

CHAPTER 24

WOOD GLIDER

Product Information

Unit Features	24.2
NFRC Values / Minimum and Maximum Values	24.3
Egress, Lite and Vent Values / Design Pressure	24.4
Measurement Conversion Values	24.5

Elevations and Sections

Elevations: Operating / Triple Sash	24.6
Section Details: Operating	24.7
Section Details: Combination / Mullions	24.8
Divided Lite Options	24.9
Daylight Opening Conversions	24.10
Elevations: Standard Divided Lite Patterns	24.11
Section Details: Construction	24.12

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 GLIDER

UNIT FEATURES

Frame:

- Pine wood interior and exterior
- Frame width: 4 9/16" (116)
- Frame thickness: 1 11/16" (43), Head jamb 1 1/16" (17), Jamb 1 3/32" (28)

Sash:

- Interior: Pine wood interior and exterior
- Sash thickness: 1 5/16" (33 mm)
- Operating meeting stile width: 2 1/4" (57)
- Operating stile width at jamb: 2 1/16" (52)
- Operating Top rail width: 1 21/32" (42)
- Stationary Top rail width: 2 1/8" (54)
- Operating bottom rail width: 2 11/32" (60)
- Stationary bottom rail: 3 3/4" (95)

Interior and exterior finish:

- Bare or primed interior or exterior

Operating Hardware:

- Locks: High pressure zinc die-cast cam lock and keeper at checkrail. Optional keyed lock. Two locks on call number 40 and over. Color: Satin Taupe. Optional: Bronze, White or Plated brass
- Sill track: Vinyl extrusion with foam backing. Color: White
- Finger Pull on operating sash

Weatherstripping:

- Weather strip: Dual durometer weather strip at check rail, dual durometer bulb weather strip on operating sash and leaf type weather strip on operating jamb
- Foam backed vinyl head track with built-in head weather strip fin. Sill track 7/8 inch (22) high with fin seal weather strip. Leaf weather strip between top of stationary sash and head jamb frame member. Color: White

Jamb Extensions:

- Interior pine wood extensions available for various wall thickness factory applied, finish to match interior

Insect Screens:

- Aluminum screen: Factory installed half screen, removable to interior. Color: Satin Taupe. Optional Stone White or Bronze.
- Screen mesh: 18 by 16 charcoal fiberglass. Optional screen mesh: Charcoal aluminum wire, Black aluminum wire, Bright aluminum wire, Bright bronze wire
- Optional High Transparency screen mesh (Hi-Tran) 20 x 20 charcoal fiberglass.

Wood Combination Storm Sash and Screen:

- Frame thickness: 1-1/16 inches (26). Rigid track utilized to hold storm and screen panels. Finish: Treated bare wood. Latex primer, White
- Hardware: Metal pulls on sliding storm panels. Metal clips to lock storm panels at center stile

Removable Interior Grilles:

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

Simulated Divided Lites (SDL):

- Interior / Exterior bars: Pine wood, 7/8" (22) or 1 1/8" (29) wide bars
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative
- Installation method: Factory applied with acrylic foam tape

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)
- Marvin SillGuard™
- Aluminum drip cap: Color: Bahama Brown, Bronze, Evergreen, Pebble Gray, White. Drip cap not designed to replace proper flashing
- Wood exterior mouldings: Brick Mould Casing, Flat casing, Mullion cover

Note:

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

WOOD GLIDER

NFRC UNIT VALUES / MINIMUM AND MAXIMUM MEASUREMENTS

NFRC Unit Values					
Glazing Type	U-Factor	R-Value	Solar Heat Gain Coefficient	Visible Light Transmittance	Energy Star
Glider					
Size Tested	60 x 36	60 x 36	60 x 36	60 x 36	
Single Glaze	0.92	1.09	0.61	0.61	-
Single Glaze with EP	0.47	2.13	0.54	0.56	-
Single Glaze with Low E EP	0.37	2.70	0.46	0.51	NC
Insulating glass	0.53	1.89	0.54	0.56	-
Insulating glass - SDL with spacer bars	0.51	1.96	0.49	0.50	-
Insulating Low E II glass	0.42	2.38	0.30	0.49	S
Insulating Low E II glass - SDL with spacer bars	0.41	2.44	0.28	0.44	S
Insulating Low E II glass - Argon	0.37	2.70	0.30	0.49	NC, SC, S
Insulating Low E II glass - Argon, SDL with spacer bars	0.36	2.78	0.28	0.44	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 Glass Square Feet
Operator					
Insulating Glass	30 5/8" (778)	19 9/16" (497)	70 5/8" (1794)	55 9/16" (1411)	27.25 Sq. feet (2.53 Sq. Meters)
Single Glaze	30 5/8" (778)	19 9/16" (497)	70 5/8" (1794)	55 9/16" (1411)	27.25 Sq. feet (2.53 Sq. Meters)
Single Glaze with EP	30 5/8" (778)	19 9/16" (497)	70 5/8" (1794)	55 9/16" (1411)	27.25 Sq. feet (2.53 Sq. Meters)
Triple Sash					
Insulating Glass	43 1/2" (1105)	19 9/16" (497)	95 1/2" (2426)	55 9/16" (1411)	36.84 Sq. feet (3.42 Sq. Meters)
Single Glaze	43 1/2" (1105)	19 9/16" (497)	95 1/2" (2426)	55 9/16" (1411)	36.84 Sq. feet (3.42 Sq. Meters)
Single Glaze with EP	43 1/2" (1105)	19 9/16" (497)	95 1/2" (2426)	55 9/16" (1411)	36.84 Sq. feet (3.42 Sq. Meters)

NOTE:

Standard glass size widths, on a triple sash flankers are 20" (508). Maximum glass size on center sash is 48" (1219).

