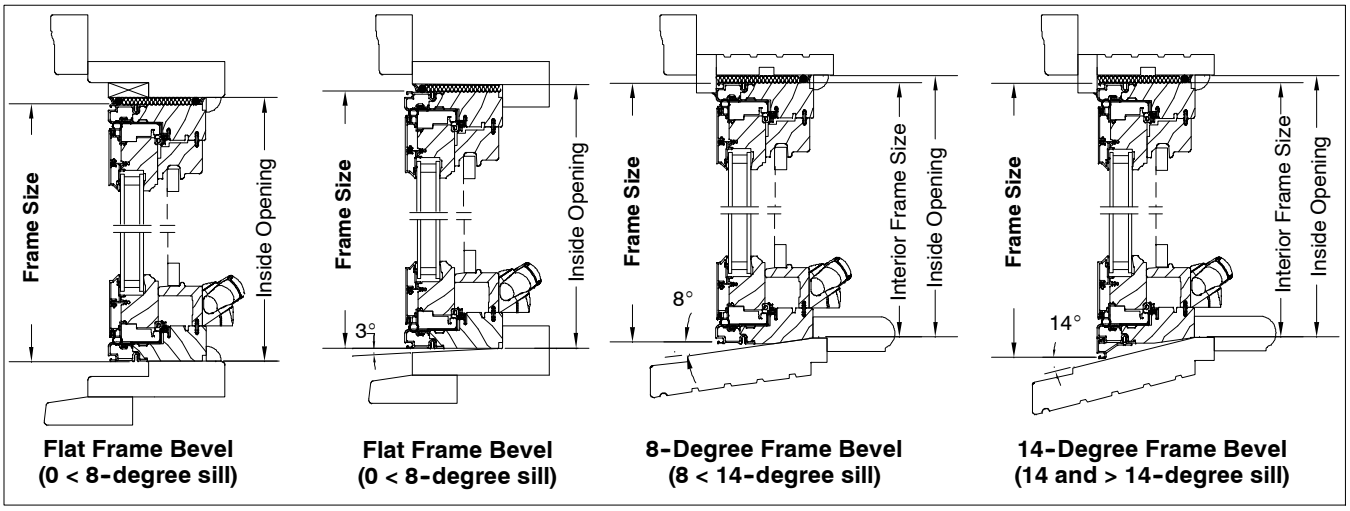
NOTE:
These minimum and maximum measurements are guidelines for configuring custom sized units, all measurements are specific to glass type. For assistance please call 800-346-3363 or your Marvin representative.

CLAD ULTIMATE REPLACEMENT CASEMENT

MEASUREMENT CONVERSIONS

Unit	Width	Height
Masonry Opening to Rough Opening (without BMC)	+ 1/2″ (13)	+ 1/4″ (6)
Masonry Opening to Rough Opening (with BMC)	- 2 1/8″ (54)	- 1 11/16″ (43)
Masonry Opening to Rough Opening (with Flat Casing)	- 5 1/2″ (140)	- 3 3/8″ (86)
Masonry Opening to Outside Measurement of BMC	- 1/2″ (13)	- 1/4″ (6)
Masonry Opening to Outside Measurement of Flat Casing	- 1/2″ (13)	- 1/4″ (6)
Outside Measurement of Frame to Rough Opening	+ 1″ (25)	+ 1/2″ (37)
Glass Size to Rough Opening	+ 5 23/32″ (145)	+ 5 7/32″ (133)
Sash Opening to Rough Opening	+ 2 5/16″ (59)	+ 1 13/16″ (46)
Sash		
Glass Size to Sash Opening	+ 3 13/32″ (87)	+ 3 13/32″ (87)
Glass Size to Outside Measurement of Sash	+ 3 3/32″ (79)	+ 3 3/32″ (79)
Outside Measurement of Sash to Rough Opening	+ 2 5/8″ (67)	+ 2 1/8″ (54)
Glass Size to Daylight Opening	- 1 3/32″ (28)	- 1 3/32″ (28)
Rough Opening to Daylight Opening	- 6 13/16″ (173)	- 6 5/16″ (160)
Screen		
Rough Opening to Outside Measurement	- 5 11/16″ (144)	- 5 13/16″ (148)
Glass to Outside Measurement	+ 1/32″ (1)	- 3/16″ (5)
Daylight Opening to Outside Measurement	+ 1 1/8″ (29)	+ 29/32″ (23)
Wide Bottom Rail Option		
Rough Opening to Daylight Opening	- 6 13/16″ (173)	- 7 13/16″ (198)
Glass to Daylight Opening	+ 5 23/32″ (145)	+ 6 23/32″ (171)

NOTE:
Conversions represent units without dividers. Contact your Marvin representative for additional conversions.



