

Technical Specifications

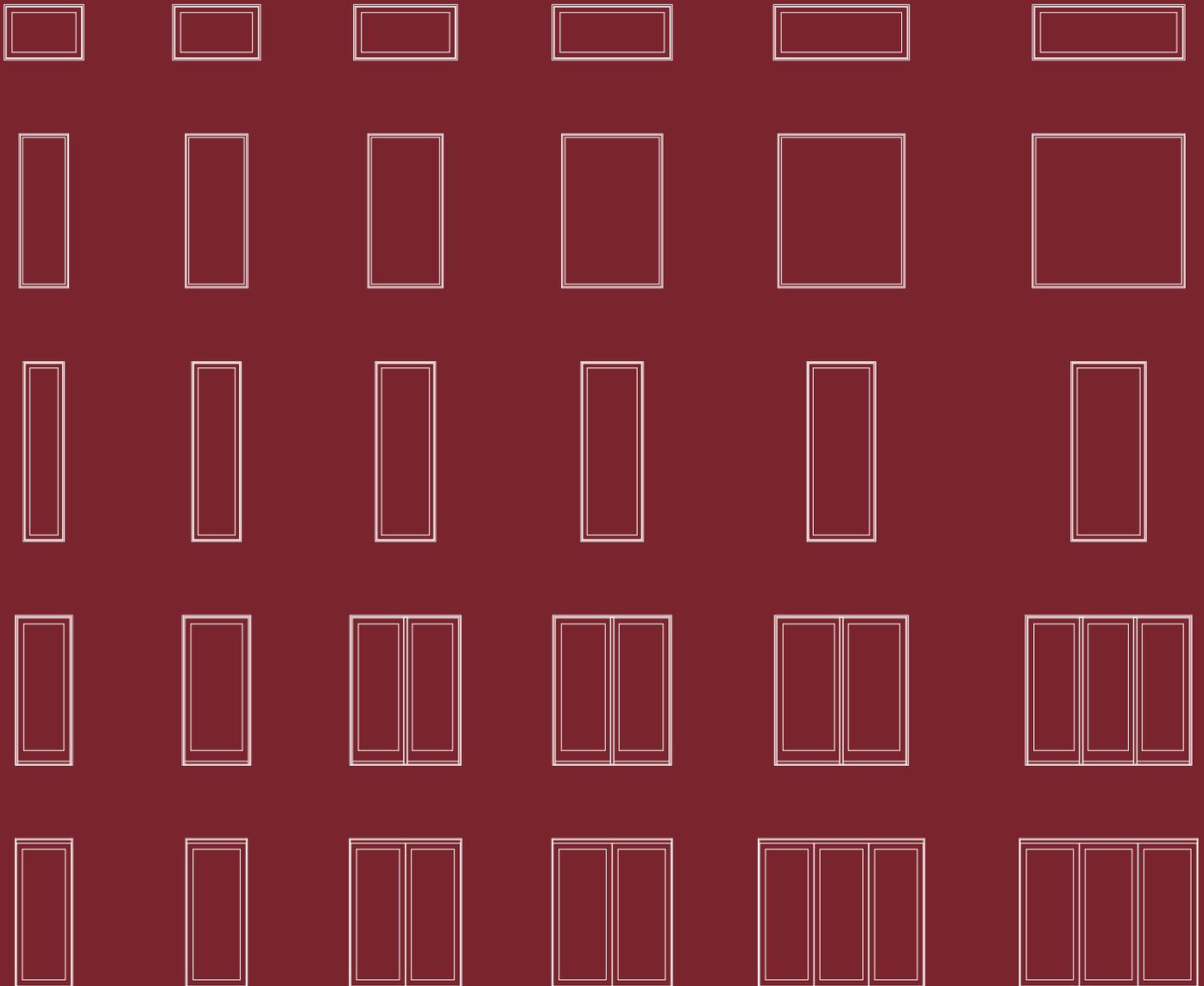




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MARVIN VIVID™ DIRECT GLAZE WINDOWS
Ebony

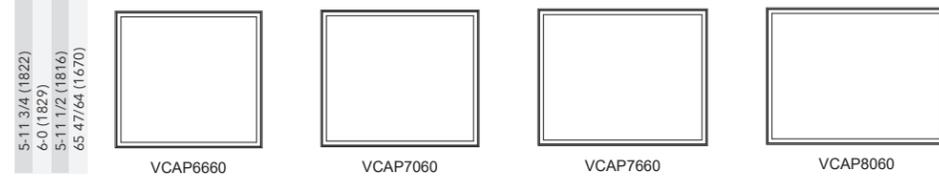
Ordering

Each product section offers product codes for ordering under each unit. Codes do not necessarily indicate product size. Metric millimeter measurements are in parentheses.

You'll notice four measurements for each window or door: masonry opening, rough opening, frame size and daylight opening size. The masonry opening (MO) is for a home built with brick or stone; rough openings (RO) are for houses with wood, vinyl or metal siding. Frame size (FS) measures from edge to edge of the unit; Daylight Opening (DLO) indicates the dimensions of the total visible area in a single sash or panel.

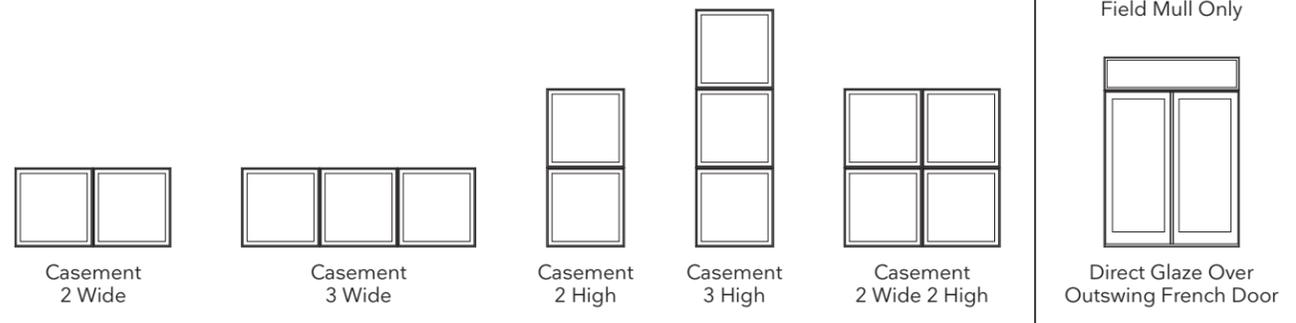
The Inside Opening (IO) ordering method is also available when the Insert Application is selected. For assistance, please contact your Marvin representative.

MO (mm)	6-5 1/2 (1969)	6-11 1/2 (2121)	7-5 1/2 (2273)	7-11 1/2 (2426)
RO (mm)	6-6 (1981)	7-0 (2134)	7-6 (2286)	8-0 (2438)
FS (mm)	6-5 (1956)	6-11 (2108)	7-5 (2261)	7-11 (2413)
DLO (mm)	71 15/64 (1809)	77 15/64 (1962)	83 15/64 (2114)	89 15/64 (2267)



Mulling Options - A variety of factory mullied combinations are available. Field mulling kits are available, as well as prep for Field mulling, to create your own multiple assemblies. Please contact your local Marvin representative for more information.

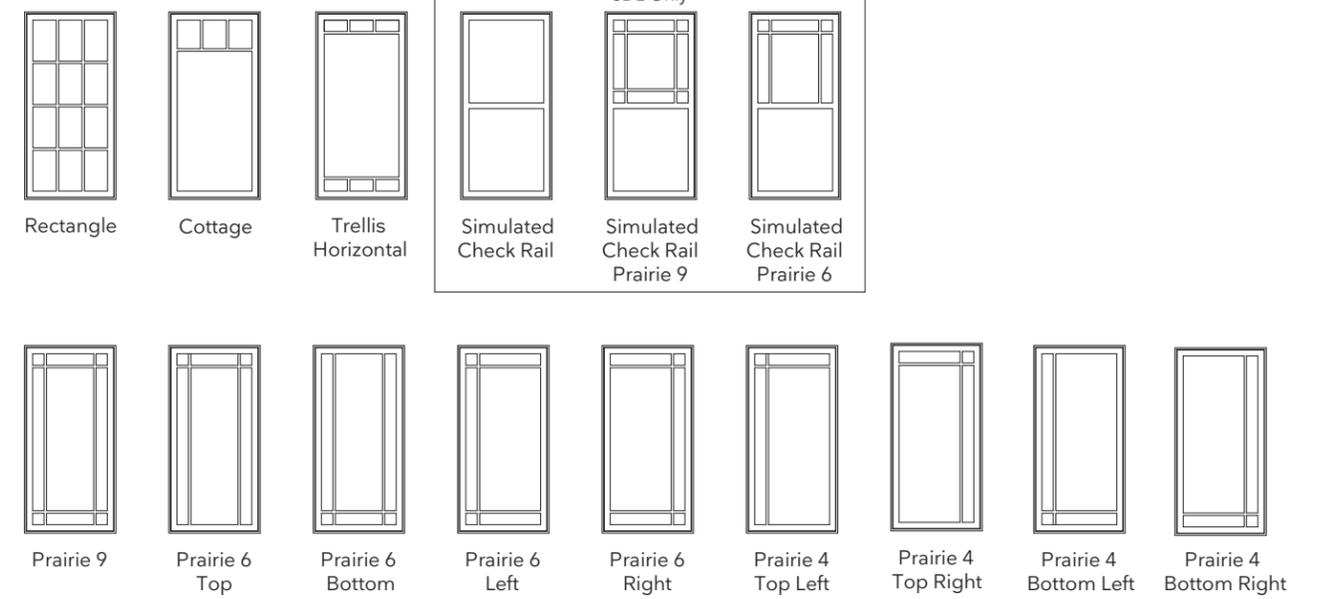
Examples of Possible Configurations



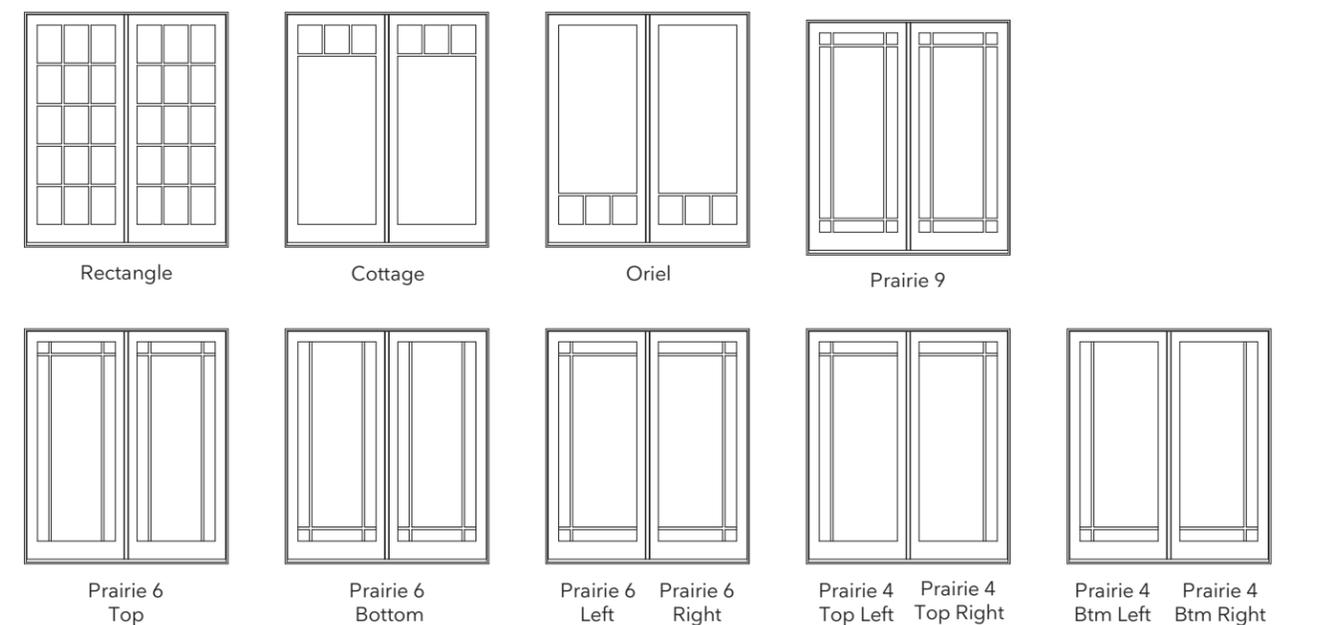
The information provided in this catalog has been gathered and assembled with every effort made to validate accuracy and consistency of the content. However, Marvin does not make any warranty or guarantee as to this information. Please verify critical product data in Marvin Order Management System (OMS)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

Lite Cuts

Windows



Doors



SDL (Simulated Divided Lite) with Spacer Bar - 7/8" (22)
 Simulated Check Rail SDL with Spacer Bar - 2" (51)
 GBG (Grilles Between the Glass) - 23/32" (18)
 Lite cuts are dependent on product type and size. Please consult your local Marvin representative for details and availability.

Awning

MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)
DLO (mm)	11 15/64 (285)	13 15/64 (336)	17 15/64 (438)	22 15/64 (565)	23 15/64 (590)	26 15/64 (666)	29 15/64 (743)

1-5 3/4 (451)							
1-6 (457)							
1-7 3/4 (502)							
1-8 (508)							
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 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)							

Awning

MO (mm)	3-5 1/2 (1054)	3-11 1/2 (1207)	4-5 1/2 (1359)	4-11 1/2 (1511)	5-5 1/2 (1664)	5-11 1/2 (1816)
RO (mm)	3-6 (1067)	4-0 (1219)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)
FS (mm)	3-5 (1041)	3-11 (1194)	4-5 (1346)	4-11 (1499)	5-5 (1651)	5-11 (1803)
DLO (mm)	35 15/64 (895)	41 15/64 (1047)	47 15/64 (1200)	53 15/64 (1352)	59 15/64 (1505)	65 15/64 (1657)

1-5 3/4 (451)						
1-6 (457)						
1-7 3/4 (502)						
1-8 (508)						
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 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)						

Details and Elevations not to scale.