For larger glass size widths, contact your Marvin Architectural Department for correct conversion.

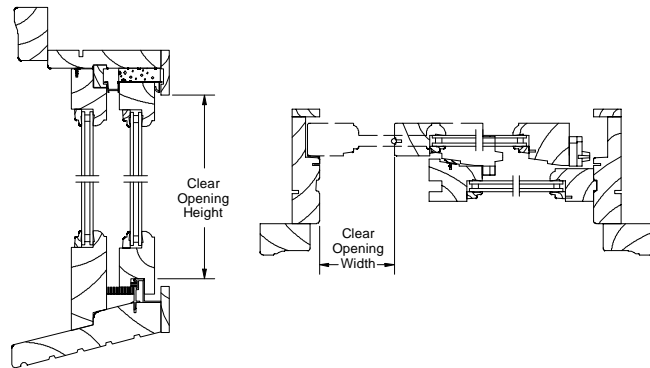
WOOD GLIDER

EGRESS, LITE & VENT MEASUREMENTS / DESIGN PRESSURE VALUES

Egress, Lite and Vent Measurements - Glider						
Call #	Total Square Feet	Clear Opening Width	Clear Opening Height	Floor to Sill Height	Vent Opening	Lite (Both Sash)
Egress Openings						
1616	1.80	14.38	18.00	62.31	1.80	3.10
1624	2.60	14.38	26.00	54.31	2.60	4.76
1628	3.00	14.38	30.00	50.31	2.99	5.59
1632	3.40	14.38	34.00	46.31	3.39	6.42
1636	3.79	14.38	38.00	42.31	3.79	7.25
1640	4.19	14.38	42.00	38.31	4.19	8.08
1648	4.99	14.38	50.00	30.31	4.99	9.74
2016	2.30	18.38	18.00	62.31	2.30	3.93
2024	3.32	18.38	26.00	54.31	3.32	6.03
2028	3.83	18.38	30.00	50.31	3.83	7.09
2032	4.34	18.38	34.00	46.31	4.34	8.14
2036	4.85	18.38	38.00	42.31	4.85	9.19
2040	5.36	18.38	42.00	38.31	5.36	10.24
2048	6.38	18.38	50.00	30.31	6.38	12.35
2416	2.80	22.38	18.00	62.31	2.80	4.76
2424	4.04	22.38	26.00	54.31	4.04	7.31
2428	4.66	22.38	30.00	50.31	4.66	8.58
2432	5.28	22.38	34.00	46.31	5.28	9.86
2436*	5.91	22.38	38.00	42.31	5.90	11.13
2440*	6.53	22.38	42.00	38.31	6.53	12.40
2448*	7.77	22.38	50.00	30.31	7.77	14.95
2816	3.30	26.38	18.00	62.31	3.30	5.59
2824	4.76	26.38	26.00	54.31	4.76	8.58
2828	5.50	26.38	30.00	50.31	5.49	10.08
2832*	6.23	26.38	34.00	46.31	6.23	11.57
2836*	6.96	26.38	38.00	42.31	6.96	13.07
2840*	7.69	26.38	42.00	38.31	7.69	14.57
2848*	9.16	26.38	50.00	30.31	9.16	17.56
3216	3.80	30.38	18.00	62.31	3.80	6.42
3224	5.49	30.38	26.00	54.31	5.48	9.86
3228**	6.33	30.38	30.00	50.31	6.33	11.57
3232**	7.17	30.38	34.00	46.31	7.17	13.29
3236*	8.02	30.38	38.00	42.31	8.02	15.01
3240*	8.86	30.38	42.00	38.31	8.86	16.73
3248*	10.55	30.38	50.00	30.31	10.55	20.17
Glider Triple Sash						
20-4032-20	4.85	20.56	34.00	46.31	8.22	16.50
20-4040-20*	6.00	20.56	42.00	38.31	10.15	20.77
20-4048-20*	7.14	20.56	50.00	30.31	12.09	25.04
20-4832-20	4.85	20.56	34.00	46.31	9.70	18.22
20-4840-20*	6.00	20.56	42.00	38.31	12.00	22.93
20-4848-20*	7.14	20.56	50.00	30.31	14.28	27.65

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".



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.

Design Pressure Values - Operators						
Call #	16	20	24	28	32	
Width						
Height	16	DP 35	DP 35	DP 35	DP 35	DP 35
	24	DP 35	DP 35	DP 35	DP 35	DP 35
	28	DP 35	DP 35	DP 35	DP 35	DP 35
	32	DP 35	DP 35	DP 35	DP 35	DP 35
	36	DP 35	DP 35	DP 35	DP 35	DP 35
	40	DP 35	DP 35	DP 35	DP 35	DP 35
48	DP 35	DP 35	DP 35	DP 35	DP 35	

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.