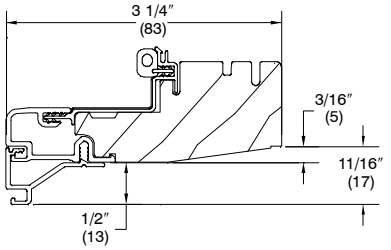
Flat Frame Bevel (0 < 8-degree sill)

Flat Frame Bevel (0 < 8-degree sill)

8-Degree Frame Bevel (8 < 14-degree sill)

14-Degree Frame Bevel (14 and > 14-degree sill)

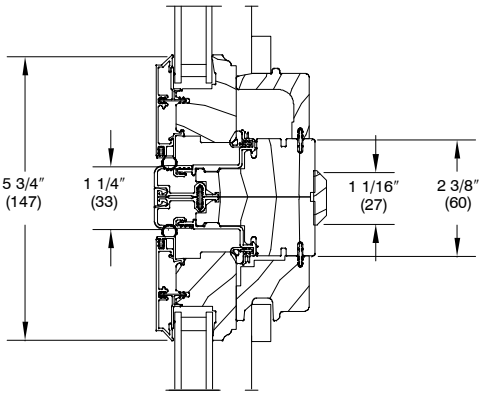
Interior Frame Size to Frame Size (exterior)	
Frame Bevel	**Conversions**
0°	0 (0)
8°	+ 3/16 (5)
14°	+ 11/16 (17)



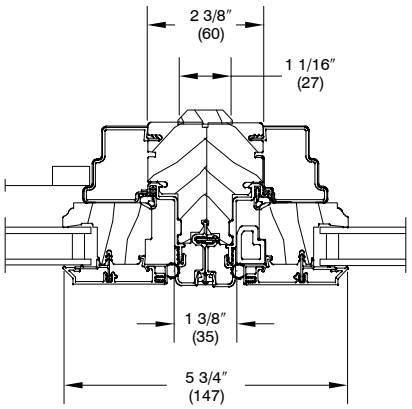
CLAD ULTIMATE REPLACEMENT CASEMENT

SECTION DETAILS: MULLIONS

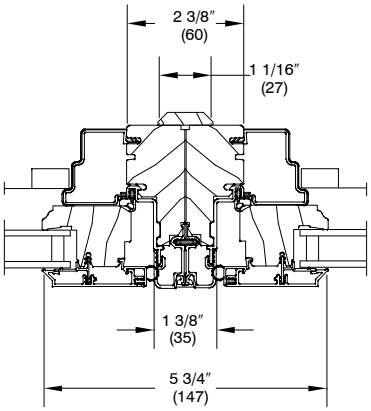
SCALE: 3″ = 1′ 0″



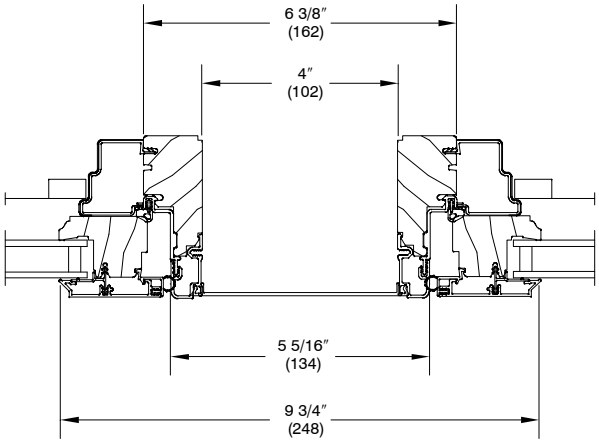
Horizontal Mullion
Stationary / Operator



Vertical Mullion
Operator/Picture



Vertical Mullion
Operator/Operator



Vertical Mullion
Operator with 4″ Space Mull

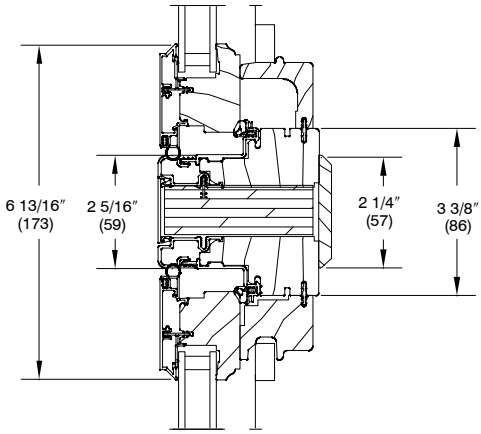
NOTE:
For information on structural mullions refer to the Product Performance and Information section.
Interior trim supplied by Marvin applied by others

CLAD ULTIMATE REPLACEMENT CASEMENT

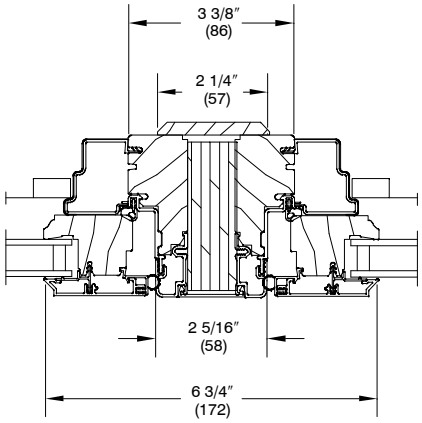
SECTION DETAILS: MULLIONS

SCALE: 3″ = 1′ 0″

Structural 1″ LVL Mullions



Horizontal Mullion



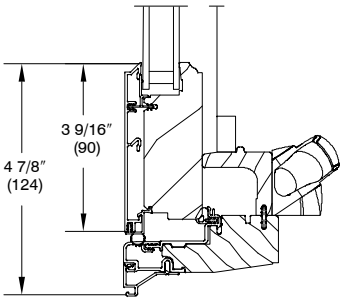
Vertical Mullion

NOTE:
For information on structural mullions refer to the Product Performance and Information section.
Interior trim supplied by Marvin applied by others