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

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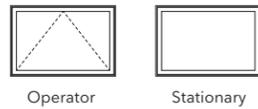
Awning

MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)
DLO (mm)	11 15/64 (285)	13 15/64 (336)	17 15/64 (438)	22 15/64 (565)	23 15/64 (590)	26 15/64 (666)	29 15/64 (743)

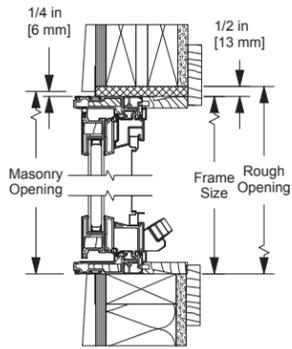
5-5 3/4 (1670)							
5-5 3/4 (1670)	VAWN1656	VAWN1856	VAWN2056	VAWN2556	VAWN2656	VAWN2956	VAWN3056
5-5 3/4 (1670)							
5-5 3/4 (1670)	VAWN1660	VAWN1860	VAWN2060	VAWN2560	VAWN2660	VAWN2960	VAWN3060

MO (mm)	3-5 1/2 (1054)	3-11 1/2 (1207)	4-5 1/2 (1359)	4-11 1/2 (1511)
RO (mm)	3-6 (1067)	4-0 (1219)	4-6 (1372)	5-0 (1524)
FS (mm)	3-5 (1041)	3-11 (1194)	4-5 (1346)	4-11 (1499)
DLO (mm)	35 15/64 (895)	41 15/64 (1047)	47 15/64 (1200)	53 15/64 (1352)

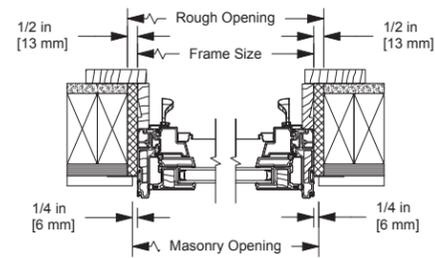
5-5 3/4 (1670)				
5-5 3/4 (1670)	VAWN3656	VAWN4056	VAWN4656	VAWN5056
5-5 3/4 (1670)				
5-5 3/4 (1670)	VAWN3660	VAWN4060	VAWN4660	VAWN5060



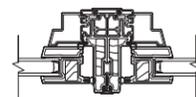
Construction Details



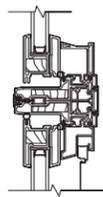
Head Jamb and Sill



Jamb



Vertical Mullion



Horizontal Mullion

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Casement

MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)	3-5 1/2 (1054)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)	3-6 (1067)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)	3-5 (1041)
DLO (mm)	11 15/64 (285)	13 15/64 (336)	17 15/64 (438)	22 15/64 (565)	23 15/64 (590)	26 15/64 (666)	29 15/64 (743)	35 15/64 (895)

1-5 3/4 (451)								
1-5 3/4 (451)	VCA1616	VCA1816	VCA2016	VCA2516	VCA2616	VCA2916	VCA3016	VCA3616
1-7 3/4 (502)								
1-7 3/4 (502)	VCA1618	VCA1818	VCA2018	VCA2518	VCA2618	VCA2918	VCA3018	VCA3618
1-11 3/4 (603)								
1-11 3/4 (603)	VCA1620	VCA1820	VCA2020	VCA2520	VCA2620	VCA2920	VCA3020	VCA3620
2-5 3/4 (756)								
2-5 3/4 (756)	VCA1626	VCA1826	VCA2026	VCA2526	VCA2626	VCA2926	VCA3026	VCA3626 E
2-11 3/4 (908)								
2-11 3/4 (908)	VCA1630	VCA1830	VCA2030	VCA2530	VCA2630	VCA2930	VCA3030 E	VCA3630 E
3-5 3/4 (1060)								
3-5 3/4 (1060)	VCA1636	VCA1836	VCA2036	VCA2536	VCA2636	VCA2936 E	VCA3036 E	VCA3636 E
3-11 3/4 (1213)								
3-11 3/4 (1213)	VCA1640	VCA1840	VCA2040	VCA2540 E	VCA2640 E	VCA2940 E	VCA3040 E	VCA3640 E
4-5 3/4 (1365)								
4-5 3/4 (1365)	VCA1646	VCA1846	VCA2046	VCA2546 E	VCA2646 E	VCA2946 E	VCA3046 E	VCA3646 E
4-11 3/4 (1518)								
4-11 3/4 (1518)	VCA1650	VCA1850	VCA2050	VCA2550 E	VCA2650 E	VCA2950 E	VCA3050 E	VCA3650 E
5-5 3/4 (1670)								
5-5 3/4 (1670)	VCA1656	VCA1856	VCA2056	VCA2556 E	VCA2656 E	VCA2956 E	VCA3056 E	VCA3656 E

E = Egress
 Casements available as an operator or stationary.
 L or R handing determined from exterior.

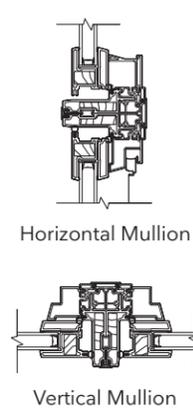
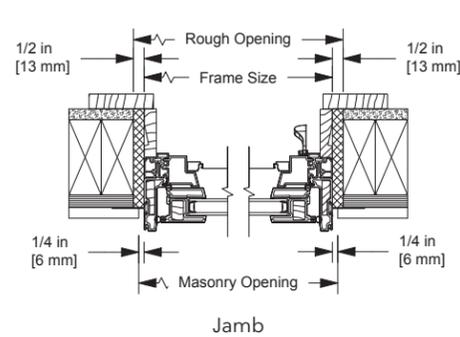
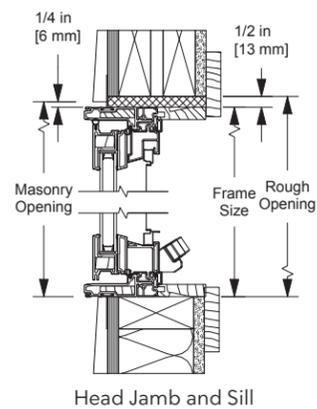
Casement

MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)	3-5 1/2 (1054)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)	3-6 (1067)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)	3-5 (1041)
DLO (mm)	11 15/64 (285)	13 15/64 (336)	17 15/64 (438)	22 15/64 (565)	23 15/64 (590)	26 15/64 (666)	29 15/64 (743)	35 15/64 (895)

5-11 3/4 (1822)	VCA1660	VCA1860	VCA2060	VCA2560 E	VCA2660 E	VCA2960 E	VCA3060 E	VCA3660 E
6-5 3/4 (1775)	VCA1666	VCA1866	VCA2066	VCA2566 E	VCA2666 E	VCA2966 E	VCA3066 E	VCA3666 E
6-11 3/4 (2127)	VCA1670	VCA1870	VCA2070	VCA2570 E	VCA2670 E	VCA2970 E	VCA3070 E	VCA3670 E
7-5 3/4 (2280)	VCA1676	VCA1876	VCA2076	VCA2576 E	VCA2676 E	VCA2976 E	VCA3076 E	VCA3676 E
7-11 3/4 (2432)	VCA1680	VCA1880	VCA2080	VCA2580 E	VCA2680 E	VCA2980 E	VCA3080 E	VCA3680 E

E = Egress

Construction Details



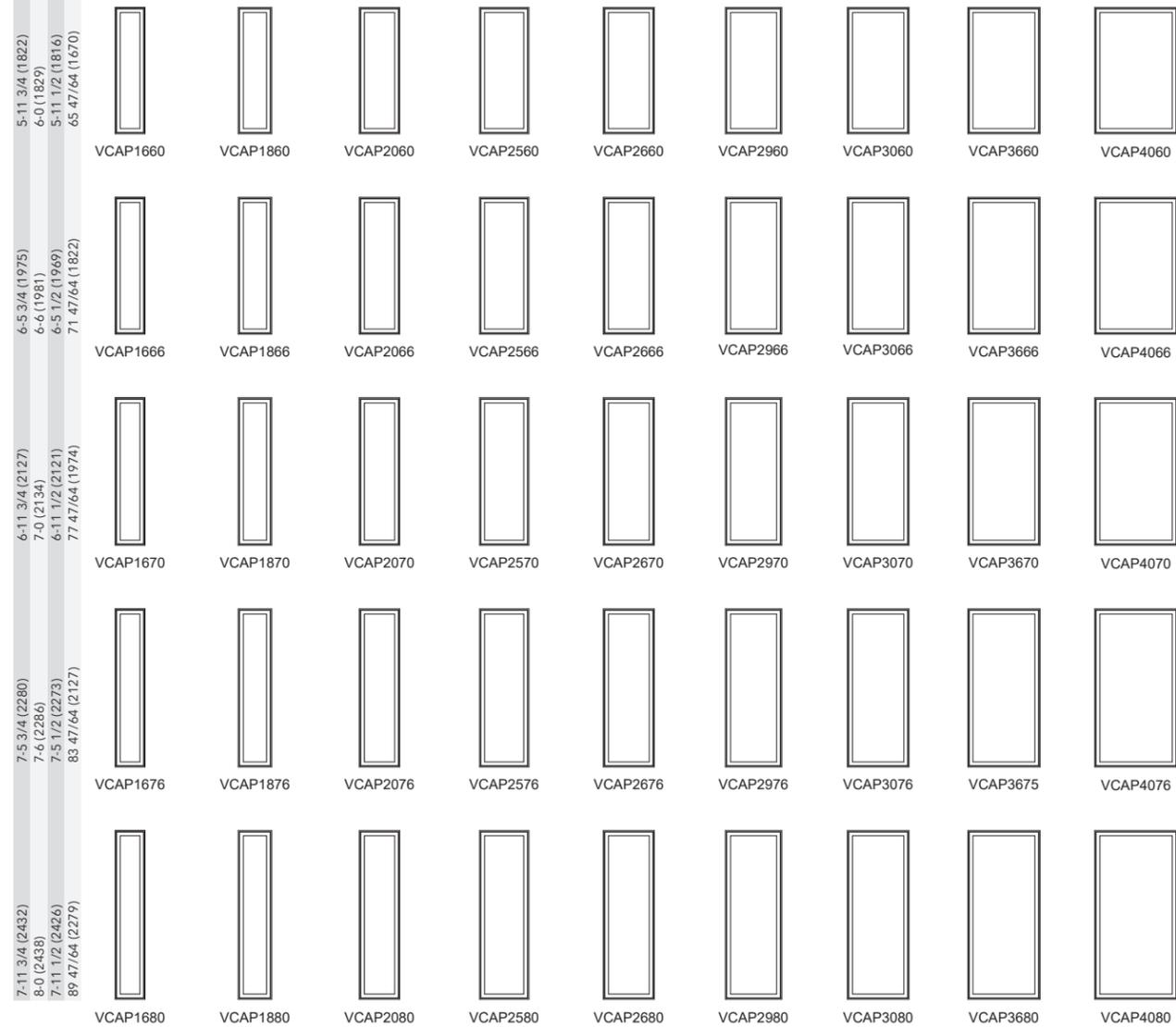
Casement Picture

MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)	3-5 1/2 (1054)	3-11 1/2 (1207)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)	3-6 (1067)	4-0 (1219)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)	3-5 (1041)	3-11 (1194)
DLO (mm)	11 15/64 (285)	13 15/64 (336)	17 15/64 (438)	22 15/64 (565)	23 15/64 (590)	26 15/64 (666)	29 15/64 (743)	35 15/64 (895)	41 15/64 (1047)

1-5 3/4 (451)	VCAP1616	VCAP1816	VCAP2016	VCAP2516	VCAP2616	VCAP2916	VCAP3016	VCAP3616	VCAP4016
1-7 3/4 (502)	VCAP1618	VCAP1818	VCAP2018	VCAP2518	VCAP2618	VCAP2918	VCAP3018	VCAP3618	VCAP4018
1-11 3/4 (603)	VCAP1620	VCAP1820	VCAP2020	VCAP2520	VCAP2620	VCAP2920	VCAP3020	VCAP3620	VCAP4020
2-5 3/4 (756)	VCAP1626	VCAP1826	VCAP2026	VCAP2526	VCAP2626	VCAP2926	VCAP3026	VCAP3626	VCAP4026
2-11 3/4 (908)	VCAP1630	VCAP1830	VCAP2030	VCAP2530	VCAP2630	VCAP2930	VCAP3030	VCAP3630	VCAP4030
3-5 3/4 (1060)	VCAP1636	VCAP1836	VCAP2036	VCAP2536	VCAP2636	VCAP2936	VCAP3036	VCAP3636	VCAP4036
3-11 3/4 (1213)	VCAP1640	VCAP1840	VCAP2040	VCAP2540	VCAP2640	VCAP2940	VCAP3040	VCAP3640	VCAP4040
4-5 3/4 (1365)	VCAP1646	VCAP1846	VCAP2046	VCAP2546	VCAP2646	VCAP2946	VCAP3046	VCAP3646	VCAP4046
4-11 3/4 (1518)	VCAP1650	VCAP1850	VCAP2050	VCAP2550	VCAP2650	VCAP2950	VCAP3050	VCAP3650	VCAP4050
5-5 3/4 (1670)	VCAP1656	VCAP1856	VCAP2056	VCAP2556	VCAP2656	VCAP2956	VCAP3056	VCAP3656	VCAP4056

Casement Picture

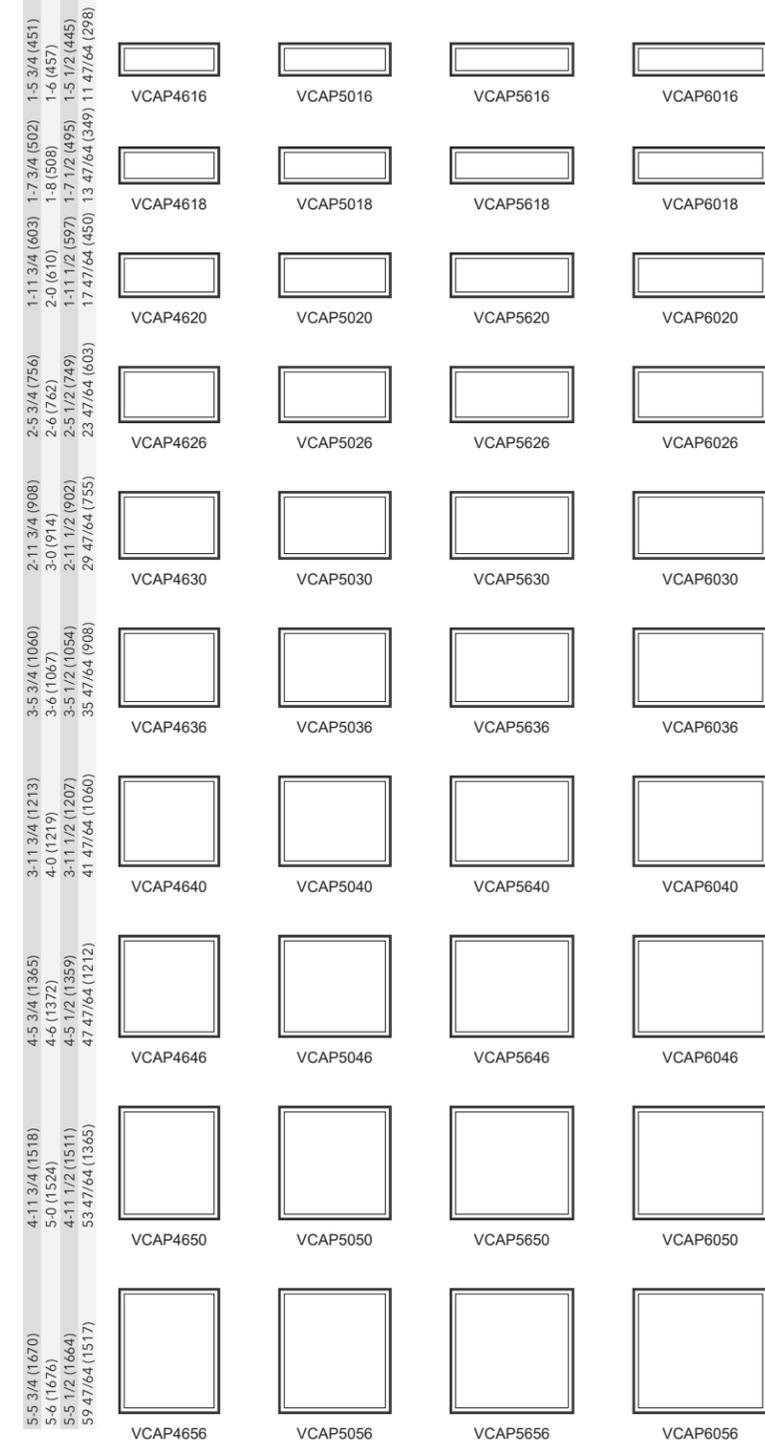
MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)	3-5 1/2 (1054)	3-11 1/2 (1207)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)	3-6 (1067)	4-0 (1219)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)	3-5 (1041)	3-11 (1194)
DLO (mm)	11 15/64 (285)	13 15/64 (336)	17 15/64 (438)	22 15/64 (565)	23 15/64 (590)	26 15/64 (666)	29 15/64 (743)	35 15/64 (895)	41 15/64 (1047)



