

ESSENTIAL

MARVIN ESSENTIAL™ COLLECTION



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MARVIN ESSENTIAL™ COLLECTION

ORDERING

Marvin Essential Collection products are sized with consistent nominal sizing to simplify specification and ordering.* Each product section offers product codes for ordering under each unit. Metric millimeter measurements are in parentheses.

You'll notice four measurements for each window or door: masonry opening, rough opening, frame size, and day light opening size. The masonry opening is for a home built with brick or stone; rough openings are for houses with wood, vinyl or metal siding. Frame size measures from edge to edge of the unit; daylight opening indicates the dimension of total visible glass in a single sash.

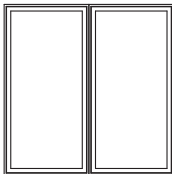
MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 7 1/2" (902)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)
DLO (mm)	12 9/16" (319)	18 9/16" (471)	24 9/16" (624)	26 9/16" (675)	30 9/16" (776)	36 9/16" (929)	42 9/16" (1081)
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207) 20 5/16" (516)							
	ESSH1640	ESSH2040	ESSH2640	ESSH2840	ESSH3040	ESSH3640	ESSH4040

Mulling Options - A variety of standard factory mullied and reinforced factory mullied combinations are available.

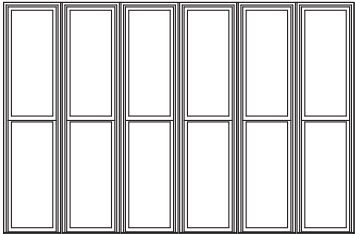
Mulling Configurations	Maximum Overall Rough Opening not to exceed:	Maximum Units Wide by High
Casement / Awning Picture / Direct Glaze	114" (2896) X 78" (1981)	6 Wide X 1 High
Single Hung / Double Hung Picture / Direct Glaze		
Direct Glaze		
Casement / Awning Picture / Direct Glaze	96" (2438) X 96" (2438)	5 Wide X 5 High
Single Hung / Double Hung Picture / Direct Glaze		
Direct Glaze		
Glider Picture / Direct Glaze	114" (2896) X 60" (1524)	3 Wide X 1 High
	72" (1829) X 78" (1981)	2 Wide X 2 High
Direct Glaze Round Top over Casement, Single Hung / Double Hung, or Direct Glaze	96" (2438) X 96" (2438)	5 Wide X 2 High

Field mulling kits are available to create your own unique multiple assemblies.
Please contact your local Marvin representative for more information.

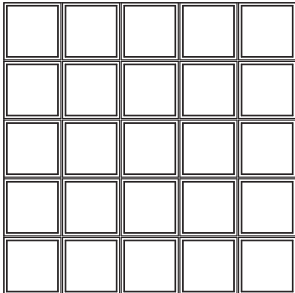
Examples of Possible Configurations



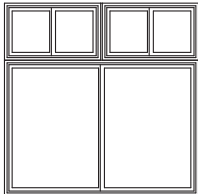
Casement
2 Wide 1 High



Double Hung
6 Wide 1 High



Awning
5 Wide 5 High



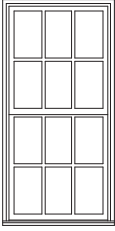
Glider
2 Wide 2 High

The information provided in this catalog has been gathered and assembled with every effort made to validate accuracy and consistency of the content. However, Marvin does not make any warranty or guarantee as to this information. Please verify critical product data in Marvin Order Management System (OMS) quotes and at the time of ordering.

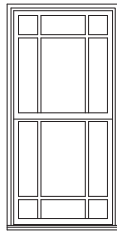
* Direct Glaze units are specified according to guidelines on page 35.

LITE CUTS

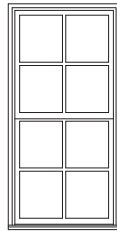
Windows



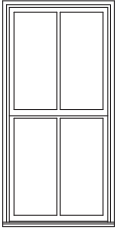
Rectangular
Available as GBG



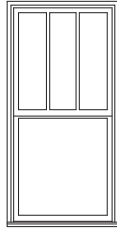
Prairie
Available as GBG



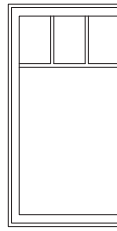
2w2h
Available as GBG



2w1h
Available as GBG

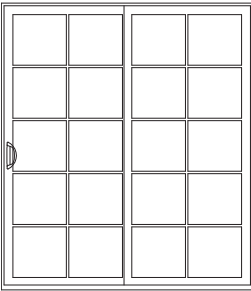


Equal Lite
Available as GBG

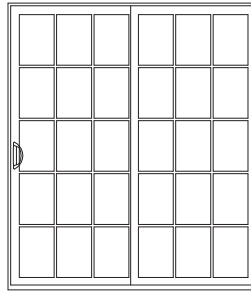


Cottage Lite
Available as GBG

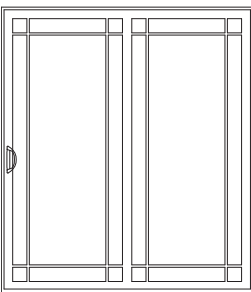
Doors



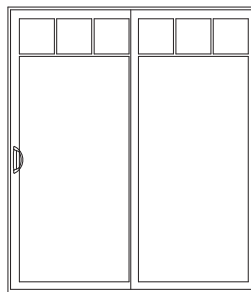
10/12 Lite
One vertical bar per panel
Available as GBG



15/18 Lite
Two vertical bars per panel
Available as GBG



Prairie
Available as GBG



Cottage Lite
Available as GBG

Equal lite allows for the number of horizontal and vertical lites to be specified for a custom appearance.

Lite cuts are dependent on product type and size. Please consult your local Marvin representative for details and availability.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

CASEMENT

MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 11 1/2" (902)
DLO (mm)	11 53/64" (300)	17 53/64" (453)	23 53/64" (605)	29 53/64" (757)
1' - 11 3/4" (603) 2' - 0" (610) 2' - 5 3/4" (756) 2' - 6" (762) 2' - 11 3/4" (808) 3' - 0" (914) 3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 11 3/4" (1213) 4' - 0" (1219) 4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 11 3/4" (1518) 5' - 0" (1524) 5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 11 3/4" (1822)	 ESCA1620  ESCA1626  ESCA1630  ESCA1636  ESCA1640  ESCA1646  ESCA1650  ESCA1656  ESCA1660 T	 ESCA2020  ESCA2026  ESCA2030  ESCA2036  ESCA2040  ESCA2046  ESCA2050  ESCA2056  ESCA2060 T	 ESCA2620*  ESCA2626*  ESCA2630*  ESCA2636*  ESCA2640 E*  ESCA2646 E*  ESCA2650 E*  ESCA2656 E*  ESCA2660 ET*	 ESCA3020*  ESCA3026*  ESCA3030*  ESCA3036 E*  ESCA3040 E*  ESCA3046 E*  ESCA3050 E*  ESCA3056 E*  ESCA3060 ET*

Details and Elevations not to scale.

Special sized units available within product size matrix. See your Marvin retailer.

E = These windows meet National Egress Codes for fire evacuation. Local codes may differ.

T = Standard Tempered

Obscure Glass option available on all units.

GBG available in standard rectangular lite cut, shown above. Other GBG lite cuts shown on page 3.

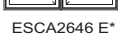
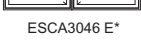
See page 52 for specific PG Ratings.

* These units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

CASEMENT

2 Wide

MO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)
RO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)
FS (mm)	2' - 11 1/2" (902)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)	5' - 11 1/2" (1816)
1' - 11 3/4" (603) 2' - 0" (610) 1' - 11 1/2" (597)	 ESCA1620	 ESCA2020	 ESCA2620*	 ESCA3020*
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESCA1626	 ESCA2026	 ESCA2626*	 ESCA3026*
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESCA1630	 ESCA2030	 ESCA2630*	 ESCA3030*
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054)	 ESCA1636	 ESCA2036	 ESCA2636*	 ESCA3036 E*
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207)	 ESCA1640	 ESCA2040	 ESCA2640 E*	 ESCA3040 E*
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359)	 ESCA1646	 ESCA2046	 ESCA2646 E*	 ESCA3046 E*
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511)	 ESCA1650	 ESCA2050	 ESCA2650 E*	 ESCA3050 E*
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664)	 ESCA1656	 ESCA2056	 ESCA2656 E*	 ESCA3056 E*
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816)	 ESCA1660 T	 ESCA2060 T	 ESCA2660 ET*	 ESCA3060 ET*

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96". Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

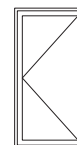
Construction Details

Casements available as an operator or stationary.

L or R handing determined from exterior.

Operator

Stationary



LEFT

RIGHT

3 Wide

MO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	9' - 0" (2743)
RO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	9' - 0" (2743)
FS (mm)	4' - 5 1/2" (1359)	5' - 11 1/2" (1816)	7' - 5 1/2" (2273)	8' - 11 1/2" (2731)
1' - 11 3/4" (603) 2' - 0" (610) 1' - 11 1/2" (597)	 ESCA1620	 ESCA2020	 ESCA2620*	 ESCA3020*
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESCA1626	 ESCA2026	 ESCA2626*	 ESCA3026*
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESCA1630	 ESCA2030	 ESCA2630*	 ESCA3030*
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054)	 ESCA1636	 ESCA2036	 ESCA2636*	 ESCA3036 E*
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207)	 ESCA1640	 ESCA2040	 ESCA2640 E*	 ESCA3040 E*
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359)	 ESCA1646	 ESCA2046	 ESCA2646 E*	 ESCA3046 E*
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511)	 ESCA1650	 ESCA2050	 ESCA2650 E*	 ESCA3050 E*
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664)	 ESCA1656	 ESCA2056	 ESCA2656 E*	 ESCA3056 E*
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816)	 ESCA1660 T	 ESCA2060 T	 ESCA2660 ET*	 ESCA3060 ET*

Details and Elevations not to scale.

Special sized units available within product size matrix.
See your Marvin retailer.

E = These windows meet National Egress Codes for fire evacuation. Local codes may differ.

T = Standard Tempered

Obscure Glass option available on all units.

GBG available in standard Rectangular lite cut, shown above.
Other GBG lite cuts shown on page 3.

See page 52 for specific PG Ratings.

* These units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

CASEMENT

4 Wide

MO (mm)	6' - 0" (1829)	8' - 0" (2438)
RO (mm)	6' - 0" (1829)	8' - 0" (2438)
FS (mm)	5' - 11 1/2" (1816)	7' - 11 1/2" (2426)
1' - 11 3/4" (603) 2' - 0" (610) 1' - 11 1/2" (597)	 ESCA1620	 ESCA2020
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESCA1626	 ESCA2026
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESCA1630	 ESCA2030
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054)	 ESCA1636	 ESCA2036
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207)	 ESCA1640	 ESCA2040
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359)	 ESCA1646	 ESCA2046
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511)	 ESCA1650	 ESCA2050
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664)	 ESCA1656	 ESCA2056
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816)	 ESCA1660 T	 ESCA2060 T

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96". Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

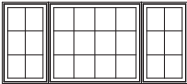
Please consult your local Marvin representative for more information.

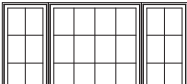
MARVIN ESSENTIAL™ COLLECTION

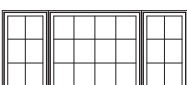
CASEMENT - Multiple Assemblies

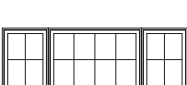
Casement Flankers with Center Picture

MO (mm)	8' - 0" (2438)
RO (mm)	8' - 0" (2438)
FS (mm)	7' - 11 1/2" (2426)

3' - 5 3/4" (1060)	
3' - 6" (1067)	
3' - 5 1/2" (1054)	
ESCA2036 / ESCAP4036 / ESCA2036	

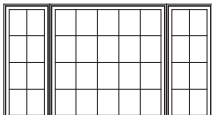
3' - 11 3/4" (1213)	
4' - 0" (1219)	
3' - 11 1/2" (1207)	
ESCA2040 / ESCAP4040 / ESCA2040	

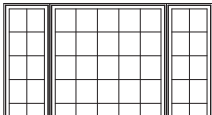
4' - 5 3/4" (1365)	
4' - 6" (1372)	
4' - 5 1/2" (1359)	
ESCA2046 / ESCAP4046 / ESCA2046	

4' - 11 3/4" (1518)	
5' - 0" (1524)	
4' - 11 1/2" (1511)	
ESCA2050 / ESCAP4050 / ESCA2050	

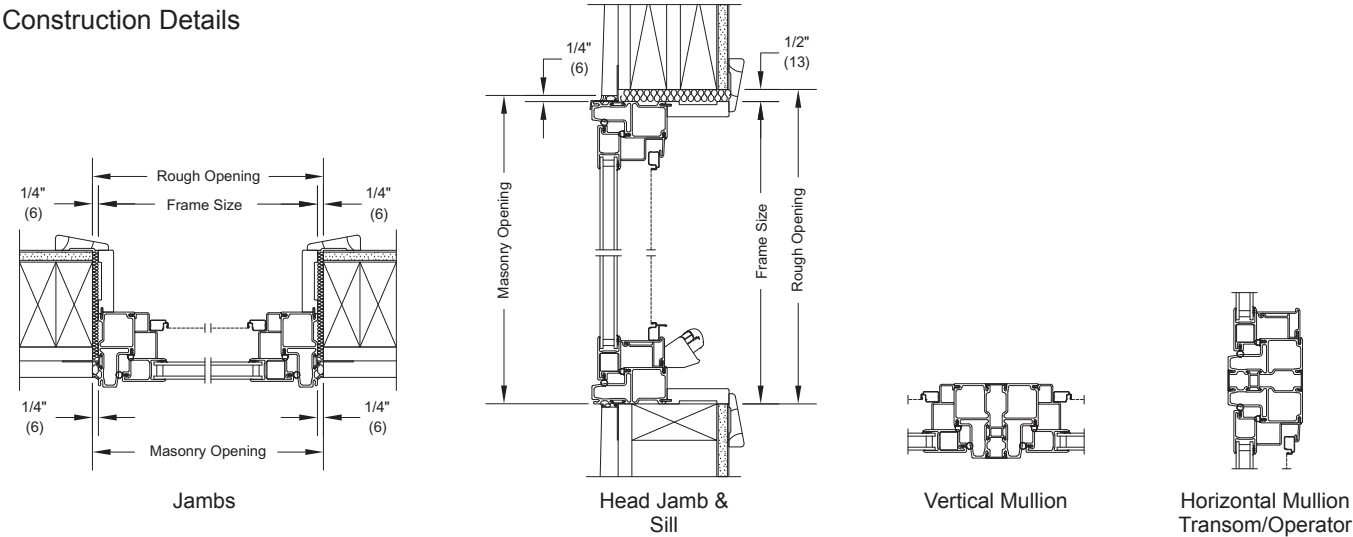
Casement Flankers with Center Picture

MO (mm)	9' - 0" (2743)
RO (mm)	9' - 0" (2743)
FS (mm)	8' - 11 1/2" (2731)

4' - 11 3/4" (1518)	
5' - 0" (1524)	
4' - 11 1/2" (1511)	
ESCA2050 / ESCAP5050 / ESCA2050	

5' - 5 3/4" (1670)	
5' - 6" (1676)	
5' - 5 1/2" (1664)	
ESCA2056 / ESCAP5056 / ESCA2056	

Construction Details



Details and Elevations not to scale.

Special sized units available within product size matrix. See your Marvin retailer.

Obscure Glass option available on all units.

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 3.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".

Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".

Maximum up to 5 units wide by 5 units high.

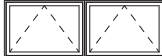
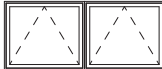
Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

AWNING

MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)
DLO (mm)	11 53/64" (300)	17 53/64" (453)	23 53/64" (605)	29 53/64" (757)	35 53/64" (910)	41 53/64" (1062)
1' - 5 3/4" (451)	 ESAWN1616	 ESAWN2016	 ESAWN2616	 ESAWN3016	 ESAWN3616	 ESAWN4016
1' - 6" (457)						
1' - 5 1/2" (445)						
11 53/64" (300)						
1' - 11 3/4" (603)	 ESAWN1620	 ESAWN2020	 ESAWN2620	 ESAWN3020	 ESAWN3620	 ESAWN4020
2' - 0" (610)						
1' - 11 1/2" (597)						
17 53/64" (453)						
2' - 5 3/4" (756)	 ESAWN1626	 ESAWN2026	 ESAWN2626	 ESAWN3026	 ESAWN3626	 ESAWN4026
2' - 6" (762)						
2' - 5 1/2" (749)						
23 53/64" (605)						
2' - 11 3/4" (908)	 ESAWN1630	 ESAWN2030	 ESAWN2630	 ESAWN3030	 ESAWN3630	 ESAWN4030
3' - 0" (914)						
2' - 11 1/2" (902)						
29 53/64" (757)						

2 Wide

MO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
RO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
FS (mm)	2' - 11 1/2" (902)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)	5' - 11 1/2" (1816)	6' - 11 1/2" (2121)	7' - 11 1/2" (2426)
1' - 5 3/4" (451) 1' - 6" (457) 1' - 5 1/2" (445)	 ESAWN1616	 ESAWN2016	 ESAWN2616	 ESAWN3016	 ESAWN3616	 ESAWN4016
1' - 11 3/4" (603) 2' - 0" (610) 1' - 11 1/2" (597)	 ESAWN1620	 ESAWN2020	 ESAWN2620	 ESAWN3020	 ESAWN3620	 ESAWN4020
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESAWN1626	 ESAWN2026	 ESAWN2626	 ESAWN3026	 ESAWN3626	 ESAWN4026
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESAWN1630	 ESAWN2030	 ESAWN2630	 ESAWN3030	 ESAWN3630	 ESAWN4030

Details and Elevations not to scale.

Special sized units available within product size matrix.
See your Marvin retailer.

Obscure Glass option available on all units.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".
Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".
Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

AWNING

3 Wide

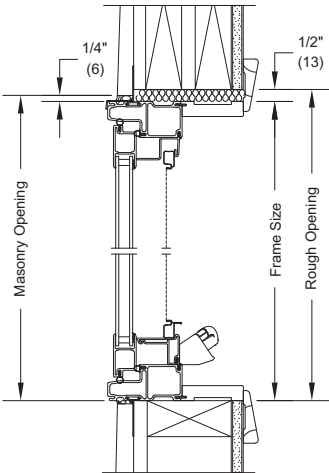
MO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	9' - 0" (2743)
RO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	9' - 0" (2743)
FS (mm)	4' - 5 1/2" (1359)	5' - 11 1/2" (1816)	7' - 5 1/2" (2273)	8' - 11 1/2" (2731)
1' - 5 3/4" (451)				
1' - 6" (457)	ESAWN1616	ESAWN2016	ESAWN2616	ESAWN3016
1' - 5 1/2" (445)				
1' - 11" 3/4" (603)				
2' - 0" (610)	ESAWN1620	ESAWN2020	ESAWN2620	ESAWN3020
1' - 11 1/2" (597)				
2' - 5 3/4" (756)				
2' - 6" (762)	ESAWN1626	ESAWN2026	ESAWN2626	ESAWN3026
2' - 5 1/2" (749)				
2' - 11 3/4" (908)				
3' - 0" (914)	ESAWN1630	ESAWN2030	ESAWN2630	ESAWN3030
2' - 11 1/2" (902)				

4 Wide

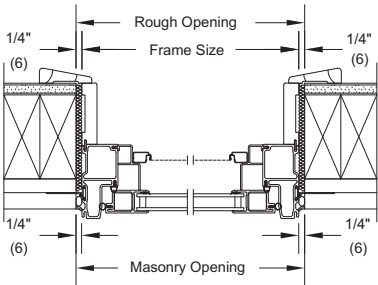
MO (mm)	6' - 0" (1829)	8' - 0" (2438)
RO (mm)	6' - 0" (1829)	8' - 0" (2438)
FS (mm)	5' - 11 1/2" (1816)	7' - 11 1/2" (2426)

1' - 5 3/4" (451)		
1' - 6" (457)	ESAWN1616	ESAWN2016
1' - 5 1/2" (445)		
1' - 11 3/4" (603)		
2' - 0" (610)	ESAWN1620	ESAWN2020
1' - 11 1/2" (597)		
2' - 5 3/4" (756)		
2' - 6" (762)	ESAWN1626	ESAWN2026
2' - 5 1/2" (749)		
2' - 11 3/4" (908)		
3' - 0" (914)	ESAWN1630	ESAWN2030
2' - 11 1/2" (902)		

Construction Details



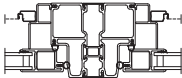
Head Jamb & Sill



Jamb



Vertical Mullion



Horizontal Mullion
Transom/Operator

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".
Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".
Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

Details and Elevations not to scale.

Special sized units available within product size matrix.
See your Marvin retailer.

Obscure Glass option available on all units.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

CASEMENT PICTURE

MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)	5' - 11 1/2" (1816)
DLO (mm)	11 53/64" (300)	17 53/64" (453)	23 53/64" (605)	29 53/64" (757)	35 53/64" (910)	41 53/64" (1062)	53 53/64" (1367)	65 53/64" (1672)
1' - 11 3/4" (603)								
2' - 5 3/4" (756)								
2' - 11 3/4" (908)								
3' - 5 3/4" (1060)								
3' - 11 3/4" (1213)								
4' - 5 3/4" (1365)								
4' - 11 3/4" (1518)								
5' - 5 3/4" (1670)								
5' - 11 3/4" (1822)								

Details and Elevations not to scale.

Special sized units available within product size matrix. See your Marvin retailer.

T = Standard Tempered.

Obscure Glass option available on all units.

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 3.

See page 52 for specific PG Ratings.

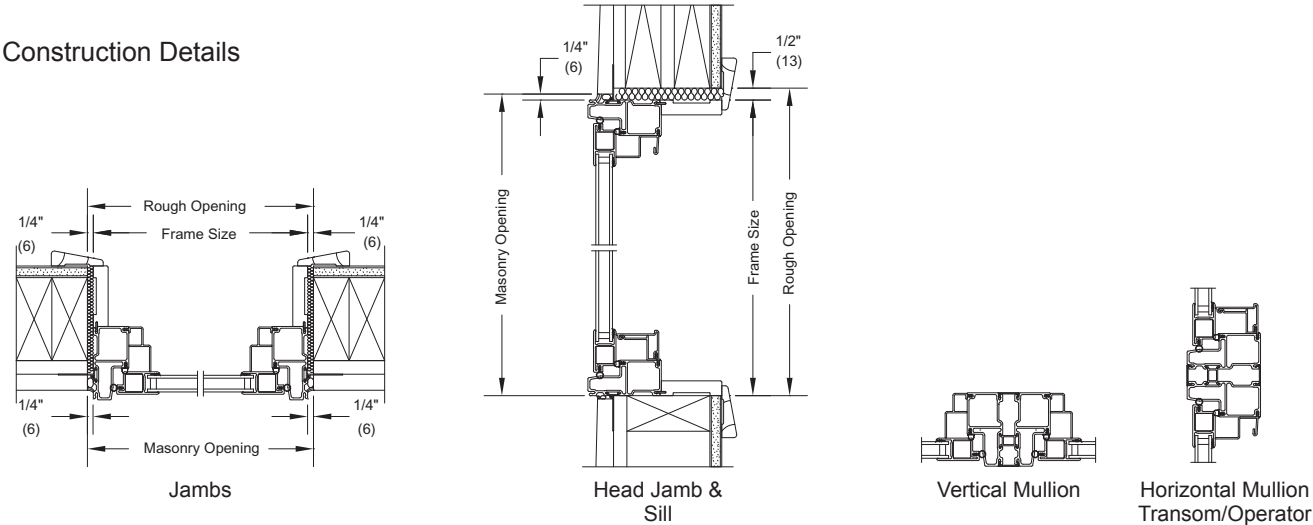
For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MARVIN ESSENTIAL™ COLLECTION

CASEMENT TRANSOM

MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	5' - 0" (1524)	6' - 0" (1829)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)	5' - 11 1/2" (1816)
DLO (mm)	11 53/64" (300)	17 53/64" (453)	23 53/64" (605)	29 53/64" (757)	35 53/64" (910)	41 53/64" (1062)	53 53/64" (1367)	65 53/64" (1672)
1' - 11 3/4" (298)								
0' - 11 3/4" (305)								
1' - 0" (292)								
0' - 11 1/2" (292)								
1' - 5 3/4" (451)								
1' - 6" (457)								
1' - 5 1/2" (445)								
1' - 11 1/2" (597)								
17 53/64" (453)								
1' - 11 3/4" (603)								
2' - 0" (610)								
1' - 11 1/2" (597)								
17 53/64" (453)								
ESCATR1610	ESCATR2010	ESCATR2610	ESCATR3010	ESCATR3610	ESCATR4010	ESCATR5010	ESCATR6010	
ESCATR1616	ESCATR2016	ESCATR2616	ESCATR3016	ESCATR3616	ESCATR4016	ESCATR5016	ESCATR6016	
ESCATR1620	ESCATR2020	ESCATR2620	ESCATR3020	ESCATR3620	ESCATR4020	ESCATR5020	ESCATR6020	

Construction Details



MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".
Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".
Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

SINGLE HUNG

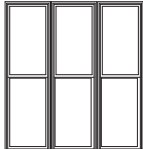
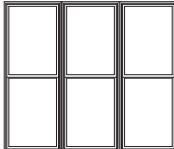
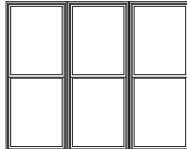
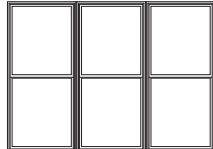
MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 7 1/2" (800)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)
DLO (mm)	12 9/16" (319)	18 9/16" (471)	24 9/16" (624)	26 9/16" (675)	30 9/16" (776)	36 9/16" (929)	42 9/16" (1081)
1' - 5 3/4" (603) 2' - 0" (610) 2' - 6" (762) 2' - 5 1/2" (749) 1' - 11 1/2" (597) 8 5/16" (211)	 ESSH1620	 ESSH2020	 ESSH2620	 ESSH2820	 ESSH3020	 ESSH3620	 ESSH4020
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749) 11 5/16" (287)	 ESSH1626	 ESSH2026	 ESSH2626	 ESSH2826	 ESSH3026	 ESSH3626	 ESSH4026
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902) 14 5/16" (363)	 ESSH1630	 ESSH2030	 ESSH2630	 ESSH2830	 ESSH3030	 ESSH3630	 ESSH4030
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054) 17 5/16" (440)	 ESSH1636	 ESSH2036	 ESSH2636	 ESSH2836	 ESSH3036	 ESSH3636	 ESSH4036
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207) 20 5/16" (516)	 ESSH1640	 ESSH2040	 ESSH2640	 ESSH2840	 ESSH3040	 ESSH3640	 ESSH4040
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359) 23 5/16" (592)	 ESSH1646	 ESSH2046	 ESSH2646	 ESSH2846	 ESSH3046	 ESSH3646	 ESSH4046
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511) 26 5/16" (668)	 ESSH1650	 ESSH2050	 ESSH2650	 ESSH2850	 ESSH3050 E	 ESSH3650 E	 ESSH4050 E
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664) 29 5/16" (744)	 ESSH1656	 ESSH2056	 ESSH2656	 ESSH2856	 ESSH3056 E	 ESSH3656 E	 ESSH4056 E
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816) 32 5/16" (821)	 ESSH1660	 ESSH2060	 ESSH2660 E	 ESSH2860 E	 ESSH3060 E	 ESSH3660 E	 ESSH4060 E
6' - 5 3/4" (1975) 6' - 6" (1981) 6' - 5 1/2" (1969) 35 5/16" (897)	 ESSH1666	 ESSH2066	 ESSH2666 E	 ESSH2866 E	 ESSH3066 E	 ESSH3660 E	 ESSH4066 E

2 Wide

MO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
RO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
FS (mm)	2' - 11 1/2" (902)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)	5' - 3 1/2" (1613)	5' - 11 1/2" (1816)	6' - 11 1/2" (2121)	7' - 11 1/2" (2426)
1' - 11" 3/4" (603) 2' - 0" (610) 2' - 11 1/2" (597)	 ESSH1620	 ESSH2020	 ESSH2620	 ESSH2820	 ESSH3020	 ESSH3620	 ESSH4020
2' - 5 3/4" (766) 2' - 6" (762) 2' - 5 1/2" (749)	 ESSH1626	 ESSH2026	 ESSH2626	 ESSH2826	 ESSH3026	 ESSH3626	 ESSH4026
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESSH1630	 ESSH2030	 ESSH2630	 ESSH2830	 ESSH3030	 ESSH3630	 ESSH4030
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054)	 ESSH1636	 ESSH2036	 ESSH2636	 ESSH2836	 ESSH3036	 ESSH3636	 ESSH4036
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207)	 ESSH1640	 ESSH2040	 ESSH2640	 ESSH2840	 ESSH3040	 ESSH3640	 ESSH4040
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359)	 ESSH1646	 ESSH2046	 ESSH2646	 ESSH2846	 ESSH3046	 ESSH3646	 ESSH4046
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511)	 ESSH1650	 ESSH2050	 ESSH2650	 ESSH2850	 ESSH3050 E	 ESSH3650 E	 ESSH4050 E
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664)	 ESSH1656	 ESSH2056	 ESSH2656	 ESSH2856	 ESSH3056 E	 ESSH3656 E	 ESSH4056 E
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816)	 ESSH1660	 ESSH2060	 ESSH2660 E	 ESSH2860 E	 ESSH3060 E	 ESSH3660 E	 ESSH4060 E
6' - 5 3/4" (1975) 6' - 6" (1981) 6' - 5 1/2" (1969)	 ESSH1666	 ESSH2066	 ESSH2666 E	 ESSH2866 E	 ESSH3066 E	 ESSH3660 E	 ESSH4066 E

SINGLE HUNG

3 Wide

MO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	8' - 0" (2438)	9' - 0" (2743)
RO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	8' - 0" (2438)	9' - 0" (2743)
FS (mm)	4' - 5 1/2" (1359)	5' - 11 1/2" (1816)	7' - 5 1/2" (2273)	7' 11 1/2" (2426)	8' - 11 1/2" (2731)
1' - 11" 3/4" (603) 2' - 0" (610) 1' - 11 1/2" (597)	 ESSH1620	 ESSH2020	 ESSH2620	 ESSH2820	 ESSH3020
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESSH1626	 ESSH2026	 ESSH2626	 ESSH2826	 ESSH3026
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESSH1630	 ESSH2030	 ESSH2630	 ESSH2830	 ESSH3030
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054)	 ESSH1636	 ESSH2036	 ESSH2636	 ESSH2836	 ESSH3036
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207)	 ESSH1640	 ESSH2040	 ESSH2640	 ESSH2840	 ESSH3040
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359)	 ESSH1646	 ESSH2046	 ESSH2646	 ESSH2846	 ESSH3046
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511)	 ESSH1650	 ESSH2050	 ESSH2650	 ESSH2850	 ESSH3050 E
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664)	 ESSH1656	 ESSH2056	 ESSH2656	 ESSH2856	 ESSH3056 E
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816)	 ESSH1660	 ESSH2060	 ESSH2660 E	 ESSH2860 E	 ESSH3060 E
6' - 5 3/4" (1975) 6' - 6" (1981) 6' - 5 1/2" (1969)	 ESSH1666	 ESSH2066	 ESSH2666 E	 ESSH2866 E	 ESSH3066 E

4 Wide

MO (mm)	6' - 0" (1829)	8' - 0" (2438)
RO (mm)	6' - 0" (1829)	8' - 0" (2438)
FS (mm)	5' - 11 1/2" (1816)	7' - 11 1/2" (2426)
1' - 1 3/4" (603)		
2' - 5 3/4" (756)		
2' - 11 3/4" (908)		
3' - 5 3/4" (1060)		
3' - 11 3/4" (1213)		
4' - 5 3/4" (1365)		
4' - 11 3/4" (1518)		
5' - 5 3/4" (1670)		
5' - 11 3/4" (1822)		
6' - 5 3/4" (1975)		

GBG available in standard Rectangular lite cut, shown. Other GBG lite cuts shown on page 3.