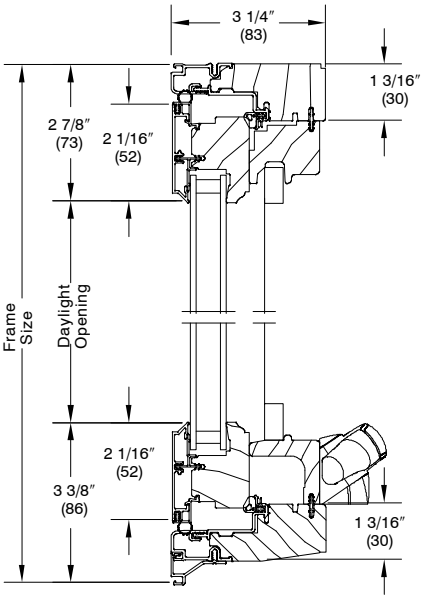
CLAD ULTIMATE REPLACEMENT CASEMENT

SECTION DETAILS: CASEMENT/AWNING OPERATING

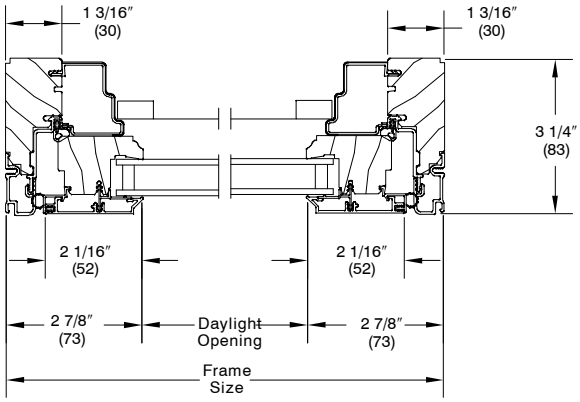
NOT TO SCALE



Sill Wide Bottom Rail

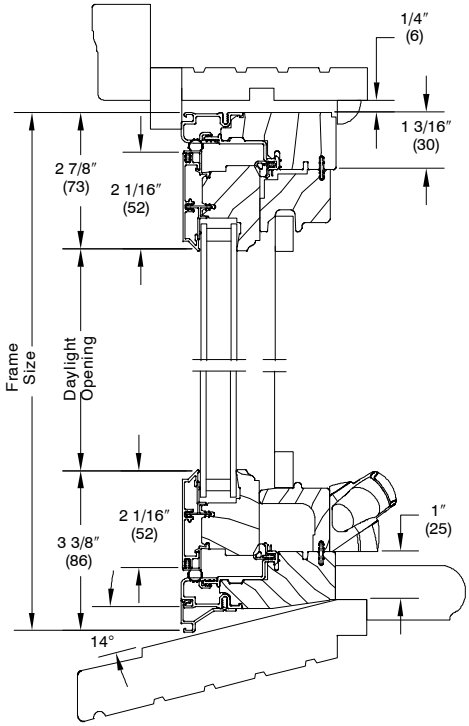


Head Jamb and Sill

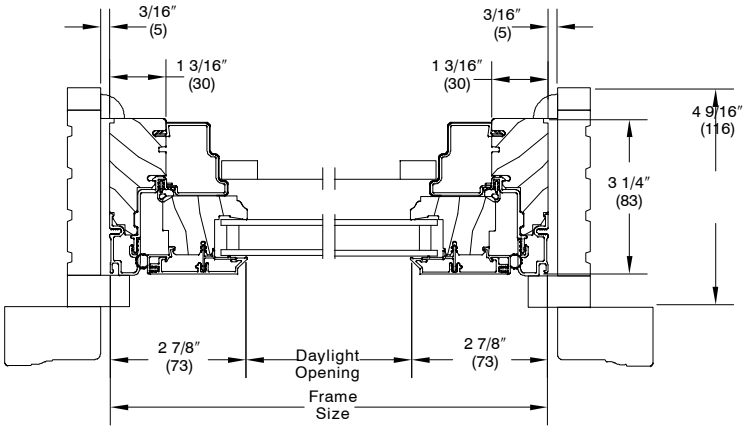


Jambs

Installed In Existing Double Hung Frame with Sloped Sill



Head Jamb and Sill



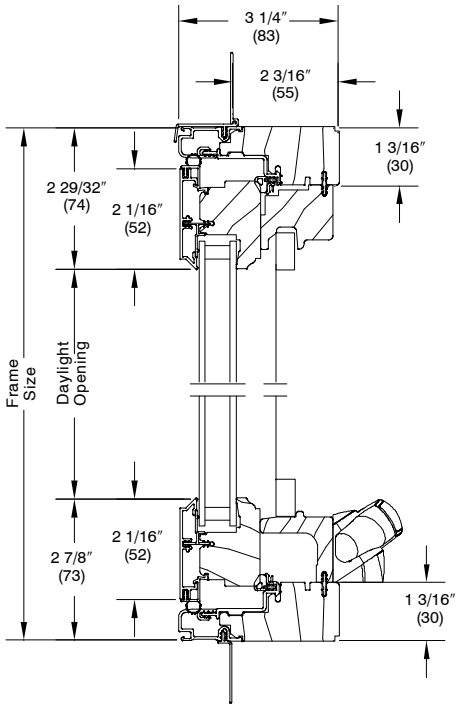
Jambs

NOTE:
Installed in Double Hung frame, with optional 14° frame bevel.

CLAD ULTIMATE REPLACEMENT CASEMENT

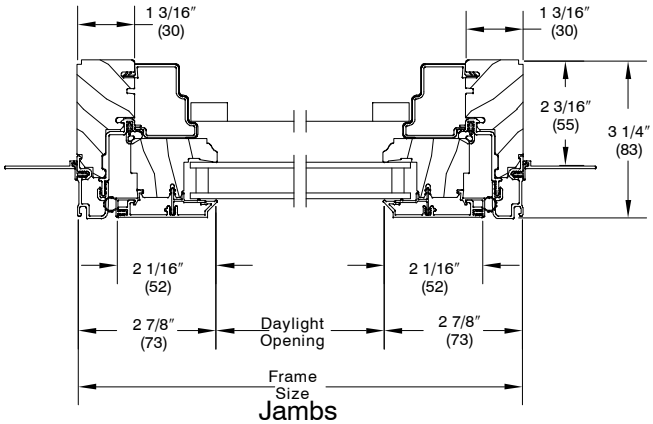
SECTION DETAILS: CASEMENT/AWNING OPERATING

NOT TO SCALE



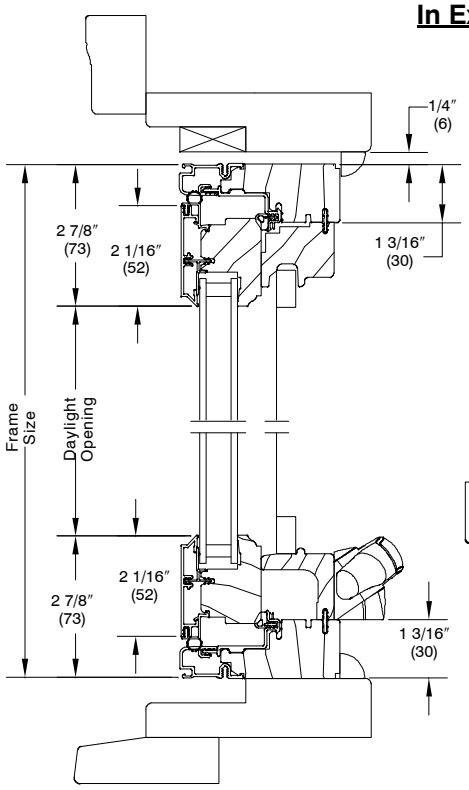
Head Jamb and Sill

NOTE:
Shown with optional nailing fin.

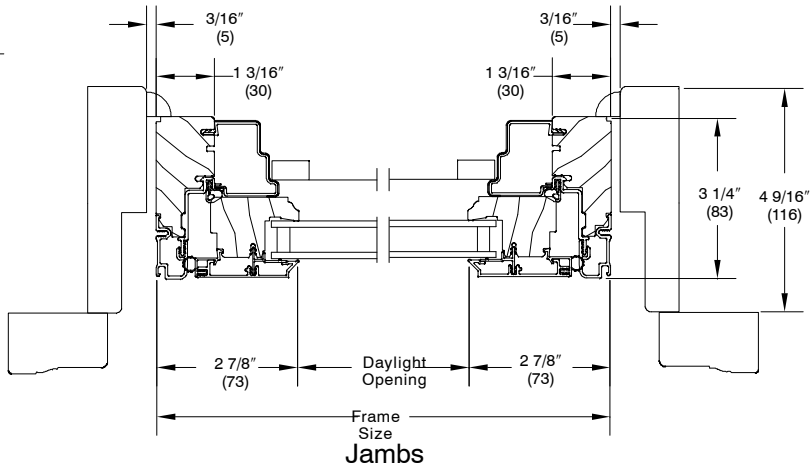


Jambs

In Existing Casement Frame



Head Jamb and Sill



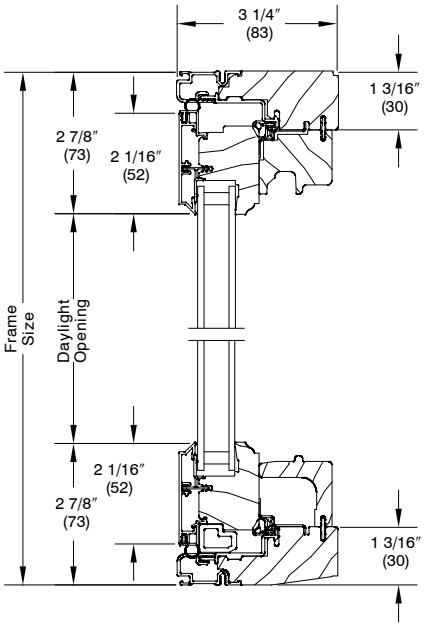
Jambs

NOTE:
No frame bevel.

