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**PRODUCT SPECIFICATIONS****EXTERIOR FINISH**

The standard exterior is factory-applied latex primer with an option for unfinished (stain grade) natural pine exterior available.

**AURALAST® WOOD**

AuraLast® wood is fundamentally different from wood treated in traditional millwork preservation processes in that it uses a proprietary vacuum/pressure process to provide protection throughout the wood parts used to make windows and doors. AuraLast® wood is distinguished from wood using traditional preservation methods by its unique ability to achieve greater penetration of the active ingredients into the wood parts, with a minimum treatment penetration of 92%.

**INTERIOR FINISH**

Interior surfaces are unfinished clear pine ready for on-site finishing. Optional prefinished pine interiors include four acrylic colors (Moderate White, Extra White, Natural Choice, Pure White), five stains (Wheat, Cherry, Fruitwood, Cordovan, Cider) and a clear lacquer topcoat. Primed interior is also available.

**FRAME**

Frame is assembled from select kiln-dried pine AuraLast® wood on all exterior parts. Standard jamb width is 4-9/16".

**SASH**

2-3/32" thick select kiln-dried pine AuraLast® wood. The glass is mounted into the sash using a silicone-glazing compound on the exterior and acrylic sealant on the interior, then secured with interior applied profiled wood stops. To accommodate the new nesting crank hardware, the height of the bottom rail on all operable casement, awning, radius and geometric units has been increased to 2-3/32".

**GLAZING**

Insulating glass is constructed from two panes of glass, utilizing a continuous roll formed stainless steel spacer with dual seal sealant. Radius insulating glass is construction of panes of glass utilizing an anodized rectangular spacer. The glass is mounted into the sash using a silicone-glazing compound and secured with interior applied profiled wood stops. All insulating glass units comply with the performance requirements of IGCC in accordance with either ASTM E774 or E2190.

**GLAZING OPTIONS**

Insulating glass available in Low-E with Argon, Low-E, Low-E 366, Clear, Neat Glass, Seedy Reamy, tinted, reflective, or obscure, tempered or other specialty glass as specified. Preserve® film is a 0.003" thick polyethylene film with a low tack acrylic adhesive applied to the glass for protection during shipping and installation. Installations at 4,000 foot elevations and higher require a capillary tube to equalize environmental stress (otherwise known as High Altitude glazing). High Altitude glazing does not allow the use of Argon as listed under glazing options.

**WEATHER-STRIPPING**

Engineered system combines foam lined bulb seal compressed between the interior of the sash and the frame in a continuous plane on all four sides with a secondary bulb seal compressed between the edge of the sash and the frame.

**HARDWARE**

Operating sash are mounted to the frame with corrosion resistant steel hinges. Radius operating sash are mounted into the frame with stainless steel leaf hinges. The operating hardware is made of hardened steel worm gears and a heavy gauge steel-operating arm. The sash is secured with concealed type locking hardware. The interior operator cover, nesting crank handle, and locking handle finish options are White, Chestnut Bronze, Desert Sand, plated Polished Brass, Antique Brass, Polished Chrome, Brushed Chrome and Oil-Rubbed Bronze.

**INTERIOR INSECT SCREENS**

Charcoal fiberglass screen cloth (18x16 mesh) set in painted roll formed aluminum frame fitted to the inside of the window with all necessary hardware, in White, Chestnut Bronze or Desert Sand finishes. Wood veneer screen frames are available in Ponderosa Pine. Insect screens are intended to allow air and light in and to keep insects out. They are not intended to keep anyone or anything from falling through an open window. For safety screens or other security devices contact your local building supply retailer.

**GRILLES**

**SDL** (Simulated Divided Lites) - extruded pre-primed aluminum muntins permanently applied to the exterior of the insulating glass unit (not available on textured glass) in 5/8", 7/8", 1-1/8", or 1-3/8" widths. Profiles are bead stop in all widths, and a putty profile in 5/8", 7/8", and 1-1/8" widths only. SDL is standard with a light bronze internal shadow bar to give a true divided lite appearance. As an option, SDL may be ordered with a silver shadow bar. Clear wood interior muntin bars match the exterior muntin width and are permanently bonded to the interior of the glass. Also available is a 2-5/16" SDL bar, which simulates a double-hung checkrail.

**Full-Surround Removable Wood Grilles** - Rectangular, unfinished interior clear pine wood grilles in 7/8", 1-1/8", and 1-3/8" are available in patterns selected by the owner.

**GBG** (Grilles between the Glass) - 5/8" flat, 23/32" contour, or 1" contour grilles mounted between the glass panes suspended within the air cavity.

**EXTERIOR TRIM**

Brickmould standard with optional 3-1/2", 4-1/2", 5-1/2" flat trim, 3-1/2" Adams and 1 x 4 Backband trim. Optional mull covers to accommodate 1" (spread only), 2", 3-1/2" and 6" spread and stud pocket mull.

**EXTENSION JAMBS**

Extensions are applied to the interior on all four sides of the frame in wall depths up to 9-1/8" for 4/4 and up to 13-11/16" for 5/4, factory applied.

*Continued on next page*

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PRODUCT SPECIFICATIONS

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**INSTALLATION**

Installation per JELD-WEN Installation Method for Wood Windows.  
See [www.jeld-wen.com/resources](http://www.jeld-wen.com/resources) for instructions.

**PERFORMANCE**

**NFRC Certified** - (rated and labeled in accordance with NFRC 100 and 200 procedures)

**ANSI/AAMA/NWDA/101/I.S.2-97**  
**AMMA/WDMA/CSA 101/I.S.2/A440-05**  
**WDMA Hallmark Certified**

See [www.jeld-wen.com](http://www.jeld-wen.com) for architectural and performance information.

**QUICK SPEC GUIDE**

SPECIFICATION	STANDARD FEATURES	OPTIONAL FEATURES <i>Some options may require additional lead times. Consult your JELD-WEN Sales Representative.</i>
<b>EXTERIOR FINISH</b>	<ul style="list-style-type: none"> <li>• Primed</li> </ul>	<ul style="list-style-type: none"> <li>• Natural</li> <li>• Vertical Grain Douglas Fir</li> <li>• Mahogany</li> </ul> <p>Sash Only:</p> <ul style="list-style-type: none"> <li>• Bright Copper*      <i>*Copper is only available when ordered with a clad sash</i></li> <li>• Speckled Patina Copper</li> <li>• Hand Rubbed Patina Copper</li> </ul>
<b>EXTERIOR TRIM</b>	<ul style="list-style-type: none"> <li>• Brickmould &amp; Subsill</li> </ul>	<ul style="list-style-type: none"> <li>• Adams Casing</li> <li>• 3-1/2" Flat Casing</li> <li>• 4-1/2" Flat Casing</li> <li>• 5-1/2" Flat Casing</li> <li>• 1x4 Backband</li> <li>• Extended Sill Nose</li> <li>• Historical Subsill (available on Double-Hung units only)</li> </ul>
<b>INTERIOR WOOD</b>	<ul style="list-style-type: none"> <li>• Western Pine</li> </ul>	<ul style="list-style-type: none"> <li>• Vertical Grain Douglas Fir</li> <li>• Mahogany</li> </ul>
<b>INTERIOR FINISH</b>	<ul style="list-style-type: none"> <li>• Natural</li> </ul>	<ul style="list-style-type: none"> <li>• Priming Available</li> </ul> <p>Pre-finished Interior Options are:</p> <ul style="list-style-type: none"> <li>• Paint - Pure White, Extra White, Natural Choice, Moderate White</li> <li>• Stain - Wheat, Fruitwood, Cherry, Cordovan, Cider</li> <li>• Clear Lacquer</li> </ul>
<b>SIZE</b>	<ul style="list-style-type: none"> <li>• Standard sizes available in Full Rounds, Octagons, Casement Half Rounds, Casement Quarter Rounds, Double-Hung Half Rounds, Twin Double-Hung Half Rounds, Double-Hung Quarter Rounds, In-Swing and Out-Swing Patio Door Half Rounds in both true and replacement sizes.</li> </ul>	<ul style="list-style-type: none"> <li>• Custom sizes and shapes from 6" to 120"</li> <li>• Smallest frame angle is 11 degrees</li> <li>• Smallest frame radius is 9"</li> <li>• Smallest full round is 18" diameter</li> <li>• Operating Geometrics cannot exceed 32" in width, cannot exceed 15 sq. ft., and the short leg must be 2/3 of the overall height.</li> </ul>
<b>GLAZING</b>	<ul style="list-style-type: none"> <li>• Low-E Insulating Glass (with Argon)</li> <li>• Low-E 366</li> <li>• Preserve® Protective Film</li> </ul>	<ul style="list-style-type: none"> <li>• Clear</li> <li>• Obscure</li> <li>• Reflective</li> <li>• Tints: Bronze, Gray, Green</li> <li>• Glue Chip</li> <li>• Safety Laminate in Clear, Bronze or Gray</li> <li>• Neat Glass</li> <li>• Seedy Reamy</li> <li>• Rain</li> <li>• Narrow Reed</li> <li>• Sandblasted</li> <li>• Tempered</li> <li>• Impact Resistant</li> </ul> <p>• High Altitude (Breather Tube, no Argon)</p>

*Continued on next page*

QUICK SPEC GUIDE

SPECIFICATION	STANDARD FEATURES	<b>OPTIONAL FEATURES</b> <i>Some options may require additional lead times. Consult your JELD-WEN Sales Representative.</i>
<b>GRILLES</b>		SDL Bead Profile: <ul style="list-style-type: none"> <li>• 5/8", 7/8", 1-1/8", 1-3/8", 2-5/16" with Light Bronze Shadow Bar</li> <li>• 5/8", 7/8", 1-1/8", 1-3/8", 2-5/16" with Silver Shadow Bar</li> </ul> SDL Putty Profile: <ul style="list-style-type: none"> <li>• 5/8", 7/8" and 1-1/8" with Light Bronze Shadow Bar</li> <li>• 5/8", 7/8" and 1-1/8" with Silver Shadow Bar</li> </ul> GBG (Grilles between the Glass): <ul style="list-style-type: none"> <li>• 5/8" Flat, 23/32" Contour, 1" Contour</li> </ul> Full Surround: <ul style="list-style-type: none"> <li>• 7/8", 1-1/8", 1-3/8"</li> </ul>
<b>HARDWARE</b>		<ul style="list-style-type: none"> <li>• Roto Operator (single arm)</li> <li>• Concealed Locking System</li> </ul>
<b>HARDWARE COLOR</b>		<ul style="list-style-type: none"> <li>• White</li> <li>• Chestnut Bronze</li> <li>• Desert Sand</li> <li>• Polished Brass</li> <li>• Antique Brass</li> <li>• Polished Chrome</li> <li>• Brushed Chrome</li> <li>• Oil-Rubbed Bronze</li> </ul>
<b>JAMB</b>	<ul style="list-style-type: none"> <li>• Applied, 5/4</li> <li>• 4-9/16"</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 9-1/8" 4/4</li> <li>• Up to 13-11/16" 5/4</li> </ul>
<b>INSECT SCREENS</b>	<ul style="list-style-type: none"> <li>• Fiberglass</li> </ul>	<ul style="list-style-type: none"> <li>• Fiberglass</li> </ul>
<b>SCREEN FRAME COLOR</b>		<ul style="list-style-type: none"> <li>• White</li> <li>• Chestnut Bronze</li> <li>• Desert Sand</li> </ul> Wood Veneer (Interior) <ul style="list-style-type: none"> <li>• Ponderosa Pine</li> <li>• Vertical Grain Douglas Fir</li> <li>• Mahogany</li> <li>• Knotty Alder</li> </ul>

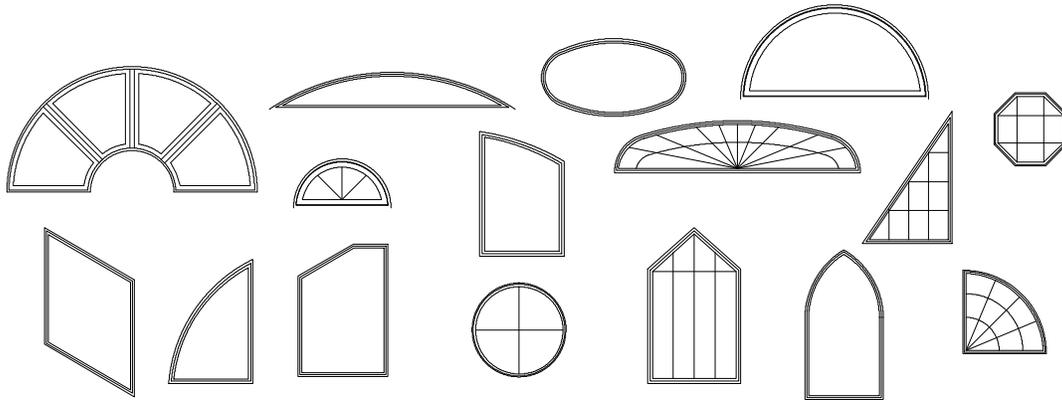
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**GENERAL INFORMATION**

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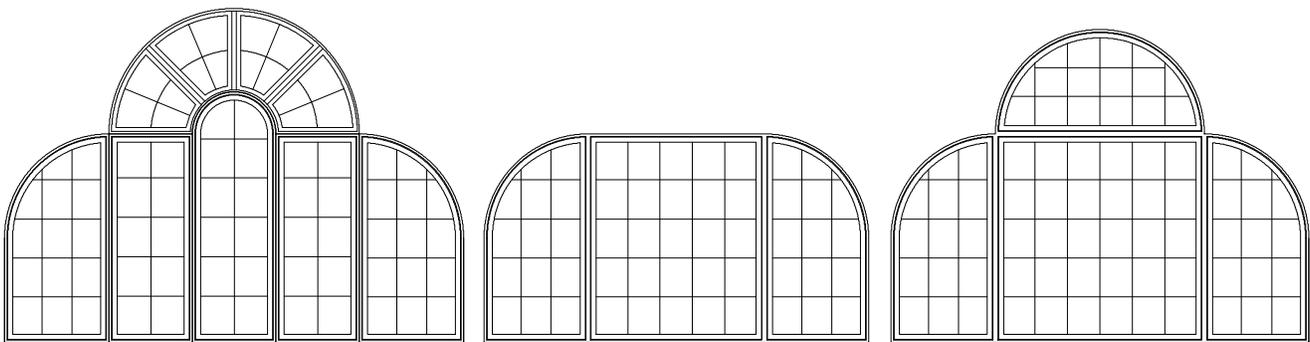
**STANDARD SIZES & DESIGNS**

Wood geometric windows are produced one-at-a-time to customer order, and are available in a nearly infinite range of sizes and shapes. Specified sizes, angles, and radii can be attained in finished units, to meet the most demanding architectural requirements.