E = These windows (in equal sash) meet National Egress Codes for fire evacuation. Local codes may differ.

Details and Elevations not to scale.

Available in equal, cottage, and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available on 20 call number heights.

Obscure Glass option available on all units.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

Special sized units available within product size matrix. See your Marvin retailer.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".
Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".
Maximum up to 5 units wide by 5 units high.

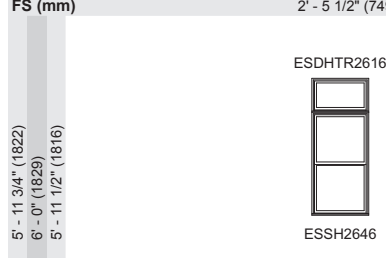
Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

SINGLE HUNG - Transoms and Multiple Assemblies

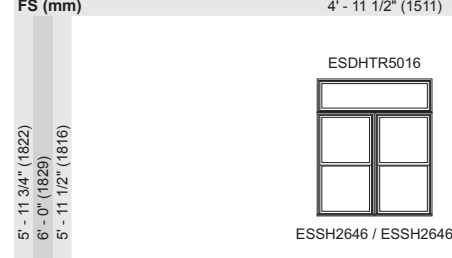
Transom Mullered Over Single Hung

MO (mm)	2' - 6" (762)
RO (mm)	2' - 6" (762)
FS (mm)	2' - 5 1/2" (749)



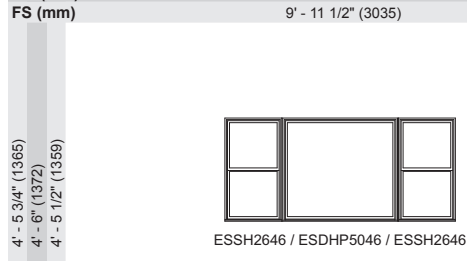
Transom Mullered Over Single Hung 2 Wide

MO (mm)	5' - 0" (1524)
RO (mm)	5' - 0" (1524)
FS (mm)	4' - 11 1/2" (1511)



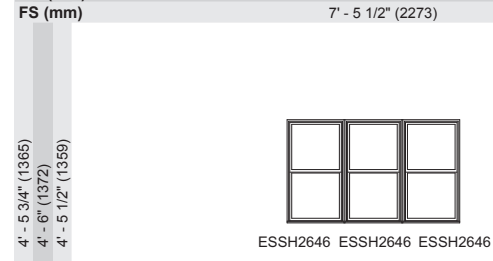
Single Hung Flankers with Center Picture*

MO (mm)	10' - 0" (3048)
RO (mm)	10' - 0" (3048)
FS (mm)	9' - 11 1/2" (3035)

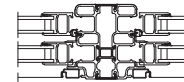
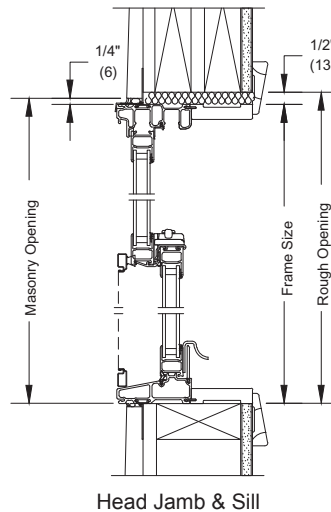
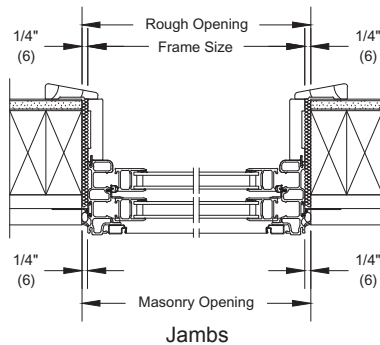


Single Hung Flankers with Center Operator

MO (mm)	7' - 6" (2286)
RO (mm)	7' - 6" (2286)
FS (mm)	7' - 5 1/2" (2273)



Construction Details



E = These windows (in equal sash) meet National Egress Codes for fire evacuation. Local codes may differ.

* This product is only available field mullered.

Details and Elevations not to scale.

Available in equal, cottage, and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available on 20 and 66 call number heights.

Obscure Glass option available on all units.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

Special sized units available within product size matrix. See your Marvin retailer.

See page 52 for specific PG Ratings.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullered.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".
Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".
Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

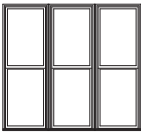
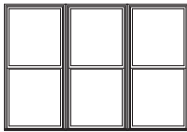
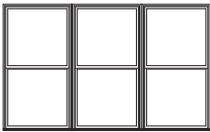
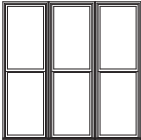
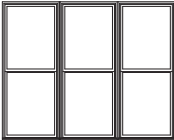
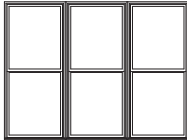
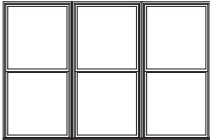
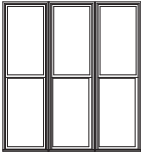
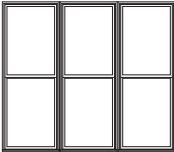
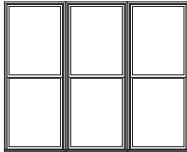
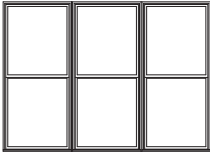
IO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (813)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (813)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 7 1/2" (800)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)
DLO (mm)	12 9/16" (319)	18 9/16" (471)	24 9/16" (624)	26 9/16" (675)	30 9/16" (776)	36 9/16" (929)	42 9/16" (1081)
2' - 11 3/4" (908) 2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749) 11 5/16" (287)	 ESDH1620	 ESDH2020	 ESDH2620	 ESDH2820	 ESDH3020	 ESDH3620	 ESDH4020
3' - 0" (914) 3' - 6" (1067) 2' - 11 1/2" (902) 14 5/16" (363)	 ESDH1626	 ESDH2026	 ESDH2626	 ESDH2826	 ESDH3026	 ESDH3626	 ESDH4026
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207) 20 5/16" (516)	 ESDH1630	 ESDH2030	 ESDH2630	 ESDH2830	 ESDH3030	 ESDH3630	 ESDH4030
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359) 23 5/16" (592)	 ESDH1636	 ESDH2036	 ESDH2636	 ESDH2836	 ESDH3036	 ESDH3636	 ESDH4036
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511) 26 5/16" (668)	 ESDH1640	 ESDH2040	 ESDH2640	 ESDH2840	 ESDH3040	 ESDH3640	 ESDH4040
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664) 29 5/16" (744)	 ESDH1646	 ESDH2046	 ESDH2646	 ESDH2846	 ESDH3046	 ESDH3646	 ESDH4046
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816) 32 5/16" (821)	 ESDH1650	 ESDH2050	 ESDH2650	 ESDH2850	 ESDH3050 E	 ESDH3650 E	 ESDH4050 E
6' - 5 3/4" (1975) 6' - 6" (1981) 6' - 5 1/2" (1969) 35 5/16" (897)	 ESDH1656	 ESDH2056	 ESDH2656	 ESDH2856	 ESDH3056 E	 ESDH3656 E	 ESDH4056 E
	 ESDH1660	 ESDH2060	 ESDH2660 E	 ESDH2860 E	 ESDH3060 E	 ESDH3660 E	 ESDH4060 E
	 ESDH1666	 ESDH2066	 ESDH2666 E	 ESDH2866 E	 ESDH3066 E	 ESDH3660 E	 ESDH4066 E

DOUBLE HUNG

2 Wide

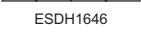
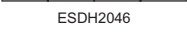
MO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
RO (mm)	3' - 0" (914)	4' - 0" (1219)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
FS (mm)	2' - 11 1/2" (902)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)	5' - 3 1/2" (1600)	5' - 11 1/2" (1816)	6' - 11 1/2" (2121)	7' - 11 1/2" (2426)
1' - 11 3/4" (603) 2' - 0" (610) 2' - 11 1/2" (697)	 ESDH1620	 ESDH2020	 ESDH2620	 ESDH2820	 ESDH3020	 ESDH3620	 ESDH4020
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESDH1626	 ESDH2026	 ESDH2626	 ESDH2826	 ESDH3026	 ESDH3626	 ESDH4026
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESDH1630	 ESDH2030	 ESDH2630	 ESDH2830	 ESDH3030	 ESDH3630	 ESDH4030
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054)	 ESDH1636	 ESDH2036	 ESDH2636	 ESDH2836	 ESDH3036	 ESDH3636	 ESDH4036
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207)	 ESDH1640	 ESDH2040	 ESDH2640	 ESDH2840	 ESDH3040	 ESDH3640	 ESDH4040
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359)	 ESDH1646	 ESDH2046	 ESDH2646	 ESDH2846	 ESDH3046	 ESDH3646	 ESDH4046
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511)	 ESDH1650	 ESDH2050	 ESDH2650	 ESDH2850	 ESDH3050 E	 ESDH3650 E	 ESDH4050 E
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664)	 ESDH1656	 ESDH2056	 ESDH2656	 ESDH2856	 ESDH3056 E	 ESDH3656 E	 ESDH4056 E
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816)	 ESDH1660	 ESDH2060	 ESDH2660 E	 ESDH2860 E	 ESDH3060 E	 ESDH3660 E	 ESDH4060 E
6' - 5 3/4" (1975) 6' - 6" (1981) 6' - 5 1/2" (1969)	 ESDH1666	 ESDH2066	 ESDH2666 E	 ESDH2866 E	 ESDH3066 E	 ESDH3666 E	 ESDH4066 E

3 Wide

MO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	8' - 0" (2438)	9' - 0" (2743)
RO (mm)	4' - 6" (1372)	6' - 0" (1829)	7' - 6" (2286)	8' - 0" (2438)	9' - 0" (2743)
FS (mm)	4' - 5 1/2" (1359)	5' - 11 1/2" (1816)	7' - 5 1/2" (2273)	7' 11 1/2" (2413)	8' - 11 1/2" (2731)
1' - 11 3/4" (603) 2' - 0" (610) 2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESDH1620	 ESDH2020	 ESDH2620	 ESDH2820	 ESDH3026
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESDH1626	 ESDH2026	 ESDH2626	 ESDH2826	 ESDH3026
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESDH1630	 ESDH2030	 ESDH2630	 ESDH2830	 ESDH3030
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054)	 ESDH1636	 ESDH2036	 ESDH2636	 ESDH2836	 ESDH3036
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207)	 ESDH1640	 ESDH2040	 ESDH2640	 ESDH2840	 ESDH3040
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359)	 ESDH1646	 ESDH2046	 ESDH2646	 ESDH2846	 ESDH3046
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511)	 ESDH1650	 ESDH2050	 ESDH2650	 ESDH2850	 ESDH3050 E
5' - 5 3/4" (1670) 5' - 6" (1676) 5' - 5 1/2" (1664)	 ESDH1656	 ESDH2056	 ESDH2656	 ESDH2856	 ESDH3056 E
5' - 11 3/4" (1822) 6' - 0" (1829) 5' - 11 1/2" (1816)	 ESDH1660	 ESDH2060	 ESDH2660 E	 ESDH2860 E	 ESDH3060 E
6' - 5 3/4" (1975) 6' - 6" (1981) 6' - 5 1/2" (1969)	 ESDH1666	 ESDH2066	 ESDH2666 E	 ESDH2866 E	 ESDH3066 E

DOUBLE HUNG

4 Wide

MO (mm)	6' - 0" (1829)	8' - 0" (2438)
RO (mm)	6' - 0" (1829)	8' - 0" (2438)
FS (mm)	5' - 11 1/2" (1816)	7' - 11 1/2" (2426)
1' - 11 3/4" (603)		
2' - 0" (610)	ESDH1620	ESDH2020
2' - 5 3/4" (756)		
2' - 6" (762)	ESDH1626	ESDH2026
2' - 11 3/4" (908)		
3' - 0" (914)	ESDH1630	ESDH2030
2' - 11 1/2" (902)		
3' - 5 3/4" (1060)	ESDH1636	ESDH2036
3' - 6" (1067)		
3' - 5 1/2" (1054)	ESDH1640	ESDH2040
3' - 11 3/4" (1213)		
4' - 0" (1219)	ESDH1646	ESDH2046
3' - 11 1/2" (1207)		
4' - 5 3/4" (1365)	ESDH1650	ESDH2050
4' - 6" (1372)		
4' - 5 1/2" (1359)	ESDH1656	ESDH2056
4' - 11 3/4" (1518)		
5' - 0" (1524)	ESDH1660	ESDH2060
4' - 11 1/2" (1511)		
5' - 5 3/4" (1670)	ESDH1666	ESDH2066
5' - 6" (1676)		
5' - 5 1/2" (1664)	ESDH1666	ESDH2066
5' - 11 3/4" (1822)		
6' - 0" (1829)	ESDH1666	ESDH2066
5' - 11 1/2" (1816)		
6' - 5 3/4" (1975)	ESDH1666	ESDH2066
6' - 6" (1981)		
6' - 5 1/2" (1969)		

GBG available in standard Rectangular lite cut, shown. Other GBG lite cuts shown on page 3.

E = These windows (in equal sash) meet National Egress Codes for fire evacuation. Local codes may differ.

Details and Elevations not to scale.

Available in equal, cottage, and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available on 20, 60, and 66 call number heights.

Obscure Glass option available on all units.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

Special sized units available within product size matrix. See your Marvin retailer.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullied.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".

Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96".

Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

MARVIN ESSENTIAL™ COLLECTION

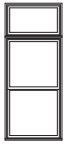
DOUBLE HUNG - Transoms and Multiple Assemblies

Transom Muller Over Double Hung

MO (mm)	2' - 6" (762)
RO (mm)	2' - 6" (762)
FS (mm)	2' - 5 1/2" (749)

5' - 11 3/4" (1822)
6' - 0" (1829)
5' - 11 1/2" (1816)

ESDHTR2616



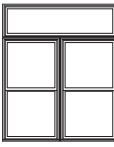
ESDH2646

Transom Muller Over Double Hung 2 Wide

MO (mm)	5' - 0" (1524)
RO (mm)	5' - 0" (1524)
FS (mm)	4' - 11 1/2" (1511)

5' - 11 3/4" (1822)
6' - 0" (1829)
5' - 11 1/2" (1816)

ESDHTR5016

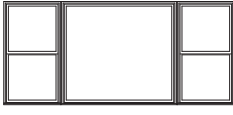


ESDH2646 / ESDH2646

Double Hung Flankers with Center Picture*

MO (mm)	10' - 0" (3048)
RO (mm)	10' - 0" (3048)
FS (mm)	9' - 11 1/2" (3035)

4' - 5 3/4" (1365)
4' - 6" (1372)
4' - 5 1/2" (1359)



ESDH2646 / ESDHP5046 / ESDH2646

Double Hung Flankers with Center Operator

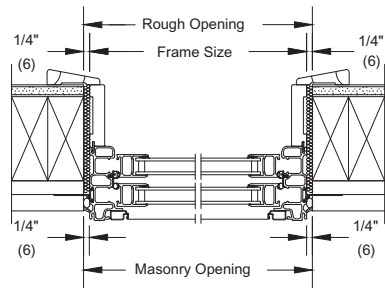
MO (mm)	7' - 6" (2286)
RO (mm)	7' - 6" (2286)
FS (mm)	7' - 5 1/2" (2273)

4' - 5 3/4" (1365)
4' - 6" (1372)
4' - 5 1/2" (1359)

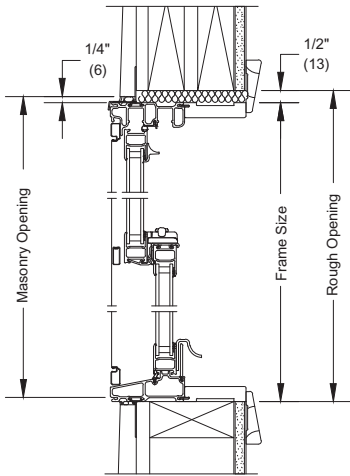


ESDH2646 / ESDH2646 / ESDH2646

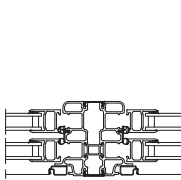
Construction Details



Jambs



Head Jamb
& Sill



Vertical Mullion



Horizontal Mullion
Transom/Operator

* This product is only available field muller.

Details and Elevations not to scale.

Available in equal, cottage, and reverse cottage sash configurations. Cottage and reverse cottage sash configurations are not available on 20, 60, and 66 call number heights.

Obscure Glass option available on all units.

Special sized units available within product size matrix. See your Marvin retailer.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory muller.

MAXIMUM ROUGH OPENING not to exceed 114" x 78". Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 96" x 96". Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

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GLIDER

MO (mm)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	4' - 6" (1372)	5' - 0" (1524)	6' - 0" (1829)
RO (mm)	2' - 6" (762)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	4' - 6" (1372)	5' - 0" (1524)	6' - 0" (1829)
FS (mm)	2' - 5 1/2" (749)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)	4' - 5 1/2" (1359)	4' - 11 1/2" (1511)	5' - 11 1/2" (1816)
DLO (mm)	11 5/16" (287)	14 5/16" (363)	17 5/16" (440)	20 5/16" (516)	23 5/16" (592)	26 5/16" (668)	32 5/16" (821)
1' - 5 3/4" (451)							
1' - 11 3/4" (603)							
2' - 0" (610)							
2' - 5 3/4" (756)							
2' - 6" (762)							
2' - 11 3/4" (908)							
3' - 0" (914)							
3' - 5 1/2" (1054)							
36 9/16" (929)							
3' - 11 3/4" (1213)							
4' - 0" (1219)							
4' - 5 1/2" (1359)							
42 9/16" (1081)							
4' - 5 3/4" (1365)							
4' - 6" (1372)							
4' - 11 1/2" (1511)							
48 9/16" (1233)							
4' - 11 3/4" (1518)							
5' - 0" (1524)							
54 9/16" (1386)							

GBG available in standard Rectangular lite cut, shown. Other GBG lite cuts shown on page 3.

E = These windows meet National Egress Codes for fire evacuation. Local codes may differ.

Details and Elevations not to scale.

XO operation standard, OX operation optional.

Obscure Glass option available on all units.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

Special sized units available within product size matrix. See your Marvin retailer.

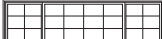
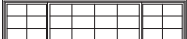
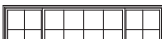
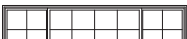
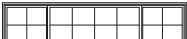
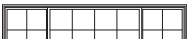
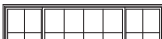
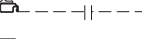
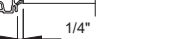
See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MARVIN ESSENTIAL™ COLLECTION

GLIDER TRIPLE SASH

MO (mm)	6'-0" (1829)	7'-0" (2134)	8'-0" (2438)
RO (mm)	6'-0" (1829)	7'-0" (2134)	8'-0" (2438)
FS (mm)	5'-11 1/2" (1816)	6'-11 1/2" (2121)	7'-11 1/2" (2426)

1'-5 3/4" (451)			
1'-5 3/4" (451)	ESGLTS6016	ESGLTS7016	ESGLTS8016
1'-11 3/4" (603)			
1'-11 3/4" (603)	ESGLTS6020	ESGLTS7020	ESGLTS8020
2'-5 3/4" (756)			
2'-5 3/4" (756)	ESGLTS6026	ESGLTS7026	ESGLTS8026
2'-6" (762)			
2'-6" (762)	ESGLTS6030	ESGLTS7030	ESGLTS8030
2'-11 3/4" (908)			
2'-11 3/4" (908)	ESGLTS6036	ESGLTS7036	ESGLTS8036
3'-0" (914)			
3'-0" (914)	ESGLTS6040	ESGLTS7040	ESGLTS8040 E
3'-5 3/4" (1060)			
3'-5 3/4" (1060)	ESGLTS6046	ESGLTS7046	ESGLTS8046 E
3'-6" (1067)			
3'-6" (1067)	ESGLTS6050	ESGLTS7050	ESGLTS8050 E
3'-11 3/4" (1213)			
3'-11 3/4" (1213)	ESGLTS6050	ESGLTS7050	ESGLTS8050 E
4'-0" (1219)			
4'-0" (1219)	ESGLTS6050	ESGLTS7050	ESGLTS8050 E
4'-5 3/4" (1365)			
4'-5 3/4" (1365)	ESGLTS6050	ESGLTS7050	ESGLTS8050 E
4'-6" (1372)			
4'-6" (1372)	ESGLTS6050	ESGLTS7050	ESGLTS8050 E
4'-11 3/4" (1518)			
4'-11 3/4" (1518)	ESGLTS6050	ESGLTS7050	ESGLTS8050 E

GBG available in standard Rectangular lite cut, shown.
Other GBG lite cuts shown on page 3.

E = These windows meet National Egress Codes for fire
evacuation. Local codes may differ.

Details and Elevations not to scale.

Obscure Glass option available on all units.

Units may optionally include a window opening control
device tested to ASTM F2090-10, which can be released
from the inside without the use of a key, tool, special
knowledge, or force greater than that required for normal
unit operation.

Special sized units available within product size matrix.
See your Marvin retailer.

See page 52 for specific PG Ratings.

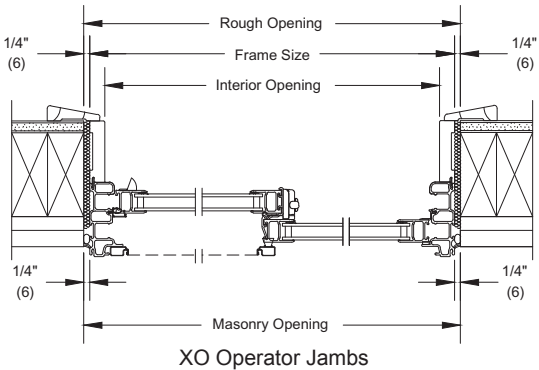
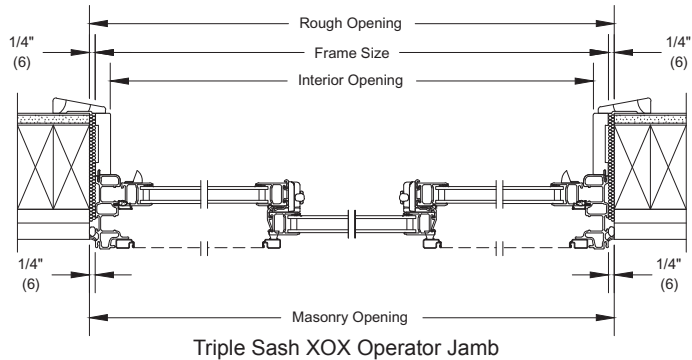
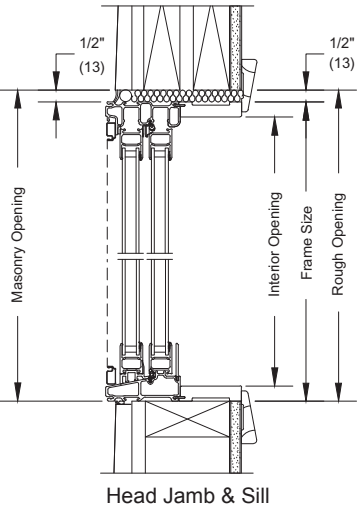
For further details and drawings visit the 'Tools and
Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Field mull kits are available. Structural mullion
reinforcement is required for some assemblies.

Please consult your local Marvin representative for
more information.