Details and Elevations not to scale.
 Special sized units available within product size matrix. See your Marvin retailer.
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Casement Picture

MO (mm)	4-5 1/2 (1359)	4-11 1/2 (1511)	5-5 1/2 (1664)	5-11 1/2 (1816)
RO (mm)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)
FS (mm)	4-5 (1346)	4-11 (1499)	5-5 (1651)	5-11 (1803)
DLO (mm)	47 15/64 (1200)	53 15/64 (1352)	59 15/64 (1505)	65 15/64 (1657)



Casement Picture

MO (mm)	4-5 1/2 (11359)	4-11 1/2 (1511)	5-5 1/2 (1664)	5-11 1/2 (1816)
RO (mm)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)
FS (mm)	4-5 (1346)	4-11 (1499)	5-5 (1651)	5-11 (1803)
DLO (mm)	47 15/64 (1200)	53 15/64 (1352)	59 15/64 (1505)	65 15/64 (1657)

5-11 3/4 (1822)				
6-0 (1829)				
5-11 1/2 (1816)				
65 47/64 (1670)				
6-5 3/4 (1975)				
6-6 (1981)				
6-5 1/2 (1969)				
71 47/64 (1822)				
6-11 3/4 (2127)				
7-0 (2134)				
6-11 1/2 (2121)				
77 47/64 (1974)				
7-5 3/4 (2280)				
7-6 (2286)				
7-5 1/2 (2273)				
83 47/64 (2127)				
7-11 3/4 (2432)				
8-0 (2438)				
7-11 1/2 (2426)				
89 47/64 (2279)				

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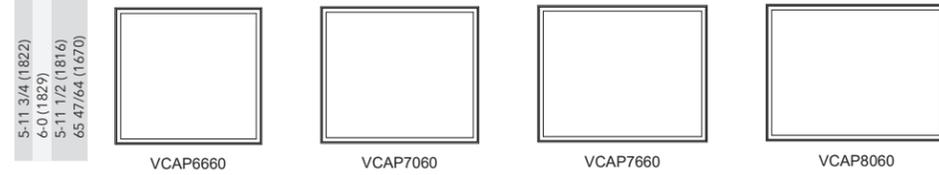
Casement Picture

MO (mm)	6-5 1/2 (1969)	6-11 1/2 (2121)	7-5 1/2 (2273)	7-11 1/2 (2426)
RO (mm)	6-6 (1981)	7-0 (2134)	7-6 (2286)	8-0 (2438)
FS (mm)	6-5 (1956)	6-11 (2108)	7-5 (2261)	7-11 (2413)
DLO (mm)	71 15/64 (1809)	77 15/64 (1962)	83 15/64 (2114)	89 15/64 (2267)

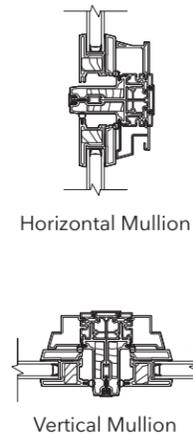
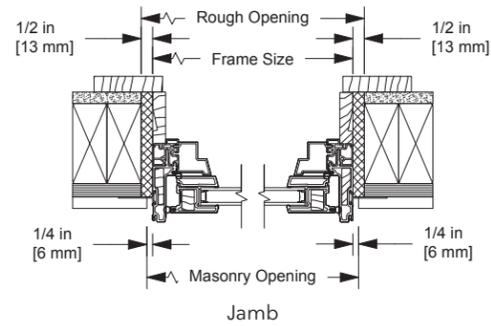
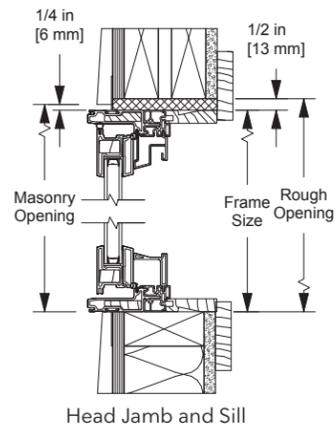
5-5 3/4 (1670)				
5-6 (1676)				
5-5 1/2 (1664)				
59 47/64 (1517)				
4-11 3/4 (1518)				
5-0 (1524)				
4-11 1/2 (1511)				
53 47/64 (1365)				
4-5 3/4 (1365)				
4-6 (1372)				
4-5 1/2 (1359)				
47 47/64 (1212)				
3-11 3/4 (1213)				
4-0 (1219)				
3-11 1/2 (1207)				
41 47/64 (1060)				
3-5 3/4 (1060)				
3-6 (1067)				
3-5 1/2 (1054)				
35 47/64 (908)				
2-11 3/4 (908)				
3-0 (914)				
2-11 1/2 (902)				
29 47/64 (755)				
2-5 3/4 (756)				
2-6 (762)				
2-5 1/2 (749)				
23 47/64 (603)				
1-11 3/4 (603)				
2-0 (610)				
1-11 1/2 (597)				
17 47/64 (450)				
1-7 3/4 (502)				
1-8 (508)				
1-7 1/2 (495)				
13 47/64 (349)				
1-5 3/4 (451)				
1-6 (457)				
1-5 1/2 (445)				

Casement Picture

MO (mm)	6-5 1/2 (1969)	6-11 1/2 (2121)	7-5 1/2 (2273)	7-11 1/2 (2426)
RO (mm)	6-6 (1981)	7-0 (2134)	7-6 (2286)	8-0 (2438)
FS (mm)	6-5 (1956)	6-11 (2108)	7-5 (2261)	7-11 (2413)
DLO (mm)	71 15/64 (1809)	77 15/64 (1962)	83 15/64 (2114)	89 15/64 (2267)



Construction Details



Details and Elevations not to scale.
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Direct Glaze

MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)	3-5 1/2 (1054)	3-11 1/2 (1207)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)	3-6 (1067)	4-0 (1219)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)	3-5 (1041)	3-11 (1194)
DLO (mm)	1-1 3/4 (349)	1-3 3/4 (400)	1-7 3/4 (502)	2-0 3/4 (629)	2-1 3/4 (654)	2-4 3/4 (730)	2-7 3/4 (807)	3-1 3/4 (959)	3-7 3/4 (1111)

5-11 3/4 (1822)	VDG1616	VDG1816	VDG2016	VDG2516	VDG2616	VDG2916	VDG3016	VDG3616	VDG4016
6-0 (1829)	VDG1618	VDG1818	VDG2018	VDG2518	VDG2618	VDG2918	VDG3018	VDG3618	VDG4018
5-11 1/2 (1816)	VDG1620	VDG1820	VDG2020	VDG2520	VDG2620	VDG2920	VDG3020	VDG3620	VDG4020
65 47/64 (1670)	VDG1626	VDG1826	VDG2026	VDG2526	VDG2626	VDG2926	VDG3026	VDG3626	VDG4026
1-11 3/4 (603)	VDG1630	VDG1830	VDG2030	VDG2530	VDG2630	VDG2930	VDG3030	VDG3630	VDG4030
2-5 3/4 (756)	VDG1636	VDG1836	VDG2036	VDG2536	VDG2636	VDG2936	VDG3036	VDG3636	VDG4036
1-11 3/4 (603)	VDG1640	VDG1840	VDG2040	VDG2540	VDG2640	VDG2940	VDG3040	VDG3640	VDG4040
2-5 3/4 (756)	VDG1646	VDG1846	VDG2046	VDG2546	VDG2646	VDG2946	VDG3046	VDG3646	VDG4046
3-5 3/4 (1060)	VDG1650	VDG1850	VDG2050	VDG2550	VDG2650	VDG2950	VDG3050	VDG3650	VDG4050
4-5 3/4 (1365)	VDG1656	VDG1856	VDG2056	VDG2556	VDG2656	VDG2956	VDG3056	VDG3656	VDG4056

Direct Glaze

MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)	3-5 1/2 (1054)	3-11 1/2 (1207)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)	3-6 (1067)	4-0 (1219)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)	3-5 (1041)	3-11 (1194)
DLO (mm)	1-1 3/4 (349)	1-3 3/4 (400)	1-7 3/4 (502)	2-0 3/4 (629)	2-1 3/4 (654)	2-4 3/4 (730)	2-7 3/4 (807)	3-1 3/4 (959)	3-7 3/4 (1111)

5-11 3/4 (1822) 6-0 (1829) 5-11 1/2 (1816) 5-8 1/4 (1734)									
6-5 3/4 (1975) 6-6 (1981) 6-5 1/2 (1969) 6-2 1/4 (1886)									
6-11 3/4 (2127) 7-0 (2134) 6-11 1/2 (2121) 6-8 1/4 (2039)									
7-5 3/4 (2280) 7-6 (2286) 7-5 1/2 (2273) 7-2 1/4 (2191)									
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 7-8 1/4 (2343)									
8-5 3/4 (2584) 8-6 (2591) 8-5 1/2 (2578) 8-2 1/4 (2496)									

Direct Glaze

MO (mm)	1-5 1/2 (445)	1-7 1/2 (495)	1-11 1/2 (597)	2-4 1/2 (724)	2-5 1/2 (749)	2-8 1/2 (826)	2-11 1/2 (902)	3-5 1/2 (1054)	3-11 1/2 (1207)
RO (mm)	1-6 (457)	1-8 (508)	2-0 (610)	2-5 (737)	2-6 (762)	2-9 (838)	3-0 (914)	3-6 (1067)	4-0 (1219)
FS (mm)	1-5 (432)	1-7 (483)	1-11 (584)	2-4 (711)	2-5 (737)	2-8 (813)	2-11 (889)	3-5 (1041)	3-11 (1194)
DLO (mm)	1-1 3/4 (349)	1-3 3/4 (400)	1-7 3/4 (502)	2-0 3/4 (629)	2-1 3/4 (654)	2-4 3/4 (730)	2-7 3/4 (807)	3-1 3/4 (959)	3-7 3/4 (1111)

8-11 3/4 (2737) 9-0 (2743) 8-11 1/2 (2731) 8-8 1/4 (2648)									
9-5 3/4 (2889) 9-6 (2896) 9-5 1/2 (2883) 9-2 1/4 (2801)									
9-11 3/4 (3042) 10-0 (3048) 9-11 1/2 (3035) 9-8 1/4 (2953)									

Details and Elevations not to scale.
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Direct Glaze

MO (mm)	4-5 1/2 (1359)	4-11 1/2 (1511)	5-5 1/2 (1664)	5-11 1/2 (1816)	6-5 1/2 (1969)	6-11 1/2 (2121)
RO (mm)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)	6-6 (1981)	7-0 (2134)
FS (mm)	4-5 (1346)	4-11 (1499)	5-5 (1651)	5-11 (1803)	6-5 (1956)	6-11 (2108)
DLO (mm)	4-1 3/4 (1264)	4-7 3/4 (1416)	5-1 3/4 (1569)	5-7 3/4 (1721)	6-1 3/4 (1873)	6-7 3/4 (2026)

1-5 3/4 (451) 1-6 (457) 1-5 1/2 (445) 1-2 1/4 (362)						
1-7 3/4 (502) 1-8 (508) 1-7 1/2 (495) 1-4 1/4 (413)						
1-11 3/4 (603) 2-0 (610) 1-11 1/2 (597) 1-8 1/4 (515)						
2-5 3/4 (756) 2-6 (762) 2-5 1/2 (749) 2-2 1/4 (667)						
2-11 3/4 (908) 3-0 (914) 2-11 1/2 (902) 2-8 1/4 (819)						
3-5 3/4 (1060) 3-6 (1067) 3-5 1/2 (1054) 3-2 1/4 (972)						
3-11 3/4 (1213) 4-0 (1219) 3-11 1/2 (1207) 3-8 1/4 (1124)						
4-5 3/4 (1365) 4-6 (1372) 4-5 1/2 (1359) 4-2 1/4 (1277)						
4-11 3/4 (1518) 5-0 (1524) 4-11 1/2 (1511) 4-8 1/4 (1429)						
5-5 3/4 (1670) 5-6 (1676) 5-5 1/2 (1664) 5-2 1/4 (1581)						

Direct Glaze

MO (mm)	4-5 1/2 (1359)	4-11 1/2 (1511)	5-5 1/2 (1664)	5-11 1/2 (1816)	6-5 1/2 (1969)	6-11 1/2 (2121)
RO (mm)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)	6-6 (1981)	7-0 (2134)
FS (mm)	4-5 (1346)	4-11 (1499)	5-5 (1651)	5-11 (1803)	6-5 (1956)	6-11 (2108)
DLO (mm)	4-1 3/4 (1264)	4-7 3/4 (1416)	5-1 3/4 (1569)	5-7 3/4 (1721)	6-1 3/4 (1873)	6-7 3/4 (2026)

5-11 3/4 (1822) 6-0 (1829) 5-11 1/2 (1816) 5-8 1/4 (1734)						
6-5 3/4 (1975) 6-6 (1981) 6-5 1/2 (1969) 6-2 1/4 (1886)						
6-11 3/4 (2127) 7-0 (2134) 6-11 1/2 (2121) 6-8 1/4 (2039)						
7-5 3/4 (2280) 7-6 (2286) 7-5 1/2 (2273) 7-2 1/4 (2191)						
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 7-8 1/4 (2343)						
8-5 3/4 (2584) 8-6 (2591) 8-5 1/2 (2578) 8-2 1/4 (2496)						

Direct Glaze

MO (mm)	4-5 1/2 (1359)	4-11 1/2 (1511)	5-5 1/2 (1664)	5-11 1/2 (1816)
RO (mm)	4-6 (1372)	5-0 (1524)	5-6 (1676)	6-0 (1829)
FS (mm)	4-5 (1346)	4-11 (1499)	5-5 (1651)	5-11 (1803)
DLO (mm)	4-1 3/4 (1264)	4-7 3/4 (1416)	5-1 3/4 (1569)	5-7 3/4 (1721)

8-11 3/4 (2737)				
9-0 (2743)				
8-11 1/2 (2731)				
8-8 1/4 (2648)				
9-5 3/4 (2889)				
9-6 (2896)				
9-5 1/2 (2883)				
9-2 1/4 (2801)				
9-11 3/4 (3042)				
10-0 (3048)				
9-11 1/2 (3035)				
9-8 1/4 (2953)				