**MULTIPLE ASSEMBLIES**

Wood in-sash geometric windows may be mullied above, below, or beside other wood geometric windows, or other wood window or patio door products. Factory assembled mulls are limited in height (100"), width (150"), and a total area (75 square feet).

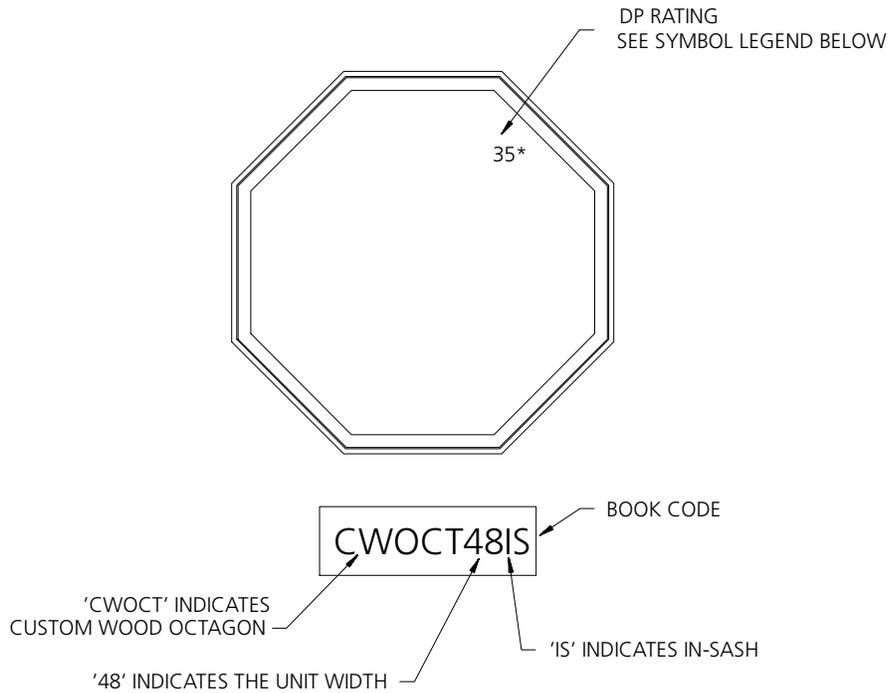


**ELEVATION NOTES**

ELEVATION DRAWINGS UTILIZE A LIMITED NUMBER OF PROJECTED LINES TO PRODUCE A RUDIMENTARY DRAWING INTENDED TO BE USED IN A SMALL GRAPHICAL SCALE. ELEVATIONS ARE VIEWED PERPENDICULAR FROM THE EXTERIOR OF THE STRUCTURE. IF MORE DIMENSIONS ARE NEEDED, USE THE SECTION DRAWINGS FOR MORE COMPLETE DEPICTIONS.

**BOOK CODE DEFINITIONS**

- |     |             |   |
|-----|-------------|---|
| 1.  | WXXHRIS     | WOOD HALF ROUND IN-SASH                           |
| 2.  | WDRXXHRIS   | WOOD DOUBLE-HUNG HALF ROUND IN-SASH               |
| 3.  | WIPDXXHRIS  | WOOD IN-SWING PATIO DOOR HALF ROUND IN-SASH       |
| 4.  | WIPDTXXHRIS | WOOD IN-SWING PATIO DOOR TRUE HALF ROUND IN-SASH  |
| 5.  | WOPDXXHRIS  | WOOD OUT-SWING PATIO DOOR HALF ROUND IN-SASH      |
| 6.  | WOPDTXXHRIS | WOOD OUT-SWING PATIO DOOR TRUE HALF ROUND IN-SASH |
| 7.  | WXXQRIS     | WOOD QUARTER ROUND IN-SASH                        |
| 8.  | WXXFRIS     | WOOD FULL ROUND IN-SASH                           |
| 9.  | WOCTXXIS    | WOOD OCTAGON IN-SASH                              |
| 10. | WDRXXQRIS   | WOOD DOUBLE-HUNG QUARTER ROUND IN-SASH            |



**GENERAL NOTES**

1. UNIT ELEVATIONS ARE SHOWN WITHOUT EXTERIOR TRIM.
2. VALUES IN BRACKETS ARE MILLIMETER CONVERSIONS.
3. HALF ROUNDS, QUARTER ROUNDS AND FULL ROUNDS ARE AVAILABLE AS STATIONARY (FIXED).

**ELEVATION SYMBOL LEGEND:**

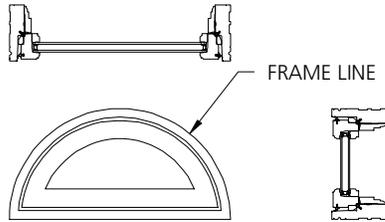
### NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

**ELEVATION NOTES**

**GEOMETRIC ELEVATIONS:**

THE POSSIBLE SHAPES AND CONFIGURATIONS OF GEOMETRIC WINDOWS ARE TOO NUMEROUS TO OFFER IN A DRAWING FORMAT. CREATE THE OUTSIDE FRAME LINES OF THE GEOMETRIC SHAPE DESIRED. REFER TO SECTION DETAILS AND DIMENSIONS TO FIND THE APPROPRIATE OFFSET DIMENSIONS FOR FRAME FEATURES AND DAYLIGHT OPENING. THE FOLLOWING INFORMATION DETAILS THE CREATION OF TRIM AND SUBSILL FOR GEOMETRIC ELEVATIONS.

**STANDARD ELEVATIONS**



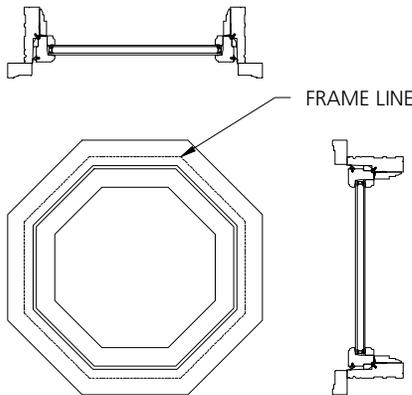
**STANDARD GEOMETRIC ELEVATIONS**

Geometric elevations are drawn as 'Frame Only' (without trim) to simplify mulling and multiple assemblies. Trim and subsill applications can easily be offset from frame lines to create the desired trim and finish.

**MULLING WOOD UNITS**

Wood elevations from other product lines have brickmould shown as the standard offering. Refer to the Section Details & Dimensions page of that product type to determine the offset from brickmould to frame. This will show the outside frame line hidden by the brickmould.

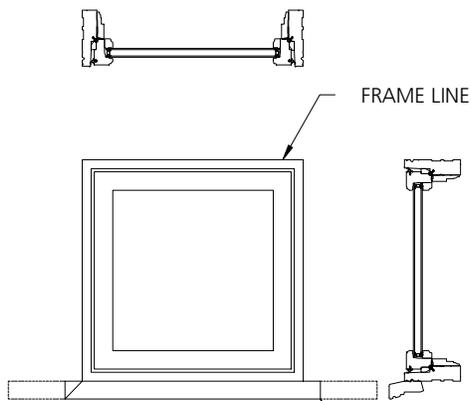
**TRIM - ALL SIDES**



**TRIM - ALL SIDES**

Applying trim to all 4 sides of an elevation is an offset from the frame. See Unit Sizing, Rough Openings & Masonry Openings page for offset dimensions of various trim options.

**SUBSILL**

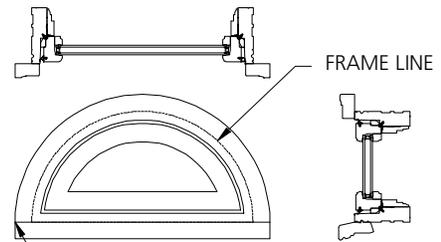


**SUBSILL**

Subsill is applied to the bottom of straight line portions of the window. The subsill is continuous to the outside dimensions of the units frame or trim. The application of subsill will affect the rough opening by adding 1" to the rough opening height. See Unit Sizing, Rough Opening & Masonry Openings page for more information.

**SUBSILL RESTRICTIONS**

Subsill may not be applied to octagon, full round, oval, inverted half round and inverted quarter round units.



SUBSILL EXTENDS TO 1 3/8" [35] OR 6" [152] OUTSIDE THE EDGE OF THE FRAME, UNLESS SPECIFIED OTHERWISE.

SUBSILL EXTENDS TO OUTSIDE EDGE OF THE BRICKMOULD

**FULL ROUND UNITS**

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

23 1/4"(591)  
26 5/16"(668)  
20 3/4"(527)  
20"(508)  
15 13/64"(386)

27 1/4"(692)  
30 5/16"(770)  
24 3/4"(629)  
24"(610)  
19 13/64"(488)

33 1/4"(845)  
36 5/16"(922)  
30 3/4"(781)  
30"(762)  
25 13/64"(640)

35 1/4"(895)  
38 5/16"(973)  
32 3/4"(832)  
32"(813)  
27 13/64"(691)

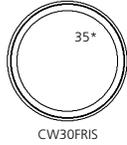
39 1/4"(997)  
42 5/16"(1074)  
36 3/4"(933)  
36"(914)  
31 13/64"(792)



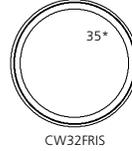
CW20FRIS



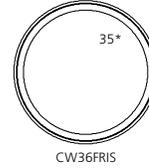
CW24FRIS



CW30FRIS



CW32FRIS



CW36FRIS

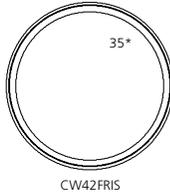
**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

45 1/4"(1149)  
48 5/16"(1227)  
42 3/4"(1086)  
42"(1067)  
37 13/64"(945)

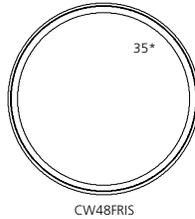
51 1/4"(1302)  
54 5/16"(1379)  
48 3/4"(1238)  
48"(1219)  
43 13/64"(1097)

57 1/4"(1454)  
60 5/16"(1532)  
54 3/4"(1391)  
54"(1372)  
49 13/64"(1250)

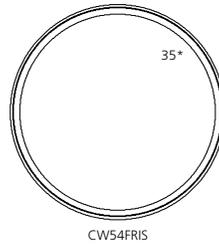
63 1/4"(1607)  
66 5/16"(1684)  
60 3/4"(1543)  
60"(1524)  
55 13/64"(1402)



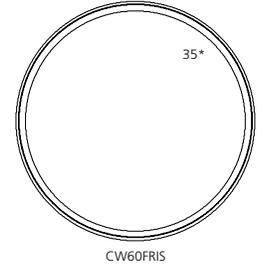
CW42FRIS



CW48FRIS



CW54FRIS



CW60FRIS

**ELEVATION SYMBOL LEGEND:**

**M.O.** = MASONRY OPENING  
VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS.  
##\* NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

**OCTAGON UNITS**

**M.O. BRICKMOULD  
M.O. ADAMS/FLAT CASING  
ROUGH OPENING  
FRAME SIZE  
DAYLIGHT OPENING**

23 1/4"(591)  
26 5/16"(668)  
20 3/4"(527)  
20"(508)  
15 13/64"(386)

27 1/4"(692)  
30 5/16"(770)  
24 3/4"(629)  
24"(610)  
19 13/64"(488)

33 1/4"(845)  
36 5/16"(922)  
30 3/4"(781)  
30"(762)  
25 13/64"(640)