Construction Details



GLIDER

2 Wide

MO (mm)	5' - 0" (1524)	6' - 0" (1828)	7' - 0" (2134)	8' - 0" (2438)	9' - 0" (2744)
RO (mm)	5' - 0" (1524)	6' - 0" (1828)	7' - 0" (2134)	8' - 0" (2438)	9' - 0" (2744)
FS (mm)	4' - 11 1/2" (1511)	5' - 11 1/2" (1816)	6' - 11 1/2" (2121)	7' - 11 1/2" (2426)	8' - 11 1/2" (2734)
1' - 5 3/4" (451) 1' - 6" (457) 1' - 5 1/2" (445)	 ESGL2616	 ESGL3016	 ESGL3616	 ESGL4016	 ESGL4616
1' - 11 3/4" (603) 2' - 0" (610) 1' - 11 1/2" (597)	 ESGL2620	 ESGL3020	 ESGL3620	 ESGL4020	 ESGL4620
2' - 5 3/4" (756) 2' - 6" (762) 2' - 5 1/2" (749)	 ESGL2626	 ESGL30126	 ESGL36126	 ESGL4026	 ESGL4626
2' - 11 3/4" (908) 3' - 0" (914) 2' - 11 1/2" (902)	 ESGL2630	 ESGL3030	 ESGL3630	 ESGL4030	 ESGL4630
3' - 5 3/4" (1060) 3' - 6" (1067) 3' - 5 1/2" (1054)	 ESGL2636	 ESGL3036	 ESGL3636	 ESGL4036	 ESGL4636 E
3' - 11 3/4" (1213) 4' - 0" (1219) 3' - 11 1/2" (1207)	 ESGL2640	 ESGL3040	 ESGL3640	 ESGL4040 E	 ESGL4640 E
4' - 5 3/4" (1365) 4' - 6" (1372) 4' - 5 1/2" (1359)	 ESGL2646	 ESGL3046	 ESGL3646	 ESGL4046 E	 ESGL4646 E
4' - 11 3/4" (1518) 5' - 0" (1524) 4' - 11 1/2" (1511)	 ESGL2650	 ESGL3050	 ESGL3650	 ESGL4050 E	 ESGL4650 E

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 3.

E = These windows meet National Egress Codes for fire evacuation. Local codes may differ.

Details and Elevations not to scale.

XO operation standard, OX operation optional. Obscure Glass option available on all units.

Special sized units available within product size matrix. See your Marvin retailer.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled.

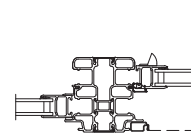
MAXIMUM ROUGH OPENING not to exceed 114" x 60". Maximum up to 3 units wide by 1 unit high.

MAXIMUM ROUGH OPENING not to exceed 72" x 78". Maximum up to 2 units wide by 2 units high.

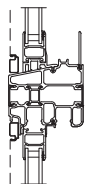
Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

Construction Details



Vertical Mullion



Horizontal Mullion

MARVIN ESSENTIAL™ COLLECTION

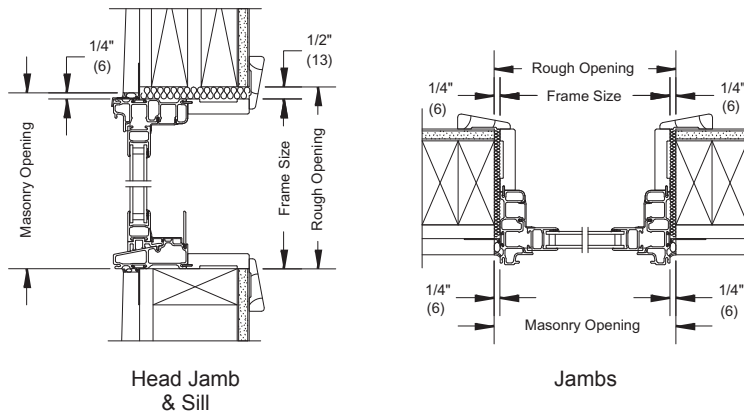
DOUBLE HUNG PICTURE

MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	5' - 0" (1524)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	5' - 0" (1524)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 7 1/2" (800)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)
DLO (mm)	12 9/16" (319)	18 9/16" (471)	24 9/16" (624)	26 9/16" (675)	30 9/16" (776)	36 9/16" (929)	42 9/16" (1081)	54 9/16" (1386)
1'-11 3/4" (603)								
2'-5 3/4" (756)								
2'-11 3/4" (908)								
3'-5 3/4" (1060)								
3'-11 3/4" (1213)								
4'-5 3/4" (1365)								
4'-11 3/4" (1518)								
5'-5 3/4" (1670)								
5'-11 3/4" (1822)								

DOUBLE HUNG TRANSOM

MO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	5' - 0" (1524)
RO (mm)	1' - 6" (457)	2' - 0" (610)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)	5' - 0" (1524)
FS (mm)	1' - 5 1/2" (445)	1' - 11 1/2" (597)	2' - 5 1/2" (749)	2' - 7 1/2" (800)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)
DLO (mm)	12 9/16" (319)	18 9/16" (471)	24 9/16" (624)	26 9/16" (675)	30 9/16" (776)	36 9/16" (929)	42 9/16" (1081)	54 9/16" (1386)
0' - 11 3/4" (298)								
1' - 0" (305)								
0' - 11 1/2" (292)								
6 9/16" (167)								
1' - 5 3/4" (451)								
1' - 6" (457)								
1' - 5 1/2" (445)								
12 9/16" (319)								
1' - 11 3/4" (603)								
2' - 0" (610)								
1' - 11 1/2" (597)								
18 9/16" (471)								
	ESDHTR1610	ESDHTR2010	ESDHTR2610	ESDHTR2810	ESDHTR3010	ESDHTR3610	ESDHTR4010	ESDHTR5010
	ESDHTR1616	ESDHTR2016	ESDHTR2616	ESDHTR2816	ESDHTR3016	ESDHTR3616	ESDHTR4016	ESDHTR5016
	ESDHTR1620	ESDHTR2020	ESDHTR2620	ESDHTR2820	ESDHTR3020	ESDHTR3620	ESDHTR4020	ESDHTR5020

Construction Details



GBG available in standard Rectangular lite cut, shown above.
Other GBG lite cuts shown on page 3. (Not available on In-Sash Transom units.)

Details and Elevations not to scale.

Special sized units available within product size matrix. See your Marvin retailer.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled.

MAXIMUM ROUGH OPENING not to exceed 114" x 78".
Maximum up to 6 units wide by 1 unit high.

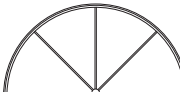
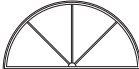
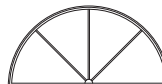
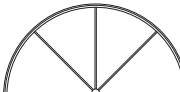
MAXIMUM ROUGH OPENING not to exceed 96" x 96".
Maximum up to 5 units wide by 5 units high.

Field mull kits are available. Structural mullion reinforcement is required for some assemblies.

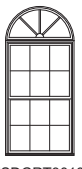
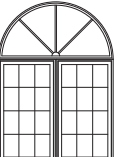
Please consult your local Marvin representative for more information.

MARVIN ESSENTIAL™ COLLECTION
DIRECT GLAZE ROUND TOPS

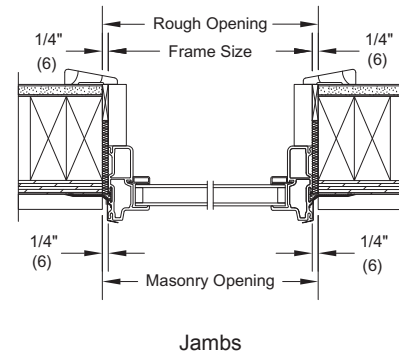
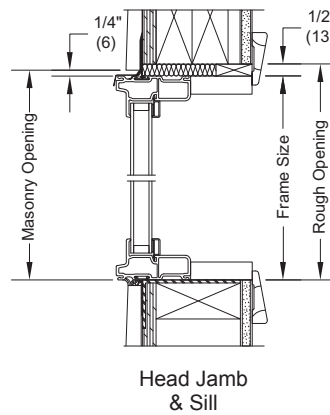
True Half Round (RT1)

MO (mm) RO (mm) FS (mm) DLO (mm)	2'- 6" (762) 2'- 6" (762) 2'- 5 1/2" (749) 25 53/64" (656)		ESDGRT2613	MO (mm) RO (mm) FS (mm) DLO (mm)	2'- 8" (813) 2'- 8" (813) 2'- 7 1/2" (800) 27 27/32" (707)		ESDGRT2814	MO (mm) RO (mm) FS (mm) DLO (mm)	3'- 0" (914) 3'- 0" (914) 2'- 11 1/2" (902) 31 7/8" (810)		ESDGRT3016	MO (mm) RO (mm) FS (mm) DLO (mm)	3'- 6" (1067) 3'- 6" (1067) 3'- 5 1/2" (1054) 37 29/32" (963)		ESDGRT3619
MO (mm) RO (mm) FS (mm) DLO (mm)	4'- 0" (1219) 4'- 0" (1219) 3'- 11 1/2" (1207) 43 59/64" (1116)		ESDGRT4020	MO (mm) RO (mm) FS (mm) DLO (mm)	5'- 0" (1524) 5'- 0" (1524) 4'- 11 1/2" (1511) 55 61/64" (1421)		ESDGRT5026	MO (mm) RO (mm) FS (mm) DLO (mm)	5'- 4" (1626) 5'- 4" (1626) 5'- 3 1/2" (1613) 59 61/64" (1523)		ESDGRT5428	MO (mm) RO (mm) FS (mm) DLO (mm)	8'- 0" (2438) 8'- 0" (2438) 7'- 11 1/2" (2426) 92 23/37" (2337)		ESDGRT8040
MO (mm) RO (mm) FS (mm) DLO (mm)	6'- 0" (1829) 6'- 0" (1829) 5'- 11 1/2" (1816) 67 31/32" (1726)		ESDGRT6030	MO (mm) RO (mm) FS (mm) DLO (mm)	7'- 0" (2134) 7'- 0" (2134) 6'- 11 1/2" (2121) 79 63/64" (2032)		ESDGRT7036	MO (mm) RO (mm) FS (mm) DLO (mm)	8'- 0" (2438) 8'- 0" (2438) 7'- 11 1/2" (2426) 92 23/37" (2337)		ESDGRT8040				

Multiple Assemblies

MO (mm) 3' - 0" (914) RO (mm) 3' - 0" (914) FS (mm) 2' - 11 1/2" (902) 6' - 6" (1981) 6' - 6 1/4" (1988) 6' - 5 3/4" (1975)	 ESDGRT3016 Over ESDH3050
MO (mm) 5' - 0" (1524) RO (mm) 5' - 0" (1524) FS (mm) 4' - 11 1/2" (1511) 7' - 0" (2134) 7' - 0 1/4" (2140) 6' - 11 3/4" (2127)	 ESDGRT5026 Over ESCA2646

Construction Details



GBG only available in standard Round Top pattern, shown above.

Details and Elevations not to scale.

Sample multiples assemblies shown. Contact your Marvin representative for more information.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

MAXIMUM ROUGH OPENING - ESDG RT to ESCA, ESAWN, ESCA P, ESSH, ESDH, ESDH P, ESDG (Rectangle), ESDH TR, ESCA TR not to exceed 96" x 96" up to 5W2H.

MAXIMUM ROUGH OPENING - ESDG RT to ESGL not to exceed 72" x 78" up to 2 wide 2 high.

Both horizontal and vertical field mull kits are available. Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

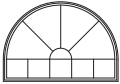
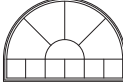
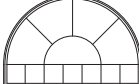
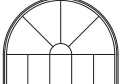
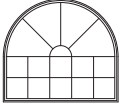
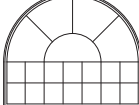
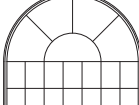
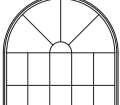
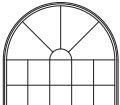
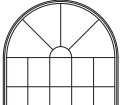
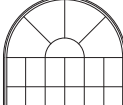
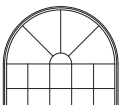
DIRECT GLAZE ROUND TOPS

True Half Above Springline (RT2)

MO (mm)	2' - 6" (762)	2' - 8" (813)	3' - 0" (914)	3' - 6" (1067)
RO (mm)	2' - 6" (762)	2' - 8" (813)	3' - 0" (914)	3' - 6" (1067)
FS (mm)	2' - 5 1/2" (749)	2' - 7 1/2" (800)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)
DLO (mm)	26 1/16" (662)	28 1/16" (713)	32 1/16" (814)	38 1/16" (967)
	 ESDGRT2610	 ESDGRT2810	 ESDGRT3010	 ESDGRT3610
	 ESDGRT2616	 ESDGRT2816	 ESDGRT3016	 ESDGRT3616
	 ESDGRT2620	 ESDGRT2820	 ESDGRT3020	 ESDGRT3620
	 ESDGRT2626	 ESDGRT2826	 ESDGRT3026	 ESDGRT3626
	 ESDGRT2630	 ESDGRT2830	 ESDGRT3030	 ESDGRT3630
	 ESDGRT2636	 ESDGRT2836	 ESDGRT3036	 ESDGRT3636
	 ESDGRT2640	 ESDGRT2840	 ESDGRT3040	 ESDGRT3640
	 ESDGRT2646	 ESDGRT2846	 ESDGRT3046	 ESDGRT3646
	 ESDGRT2650	 ESDGRT2850	 ESDGRT3050	 ESDGRT3650

MARVIN ESSENTIAL™ COLLECTION
DIRECT GLAZE ROUND TOPS

True Half Above Springline (RT2)

MO (mm)	4' - 0" (1219)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)
RO (mm)	4' - 0" (1219)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)
FS (mm)	3' - 11 1/2" (1207)	4' - 11 1/2" (1511)	5' - 3 1/2" (1600)	5' - 11 1/2" (1816)
DLO (mm)	44 1/16" (1119)	56 1/16" (1424)	60 1/16" (1525)	68 1/16" (1729)
	2' - 11 1/2" (802) 2' - 11 3/4" (808) 2' - 11 1/4" (895) 31 13/16" (808)	3' - 5 1/2" (1054) 3' - 5 3/4" (1060) 3' - 5 1/4" (1048) 37 13/16" (960)	3' - 7 1/2" (1105) 3' - 7 3/4" (1111) 3' - 7 1/4" (1099) 39 13/16" (1011)	3' - 11 1/2" (1207) 3' - 11 3/4" (1213) 3' - 11 1/4" (1200) 43 13/16" (1113)
	 ESDGR4010	 ESDGR5010	 ESDGR5410	 ESDGR6010
	3' - 5 1/2" (1054) 3' - 5 3/4" (1060) 3' - 5 1/4" (1048) 37 13/16" (960)	3' - 11 1/2" (1207) 3' - 11 3/4" (1213) 3' - 11 1/4" (1200) 43 13/16" (1113)	4' - 1 1/2" (1257) 4' - 1 3/4" (1264) 4' - 1 1/4" (1251) 45 13/16" (1164)	4' - 5 1/2" (1359) 4' - 5 3/4" (1365) 4' - 5 1/4" (1353) 49 13/16" (1265)
	 ESDGR4016	 ESDGR5016	 ESDGR5416	 ESDGR6016
	3' - 11 1/2" (1207) 3' - 11 3/4" (1213) 3' - 11 1/4" (1200) 43 13/16" (1113)	4' - 5 1/2" (1359) 4' - 5 3/4" (1365) 4' - 5 1/4" (1353) 49 13/16" (1265)	4' - 7 1/2" (1410) 4' - 7 3/4" (1416) 4' - 7 1/4" (1403) 51 13/16" (1316)	4' - 11 1/2" (1511) 4' - 11 3/4" (1518) 4' - 11 1/4" (1505) 55 13/16" (1418)
	 ESDGR4020	 ESDGR5020	 ESDGR5420	 ESDGR6020
	4' - 5 1/2" (1359) 4' - 5 3/4" (1365) 4' - 5 1/4" (1353) 49 13/16" (1265)	4' - 11 1/2" (1511) 4' - 11 3/4" (1518) 4' - 11 1/4" (1505) 55 13/16" (1418)	5' - 1 1/2" (1562) 5' - 1 3/4" (1568) 5' - 1 1/4" (1556) 57 13/16" (1488)	5' - 5 1/2" (1664) 5' - 5 3/4" (1670) 5' - 5 1/4" (1657) 61 13/16" (1570)
	 ESDGR4026	 ESDGR5026	 ESDGR5426	 ESDGR6026
	4' - 11 1/2" (1511) 4' - 11 3/4" (1518) 4' - 11 1/4" (1505) 55 13/16" (1418)	5' - 5 1/2" (1664) 5' - 5 3/4" (1670) 5' - 5 1/4" (1657) 61 13/16" (1570)	5' - 7 1/2" (1715) 5' - 7 3/4" (1721) 5' - 7 1/4" (1708) 63 13/16" (1621)	
	 ESDGR4030	 ESDGR5030	 ESDGR5430	
	5' - 5 1/2" (1664) 5' - 5 3/4" (1670) 5' - 5 1/4" (1657) 61 13/16" (1570)	5' - 11 1/2" (1816) 5' - 11 3/4" (1822) 5' - 11 1/4" (1810) 67 13/16" (1722)	6' - 1 1/2" (1867) 6' - 1 3/4" (1873) 6' - 1 1/4" (1861) 69 13/16" (1773)	
	 ESDGR4036	 ESDGR5036	 ESDGR5436	
	5' - 11 1/2" (1816) 5' - 11 3/4" (1822) 5' - 11 1/4" (1810) 67 13/16" (1722)	6' - 5 1/2" (1969) 6' - 5 3/4" (1975) 6' - 5 1/4" (1962) 73 13/16" (1875)	6' - 7 1/2" (2019) 6' - 7 3/4" (2026) 6' - 7 1/4" (2013) 75 13/16" (1926)	
	 ESDGR4040	 ESDGR5040	 ESDGR5440	
	6' - 5 1/2" (1969) 6' - 5 3/4" (1975) 6' - 5 1/4" (1962) 73 13/16" (1875)	6' - 11 1/2" (2121) 6' - 11 3/4" (2127) 6' - 11 1/4" (2115) 79 13/16" (2027)		
	 ESDGR4046	 ESDGR5046		
	6' - 11 1/2" (2121) 6' - 11 3/4" (2127) 6' - 11 1/4" (2115) 79 13/16" (2027)			
	 ESDGR4050			

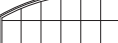
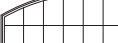
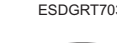
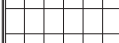
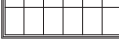
DIRECT GLAZE ROUND TOPS

Eyebrow Above Springline (RT6)

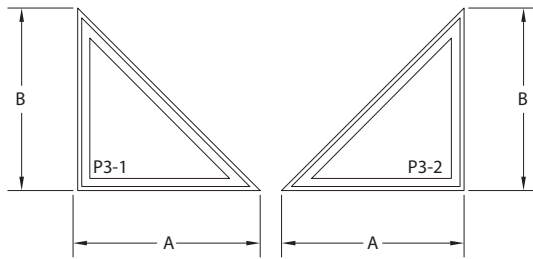
MO (mm)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
RO (mm)	2' - 6" (762)	2' - 8" (914)	3' - 0" (914)	3' - 6" (1067)	4' - 0" (1219)
FS (mm)	2' - 5 1/2" (749)	2' - 7 1/2" (902)	2' - 11 1/2" (902)	3' - 5 1/2" (1054)	3' - 11 1/2" (1207)
DLO (mm)	26 1/16" (662)	28 1/16" (713)	32 1/16" (814)	38 1/16" (967)	44 1/16" (1119)
	 ESDGRT2610	 ESDGRT2810	 ESDGRT3010	 ESDGRT3610	 ESDGRT4010
	 ESDGRT2616	 ESDGRT2816	 ESDGRT3016	 ESDGRT3616	 ESDGRT4016
	 ESDGRT2620	 ESDGRT2820	 ESDGRT3020	 ESDGRT3620	 ESDGRT4020
	 ESDGRT2626	 ESDGRT2826	 ESDGRT3026	 ESDGRT3626	 ESDGRT4026
	 ESDGRT2630	 ESDGRT2830	 ESDGRT3030	 ESDGRT3630	 ESDGRT4030
	 ESDGRT2636	 ESDGRT2836	 ESDGRT3036	 ESDGRT3636	 ESDGRT4036
	 ESDGRT2640	 ESDGRT2840	 ESDGRT3040	 ESDGRT3640	 ESDGRT4040
	 ESDGRT2646	 ESDGRT2846	 ESDGRT3046	 ESDGRT3646	 ESDGRT4046
	 ESDGRT2650	 ESDGRT2850	 ESDGRT3050	 ESDGRT3650	 ESDGRT4050
	 ESDGRT2656	 ESDGRT2856	 ESDGRT3056	 ESDGRT3656	 ESDGRT4056
	 ESDGRT2660	 ESDGRT2860	 ESDGRT3060	 ESDGRT3660	 ESDGRT4060
6' - 2 15/16" (1904)	5' - 8 15/16" (1752)	5' - 9 7/16" (1764)	5' - 10 1/2" (1791)	5' - 10 1/2" (1791)	6' - 0 1/8" (1832)
6' - 3 3/16" (1910)	5' - 9 3/16" (1758)	5' - 9 11/16" (1770)	5' - 10 3/4" (1797)	5' - 10 3/4" (1798)	6' - 0 3/8" (1838)
6' - 2 11/16" (1898)	5' - 8 11/16" (1745)	5' - 9 3/16" (1757)	5' - 10 1/4" (1785)	5' - 10 1/4" (1785)	5' - 11 7/8" (1825)
71 17/64" (1810)	65 17/64" (1658)	65 3/4" (1670)	66 13/16" (1697)	66 53/64" (1697)	68 27/64" (1738)
5' - 2 15/16" (1599)	4' - 8 15/16" (1447)	4' - 9 7/16" (1459)	4' - 10 1/2" (1486)	4' - 10 1/2" (1486)	5' - 0 1/8" (1527)
5' - 3 3/16" (1606)	4' - 9 3/16" (1453)	4' - 9 11/16" (1465)	4' - 10 3/4" (1492)	4' - 10 3/4" (1493)	5' - 0 3/8" (1533)
5' - 2 11/16" (1593)	4' - 8 11/16" (1440)	4' - 9 3/16" (1452)	4' - 10 1/4" (1480)	4' - 10 1/4" (1480)	5' - 0 3/8" (1533)
59 17/64" (1505)	53 17/64" (1353)	53 3/4" (1365)	54 13/16" (1392)	54 53/64" (1393)	56 27/64" (1433)
5' - 4 1/2" (1639)	4' - 10 1/2" (1486)	4' - 10 3/4" (1493)	4' - 11 1/4" (1500)	4' - 11 1/4" (1500)	5' - 1 1/8" (1544)
5' - 4 3/4" (1645)	4' - 10 3/4" (1493)	4' - 11 1/4" (1500)	4' - 11 3/8" (1506)	4' - 11 3/8" (1506)	5' - 1 1/4" (1550)
5' - 4 1/4" (1633)	4' - 10 1/4" (1480)	4' - 11 1/8" (1492)	4' - 11 1/2" (1500)	4' - 11 1/2" (1500)	5' - 1 1/2" (1562)
60 53/64" (1545)	54 53/64" (1393)	54 13/16" (1392)	55 1/2" (1444)	55 1/2" (1444)	57 1/2" (1512)
6' - 4 1/2" (1944)	5' - 10 1/2" (1791)	5' - 11 1/4" (1803)	5' - 11 3/8" (1810)	5' - 11 3/8" (1810)	6' - 1 1/8" (1854)
6' - 4 3/4" (1950)	5' - 10 3/4" (1798)	5' - 11 3/8" (1810)	5' - 11 7/8" (1825)	5' - 11 7/8" (1825)	6' - 1 3/8" (1866)
6' - 4 1/4" (1937)	5' - 10 1/4" (1785)	5' - 11 1/8" (1803)	5' - 11 1/2" (1810)	5' - 11 1/2" (1810)	6' - 1 1/4" (1850)
72 53/64" (1850)	66 53/64" (1697)	66 13/16" (1697)	67 1/2" (1744)	67 1/2" (1744)	69 1/2" (1790)
6' - 6 1/8" (1984)	5' - 11 1/8" (1832)	5' - 12 1/4" (1844)	5' - 12 3/8" (1856)	5' - 12 3/8" (1856)	6' - 2 1/8" (1904)
6' - 6 3/8" (1990)	5' - 11 3/8" (1838)	5' - 12 3/8" (1856)	5' - 12 7/8" (1868)	5' - 12 7/8" (1868)	6' - 2 3/8" (1910)
6' - 5 7/8" (1978)	5' - 11 7/8" (1825)	5' - 12 7/8" (1868)	5' - 13 1/8" (1880)	5' - 13 1/8" (1880)	6' - 2 1/4" (1898)
74 27/64" (1890)	68 27/64" (1738)	68 13/16" (1738)	69 1/2" (1790)	69 1/2" (1790)	71 1/2" (1842)

MARVIN ESSENTIAL™ COLLECTION
DIRECT GLAZE ROUND TOPS

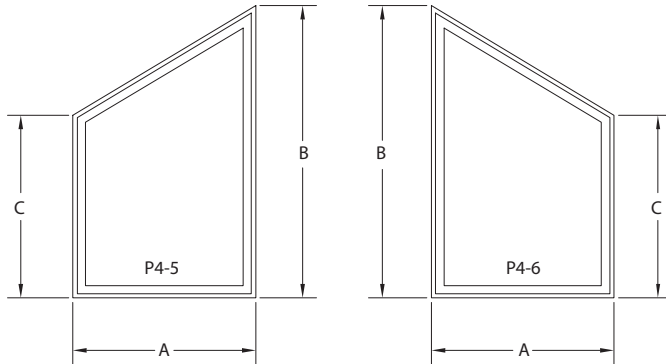
Eyebrow Above Springline (RT6)

MO (mm)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	7' - 0" (2134)	8' - 0" (2438)
RO (mm)	5' - 0" (1524)	5' - 4" (1626)	6' - 0" (1829)	5' - 0" (2134)	8' - 0" (2438)
FS (mm)	4' - 11 1/2" (1511)	5' - 3 1/2" (1613)	5' - 11 1/2" (1816)	6' - 11 1/2" (2121)	7' - 11 1/2" (2426)
DLO (mm)	56 1/16" (1424)	60 1/16" (1525)	68 1/16" (1729)	80 1/16" (2033)	92 1/16" (2338)
	 ESDGRT5010	 ESDGRT5410	 ESDGRT6010	 ESDGRT7010	 ESDGRT8010
	 ESDGRT5016	 ESDGRT5416	 ESDGRT6016	 ESDGRT7016	 ESDGRT8016
	 ESDGRT5020	 ESDGRT5420	 ESDGRT6020	 ESDGRT7020	 ESDGRT8020
	 ESDGRT5026	 ESDGRT5426	 ESDGRT6026	 ESDGRT7026	 ESDGRT8026
	 ESDGRT5030	 ESDGRT5430	 ESDGRT6030	 ESDGRT7030	 ESDGRT8030
	 ESDGRT5036	 ESDGRT5436	 ESDGRT6036	 ESDGRT7036	
	 ESDGRT5040	 ESDGRT5440	 ESDGRT6040	 ESDGRT7040	
	 ESDGRT5046	 ESDGRT5446	 ESDGRT6046		
	 ESDGRT5050	 ESDGRT5450	 ESDGRT6050		
	 ESDGRT5056	 ESDGRT5456			
	 ESDGRT5060	 ESDGRT5460			

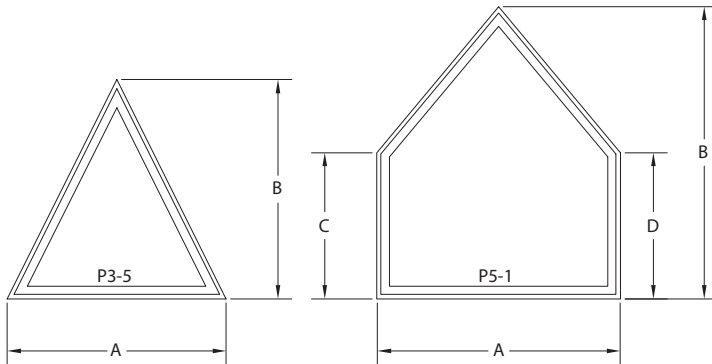
DIRECT GLAZE SPECIALTY SHAPES - Polygons



90° TRIANGLE

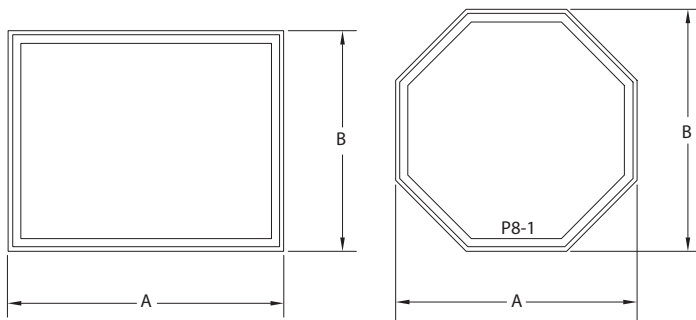


TRAPEZOID



ISOSCELES TRIANGLE

PENTAGON



90° RECTANGLE

OCTAGON

HOW TO SPECIFY

When ordering a Trapezoid, Triangle, or Rectangle window, provide a sketch of the unit as viewed from the exterior, also include key Rough Opening dimensions.