Details and Elevations not to scale.
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Direct Glaze

MO (mm)	7-5 1/2 (2273)	7-11 1/2 (2426)	8-5 1/2 (2578)	8-11 1/2 (2731)
RO (mm)	7-6 (2286)	8-0 (2438)	8-6 (2591)	9-0 (2743)
FS (mm)	7-5 (2261)	7-11 (2413)	8-5 (2565)	8-11 (2718)
DLO (mm)	7-1 3/4 (2178)	7-7 3/4 (2331)	8-1 3/4 (2483)	8-7 3/4 (2635)

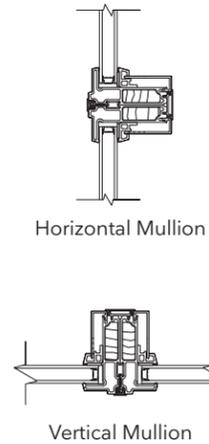
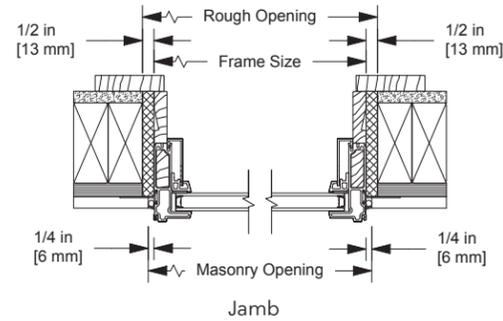
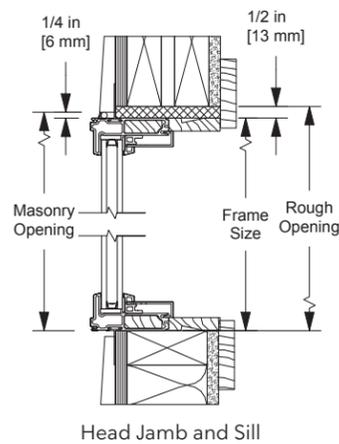
1-5 3/4 (451)				
1-6 (457)				
1-7 1/2 (445)				
1-2 1/4 (362)				
1-7 3/4 (502)				
1-8 (508)				
1-7 1/2 (495)				
1-4 1/4 (413)				
1-11 3/4 (603)				
2-0 (610)				
1-1 1/2 (597)				
1-8 1/4 (515)				
2-5 3/4 (756)				
2-6 (762)				
2-5 1/2 (749)				
2-2 1/4 (667)				
2-11 3/4 (908)				
3-0 (914)				
2-1 1/2 (902)				
2-8 1/4 (819)				
3-5 3/4 (1060)				
3-6 (1067)				
3-5 1/2 (1054)				
3-2 1/4 (972)				
3-11 3/4 (1213)				
4-0 (1219)				
3-11 1/2 (1207)				
3-8 1/4 (1124)				
4-5 3/4 (1365)				
4-6 (1372)				
4-5 1/2 (1359)				
4-2 1/4 (1277)				
4-11 3/4 (1518)				
5-0 (1524)				
4-11 1/2 (1511)				
4-8 1/4 (1429)				
5-5 3/4 (1670)				
5-6 (1676)				
5-5 1/2 (1664)				
5-2 1/4 (1581)				

Direct Glaze

MO (mm)	7-5 1/2 (2273)	7-11 1/2 (2426)	8-5 1/2 (2578)	8-11 1/2 (2731)
RO (mm)	7-6 (2286)	8-0 (2438)	8-6 (2591)	9-0 (2743)
FS (mm)	7-5 (2261)	7-11 (2413)	8-5 (2565)	8-11 (2718)
DLO (mm)	7-1 3/4 (2178)	7-7 3/4 (2331)	8-1 3/4 (2483)	8-7 3/4 (2635)

5-11 3/4 (1822)				
6-0 (1829)				
5-11 1/2 (1816)				
5-8 1/4 (1734)				
6-5 3/4 (1975)				
6-6 (1981)				
6-5 1/2 (1969)				
6-2 1/4 (1886)				
6-11 3/4 (2127)				
7-0 (2134)				
6-11 1/2 (2121)				
6-8 1/4 (2039)				

Construction Details



Details and Elevations not to scale.
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Direct Glaze

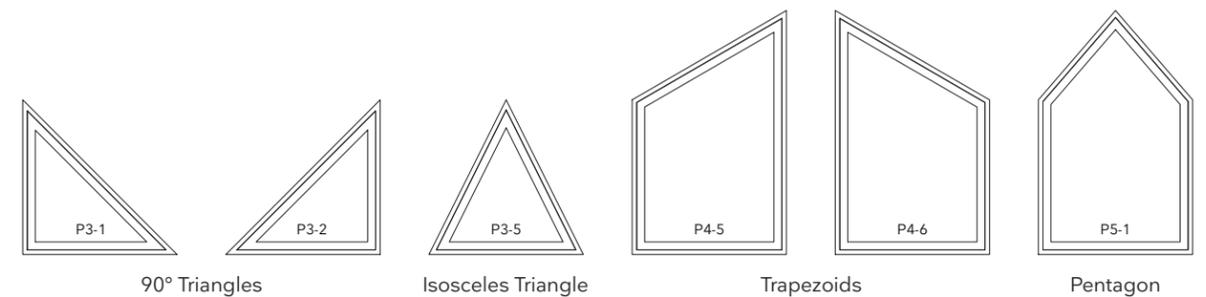
MO (mm)	9-5 1/2 (2883)	9-11 1/2 (3035)
RO (mm)	9-6 (2896)	10-0 (3048)
FS (mm)	9-5 (2870)	9-11 (3023)
DLO (mm)	9-1 3/4 (2788)	9-7 3/4 (2940)

1-5 3/4 (451)		
1-6 (457)		
1-5 1/2 (445)		
1-2 1/4 (362)		
1-7 3/4 (502)		
1-8 (508)		
1-7 1/2 (495)		
1-4 1/4 (413)		
1-11 3/4 (603)		
2-0 (610)		
1-11 1/2 (597)		
1-8 1/4 (515)		
2-5 3/4 (756)		
2-6 (762)		
2-5 1/2 (749)		
2-2 1/4 (667)		
2-11 3/4 (908)		
3-0 (914)		
2-11 1/2 (902)		
2-8 1/4 (819)		
3-5 3/4 (1060)		
3-6 (1067)		
3-5 1/2 (1054)		
3-2 1/4 (972)		

MO (mm)	9-5 1/2 (2883)	9-11 1/2 (3035)
RO (mm)	9-6 (2896)	10-0 (3048)
FS (mm)	9-5 (2870)	9-11 (3023)
DLO (mm)	9-1 3/4 (2788)	9-7 3/4 (2940)

3-11 3/4 (1213)		
4-0 (1219)		
3-11 1/2 (1207)		
3-8 1/4 (1124)		
4-5 3/4 (1365)		
4-6 (1372)		
4-5 1/2 (1359)		
4-2 1/4 (1277)		
4-11 3/4 (1518)		
5-0 (1524)		
4-11 1/2 (1511)		
4-8 1/4 (1429)		
5-5 3/4 (1670)		
5-6 (1676)		
5-5 1/2 (1664)		
5-2 1/4 (1581)		
5-11 3/4 (1822)		
6-0 (1829)		
5-11 1/2 (1816)		
5-8 1/4 (1734)		

Direct Glaze Shapes



Bi-Fold Door

1, 2, 3 Panel

MO (mm)	3-1 3/32 (942)	3-3 25/32 (1010)	6-0 1/16 (1830)	6-5 27/64 (1967)	8-10 39/64 (2708)	9-6 21/32 (2912)
RO (mm)	3-1 19/32 (955)	3-4 9/32 (1023)	6-0 9/16 (1843)	6-5 59/64 (1979)	8-11 7/64 (2721)	9-7 5/32 (2925)
FS (mm)	3-0 19/32 (929)	3-3 9/32 (998)	5-11 9/16 (1818)	6-4 59/64 (1954)	8-10 7/64 (2695)	9-6 5/32 (2899)
DLO (mm)	2-3 3/16 (691)	2-5 7/8 (759)	2-3 3/16 (691)	2-5 7/8 (759)	2-3 3/16 (691)	2-5 7/8 (759)

<p>6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 5-7 19/64 (1709)</p>						
<p>VNBF3065</p>	<p>VNBF3465</p>	<p>VNBF6065</p>	<p>VNBF6665</p>	<p>VNBF9065</p>	<p>VNBF9865</p>	<p>VNBF9865</p>
<p>6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 5-9 51/64 (1773)</p>						
<p>VNBF3068</p>	<p>VNBF3468</p>	<p>VNBF6068</p>	<p>VNBF6668</p>	<p>VNBF9068</p>	<p>VNBF9868</p>	<p>VNBF9868</p>
<p>7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 6-1 51/64 (1874)</p>						
<p>VNBF3070</p>	<p>VNBF3470</p>	<p>VNBF6070</p>	<p>VNBF6670</p>	<p>VNBF9070</p>	<p>VNBF9870</p>	<p>VNBF9870</p>
<p>7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 6-11 19/64 (2116)</p>						
<p>VNBF3080</p>	<p>VNBF3480</p>	<p>VNBF6080</p>	<p>VNBF6680</p>	<p>VNBF9080</p>	<p>VNBF9880</p>	<p>VNBF9880</p>

Bi-Fold Door

4 Panel

MO (mm)	11-9 1/2 (3594)	12-8 7/32 (3867)
RO (mm)	11-10 (3607)	12-8 23/32 (3879)
FS (mm)	11-9 (3581)	12-7 23/32 (3854)
DLO (mm)	2-3 3/16 (691)	2-5 7/8 (759)

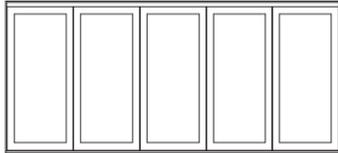
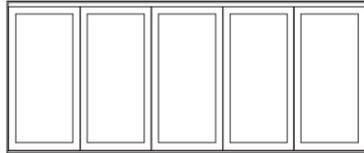
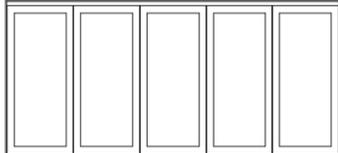
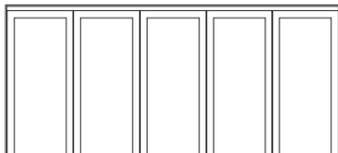
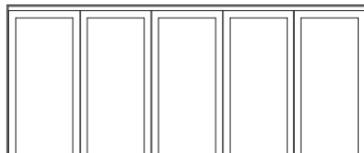
<p>6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 5-7 19/64 (1709)</p>		
<p>VNBF12065</p>	<p>VNBF12865</p>	<p>VNBF12865</p>
<p>6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 5-9 51/64 (1773)</p>		
<p>VNBF12068</p>	<p>VNBF12868</p>	<p>VNBF12868</p>
<p>7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 6-1 51/64 (1874)</p>		
<p>VNBF12070</p>	<p>VNBF12870</p>	<p>VNBF12870</p>
<p>7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 6-11 19/64 (2116)</p>		
<p>VNBF12080</p>	<p>VNBF12880</p>	<p>VNBF12880</p>

Details and Elevations not to scale.
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Bi-Fold Door

5 Panel

MO (mm)	14-8 3/32 (4473)	15-9 1/2 (4813)
RO (mm)	14-8 19/32 (4485)	15-10 (4826)
FS (mm)	14-7 19/32 (4460)	15-9 (4801)
DLO (mm)	2-3 3/16 (691)	2-5 7/8 (759)

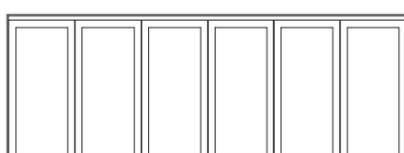
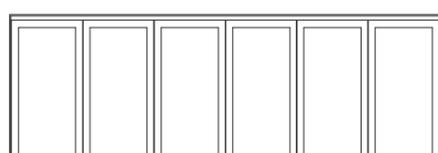
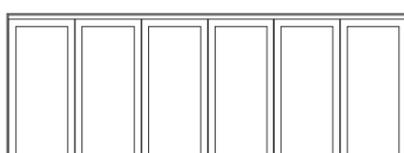
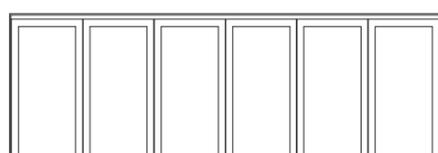
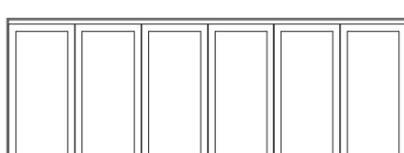
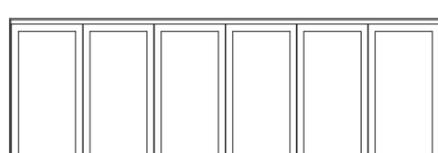
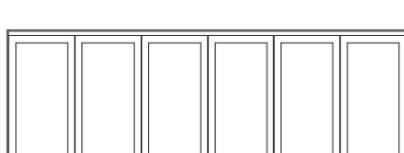
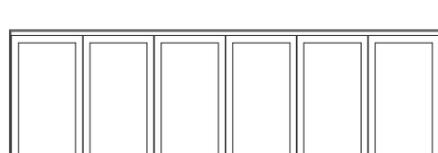
<p>6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 5-7 19/64 (1709)</p> <p>6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 5-9 51/64 (1773)</p> <p>7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 6-1 51/64 (1874)</p> <p>7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 6-11 19/64 (2116)</p>	 <p>VNBFLD15065</p>	 <p>VNBFLD16065</p>
	 <p>VNBFLD15068</p>	 <p>VNBFLD16068</p>
	 <p>VNBFLD15070</p>	 <p>VNBFLD16070</p>
	 <p>VNBFLD15080</p>	 <p>VNBFLD16080</p>

Details and Elevations not to scale.
Special sized units available within product size matrix. See your Marvin retailer.
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Bi-Fold Door