35 1/4"(895)  
38 5/16"(973)  
32 3/4"(832)  
32"(813)  
27 13/64"(691)



CWOCT20IS



CWOCT24IS



CWOCT30IS



CWOCT32IS

**M.O. BRICKMOULD  
M.O. ADAMS/FLAT CASING  
ROUGH OPENING  
FRAME SIZE  
DAYLIGHT OPENING**

39 1/4"(997)  
42 5/16"(1074)  
36 3/4"(933)  
36"(914)  
31 13/64"(793)

45 1/4"(1149)  
48 5/16"(1227)  
42 3/4"(1086)  
42"(1067)  
37 13/64"(945)

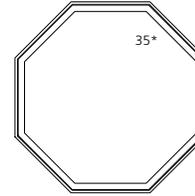
51 1/4"(1302)  
54 5/16"(1379)  
48 3/4"(1238)  
48"(1219)  
43 13/64"(1097)



CWOCT36IS



CWOCT42IS



CWOCT48IS

**ELEVATION SYMBOL LEGEND:**

**M.O.** = MASONRY OPENING  
VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS.  
### NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

**CASEMENT HALF ROUND UNITS**

**M.O. BRICKMOLD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

21 1/4"(540)  
24 5/16"(617)  
18 3/4"(476)  
18"(457)  
12 19/64"(312)

23 1/4"(591)  
26 5/16"(668)  
20 3/4"(527)  
20"(508)  
14 19/64"(363)

27 1/4"(692)  
30 5/16"(770)  
24 3/4"(629)  
24"(610)  
18 19/64"(464)

31 1/4"(794)  
34 5/16"(871)  
28 3/4"(730)  
28"(711)  
22 19/64"(566)

33 1/4"(845)  
36 5/16"(922)  
30 3/4"(781)  
30"(762)  
24 19/64"(617)

12 5/16"(313)  
13 7/8"(352)  
10 3/4"(273)  
9"(229)  
4 13/64"(107)



CW18HRIS

13 5/16"(338)  
14 7/8"(378)  
11 3/4"(298)  
10"(254)  
5 13/64"(132)



CW20HRIS

15 5/16"(389)  
16 7/8"(429)  
13 3/4"(349)  
12"(305)  
7 13/64"(183)



CW24HRIS

17 5/16"(440)  
18 7/8"(479)  
15 3/4"(400)  
14"(229)  
9 13/64"(234)



CW28HRIS

18 5/16"(465)  
19 7/8"(505)  
16 3/4"(425)  
15"(381)  
10 13/64"(259)



CW30HRIS

**M.O. BRICKMOLD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

35 1/4"(895)  
38 5/16"(973)  
32 3/4"(832)  
32"(813)  
26 19/64"(668)

39 1/4"(997)  
42 5/16"(1074)  
36 3/4"(933)  
36"(914)  
30 19/64"(769)

43 1/4"(1099)  
46 5/16"(1176)  
40 3/4"(1035)  
40"(1016)  
34 19/64"(871)

45 1/4"(1149)  
48 5/16"(1227)  
42 3/4"(1086)  
42"(1067)  
36 19/64"(922)

19 5/16"(491)  
20 7/8"(530)  
17 3/4"(451)  
16"(406)  
11 13/64"(284)



CW32HRIS

21 5/16"(541)  
22 7/8"(581)  
19 3/4"(502)  
18"(457)  
13 13/64"(335)



CW36HRIS

23 5/16"(592)  
24 7/8"(632)  
21 3/4"(552)  
20"(508)  
15 13/64"(386)



CW40HRIS

24 5/16"(618)  
25 7/8"(657)  
22 3/4"(578)  
21"(533)  
16 13/64"(412)



CW42HRIS

**M.O. BRICKMOLD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

51 1/4"(1302)  
54 5/16"(1379)  
48 3/4"(1238)  
48"(1219)  
42 19/64"(1074)

57 1/4"(1454)  
60 5/16"(1532)  
54 3/4"(1391)  
54"(1372)  
48 19/64"(1227)

59 1/4"(1505)  
62 5/16"(1582)  
56 3/4"(1441)  
56"(1422)  
50 19/64"(1278)

28 7/8"(733)  
27 5/16"(694)  
25 3/4"(654)  
24"(610)  
19 13/64"(488)



CW48HRIS

30 5/16"(770)  
31 7/8"(810)  
28 3/4"(730)  
27"(686)  
22 13/64"(564)



CW54HRIS

31 5/16"(795)  
32 7/8"(835)  
29 3/4"(756)  
28"(711)  
23 13/64"(589)



CW56HRIS

**M.O. BRICKMOLD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

63 1/4"(1607)  
66 5/16"(1684)  
60 3/4"(1543)  
60"(1524)  
54 19/64"(1379)

67 1/4"(1708)  
70 5/16"(1786)  
64 3/4"(1645)  
64"(1626)  
58 19/64"(1481)

69 1/4"(1759)  
72 5/16"(1836)  
66 3/4"(1695)  
66"(1676)  
60 19/64"(1531)

33 5/16"(846)  
34 7/8"(886)  
31 3/4"(806)  
30"(762)  
25 13/64"(640)



CW60HRIS

35 5/16"(897)  
36 7/8"(937)  
33 3/4"(857)  
32"(813)  
27 13/64"(691)



CW64HRIS

36 5/16"(922)  
37 7/8"(962)  
34 3/4"(883)  
33"(838)  
28 13/64"(716)



CW66HRIS

**M.O. BRICKMOLD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

75 1/4"(1911)  
78 5/16"(1989)  
72 3/4"(1848)  
72"(1829)  
66 19/64"(1684)

87 1/4"(2216)  
90 5/16"(2294)  
84 3/4"(2153)  
84"(2134)  
78 19/64"(1989)

39 5/16"(999)  
40 7/8"(1038)  
37 3/4"(959)  
36"(914)  
31 13/64"(793)



CW72HRIS

45 5/16"(1151)  
46 7/8"(1191)  
43 3/4"(1111)  
42"(1067)  
37 13/64"(945)



CW84HRIS

**M.O. BRICKMOLD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

93 1/4"(2369)  
96 5/16"(2446)  
90 3/4"(2305)  
90"(2286)  
84 19/64"(2141)

99 1/4"(2521)  
102 5/16"(2598)  
96 3/4"(2457)  
96"(2438)  
90 19/64"(2294)

48 5/16"(1227)  
49 7/8"(1267)  
46 3/4"(1187)  
45"(1143)  
40 13/64"(1021)



CW90HRIS

51 5/16"(1303)  
52 7/8"(1343)  
49 3/4"(1264)  
48"(1219)  
43 13/64"(1097)



CW96HRIS

**ELEVATION SYMBOL LEGEND:**

**M.O.** = MASONRY OPENING  
VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS.  
### NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

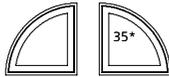
SCALE: 1/4" = 1'

**CASEMENT QUARTER ROUND UNITS**

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

21 1/4" (540)  
24 5/16" (617)  
18 3/4" (476)  
18" (457)  
13 1/64" (331)

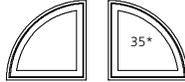
21 5/16" (541)  
22 7/8" (581)  
19 3/4" (502)  
18" (457)  
13 1/64" (331)



CW18QRIS

23 1/4" (591)  
26 5/16" (668)  
20 3/4" (527)  
20" (508)  
15 1/64" (381)

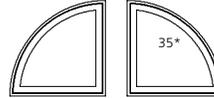
23 5/16" (592)  
24 7/8" (632)  
21 3/4" (552)  
20" (508)  
15 1/64" (381)



CW20QRIS

27 1/4" (692)  
30 5/16" (770)  
24 3/4" (629)  
24" (610)  
19 1/64" (483)

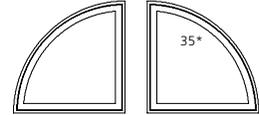
27 5/16" (694)  
28 7/8" (733)  
25 3/4" (654)  
24" (610)  
19 1/64" (483)



CW24QRIS

31 1/4" (794)  
34 5/16" (871)  
28 3/4" (730)  
28" (711)  
23 1/64" (585)

31 5/16" (795)  
32 7/8" (835)  
29 3/4" (756)  
28" (711)  
23 1/64" (585)

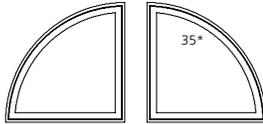


CW28QRIS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

33 1/4" (845)  
36 5/16" (922)  
30 3/4" (781)  
30" (762)  
25 1/64" (635)

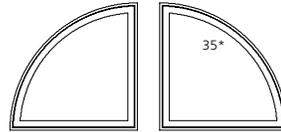
33 5/16" (846)  
34 7/8" (886)  
31 3/4" (806)  
30" (762)  
25 1/64" (635)



CW30QRIS

35 1/4" (895)  
38 5/16" (973)  
32 3/4" (832)  
32" (813)  
27 1/64" (686)

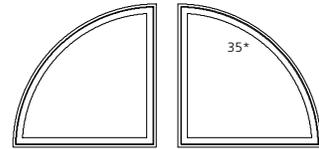
35 5/16" (897)  
36 7/8" (937)  
33 3/4" (857)  
32" (813)  
27 1/64" (686)



CW32QRIS

39 1/4" (997)  
42 5/16" (1074)  
36 3/4" (933)  
36" (914)  
31 1/64" (788)

39 5/16" (999)  
40 7/8" (1038)  
37 3/4" (959)  
36" (914)  
31 1/64" (788)

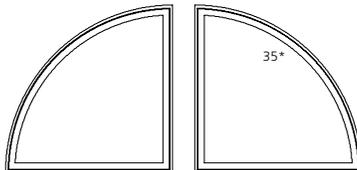


CW36QRIS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

45 1/4" (1149)  
48 5/16" (1227)  
42 3/4" (1086)  
42" (1067)  
37 1/64" (940)

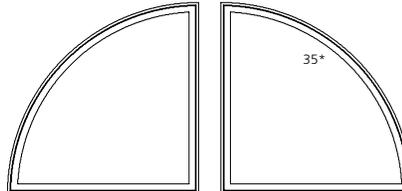
45 5/16" (1151)  
46 7/8" (1191)  
43 3/4" (1111)  
42" (1067)  
37 1/64" (940)



CW42QRIS

51 1/4" (1302)  
54 5/16" (1379)  
48 3/4" (1238)  
48" (1219)  
43 1/64" (1093)

51 5/16" (1303)  
52 7/8" (1343)  
49 3/4" (1264)  
48" (1219)  
43 1/64" (1093)



CW48QRIS

**ELEVATION SYMBOL LEGEND:**

**M.O.** = MASONRY OPENING

VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS.

### NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

SCALE: 1/4" = 1'

### DOUBLE-HUNG HALF ROUND UNITS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

24 5/8" (625)  
27 11/16" (703)  
22 1/8" (562)  
21 3/8" (543)  
15 55/64" (403)

28 5/8" (727)  
31 11/16" (805)  
26 1/8" (664)  
25 3/8" (645)  
19 55/64" (504)

32 5/8" (829)  
35 11/16" (906)  
30 18" (765)  
29 3/8" (746)  
23 55/64" (606)

36 5/8" (930)  
39 11/16" (1008)  
34 1/8" (867)  
33 3/8" (848)  
27 55/64" (708)

40 5/8" (1032)  
43 11/16" (1109)  
38 1/8" (968)  
37 3/8" (949)  
31 55/64" (809)

14" (365)  
15 9/16" (395)  
12 7/16" (316)  
10 11/16" (271)  
5 57/64" (150)



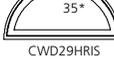
CWD25HRIS

16" (406)  
17 9/16" (446)  
14 7/16" (367)  
12 11/16" (322)  
7 57/64" (200)



CWD29HRIS

18" (457)  
19 9/16" (497)  
16 7/16" (417)  
14 11/16" (373)  
9 57/64" (251)



CWD29HRIS

20" (508)  
21 9/16" (548)  
18 7/16" (468)  
16 11/16" (424)  
11 57/64" (302)



CWD33HRIS

22" (559)  
23 9/16" (598)  
20 7/16" (519)  
18 11/16" (475)  
13 57/64" (353)



CWD37HRIS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

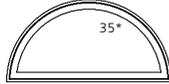
44 5/8" (1133)  
47 11/16" (1211)  
42 1/8" (1070)  
41 3/8" (1051)  
35 55/64" (911)

48 5/8" (1235)  
51 11/16" (1313)  
46 1/8" (1172)  
45 3/8" (1153)  
39 55/64" (1012)

46" (1168)  
49 1/16" (1246)  
43 1/2" (1105)  
42 3/4" (1086)  
37 41/64" (956)

54" (1372)  
57 1/16" (1449)  
51 1/2" (1308)  
50 3/4" (1289)  
45 41/64" (1156)

24" (610)  
25 9/16" (649)  
22 7/16" (570)  
19 11/16" (500)  
15 57/64" (404)



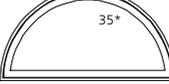
CWD41HRIS

26" (660)  
27 9/16" (700)  
24 7/16" (621)  
22 11/16" (614)  
17 57/64" (454)