WOOD GLIDER

MEASUREMENT CONVERSIONS: OPERATING / TRIPLE SASH

Measurement Conversions - Operator									
Size Referenced	Daylight Opening (DLO)		Glass Size (GS)		Frame Size		Rough Opening		Masonry Opening
Daylight Opening (DLO)	Dimension Needed								
	Width		+ 1 1/16" (27)	Width		DLO x 2 + 7 3/4" (170)	Width		DLO x 2 + 10 13/16" (275)
Glass Size (GS)	Height		+ 1 1/16" (27)	Height		+ 8 1/8" (206)	Height		+ 8 5/8" (219)
	Width		- 1 1/16" (27)	Width		GS x 2 + 5 5/8" (143)	Width		GS x 2 + 6 5/8" (168)
Frame Size	Height		- 1 1/16" (27)	Height		+ 7 1/16" (179)	Height		+ 7 9/16" (192)
	Width		- 7 3/4" + 2 (170)	Width		- 5 5/8" + 2 (143)	Width		+ 1" (25)
Rough Opening	Height		- 8 1/8" (206)	Height		- 7 1/16" (179)	Height		+ 1/2" (13)
	Width		- 8 3/4" + 2 (195)	Width		- 6 5/8" + 2 (168)	Width		- 1" (25)
Masonry Opening	Height		- 8 5/8" (219)	Height		- 7 9/16" (192)	Height		- 1/2" (13)
	Width		- 8 3/4" + 2 (195)	Width		- 6 5/8" + 2 (168)	Width		- 1" (25)
Masonry Opening	Width		- 10 13/16" + 2 (275)	Width		- 8 11/16" + 2 (221)	Width		- 3 1/16" (78)
	Height		- 9 15/16" (252)	Height		- 8 7/8" (225)	Height		- 1 13/16" (40)

Egress Conversions - Operator

Glass Size Width -1 5/8" (41) Glass Size Height: +2" (51)
 Rough Opening Width /2 -4 15/16" (125) Rough Opening Height: -5 9/16" (141)

Measurement Conversions - Triple Sash									
Size Referenced	Daylight Opening (DLO)		Glass Size (GS)		Frame Size		Rough Opening		Masonry Opening
Daylight Opening (DLO)	Dimension Needed								
	Width		+ 1 1/16" (27)	Width		ALL DLO + 9 11/16" (246)	Width		ALL DLO + 12 3/4" (324)
Glass Size (GS)	Height		+ 1 1/16" (27)	Height		+ 8 1/8" (206)	Height		+ 8 5/8" (219)
	Width		- 1 1/16" (27)	Width		ALL GS + 6 1/2" (165)	Width		ALL GS + 7 1/2" (191)
Frame Size	Height		- 1 1/16" (27)	Height		+ 7 1/16" (179)	Height		+ 7 9/16" (192)
	Width		- 9 11/16" (246)	Width		- 6 1/2" (165)	Width		+ 1" (25)
Rough Opening	Height		- 8 1/8" (206)	Height		- 7 1/16" (179)	Height		+ 1/2" (13)
	Width		- 10 11/16" (271)	Width		- 7 1/2" (191)	Width		- 1" (25)
Masonry Opening	Height		- 8 5/8" (219)	Height		- 7 9/16" (192)	Height		- 1/2" (13)
	Width		- 10 11/16" (271)	Width		- 7 1/2" (191)	Width		- 1" (25)
Masonry Opening	Width		- 12 3/4" (324)	Width		- 9 9/16" (243)	Width		- 3 1/16" (78)
	Height		- 9 15/16" (252)	Height		- 8 7/8" (225)	Height		- 1 13/16" (40)

NOTE:

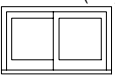
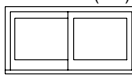
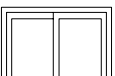
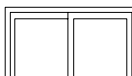
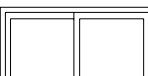
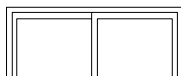

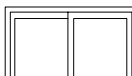
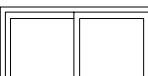
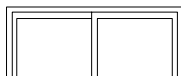

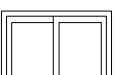
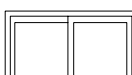
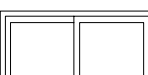



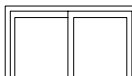



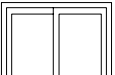
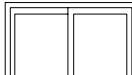




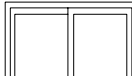



Conversions represent units without dividers. Contact Marvin's for additional conversions.

WOOD GLIDER

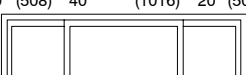
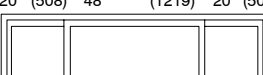
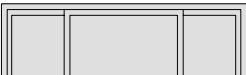
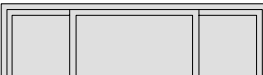
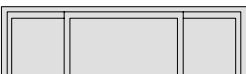
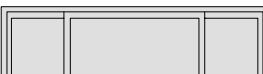
ELEVATIONS: OPERATING / TRIPLE SASH

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 11/16 (1033)	4-0 11/16 (1237)	4-8 11/16 (1440)	5-4 11/16 (1643)	6-0 11/16 (1846)
Rgh. Opg.	3-2 5/8 (981)	3-10 5/8 (1184)	4-6 5/8 (1387)	5-2 5/8 (1591)	5-10 5/8 (1794)
Frame Size	3-1 5/8 (956)	3-9 5/8 (1159)	4-5 5/8 (1362)	5-1 5/8 (1565)	5-9 5/8 (1768)
Glass Size	16" (406)	20" (508)	24" (610)	28" (711)	32" (813)
3-0 7/8 (937)					
2-8 7/8 (835)					
2-11 9/16 (903)					
3-4 7/8 (1038)					
3-7 1/8 (1107)					
3-11 9/16 (1208)					
4-0 7/8 (1241)					