6 Panel

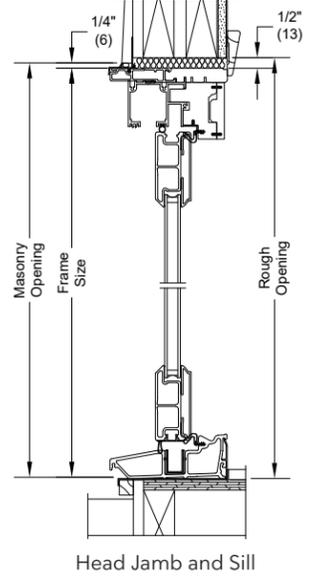
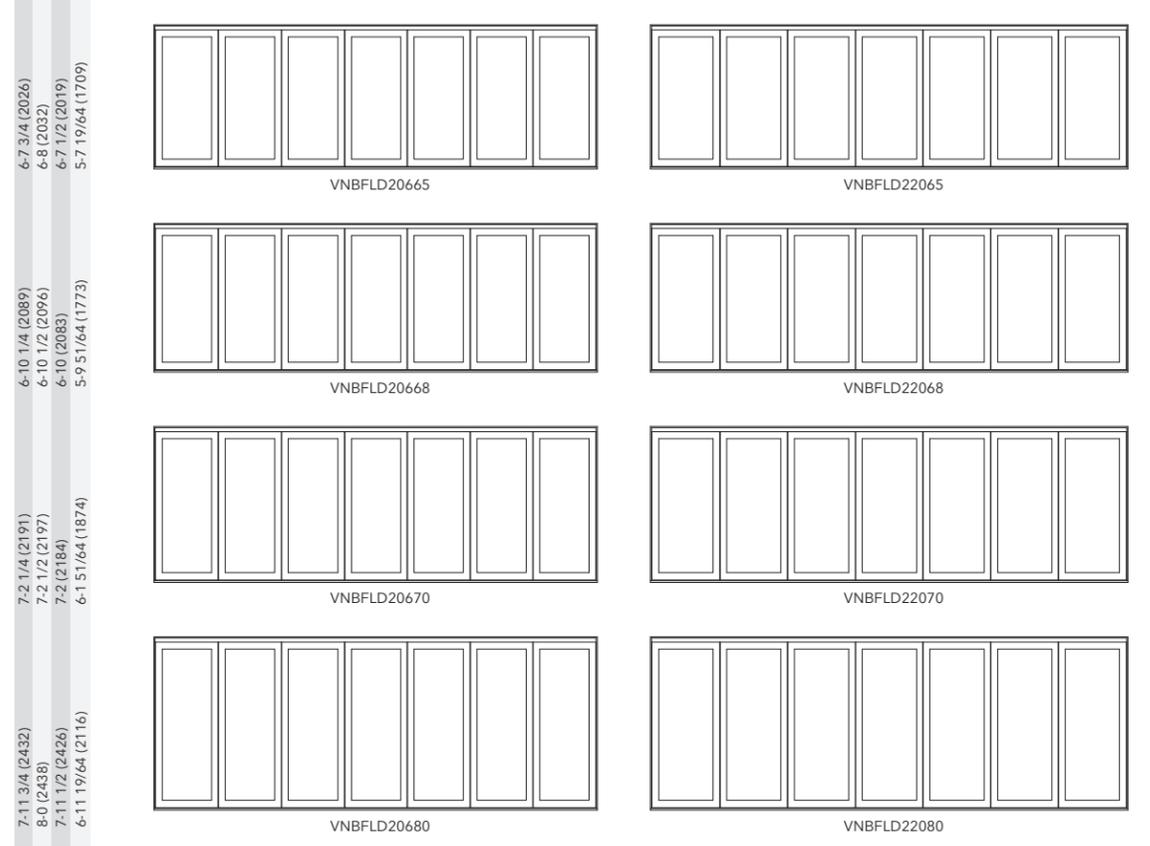
MO (mm)	17-6 7/8 (5356)	18-10 31/32 (5765)
RO (mm)	17-7 3/8 (5369)	18-11 15/32 (5778)
FS (mm)	17-6 3/8 (5344)	18-10 15/32 (5752)
DLO (mm)	2-3 3/16 (691)	2-5 7/8 (759)

<p>6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 5-7 19/64 (1709)</p> <p>6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 5-9 51/64 (1773)</p> <p>7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 6-1 51/64 (1874)</p> <p>7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 6-11 19/64 (2116)</p>	 <p>VNBFLD17865</p>	 <p>VNBFLD19065</p>
	 <p>VNBFLD17868</p>	 <p>VNBFLD19068</p>
	 <p>VNBFLD17870</p>	 <p>VNBFLD19070</p>
	 <p>VNBFLD17880</p>	 <p>VNBFLD19080</p>

Bi-Fold Door

7 Panel

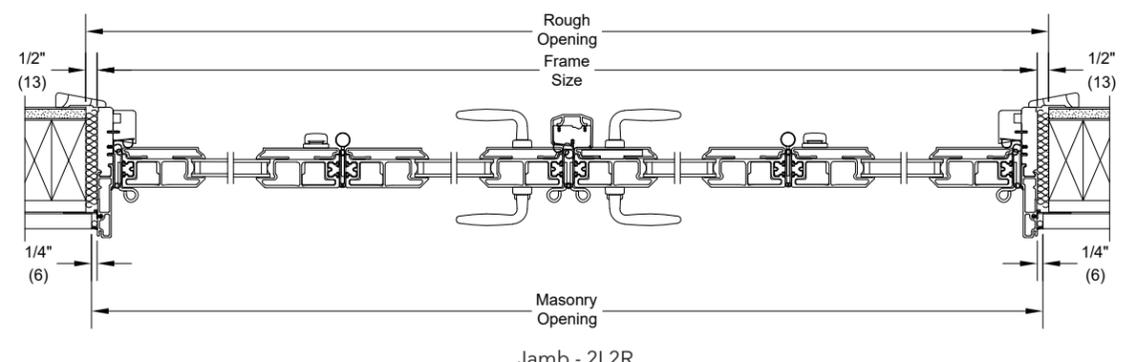
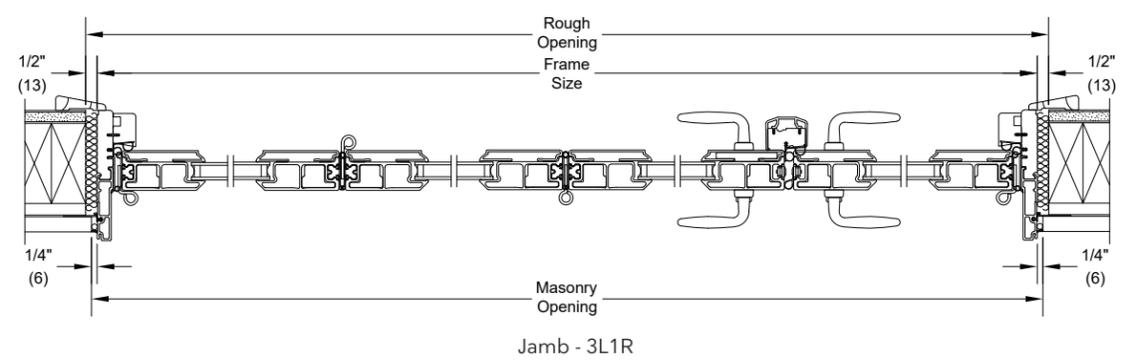
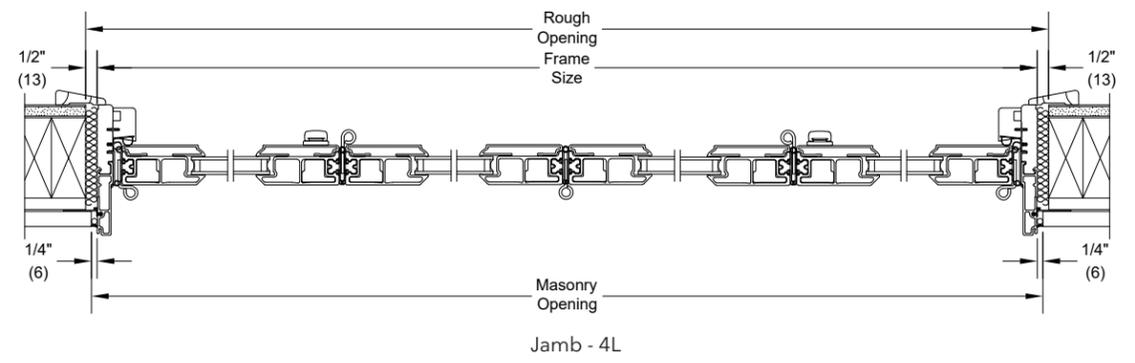
MO (mm)	20-5 37/64 (6238)	22-0 11/32 (6714)
RO (mm)	20-6 5/64 (6250)	22-0 27/32 (6727)
FS (mm)	20-5 5/64 (6225)	21-11 27/32 (6702)
DLO (mm)	2-3 3/16 (691)	2-5 7/8 (759)



Details and Elevations not to scale.
 Special sized units available within product size matrix. See your Marvin retailer.
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Bi-Fold Door

Construction Details



Inswing French Door

2 Panel

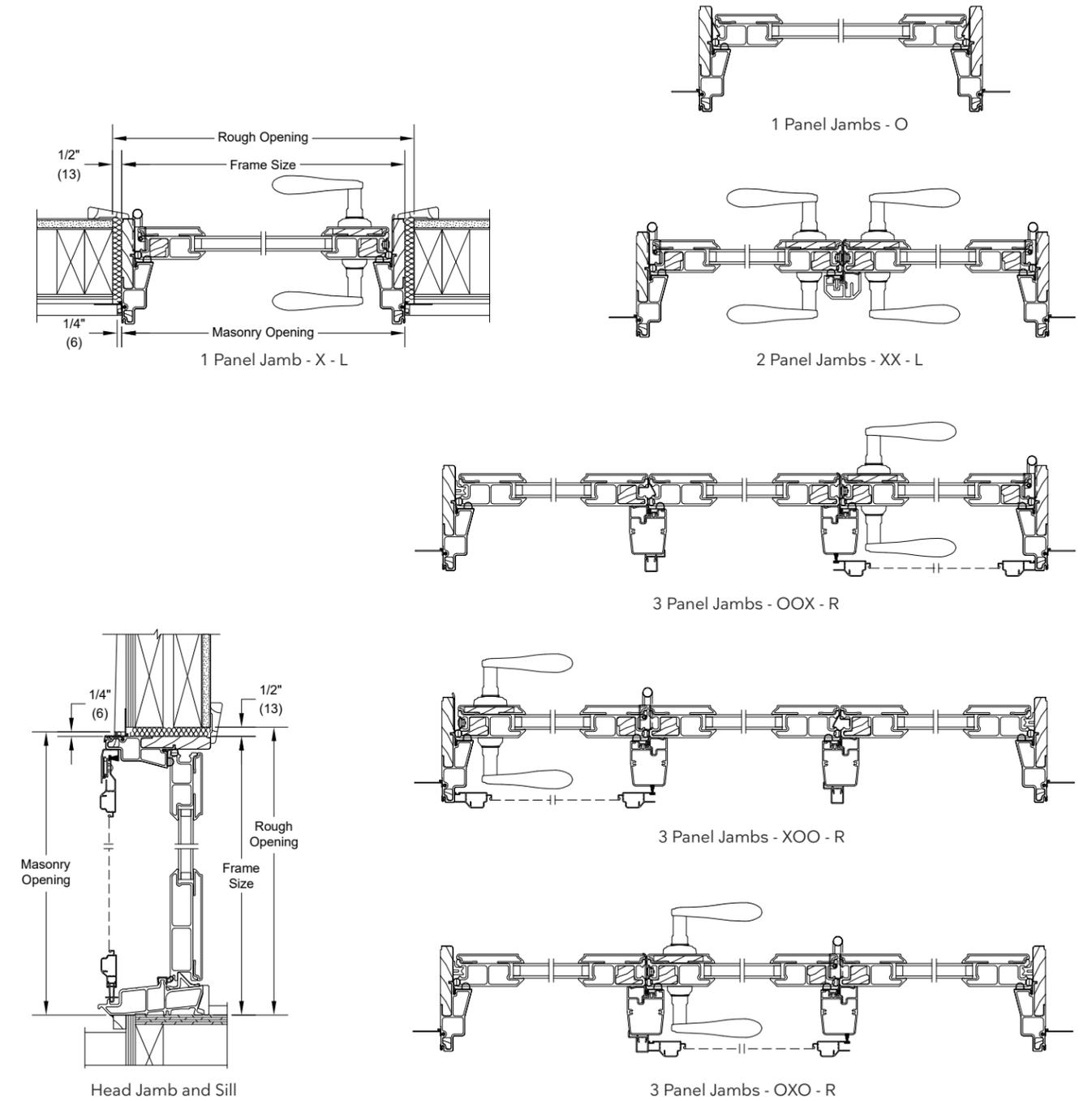
MO (mm)	5-10 1/4 (1784)	7-4 1/4 (2242)	7-10 1/4 (2394)	8-10 1/4 (2699)
RO (mm)	5-10 3/4 (1797)	7-4 3/4 (2254)	7-10 3/4 (2407)	8-10 3/4 (2711)
FS (mm)	5-9 3/4 (1772)	7-3 3/4 (2229)	7-9 3/4 (2381)	8-9 3/4 (2686)
DLO (mm)	1-3 11/32 (390)	1-9 11/32 (542)	1-11 11/32 (593)	2-3 11/32 (695)

6-7 3/4 (2026)				
6-8 (2032)				
6-7 1/2 (2019)				
5-7 3/32 (1704)				
6-10 1/4 (2089)				
6-10 1/2 (2096)				
6-10 (2083)				
5-9 19/32 (1768)				
7-2 1/4 (2191)				
7-2 1/2 (2197)				
7-2 (2184)				
6-1 19/32 (1869)				
7-11 3/4 (2432)				
8-0 (2438)				
7-11 1/2 (2426)				
6-11 3/32 (2111)				

Details and Elevations not to scale.
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Inswing French Door

Construction Details



Outswing French Door

MO (mm)	2-6 13/16 (783)	2-8 13/16 (834)	3-0 13/16 (935)	4-11 3/4 (1518)	5-3 3/4 (1619)	5-11 3/4 (1822)
RO (mm)	2-7 5/16 (796)	2-9 5/16 (846)	3-1 5/16 (948)	5-0 1/4 (1530)	5-4 1/4 (1632)	6-0 1/4 (1835)
FS (mm)	2-6 5/16 (770)	2-8 5/16 (821)	3-0 5/16 (923)	4-11 1/4 (1505)	5-3 1/4 (1607)	5-11 1/4 (1810)
DLO (mm)	1-9 11/32 (542)	1-11 11/32 (593)	2-3 11/32 (695)	1-9 11/32 (542)	1-11 11/32 (593)	2-3 11/32 (695)

6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 5-7 3/32 (1704)						
VNOFD2665	VNOFD2865	VNOFD3065	VNOFD5065	VNOFD5465	VNOFD6065	
6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 5-9 19/32 (1768)						
VNOFD2668	VNOFD2868	VNOFD3068	VNOFD5068	VNOFD5468	VNOFD6068	
7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 6-1 19/32 (1869)						
VNOFD2670	VNOFD2870	VNOFD3070	VNOFD5070	VNOFD5470	VNOFD6070	
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 6-11 3/32 (2111)						
VNOFD2680	VNOFD2880	VNOFD3080	VNOFD5080	VNOFD5480	VNOFD6080	

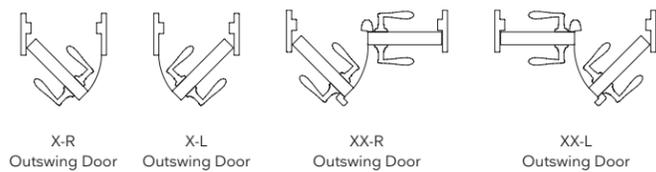
Outswing French Door

MO (mm)	7-4 1/2 (2248)	7-10 1/2 (2400)	8-10 1/2 (2705)
RO (mm)	7-5 (2261)	7-11 (2413)	8-11 (2718)
FS (mm)	7-4 (2235)	7-10 (2388)	8-10 (2692)
DLO (mm)	1-9 11/32 (542)	1-11 11/32 (593)	2-3 11/32 (695)

6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 5-7 3/32 (1704)			
VNOFD7665	VNOFD8065	VNOFD9065	
6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 5-9 19/32 (1768)			
VNOFD7668	VNOFD8068	VNOFD9068	
7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 6-1 19/32 (1869)			
VNOFD7670	VNOFD8070	VNOFD9070	
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 6-11 3/32 (2111)			
VNOFD7680	VNOFD8080	VNOFD9080	

Outswing Door Operation

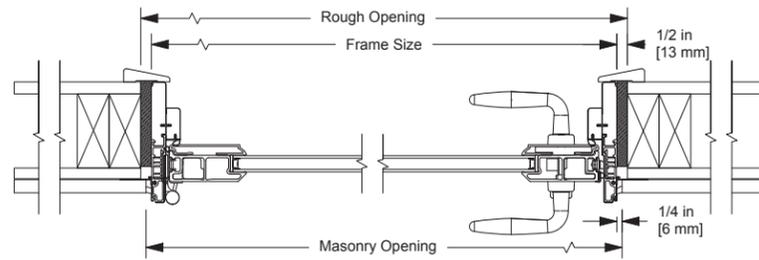
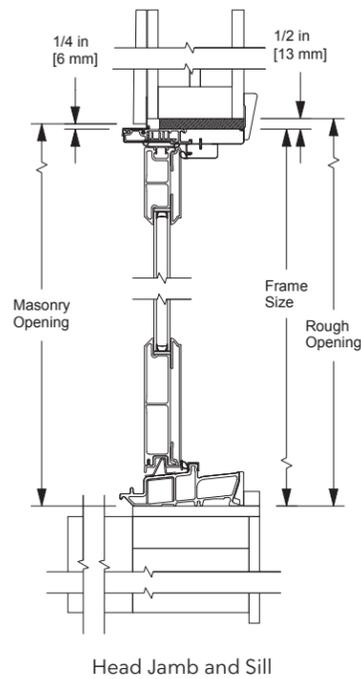
X signifies an operating door panel, O means stationary. Listing the panels in a door starts from the left to the right, looking from the exterior.