CWD45HRIS

24 11/16" (627)  
26 1/4" (667)  
23 1/8" (587)  
21 3/8" (543)  
16 37/64" (421)



CWD21-2HRIS

28 11/16" (729)  
30 1/4" (768)  
27 1/8" (689)  
25 3/8" (645)  
20 37/64" (523)



CWD25-2HRIS

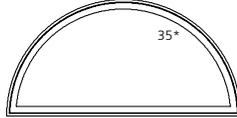
**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

62" (1575)  
65 1/16" (1652)  
59 1/2" (1511)  
58 3/4" (1492)  
53 41/64" (1363)

70" (1778)  
73 1/16" (1855)  
67 1/2" (1715)  
66 3/4" (1695)  
61 41/64" (1566)

78" (1981)  
81 1/16" (2059)  
75 1/2" (1918)  
74 3/4" (1899)  
69 41/64" (1769)

32 11/16" (830)  
34 1/4" (870)  
31 1/8" (791)  
29 3/8" (746)  
24 37/64" (624)



CWD29-2HRIS

36 11/16" (932)  
38 1/4" (972)  
35 1/8" (892)  
33 3/8" (848)  
28 37/64" (726)



CWD33-2HRIS

40 11/16" (1033)  
42 1/4" (1073)  
39 1/8" (994)  
37 3/8" (949)  
32 37/64" (827)



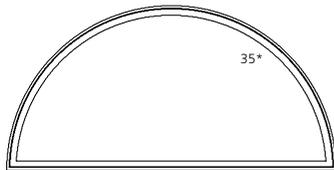
CWD37-2HRIS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

86" (2184)  
89 1/16" (2262)  
83 1/2" (2121)  
82 3/4" (2102)  
77 41/64" (1972)

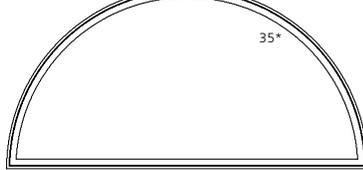
94" (2388)  
97 1/16" (2465)  
91 1/2" (2324)  
90 3/4" (2305)  
85 41/64" (2175)

44 11/16" (1135)  
46 1/4" (1175)  
43 1/8" (1095)  
41 3/8" (1051)  
36 37/64" (929)



CWD41-2HRIS

48 11/16" (1237)  
50 1/4" (1276)  
47 1/8" (1197)  
45 3/8" (1153)  
40 37/64" (1031)



CWD45-2HRIS

**ELEVATION SYMBOL LEGEND:**

**M.O.** = MASONRY OPENING

VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS.

**##\*** NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

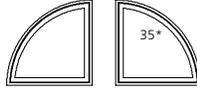
SCALE: 1/4" = 1'

**DOUBLE-HUNG QUARTER ROUND UNITS**

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

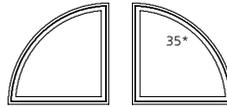
24 5/8" (625)  
27 11/16" (703)  
22 1/8" (562)  
21 3/8" (543)  
17 1/2" (445)

24 11/16" (627)  
26 1/4" (667)  
23 1/8" (587)  
21 3/8" (543)  
17 1/2" (445)



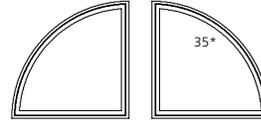
CWD21QRIS

28 11/16" (729)  
30 1/4" (768)  
27 1/8" (689)  
25 3/8" (645)  
21 1/2" (546)



CWD25QRIS

32 11/16" (830)  
34 1/4" (870)  
31 1/8" (791)  
29 3/8" (746)  
25 1/2" (648)

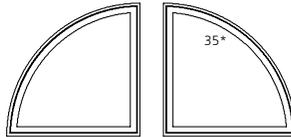


CWD29QRIS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

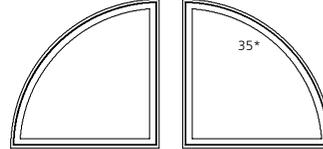
36 5/8" (930)  
39 11/16" (1008)  
34 1/8" (867)  
33 3/8" (848)  
29 1/2" (749)

36 11/16" (932)  
38 1/4" (972)  
35 1/8" (892)  
33 3/8" (848)  
29 1/2" (749)



CWD33QRIS

40 11/16" (1033)  
42 1/4" (1073)  
39 1/8" (994)  
37 3/8" (949)  
33 1/2" (851)



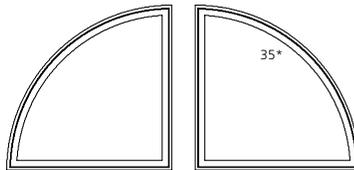
CWD37QRIS

40 5/8" (1032)  
43 11/16" (1109)  
38 1/8" (968)  
37 3/8" (949)  
33 1/2" (851)

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

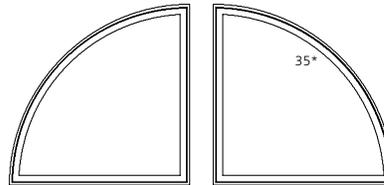
44 5/8" (1133)  
47 11/16" (1211)  
42 1/8" (1070)  
41 3/8" (1051)  
37 1/2" (953)

44 11/16" (1135)  
46 1/4" (1175)  
43 1/8" (1095)  
41 3/8" (1051)  
37 1/2" (953)



CWD41QRIS

48 11/16" (1237)  
50 1/4" (1276)  
47 1/8" (1197)  
45 3/8" (1153)  
41 1/2" (1054)



CWD45QRIS

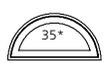
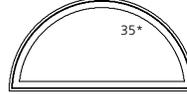
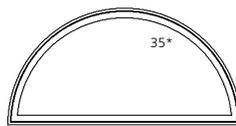
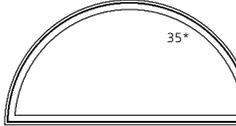
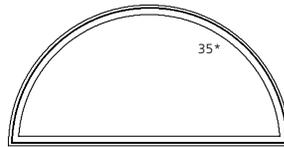
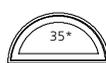
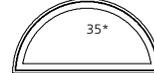
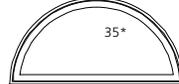
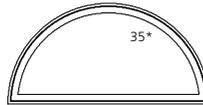
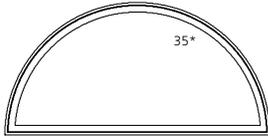
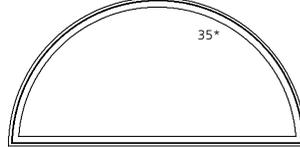
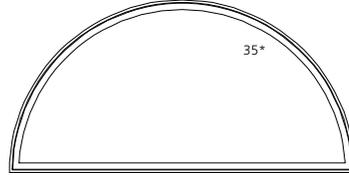
**ELEVATION SYMBOL LEGEND:**

**M.O.** = MASONRY OPENING  
VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS.  
**##\*** NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

SCALE: 1/4" = 1'

### IN-SWING PATIO DOOR HALF ROUND UNITS

<b>M.O. BRICKMOULD</b> <b>M.O. ADAMS/FLAT CASING</b> <b>ROUGH OPENING</b> <b>FRAME SIZE</b> <b>DAYLIGHT OPENING</b>	26 11/16" (678) 29 3/4" (755) 24 3/16" (614) 23 7/16" (595) 18 1/64" (458)	32 11/16" (830) 35 3/4" (908) 30 3/16" (767) 29 7/16" (748) 24 1/64" (610)	34 11/16" (881) 37 3/4" (959) 32 3/16" (818) 31 7/16" (799) 26 1/64" (661)	38 11/16" (983) 41 3/4" (1060) 36 3/16" (919) 35 7/16" (900) 30 1/64" (762)	49 11/16" (1267) 52 3/4" (1344) 47 3/8" (1197) 46 5/16" (1184) 41 1/64" (1042)
15 1/16" (382) 16 5/8" (421) 13 1/2" (343) 11 3/4" (298) 6 59/64" (176)	 CWIPD20HRIS	 CWIPD26HRIS	 CWIPD28HRIS	 CWIPD30HRIS	 CWIPD40HRIS
<b>M.O. BRICKMOULD</b> <b>M.O. ADAMS/FLAT CASING</b> <b>ROUGH OPENING</b> <b>FRAME SIZE</b> <b>DAYLIGHT OPENING</b>	61 7/8" (1572) 64 15/16" (1649) 59 3/8" (1508) 58 5/8" (1489) 53 39/64" (1362)	65 7/8" (1673) 68 15/16" (1751) 63 3/8" (1610) 62 5/8" (1591) 57 39/64" (1463)	73 7/8" (1876) 76 15/16" (1954) 71 3/8" (1813) 70 5/8" (1794) 65 39/64" (1666)		
32 5/8" (829) 34 3/16" (868) 31 1/16" (789) 29 5/16" (745) 24 33/64" (623)	 CWIPD50HRIS	 CWIPD54HRIS	 CWIPD60HRIS		
<b>M.O. BRICKMOULD</b> <b>M.O. ADAMS/FLAT CASING</b> <b>ROUGH OPENING</b> <b>FRAME SIZE</b> <b>DAYLIGHT OPENING</b>	28 11/16" (729) 31 3/4" (806) 26 3/16" (665) 25 7/16" (646) 20 5/64" (510)	36 11/16" (932) 39 3/4" (1009) 34 3/16" (886) 33 7/16" (849) 28 5/64" (713)	40 11/16" (1033) 43 3/4" (1111) 38 3/16" (970) 37 7/16" (951) 32 5/64" (815)	46 11/16" (1186) 49 3/4" (1263) 44 3/16" (1122) 43 7/16" (1103) 38 5/64" (967)	
16 1/16" (407) 17 5/8" (447) 14 1/2" (368) 12 3/4" (323) 7 59/64" (201)	 CWIPDT20HRIS	 CWIPDT28HRIS	 CWIPDT30HRIS	 CWIPDT36HRIS	
<b>M.O. BRICKMOULD</b> <b>M.O. ADAMS/FLAT CASING</b> <b>ROUGH OPENING</b> <b>FRAME SIZE</b> <b>DAYLIGHT OPENING</b>	53 7/8" (1368) 56 15/16" (1446) 51 3/8" (1305) 50 5/8" (1286) 45 37/64" (1158)	69 7/8" (1775) 72 15/16" (1852) 67 3/8" (1711) 66 5/8" (1692) 61 37/64" (1564)	77 7/8" (1978) 80 15/16" (2055) 75 3/8" (1915) 74 5/8" (1895) 69 37/64" (1767)		
28 1/16" (727) 30 5/8" (767) 27 1/16" (687) 25 5/16" (643) 20 59/64" (531)	 CWIPDT40HRIS	 CWIPDT54HRIS	 CWIPDT60HRIS		
<b>M.O. BRICKMOULD</b> <b>M.O. ADAMS/FLAT CASING</b> <b>ROUGH OPENING</b> <b>FRAME SIZE</b> <b>DAYLIGHT OPENING</b>	89 7/8" (2283) 92 15/16" (2360) 87 3/8" (2219) 86 5/8" (2200) 81 37/64" (2072)				
46 5/8" (1184) 48 3/16" (1224) 45 1/16" (1145) 43 5/16" (1100) 38 33/64" (978)	 CWIPDT70HRIS				

**ELEVATION SYMBOL LEGEND:**

M.O. = MASONRY OPENING  
 VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS.  
 ##\* NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

SCALE: 1/4" = 1'

### OUT-SWING PATIO DOOR HALF ROUND UNITS

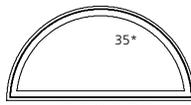
**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

50 7/16" (1281)  
53 1/2" (1359)  
47 15/16" (1218)  
47 3/16" (1199)  
42 7/64" (1070)

62 7/16" (1586)  
65 1/2" (1663)  
59 15/16" (1522)  
59 3/16" (1503)  
54 7/64" (1374)

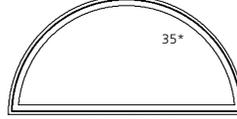
66 7/16" (1688)  
69 1/2" (1765)  
63 15/16" (1624)  
63 3/16" (1605)  
58 7/64" (1476)

26 1 5/16" (683)  
28 7/8" (723)  
28 3/8" (722)  
23 5/8" (698)  
18 5/164" (477)



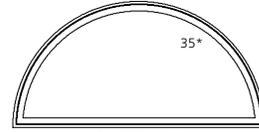
CWOPD40HRIS

32 1 5/16" (836)  
34 1/2" (890)  
30 3/8" (772)  
29 5/8" (752)  
24 5 1/64" (630)



CWOPD50HRIS

34 1 5/16" (887)  
36 1/2" (926)  
32 3/8" (822)  
31 5/8" (802)  
26 5 1/64" (681)

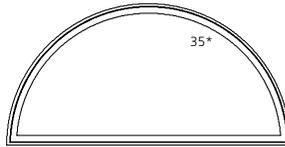


CWOPD54HRIS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

74 7/16" (1891)  
77 1/2" (1968)  
71 15/16" (1827)  
71 3/16" (1808)  
66 7/64" (1679)

38 1 5/16" (988)  
40 1 7/8" (1028)  
40 3/8" (1014)  
35 5/8" (904)  
30 5 1/64" (782)