Triple Sash

Mas. Opg.	7-5 9/16 (2275)	8-1 9/16 (2478)
Rgh. Opg.	7-3 1/2 (2223)	7-11 1/2 (2426)
Frame Size	7-2 1/2 (2197)	7-10 1/2 (2400)
Glass Size	20" (508) 40" (1016) 20" (508)	20" (508) 48" (1219) 20" (508)
3-4 7/8 (1038)		
4-0 7/8 (1241)		
4-8 7/8 (1445)		

NOTE:

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

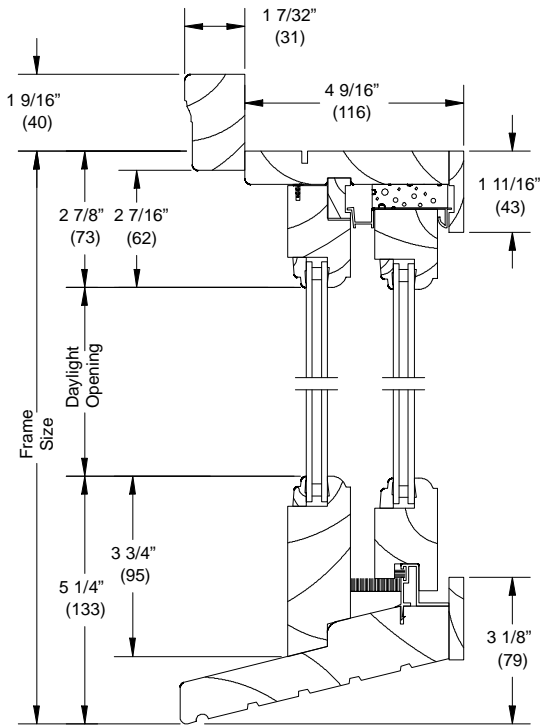
** These windows must be installed lower in the wall to meet the required floor to sill height of 44".

WOOD GLIDER

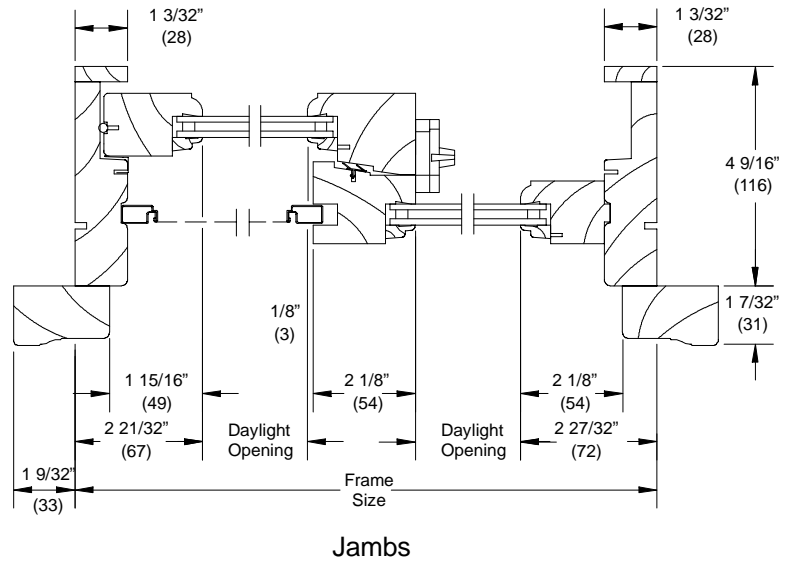
SECTION DETAILS: OPERATING / TRIPLE SASH

SCALE: 3" = 1' 0"