EXAMPLE

To order a window of a Trapezoid opening provide the measurements of A, B, and C as indicated. For other shapes, give the dimensions shown.

SPECIFICATION NOTES

All units are subject to validation.

Maximum/Minimum Guidelines

Maximum Square Footage: 49 ft² of Rough Opening

Maximum Width: 114" Rough Opening

Maximum Height: 114" Rough Opening

Minimum (RECT, P3, P4, P5): 12" x 12" Rough Opening

Minimum (P8): 18" x 18" Rough Opening

Minimum Short Leg (P4, P5): 8" Rough Opening

P3 Pitch: 3/12 to 36/12 Pitch Available

P4 Pitch: 36/12 Maximum Pitch Available

P5 Pitch: 36/12 Maximum Pitch Available

MULTIPLE ASSEMBLIES

Multiple assemblies can be factory mullled.

MAXIMUM ROUGH OPENING: not to exceed 114" x 78".

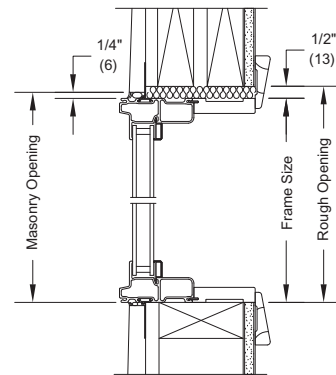
Maximum up to 6 units wide by 1 unit high.

MAXIMUM ROUGH OPENING: not to exceed 96" x 96".

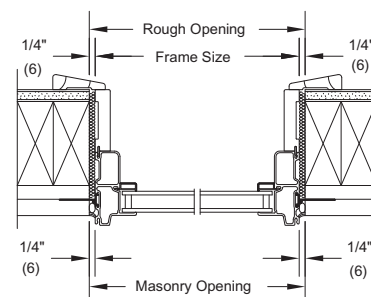
Maximum up to 5 units wide by 5 units high.

NOTE: Units with Rough Opening larger than 37.75 ft² will be standard tempered.

Construction Details



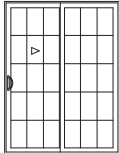
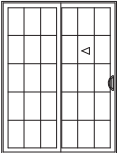
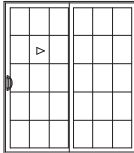
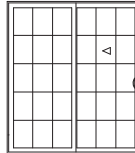
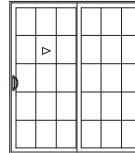
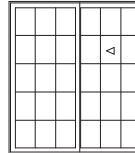
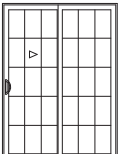
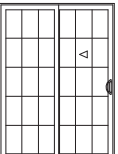
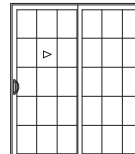
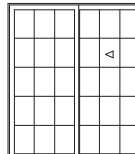
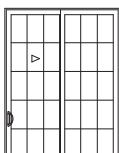
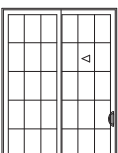
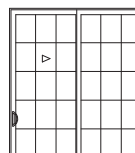
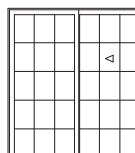
Head Jamb & Sill



Jambs

MARVIN ESSENTIAL™ COLLECTION
SLIDING PATIO DOOR

2 Panel

MO (mm)	5' - 0" (1524)	5' - 0" (1524)	5' - 10 1/2" (1791)	5' - 10 1/2" (1791)	6' - 0" (1829)	6' - 0" (1829)
RO (mm)	5' - 0" (1524)	5' - 0" (1524)	5' - 10 1/2" (1791)	5' - 10 1/2" (1791)	6' - 0" (1829)	6' - 0" (1829)
FS (mm)	4' - 11 1/2" (1511)	4' - 11 1/2" (1511)	5' - 10" (1778)	5' - 10" (1778)	5' - 11 1/2" (1816)	5' - 11 1/2" (1816)
DLO (mm)	24 63/64" (635)	24 63/64" (635)	30 15/64" (768)	30 15/64" (768)	30 63/64" (787)	30 63/64" (787)
6' - 7 3/4" (2026)						
6' - 8" (2032)						
6' - 7 1/2" (2019)						
72 1/2" (1841)						
6' - 9 3/4" (2076)						
6' - 10" (2083)						
6' - 9 1/2" (2070)						
74 1/2" (1892)						
7' - 11 3/4" (2432)						
8' - 0" (2438)						
7' - 11 1/2" (2426)						
88 1/2" (2248)						

GBG available in standard Rectangular lite cut, shown above.
Other GBG lite cuts shown on page 3. (Not available on In-Sash Transom units.)

Details and Elevations not to scale.

Special sized units available within two panel product size matrix.
See your Marvin representative for more information.

See page 52 for specific PG Ratings.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assembly units can be factory mulled up to 1 unit wide by 2 units high.

MAXIMUM ROUGH OPENING not to exceed 72" x 100 1/2".

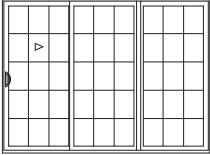
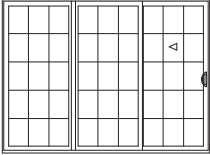
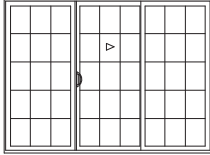
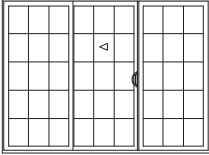
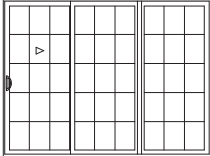
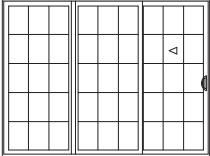
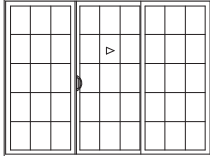
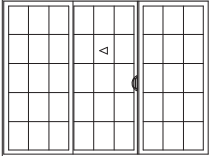
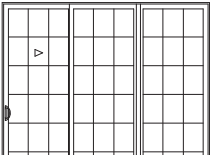
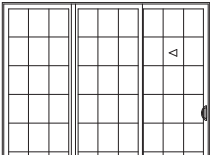
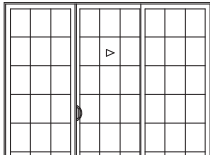
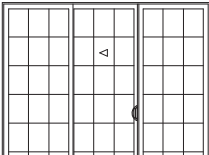
Field mull kits available for up to 3 units wide by 2 units high not to exceed 110" x 112". Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

SLIDING PATIO DOOR

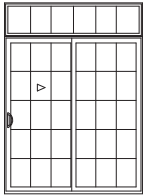
3 Panel

MO (mm)	9' - 0" (2743)	9' - 0" (2743)	9' - 0" (2743)	9' - 0" (2743)
RO (mm)	9' - 0" (2743)	9' - 0" (2743)	9' - 0" (2743)	9' - 0" (2743)
FS (mm)	8' - 11 1/2" (2731)	8' - 11 1/2" (2731)	8' - 11 1/2" (2731)	8' - 11 1/2" (2731)
DLO (mm)	30 63/64" (787)	30 63/64" (787)	30 63/64" (787)	30 63/64" (787)

6' - 7 3/4" (2026) 6' - 8" (2032) 6' - 7 1/2" (2019) 72 1/2" (1841)				
	ESSPD9068 - XOO	ESSPD9068 - OOX	ESSPD9068 - OXO RH	ESSPD9068 - OXO LH
6' - 9 3/4" (2076) 6' - 10" (2083) 6' - 9 1/2" (2070) 74 1/2" (1892)				
	ESSPD90610 - XOO	ESSPD90610 - OOX	ESSPD90610 - OXO RH	ESSPD90610 - OXO LH
7' - 11 3/4" (2432) 8' - 0" (2438) 7' - 11 1/2" (2426) 88 1/2" (2248)				
	ESSPD9080 - XOO	ESSPD9080 - OOX	ESSPD9080 - OXO RH	ESSPD9080 - OXO LH

Direct Glaze Over Sliding Patio Door

MO (mm)	6' - 0" (1829)
RO (mm)	6' - 0" (1829)
FS (mm)	5' - 11 1/2" (1816)

8' - 3 3/4" (2534) 8' - 4" (2540) 8' - 3 1/2" (2527)	
	ESDG6016/ESSPD60610

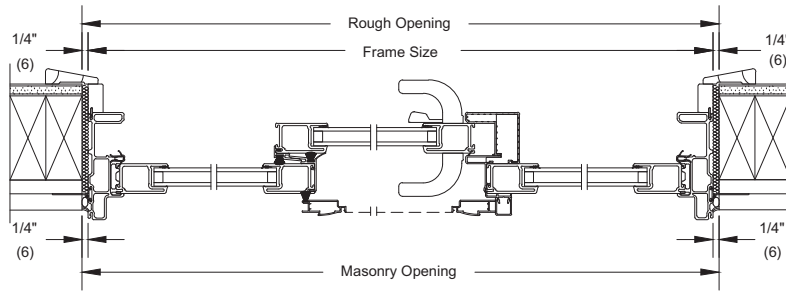
Direct Glaze Over Sliding Patio Door

MO (mm)	5' - 0" (1524)	5' - 10 1/2" (1791)	6' - 0" (1829)	9' - 0" (2743)
RO (mm)	5' - 0" (1524)	5' - 10 1/2" (1791)	6' - 0" (1829)	9' - 0" (2743)
FS (mm)	4' - 11 1/2" (1511)	5' - 10" (1778)	5' - 11 1/2" (1816)	8' - 11 1/2" (2731)
DLO (mm)	57 1/4" (1454)	67 1/4" (1708)	69 1/4" (1759)	105 1/4" (2673)

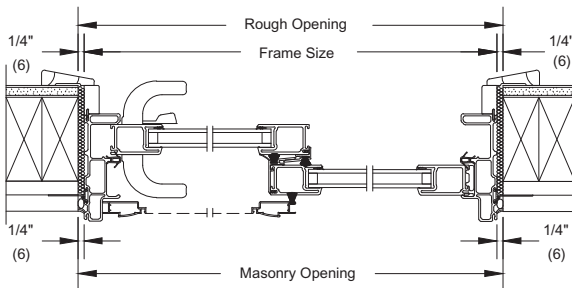
0' - 11 3/4" (298) 1' - 0" (305) 0' - 11 1/2" (292) 8 1/16" (205)				
	ESDG5010	ESDG51010	ESDG6010	ESDG9010
1' - 5 3/4" (451) 1' - 6" (457) 1' - 5 1/2" (445) 14 1/16" (357)				
	ESDG5016	ESDG51016	ESDG6016	ESDG9016

MARVIN ESSENTIAL™ COLLECTION
SLIDING PATIO DOOR

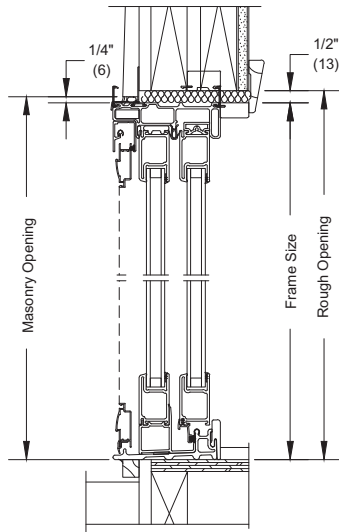
Construction Details



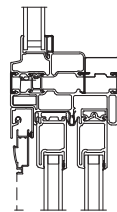
3 Panel OXO Operator Jamb



2 Panel XO Operator Jamb



Head Jamb & Sill



Direct Glaze
Over Sliding Patio Door

GBG available in standard Rectangular lite cut, shown above. Other GBG lite cuts shown on page 3.
 (Not available on In-Sash Transom units)

Details and Elevations not to scale.

Special sized units available within product size matrix. See your Marvin retailer.

See page 52 for specific PG Ratings.

XO operation shown, OX operation optional.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

MULTIPLE ASSEMBLIES

Multiple assembly units can be factory mullied up to 1 unit wide by 2 units high.

MAXIMUM ROUGH OPENING not to exceed 72" x 100 1/2".

Field mull kits available for up to 3 units wide by 2 units high not to exceed 110" x 112". Structural mullion reinforcement is required for some assemblies.

Please consult your local Marvin representative for more information.

EGRESS OPENINGS

Casement

EGRESS OPENING													
Unit #	Egress Width		Egress Height		Egress Clear Opening		Floor To Clear Opening*		Vent		DLO		
	Inches	(mm)	Inches	(mm)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	
1620	8 43/64	(220)	18 5/16	(465)	1.10	(1025)	60 41/64	(1540)	1.10	(1025)	1.46	(1359)	
1626	8 43/64	(220)	24 5/16	(618)	1.46	(1360)	54 41/64	(1388)	1.46	(1360)	1.96	(1817)	
1630	8 43/64	(220)	30 5/16	(770)	1.83	(1696)	48 41/64	(1236)	1.83	(1696)	2.45	(2275)	
1636	8 43/64	(220)	36 5/16	(923)	2.19	(2032)	42 41/64	(1083)	2.19	(2032)	2.94	(2732)	
1640	8 43/64	(220)	42 5/16	(1075)	2.55	(2367)	36 41/64	(931)	2.55	(2367)	3.43	(3190)	
1646	8 43/64	(220)	48 5/16	(1227)	2.91	(2703)	30 41/64	(778)	2.91	(2703)	3.93	(3647)	
1650	8 43/64	(220)	54 5/16	(1380)	3.27	(3038)	24 41/64	(626)	3.27	(3038)	4.42	(4105)	
1656	8 43/64	(220)	60 5/16	(1532)	3.63	(3374)	18 41/64	(474)	3.63	(3374)	4.91	(4563)	
1660	8 43/64	(220)	66 5/16	(1685)	3.99	(3710)	12 41/64	(321)	3.99	(3710)	5.40	(5020)	
2020	14 43/64	(373)	18 5/16	(465)	1.87	(1734)	60 41/64	(1540)	1.87	(1734)	2.21	(2049)	
2026	14 43/64	(373)	24 5/16	(618)	2.48	(2302)	54 41/64	(1388)	2.48	(2302)	2.95	(2739)	
2030	14 43/64	(373)	30 5/16	(770)	3.09	(2870)	48 41/64	(1236)	3.09	(2870)	3.69	(3429)	
2036	14 43/64	(373)	36 5/16	(923)	3.70	(3438)	42 41/64	(1083)	3.70	(3438)	4.43	(4119)	
2040	14 43/64	(373)	42 5/16	(1075)	4.31	(4005)	36 41/64	(931)	4.31	(4005)	5.18	(4809)	
2046	14 43/64	(373)	48 5/16	(1227)	4.92	(4573)	30 41/64	(778)	4.92	(4573)	5.92	(5499)	
2050	14 43/64	(373)	54 5/16	(1380)	5.53	(5141)	24 41/64	(626)	5.53	(5141)	6.66	(6188)	
2056	14 43/64	(373)	60 5/16	(1532)	6.15	(5709)	18 41/64	(474)	6.15	(5709)	7.40	(6878)	
2060	14 43/64	(373)	66 5/16	(1685)	6.76	(6277)	12 41/64	(321)	6.76	(6277)	8.15	(7568)	
2620	**	20 43/64	(525)	18 5/16	(465)	2.63	(2443)	60 41/64	(1540)	2.63	(2443)	2.95	(2739)
2626	**	20 43/64	(525)	24 5/16	(618)	3.49	(3243)	54 41/64	(1388)	3.49	(3243)	3.94	(3661)
2630	**	20 43/64	(525)	30 5/16	(770)	4.35	(4043)	48 41/64	(1236)	4.35	(4043)	4.93	(4583)
2636	**	20 43/64	(525)	36 5/16	(923)	5.21	(4843)	42 41/64	(1083)	5.21	(4843)	5.93	(5505)
2640	E **	20 43/64	(525)	42 5/16	(1075)	6.07	(5644)	36 41/64	(931)	6.07	(5644)	6.92	(6428)
2646	E **	20 43/64	(525)	48 5/16	(1227)	6.94	(6444)	30 41/64	(778)	6.94	(6444)	7.91	(7350)
2650	E **	20 43/64	(525)	54 5/16	(1380)	7.80	(7244)	24 41/64	(626)	7.80	(7244)	8.90	(8272)
2656	E **	20 43/64	(525)	60 5/16	(1532)	8.66	(8044)	18 41/64	(474)	8.66	(8044)	9.90	(9194)
2660	E **	20 43/64	(525)	66 5/16	(1685)	9.52	(8844)	12 41/64	(321)	9.52	(8844)	10.89	(10116)
3020	**	26 43/64	(677)	18 5/16	(465)	3.39	(3152)	60 41/64	(1540)	3.39	(3152)	3.69	(3429)
3026	**	26 43/64	(677)	24 5/16	(618)	4.50	(4185)	54 41/64	(1388)	4.50	(4185)	4.93	(4583)
3030	**	26 43/64	(677)	30 5/16	(770)	5.62	(5217)	48 41/64	(1236)	5.62	(5217)	6.18	(5738)
3036	E **	26 43/64	(677)	36 5/16	(923)	6.73	(6249)	42 41/64	(1083)	6.73	(6249)	7.42	(6892)
3040	E **	26 43/64	(677)	42 5/16	(1075)	7.84	(7282)	36 41/64	(931)	7.84	(7282)	8.66	(8047)
3046	E **	26 43/64	(677)	48 5/16	(1227)	8.95	(8314)	30 41/64	(778)	8.95	(8314)	9.90	(9201)
3050	E **	26 43/64	(677)	54 5/16	(1380)	10.06	(9347)	24 41/64	(626)	10.06	(9347)	11.15	(10355)
3056	E **	26 43/64	(677)	60 5/16	(1532)	11.17	(10379)	18 41/64	(474)	11.17	(10379)	12.39	(11510)
3060	E **	26 43/64	(677)	66 5/16	(1685)	12.28	(11411)	12 41/64	(321)	12.28	(11411)	13.63	(12664)

Awning

VENT OPENING				
Unit #	Vent		DLO	
	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)
1616	0.74	(689)	0.97	(902)
1620	1.10	(1025)	1.46	(1359)
1626	1.46	(1361)	1.96	(1817)
1630	1.83	(1696)	2.45	(2275)
2016	1.25	(1166)	1.46	(1359)
2020	1.87	(1734)	2.21	(2049)
2026	2.48	(2302)	2.95	(2739)
2030	3.09	(2870)	3.69	(3429)
2616	1.77	(1643)	1.96	(1817)
2620	2.63	(2443)	2.95	(2739)
2626	3.49	(3243)	3.94	(3661)
2630	4.35	(4043)	4.93	(4583)
3016	2.28	(2119)	2.45	(2275)
3020	3.39	(3152)	3.69	(3429)
3026	4.50	(4184)	4.93	(4583)
3030	5.62	(5217)	6.18	(5738)
3616	2.79	(2596)	2.94	(2732)
3620	4.16	(3861)	4.43	(4119)
3626	5.52	(5126)	5.93	(5505)
3630	6.88	(6390)	7.42	(6892)
4016	3.31	(3073)	3.43	(3190)
4020	4.92	(4570)	5.18	(4809)
4026	6.53	(6067)	6.92	(6428)
4030	8.14	(7564)	8.66	(8047)

E These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

* Floor to clear opening is calculated using 6'-10 1/4" from finished floor to rough opening header.

** These units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

The information provided in this catalog has been gathered and assembled with every effort made to validate accuracy and consistency of the content. However, Marvin does not make any warranty or guarantee as to this information. Please verify critical product data in Marvin Order Management System (OMS) quotes and at the time of ordering.

Single Hung Equal Sash

EGRESS OPENING													
Egress Width			Egress Height		Egress Clear Opening		Floor To Clear Opening*		Vent		DLO		
Unit #	Inches	(mm)	Inches	(mm)	Sq. Ft	Sq. Ft	Sq. Ft.	(cm ²)	Sq. Ft	(cm ²)	Sq. Ft	(cm ²)	
1620	14 9/16	(370)	7 13/64	(183)	0.73	(677)	60 41/64	(1540)	0.73	(677)	1.45	(1347)	
1626	14 9/16	(370)	10 13/64	(259)	1.03	(959)	54 41/64	(1388)	1.03	(959)	1.97	(1833)	
1630	14 9/16	(370)	13 13/64	(336)	1.34	(1241)	48 41/64	(1236)	1.34	(1241)	2.50	(2319)	
1636	14 9/16	(370)	16 13/64	(412)	1.64	(1523)	42 41/64	(1083)	1.64	(1523)	3.02	(2805)	
1640	14 9/16	(370)	19 13/64	(488)	1.94	(1804)	36 41/64	(931)	1.94	(1804)	3.54	(3292)	
1646	14 9/16	(370)	22 13/64	(564)	2.25	(2086)	30 41/64	(778)	2.25	(2086)	4.07	(3778)	
1650	14 9/16	(370)	25 13/64	(640)	2.55	(2368)	24 41/64	(626)	2.55	(2368)	4.59	(4264)	
1656	14 9/16	(370)	28 13/64	(717)	2.85	(2650)	18 41/64	(474)	2.85	(2650)	5.11	(4750)	
1660	14 9/16	(370)	31 13/64	(793)	3.16	(2932)	12 41/64	(321)	3.16	(2932)	5.64	(5236)	
1666	14 9/16	(370)	34 13/64	(869)	3.46	(3214)	6 41/64	(169)	3.46	(3214)	6.16	(5722)	
2020	20 9/16	(522)	7 13/64	(183)	1.03	(956)	60 41/64	(1540)	1.03	(956)	2.14	(1990)	
2026	20 9/16	(522)	10 13/64	(259)	1.46	(1354)	54 41/64	(1388)	1.46	(1354)	2.92	(2709)	
2030	20 9/16	(522)	13 13/64	(336)	1.89	(1752)	48 41/64	(1236)	1.89	(1752)	3.69	(3427)	
2036	20 9/16	(522)	16 13/64	(412)	2.31	(2150)	42 41/64	(1083)	2.31	(2150)	4.46	(4145)	
2040	20 9/16	(522)	19 13/64	(488)	2.74	(2548)	36 41/64	(931)	2.74	(2548)	5.24	(4864)	
2046	20 9/16	(522)	22 13/64	(564)	3.17	(2946)	30 41/64	(778)	3.17	(2946)	6.01	(5582)	
2050	20 9/16	(522)	25 13/64	(640)	3.60	(3344)	24 41/64	(626)	3.60	(3344)	6.78	(6301)	
2056	20 9/16	(522)	28 13/64	(717)	4.03	(3742)	18 41/64	(474)	4.03	(3742)	7.56	(7019)	
2060	20 9/16	(522)	31 13/64	(793)	4.46	(4140)	12 41/64	(321)	4.46	(4140)	8.33	(7738)	
2066	20 9/16	(522)	34 13/64	(869)	4.88	(4538)	6 41/64	(169)	4.88	(4538)	9.10	(8456)	
2620	26 9/16	(675)	7 13/64	(183)	1.33	(1235)	60 41/64	(1540)	1.33	(1235)	2.83	(2633)	
2626	26 9/16	(675)	10 13/64	(259)	1.88	(1750)	54 41/64	(1388)	1.88	(1750)	3.86	(3584)	
2630	26 9/16	(675)	13 13/64	(336)	2.44	(2264)	48 41/64	(1236)	2.44	(2264)	4.88	(4535)	
2636	26 9/16	(675)	16 13/64	(412)	2.99	(2778)	42 41/64	(1083)	2.99	(2778)	5.90	(5486)	
2640	26 9/16	(675)	19 13/64	(488)	3.54	(3292)	36 41/64	(931)	3.54	(3292)	6.93	(6436)	
2646	26 9/16	(675)	22 13/64	(564)	4.10	(3806)	30 41/64	(778)	4.10	(3806)	7.95	(7387)	
2650	26 9/16	(675)	25 13/64	(640)	4.65	(4320)	24 41/64	(626)	4.65	(4320)	8.97	(8338)	
2656	26 9/16	(675)	28 13/64	(717)	5.20	(4834)	18 41/64	(474)	5.20	(4834)	10.00	(9288)	
2660	E	26 9/16	(675)	31 13/64	(793)	5.76	(5348)	12 41/64	(321)	5.76	(5348)	11.02	(10239)
2666	E	26 9/16	(675)	34 13/64	(869)	6.31	(5862)	6 41/64	(169)	6.31	(5862)	12.04	(11190)
2820		28 9/16	(725)	7 13/64	(183)	1.43	(1328)	60 41/64	(1540)	1.43	(1328)	3.07	(2848)
2826		28 9/16	(725)	10 13/64	(259)	2.02	(1881)	54 41/64	(1388)	2.02	(1881)	4.17	(3876)
2830		28 9/16	(725)	13 13/64	(336)	2.62	(2434)	48 41/64	(1236)	2.62	(2434)	5.28	(4904)
2836		28 9/16	(725)	16 13/64	(412)	3.21	(2987)	42 41/64	(1083)	3.21	(2987)	6.39	(5932)
2840		28 9/16	(725)	19 13/64	(488)	3.81	(3540)	36 41/64	(931)	3.81	(3540)	7.49	(6960)
2846		28 9/16	(725)	22 13/64	(564)	4.40	(4092)	30 41/64	(778)	4.40	(4092)	8.60	(7989)
2850		28 9/16	(725)	25 13/64	(640)	5.00	(4645)	24 41/64	(626)	5.00	(4645)	9.71	(9017)
2856		28 9/16	(725)	28 13/64	(717)	5.59	(5198)	18 41/64	(474)	5.59	(5198)	10.81	(10045)
2860	E	28 9/16	(725)	31 13/64	(793)	6.19	(5751)	12 41/64	(321)	6.19	(5751)	11.92	(11073)
2866	E	28 9/16	(725)	34 13/64	(869)	6.78	(6303)	6 41/64	(169)	6.78	(6303)	13.03	(12101)
3020		32 9/16	(827)	7 13/64	(183)	1.63	(1515)	60 41/64	(1540)	1.63	(1515)	3.53	(3277)
3026		32 9/16	(827)	10 13/64	(259)	2.31	(2145)	54 41/64	(1388)	2.31	(2145)	4.80	(4460)
3030		32 9/16	(827)	13 13/64	(336)	2.99	(2775)	48 41/64	(1236)	2.99	(2775)	6.07	(5643)
3036		32 9/16	(827)	16 13/64	(412)	3.67	(3405)	42 41/64	(1083)	3.67	(3405)	7.35	(6826)
3040		32 9/16	(827)	19 13/64	(488)	4.34	(4035)	36 41/64	(931)	4.34	(4035)	8.62	(8009)
3046		32 9/16	(827)	22 13/64	(564)	5.02	(4666)	30 41/64	(778)	5.02	(4666)	9.89	(9192)
3050	E	32 9/16	(827)	25 13/64	(640)	5.70	(5296)	24 41/64	(626)	5.70	(5296)	11.17	(10375)
3056	E	32 9/16	(827)	28 13/64	(717)	6.38	(5926)	18 41/64	(474)	6.38	(5926)	12.44	(11558)
3060	E	32 9/16	(827)	31 13/64	(793)	7.06	(6556)	12 41/64	(321)	7.06	(6556)	13.71	(12741)
3066	E	32 9/16	(827)	34 13/64	(869)	7.74	(7186)	6 41/64	(169)	7.74	(7186)	14.99	(13924)
3620		38 9/16	(979)	7 13/64	(183)	1.93	(1794)	60 41/64	(1540)	1.93	(1794)	4.22	(3920)
3626		38 9/16	(979)	10 13/64	(259)	2.73	(2540)	54 41/64	(1388)	2.73	(2540)	5.74	(5335)
3630		38 9/16	(979)	13 13/64	(336)	3.54	(3286)	48 41/64	(1236)	3.54	(3286)	7.27	(6751)
3636		38 9/16	(979)	16 13/64	(412)	4.34	(4033)	42 41/64	(1083)	4.34	(4033)	8.79	(8166)
3640		38 9/16	(979)	19 13/64	(488)	5.14	(4779)	36 41/64	(931)	5.14	(4779)	10.31	(9581)
3646		38 9/16	(979)	22 13/64	(564)	5.95	(5525)	30 41/64	(778)	5.95	(5525)	11.84	(10996)
3650	E	38 9/16	(979)	25 13/64	(640)	6.75	(6272)	24 41/64	(626)	6.75	(6272)	13.36	(12412)
3656	E	38 9/16	(979)	28 13/64	(717)	7.55	(7018)	18 41/64	(474)	7.55	(7018)	14.88	(13827)
3660	E	38 9/16	(979)	31 13/64	(793)	8.36	(7764)	12 41/64	(321)	8.36	(7764)	16.41	(15242)
3666	E	38 9/16	(979)	34 13/64	(869)	9.16	(8511)	6 41/64	(169)	9.16	(8511)	17.93	(16657)
4020		44 9/16	(1132)	7 13/64	(183)	2.23	(2073)	60 41/64	(1540)	2.23	(2073)	4.91	(4564)
4026		44 9/16	(1132)	10 13/64	(259)	3.16	(2935)	54 41/64	(1388)	3.16	(2935)	6.69	(6211)
4030		44 9/16	(1132)	13 13/64	(336)	4.09	(3798)	48 41/64	(1236)	4.09	(3798)	8.46	(7858)
4036		44 9/16	(1132)	16 13/64	(412)	5.02	(4660)	42 41/64	(1083)	5.02	(4660)	10.23	(9506)
4040		44 9/16	(1132)	19 13/64	(488)	5.94	(5523)	36 41/64	(931)	5.94	(5523)	12.01	(11153)
4046		44 9/16	(1132)	22 13/64	(564)	6.87	(6385)	30 41/64	(778)	6.87	(6385)	13.78	(12801)
4050	E	44 9/16	(1132)	25 13/64	(640)	7.80	(7247)	24 41/64	(626)	7.80	(7247)	15.55	(14448)
4056	E	44 9/16	(1132)	28 13/64	(717)	8.73	(8110)	18 41/64	(474)	8.73	(8110)	17.33	(16096)
4060	E	44 9/16	(1132)	31 13/64	(793)	9.66	(8972)	12 41/64	(321)	9.66	(8972)	19.10	(17743)
4066	E	44 9/16	(1132)	34 13/64	(869)	10.59	(9835)	6 41/64	(169)	10.59	(9835)	20.87	(19391)