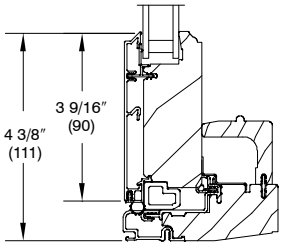
CLAD ULTIMATE REPLACEMENT CASEMENT

SECTION DETAILS: CASEMENT/AWNING STATIONARY/PICTURE

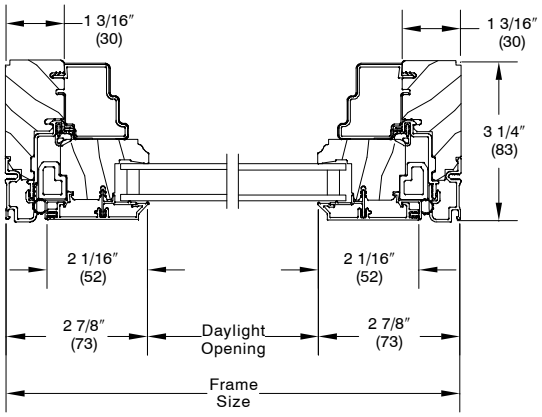
NOT TO SCALE



Head Jamb and Sill

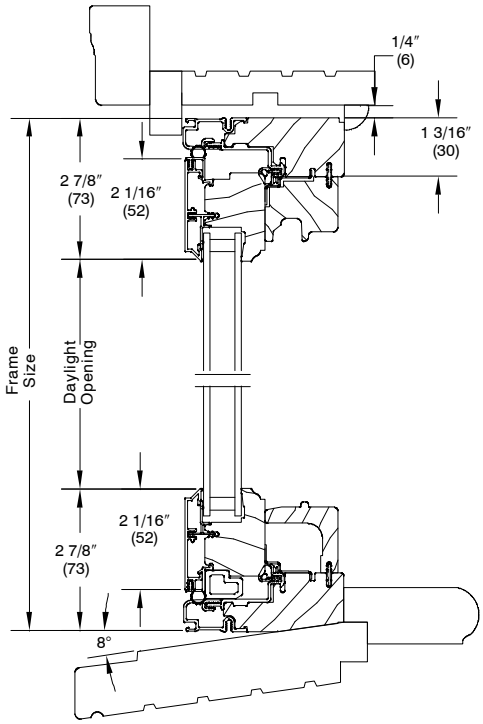


Sill Wide Bottom Rail

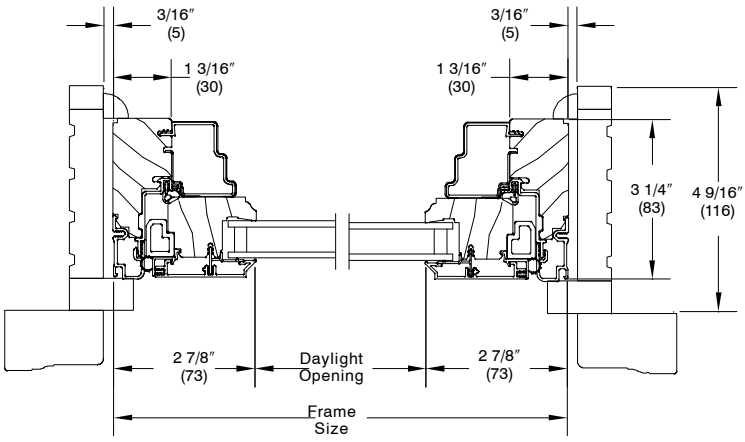


Jambs

Installed In Existing Double Hung Frame with Sloped Sill



Head Jamb and Sill



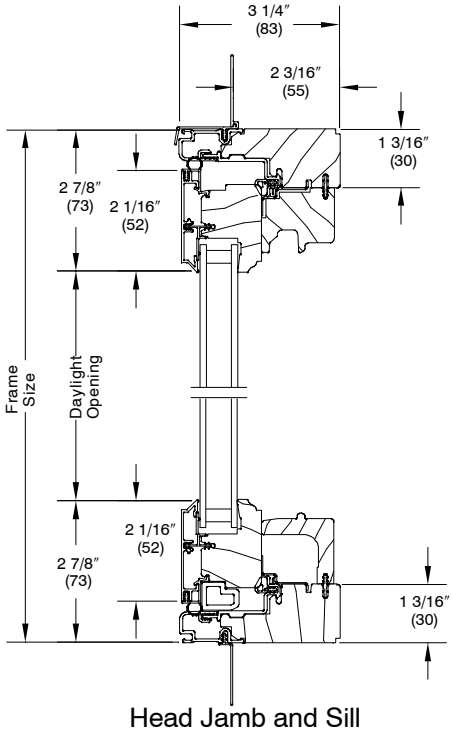
Jambs

NOTE:
Installed in Double Hung frame, with optional 8° frame bevel.