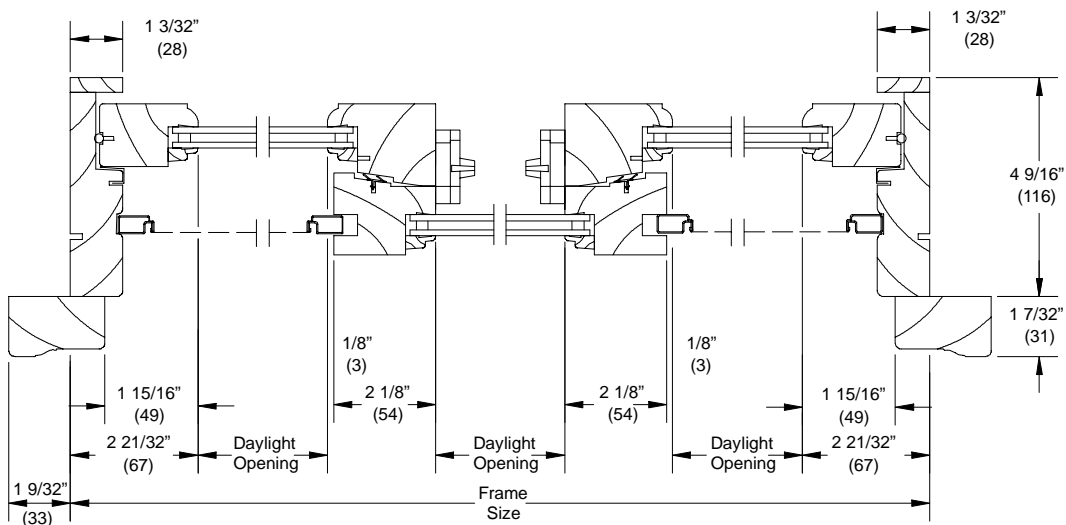
Operating



Head Jamb and Sill



Triple Sash



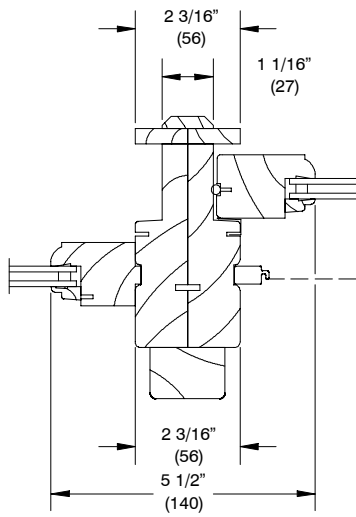
Jamb

WOOD GLIDER

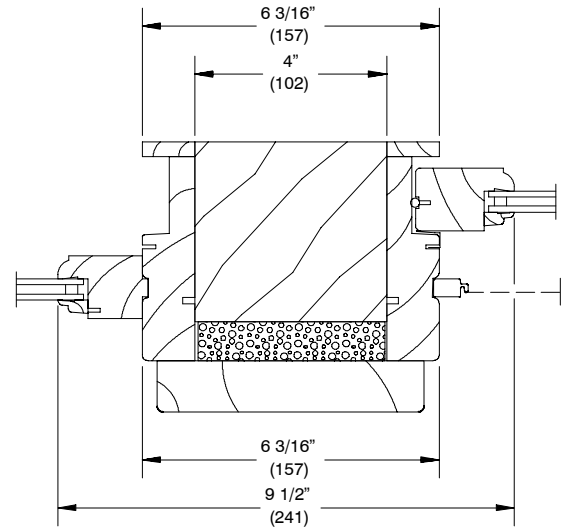
SECTION DETAILS: MULLIONS / COMBINATION

SCALE: 3" = 1' 0"

Mullions



Vertical Mullion
Frame to Frame

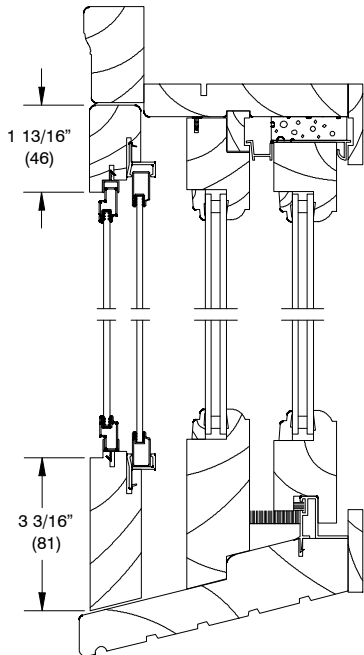


Vertical Mullion
with 4" Space Mull

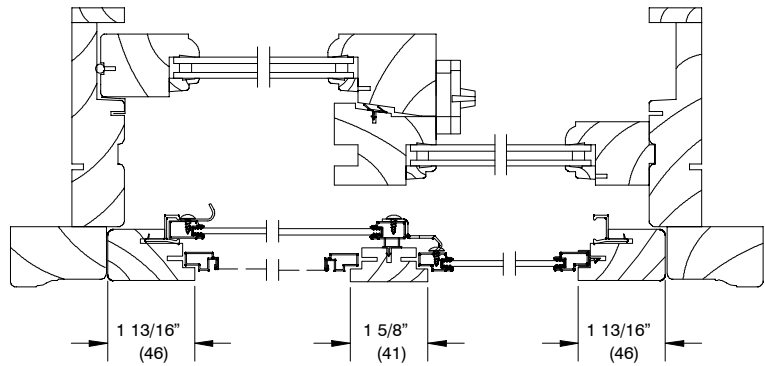
NOTE:

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

Combination



Head Jamb and Sill



Jamb

WOOD GLIDER

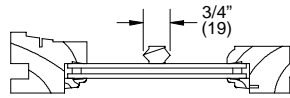
SECTION DETAILS: DIVIDED LITE OPTIONS

NOT TO SCALE

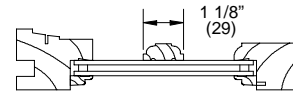
Operator Insulating Glass



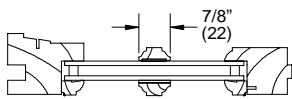
Insulating Glass



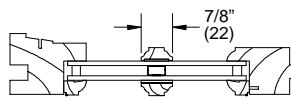
3/4" Grille



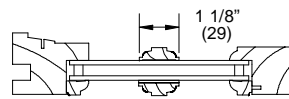
1 1/8" Grille



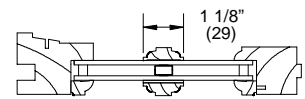
7/8" SDL



7/8" SDL
with Spacer Bar



1 1/8" SDL



1 1/8" SDL
with Spacer Bar

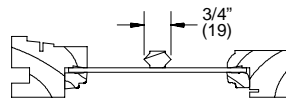
Single Glaze



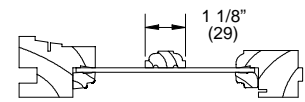
Single Glaze



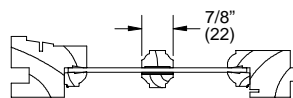
Single Glaze with
Energy Panel



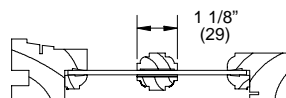
3/4" Grille



1 1/8" Grille



7/8" SDL



1 1/8" SDL

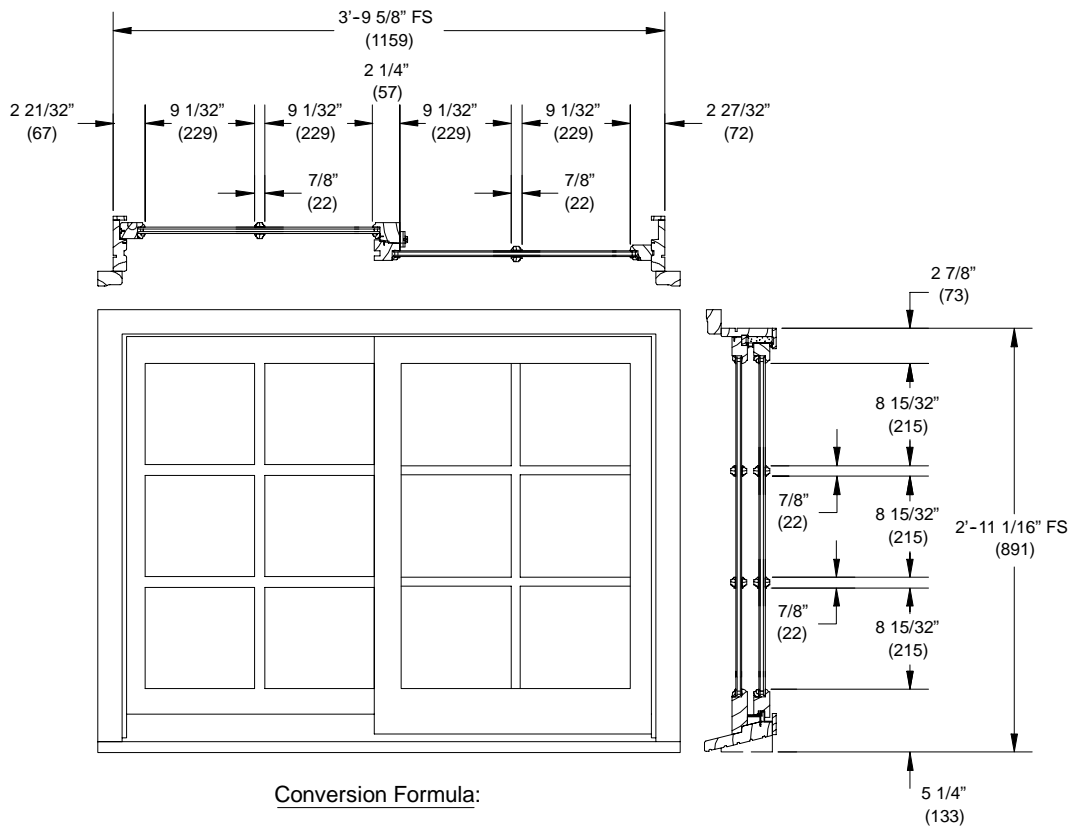
NOTE:

Grille = Removable interior divider
 SDL = Simulated divided lite

WOOD GLIDER

RECTANGULAR DAYLIGHT OPENING CONVERSIONS

NOT TO SCALE



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.