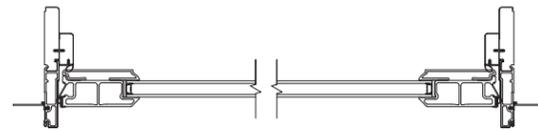
Details and Elevations not to scale.
Special sized units available within product size matrix. See your Marvin retailer.
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Outswing French Door

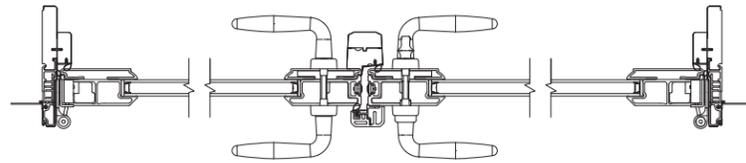
Construction Details



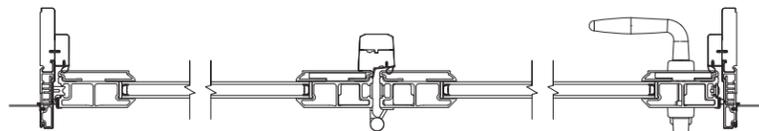
1 Panel Jamb - X - R



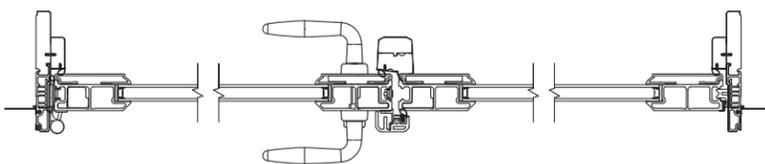
1 Panel Jamb - O



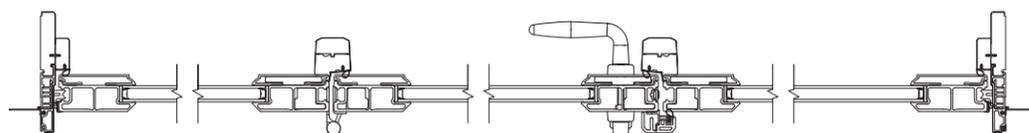
2 Panel Jamb - XX - L



2 Panel Jamb - OX - R



2 Panel Jamb - XO - R



3 Panel Jamb - OXO - R

Details and Elevations not to scale.
Special sized units available within product size matrix. See your Marvin retailer.
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Sliding French Door

2 Panel

MO (mm)	4-11 1/2 (1511)	5-11 1/2 (1816)	7-11 1/2 (2426)
RO (mm)	5-0 (1524)	6-0 (1829)	8-0 (2438)
FS (mm)	4-11 (1499)	5-11 (1803)	7-11 (2413)
DLO (mm)	1-10 3/8 (568)	2-4 3/8 (721)	3-4 3/8 (1026)

6-7 3/4 (2026)			
6-8 (2032)			
6-7 1/2 (2019)			
5-7 3/32 (1704)			
6-10 1/4 (2089)			
6-10 1/2 (2096)			
6-10 (2083)			
5-9 19/32 (1768)			
7-11 3/4 (2432)			
8-0 (2438)			
7-11 1/2 (2426)			
6-11 3/32 (2111)			

3 Panel

MO (mm)	7-5 (2261)	8-11 (2718)	11-11 (3632)
RO (mm)	7-5 1/2 (2273)	8-11 1/2 (2731)	11-11 1/2 (3645)
FS (mm)	7-4 1/2 (2248)	8-10 1/2 (2705)	11-10 1/2 (3620)
DLO (mm)	1-10 3/8 (568)	2-4 3/8 (721)	3-4 3/8 (1026)

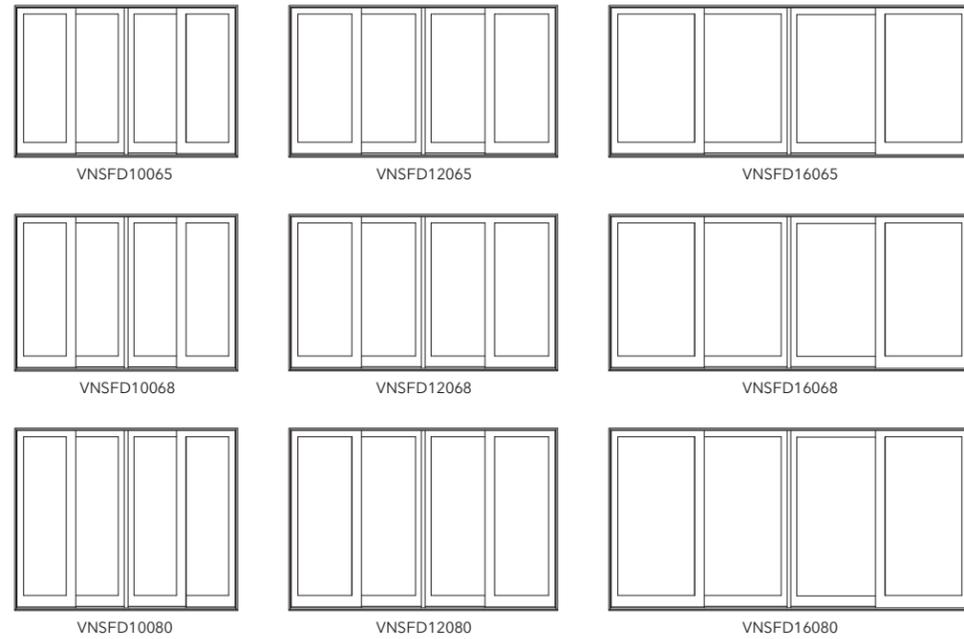
6-7 3/4 (2026)			
6-8 (2032)			
6-7 1/2 (2019)			
5-7 3/32 (1704)			
6-10 1/4 (2089)			
6-10 1/2 (2096)			
6-10 (2083)			
5-9 19/32 (1768)			
7-11 3/4 (2432)			
8-0 (2438)			
7-11 1/2 (2426)			
6-11 3/32 (2111)			

Sliding French Door

4 Panel

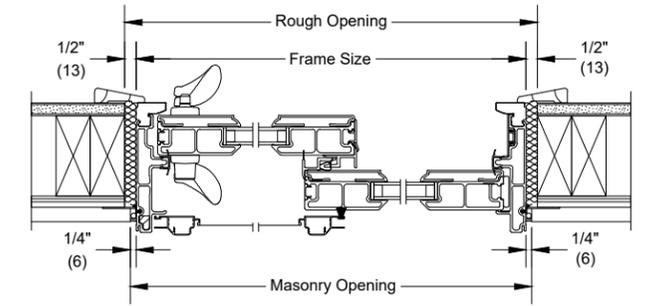
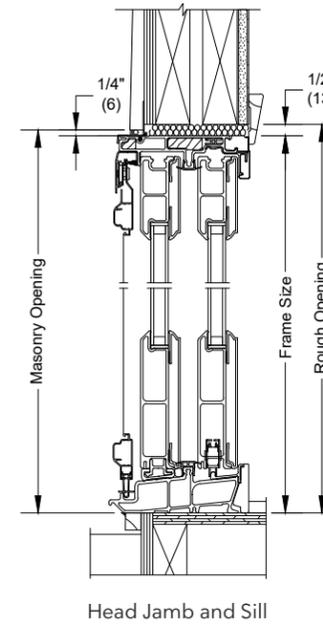
MO (mm)	9-9 1/2 (2985)	11-9 1/2 (3594)	15-9 1/2 (4813)
RO (mm)	9-10 (2997)	11-10 (3607)	15-10 (4826)
FS (mm)	9-9 (2972)	11-9 (3581)	15-9 (4801)
DLO (mm)	1-10 3/8 (568)	2-4 3/8 (721)	3-4 3/8 (1026)

6-10 1/4 (2089)	6-10 1/2 (2096)	6-10 (2083)	5-7 3/32 (1704)
7-2 1/4 (2191)	7-2 1/2 (2197)	7-2 (2184)	5-9 19/32 (1704)
7-11 3/4 (2432)	8-0 (2438)	7-11 1/2 (2426)	6-11 3/32 (2111)

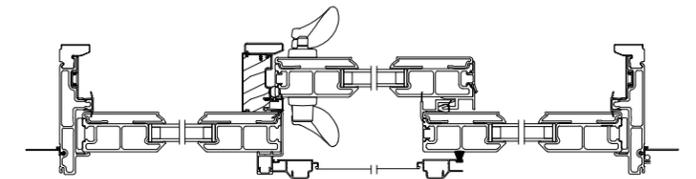


Sliding French Door

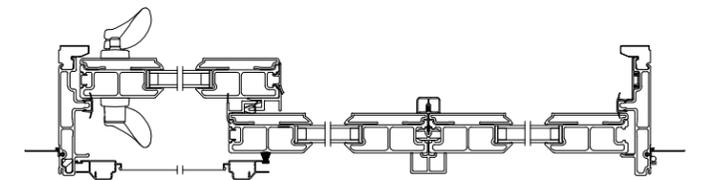
Construction Details 2, 3, and 4 Panel



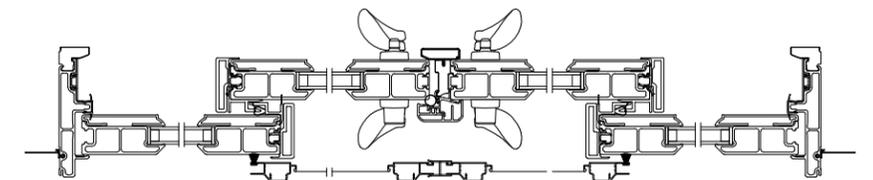
2 Panel Jamb - XO Operator



3 Panel Jamb - OXO Operator



3 Panel Jamb - XOO Operator



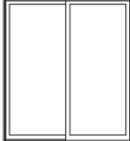
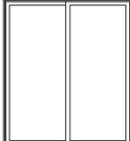
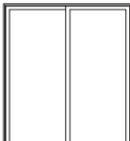
4 Panel Jamb - OXXO Operator

Details and Elevations not to scale.
Special sized units available within product size matrix. See your Marvin retailer.
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Sliding Patio Door

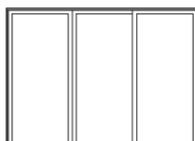
2 Panel

MO (mm)	4-11 1/2 (1511)	5-11 1/2 (1816)	7-11 1/2 (2426)
RO (mm)	5-0 (1524)	6-0 (1829)	8-0 (2438)
FS (mm)	4-11 (1499)	5-11 (1803)	7-11 (2413)
DLO (mm)	2-1 (635)	2-7 (787)	3-7 (1092)

6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 6-0 1/32 (1803)			
	VNSPD5065	VNSPD6065	VNSPD8065
6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 6-2 17/32 (1893)			
	VNSPD5068	VNSPD6068	VNSPD8068
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 7-4 1/32 (2236)			
	VNSPD5080	VNSPD6080	VNSPD8080

3 Panel

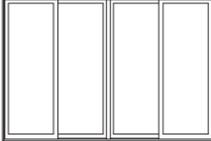
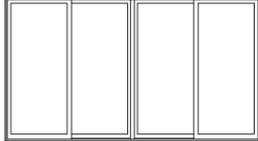
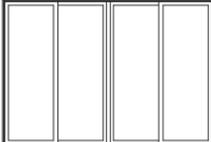
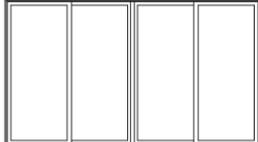
MO (mm)	7-5 (2261)	8-11 (2718)	11-11 (3632)
RO (mm)	7-5 1/2 (2273)	8-11 1/2 (2731)	11-11 1/2 (3645)
FS (mm)	7-4 1/2 (2248)	8-10 1/2 (2705)	11-10 1/2 (3620)
DLO (mm)	2-1 (635)	2-7 (787)	3-7 (1092)

6-7 3/4 (2026) 6-8 (2032) 6-7 1/2 (2019) 6-0 1/32 (1803)			
	VNSPD7665	VNSPD9065	VNSPD12065
6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 6-2 17/32 (1893)			
	VNSPD7668	VNSPD9068	VNSPD12068
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 7-4 1/32 (2236)			
	VNSPD7680	VNSPD9080	VNSPD12080