CLAD ULTIMATE REPLACEMENT CASEMENT

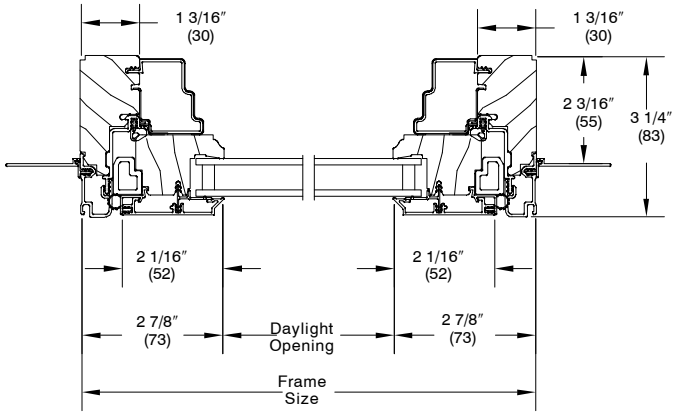
SECTION DETAILS: CASEMENT/AWNING STATIONARY/PICTURE

NOT TO SCALE



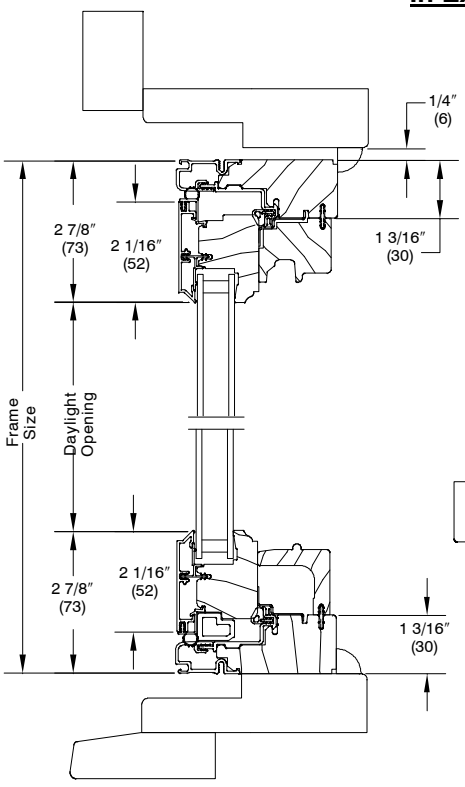
Head Jamb and Sill

NOTE:
Shown with optional nailing fin.

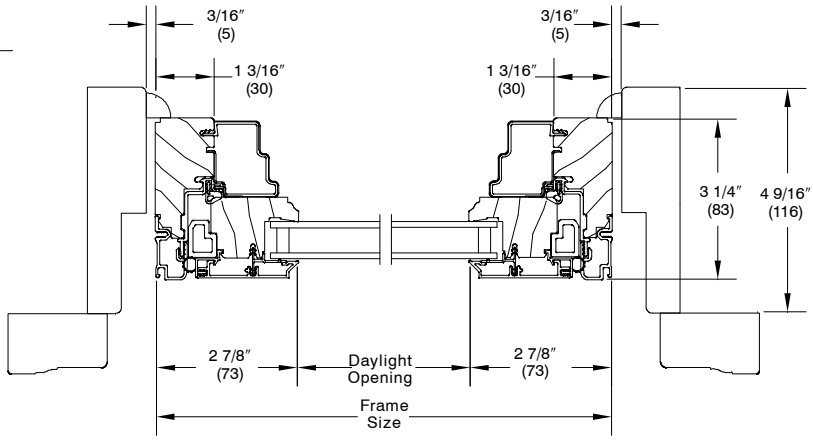


Jambs

In Existing Casement Frame



Head Jamb and Sill



Jambs

NOTE:
No frame bevel.

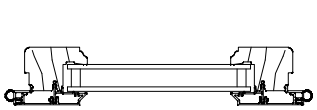
CLAD ULTIMATE REPLACEMENT CASEMENT

MARVIN Windows and Doors
Built around you.