E These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

* Floor to clear opening is calculated using 6'-10 1/4" from finished floor to rough opening header.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

EGRESS OPENINGS

Single Hung Cottage

EGRESS OPENING															
Unit #	Egress Width		Egress Height		Egress Clear Opening		Floor To Clear Opening*			Vent		DLO		Check Rail Height	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	(cm ²)	Inches	(mm)		Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	Inches	(mm)
1626	14 9/16	(370)	7 23/32	(196)	0.78	(725)	54 41/64	(1388)		0.78	(725)	2.41	(2235)	17 11/16	(449)
1630	14 9/16	(370)	10 1/8	(257)	1.02	(951)	48 41/64	(1236)		1.02	(951)	3.03	(2818)	21 9/32	(541)
1636	14 9/16	(370)	12 33/64	(318)	1.27	(1176)	42 41/64	(1083)		1.27	(1176)	3.66	(3402)	24 7/8	(632)
1640	14 9/16	(370)	14 59/64	(379)	1.51	(1402)	36 41/64	(931)		1.51	(1402)	4.29	(3985)	28 31/64	(723)
1646	14 9/16	(370)	17 5/16	(440)	1.75	(1627)	30 41/64	(778)		1.75	(1627)	4.92	(4569)	32 5/64	(815)
1650	14 9/16	(370)	19 23/32	(501)	1.99	(1852)	24 41/64	(626)		1.99	(1852)	5.55	(5152)	35 11/16	(906)
1656	14 9/16	(370)	22 13/64	(564)	2.25	(2086)	18 41/64	(474)		2.25	(2086)	6.16	(5722)	39 3/16	(995)
1660	14 9/16	(370)	24 33/64	(623)	2.48	(2304)	12 41/64	(321)		2.48	(2304)	6.80	(6320)	42 7/8	(1089)
1666	14 9/16	(370)	26 59/64	(684)	2.72	(2529)	6 41/64	(169)		2.72	(2529)	7.43	(6903)	46 31/64	(1181)
2026	20 9/16	(522)	7 23/32	(196)	1.10	(1024)	54 41/64	(1388)		1.10	(1024)	3.55	(3302)	17 11/16	(449)
2030	20 9/16	(522)	10 1/8	(257)	1.44	(1342)	48 41/64	(1236)		1.44	(1342)	4.48	(4165)	21 9/32	(541)
2036	20 9/16	(522)	12 33/64	(318)	1.79	(1661)	42 41/64	(1083)		1.79	(1661)	5.41	(5027)	24 7/8	(632)
2040	20 9/16	(522)	14 59/64	(379)	2.13	(1979)	36 41/64	(931)		2.13	(1979)	6.34	(5889)	28 31/64	(723)
2046	20 9/16	(522)	17 5/16	(440)	2.47	(2297)	30 41/64	(778)		2.47	(2297)	7.27	(6751)	32 5/64	(815)
2050	20 9/16	(522)	19 23/32	(501)	2.82	(2616)	24 41/64	(626)		2.82	(2616)	8.19	(7613)	35 11/16	(906)
2056	20 9/16	(522)	22 13/64	(564)	3.17	(2946)	18 41/64	(474)		3.17	(2946)	9.10	(8456)	39 3/16	(995)
2060	20 9/16	(522)	24 33/64	(623)	3.50	(3253)	12 41/64	(321)		3.50	(3253)	10.05	(9338)	42 7/8	(1089)
2066	20 9/16	(522)	26 59/64	(684)	3.84	(3571)	6 41/64	(169)		3.84	(3571)	10.98	(10201)	46 31/64	(1181)
2626	26 9/16	(675)	7 23/32	(196)	1.42	(1323)	54 41/64	(1388)		1.42	(1323)	4.70	(4370)	17 43/64	(449)
2630	26 9/16	(675)	10 1/8	(257)	1.87	(1734)	48 41/64	(1236)		1.87	(1734)	5.93	(5511)	21 9/32	(541)
2636	26 9/16	(675)	12 33/64	(318)	2.31	(2145)	42 41/64	(1083)		2.31	(2145)	7.16	(6652)	24 7/8	(632)
2640	26 9/16	(675)	14 59/64	(379)	2.75	(2557)	36 41/64	(931)		2.75	(2557)	8.39	(7793)	28 31/64	(723)
2646	26 9/16	(675)	17 5/16	(440)	3.19	(2968)	30 41/64	(778)		3.19	(2968)	9.62	(8933)	32 5/64	(815)
2650	26 9/16	(675)	19 23/32	(501)	3.64	(3379)	24 41/64	(626)		3.64	(3379)	10.84	(10074)	35 11/16	(906)
2656	26 9/16	(675)	22 13/64	(564)	4.10	(3806)	18 41/64	(474)		4.10	(3806)	12.04	(11190)	39 3/16	(995)
2660	26 9/16	(675)	24 33/64	(623)	4.52	(4202)	12 41/64	(321)		4.52	(4202)	13.30	(12357)	42 7/8	(1089)
2666	26 9/16	(675)	26 59/64	(684)	4.97	(4613)	6 41/64	(169)		4.97	(4613)	14.53	(13498)	46 31/64	(1181)
2826	28 9/16	(725)	7 23/32	(196)	1.53	(1422)	54 41/64	(1388)		1.53	(1422)	5.09	(4726)	17 11/16	(449)
2830	28 9/16	(725)	10 1/8	(257)	2.01	(1865)	48 41/64	(1236)		2.01	(1865)	6.41	(5960)	21 9/32	(541)
2836	28 9/16	(725)	12 33/64	(318)	2.48	(2307)	42 41/64	(1083)		2.48	(2307)	7.74	(7193)	24 7/8	(632)
2840	28 9/16	(725)	14 59/64	(379)	2.96	(2749)	36 41/64	(931)		2.96	(2749)	9.07	(8427)	28 31/64	(723)
2846	28 9/16	(725)	17 5/16	(440)	3.44	(3191)	30 41/64	(778)		3.44	(3191)	10.40	(9661)	32 5/64	(815)
2850	28 9/16	(725)	19 23/32	(501)	3.91	(3634)	24 41/64	(626)		3.91	(3634)	11.73	(10895)	35 11/16	(906)
2856	28 9/16	(725)	22 13/64	(564)	4.40	(4092)	18 41/64	(474)		4.40	(4092)	13.03	(12101)	39 3/16	(995)
2860	28 9/16	(725)	24 33/64	(623)	4.86	(4519)	12 41/64	(321)		4.86	(4519)	14.38	(13364)	42 7/8	(1089)
2866	28 9/16	(725)	26 59/64	(684)	5.34	(4961)	6 41/64	(169)		5.34	(4961)	15.71	(14597)	46 31/64	(1181)
3026	32 9/16	(827)	7 23/32	(196)	1.75	(1622)	54 41/64	(1388)		1.75	(1622)	5.85	(5438)	17 11/16	(449)
3030	32 9/16	(827)	10 1/8	(257)	2.29	(2126)	48 41/64	(1236)		2.29	(2126)	7.38	(6857)	21 9/32	(541)
3036	32 9/16	(827)	12 33/64	(318)	2.83	(2630)	42 41/64	(1083)		2.83	(2630)	8.91	(8277)	24 7/8	(632)
3040	32 9/16	(827)	14 59/64	(379)	3.37	(3134)	36 41/64	(931)		3.37	(3134)	10.44	(9696)	28 31/64	(723)
3046	32 9/16	(827)	17 5/16	(440)	3.92	(3638)	30 41/64	(778)		3.92	(3638)	11.97	(11116)	32 5/64	(815)
3050	32 9/16	(827)	19 23/32	(501)	4.46	(4142)	24 41/64	(626)		4.46	(4142)	13.49	(12535)	35 11/16	(906)
3056	32 9/16	(827)	22 13/64	(564)	5.02	(4666)	18 41/64	(474)		5.02	(4666)	14.99	(13924)	39 3/16	(995)
3060	32 9/16	(827)	24 33/64	(623)	5.54	(5151)	12 41/64	(321)		5.54	(5151)	16.55	(15376)	42 7/8	(1089)
3066	32 9/16	(827)	26 59/64	(684)	6.09	(5656)	6 41/64	(169)		6.09	(5656)	18.08	(16796)	46 31/64	(1181)
3626	38 9/16	(979)	7 23/32	(196)	2.07	(1921)	54 41/64	(1388)		2.07	(1921)	7.00	(6505)	17 11/16	(449)
3630	38 9/16	(979)	10 1/8	(257)	2.71	(2518)	48 41/64	(1236)		2.71	(2518)	8.83	(8204)	21 9/32	(541)
3636	38 9/16	(979)	12 33/64	(318)	3.35	(3115)	42 41/64	(1083)		3.35	(3115)	10.66	(9902)	24 7/8	(632)
3640	38 9/16	(979)	14 59/64	(379)	4.00	(3712)	36 41/64	(931)		4.00	(3712)	12.49	(11600)	28 31/64	(723)
3646	38 9/16	(979)	17 5/16	(440)	4.64	(4309)	30 41/64	(778)		4.64	(4309)	14.31	(13298)	32 5/64	(815)
3650	38 9/16	(979)	19 23/32	(501)	5.28	(4906)	24 41/64	(626)		5.28	(4906)	16.14	(14997)	35 11/16	(906)
3656	38 9/16	(979)	22 13/64	(564)	5.95	(5525)	18 41/64	(474)		5.95	(5525)	17.93	(16657)	39 3/16	(995)
3660	E 38 9/16	(979)	24 33/64	(623)	6.57	(6101)	12 41/64	(321)		6.57	(6101)	19.80	(18395)	42 7/8	(1089)
3666	E 38 9/16	(979)	26 59/64	(684)	7.21	(6698)	6 41/64	(169)		7.21	(6698)	21.63	(20093)	46 31/64	(1181)
4026	44 9/16	(1132)	7 23/32	(196)	2.39	(2219)	54 41/64	(1388)		2.39	(2219)	8.15	(7573)	17 11/16	(449)
4030	44 9/16	(1132)	10 1/8	(257)	3.13	(2909)	48 41/64	(1236)		3.13	(2909)	10.28	(9550)	21 9/32	(541)
4036	44 9/16	(1132)	12 33/64	(318)	3.87	(3599)	42 41/64	(1083)		3.87	(3599)	12.41	(11527)	24 7/8	(632)
4040	44 9/16	(1132)	14 59/64	(379)	4.62	(4289)	36 41/64	(931)		4.62	(4289)	14.54	(13504)	28 31/64	(723)
4046	44 9/16	(1132)	17 5/16	(440)	5.36	(4979)	30 41/64	(778)		5.36	(4979)	16.66	(15481)	32 5/64	(815)
4050	44 9/16	(1132)	19 23/32	(501)	6.10	(5669)	24 41/64	(626)		6.10	(5669)	18.79	(17458)	35 11/16	(906)
4056	44 9/16	(1132)	22 13/64	(564)	6.87	(6385)	18 41/64	(474)		6.87	(6385)	20.87	(19391)	39 3/16	(995)
4060	E 44 9/16	(1132)	24 33/64	(623)	7.59	(7050)	12 41/64	(321)		7.59	(7050)	23.05	(21414)	42 7/8	(1089)
4066	E 44 9/16	(1132)	26 59/64	(684)	8.33	(7740)	6 41/64	(169)		8.33	(7740)	25.18	(23391)	46 31/64	(1181)

E These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

* Floor to clear opening is calculated using 6'-10 1/4" from finished floor to rough opening header.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

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The information provided in this catalog has been gathered and assembled with every effort made to validate accuracy and consistency of the content. However, Marvin does not make any warranty or guarantee as to this information. Please verify critical product data in Marvin Order Management System (OMS) quotes and at the time of ordering.

Single Hung Reverse Cottage

EGRESS OPENING														
Unit #	Egress Width		Egress Height		Egress Clear Opening		Floor To Clear Opening*		Vent		DLO		Check Rail Height	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	(cm ²)	Inches	(mm)	Sq. Ft.	(cm ²)	Sq. Ft	(cm ²)	Inches	(mm)
1626	14 9/16	(370)	7 23/32	(196)	0.78	(725)	54 41/64	(1388)	0.78	(725)	1.54	(1431)	12 45/64	(323)
1630	14 9/16	(370)	10 1/8	(257)	1.02	(951)	48 41/64	(1236)	1.02	(951)	1.96	(1820)	15 7/64	(384)
1636	14 9/16	(370)	12 33/64	(318)	1.27	(1176)	42 41/64	(1083)	1.27	(1176)	2.38	(2209)	17 33/64	(445)
1640	14 9/16	(370)	14 59/64	(379)	1.51	(1402)	36 41/64	(931)	1.51	(1402)	2.80	(2598)	19 29/32	(506)
1646	14 9/16	(370)	17 5/16	(440)	1.75	(1627)	30 41/64	(778)	1.75	(1627)	3.22	(2987)	22 5/16	(567)
1650	14 9/16	(370)	19 23/32	(501)	1.99	(1852)	24 41/64	(626)	1.99	(1852)	3.63	(3376)	24 45/64	(628)
1656	14 9/16	(370)	22 13/64	(564)	2.25	(2086)	18 41/64	(474)	2.25	(2086)	4.07	(3778)	27 3/16	(691)
1660	14 9/16	(370)	24 33/64	(623)	2.48	(2304)	12 41/64	(321)	2.48	(2304)	4.47	(4153)	29 33/64	(750)
1666	14 9/16	(370)	26 59/64	(684)	2.72	(2529)	6 41/64	(169)	2.72	(2529)	4.89	(4542)	31 29/32	(810)
2026	20 9/16	(522)	7 23/32	(196)	1.10	(1024)	54 41/64	(1388)	1.10	(1024)	2.28	(2115)	12 45/64	(323)
2030	20 9/16	(522)	10 1/8	(257)	1.44	(1342)	48 41/64	(1236)	1.44	(1342)	2.89	(2689)	15 7/64	(384)
2036	20 9/16	(522)	12 33/64	(318)	1.79	(1661)	42 41/64	(1083)	1.79	(1661)	3.51	(3264)	17 33/64	(445)
2040	20 9/16	(522)	14 59/64	(379)	2.13	(1979)	36 41/64	(931)	2.13	(1979)	4.13	(3839)	19 29/32	(506)
2046	20 9/16	(522)	17 5/16	(440)	2.47	(2297)	30 41/64	(778)	2.47	(2297)	4.75	(4414)	22 5/16	(567)
2050	20 9/16	(522)	19 23/32	(501)	2.82	(2616)	24 41/64	(626)	2.82	(2616)	5.37	(4988)	24 45/64	(628)
2056	20 9/16	(522)	22 13/64	(564)	3.17	(2946)	18 41/64	(474)	3.17	(2946)	6.01	(5582)	27 3/16	(691)
2060	20 9/16	(522)	24 33/64	(623)	3.50	(3253)	12 41/64	(321)	3.50	(3253)	6.61	(6137)	29 33/64	(750)
2066	20 9/16	(522)	26 59/64	(684)	3.84	(3571)	6 41/64	(169)	3.84	(3571)	7.22	(6712)	31 29/32	(810)
2626	26 9/16	(675)	7 23/32	(196)	1.42	(1323)	54 41/64	(1388)	1.42	(1323)	3.01	(2798)	12 45/64	(323)
2630	26 9/16	(675)	10 1/8	(257)	1.87	(1734)	48 41/64	(1236)	1.87	(1734)	3.83	(3559)	15 7/64	(384)
2636	26 9/16	(675)	12 33/64	(318)	2.31	(2145)	42 41/64	(1083)	2.31	(2145)	4.65	(4319)	17 33/64	(445)
2640	26 9/16	(675)	14 59/64	(379)	2.75	(2557)	36 41/64	(931)	2.75	(2557)	5.47	(5080)	19 29/32	(506)
2646	26 9/16	(675)	17 5/16	(440)	3.19	(2968)	30 41/64	(778)	3.19	(2968)	6.29	(5841)	22 5/16	(567)
2650	26 9/16	(675)	19 23/32	(501)	3.64	(3379)	24 41/64	(626)	3.64	(3379)	7.11	(6601)	24 45/64	(628)
2656	26 9/16	(675)	22 13/64	(564)	4.10	(3806)	18 41/64	(474)	4.10	(3806)	7.95	(7387)	27 3/16	(691)
2660	26 9/16	(675)	24 33/64	(623)	4.52	(4202)	12 41/64	(321)	4.52	(4202)	8.74	(8121)	29 33/64	(750)
2666	26 9/16	(675)	26 59/64	(684)	4.97	(4613)	6 41/64	(169)	4.97	(4613)	9.56	(8882)	31 29/32	(810)
2826	28 9/16	(725)	7 23/32	(196)	1.53	(1422)	54 41/64	(1388)	1.53	(1422)	3.26	(3026)	12 45/64	(323)
2830	28 9/16	(725)	10 1/8	(257)	2.01	(1865)	48 41/64	(1236)	2.01	(1865)	4.14	(3849)	15 7/64	(384)
2836	28 9/16	(725)	12 33/64	(318)	2.48	(2307)	42 41/64	(1083)	2.48	(2307)	5.03	(4671)	17 33/64	(445)
2840	28 9/16	(725)	14 59/64	(379)	2.96	(2749)	36 41/64	(931)	2.96	(2749)	5.91	(5494)	19 29/32	(506)
2846	28 9/16	(725)	17 5/16	(440)	3.44	(3191)	30 41/64	(778)	3.44	(3191)	6.80	(6316)	22 5/16	(567)
2850	28 9/16	(725)	19 23/32	(501)	3.91	(3634)	24 41/64	(626)	3.91	(3634)	7.68	(7139)	24 45/64	(628)
2856	28 9/16	(725)	22 13/64	(564)	4.40	(4092)	18 41/64	(474)	4.40	(4092)	8.60	(7989)	27 3/16	(691)
2860	28 9/16	(725)	24 33/64	(623)	4.86	(4519)	12 41/64	(321)	4.86	(4519)	9.45	(8782)	29 33/64	(750)
2866	28 9/16	(725)	26 59/64	(684)	5.34	(4961)	6 41/64	(169)	5.34	(4961)	10.34	(9605)	31 29/32	(810)
3026	32 9/16	(827)	7 23/32	(196)	1.75	(1622)	54 41/64	(1388)	1.75	(1622)	3.75	(3482)	12 45/64	(323)
3030	32 9/16	(827)	10 1/8	(257)	2.29	(2126)	48 41/64	(1236)	2.29	(2126)	4.77	(4428)	15 7/64	(384)
3036	32 9/16	(827)	12 33/64	(318)	2.83	(2630)	42 41/64	(1083)	2.83	(2630)	5.79	(5375)	17 33/64	(445)
3040	32 9/16	(827)	14 59/64	(379)	3.37	(3134)	36 41/64	(931)	3.37	(3134)	6.80	(6321)	19 29/32	(506)
3046	32 9/16	(827)	17 5/16	(440)	3.92	(3638)	30 41/64	(778)	3.92	(3638)	7.82	(7267)	22 5/16	(567)
3050	32 9/16	(827)	19 23/32	(501)	4.46	(4142)	24 41/64	(626)	4.46	(4142)	8.84	(8214)	24 45/64	(628)
3056	32 9/16	(827)	22 13/64	(564)	5.02	(4666)	18 41/64	(474)	5.02	(4666)	9.89	(9192)	27 3/16	(691)
3060	32 9/16	(827)	24 33/64	(623)	5.54	(5151)	12 41/64	(321)	5.54	(5151)	10.88	(10105)	29 33/64	(750)
3066	32 9/16	(827)	26 59/64	(684)	6.09	(5656)	6 41/64	(169)	6.09	(5656)	11.90	(11051)	31 29/32	(810)
3626	38 9/16	(979)	7 23/32	(196)	2.07	(1921)	54 41/64	(1388)	2.07	(1921)	4.48	(4165)	12 45/64	(323)
3630	38 9/16	(979)	10 1/8	(257)	2.71	(2518)	48 41/64	(1236)	2.71	(2518)	5.70	(5298)	15 7/64	(384)
3636	38 9/16	(979)	12 33/64	(318)	3.35	(3115)	42 41/64	(1083)	3.35	(3115)	6.92	(6430)	17 33/64	(445)
3640	38 9/16	(979)	14 59/64	(379)	4.00	(3712)	36 41/64	(931)	4.00	(3712)	8.14	(7562)	19 29/32	(506)
3646	38 9/16	(979)	17 5/16	(440)	4.64	(4309)	30 41/64	(778)	4.64	(4309)	9.36	(8694)	22 5/16	(567)
3650	38 9/16	(979)	19 23/32	(501)	5.28	(4906)	24 41/64	(626)	5.28	(4906)	10.58	(9826)	24 45/64	(628)
3656	38 9/16	(979)	22 13/64	(564)	5.95	(5525)	18 41/64	(474)	5.95	(5525)	11.84	(10996)	27 3/16	(691)
3660	38 9/16	(979)	24 33/64	(623)	6.57	(6101)	12 41/64	(321)	6.57	(6101)	13.01	(12089)	29 33/64	(750)
3666	38 9/16	(979)	26 59/64	(684)	7.21	(6698)	6 41/64	(169)	7.21	(6698)	14.23	(13221)	31 29/32	(810)
4026	44 9/16	(1132)	7 23/32	(196)	2.39	(2219)	54 41/64	(1388)	2.39	(2219)	5.22	(4849)	12 45/64	(323)
4030	44 9/16	(1132)	10 1/8	(257)	3.13	(2909)	48 41/64	(1236)	3.13	(2909)	6.64	(6167)	15 7/64	(384)
4036	44 9/16	(1132)	12 33/64	(318)	3.87	(3599)	42 41/64	(1083)	3.87	(3599)	8.06	(7485)	17 33/64	(445)
4040	44 9/16	(1132)	14 59/64	(379)	4.62	(4289)	36 41/64	(931)	4.62	(4289)	9.48	(8803)	19 29/32	(506)
4046	44 9/16	(1132)	17 5/16	(440)	5.36	(4979)	30 41/64	(778)	5.36	(4979)	10.89	(10121)	22 5/16	(567)
4050	44 9/16	(1132)	19 23/32	(501)	6.10	(5669)	24 41/64	(626)	6.10	(5669)	12.81	(11439)	24 45/64	(628)
4056	44 9/16	(1132)	22 13/64	(564)	6.87	(6385)	18 41/64	(474)	6.87	(6385)	13.78	(12801)	27 3/16	(691)
4060	44 9/16	(1132)	24 33/64	(623)	7.59	(7050)	12 41/64	(321)	7.59	(7050)	15.15	(14073)	29 33/64	(750)
4066	44 9/16	(1132)	26 59/64	(684)	8.33	(7740)	6 41/64	(169)	8.33	(7740)	16.57	(15391)	31 29/32	(810)

E These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

* Floor to clear opening is calculated using 6"-10 1/4" from finished floor to rough opening header.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

The information provided in this catalog has been gathered and assembled with every effort made to validate accuracy and consistency of the content. However, Marvin does not make any warranty or guarantee as to this information. Please verify critical product data in Marvin Order Management System (OMS) quotes and at the time of ordering.