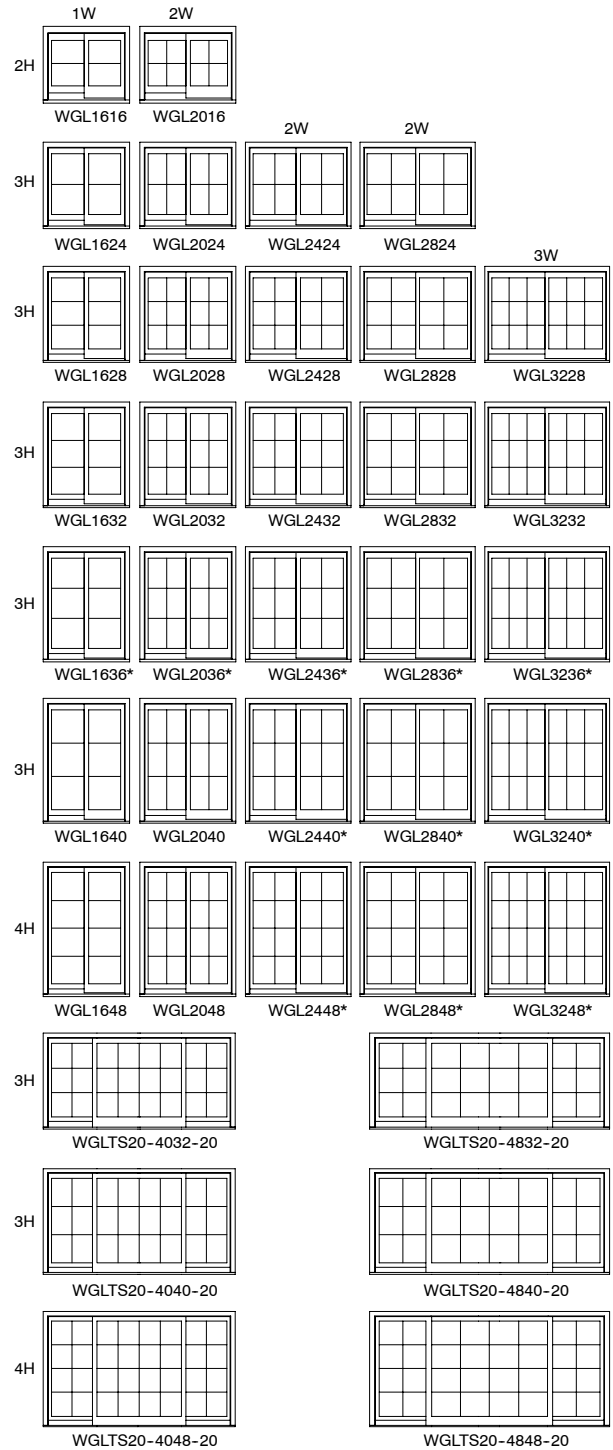
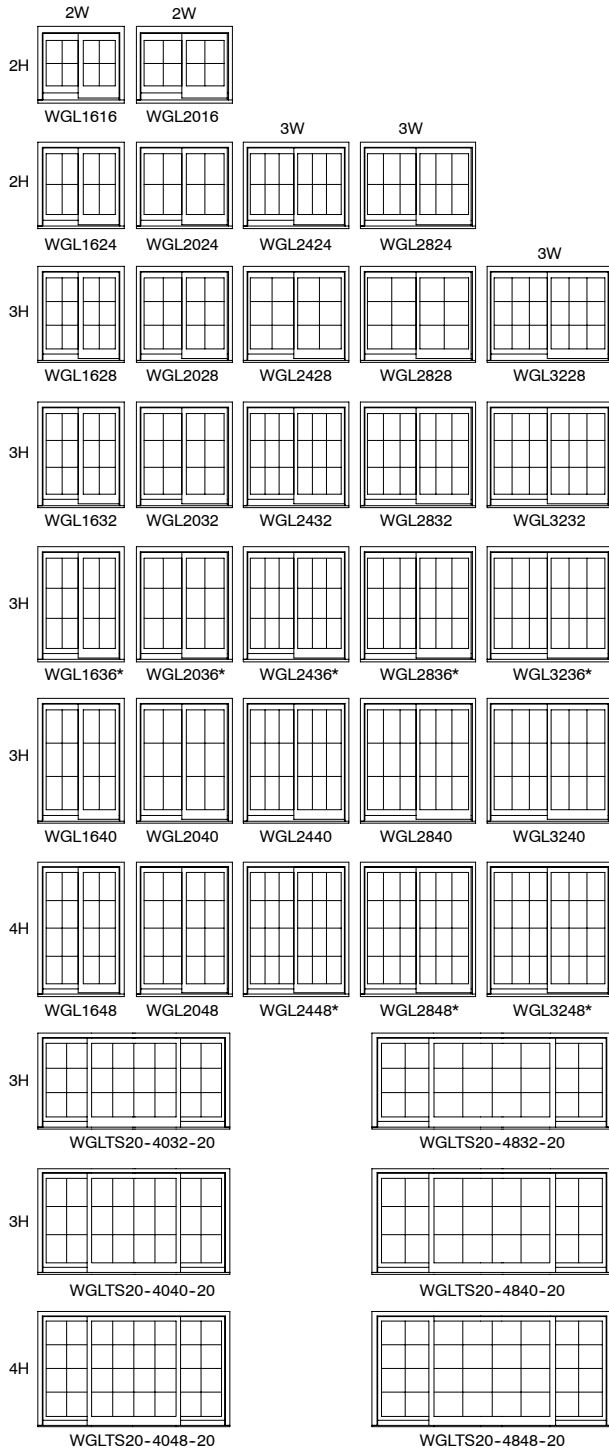
WOOD GLIDER

STANDARD RECTANGULAR DIVIDED LITE PATTERNS

NOT TO SCALE

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

1 1/8" (19) Grille
1 1/8" (43) Simulated Divided Lite (SDL)