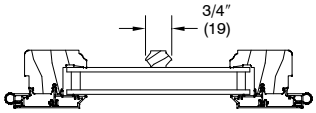
SECTION DETAILS: DIVIDED LITE OPTIONS

NOT TO SCALE

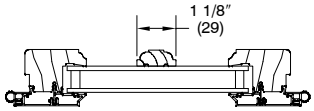
Casement Awning and Casement/Awning Picture
3/4″ Insulating Glass



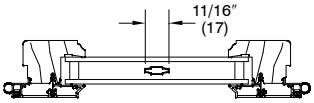
Insulating Glass



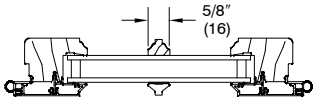
3/4″ Grille



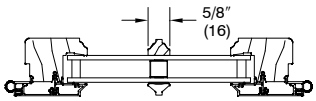
1 1/8″ Grille



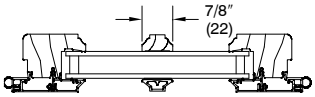
Aluminum
11/16″ Contour GBG



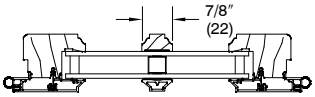
5/8″ SDL
without Spacer Bar



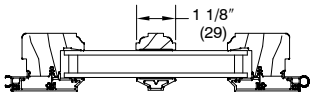
5/8″ SDL
with Spacer Bar



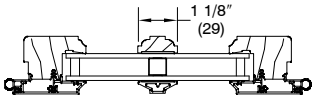
7/8″ SDL
without Spacer Bar



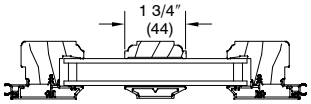
7/8″ SDL
with Spacer Bar



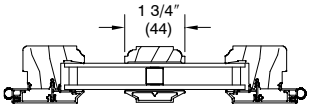
1 1/8″ SDL
without Spacer Bar



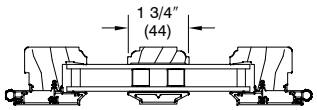
1 1/8″ SDL
with Spacer Bar



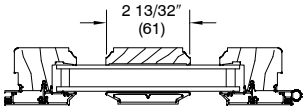
1 3/4″ SDL
without Spacer Bar



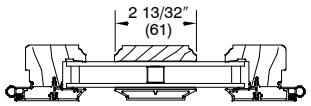
1 3/4″ SDL
with Spacer Bar



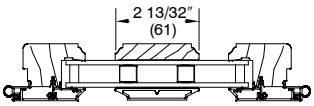
1 3/4″ SDL
with Two Spacer Bars



2 13/32″ SDL
without Spacer Bar

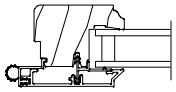


2 13/32″ SDL
with Spacer Bar

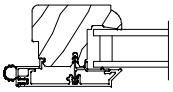


2 13/32″ SDL
with Two Spacer Bars

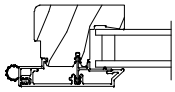
NOTE:
Grille = Removable interior divider
SDL = Simulated divided lite
GBG = Grilles between glass



Ogee – Standard



Ovolo
Sticking Profiles

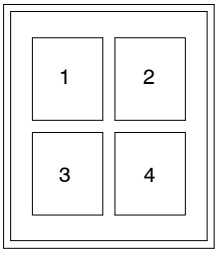


Square

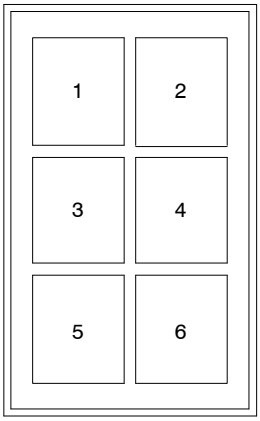
* Grille – available for use in Ogee and Ovolo sash sticking.
SDL – available for use on Ogee and Ovolo sash sticking only
GBG – available with all three sticking profiles

Determining Lite Cuts

NOTE: Count the lites not the bars. Samples shown with 1 1/8″ SDL bar.



Example shown is:
2 wide and 2 high,
4 lite total.