EGRESS OPENINGS

Double Hung Equal Sash

EGRESS OPENING												
Unit #	Egress Width		Egress Height		Egress Clear Opening		Floor To Clear Opening*		Vent		DLO	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)
1620	14 9/16	(370)	7 13/64	(183)	0.73	(677)	60 41/64	(1540)	0.73	(677)	1.45	(1347)
1626	14 9/16	(370)	10 13/64	(259)	1.03	(959)	54 41/64	(1388)	1.03	(959)	1.97	(1833)
1630	14 9/16	(370)	13 13/64	(336)	1.34	(1241)	48 41/64	(1236)	1.34	(1241)	2.50	(2319)
1636	14 9/16	(370)	16 13/64	(412)	1.64	(1523)	42 41/64	(1083)	1.64	(1523)	3.02	(2805)
1640	14 9/16	(370)	19 13/64	(488)	1.94	(1804)	36 41/64	(931)	1.94	(1804)	3.54	(3292)
1646	14 9/16	(370)	22 13/64	(564)	2.25	(2086)	30 41/64	(778)	2.25	(2086)	4.07	(3778)
1650	14 9/16	(370)	25 13/64	(640)	2.55	(2368)	24 41/64	(626)	2.55	(2368)	4.59	(4264)
1656	14 9/16	(370)	28 13/64	(717)	2.85	(2650)	18 41/64	(474)	2.85	(2650)	5.11	(4750)
1660	14 9/16	(370)	31 13/64	(793)	3.16	(2932)	12 41/64	(321)	3.16	(2932)	5.64	(5236)
1666	14 9/16	(370)	34 13/64	(869)	3.46	(3214)	6 41/64	(169)	3.46	(3214)	6.16	(5722)
2020	20 9/16	(522)	7 13/64	(183)	1.03	(956)	60 41/64	(1540)	1.03	(956)	2.14	(1990)
2026	20 9/16	(522)	10 13/64	(259)	1.46	(1354)	54 41/64	(1388)	1.46	(1354)	2.92	(2709)
2030	20 9/16	(522)	13 13/64	(336)	1.89	(1752)	48 41/64	(1236)	1.89	(1752)	3.69	(3427)
2036	20 9/16	(522)	16 13/64	(412)	2.31	(2150)	42 41/64	(1083)	2.31	(2150)	4.46	(4145)
2040	20 9/16	(522)	19 13/64	(488)	2.74	(2548)	36 41/64	(931)	2.74	(2548)	5.24	(4864)
2046	20 9/16	(522)	22 13/64	(564)	3.17	(2946)	30 41/64	(778)	3.17	(2946)	6.01	(5582)
2050	20 9/16	(522)	25 13/64	(640)	3.60	(3344)	24 41/64	(626)	3.60	(3344)	6.78	(6301)
2056	20 9/16	(522)	28 13/64	(717)	4.03	(3742)	18 41/64	(474)	4.03	(3742)	7.56	(7019)
2060	20 9/16	(522)	31 13/64	(793)	4.46	(4140)	12 41/64	(321)	4.46	(4140)	8.33	(7738)
2066	20 9/16	(522)	34 13/64	(869)	4.88	(4538)	6 41/64	(169)	4.88	(4538)	9.10	(8456)
2620	26 9/16	(675)	7 13/64	(183)	1.33	(1235)	60 41/64	(1540)	1.33	(1235)	2.83	(2633)
2626	26 9/16	(675)	10 13/64	(259)	1.88	(1750)	54 41/64	(1388)	1.88	(1750)	3.86	(3584)
2630	26 9/16	(675)	13 13/64	(336)	2.44	(2264)	48 41/64	(1236)	2.44	(2264)	4.88	(4535)
2636	26 9/16	(675)	16 13/64	(412)	2.99	(2778)	42 41/64	(1083)	2.99	(2778)	5.90	(5486)
2640	26 9/16	(675)	19 13/64	(488)	3.54	(3292)	36 41/64	(931)	3.54	(3292)	6.93	(6436)
2646	26 9/16	(675)	22 13/64	(564)	4.10	(3806)	30 41/64	(778)	4.10	(3806)	7.95	(7387)
2650	26 9/16	(675)	25 13/64	(640)	4.65	(4320)	24 41/64	(626)	4.65	(4320)	8.97	(8338)
2656	26 9/16	(675)	28 13/64	(717)	5.20	(4834)	18 41/64	(474)	5.20	(4834)	10.00	(9288)
2660	E 26 9/16	(675)	31 13/64	(793)	5.76	(5348)	12 41/64	(321)	5.76	(5348)	11.02	(10239)
2666	E 26 9/16	(675)	34 13/64	(869)	6.31	(5862)	6 41/64	(169)	6.31	(5862)	12.04	(11190)
2820	28 9/16	(725)	7 13/64	(183)	1.43	(1328)	60 41/64	(1540)	1.43	(1328)	3.07	(2848)
2826	28 9/16	(725)	10 13/64	(259)	2.02	(1881)	54 41/64	(1388)	2.02	(1881)	4.17	(3876)
2830	28 9/16	(725)	13 13/64	(336)	2.62	(2434)	48 41/64	(1236)	2.62	(2434)	5.28	(4904)
2836	28 9/16	(725)	16 13/64	(412)	3.21	(2987)	42 41/64	(1083)	3.21	(2987)	6.39	(5932)
2840	28 9/16	(725)	19 13/64	(488)	3.81	(3540)	36 41/64	(931)	3.81	(3540)	7.49	(6960)
2846	28 9/16	(725)	22 13/64	(564)	4.40	(4092)	30 41/64	(778)	4.40	(4092)	8.60	(7989)
2850	28 9/16	(725)	25 13/64	(640)	5.00	(4645)	24 41/64	(626)	5.00	(4645)	9.71	(9017)
2856	28 9/16	(725)	28 13/64	(717)	5.59	(5198)	18 41/64	(474)	5.59	(5198)	10.81	(10045)
2860	E 28 9/16	(725)	31 13/64	(793)	6.19	(5751)	12 41/64	(321)	6.19	(5751)	11.92	(11073)
2866	E 28 9/16	(725)	34 13/64	(869)	6.78	(6303)	6 41/64	(169)	6.78	(6303)	13.03	(12101)
3020	32 9/16	(827)	7 13/64	(183)	1.63	(1515)	60 41/64	(1540)	1.63	(1515)	3.53	(3277)
3026	32 9/16	(827)	10 13/64	(259)	2.31	(2145)	54 41/64	(1388)	2.31	(2145)	4.80	(4460)
3030	32 9/16	(827)	13 13/64	(336)	2.99	(2775)	48 41/64	(1236)	2.99	(2775)	6.07	(5643)
3036	32 9/16	(827)	16 13/64	(412)	3.67	(3405)	42 41/64	(1083)	3.67	(3405)	7.35	(6826)
3040	32 9/16	(827)	19 13/64	(488)	4.34	(4035)	36 41/64	(931)	4.34	(4035)	8.62	(8009)
3046	32 9/16	(827)	22 13/64	(564)	5.02	(4666)	30 41/64	(778)	5.02	(4666)	9.89	(9192)
3050	E 32 9/16	(827)	25 13/64	(640)	5.70	(5296)	24 41/64	(626)	5.70	(5296)	11.17	(10375)
3056	E 32 9/16	(827)	28 13/64	(717)	6.38	(5926)	18 41/64	(474)	6.38	(5926)	12.44	(11558)
3060	E 32 9/16	(827)	31 13/64	(793)	7.06	(6556)	12 41/64	(321)	7.06	(6556)	13.71	(12741)
3066	E 32 9/16	(827)	34 13/64	(869)	7.74	(7186)	6 41/64	(169)	7.74	(7186)	14.99	(13924)
3620	38 9/16	(979)	7 13/64	(183)	1.93	(1794)	60 41/64	(1540)	1.93	(1794)	4.22	(3920)
3626	38 9/16	(979)	10 13/64	(259)	2.73	(2540)	54 41/64	(1388)	2.73	(2540)	5.74	(5335)
3630	38 9/16	(979)	13 13/64	(336)	3.54	(3286)	48 41/64	(1236)	3.54	(3286)	7.27	(6751)
3636	38 9/16	(979)	16 13/64	(412)	4.34	(4033)	42 41/64	(1083)	4.34	(4033)	8.79	(8166)
3640	38 9/16	(979)	19 13/64	(488)	5.14	(4779)	36 41/64	(931)	5.14	(4779)	10.31	(9581)
3646	38 9/16	(979)	22 13/64	(564)	5.95	(5525)	30 41/64	(778)	5.95	(5525)	11.84	(10996)
3650	E 38 9/16	(979)	25 13/64	(640)	6.75	(6272)	24 41/64	(626)	6.75	(6272)	13.36	(12412)
3656	E 38 9/16	(979)	28 13/64	(717)	7.55	(7018)	18 41/64	(474)	7.55	(7018)	14.88	(13827)
3660	E 38 9/16	(979)	31 13/64	(793)	8.36	(7764)	12 41/64	(321)	8.36	(7764)	16.41	(15242)
3666	E 38 9/16	(979)	34 13/64	(869)	9.16	(8511)	6 41/64	(169)	9.16	(8511)	17.93	(16657)
4020	44 9/16	(1132)	7 13/64	(183)	2.23	(2073)	60 41/64	(1540)	2.23	(2073)	4.91	(4564)
4026	44 9/16	(1132)	10 13/64	(259)	3.16	(2935)	54 41/64	(1388)	3.16	(2935)	6.69	(6211)
4030	44 9/16	(1132)	13 13/64	(336)	4.09	(3798)	48 41/64	(1236)	4.09	(3798)	8.46	(7858)
4036	44 9/16	(1132)	16 13/64	(412)	5.02	(4660)	42 41/64	(1083)	5.02	(4660)	10.23	(9506)
4040	44 9/16	(1132)	19 13/64	(488)	5.94	(5523)	36 41/64	(931)	5.94	(5523)	12.01	(11153)
4046	44 9/16	(1132)	22 13/64	(564)	6.87	(6385)	30 41/64	(778)	6.87	(6385)	13.78	(12801)
4050	E 44 9/16	(1132)	25 13/64	(640)	7.80	(7247)	24 41/64	(626)	7.80	(7247)	15.55	(14448)
4056	E 44 9/16	(1132)	28 13/64	(717)	8.73	(8110)	18 41/64	(474)	8.73	(8110)	17.33	(16096)
4060	E 44 9/16	(1132)	31 13/64	(793)	9.66	(8972)	12 41/64	(321)	9.66	(8972)	19.10	(17743)
4066	E 44 9/16	(1132)	34 13/64	(869)	10.59	(9835)	6 41/64	(169)	10.59	(9835)	20.87	(19391)

E These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

* Floor to clear opening is calculated using 6'-10 1/4" from finished floor to rough opening header.

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For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

Double Hung Cottage

EGRESS OPENING														
Unit #	Egress Width		Egress Height		Egress Clear Opening		Floor To Clear Opening*		Vent		DLO		Check Rail Height	
	Inches	(mm)	Inches	(mm)	Sq. Ft.	(cm ²)	Inches	(mm)	Sq. Ft.	(cm ²)	Sq. Ft	(cm ²)	Inches	(mm)
1626	14 9/16	(370)	7 23/32	(196)	0.78	(725)	54 41/64	(1388)	0.78	(725)	2.41	(2235)	17 11/16	(449)
1630	14 9/16	(370)	10 1/8	(257)	1.02	(951)	48 41/64	(1236)	1.02	(951)	3.03	(2818)	21 9/32	(541)
1636	14 9/16	(370)	12 33/64	(318)	1.27	(1176)	42 41/64	(1083)	1.27	(1176)	3.66	(3402)	24 7/8	(632)
1640	14 9/16	(370)	14 59/64	(379)	1.51	(1402)	36 41/64	(931)	1.51	(1402)	4.29	(3985)	28 31/64	(723)
1646	14 9/16	(370)	17 5/16	(440)	1.75	(1627)	30 41/64	(778)	1.75	(1627)	4.92	(4569)	32 5/64	(815)
1650	14 9/16	(370)	19 23/32	(501)	1.99	(1852)	24 41/64	(626)	1.99	(1852)	5.55	(5152)	35 11/16	(906)
1656	14 9/16	(370)	22 13/64	(564)	2.25	(2086)	18 41/64	(474)	2.25	(2086)	6.16	(5722)	39 3/16	(995)
2026	20 9/16	(522)	7 23/32	(196)	1.10	(1024)	54 41/64	(1388)	1.10	(1024)	3.55	(3302)	17 11/16	(449)
2030	20 9/16	(522)	10 1/8	(257)	1.44	(1342)	48 41/64	(1236)	1.44	(1342)	4.48	(4165)	21 9/32	(541)
2036	20 9/16	(522)	12 33/64	(318)	1.79	(1661)	42 41/64	(1083)	1.79	(1661)	5.41	(5027)	24 7/8	(632)
2040	20 9/16	(522)	14 59/64	(379)	2.13	(1979)	36 41/64	(931)	2.13	(1979)	6.34	(5889)	28 31/64	(723)
2046	20 9/16	(522)	17 5/16	(440)	2.47	(2297)	30 41/64	(778)	2.47	(2297)	7.27	(6751)	32 5/64	(815)
2050	20 9/16	(522)	19 23/32	(501)	2.82	(2616)	24 41/64	(626)	2.82	(2616)	8.19	(7613)	35 11/16	(906)
2056	20 9/16	(522)	22 13/64	(564)	3.17	(2946)	18 41/64	(474)	3.17	(2946)	9.10	(8456)	39 3/16	(995)
2626	26 9/16	(675)	7 23/32	(196)	1.42	(1323)	54 41/64	(1388)	1.42	(1323)	4.70	(4370)	17 43/64	(449)
2630	26 9/16	(675)	10 1/8	(257)	1.87	(1734)	48 41/64	(1236)	1.87	(1734)	5.93	(5511)	21 9/32	(541)
2636	26 9/16	(675)	12 33/64	(318)	2.31	(2145)	42 41/64	(1083)	2.31	(2145)	7.16	(6652)	24 7/8	(632)
2640	26 9/16	(675)	14 59/64	(379)	2.75	(2557)	36 41/64	(931)	2.75	(2557)	8.39	(7793)	28 31/64	(723)
2646	26 9/16	(675)	17 5/16	(440)	3.19	(2968)	30 41/64	(778)	3.19	(2968)	9.62	(8933)	32 5/64	(815)
2650	26 9/16	(675)	19 23/32	(501)	3.64	(3379)	24 41/64	(626)	3.64	(3379)	10.84	(10074)	35 11/16	(906)
2656	26 9/16	(675)	22 13/64	(564)	4.10	(3806)	18 41/64	(474)	4.10	(3806)	12.04	(11190)	39 3/16	(995)
2826	28 9/16	(725)	7 23/32	(196)	1.53	(1422)	54 41/64	(1388)	1.53	(1422)	5.09	(4726)	17 11/16	(449)
2830	28 9/16	(725)	10 1/8	(257)	2.01	(1865)	48 41/64	(1236)	2.01	(1865)	6.41	(5960)	21 9/32	(541)
2836	28 9/16	(725)	12 33/64	(318)	2.48	(2307)	42 41/64	(1083)	2.48	(2307)	7.74	(7193)	24 7/8	(632)
2840	28 9/16	(725)	14 59/64	(379)	2.96	(2749)	36 41/64	(931)	2.96	(2749)	9.07	(8427)	28 31/64	(723)
2846	28 9/16	(725)	17 5/16	(440)	3.44	(3191)	30 41/64	(778)	3.44	(3191)	10.40	(9661)	32 5/64	(815)
2850	28 9/16	(725)	19 23/32	(501)	3.91	(3634)	24 41/64	(626)	3.91	(3634)	11.73	(10895)	35 11/16	(906)
2856	28 9/16	(725)	22 13/64	(564)	4.40	(4092)	18 41/64	(474)	4.40	(4092)	13.03	(12101)	39 3/16	(995)
3026	32 9/16	(827)	7 23/32	(196)	1.75	(1622)	54 41/64	(1388)	1.75	(1622)	5.85	(5438)	17 11/16	(449)
3030	32 9/16	(827)	10 1/8	(257)	2.29	(2126)	48 41/64	(1236)	2.29	(2126)	7.38	(6857)	21 9/32	(541)
3036	32 9/16	(827)	12 33/64	(318)	2.83	(2630)	42 41/64	(1083)	2.83	(2630)	8.91	(8277)	24 7/8	(632)
3040	32 9/16	(827)	14 59/64	(379)	3.37	(3134)	36 41/64	(931)	3.37	(3134)	10.44	(9696)	28 31/64	(723)
3046	32 9/16	(827)	17 5/16	(440)	3.92	(3638)	30 41/64	(778)	3.92	(3638)	11.97	(11116)	32 5/64	(815)
3050	32 9/16	(827)	19 23/32	(501)	4.46	(4142)	24 41/64	(626)	4.46	(4142)	13.49	(12535)	35 11/16	(906)
3056	32 9/16	(827)	22 13/64	(564)	5.02	(4666)	18 41/64	(474)	5.02	(4666)	14.99	(13924)	39 3/16	(995)
3626	38 9/16	(979)	7 23/32	(196)	2.07	(1921)	54 41/64	(1388)	2.07	(1921)	7.00	(6505)	17 11/16	(449)
3630	38 9/16	(979)	10 1/8	(257)	2.71	(2518)	48 41/64	(1236)	2.71	(2518)	8.83	(8204)	21 9/32	(541)
3636	38 9/16	(979)	12 33/64	(318)	3.35	(3115)	42 41/64	(1083)	3.35	(3115)	10.66	(9902)	24 7/8	(632)
3640	38 9/16	(979)	14 59/64	(379)	4.00	(3712)	36 41/64	(931)	4.00	(3712)	12.49	(11600)	28 31/64	(723)
3646	38 9/16	(979)	17 5/16	(440)	4.64	(4309)	30 41/64	(778)	4.64	(4309)	14.31	(13298)	32 5/64	(815)
3650	38 9/16	(979)	19 23/32	(501)	5.28	(4906)	24 41/64	(626)	5.28	(4906)	16.14	(14997)	35 11/16	(906)
3656	38 9/16	(979)	22 13/64	(564)	5.95	(5525)	18 41/64	(474)	5.95	(5525)	17.93	(16657)	39 3/16	(995)
4026	44 9/16	(1132)	7 23/32	(196)	2.39	(2219)	54 41/64	(1388)	2.39	(2219)	8.15	(7573)	17 11/16	(449)
4030	44 9/16	(1132)	10 1/8	(257)	3.13	(2909)	48 41/64	(1236)	3.13	(2909)	10.28	(9550)	21 9/32	(541)
4036	44 9/16	(1132)	12 33/64	(318)	3.87	(3599)	42 41/64	(1083)	3.87	(3599)	12.41	(11527)	24 7/8	(632)
4040	44 9/16	(1132)	14 59/64	(379)	4.62	(4289)	36 41/64	(931)	4.62	(4289)	14.54	(13504)	28 31/64	(723)
4046	44 9/16	(1132)	17 5/16	(440)	5.36	(4979)	30 41/64	(778)	5.36	(4979)	16.66	(15481)	32 5/64	(815)
4050	44 9/16	(1132)	19 23/32	(501)	6.10	(5669)	24 41/64	(626)	6.10	(5669)	18.79	(17458)	35 11/16	(906)
4056	44 9/16	(1132)	22 13/64	(564)	6.87	(6385)	18 41/64	(474)	6.87	(6385)	20.87	(19391)	39 3/16	(995)

E These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

* Floor to clear opening is calculated using 6"-10 1/4" from finished floor to rough opening header.

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

The information provided in this catalog has been gathered and assembled with every effort made to validate accuracy and consistency of the content. However, Marvin does not make any warranty or guarantee as to this information. Please verify critical product data in Marvin Order Management System (OMS) quotes and at the time of ordering.

EGRESS OPENINGS

Double Hung Reverse Cottage

EGRESS OPENING														
Egress Width			Egress Height		Egress Clear Opening		Floor To Clear Opening*		Vent		DLO		Check Rail Height	
Unit #	Inches	(mm)	Inches	(mm)	Sq. Ft.	(cm ²)	Inches	(mm)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	Inches	(mm)
1626	14 9/16	(370)	7 23/32	(196)	0.78	(725)	54 41/64	(1388)	0.78	(725)	1.54	(1431)	12 45/64	(323)
1630	14 9/16	(370)	10 1/8	(257)	1.02	(951)	48 41/64	(1236)	1.02	(951)	1.96	(1820)	15 7/64	(384)
1636	14 9/16	(370)	12 33/64	(318)	1.27	(1176)	42 41/64	(1083)	1.27	(1176)	2.38	(2209)	17 33/64	(445)
1640	14 9/16	(370)	14 59/64	(379)	1.51	(1402)	36 41/64	(931)	1.51	(1402)	2.80	(2598)	19 29/32	(506)
1646	14 9/16	(370)	17 5/16	(440)	1.75	(1627)	30 41/64	(778)	1.75	(1627)	3.22	(2987)	22 5/16	(567)
1650	14 9/16	(370)	19 23/32	(501)	1.99	(1852)	24 41/64	(626)	1.99	(1852)	3.63	(3376)	24 45/64	(628)
1656	14 9/16	(370)	22 13/64	(564)	2.25	(2086)	18 41/64	(474)	2.25	(2086)	4.07	(3778)	27 3/16	(691)
2026	20 9/16	(522)	7 23/32	(196)	1.10	(1024)	54 41/64	(1388)	1.10	(1024)	2.28	(2115)	12 45/64	(323)
2030	20 9/16	(522)	10 1/8	(257)	1.44	(1342)	48 41/64	(1236)	1.44	(1342)	2.89	(2689)	15 7/64	(384)
2036	20 9/16	(522)	12 33/64	(318)	1.79	(1661)	42 41/64	(1083)	1.79	(1661)	3.51	(3264)	17 33/64	(445)
2040	20 9/16	(522)	14 59/64	(379)	2.13	(1979)	36 41/64	(931)	2.13	(1979)	4.13	(3839)	19 29/32	(506)
2046	20 9/16	(522)	17 5/16	(440)	2.47	(2297)	30 41/64	(778)	2.47	(2297)	4.75	(4414)	22 5/16	(567)
2050	20 9/16	(522)	19 23/32	(501)	2.82	(2616)	24 41/64	(626)	2.82	(2616)	5.37	(4988)	24 45/64	(628)
2056	20 9/16	(522)	22 13/64	(564)	3.17	(2946)	18 41/64	(474)	3.17	(2946)	6.01	(5582)	27 3/16	(691)
2626	26 9/16	(675)	7 23/32	(196)	1.42	(1323)	54 41/64	(1388)	1.42	(1323)	3.01	(2798)	12 45/64	(323)
2630	26 9/16	(675)	10 1/8	(257)	1.87	(1734)	48 41/64	(1236)	1.87	(1734)	3.83	(3559)	15 7/64	(384)
2636	26 9/16	(675)	12 33/64	(318)	2.31	(2145)	42 41/64	(1083)	2.31	(2145)	4.65	(4319)	17 33/64	(445)
2640	26 9/16	(675)	14 59/64	(379)	2.75	(2557)	36 41/64	(931)	2.75	(2557)	5.47	(5080)	19 29/32	(506)
2646	26 9/16	(675)	17 5/16	(440)	3.19	(2968)	30 41/64	(778)	3.19	(2968)	6.29	(5841)	22 5/16	(567)
2650	26 9/16	(675)	19 23/32	(501)	3.64	(3379)	24 41/64	(626)	3.64	(3379)	7.11	(6601)	24 45/64	(628)
2656	26 9/16	(675)	22 13/64	(564)	4.10	(3806)	18 41/64	(474)	4.10	(3806)	7.95	(7387)	27 3/16	(691)
2826	28 9/16	(725)	7 23/32	(196)	1.53	(1422)	54 41/64	(1388)	1.53	(1422)	3.26	(3026)	12 45/64	(323)
2830	28 9/16	(725)	10 1/8	(257)	2.01	(1865)	48 41/64	(1236)	2.01	(1865)	4.14	(3849)	15 7/64	(384)
2836	28 9/16	(725)	12 33/64	(318)	2.48	(2307)	42 41/64	(1083)	2.48	(2307)	5.03	(4671)	17 33/64	(445)
2840	28 9/16	(725)	14 59/64	(379)	2.96	(2749)	36 41/64	(931)	2.96	(2749)	5.91	(5494)	19 29/32	(506)
2846	28 9/16	(725)	17 5/16	(440)	3.44	(3191)	30 41/64	(778)	3.44	(3191)	6.80	(6316)	22 5/16	(567)
2850	28 9/16	(725)	19 23/32	(501)	3.91	(3634)	24 41/64	(626)	3.91	(3634)	7.68	(7139)	24 45/64	(628)
2856	28 9/16	(725)	22 13/64	(564)	4.40	(4092)	18 41/64	(474)	4.40	(4092)	8.60	(7989)	27 3/16	(691)
3026	32 9/16	(827)	7 23/32	(196)	1.75	(1622)	54 41/64	(1388)	1.75	(1622)	3.75	(3482)	12 45/64	(323)
3030	32 9/16	(827)	10 1/8	(257)	2.29	(2126)	48 41/64	(1236)	2.29	(2126)	4.77	(4428)	15 7/64	(384)
3036	32 9/16	(827)	12 33/64	(318)	2.83	(2630)	42 41/64	(1083)	2.83	(2630)	5.79	(5375)	17 33/64	(445)
3040	32 9/16	(827)	14 59/64	(379)	3.37	(3134)	36 41/64	(931)	3.37	(3134)	6.80	(6321)	19 29/32	(506)
3046	32 9/16	(827)	17 5/16	(440)	3.92	(3638)	30 41/64	(778)	3.92	(3638)	7.82	(7267)	22 5/16	(567)
3050	32 9/16	(827)	19 23/32	(501)	4.46	(4142)	24 41/64	(626)	4.46	(4142)	8.84	(8214)	24 45/64	(628)
3056	32 9/16	(827)	22 13/64	(564)	5.02	(4666)	18 41/64	(474)	5.02	(4666)	9.89	(9192)	27 3/16	(691)
3626	38 9/16	(979)	7 23/32	(196)	2.07	(1921)	54 41/64	(1388)	2.07	(1921)	4.48	(4165)	12 45/64	(323)
3630	38 9/16	(979)	10 1/8	(257)	2.71	(2518)	48 41/64	(1236)	2.71	(2518)	5.70	(5298)	15 7/64	(384)
3636	38 9/16	(979)	12 33/64	(318)	3.35	(3115)	42 41/64	(1083)	3.35	(3115)	6.92	(6430)	17 33/64	(445)
3640	38 9/16	(979)	14 59/64	(379)	4.00	(3712)	36 41/64	(931)	4.00	(3712)	8.14	(7562)	19 29/32	(506)
3646	38 9/16	(979)	17 5/16	(440)	4.64	(4309)	30 41/64	(778)	4.64	(4309)	9.36	(8694)	22 5/16	(567)
3650	38 9/16	(979)	19 23/32	(501)	5.28	(4906)	24 41/64	(626)	5.28	(4906)	10.58	(9826)	24 45/64	(628)
3656	38 9/16	(979)	22 13/64	(564)	5.95	(5525)	18 41/64	(474)	5.95	(5525)	11.84	(10996)	27 3/16	(691)
4026	44 9/16	(1132)	7 23/32	(196)	2.39	(2219)	54 41/64	(1388)	2.39	(2219)	5.22	(4849)	12 45/64	(323)
4030	44 9/16	(1132)	10 1/8	(257)	3.13	(2909)	48 41/64	(1236)	3.13	(2909)	6.64	(6167)	15 7/64	(384)
4036	44 9/16	(1132)	12 33/64	(318)	3.87	(3599)	42 41/64	(1083)	3.87	(3599)	8.06	(7485)	17 33/64	(445)
4040	44 9/16	(1132)	14 59/64	(379)	4.62	(4289)	36 41/64	(931)	4.62	(4289)	9.48	(8803)	19 29/32	(506)
4046	44 9/16	(1132)	17 5/16	(440)	5.36	(4979)	30 41/64	(778)	5.36	(4979)	10.89	(10121)	22 5/16	(567)
4050	44 9/16	(1132)	19 23/32	(501)	6.10	(5669)	24 41/64	(626)	6.10	(5669)	12.31	(11439)	24 45/64	(628)
4056	44 9/16	(1132)	22 13/64	(564)	6.87	(6385)	18 41/64	(474)	6.87	(6385)	13.78	(12801)	27 3/16	(691)

Sliding Patio Door

EGRESS OPENING															
Unit #	Egress Width		Egress Height		Egress Clear Opening		Vent		DLO						
	Inches	(mm)	Inches	(mm)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)		Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)		
5068	24 1/16	(611)	75 17/64	(1912)	12.58	(11688)	12.58	(11688)	25.16	(23376)					
50610	24 1/16	(611)	77 17/64	(1963)	12.92	(11999)	12.92	(11999)	25.86	(24021)					
5080	24 1/16	(611)	91 17/64	(2318)	15.26	(14173)	15.26	(14173)	30.72	(28536)					
51068	29 5/16	(745)	75 17/64	(1912)	15.33	(14238)	15.33	(14238)	30.45	(28287)					
6068	30 1/16	(764)	75 17/64	(1912)	15.72	(14602)	15.72	(14602)	31.20	(28989)					
60610	30 1/16	(764)	77 17/64	(1963)	16.14	(14990)	16.14	(14990)	32.06	(29789)					
6080	30 1/16	(764)	91 17/64	(2318)	19.06	(17706)	19.06	(17706)	38.09	(35387)					
6068	**	32 5/32	(817)	75 17/64	(1912)	16.81	(15616)	16.81	(15616)	31.20	(28989)				
60610	**	32 5/32	(817)	77 17/64	(1963)	17.26	(16031)	17.26	(16031)	32.06	(29789)				
6080	**	32 5/32	(817)	91 17/64	(2318)	20.38	(18935)	20.38	(18935)	38.09	(35387)				
9068	30 1/16	(764)	75 17/64	(1912)	15.72	(14602)	15.72	(14602)	31.20	(28989)					
90610	30 1/16	(764)	77 17/64	(1963)	16.14	(14990)	16.14	(14990)	32.06	(29789)					
9080	30 1/16	(764)	91 17/64	(2318)	19.06	(17706)	19.06	(17706)	38.09	(35387)					

E These units meet National Egress Codes requiring 5.7 SF clear opening, 20" clear width, and 24" clear height, not to exceed a floor to sill height of 44". Code restrictions may vary depending on local building codes.

* Floor to clear opening is calculated using 6'-10 1/4" from finished floor to rough opening header.

** Applies to Sliding Patio Doors with optional field applied Slim Handle (Net Clear Opening Handle).

Units may optionally include a window opening control device tested to ASTM F2090-10, which can be released from the inside without the use of a key, tool, special knowledge, or force greater than that required for normal unit operation.