CWOPD60HRIS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

29 1/4" (743)  
32 5/16" (820)  
26 3/4" (679)  
26" (660)  
20 19/32" (523)

37 1/4" (946)  
40 5/16" (1024)  
34 3/4" (883)  
34" (864)  
28 19/32" (726)

41 1/4" (1048)  
44 5/16" (1125)  
38 3/4" (984)  
38" (965)  
32 19/32" (828)

47 1/4" (1200)  
50 5/16" (1278)  
44 3/4" (1137)  
44" (1118)  
38 19/32" (980)

16 5/16" (414)  
17 7/8" (454)  
13 7/8" (358)  
13 3/32" (332)  
8 13/64" (208)



CWOPDT20HRIS

20 5/16" (516)  
21 7/8" (556)  
17 3/4" (451)  
17" (432)  
12 13/64" (310)



CWOPDT28HRIS

22 5/16" (567)  
23 7/8" (606)  
19 3/4" (502)  
19" (483)  
14 13/64" (361)



CWOPDT30HRIS

25 5/16" (643)  
26 7/8" (683)  
22 3/4" (578)  
22" (559)  
17 13/64" (437)



CWOPDT36HRIS

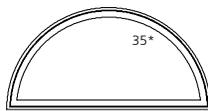
**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

54 7/16" (1383)  
57 1/2" (1460)  
51 15/16" (1319)  
51 3/16" (1300)  
46 7/64" (1171)

70 7/16" (1789)  
73 1/2" (1867)  
67 15/16" (1726)  
67 3/16" (1707)  
62 7/64" (1578)

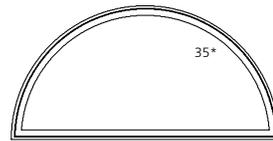
78 7/16" (1992)  
81 1/2" (2070)  
75 15/16" (1929)  
75 3/16" (1910)  
70 7/64" (1781)

28 1 5/16" (734)  
30 7/8" (774)  
30 3/8" (750)  
25 5/8" (650)  
20 51/64" (528)



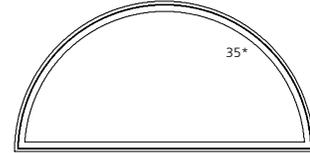
CWOPDT40HRIS

36 1 5/16" (938)  
38 1/2" (978)  
34 3/8" (873)  
33 5/8" (854)  
28 5 1/64" (731)



CWOPDT54HRIS

40 1 5/16" (1039)  
42 1/2" (1079)  
38 3/8" (975)  
37 5/8" (955)  
32 5 1/64" (833)

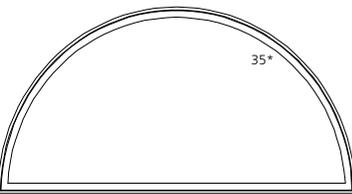


CWOPDT60HRIS

**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

90 7/16" (2297)  
93 1/2" (2375)  
87 15/16" (2234)  
87 3/16" (2215)  
82 7/64" (2086)

46 1 5/16" (1191)  
48 7/8" (1231)  
48 3/8" (1171)  
43 5/8" (1107)  
38 5 1/64" (985)



CWOPDT70HRIS

**ELEVATION SYMBOL LEGEND:**

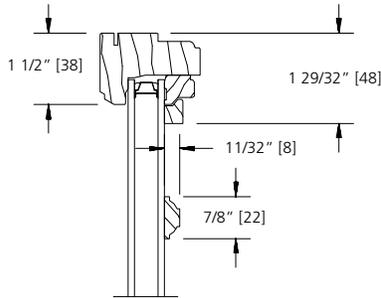
**M.O.** = MASONRY OPENING  
VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS.  
## = NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

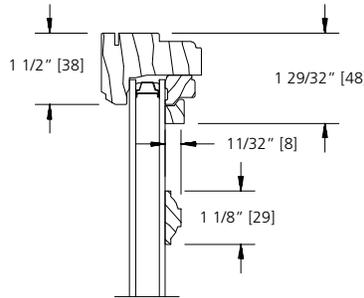
SCALE: 1/4" = 1'

**GLAZING OPTIONS**

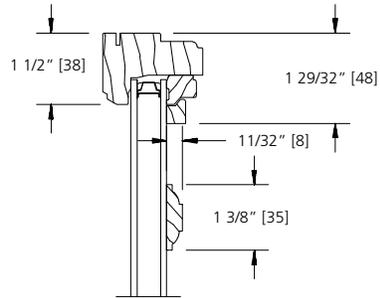
**INTERIOR GLAZED**  
INSULATED 3/4" [19] GLASS



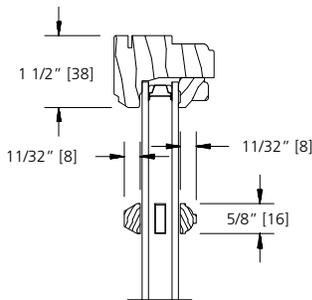
**7/8" GRILLE BAR**



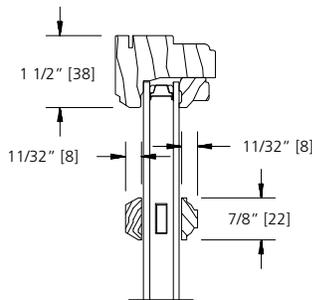
**1 1/8" GRILLE BAR**



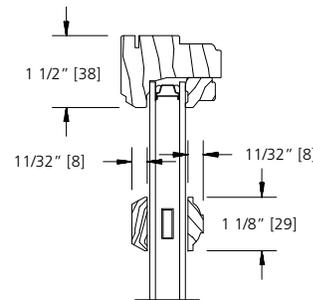
**1 3/8" GRILLE BAR**



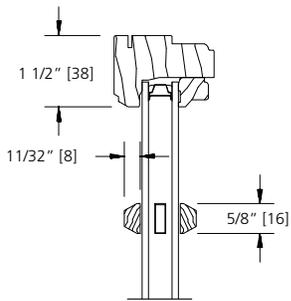
**5/8" SDL BAR  
(PUTTY/BEAD)**



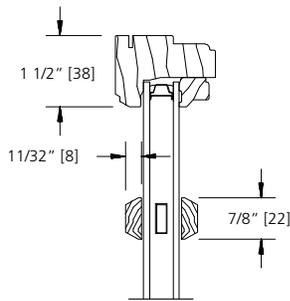
**7/8" SDL BAR  
(PUTTY/BEAD)**



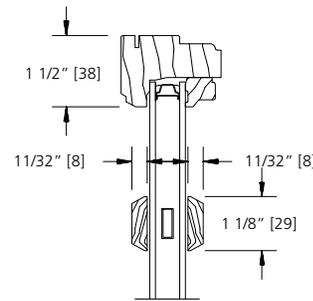
**1 1/8" SDL BAR  
(PUTTY/BEAD)**



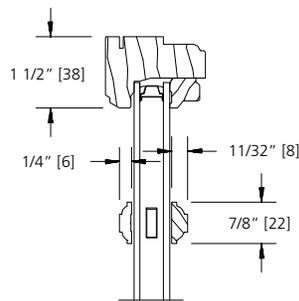
**5/8" SDL BAR  
(PUTTY/PUTTY)**



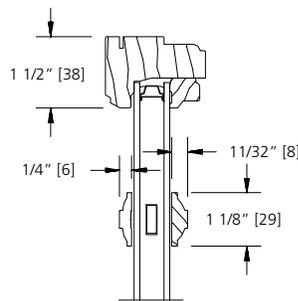
**7/8" SDL BAR  
(PUTTY/PUTTY)**



**1 1/8" SDL BAR  
(PUTTY/PUTTY)**



**7/8" SDL BAR  
(BEAD STOP)**



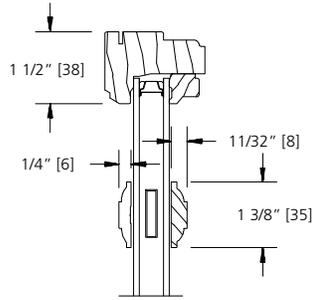
**1 1/8" SDL BAR  
(BEAD STOP)**

*Continued on next page*

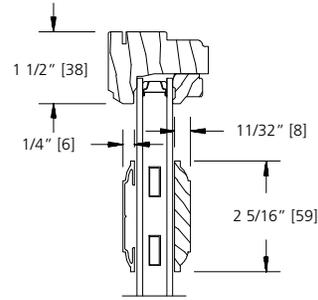
Scale: 3" = 1'

**GLAZING OPTIONS**

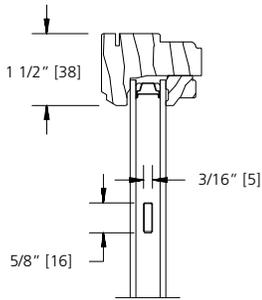
**INTERIOR GLAZED**  
INSULATED 3/4" [19] GLASS



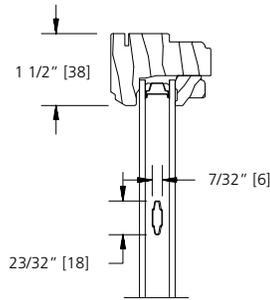
**1 3/8" SDL BAR  
(BEAD STOP)**



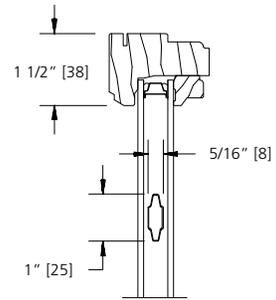
**2 5/16" SDL BAR  
(BEAD STOP)**



**5/8" FLAT  
GBG**



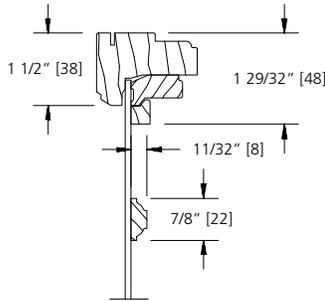
**23/32" CONTOUR  
GBG**



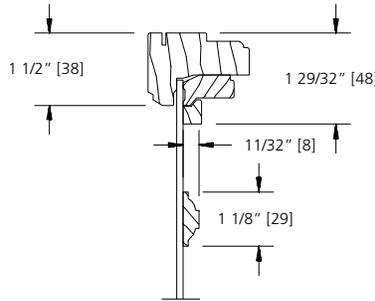
**1" CONTOUR  
GBG**

**GLAZING OPTIONS**

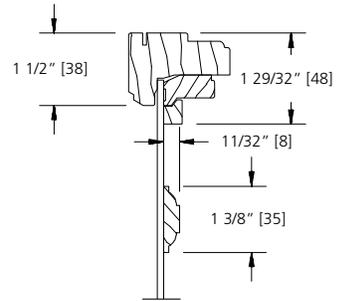
**INTERIOR GLAZED**  
SINGLE GLAZED 1/8" [3] GLASS



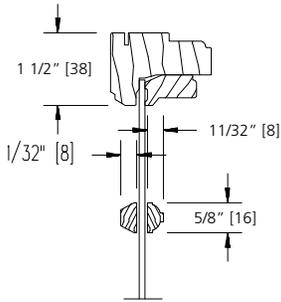
**7/8" GRILLE BAR**



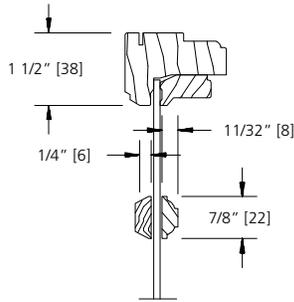
**1 1/8" GRILLE BAR**



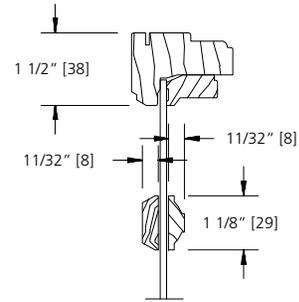
**1 3/8" GRILLE BAR**



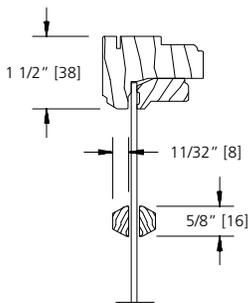
**5/8" SDL BAR  
(PUTTY/BEAD)**



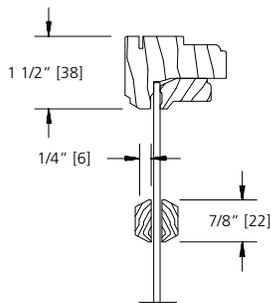
**7/8" SDL BAR  
(PUTTY/BEAD)**



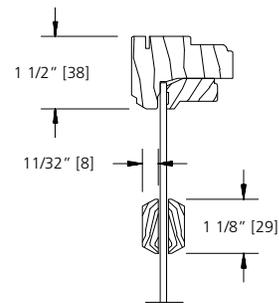
**1 1/8" SDL BAR  
(PUTTY/BEAD)**



**5/8" SDL BAR  
(PUTTY/PUTTY)**



**7/8" SDL BAR  
(PUTTY/PUTTY)**



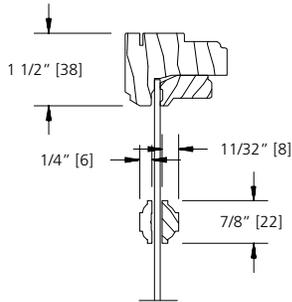
**1 1/8" SDL BAR  
(PUTTY/PUTTY)**

*Continued on next page*

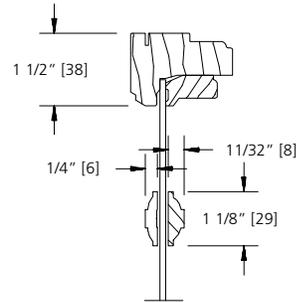
Scale: 3" = 1'