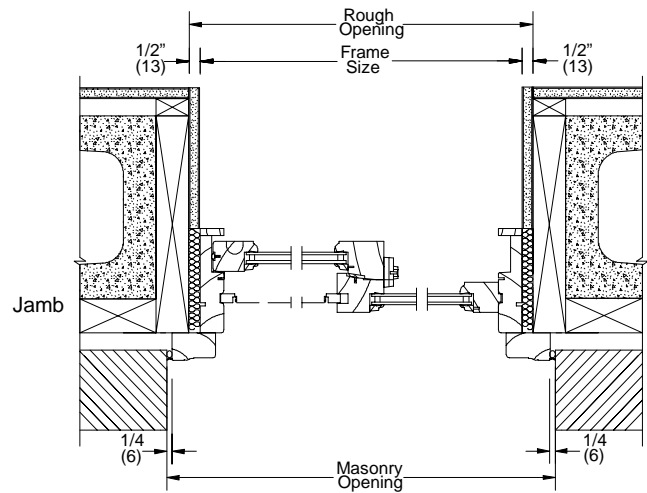
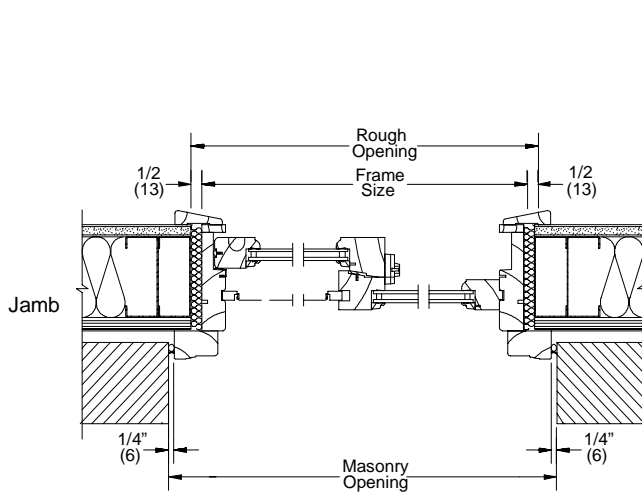
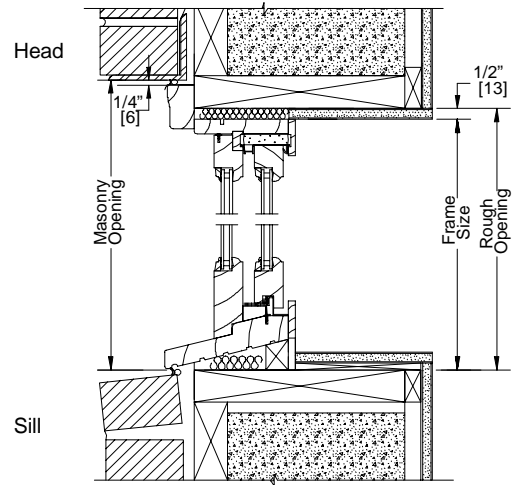
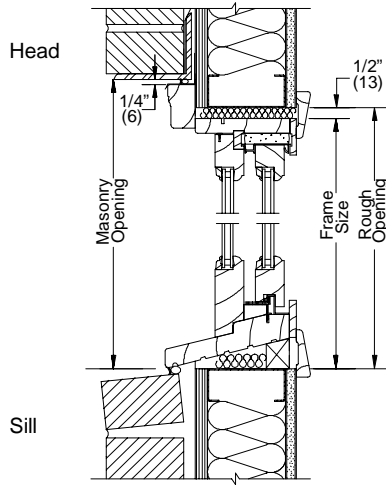
NOTE:

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 GLIDER

SECTION DETAILS: CONSTRUCTION

NOT TO SCALE



Brick Veneer with Steel Stud Construction

Brick Veneer with Concrete Block Construction

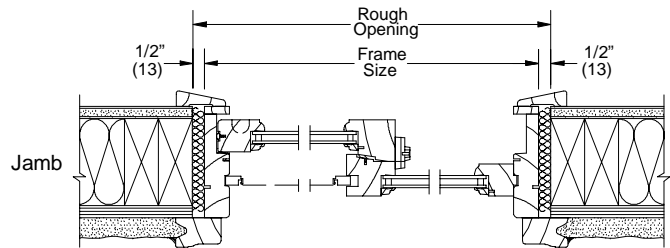
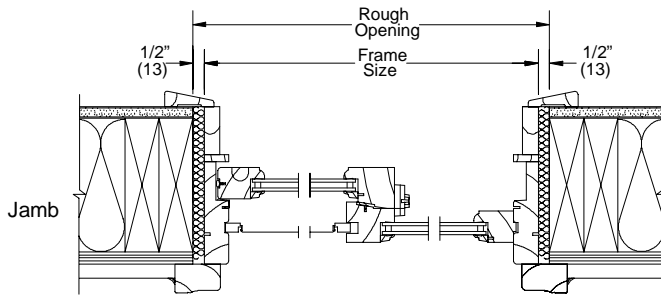
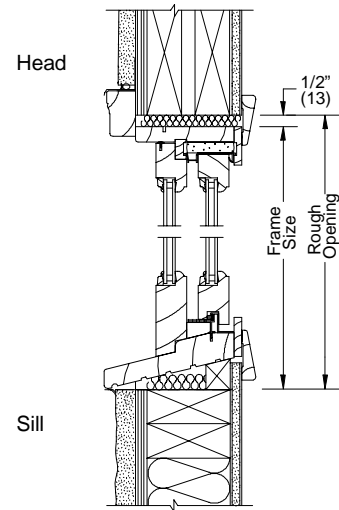
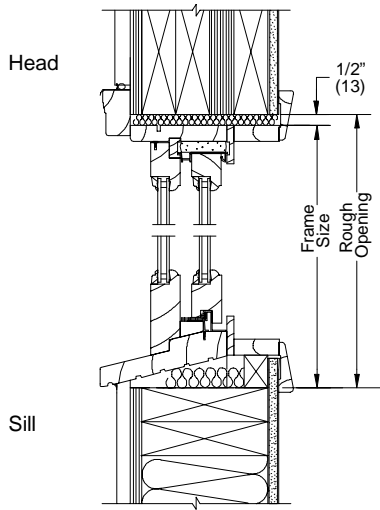
NOTE:

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 GLIDER

SECTION DETAILS: CONSTRUCTION

NOT TO SCALE



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.