Sliding Patio Door

4 Panel

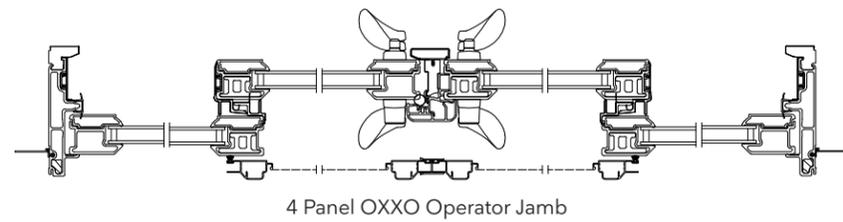
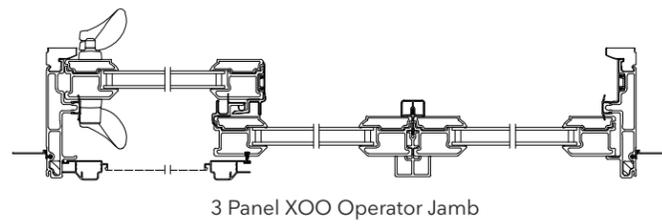
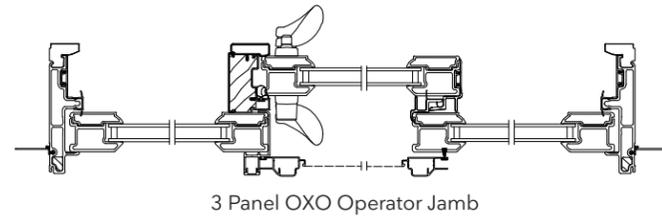
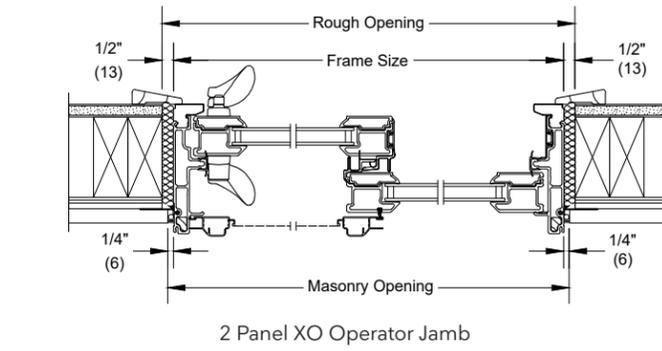
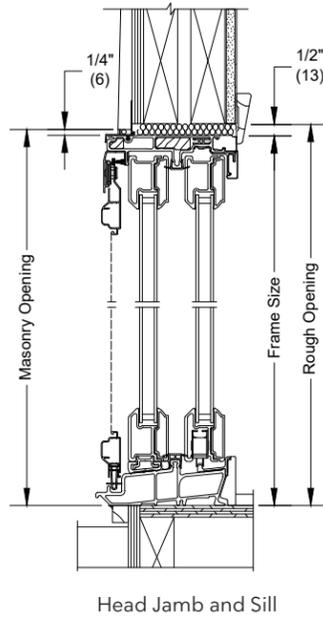
MO (mm)	6-7 3/4 (2026)	6-10 1/4 (2089)	7-11 3/4 (2432)
RO (mm)	6-8 (2032)	6-10 1/2 (2096)	8-0 (2438)
FS (mm)	6-7 1/2 (2019)	6-10 (2083)	7-11 1/2 (2426)
DLO (mm)	2-1 (635)	2-7 (787)	3-7 (1092)

6-10 1/4 (2089) 6-10 1/2 (2096) 6-10 (2083) 6-2 17/32 (1893)			
	VNSPD10065	VNSPD12065	VNSPD16065
7-2 1/4 (2191) 7-2 1/2 (2197) 7-2 (2184) 6-6 17/32 (1995)			
	VNSPD10068	VNSPD12068	VNSPD16068
7-11 3/4 (2432) 8-0 (2438) 7-11 1/2 (2426) 7-4 1/32 (2236)			
	VNSPD10080	VNSPD12080	VNSPD16080

Details and Elevations not to scale.
 Special sized units available within product size matrix. See your Marvin retailer.
 For further details and drawings visit the 'Technical Specifications' section at Marvin.com.

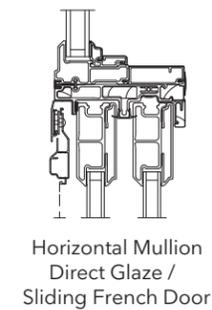
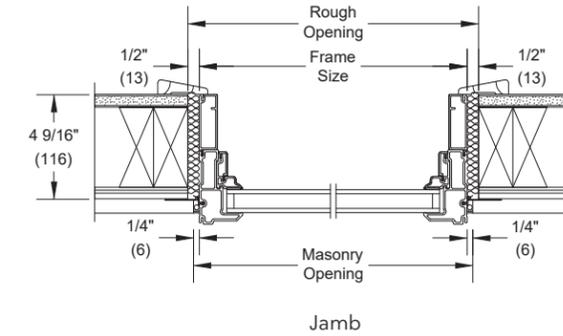
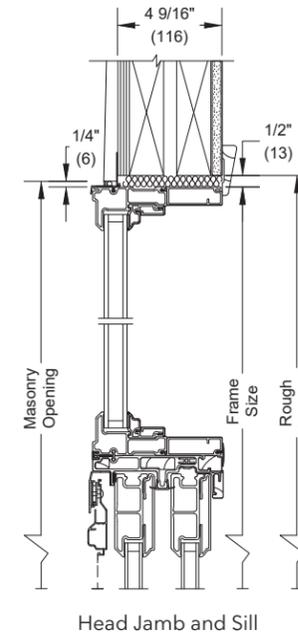
Sliding Patio Door

Construction Details



Door Transom - Direct Glaze

Construction Details



WDMA and Performance Grade (PG)

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. Marvin 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.

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: PG40 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.

Casement	LC-PG50-C
Casement Picture	LC-PG50-FW
Awning	LC-PG50-AP
Direct Glaze	CW-PG50-FW

Sliding Patio Doors	LC-PG40-SD***
Sliding French Doors	LC-PG40-SD****
Inswing French Doors	LC-PG30-SHD
Outswing French Doors	LC-PG50-SHD
Bi-Fold Doors	LC-PG30-FLD

***VSPD 2 and 3 panel call sizes wider than CN60 or taller than CN70 are LC-PG30-SD, VSPD 3 and 4 panel call sizes wider than CN90 are LC-PG25-SD

****VSFD 2 and 3 panel call sizes taller than CN70 or wider than CN90 are LC-PG30-SD, VSFD 4 panel units are LC-PG30-SD, High performance option available for VSFD 2 and 3 panel units up to CN90 widths and CN80 heights which increases design pressure rating of units to LC-PG50-SD



Sound Transmission

PRODUCT TYPE	EXTERIOR GLAZING	AIR SPACE	INTERIOR GLAZING OR CENTER GLAZING	AIRSPACE	INTERIOR GLAZING	STC	OITC
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Casement/Awning

VCA	1/8" (3.1)	1/2" (13.0)	1/8" (3.1)	--	--	29	24
	1/8" (3.1)	7/16" (11.5)	3/16" (4.7)	--	--	32	28
	1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	30	24
	3/16" (4.7)	5/16" (8.0)	5/32" (3.9)	5/16" (8.0)	3/16" (4.7)	30	25
VCAP	1/8" (3.1)	1/2" (13.0)	1/8" (3.1)	--	--	28	24
	1/8" (3.1)	7/16" (11.5)	3/16" (4.7)	--	--	32	27
	1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	28	23
	3/16" (4.7)	5/16" (8.0)	5/32" (3.9)	5/16" (8.0)	3/16" (4.7)	32	26
VAWN	1/8" (3.1)	1/2" (13.0)	1/8" (3.1)	--	--	28	24
	1/8" (3.1)	7/16" (11.5)	3/16" (4.7)	--	--	33	28
	1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	28	23
	3/16" (4.7)	5/16" (8.0)	5/32" (3.9)	5/16" (8.0)	3/16" (4.7)	30	24

Direct Glaze

VDG	1/8" (3.1)	1/2" (13.0)	1/8" (3.1)	--	--	27	23
	1/8" (3.1)	7/16" (11.5)	3/16" (4.7)	--	--	30	26
	1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	3/8" (9.8)	1/8" (3.1)	27	23
	3/16" (4.7)	3/8" (9.8)	3/16" (4.7)	3/8" (9.8)	3/16" (4.7)	32	26

Sliding Patio Door

VNSPD	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)	--	--	30	26

Sliding French Door

VNSFD	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	--	--	28	24
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	--	--	31	27

Inswing French Door

VNIFD	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	--	--	29	24
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	--	--	32	27
	5/32" (3.9)	5/16" (8.0)	9/32" (6.9) SGP laminate	--	--	32	29

Outswing French Door

VNOFD	1/8" (3.1)	17/32" (13.0)	1/8" (3.1)	--	--	30	24
	1/8" (3.1)	15/32" (11.5)	3/16" (4.7)	--	--	32	27
	5/32" (3.9)	5/16" (8.0)	9/32" (6.9) SGP laminate	--	--	32	29

Sound Transmission Class (STC) and Outdoor-Indoor Transmission Class (OITC) values are subject to change. Values are generated in accordance with ASTM E90 and ASTM 1332 test Specifications. Tested glass types available in units using 3.1 mm standard glass thickness. Contact your Marvin retailer for details.

For further details and drawings visit the 'Technical Specifications' section at Marvin.com.

Altitude Guidelines

Casement		Casement - STC/OITC														
ALTITUDE LIMITS (FEET)		ALTITUDE LIMITS (FEET)														
UNIT SIZE	16	18	20	25	26	29	30	36	16	18	20	25	26	29	30	36
16	Annealed	4000	4000	4000	4000	4000	4000	4000	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	5000	5000	7000	7000	7000	7000	3000	4000	5000	6000	6000	6000	6000	6000
18	Annealed	4000	4000	4000	4500	4500	4500	5000	3000	3000	3000	3500	3500	3500	4000	4000
	Tempered	4000	5000	6000	7500	7500	7500	9000	4000	4000	5000	6500	6500	6500	8000	8000
20	Annealed	4000	4000	5000	5000	5000	5000	5000	3000	3000	4000	4000	4000	4000	4000	4000
	Tempered	4000	5000	7000	8000	8000	9000	8000	10000	4000	4000	6000	6000	8000	8000	10000
26	Annealed	4000	4000	5000	6000	6000	7000	7000	3000	3000	4000	5000	5000	5000	5000	5500
	Tempered	6000	6500	7000	10000	10000	10000	10000	5000	5500	7500	8000	9000	9000	9000	9500
30	Annealed	4000	4000	5000	6500	6000	7000	8000	3000	3000	4000	5000	5500	6000	7000	7000
	Tempered	6000	8000	7000	10000	10000	10000	10000	5000	7000	7500	9000	9500	10000	10000	10000
36	Annealed	4000	4000	5000	6500	6000	7500	8000	3000	3000	4000	5000	5500	6500	7000	8000
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	9000	9500	10000	10000	N/A
40	Annealed	4000	4000	5000	7000	6000	7500	8000	3000	3000	4000	5000	5500	6500	7500	8000
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	9500	10000	10000	N/A
46	Annealed	4000	4000	5000	7000	7000	8000	8000	3000	3000	4000	5000	6000	7000	7500	9000
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	N/A
50	Annealed	4000	4000	5000	7000	7000	8000	9000	3000	3000	4000	5000	6000	7000	8000	9000
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	N/A
56	Annealed	4000	4000	5000	7000	7000	9000	9000	3000	3000	4000	5000	6000	N/A	8000	N/A
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	N/A
60	Annealed	4000	4000	5000	6000	7000	7000	9000	3000	3000	4000	N/A	N/A	N/A	N/A	N/A
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	N/A
66	Annealed	4000	4000	5000	6000	7000	9000	10000	3000	3000	4000	N/A	N/A	N/A	N/A	N/A
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	N/A
70	Annealed	4000	4000	5000	6000	7000	9000	10000	3000	3000	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	N/A
76	Annealed	4000	4000	5000	6000	7000	6000	9000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	4000	6000	8000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
80	Annealed	4000	4000	5000	5000	7000	6000	9000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	4000	4000	6000	8000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Altitude Guidelines

Casement Picture		ALTITUDE LIMITS (FEET)																	
UNIT SIZE	16	18	20	25	26	29	30	36	40	46	50	56	60	66	70	76	80		
16	Annealed	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000		
	Tempered	4000	5000	5000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000	5000	5000		
18	Annealed	4000	4000	4000	4500	4500	4500	5000	3000	3000	3000	3000	3000	3000	3000	4000	4000		
	Tempered	4000	5000	6000	7500	7500	7500	9000	4000	4000	5000	6000	6000	6000	9000	7000	7000		
20	Annealed	4000	4000	5000	5000	5000	5000	5000	3000	3000	4000	4000	4000	4000	4000	5000	5000		
	Tempered	4000	5000	7000	8000	8000	9000	8000	10000	4000	4000	6000	6000	8000	8000	9000	9000		
26	Annealed	4000	4000	5000	6000	6000	7000	7000	3000	3000	4000	5000	5000	5000	5000	5500			
	Tempered	6000	6500	7000	10000	10000	10000	10000	5000	5500	7500	8000	9000	9000	9000	9500			
30	Annealed	4000	4000	5000	6500	6000	7000	8000	3000	3000	4000	5000	5500	6000	7000	7000			
	Tempered	6000	8000	7000	10000	10000	10000	10000	5000	7000	7500	9000	9500	10000	10000	10000			
36	Annealed	4000	4000	5000	6500	6000	7500	8000	3000	3000	4000	5000	5500	6500	7000	8000			
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	9000	9500	10000	10000	N/A			
40	Annealed	4000	4000	5000	7000	6000	7500	8000	3000	3000	4000	5000	5500	6500	7500	8000			
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	10000			
46	Annealed	4000	4000	5000	6500	6000	7000	8000	3000	3000	4000	5000	5500	6000	7000	7000			
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	10000			
50	Annealed	4000	4000	5000	7000	7000	8000	9000	3000	3000	4000	5000	6000	7000	8000	9000			
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	10000			
56	Annealed	4000	4000	5000	6500	6000	7500	8000	3000	3000	4000	5000	5500	6500	7000	8000			
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	10000			
60	Annealed	4000	4000	5000	6000	7000	7000	9000	3000	3000	4000	N/A	N/A	N/A	N/A	N/A			
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	10000			
66	Annealed	4000	4000	5000	6000	7000	9000	10000	3000	3000	4000	N/A	N/A	N/A	N/A	N/A			
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	10000			
70	Annealed	4000	4000	5000	6000	7000	9000	10000	3000	3000	N/A	N/A	N/A	N/A	N/A	N/A			
	Tempered	6000	8000	10000	10000	10000	10000	10000	5000	7000	9000	10000	10000	10000	10000	10000			
76	Annealed	4000	4000	5000	6000	7000	6000	9000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	Tempered	4000	6000	8000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
80	Annealed	4000	4000	5000	5000	7000	6000	9000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	Tempered	4000	4000	6000	8000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