For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

Glider

EGRESS OPENING													
		Egress Width		Egress Height		Egress Clear Opening		Floor To Clear Opening*		Venting		DLO	
Unit #		Inches	(mm)	Inches	(mm)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)	Sq. Ft.	(cm ²)
2616	XO, OX	11 13/16	(300)	13 41/64	(346)	1.10	(1024)	66 41/64	(1693)	1.10	(1024)	1.97	(1833)
2620	XO, OX	11 13/16	(300)	19 41/64	(499)	1.59	(1482)	60 41/64	(1540)	1.59	(1482)	2.92	(2709)
2626	XO, OX	11 13/16	(300)	25 41/64	(651)	2.09	(1939)	54 41/64	(1388)	2.09	(1939)	3.86	(3584)
2630	XO, OX	11 13/16	(300)	31 41/64	(804)	2.58	(2396)	48 41/64	(1236)	2.58	(2396)	4.80	(4460)
2636	XO, OX	11 13/16	(300)	37 41/64	(956)	3.07	(2853)	42 41/64	(1083)	3.07	(2853)	5.74	(5335)
2640	XO, OX	11 13/16	(300)	43 41/64	(1108)	3.56	(3310)	36 41/64	(931)	3.56	(3310)	6.69	(6211)
2646	XO, OX	11 13/16	(300)	49 41/64	(1261)	4.05	(3767)	30 41/64	(778)	4.05	(3767)	7.63	(7087)
2650	XO, OX	11 13/16	(300)	55 41/64	(1413)	4.55	(4224)	24 41/64	(626)	4.55	(4224)	8.57	(7962)
3016	XO, OX	14 13/16	(376)	13 41/64	(346)	1.39	(1288)	66 41/64	(1693)	1.39	(1288)	2.50	(2319)
3020	XO, OX	14 13/16	(376)	19 41/64	(499)	2.00	(1862)	60 41/64	(1540)	2.00	(1862)	3.69	(3427)
3026	XO, OX	14 13/16	(376)	25 41/64	(651)	2.62	(2435)	54 41/64	(1388)	2.62	(2435)	4.88	(4535)
3030	XO, OX	14 13/16	(376)	31 41/64	(804)	3.24	(3008)	48 41/64	(1236)	3.24	(3008)	6.07	(5643)
3036	XO, OX	14 13/16	(376)	37 41/64	(956)	3.85	(3581)	42 41/64	(1083)	3.85	(3581)	7.27	(6751)
3040	XO, OX	14 13/16	(376)	43 41/64	(1108)	4.47	(4154)	36 41/64	(931)	4.47	(4154)	8.46	(7858)
3046	XO, OX	14 13/16	(376)	49 41/64	(1261)	5.09	(4728)	30 41/64	(778)	5.09	(4728)	9.65	(8966)
3050	XO, OX	14 13/16	(376)	55 41/64	(1413)	5.71	(5301)	24 41/64	(626)	5.71	(5301)	10.84	(10074)
3616	XO, OX	17 13/16	(452)	13 41/64	(346)	1.67	(1552)	66 41/64	(1693)	1.67	(1552)	3.02	(2805)
3620	XO, OX	17 13/16	(452)	19 41/64	(499)	2.41	(2242)	60 41/64	(1540)	2.41	(2242)	4.46	(4145)
3626	XO, OX	17 13/16	(452)	25 41/64	(651)	3.15	(2931)	54 41/64	(1388)	3.15	(2931)	5.90	(5486)
3630	XO, OX	17 13/16	(452)	31 41/64	(804)	3.90	(3620)	48 41/64	(1236)	3.90	(3620)	7.35	(6826)
3636	XO, OX	17 13/16	(452)	37 41/64	(956)	4.64	(4310)	42 41/64	(1083)	4.64	(4310)	8.79	(8166)
3640	XO, OX	17 13/16	(452)	43 41/64	(1108)	5.38	(4999)	36 41/64	(931)	5.38	(4999)	10.23	(9506)
3646	XO, OX	17 13/16	(452)	49 41/64	(1261)	6.12	(5688)	30 41/64	(778)	6.12	(5688)	11.67	(10846)
3650	XO, OX	17 13/16	(452)	55 41/64	(1413)	6.86	(6378)	24 41/64	(626)	6.86	(6378)	13.12	(12186)
4016	XO, OX	20 13/16	(529)	13 41/64	(346)	1.95	(1816)	66 41/64	(1693)	1.95	(1816)	3.54	(3292)
4020	XO, OX	20 13/16	(529)	19 41/64	(499)	2.82	(2622)	60 41/64	(1540)	2.82	(2622)	5.24	(4864)
4026	XO, OX	20 13/16	(529)	25 41/64	(651)	3.69	(3427)	54 41/64	(1388)	3.69	(3427)	6.93	(6436)
4030	XO, OX	20 13/16	(529)	31 41/64	(804)	4.56	(4232)	48 41/64	(1236)	4.56	(4232)	8.62	(8009)
4036	XO, OX	20 13/16	(529)	37 41/64	(956)	5.42	(5038)	42 41/64	(1083)	5.42	(5038)	10.31	(9581)
4040	XO, OX E	20 13/16	(529)	43 41/64	(1108)	6.29	(5843)	36 41/64	(931)	6.29	(5843)	12.01	(11153)
4046	XO, OX E	20 13/16	(529)	49 41/64	(1261)	7.16	(6649)	30 41/64	(778)	7.16	(6649)	13.70	(12726)
4050	XO, OX E	20 13/16	(529)	55 41/64	(1413)	8.02	(7454)	24 41/64	(626)	8.02	(7454)	15.39	(14298)
4616	XO, OX	23 13/16	(605)	13 41/64	(346)	2.24	(2080)	66 41/64	(1693)	2.24	(2080)	4.07	(3778)
4620	XO, OX	23 13/16	(605)	19 41/64	(499)	3.23	(3002)	60 41/64	(1540)	3.23	(3002)	6.01	(5582)
4626	XO, OX	23 13/16	(605)	25 41/64	(651)	4.22	(3923)	54 41/64	(1388)	4.22	(3923)	7.95	(7387)
4630	XO, OX	23 13/16	(605)	31 41/64	(804)	5.21	(4845)	48 41/64	(1236)	5.21	(4845)	9.89	(9192)
4636	XO, OX E	23 13/16	(605)	37 41/64	(956)	6.21	(5766)	42 41/64	(1083)	6.21	(5766)	11.84	(10996)
4640	XO, OX E	23 13/16	(605)	43 41/64	(1108)	7.20	(6688)	36 41/64	(931)	7.20	(6688)	13.78	(12801)
4646	XO, OX E	23 13/16	(605)	49 41/64	(1261)	8.19	(7610)	30 41/64	(778)	8.19	(7610)	15.72	(14606)
4650	XO, OX E	23 13/16	(605)	55 41/64	(1413)	9.18	(8531)	24 41/64	(626)	9.18	(8531)	17.66	(16410)
5016	XO, OX	26 13/16	(681)	13 41/64	(346)	2.52	(2344)	66 41/64	(1693)	2.52	(2344)	4.59	(4264)
5020	XO, OX	26 13/16	(681)	19 41/64	(499)	3.64	(3382)	60 41/64	(1540)	3.64	(3382)	6.78	(6301)
5026	XO, OX	26 13/16	(681)	25 41/64	(651)	4.76	(4419)	54 41/64	(1388)	4.76	(4419)	8.97	(8338)
5030	XO, OX E	26 13/16	(681)	31 41/64	(804)	5.87	(5457)	48 41/64	(1236)	5.87	(5457)	11.17	(10375)
5036	XO, OX E	26 13/16	(681)	37 41/64	(956)	6.99	(6495)	42 41/64	(1083)	6.99	(6495)	13.36	(12412)
5040	XO, OX E	26 13/16	(681)	43 41/64	(1108)	8.11	(7532)	36 41/64	(931)	8.11	(7532)	15.55	(14448)
5046	XO, OX E	26 13/16	(681)	49 41/64	(1261)	9.22	(8570)	30 41/64	(778)	9.22	(8570)	17.74	(16485)
5050	XO, OX E	26 13/16	(681)	55 41/64	(1413)	10.34	(9608)	24 41/64	(626)	10.34	(9608)	19.94	(18522)
6016	XO, OX	32 13/16	(833)	13 41/64	(346)	3.09	(2872)	66 41/64	(1693)	3.09	(2872)	5.64	(5236)
6020	XO, OX	32 13/16	(833)	19 41/64	(499)	4.46	(4142)	60 41/64	(1540)	4.46	(4142)	8.33	(7738)
6026	XO, OX E	32 13/16	(833)	25 41/64	(651)	5.82	(5412)	54 41/64	(1388)	5.82	(5412)	11.02	(10239)
6030	XO, OX E	32 13/16	(833)	31 41/64	(804)	7.19	(6682)	48 41/64	(1236)	7.19	(6682)	13.71	(12741)
6036	XO, OX E	32 13/16	(833)	37 41/64	(956)	8.56	(7952)	42 41/64	(1083)	8.56	(7952)	16.41	(15242)
6040	XO, OX E	32 13/16	(833)	43 41/64	(1108)	9.93	(9222)	36 41/64	(931)	9.93	(9222)	19.10	(17743)
6046	XO, OX E	32 13/16	(833)	49 41/64	(1261)	11.29	(10492)	30 41/64	(778)	11.29	(10492)	21.79	(20245)
6050	XO, OX E	32 13/16	(833)	55 41/64	(1413)	12.66	(11762)	24 41/64	(626)	12.66	(11762)	24.48	(22746)
6016	XOX	14 13/16	(376)	13 41/64	(346)	1.39	(1289)	66 41/64	(1693)	2.77	(2578)	5.47	(5086)
6020	XOX	14 13/16	(376)	19 41/64	(499)	2.00	(1862)	60 41/64	(1540)	4.01	(3725)	8.09	(7516)
6026	XOX	14 13/16	(376)	25 41/64	(651)	2.62	(2436)	54 41/64	(1388)	5.24	(4872)	10.71	(9946)
6030	XOX	14 13/16	(376)	31 41/64	(804)	3.24	(3009)	48 41/64	(1236)	6.48	(6019)	13.32	(12375)
6036	XOX	14 13/16	(376)	37 41/64	(956)	3.86	(3583)	42 41/64	(1083)	7.71	(7166)	15.94	(14805)
6040	XOX	14 13/16	(376)	43 41/64	(1108)	4.47	(4156)	36 41/64	(931)	8.95	(8313)	18.55	(17235)
6046	XOX	14 13/16	(376)	49 41/64	(1261)	5.09	(4730)	30 41/64	(778)	10.18	(9460)	21.17	(19665)
6050	XOX	14 13/16	(376)	55 41/64	(1413)	5.71	(5303)	24 41/64	(626)	11.42	(10607)	23.78	(22094)
7016	XOX	17 13/16	(453)	13 41/64	(346)	1.67	(1553)	66 41/64	(1693)	3.34	(3106)	6.52	(6059)
7020	XOX	17 13/16	(453)	19 41/64	(499)	2.41	(2242)	60 41/64	(1540)	4.83	(4485)	9.64	(8953)
7026	XOX	17 13/16	(453)	25 41/64	(651)	3.16	(2932)	54 41/64	(1388)	6.31	(5864)	12.75	(11847)
7030	XOX	17 13/16	(453)	31 41/64	(804)	3.90	(3622)	48 41/64	(1236)	7.80	(7243)	15.87	(14741)
7036	XOX	17 13/16	(453)	37 41/64	(956)	4.64	(4311)	42 41/64	(1083)	9.28	(8623)	18.98	(17636)
7040	XOX	17 13/16	(453)	43 41/64	(1108)	5.38	(5001)	36 41/64	(931)	10.77	(10002)	22.10	(20530)
7046	XOX	17 13/16	(453)	49 41/64	(1261)	6.13	(5690)	30 41/64	(778)	12.25	(11381)	25.21	(23424)
7050	XOX	17 13/16	(453)	55 41/64	(1413)	6.87	(6380)	24 41/64	(626)	13.73	(12760)	28.33	(26318)
8016	XOX	20 13/16	(529)	13 41/64	(346)	1.96	(1817)	66 41/64	(1693)	3.91	(3633)	7.57	(7031)
8020	XOX	20 13/16	(529)	19 41/64	(499)	2.82	(2622)	60 41/64	(1540)	5.65	(5245)	11.18	(10390)
8026	XOX	20 13/16	(529)	25 41/64	(651)	3.69	(3428)	54 41/64	(1388)	7.38	(6856)	14.80	(13749)
8030	XOX	20 13/16	(529)	31 41/64	(804)	4.56	(4234)	48 41/64	(1236)	9.11	(8468)	18.41	(17107)
8036	XOX	20 13/16	(529)	37 41/64	(956)	5.42	(5040)	42 41/64	(1083)	10.85	(10079)	22.03	(20466)
8040	XOX E	20 13/16	(529)	43 41/64	(1108)	6.29	(5845)	36 41/64	(931)	12.58	(11691)	25.64	(23825)
8046	XOX E	20 13/16	(529)	49 41/64	(1261)	7.16	(6651)	30 41/64	(778)	14.32	(13302)	29.26	(27184)
8050	XOX E	20 13/16	(529)	55 41/64	(1413)	8.03	(7457)	24 41/64	(626)	16.05	(14914)	32.88	(30542)

Please verify critical product data in Marvin Order Management System (OMS) quotes and at the time of ordering.

ALTITUDE GUIDELINES

Marvin recommends the maximum altitude limitation for its seal insulated glass units. These limits do not account for glass deflection which may take on a pillowed appearance below these elevations. The limits may be affected by site, location, temperature and/or divided lites. Marvin does not recommend the use of IG units in excess of these specified guidelines. These limitations apply to Marvin units and should not be interpreted as an industry standard.

Casement

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	30
20	Annealed	4000	5000	6000	6000
	Tempered	6000	8000	10000	10000
26	Annealed	4000	6000	7000	8000
	Tempered	7000	10000	10000	10000
30	Annealed	4000	6000	8000	9000
	Tempered	8000	10000	10000	10000
36	Annealed	4000	6000	8000	10000
	Tempered	9000	10000	10000	10000
40	Annealed	4000	6000	8000	10000
	Tempered	9000	10000	10000	10000
46	Annealed	4000	6000	8000	10000
	Tempered	10000	10000	10000	10000
50	Annealed	4000	6000	8000	10000
	Tempered	10000	10000	10000	10000
56	Annealed	4000	6000	8000	10000
	Tempered	10000	10000	10000	10000
60	Annealed	4000	6000	9000	10000
	Tempered	10000	10000	10000	10000

Casement STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	30
20	Annealed	3000	4000	4000	5000
	Tempered	5000	7000	8000	10000
26	Annealed	3000	4000	6000	6000
	Tempered	6000	8000	10000	10000
30	Annealed	3000	5000	6000	8000
	Tempered	7000	10000	10000	10000
36	Annealed	3000	5000	6000	8000
	Tempered	7000	10000	10000	10000
40	Annealed	3000	5000	7000	8000
	Tempered	8000	10000	10000	10000
46	Annealed	3000	5000	7000	9000
	Tempered	8000	10000	10000	10000
50	Annealed	3000	5000	7000	9000
	Tempered	8000	10000	10000	10000
56	Annealed	3000	5000	7000	9000
	Tempered	9000	10000	10000	10000
60	Annealed	3000	5000	7000	9000
	Tempered	9000	10000	10000	10000

Awning

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	30	36	40
16	Annealed	4000	4000	4000	4000	4000	4000
	Tempered	5000	6000	7000	8000	9000	9000
20	Annealed	4000	5000	6000	6000	6000	6000
	Tempered	6000	8000	10000	10000	10000	10000
26	Annealed	4000	6000	7000	8000	8000	8000
	Tempered	7000	10000	10000	10000	10000	10000
30	Annealed	4000	6000	8000	9000	10000	10000
	Tempered	8000	10000	10000	10000	10000	10000

Awning STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	30	36	40
16	Annealed	3000	3000	3000	3000	3000	3000
	Tempered	4000	5000	6000	7000	7000	8000
20	Annealed	3000	4000	4000	5000	5000	5000
	Tempered	5000	7000	8000	10000	10000	10000
26	Annealed	3000	4000	6000	6000	6000	7000
	Tempered	6000	8000	10000	10000	10000	10000
30	Annealed	3000	5000	6000	8000	8000	8000
	Tempered	7000	10000	10000	10000	10000	10000

Casement Picture

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	30	36	40	50	60
20	Annealed	4000	5000	6000	6000	6000	6000	6000	6000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000
26	Annealed	4000	6000	7000	8000	8000	8000	8000	9000
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000
30	Annealed	4000	6000	8000	9000	10000	10000	10000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000	10000
36	Annealed	4000	6000	8000	10000	10000	10000	10000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000
40	Annealed	4000	6000	8000	10000	10000	10000	10000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000
46	Annealed	4000	6000	8000	10000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
50	Annealed	4000	6000	8000	10000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
56	Annealed	4000	6000	8000	10000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
60	Annealed	4000	6000	9000	10000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000

Casement Picture STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	30	36	40	50	60
20	Annealed	3000	4000	4000	5000	5000	5000	5000	5000
	Tempered	5000	7000	8000	10000	10000	10000	10000	10000
26	Annealed	3000	4000	6000	6000	6000	7000	7000	7000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000
30	Annealed	3000	5000	6000	8000	8000	8000	9000	9000
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000
36	Annealed	3000	5000	6000	8000	10000	10000	10000	10000
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000
40	Annealed	3000	5000	7000	8000	10000	10000	10000	N/A
	Tempered	8000	10000	10000	10000	10000	10000	10000	N/A
46	Annealed	3000	5000	7000	9000	10000	10000	N/A	N/A
	Tempered	8000	10000	10000	10000	10000	10000	N/A	N/A
50	Annealed	3000	5000	7000	9000	10000	10000	N/A	N/A
	Tempered	8000	10000	10000	10000	10000	10000	N/A	N/A
56	Annealed	3000	5000	7000	9000	10000	10000	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	10000	N/A	N/A
60	Annealed	3000	5000	7000	9000	10000	N/A	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	N/A	N/A	N/A

Marvin provides these elevation guidelines as a convenience to our customers. Marvin does not recommend installation above the elevation guidelines, and products installed above such elevations are not warranted. A variety of factors, including ambient temperature, altitude, and other conditions outside Marvin's control may cause glass deflection, distortion, or an increase in convexity of the insulating glass units. Deflection, distortion, and increased convexity are not considered product defects and are not covered under Marvin's general warranty; capillary tubes may minimize these effects. Essential does not warrant the amount or percentage of argon or other inert gas present in insulating glass at any time after manufacture. Inert gas dissipates over time, and may be ineffective in products manufactured with capillary tubes. Thermal efficiencies vary with the application of the product. Marvin does not warrant that a specific level of thermal efficiency will be achieved by inert gas, low emissivity coatings, or other product features. Determining the suitability and compliance with local or other applicable building codes or standards, of all building components, including the use of any Marvin product, and the design and installation of any flashing or sealing system, is the responsibility of the buyer, user, architect, contractor, installer, and/or other construction professional. Marvin will not be liable for any problem or damage relating to inappropriate or faulty building design or construction, maintenance, installation, or selection of products. Marvin does not warrant any product's compliance with local or other applicable building codes or standards, or its suitability for use in connection with a project seeking third party certification to any standard.

MARVIN ESSENTIAL™ COLLECTION

ALTITUDE GUIDELINES

Casement Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	30	36	40	50	60
10	Annealed	4000	4000	4000	4000	4000	4000	N/A	N/A
	Tempered	4000	4000	5000	5000	5000	5000	N/A	N/A
16	Annealed	4000	4000	4000	4000	4000	4000	N/A	N/A
	Tempered	5000	6000	7000	8000	9000	9000	N/A	N/A
20	Annealed	4000	5000	6000	6000	6000	6000	6000	6000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000

Casement Transom STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	30	36	40	50	60
10	Annealed	3000	3000	3000	3000	3000	3000	N/A	N/A
	Tempered	4000	4000	4000	4000	4000	4000	N/A	N/A
16	Annealed	3000	3000	3000	3000	3000	3000	N/A	N/A
	Tempered	4000	5000	6000	7000	7000	8000	N/A	N/A
20	Annealed	3000	4000	4000	5000	5000	5000	5000	5000
	Tempered	5000	7000	8000	10000	10000	10000	10000	10000

Single Hung/Double Hung

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	28	30	36	40
20	Annealed	4000	4000	4000	4000	4000	4000	4000
	Tempered	4000	5000	5000	6000	6000	6000	6000
26	Annealed	4000	4000	4000	4000	4000	4000	4000
	Tempered	5000	6000	7000	7000	8000	8000	9000
30	Annealed	4000	5000	5000	5000	5000	5000	5000
	Tempered	6000	7000	9000	9000	10000	10000	10000
36	Annealed	4000	5000	5000	6000	6000	6000	6000
	Tempered	6000	8000	10000	10000	10000	10000	10000
40	Annealed	4000	6000	6000	6000	7000	7000	7000
	Tempered	7000	9000	10000	10000	10000	10000	10000
46	Annealed	4000	6000	7000	7000	7000	8000	8000
	Tempered	7000	10000	10000	10000	10000	10000	10000
50	Annealed	4000	6000	8000	8000	8000	9000	9000
	Tempered	8000	10000	10000	10000	10000	10000	10000
56	Annealed	4000	6000	8000	8000	9000	9000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000
60	Annealed	4000	6000	8000	8000	9000	10000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000
66	Annealed	4000	6000	8000	9000	10000	10000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000

Single Hung/Double Hung STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	28	30	36	40
20	Annealed	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	4000	5000	5000	5000	5000	5000
26	Annealed	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	5000	6000	6000	6000	7000	7000
30	Annealed	3000	4000	4000	4000	4000	4000	4000
	Tempered	5000	6000	7000	7000	8000	9000	10000
36	Annealed	3000	4000	4000	4000	5000	5000	5000
	Tempered	5000	7000	8000	9000	10000	10000	10000
40	Annealed	3000	4000	5000	5000	5000	5000	6000
	Tempered	6000	8000	10000	10000	10000	10000	10000
46	Annealed	3000	5000	6000	6000	6000	6000	7000
	Tempered	6000	9000	10000	10000	10000	10000	10000
50	Annealed	3000	5000	6000	7000	7000	7000	7000
	Tempered	7000	9000	10000	10000	10000	10000	10000
56	Annealed	3000	5000	6000	7000	8000	8000	8000
	Tempered	7000	10000	10000	10000	10000	10000	10000
60	Annealed	3000	5000	7000	7000	8000	9000	9000
	Tempered	7000	10000	10000	10000	10000	10000	10000
66	Annealed	3000	5000	7000	7000	8000	10000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000

Double Hung Picture

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	28	30	36	40	50
20	Annealed	4000	5000	6000	6000	6000	6000	6000	6000
	Tempered	7000	9000	10000	10000	10000	10000	10000	10000
26	Annealed	4000	6000	7000	8000	8000	8000	8000	9000
	Tempered	8000	10000	10000	10000	10000	10000	10000	10000
30	Annealed	4000	6000	8000	8000	9000	10000	10000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000	10000
36	Annealed	4000	6000	8000	9000	10000	10000	10000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000
40	Annealed	4000	6000	8000	9000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
46	Annealed	4000	6000	8000	9000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
50	Annealed	4000	6000	9000	9000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
56	Annealed	4000	6000	8000	9000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
60	Annealed	4000	6000	8000	9000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000

Double Hung Picture STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	28	30	36	40	50
20	Annealed	3000	4000	5000	5000	5000	5000	5000	5000
	Tempered	5000	7000	9000	9000	10000	10000	10000	10000
26	Annealed	3000	5000	6000	6000	6000	7000	7000	7000
	Tempered	6000	9000	10000	10000	10000	10000	10000	10000
30	Annealed	3000	5000	6000	7000	8000	8000	9000	9000
	Tempered	7000	10000	10000	10000	10000	10000	10000	10000
36	Annealed	3000	5000	7000	7000	8000	10000	10000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000	10000
40	Annealed	3000	5000	7000	7000	9000	10000	10000	N/A
	Tempered	8000	10000	10000	10000	10000	10000	10000	N/A
46	Annealed	3000	5000	7000	8000	9000	10000	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	10000	N/A	N/A
50	Annealed	3000	5000	7000	8000	9000	10000	N/A	N/A
	Tempered	9000	10000	10000	10000	10000	10000	N/A	N/A
56	Annealed	3000	5000	N/A	N/A	9000	N/A	N/A	N/A
	Tempered	9000	10000	N/A	N/A	10000	N/A	N/A	N/A
60	Annealed	3000	5000	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	9000	10000	N/A	N/A	N/A	N/A	N/A	N/A

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ALTITUDE GUIDELINES

Glider

ALTITUDE LIMITS (FEET)

	UNIT SIZE	26	30	36	40	46	50	60
16	Annealed	4000	4000	4000	4000	4000	4000	4000
	Tempered	5000	6000	6000	7000	7000	8000	9000
20	Annealed	4000	5000	5000	6000	6000	6000	6000
	Tempered	6000	7000	8000	9000	10000	10000	10000
26	Annealed	4000	5000	5000	6000	7000	8000	8000
	Tempered	7000	9000	10000	10000	10000	10000	10000
30	Annealed	4000	5000	6000	7000	7000	8000	9000
	Tempered	8000	10000	10000	10000	10000	10000	10000
36	Annealed	4000	5000	6000	7000	8000	9000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000
40	Annealed	4000	5000	6000	7000	8000	9000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000
46	Annealed	4000	5000	6000	7000	8000	9000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000
50	Annealed	4000	5000	6000	7000	8000	9000	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000

Glider STC/OITC

ALTITUDE LIMITS (FEET)

	UNIT SIZE	26	30	36	40	46	50	60
16	Annealed	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	5000	5000	6000	6000	7000	7000
20	Annealed	3000	4000	4000	4000	5000	5000	5000
	Tempered	5000	6000	7000	8000	9000	9000	10000
26	Annealed	3000	4000	4000	5000	6000	6000	7000
	Tempered	6000	7000	8000	10000	10000	10000	10000
30	Annealed	3000	4000	5000	5000	6000	7000	8000
	Tempered	6000	8000	10000	10000	10000	10000	10000
36	Annealed	3000	4000	5000	5000	6000	7000	9000
	Tempered	7000	9000	10000	10000	10000	10000	10000
40	Annealed	3000	4000	5000	6000	7000	7000	9000
	Tempered	7000	10000	10000	10000	10000	10000	10000
46	Annealed	3000	4000	5000	6000	7000	8000	9000
	Tempered	8000	10000	10000	10000	10000	10000	10000
50	Annealed	3000	4000	5000	6000	7000	8000	10000
	Tempered	8000	10000	10000	10000	10000	10000	10000

Glider Triple Sash Operating Sash

ALTITUDE LIMITS (FEET)

	UNIT SIZE	60	70	80
16	Annealed	4000	4000	4000
	Tempered	6000	6000	7000
20	Annealed	5000	5000	6000
	Tempered	7000	8000	9000
26	Annealed	5000	5000	6000
	Tempered	9000	10000	10000
30	Annealed	5000	6000	7000
	Tempered	10000	10000	10000
36	Annealed	5000	6000	7000
	Tempered	10000	10000	10000
40	Annealed	5000	6000	7000
	Tempered	10000	10000	10000
46	Annealed	5000	6000	7000
	Tempered	10000	10000	10000
50	Annealed	5000	6000	7000
	Tempered	10000	10000	10000

Glider Triple Sash Operating Sash STC/OITC

ALTITUDE LIMITS (FEET)

	UNIT SIZE	60	70	80
16	Annealed	3000	3000	3000
	Tempered	5000	5000	5000
20	Annealed	4000	4000	4000
	Tempered	6000	6000	7000
26	Annealed	4000	4000	5000
	Tempered	7000	8000	9000
30	Annealed	4000	5000	5000
	Tempered	8000	10000	10000
36	Annealed	4000	5000	5000
	Tempered	9000	10000	10000
40	Annealed	4000	5000	6000
	Tempered	10000	10000	10000
46	Annealed	4000	5000	6000
	Tempered	10000	10000	10000
50	Annealed	4000	5000	6000
	Tempered	10000	10000	10000

Glider Triple Sash Stationary Sash

ALTITUDE LIMITS (FEET)