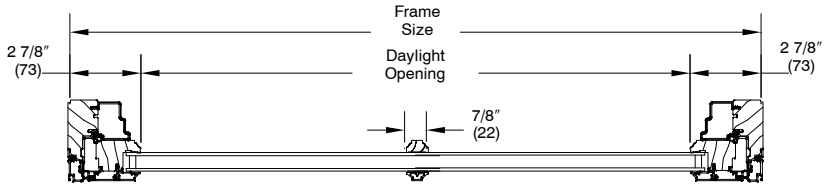


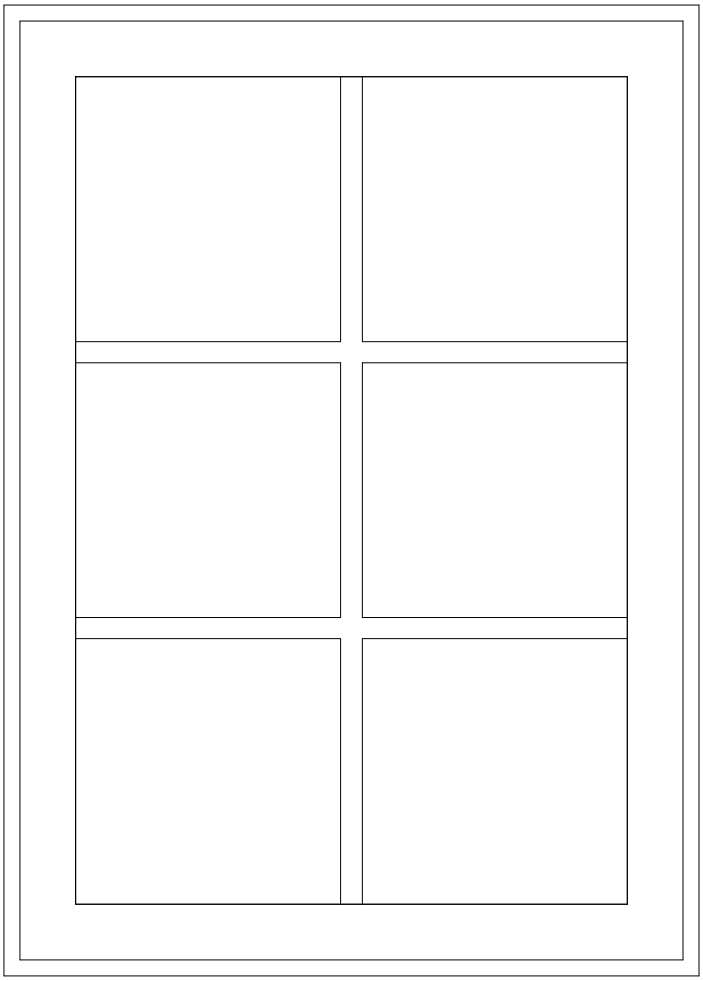
Example shown is:
2 wide and 3 high,
6 lite total.

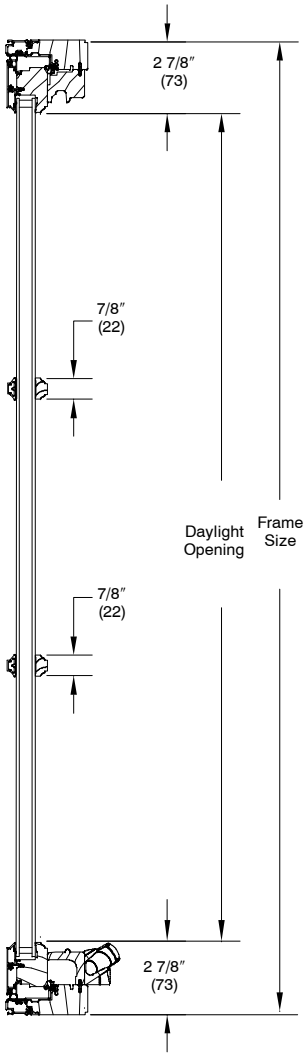
CLAD ULTIMATE REPLACEMENT CASEMENT

RECTANGULAR DAYLIGHT OPENING CONVERSIONS

SCALE: 1 1/2″ = 1′ 0″







Conversion Formula:

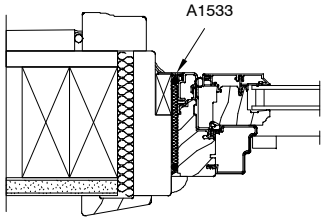
$$\frac{\text{DLO - Total Bar Width}}{\text{Number of Lites}} = \text{Individual DLO}$$

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

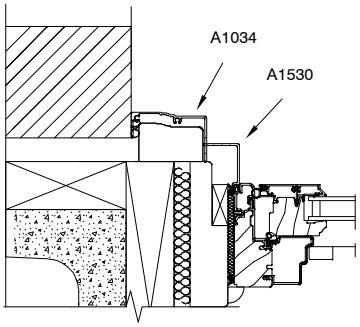
CLAD ULTIMATE REPLACEMENT CASEMENT

SECTION DETAILS: CLAD APPLICATIONS

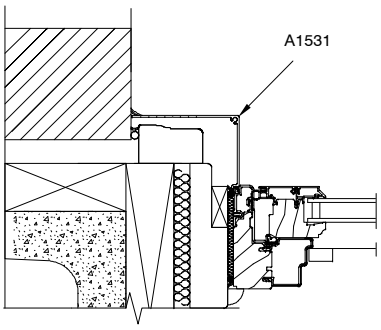
NOT TO SCALE



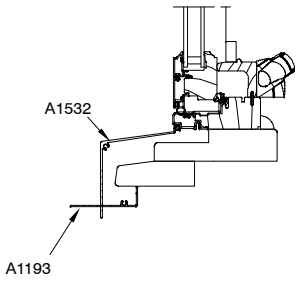
Frame Expander



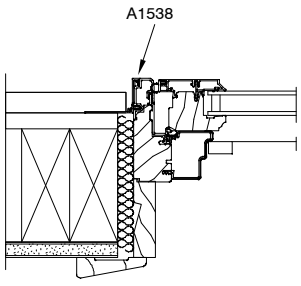
Panning (BMC shown)



Panning (Masonry shown)



Sill Panning



Panning with Kerf Cover