**GLAZING OPTIONS**

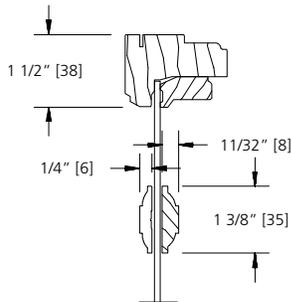
**INTERIOR GLAZED**  
SINGLE GLAZED 1/8" [3] GLASS



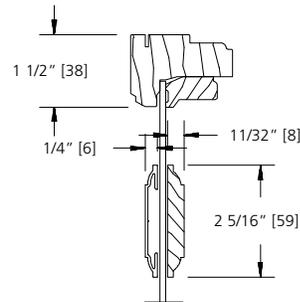
**7/8" SDL BAR**  
**(BEAD STOP)**



**1 1/8" SDL BAR**  
**(BEAD STOP)**



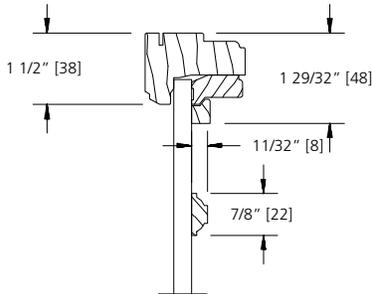
**1 3/8" SDL BAR**  
**(BEAD STOP)**



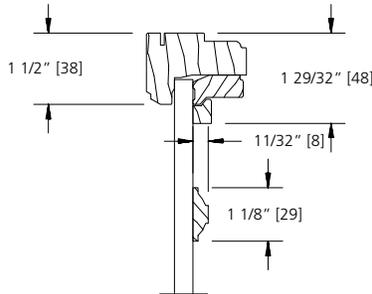
**2 5/16" SDL BAR**  
**(BEAD STOP)**

**GLAZING OPTIONS**

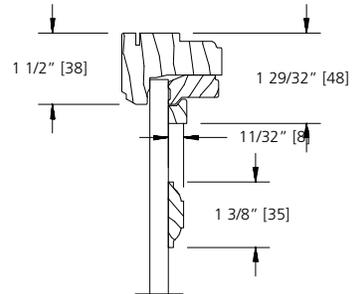
**INTERIOR GLAZED**  
IMPACT RESISTANT GLASS



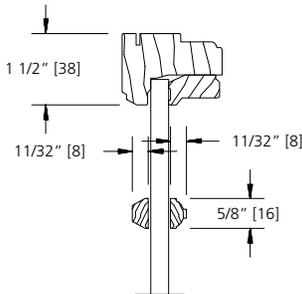
**7/8" GRILLE BAR**



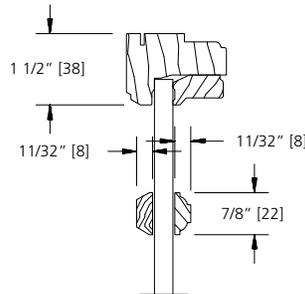
**1 1/8" GRILLE BAR**



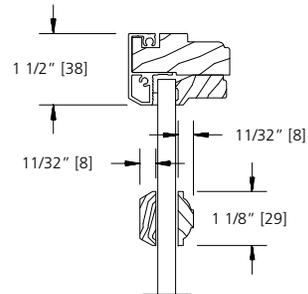
**1 3/8" GRILLE BAR**



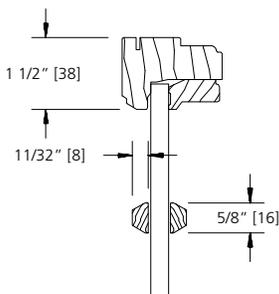
**5/8" SDL BAR  
(PUTTY/BEAD)**



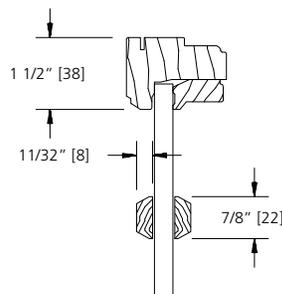
**7/8" SDL BAR  
(PUTTY/BEAD)**



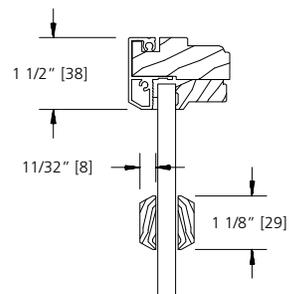
**1 1/8" SDL BAR  
(PUTTY/BEAD)**



**5/8" SDL BAR  
(PUTTY/PUTTY)**



**7/8" SDL BAR  
(PUTTY/PUTTY)**



**1 1/8" SDL BAR  
(PUTTY/PUTTY)**

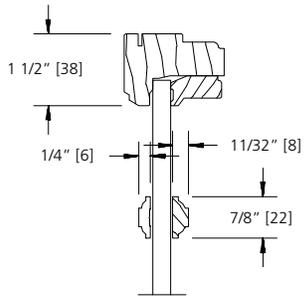
*Continued on next page*

Scale: 3" = 1'

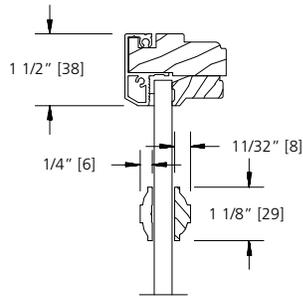
**GLAZING OPTIONS**

**INTERIOR GLAZED**

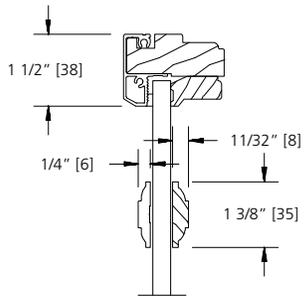
IMPACT RESISTANT GLASS



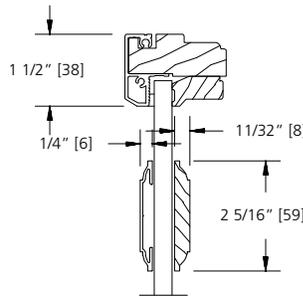
**7/8" SDL BAR  
(BEAD STOP)**



**1 1/8" SDL BAR  
(BEAD STOP)**



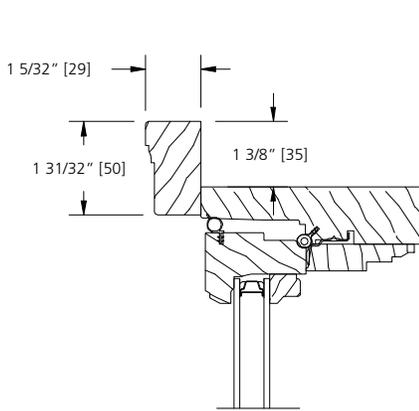
**1 3/8" SDL BAR  
(BEAD STOP)**



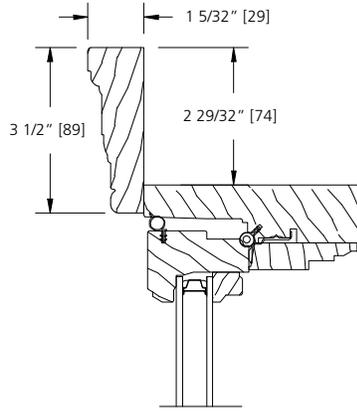
**2 5/16" SDL BAR  
(BEAD STOP)**

**TRIM OPTIONS**

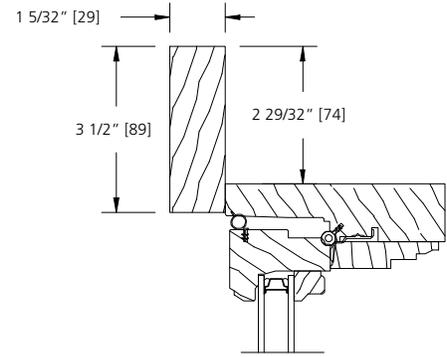
**WOOD EXTERIOR TRIM**



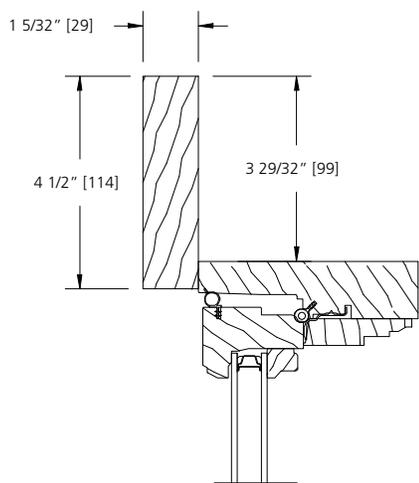
**BRICKMOULD**



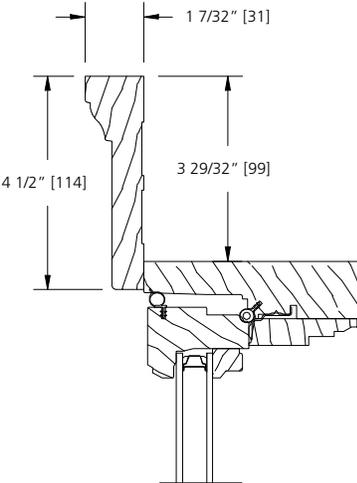
**ADAMS CASING**



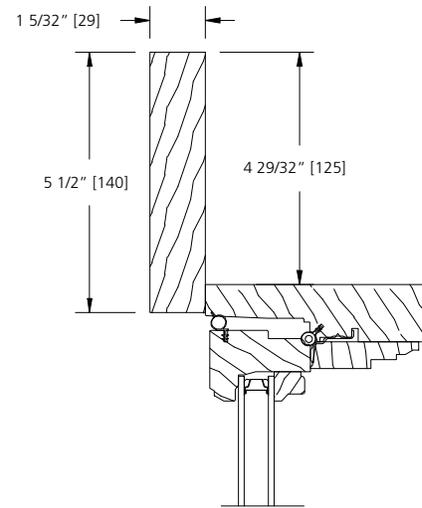
**3 1/2\"/>**



**4 1/2\"/>**

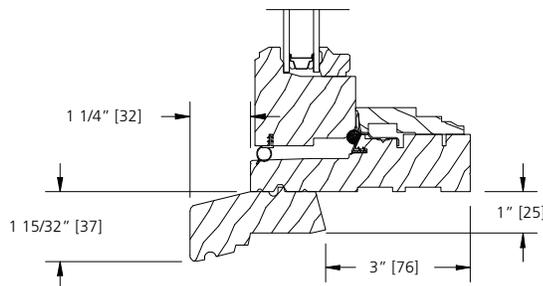


**1 X 4 BACKBAND CASING**

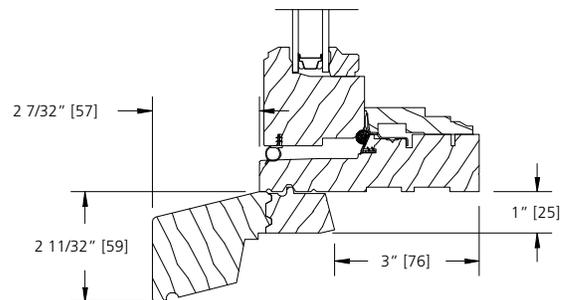


**5 1/2\"/>**

**WOOD SUBSILL OPTIONS**



**WOOD SUBSILL**



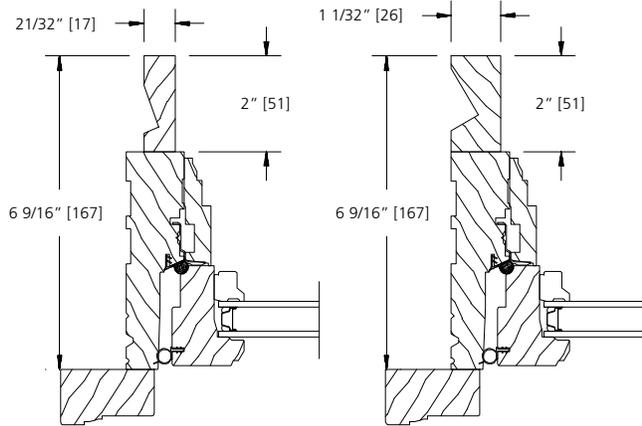
**WOOD HISTORICAL SUBSILL**

Available on Double-Hung units only

SCALE: 3" = 1'