Casement - Triple Pane		ALTITUDE LIMITS (FEET)							
UNIT SIZE	16	18	20	25	26	29	30	36	
16	Annealed	3000	3000	3000	3000	3000	3000	3000	
	Tempered	3000	4000	4000	5000	5000	5000	5000	
18	Annealed	3000	3000	3000	3000	3000	3000	3000	
	Tempered	4000	4000	5000	6000	6000	7000	7000	
20	Annealed	3000	3000	4000	4000	4000	4000	4000	
	Tempered	4000	4000	6000	6000	7500	7500	9000	
26	Annealed	3000	3000	4000	4000	5000	5000	5500	
	Tempered	5000	5500	7000	8000	8000	9000	9500	
30	Annealed	3000	3000	4000	4500	5000	5000	6000	
	Tempered	5000	7000	7000	9000	9000	9000	10000	
36	Annealed	3000	3000	4000	4500	5000	5500	6000	
	Tempered	5000	7000	8000	9000	9000	9500	10000	
40	Annealed	3000	3000	4000	5000	5000	6500	7000	
	Tempered	5000	7000	8000	10000	9000	10000	9000	
46	Annealed	3000	3000	4000	5000	5000	6000	8000	
	Tempered	5000	7000	8000	10000	10000	10000	9500	
50	Annealed	3000	3000	4000	5000	5000	6000	8000	
	Tempered	5000	7000	8000	10000	10000	10000	9500	
56	Annealed	3000	3000	4000	5000	5000	6000	8000	
	Tempered	5000	7000	8000	10000	10000	10000	9500	
60	Annealed	3000	3000	4000	5000	5000	6000	9000	
	Tempered	5000	7000	8000	10000	10000	10000	10000	
66	Annealed	3000	3000	4000	5000	5000	6000	8000	
	Tempered	5000	7000	8000	10000	10000	10000	10000	
70	Annealed	3000	3000	4000	5000	5000	6000	8000	
	Tempered	5000	7000	8000	10000	10000	10000	10000	
76	Annealed	3000	4000	4000	4000	5000	5000	8000	
	Tempered	3000	4000	5000	7000	8000	9000	10000	
80	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Tempered	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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 elevation. 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

Altitude Guidelines

Casement Picture - Triple Pane														
ALTITUDE LIMITS (FEET)														
UNIT SIZE	16	18	20	25	26	29	30	36	40	46	50	56	60	
16	Annealed	3000	3000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	3000	4000	5000	7000	7000	7000	7000	7000	7000	7000	7000	7000	5000
18	Annealed	3000	3000	4000	4500	4500	5000	5000	5000	5000	5000	5000	5000	4000
	Tempered	4000	4000	6000	7500	7500	9000	9000	9000	9000	9000	9000	9000	7000
20	Annealed	3000	3000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	4000	4000	6000	6000	7500	7500	9000	9000	9000	9000	9000	9000	5000
26	Annealed	3000	3000	5000	6000	6000	7000	7000	7000	8000	8000	8000	7000	7000
	Tempered	5000	5500	7000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
30	Annealed	3000	3000	4000	4500	5000	6000	6000	6500	6500	7000	7000	6000	N/A
	Tempered	5000	7000	7000	9000	9000	10000	10000	10000	10000	10000	10000	10000	10000
36	Annealed	3000	3000	4000	4500	5000	5500	6000	7000	8000	8500	8500	8000	N/A
	Tempered	5000	7000	8000	9000	9000	10000	9000	10000	10000	10000	10000	10000	10000
40	Annealed	3000	3000	4000	5000	5000	5500	6000	7000	9000	9500	8500	8500	9000
	Tempered	5000	7000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
46	Annealed	3000	3000	4000	5000	5000	6000	6500	8000	9000	10000	9000	9500	N/A
	Tempered	5000	7000	8000	10000	10000	10000	9500	10000	N/A	N/A	N/A	N/A	N/A
50	Annealed	3000	3000	4000	5000	5000	6000	7000	8000	9500	10000	10000	N/A	N/A
	Tempered	5000	7000	8000	10000	10000	10000	10000	9500	10000	N/A	N/A	N/A	N/A
56	Annealed	3000	3000	4000	5000	5000	6000	7000	8000	8500	9500	10000	N/A	N/A
	Tempered	5000	7000	8000	10000	10000	10000	10000	9500	10000	N/A	N/A	N/A	N/A
60	Annealed	3000	3000	4000	5000	5000	6000	7000	9000	8500	9500	10000	N/A	N/A
	Tempered	5000	7000	8000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A
66	Annealed	3000	3000	4000	5000	5000	6000	7000	8000	8500	9500	N/A	N/A	N/A
	Tempered	5000	7000	8000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A
70	Annealed	3000	3000	4000	5000	5000	6000	8000	9000	9500	N/A	N/A	N/A	N/A
	Tempered	5000	7000	8000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A
76	Annealed	3000	4000	4000	4000	5000	6000	8000	9000	N/A	N/A	N/A	N/A	N/A
	Tempered	3000	4000	5000	7000	8000	9000	10000	10000	N/A	N/A	N/A	N/A	N/A
80	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Awning														
ALTITUDE LIMITS (FEET)														
UNIT SIZE	16	18	20	25	26	29	30	36	40	46	50	56	60	
16	Annealed	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	4000	5000	5000	7000	7000	7000	7000	7000	7000	7000	7000	7000	7000
18	Annealed	4000	4000	4000	4500	4500	5000	5000	5000	5000	5000	5000	5000	5000
	Tempered	4000	5000	6000	7500	7500	9000	9000	9000	9000	9000	9000	9000	9000
20	Annealed	4000	4000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
	Tempered	4000	5000	7000	8000	8000	9000	8000	10000	10000	10000	10000	10000	10000
26	Annealed	4000	4000	5000	6000	6000	7000	7000	7000	8000	8000	8000	7000	7000
	Tempered	6000	6500	7000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
30	Annealed	4000	4000	5000	6500	6000	7000	8000	8000	8000	8000	10000	10000	9000
	Tempered	6000	8000	7000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
36	Annealed	4000	4000	5000	6500	6000	7500	8000	10000	10000	10000	10000	9000	10000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
40	Annealed	4000	4000	5000	7000	6000	7500	8000	10000	10000	10000	10000	10000	10000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
46	Annealed	4000	4000	5000	7000	7000	8000	8000	10000	10000	10000	10000	10000	10000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
50	Annealed	4000	4000	5000	7000	7000	8000	9000	10000	10000	10000	10000	10000	10000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
56	Annealed	4000	4000	5000	7000	7000	9000	9000	10000	10000	10000	10000	10000	10000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
60	Annealed	4000	4000	5000	6000	7000	9000	10000	10000	10000	10000	10000	10000	10000
	Tempered	6000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000

Altitude Guidelines

Awning STC/OITC														
ALTITUDE LIMITS (FEET)														
UNIT SIZE	16	18	20	25	26	29	30	36	40	46	50	56	60	
16	Annealed	16	18	20	25	26	29	30	36	40	46	50	56	60
	Tempered	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
18	Annealed	3000	4000	5000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
	Tempered	3000	3000	3000	3500	3500	3500	4000	4000	4000	4000	4000	4000	4000
20	Annealed	4000	4000	5000	6500	6500	6500	8000	8000	8000	8000	8000	8000	8000
	Tempered	3000	3000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
26	Annealed	4000	4000	6000	6000	8000	8000	8000	10000	10000	10000	10000	10000	10000
	Tempered	3000	3000	4000	5000	5000	5000	5000	5000	5500	5500	6000	6000	N/A
30	Annealed	5000	5500	7500	8000	9000	9000	9000	9500	9500	10000	10000	10000	10000
	Tempered	3000	3000	4000	5000	5500	6000	7000	7000	7500	8000	8000	8000	N/A
36	Annealed	5000	7000	7500	9000	9500	10000	10000	10000	10000	10000	10000	10000	10000
	Tempered	3000	3000	4000	5000	5500	6500	7000	8000	9000	9500	9500	N/A	N/A
40	Annealed	5000	7000	9000	9000	9500	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	3000	3000	4000	5000	5500	6500	7500	8000	10000	10000	N/A	N/A	N/A
46	Annealed	5000	7000	9000	10000	9500	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	3000	3000	4000	5000	6000	7000	7500	9000	10000	N/A	N/A	N/A	N/A
50	Annealed	5000	7000	9000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	3000	3000	4000	5000	6000	7000	8000	9000	N/A	N/A	N/A	N/A	N/A
56	Annealed	5000	7000	9000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	3000	3000	4000	5000	6000	N/A	8000	N/A	N/A	N/A	N/A	N/A	N/A
60	Annealed	5000	7000	9000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	3000	3000	4000	N/A									

Awning - Triple Pane														
ALTITUDE LIMITS (FEET)														
UNIT SIZE	16	18	20	25	26	29	30	36	40	46	50	56	60	
16	Annealed	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	3000	4000	4000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
18	Annealed	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
	Tempered	4000	4000	5000	6000	6000	6000	7000	7000	7000	7000	7000	7000	7000
20	Annealed	3000	3000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
	Tempered	4000	4000	6000	6000	7500	7500	9000	9000	9000	9000	9000	9000	9000
26	Annealed	3000	3000	4000	4000	5000	5000	5000	5500	5500	6000	6000	6000	6000
	Tempered	5000	5500	7000	8000	8000	9000	9000	9500	9500	10000	10000	10000	10000
30	Annealed	3000	3000	4000	4500	5000	5000	6000	6000	6500	7000	7000	7000	7000
	Tempered	5000	7000	7000	9000	9000	9000	10000	10000	10000	10000	10000	10000	10000
36	Annealed	3000	3000	4000	4500	5000	5500	6000	7000	8000	8500	8500	9000	9000
	Tempered	5000	7000	8000	9000	9000	9500	10000	9000	10000	10000	10000	10000	10000
40	Annealed	3000												

Altitude Guidelines

Direct Glaze - Triple Pane																					
ALTITUDE LIMITS (FEET)																					
UNIT SIZE	16	18	20	25	26	29	30	36	40	46	50	56	60	66	70	76	80	86	90	96	100
16	Annealed	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	N/A	N/A	N/A
	Tempered	4000	4000	5500	5500	5500	7000	7000	7000	7000	7000	7000	7000	7000	7000	4000	4000	3000	3000	N/A	N/A
18	Annealed	3000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	3000	3000	3000	3000	N/A	N/A	N/A
	Tempered	4000	6000	6000	7000	7000	7000	8000	8000	8000	8000	8000	8000	8000	6000	6000	4000	4000	N/A	N/A	N/A
20	Annealed	3000	4000	4000	4000	4500	4500	5000	5000	5000	5000	5000	5000	5000	4000	4000	4000	4000	N/A	N/A	N/A
	Tempered	5500	6000	7000	7000	8500	8500	8500	10000	10000	10000	10000	10000	10000	7000	7000	5000	5000	N/A	N/A	N/A
26	Annealed	3000	4000	4500	5000	5000	5000	5500	5500	6000	6000	6000	6000	5000	5000	5000	5000	5000	N/A	N/A	N/A
	Tempered	7000	7000	8500	9000	9000	9000	9000	9500	10000	10000	10000	10000	10000	10000	8000	8000	8000	N/A	N/A	N/A
30	Annealed	3000	4000	4500	5500	5000	6000	7000	7000	7500	7500	7500	8000	8000	8000	7000	6000	6000	N/A	N/A	N/A
	Tempered	7000	8000	8500	9500	9000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A
36	Annealed	3000	4000	5000	5500	5500	6500	7000	8000	8000	9000	9000	7500	8000	8000	7000	7000	7000	N/A	N/A	N/A
	Tempered	7000	8000	10000	9500	9500	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A
40	Annealed	3000	4000	5000	5500	5500	6500	7500	8000	10000	10000	9000	9000	9000	9000	10000	9000	N/A	N/A	N/A	N/A
	Tempered	7000	8000	10000	9500	9500	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A
46	Annealed	3000	4000	5000	6000	6000	7000	7500	9000	10000	9000	9000	9000	9500	9500	9000	9000	10000	N/A	N/A	N/A
	Tempered	7000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A
50	Annealed	3000	4000	5000	6000	6000	7000	7500	9000	9000	9000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A
	Tempered	7000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A
56	Annealed	3000	4000	5000	6000	6000	7000	8000	9000	9000	9000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	7000	8000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A						
60	Annealed	3000	4000	5000	6000	6000	7000	8000	8000	9000	9500	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	7000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
66	Annealed	3000	4000	5000	6000	5000	6000	8000	8000	9000	9500	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	7000	8000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
70	Annealed	3000	3000	4000	5000	5000	6000	7000	8000	10000	9000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	4000	6000	7000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
76	Annealed	3000	3000	4000	5000	5000	6000	6000	7000	9000	9000	N/A	N/A	N/A	N/A						
	Tempered	4000	6000	7000	10000	10000	10000	10000	10000	10000	10000	N/A	N/A	N/A	N/A						
80	Annealed	3000	3000	4000	4000	5000	5000	6000	7000	N/A	10000	N/A	N/A	N/A	N/A						
	Tempered	3000	4000	5000	8000	8000	9000	10000	10000	10000	N/A	N/A	N/A	N/A							
86	Annealed	3000	3000	4000	4000	5000	5000	N/A	N/A	N/A	N/A										
	Tempered	3000	4000	5000	8000	8000	9000	10000	10000	10000	N/A	N/A	N/A	N/A							
90	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
96	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
100	Annealed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Altitude Guidelines

Sliding French Door									
ALTITUDE LIMITS (FEET)									
UNIT SIZE	50	60	76	80	90	100	120	160	
65	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
68	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
70	Annealed	N/A							
	Tempered	10000	10000	10000	N/A	10000	10000	10000	N/A
80	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000

Sliding French Door STC							
ALTITUDE LIMITS (FEET)							
UNIT SIZE	50	60	76	90	100	120*	
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
70	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000

*STC is only available on CN120 OXXO units (not CN120 3-panel units)

Inswing French Door							
ALTITUDE LIMITS (FEET)							
UNIT SIZE	26	28	30	50	54	60	
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
70	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
80	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000

Outswing French Door							
ALTITUDE LIMITS (FEET)							
UNIT SIZE	26	28	30	50	54	60	
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
70	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
80	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000

Inswing French Door STC							
ALTITUDE LIMITS (FEET)							
UNIT SIZE	26	28	30	50	54	60	
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
70	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000

Outswing French Door STC							
ALTITUDE LIMITS (FEET)							
UNIT SIZE	26	28	30	50	54	60	
65	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
68	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000
70	Annealed	N/A	N/A	N/A	N/A	N/A	N/A
	Tempered	10000	10000	10000	10000	10000	10000

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.

Altitude Guidelines

Sliding Patio Door									
ALTITUDE LIMITS (FEET)									
	UNIT SIZE	50	60	76	80	90	100	120	160
65	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
68	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
70	Annealed	N/A							
	Tempered	10000	10000	10000	N/A	10000	10000	10000	10000
80	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000

Sliding Patio Door STC									
ALTITUDE LIMITS (FEET)									
	UNIT SIZE	50	60	76	80	90	100	120	160
65	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
68	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000
70	Annealed	N/A							
	Tempered	10000	10000	10000	N/A	10000	10000	10000	10000
80	Annealed	N/A							
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000

Bi-Fold Door															
ALTITUDE LIMITS (FEET)															
	UNIT SIZE	30	34	60	66	90	98	120	128	150	160	178	190	206	220
65	Annealed	N/A													
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
68	Annealed	N/A													
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
70	Annealed	N/A													
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	10000	10000
80	Annealed	N/A													
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000

Bi-Fold Door STC															
ALTITUDE LIMITS (FEET)															
	UNIT SIZE	30	34	60	66	90	98	120	128	150	160	178	190	206	220
65	Annealed	N/A													
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
68	Annealed	N/A													
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
70	Annealed	N/A													
	Tempered	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	N/A	10000	10000
80	Annealed	N/A													
	Tempered	N/A													



Since 1912, Marvin has been a family-owned and -led company, with a legacy of innovation and commitment to the highest quality. We understand the unique opportunity windows and doors have to improve our spaces and how we feel in them. That's why we never stop pushing what's possible and inventing new solutions to channel fresh air, enhance light quality, and connect with the world around us.

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