	UNIT SIZE	60	70	80
16	Annealed	4000	4000	4000
	Tempered	9000	10000	10000
20	Annealed	6000	6000	6000
	Tempered	10000	10000	10000
26	Annealed	8000	8000	8000
	Tempered	10000	10000	10000
30	Annealed	10000	10000	10000
	Tempered	10000	10000	10000
36	Annealed	10000	10000	10000
	Tempered	10000	10000	10000
40	Annealed	10000	10000	10000
	Tempered	10000	10000	10000
46	Annealed	10000	10000	10000
	Tempered	10000	10000	10000
50	Annealed	10000	10000	10000
	Tempered	10000	10000	10000

Glider Triple Sash Stationary Sash STC/OITC

ALTITUDE LIMITS (FEET)

	UNIT SIZE	60	70	80
16	Annealed	3000	3000	3000
	Tempered	7000	7000	8000
20	Annealed	5000	4000	4000
	Tempered	10000	10000	10000
26	Annealed	7000	6000	6000
	Tempered	10000	10000	10000
30	Annealed	8000	9000	9000
	Tempered	10000	10000	10000
36	Annealed	9000	10000	10000
	Tempered	10000	10000	10000
40	Annealed	10000	10000	10000
	Tempered	10000	10000	10000
46	Annealed	10000	10000	N/A
	Tempered	10000	10000	N/A
50	Annealed	10000	N/A	N/A
	Tempered	10000	N/A	N/A

MARVIN ESSENTIAL™ COLLECTION

ALTITUDE GUIDELINES

Double Hung Transom

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	28	30	36	40	50
10	Annealed	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	4000	5000	5000	5000	5000	5000	5000	5000
16	Annealed	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	5000	7000	8000	8000	8000	9000	10000	10000
20	Annealed	N/A	5000	6000	6000	6000	6000	6000	6000
	Tempered	N/A	9000	10000	10000	10000	10000	10000	10000

Double Hung Transom STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		16	20	26	28	30	36	40	50
10	Annealed	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	4000	4000	4000	4000	5000	5000	5000
16	Annealed	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	5000	6000	7000	7000	8000	8000	9000
20	Annealed	N/A	4000	5000	5000	5000	5000	5000	5000
	Tempered	N/A	7000	9000	9000	10000	10000	10000	10000

Sliding Patio Door

ALTITUDE LIMITS (FEET)

UNIT SIZE		50	510	60	90
68	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000
610	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	N/A	10000	10000
80	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	N/A	10000	10000

Sliding Patio Door STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		50	510	60	90
68	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000
610	Annealed	N/A	N/A	N/A	N/A
	Tempered	10000	N/A	10000	10000
80	Annealed	N/A	N/A	N/A	N/A
	Tempered	N/A	N/A	N/A	N/A

Direct Glaze over Sliding Patio Door

ALTITUDE LIMITS (FEET)

UNIT SIZE		50	510	60	90
10	Annealed	3000	3000	3000	3000
	Tempered	N/A	N/A	N/A	N/A
16	Annealed	4000	4000	4000	4000
	Tempered	N/A	N/A	N/A	N/A

Direct Glaze over Sliding Patio Door STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		50	510	60
10	Annealed	3000	3000	3000
	Tempered	N/A	N/A	N/A
16	Annealed	3000	3000	3000
	Tempered	N/A	N/A	N/A

Direct Glaze Round Top - RT1

ALTITUDE LIMITS (FEET)

UNIT SIZE		2613	2814	3016	3619	4020	5026	5428	6030	7036	8040
10	Annealed	3000	3000	4000	5000	5000	7000	8000	9000	10000	N/A
	Tempered	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10000

Direct Glaze Round Top - RT1 STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		2613	2814	3016	3619	4020
10	Annealed	3000	3000	3000	3000	4000
	Tempered	NA	NA	NA	NA	NA

Direct Glaze Round Top - RT2

ALTITUDE LIMITS (FEET)

UNIT SIZE		26	28	30	36	40	50	54	60
10	Annealed	5000	6000	6000	7500	8500	10000	9500	10000
	Tempered	9000	10000	10000	10000	10000	10000	10000	10000
16	Annealed	6000	7000	8000	9000	9000	10000	9500	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
20	Annealed	6500	7500	8000	9000	10000	10000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
26	Annealed	6500	7500	8500	9000	10000	9000	10000	10000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
30	Annealed	7000	7500	8500	9500	10000	9000	10000	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	N/A
36	Annealed	7000	8000	8500	9500	10000	10000	10000	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	N/A
40	Annealed	6000	7000	9000	9500	10000	10000	10000	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	N/A
46	Annealed	6000	7000	10000	10000	10000	10000	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000	N/A	N/A
50	Annealed	6000	7000	10000	10000	10000	10000	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	N/A	N/A	N/A

Direct Glaze Round Top - RT2 STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE		26	28	30	36	40
10	Annealed	4000	4000	5000	6500	6500
	Tempered	8000	8000	9000	10000	10000
16	Annealed	5000	5000	6000	7000	8000
	Tempered	9000	10000	10000	N/A	N/A
20	Annealed	5500	5500	6000	8000	9000
	Tempered	9500	10000	10000	N/A	N/A
26	Annealed	5500	5500	6500	8000	N/A
	Tempered	9500	10000	10000	N/A	N/A
30	Annealed	6000	5500	6500	8500	N/A
	Tempered	10000	10000	10000	N/A	N/A
36	Annealed	6000	6000	6500	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A
40	Annealed	N/A	N/A	7000	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A
46	Annealed	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A
50	Annealed	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A

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ALTITUDE GUIDELINES

Direct Glaze Round Top - RT6

ALTITUDE LIMITS (FEET)

UNIT SIZE	26	28	30	36	40	50	54	60	70	80
10	Annealed	4000	4000	4000	4000	4000	4000	4000	4000	5000
	Tempered	5000	5000	7000	7000	7000	9000	8000	10000	7000
16	Annealed	4000	4000	4500	5000	5000	6000	6000	6000	7000
	Tempered	8000	8000	8500	10000	10000	10000	10000	10000	10000
20	Annealed	5000	5000	6500	6500	8000	7000	7000	7000	8000
	Tempered	9000	9000	10000	10000	10000	10000	10000	10000	10000
26	Annealed	6000	7000	8000	8000	8500	9000	10000	9000	9000
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000
30	Annealed	6500	7500	8000	9000	9000	9500	9500	10000	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000
36	Annealed	6500	7500	8500	9000	10000	10000	10000	10000	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	N/A
40	Annealed	7000	7500	8500	9500	10000	10000	10000	10000	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	N/A
46	Annealed	7000	8000	8500	9500	10000	10000	10000	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	N/A	N/A
50	Annealed	6000	7000	9000	9500	10000	10000	10000	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000	10000	N/A	N/A
56	Annealed	6000	7000	8000	9500	10000	10000	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A
60	Annealed	6000	7000	8000	10000	10000	10000	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A

Direct Glaze Round Top - RT6 STC/OITC

ALTITUDE LIMITS (FEET)

UNIT SIZE	26	28	30	36	40	50	54	60
10	Annealed	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	4000	5000	5000	6000	7000	8000
16	Annealed	3000	3000	3000	4000	4000	4000	N/A
	Tempered	6500	8000	6500	9000	10000	10000	10000
20	Annealed	4000	4000	5000	5000	6000	6000	N/A
	Tempered	8000	8000	9500	9500	10000	10000	10000
26	Annealed	5000	5000	6000	6000	6500	7500	N/A
	Tempered	9000	10000	10000	10000	10000	10000	N/A
30	Annealed	5500	5500	6000	8000	8000	N/A	N/A
	Tempered	9500	10000	10000	N/A	N/A	N/A	N/A
36	Annealed	5500	5500	6500	8000	9000	N/A	N/A
	Tempered	9500	10000	10000	N/A	N/A	N/A	N/A
40	Annealed	6000	5500	6500	8000	N/A	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A	N/A	N/A
46	Annealed	6000	6000	6500	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A	N/A	N/A
50	Annealed	N/A	N/A	7000	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A	N/A	N/A
56	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A	N/A	N/A
60	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	N/A	N/A	N/A	N/A

SOUND TRANSMISSION

PRODUCT TYPE	EXTERIOR GLAZING	AIR SPACE	INTERIOR GLAZING	STC	OITC
Casement/Awning					
ESCA	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	28	24
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	31	26
ESAWN	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	28	24
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	33	28

Casement Picture

ESCA P	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	28	23
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	33	28

Single Hung/Double Hung

ESDH	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	27	22
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	32	27
ESSH	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	27	23
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	28	25

Double Hung Picture

ESDH P	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	29	25
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	30	25

PRODUCT TYPE	EXTERIOR GLAZING	AIR SPACE	INTERIOR GLAZING	STC	OITC
Glider					
ESGL	1/8" (3.1)	15/32" (11.5)	1/8" (3.1)	27	24
	1/8" (3.1)	13/32" (9.8)	3/16" (4.7)	29	26

Direct Glaze Round Top

ESDG RT	1/8" (3.1)	5/8" (16.0)	1/8" (3.1)	27	22
	1/8" (3.1)	19/32" (14.5)	3/16" (4.7)	32	26

Sliding Patio Door

ESSPD	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	27	23
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	28	25

Direct Glaze

ESDG	1/8" (3.1)	5/8" (16.0)	1/8" (3.1)	26	21
	1/8" (3.1)	19/32" (14.5)	3/16" (4.7)	32	27

WDMA STANDARDS

The Window and Door Manufacturers Association (WDMA), in conjunction with other organizations in the industry, has developed standards that make it easy to compare windows from different manufacturers, testing product performance regarding air and water infiltration, as well as physical loads on the exterior and interior (very important when you consider the pressure differentials that can occur in coastal areas, as well as forced entry resistance). Essential products are rated in accordance with the North American Fenestration Standard (AAMA/WDMA CSA 101/I.S.2/A440) and are certified in compliance with the WDMA Hallmark program.

MARVIN ESSENTIAL™ COLLECTION

PERFORMANCE GRADE (PG)

A performance grade rating, as created by AAMA/WDMA/CSA Standards, is a measure of the overall tested performance of a window or door that addresses all of the applicable requirements of the Standards. A product receives a PG rating if it meets all performance requirements, including: air infiltration resistance, water penetration resistance, structural performance, ease of operation, durability, weatherability, and resistance to forced entry. The higher a PG number a product has, the better the performance. As a frame of reference: PG 40 means that a product is tested structurally to a minimum 60 pounds per square foot (psf) and must withstand water penetration under conditions equal to 8 inches of rain per hour driven by a minimum of 50 mph winds.

Single Hung/Double Hung Equal Sash

CN	16	20	26	28	30	36	40
20	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
26	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
30	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
36	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
40	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
46	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG40-H	LC-PG40-H
50	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG40-H	LC-PG40-H
56	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H
60	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H	LC-PG30-H
66	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H	LC-PG30-H

Single Hung Cottage/Reverse Cottage

CN	16	20	26	28	30	36	40
26	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
30	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
36	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG40-H	LC-PG40-H
40	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG40-H	LC-PG40-H
46	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H
50	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H	LC-PG30-H
56	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H	LC-PG30-H
60	LC-PG30-H	LC-PG30-H	LC-PG30-H	LC-PG30-H	LC-PG30-H	LC-PG25-H	LC-PG25-H
66	LC-PG25-H	LC-PG25-H	LC-PG25-H	LC-PG25-H	LC-PG25-H	LC-PG25-H	LC-PG25-H

Double Hung Cottage/Reverse Cottage

CN	16	20	26	28	30	36	40
26	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
30	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H
36	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG40-H	LC-PG40-H
40	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG50-H	LC-PG40-H	LC-PG40-H
46	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H
50	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H	LC-PG30-H
56	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG40-H	LC-PG30-H	LC-PG30-H

Glider

CN	26	30	36	40	46	50	60
16	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS
20	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS
26	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS
30	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS
36	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS
40	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG30-HS	LC-PG30-HS
46	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG30-HS	LC-PG30-HS
50	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG40-HS	LC-PG30-HS	LC-PG30-HS

Glider - Triple Sash

CN	60	70	80
16	LC-PG25-HS	LC-PG25-HS	LC-PG25-HS
20	LC-PG25-HS	LC-PG25-HS	LC-PG25-HS
26	LC-PG25-HS	LC-PG25-HS	LC-PG25-HS
30	LC-PG25-HS	LC-PG25-HS	LC-PG25-HS
36	LC-PG25-HS	LC-PG25-HS	LC-PG25-HS
40	LC-PG25-HS	LC-PG25-HS	LC-PG25-HS
46	LC-PG25-HS	LC-PG25-HS	LC-PG25-HS
50	LC-PG25-HS	LC-PG25-HS	LC-PG25-HS

Awning	LC-PG40-AP
Casement	LC-PG40-C
Direct Glaze Round Top	CW-PG50-FW
Direct Glaze	LC-PG50-FW
Sliding Patio Doors	R-PG30-SD
Double Hung Picture/Transom	LC-PG50-FW
Casement Picture/Transom	LC-PG40-FW

THERMAL PERFORMANCE

ESSENTIAL CASEMENT

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
11/16" IG Low E3/ERS Arg		0.25	0.19	0.43	47	N, NC, SC, S	1
	GBG	0.25	0.18	0.39	47	N, NC, SC, S	1
11/16" IG Low E3/ERS Air		0.27	0.19	0.43	43	N, NC, SC, S	1
	GBG	0.27	0.18	0.39	43	N, NC, SC, S	1
11/16" IG Low E3 Arg		0.28	0.20	0.44	59	NC, SC, S	1
	GBG	0.28	0.18	0.40	59	NC, SC, S	
11/16" IG Low E3 Air		0.32	0.20	0.44	56	S	
	GBG	0.32	0.18	0.40	56	S	
11/16" IG Low E2 Arg		0.29	0.29	0.49	59	NC	
	GBG	0.29	0.27	0.45	59	NC	
11/16" IG Low E2 Air		0.32	0.29	0.49	55		
	GBG	0.32	0.27	0.45	55		
11/16" IG Low E1 Arg		0.29	0.48	0.54	58	N	1, 2
	GBG	0.29	0.44	0.49	58	N	1
11/16" IG Low E1 Air		0.33	0.48	0.54	55		1
	GBG	0.33	0.43	0.49	55		
11/16" IG Arg		0.42	0.54	0.57	45		
	GBG	0.42	0.49	0.51	45		
11/16" IG Air		0.44	0.54	0.57	43		
	GBG	0.44	0.49	0.51	43		

ESSENTIAL AWNING

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
11/16" IG Low E3/ERS Arg		0.25	0.19	0.43	46	N, NC, SC, S	1, 2
	GBG	0.25	0.18	0.39	46	N, NC, SC, S	1
11/16" IG Low E3/ERS Air		0.28	0.19	0.43	42	NC, SC, S	1
	GBG	0.28	0.18	0.39	42	NC, SC, S	
11/16" IG Low E3 Arg		0.28	0.20	0.44	58	NC, SC, S	1
	GBG	0.28	0.18	0.40	58	NC, SC, S	
11/16" IG Low E3 Air		0.32	0.20	0.44	54	S	
	GBG	0.32	0.18	0.40	54	S	
11/16" IG Low E2 Arg		0.29	0.29	0.49	57	NC	
	GBG	0.29	0.27	0.45	57	NC	
11/16" IG Low E2 Air		0.32	0.30	0.49	54		
	GBG	0.32	0.27	0.45	54		
11/16" IG Low E1 Arg		0.29	0.48	0.54	57	N	1, 2
	GBG	0.29	0.44	0.49	57	N	1, 2
11/16" IG Low E1 Air		0.33	0.48	0.54	54		1
	GBG	0.33	0.43	0.49	54		
11/16" IG Arg		0.43	0.54	0.57	45		
	GBG	0.43	0.49	0.51	45		
11/16" IG Air		0.45	0.54	0.57	43		
	GBG	0.45	0.49	0.51	43		

MARVIN ESSENTIAL™ COLLECTION

THERMAL PERFORMANCE

ESSENTIAL CASEMENT PICTURE-TRANSOM

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
11/16" IG Low E3/ERS Arg	GBG	0.23	0.22	0.50	46	N, NC, SC, S	1, 2
		0.23	0.20	0.45	46	N, NC, SC, S	1, 2
11/16" IG Low E3/ERS Air	GBG	0.26	0.22	0.50	43	N, NC, SC, S	1
		0.26	0.20	0.45	43	N, NC, SC, S	1
11/16" IG Low E3 Arg	GBG	0.27	0.22	0.52	59	N, NC, SC, S	1
		0.27	0.20	0.46	59	N, NC, SC, S	1
11/16" IG Low E3 Air	GBG	0.31	0.23	0.52	55	S	
		0.31	0.21	0.46	55	S	
11/16" IG Low E2 Arg	GBG	0.27	0.33	0.57	58	N, NC	1
		0.27	0.30	0.51	58	N, NC	1
11/16" IG Low E2 Air	GBG	0.31	0.34	0.57	55		
		0.31	0.30	0.51	55		
11/16" IG Low E1 Arg	GBG	0.28	0.55	0.63	58	N	1, 2, 3
		0.28	0.49	0.56	58	N	1, 2
11/16" IG Low E1 Air	GBG	0.32	0.55	0.63	54		1, 2
		0.32	0.49	0.56	54		1
11/16" IG Arg	GBG	0.43	0.62	0.65	45		
		0.43	0.56	0.58	45		
11/16" IG Air	GBG	0.45	0.62	0.65	43		
		0.45	0.56	0.58	43		

ESSENTIAL GLIDER

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
11/16" IG Low E3/ERS Arg	GBG	0.25	0.22	0.50	46	N, NC, SC, S	1, 2
		0.25	0.20	0.45	46	N, NC, SC, S	1, 2
11/16" IG Low E3/ERS Air	GBG	0.28	0.22	0.50	43	NC, SC, S	1
		0.28	0.20	0.45	43	NC, SC, S	1
11/16" IG Low E3 Arg	GBG	0.29	0.22	0.51	59	NC, SC, S	
		0.29	0.20	0.46	59	NC, SC, S	
11/16" IG Low E3 Air	GBG	0.33	0.23	0.51	55	S	
		0.33	0.20	0.46	55	S	
11/16" IG Low E2 Arg	GBG	0.30	0.33	0.57	58	NC	
		0.30	0.30	0.51	58	NC	
11/16" IG Low E2 Air	GBG	0.34	0.34	0.57	55		
		0.34	0.30	0.51	55		
11/16" IG Low E1 Arg	GBG	0.31	0.55	0.63	58		1, 2
		0.31	0.49	0.56	58		1, 2
11/16" IG Low E1 Air	GBG	0.34	0.54	0.63	54		1, 2
		0.34	0.49	0.56	54		1
11/16" IG Arg	GBG	0.46	0.62	0.65	45		
		0.46	0.56	0.58	45		
11/16" IG Air	GBG	0.48	0.62	0.65	44		
		0.48	0.56	0.58	44		

THERMAL PERFORMANCE

ESSENTIAL DOUBLE HUNG

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
11/16" IG Low E3/ERS Arg		0.25	0.22	0.50	46	N, NC, SC, S	1, 2
	GBG	0.25	0.20	0.45	46	N, NC, SC, S	1, 2
11/16" IG Low E3/ERS Air		0.28	0.22	0.50	42	NC, SC, S	1
	GBG	0.28	0.20	0.45	42	NC, SC, S	1
11/16" IG Low E3 Arg		0.29	0.22	0.51	58	NC, SC, S	
	GBG	0.29	0.20	0.46	58	NC, SC, S	
11/16" IG Low E3 Air		0.33	0.23	0.51	54	S	
	GBG	0.33	0.20	0.46	54	S	
11/16" IG Low E2 Arg		0.30	0.33	0.57	57	NC	
	GBG	0.30	0.30	0.51	57	NC	
11/16" IG Low E2 Air		0.34	0.34	0.57	54		
	GBG	0.34	0.30	0.51	54		
11/16" IG Low E1 Arg		0.31	0.55	0.63	57		1, 2
	GBG	0.31	0.49	0.56	57		1, 2
11/16" IG Low E1 Air		0.34	0.54	0.63	54		1, 2
	GBG	0.34	0.49	0.56	54		1
11/16" IG Arg		0.46	0.62	0.65	45		
	GBG	0.46	0.56	0.58	45		
11/16" IG Air		0.48	0.62	0.65	43		
	GBG	0.48	0.56	0.58	43		

ESSENTIAL SINGLE HUNG

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
11/16" IG Low E3/ERS Arg		0.25	0.22	0.50	46	N, NC, SC, S	1, 2
	GBG	0.25	0.20	0.45	46	N, NC, SC, S	1, 2
11/16" IG Low E3/ERS Air		0.28	0.22	0.50	42	NC, SC, S	1
	GBG	0.28	0.20	0.45	42	NC, SC, S	1
11/16" IG Low E3 Arg		0.29	0.22	0.51	58	NC, SC, S	
	GBG	0.29	0.20	0.46	58	NC, SC, S	
11/16" IG Low E3 Air		0.33	0.23	0.51	54	S	
	GBG	0.33	0.20	0.46	54	S	
11/16" IG Low E2 Arg		0.30	0.33	0.57	57	NC	
	GBG	0.30	0.30	0.51	57	NC	
11/16" IG Low E2 Air		0.34	0.34	0.57	54		
	GBG	0.34	0.30	0.51	54		
11/16" IG Low E1 Arg		0.31	0.55	0.63	57		1, 2
	GBG	0.31	0.49	0.56	57		1, 2
11/16" IG Low E1 Air		0.34	0.54	0.63	54		1, 2
	GBG	0.34	0.49	0.56	54		1
11/16" IG Arg		0.46	0.62	0.65	45		
	GBG	0.46	0.56	0.58	45		
11/16" IG Air		0.48	0.62	0.65	43		
	GBG	0.48	0.56	0.58	43		

MARVIN ESSENTIAL™ COLLECTION

THERMAL PERFORMANCE

ESSENTIAL DOUBLE HUNG PICTURE-TRANSOM

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
11/16" IG Low E3/ERS Arg	GBG	0.23	0.22	0.52	47	N, NC, SC, S	1, 2
		0.23	0.20	0.46	47	N, NC, SC, S	1, 2
11/16" IG Low E3/ERS Air	GBG	0.26	0.23	0.52	43	N, NC, SC, S	1
		0.26	0.21	0.46	43	N, NC, SC, S	1
11/16" IG Low E3 Arg	GBG	0.27	0.23	0.53	60	N, NC, SC, S	1
		0.27	0.21	0.48	60	N, NC, SC, S	1
11/16" IG Low E3 Air	GBG	0.31	0.23	0.53	57	S	
		0.31	0.21	0.48	57	S	
11/16" IG Low E2 Arg	GBG	0.28	0.34	0.59	60	N, NC	1
		0.28	0.31	0.53	60	NC	1
11/16" IG Low E2 Air	GBG	0.32	0.35	0.59	56		
		0.32	0.31	0.53	56		
11/16" IG Low E1 Arg	GBG	0.29	0.57	0.65	60	N	1, 2, 3
		0.29	0.51	0.58	60	N	1, 2
11/16" IG Low E1 Air	GBG	0.33	0.56	0.65	56		1, 2
		0.33	0.51	0.58	56		1
11/16" IG Arg	GBG	0.44	0.64	0.68	46		
		0.44	0.58	0.60	46		
11/16" IG Air	GBG	0.47	0.64	0.68	44		
		0.47	0.58	0.60	44		

ESSENTIAL DIRECT GLAZE

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
7/8" IG Low E3/ERS Arg	GBG	0.23	0.24	0.55	47	N, NC, SC, S	1, 2
		0.23	0.22	0.50	47	N, NC, SC, S	1, 2
7/8" IG Low E3/ERS Air	GBG	0.26	0.24	0.55	44	N, NC, SC, S	1
		0.26	0.22	0.50	44	N, NC, SC, S	1
7/8" IG Low E3 Arg	GBG	0.28	0.24	0.57	60	NC, SC, S	1
		0.28	0.22	0.51	60	NC, SC, S	1
7/8" IG Low E3 Air	GBG	0.32	0.24	0.57	56	S	
		0.32	0.22	0.51	56	S	
7/8" IG Low E2 Arg	GBG	0.28	0.36	0.63	59	N, NC	1
		0.28	0.33	0.56	59	N, NC	1
7/8" IG Low E2 Air	GBG	0.32	0.37	0.63	56		
		0.32	0.33	0.56	56		
7/8" IG Low E1 Arg	GBG	0.29	0.60	0.69	59	N	1, 2, 3
		0.29	0.54	0.62	59	N	1, 2, 3
7/8" IG Low E1 Air	GBG	0.33	0.60	0.69	56		1, 2, 3
		0.33	0.54	0.62	56		1, 2
7/8" IG Arg	GBG	0.45	0.68	0.72	46		
		0.45	0.62	0.65	46		
7/8" IG Air	GBG	0.47	0.68	0.72	44		
		0.47	0.62	0.65	44		

THERMAL PERFORMANCE

DIRECT GLAZE ROUND TOP

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
7/8" IG Low E3/ERS Arg		0.24	0.24	0.55	44	N, NC, SC, S	1, 2
	GBG	0.24	0.22	0.50	44	N, NC, SC, S	1, 2
7/8" IG Low E3/ERS Air		0.26	0.24	0.55	41	N, NC, SC, S	1
	GBG	0.26	0.22	0.50	41	N, NC, SC, S	1
7/8" IG Low E3 Arg		0.29	0.24	0.57	56	NC, SC, S	
	GBG	0.29	0.22	0.51	56	NC, SC, S	
7/8" IG Low E3 Air		0.33	0.24	0.57	53	S	
	GBG	0.33	0.22	0.51	53	S	
7/8" IG Low E2 Arg		0.29	0.36	0.63	56	NC	1
	GBG	0.29	0.33	0.56	56	NC	
7/8" IG Low E2 Air		0.33	0.37	0.63	53		
	GBG	0.33	0.33	0.56	53		
7/8" IG Low E1 Arg		0.30	0.60	0.69	55	N	1, 2, 3
	GBG	0.30	0.54	0.62	55	N	1, 2, 3
7/8" IG Low E1 Air		0.34	0.60	0.69	52		1, 2
	GBG	0.34	0.54	0.62	52		1, 2
7/8" IG Arg		0.46	0.68	0.72	44		
	GBG	0.46	0.62	0.65	44		
7/8" IG Air		0.48	0.68	0.72	42		
	GBG	0.48	0.62	0.65	42		

SLIDING PATIO DOOR

GLASS DESCRIPTION	DIVIDER	U FACTOR	SHGC	VT	CR	ENERGY STAR	CANADA ENERGY STAR
3/4" IG Low E3/ERS Arg		0.24	0.22	0.51	48	N, NC, SC, S	1, 2
	GBG	0.24	0.19	0.44	48	N, NC, SC, S	1, 2
3/4" IG Low E3/ERS Air		0.27	0.22	0.51	44	N, NC, SC, S	1
	GBG	0.27	0.20	0.44	44	N, NC, SC, S	1
3/4" IG Low E3 Arg		0.29	0.22	0.52	60	N, NC, SC, S	
	GBG	0.29	0.20	0.45	60	N, NC, SC, S	
3/4" IG Low E3 Air		0.32	0.23	0.52	56		
	GBG	0.32	0.20	0.45	56		
3/4" IG Low E2 Arg		0.29	0.34	0.58	59	N, NC	
	GBG	0.29	0.30	0.51	59	N, NC	
3/4" IG Low E2 Air		0.33	0.34	0.58	56		
	GBG	0.33	0.30	0.51	56		
3/4" IG Low E1 Arg		0.30	0.55	0.63	59		1, 2
	GBG	0.30	0.49	0.56	59		1, 2
3/4" IG Low E1 Air		0.33	0.55	0.63	56		1, 2
	GBG	0.33	0.49	0.56	56		1
3/4" IG Arg		0.45	0.63	0.66	46		
	GBG	0.45	0.55	0.58	46		
3/4" IG Air		0.47	0.63	0.66	45		
	GBG	0.47	0.55	0.58	45		



Since we opened as a family-owned and -operated lumber and cedar company in 1912, Marvin has designed products to help people live better. We remain committed to bringing beauty and simplicity into people's lives with windows and doors that stand the test of time.

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