**JAMB EXTENDER &  
STUCCO TRIM OPTIONS**

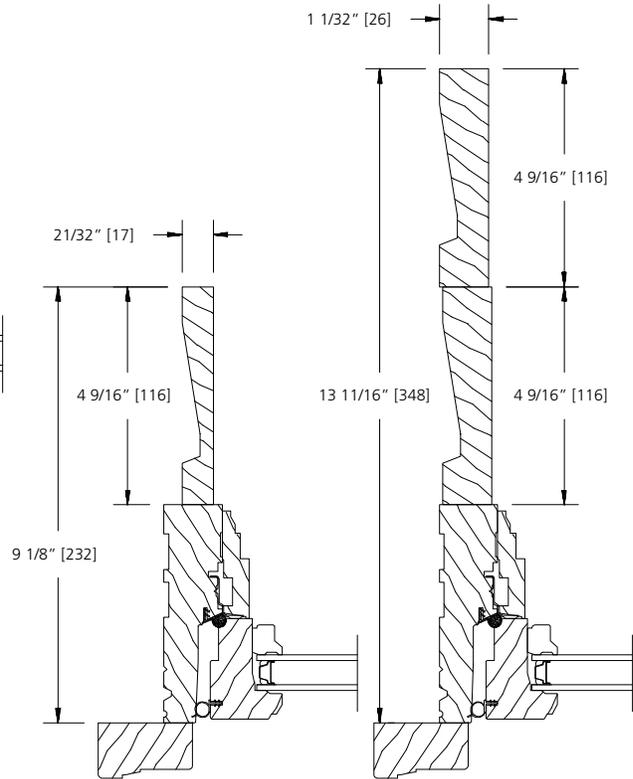
**JAMB EXTENDER OPTIONS**



**2" 4/4 OPTIONAL  
JAMB EXTENDER**

**2" 5/4 OPTIONAL  
JAMB EXTENDER**

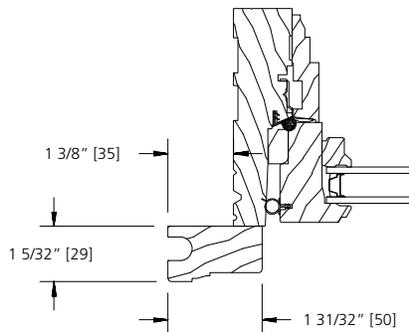
**MAXIMUM JAMB WIDTHS**



**4 9/16" 4/4 OPTIONAL  
JAMB EXTENDER**

**4 9/16" 5/4 OPTIONAL  
JAMB EXTENDER**

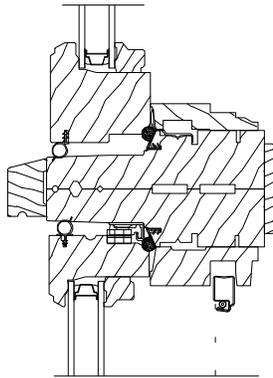
**STUCCO TRIM OPTION**



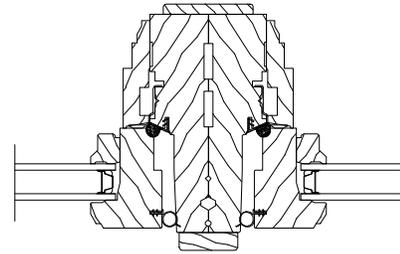
**SIDE  
STUCCO BRICKMOULD**

SCALE: 3" = 1'

**MULLION DETAILS  
WITH CUSTOM CASEMENT**

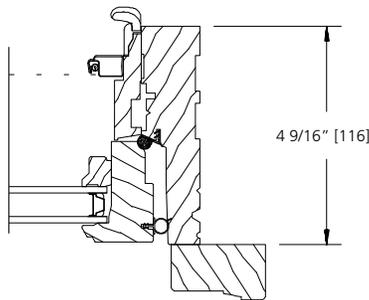


**HORIZONTAL MULLION  
IN-SASH GEOMETRIC  
CUSTOM CASEMENT  
4 9/16" & 6 9/16" JAMB**

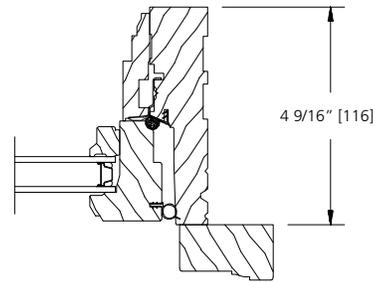


**VERTICAL MULLION  
AT IN-SASH GEOMETRIC  
4 9/16" & 6 9/16" JAMB**

**4 9/16" JAMB**

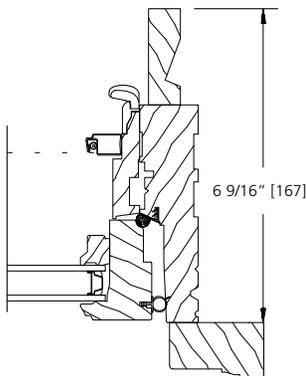


**VERTICAL JAMB  
AT CUSTOM CASEMENT**

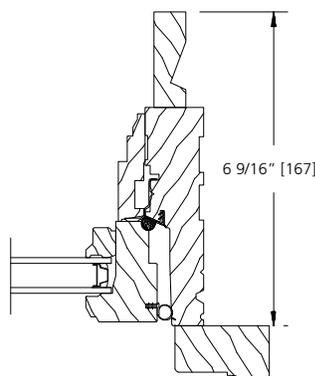


**VERTICAL JAMB  
AT IN-SASH GEOMETRIC**

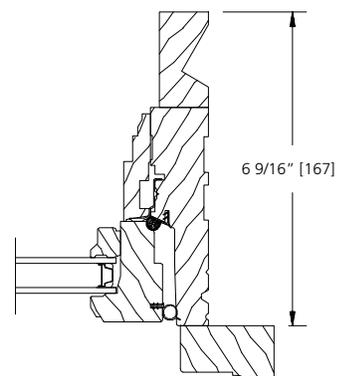
**6 9/16" JAMB**



**VERTICAL JAMB  
AT CUSTOM CASEMENT  
4/4 JAMB EXTENDER OPTION**



**VERTICAL JAMB  
AT IN-SASH GEOMETRIC  
4/4 JAMB EXTENDER OPTION**

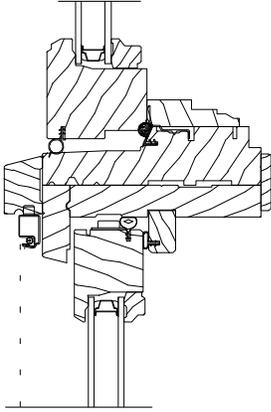


**VERTICAL JAMB  
AT IN-SASH GEOMETRIC  
5/4 JAMB EXTENDER OPTION**

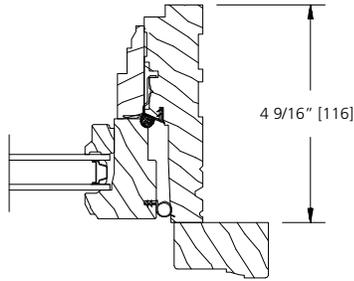
SCALE: 3" = 1'

**MULLION DETAILS  
WITH CUSTOM DOUBLE-HUNG**

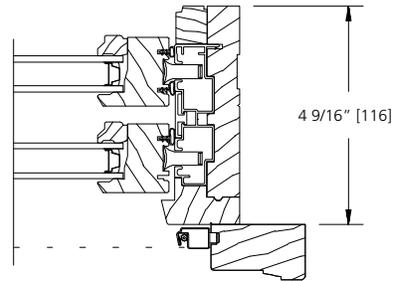
4 9/16" JAMB



IN-SASH GEOMETRIC  
CUSTOM DOUBLE-HUNG  
HORIZONTAL MULLION

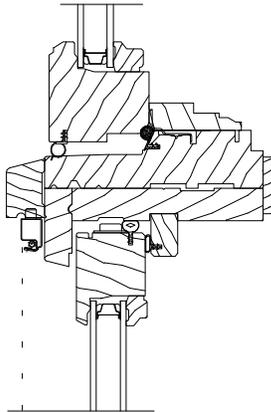


VERTICAL  
AT IN-SASH GEOMETRIC

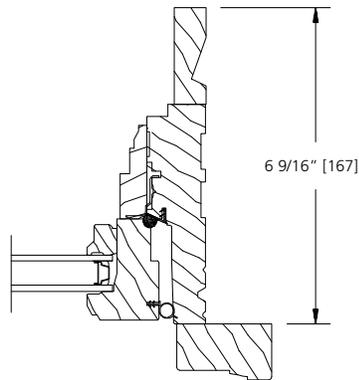


VERTICAL  
AT CUSTOM DOUBLE-HUNG

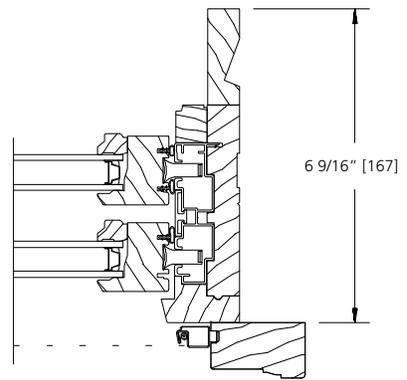
6 9/16" JAMB



IN-SASH GEOMETRIC  
CUSTOM DOUBLE-HUNG  
HORIZONTAL MULLION



VERTICAL  
AT IN-SASH GEOMETRIC

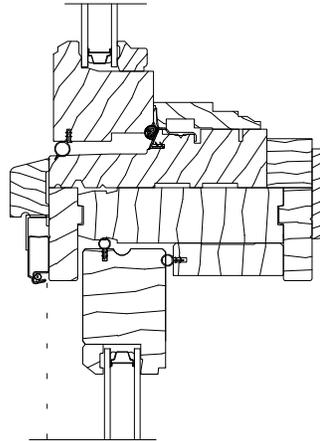


VERTICAL  
AT CUSTOM DOUBLE-HUNG

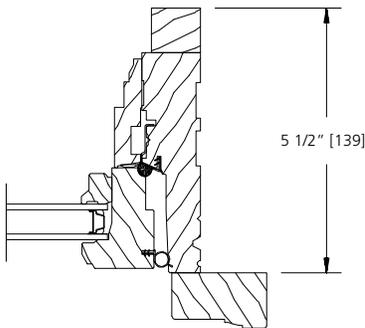
SCALE: 3" = 1'

**MULLION DETAILS  
WITH CUSTOM EPIC DOUBLE-HUNG**

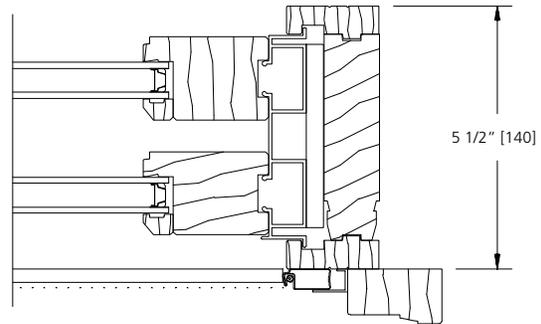
5 1/2" JAMB



**IN-SASH GEOMETRIC  
EPIC DOUBLE-HUNG  
HORIZONTAL MULLION**



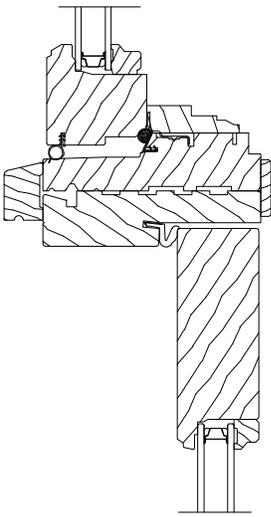
**VERTICAL  
AT IN-SASH GEOMETRIC**



**VERTICAL JAMB  
AT EPIC DOUBLE-HUNG**

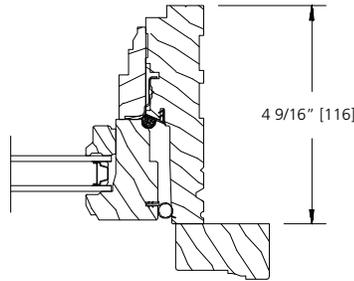
SCALE: 3" = 1'

**MULLION DETAILS  
WITH CUSTOM IN-SWING DOOR**

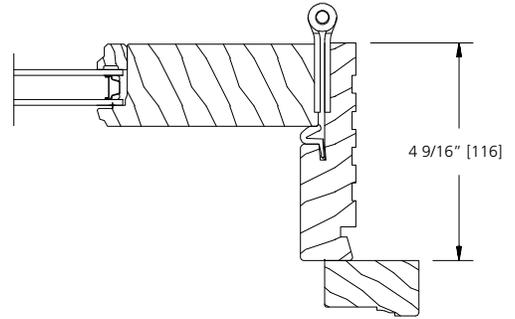


**IN-SASH GEOMETRIC  
IN-SWING DOOR  
HORIZONTAL MULLION**

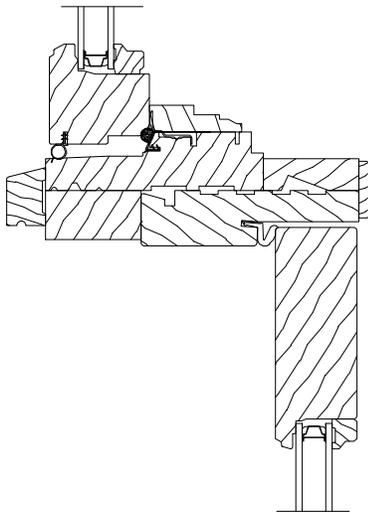
**4 9/16" JAMB**



**VERTICAL  
AT IN-SASH GEOMETRIC**

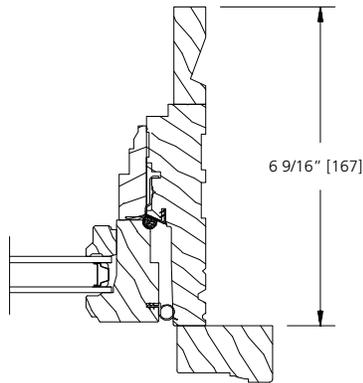


**VERTICAL  
AT IN-SWING DOOR**

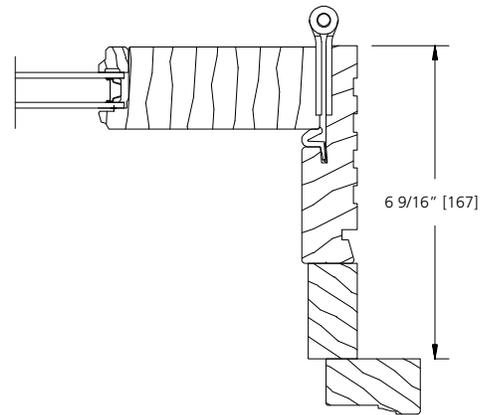


**IN-SASH GEOMETRIC  
IN-SWING DOOR  
HORIZONTAL MULLION**

**6 9/16" JAMB**



**VERTICAL  
AT IN-SASH GEOMETRIC**

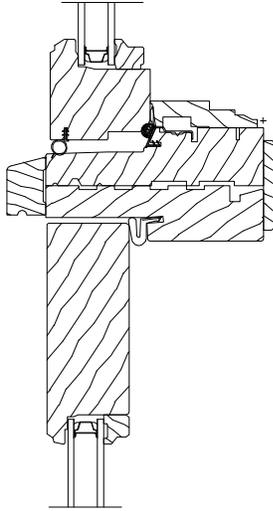


**VERTICAL  
AT IN-SWING DOOR**

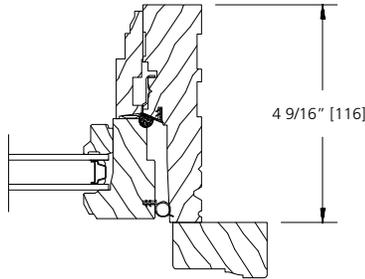
SCALE: 3" = 1'

**MULLION DETAILS  
WITH CUSTOM OUT-SWING DOOR**

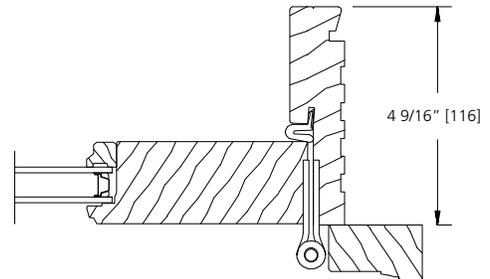
4 9/16" JAMB



**IN-SASH GEOMETRIC  
OUT-SWING DOOR  
HORIZONTAL MULLION**

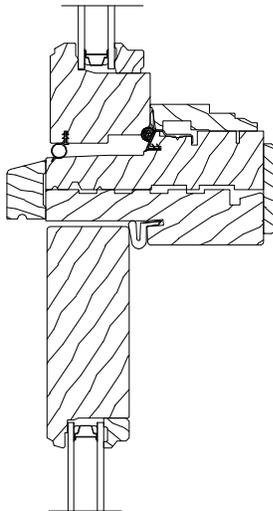


**VERTICAL  
AT IN-SASH GEOMETRIC**

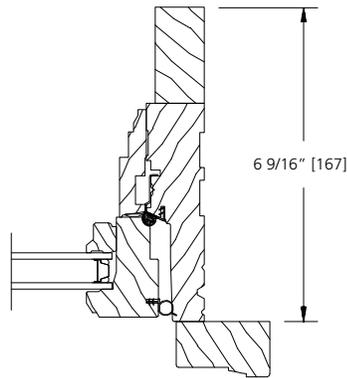


**VERTICAL  
AT OUT-SWING DOOR**

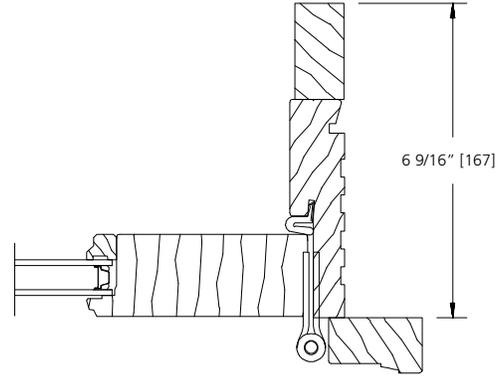
6 9/16" JAMB



**IN-SASH GEOMETRIC  
OUT-SWING DOOR  
HORIZONTAL MULLION**



**VERTICAL  
AT IN-SASH GEOMETRIC**



**VERTICAL  
AT OUT-SWING DOOR**

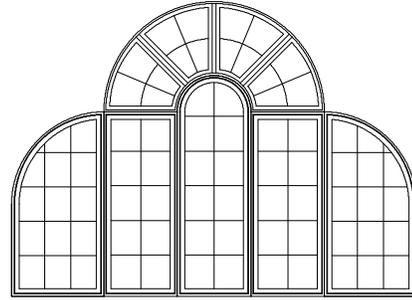
SCALE: 3" = 1'

**LITE CUT INFORMATION**

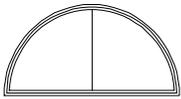
Wood geometric in-sash windows are available with removable grilles in 7/8", 1-1/8" and 1-3/8" widths, GBG (Grilles between the Glass), and Simulated Divided Lites.

**BAR ALIGNMENT**

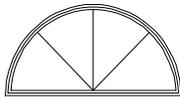
Alignment of divided lite muntin bars from one window to the next is often required by fine architectural design. Wood grilles, GBG (Grilles between the Glass), and Simulated Divided Lites may be specified with muntin bars aligned.



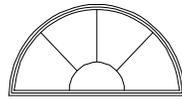
**HALF ROUND BREAKUP PATTERNS**



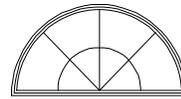
200 SERIES



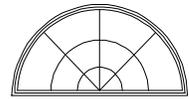
400 SERIES



500 SERIES



800 SERIES



1200 SERIES

**QUARTER ROUND BREAKUP PATTERNS**



200 SERIES

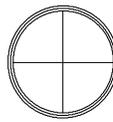


400 SERIES

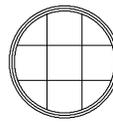


600 SERIES

**FULL ROUND BREAKUP PATTERNS**

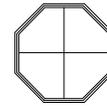


400 SERIES

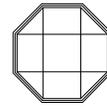


900 SERIES

**OCTAGON BREAKUP PATTERNS**



400 SERIES



900 SERIES

*Continued on next page*

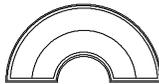
**LITE CUT INFORMATION**

**INVERTED RADIUS SILL NOTE:**

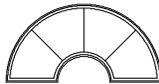
Windows with inverted radius sills have continuous head and sill configurations. The twin, triple and quad units utilize a mullion post as part of a single unit. Single lines represent grille and thermal bar lite break ups. Twin, triple and quad units are single units with mullion posts being represented by several lines.

**INVERTED HALF ROUND BREAKUP PATTERNS**

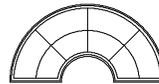
**INVERTED HALF ROUND SILL**



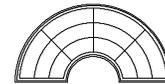
200 SERIES  
RADIUS HUB



400 SERIES

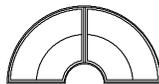


800 SERIES



1200 SERIES

**INVERTED HALF ROUND SILL - TWIN**



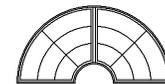
200 SERIES  
RADIUS HUB



200 SERIES



400 SERIES



600 SERIES

**INVERTED HALF ROUND SILL - TRIPLE**



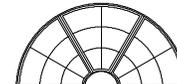
200 SERIES  
RADIUS HUB



200 SERIES



400 SERIES

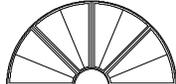


600 SERIES

**INVERTED HALF ROUND SILL - QUAD**



200 SERIES  
RADIUS HUB



200 SERIES



400 SERIES



600 SERIES

**INVERTED QUARTER ROUND BREAKUP PATTERNS**

**INVERTED QUARTER ROUND SILL**



200 SERIES  
RADIUS HUB



200 SERIES



400 SERIES



600 SERIES

**INVERTED QUARTER ROUND SILL - TWIN**



200 SERIES  
RADIUS HUB



200 SERIES



400 SERIES



600 SERIES

**INVERTED QUARTER ROUND SILL - TRIPLE**



200 SERIES  
RADIUS HUB



200 SERIES



400 SERIES

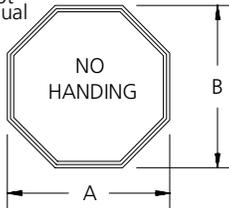


600 SERIES

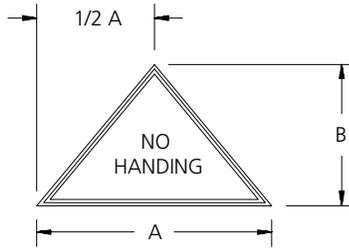
**NARROW SASH LAYOUT SHAPES**  
**ALL SIDES**

ALL GEOMETRIC WINDOW SHAPES ARE VIEWED FROM THE EXTERIOR.

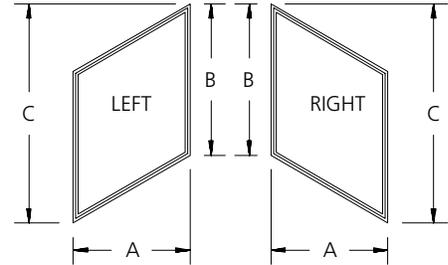
A and B do not have to be equal



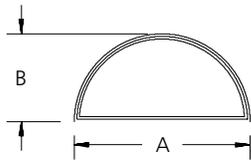
**OCTAGON**  
FIXED OR OPERATOR



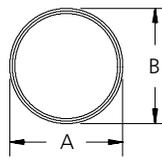
**TRIANGLE**  
STATIONARY ONLY



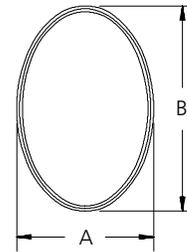
**PARALLELOGRAM**  
STATIONARY ONLY



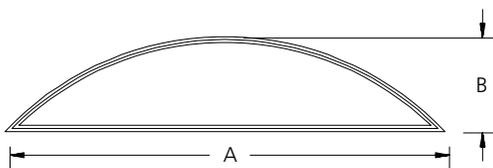
**HALF ROUND**  
STATIONARY ONLY



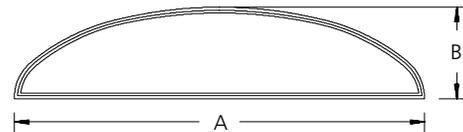
**FULL ROUND**  
STATIONARY ONLY



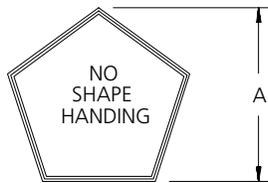
**OVAL**



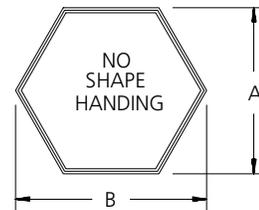
**CIRCLE SEGMENT**



**ELLIPSE**



**EQUAL PENTAGON**

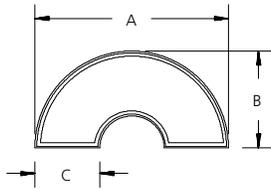


**HEXAGON**

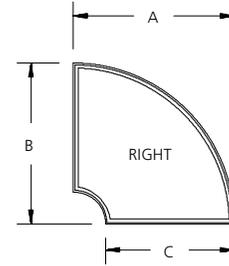
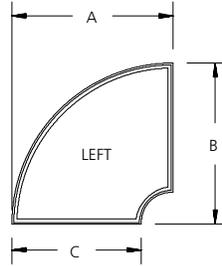
*Continued on next page*

**NARROW SASH LAYOUT SHAPES**  
**ALL SIDES**

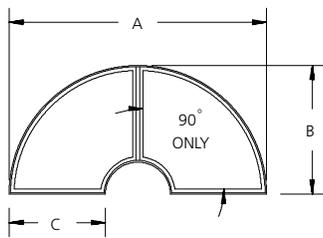
ALL GEOMETRIC WINDOW SHAPES ARE VIEWED FROM THE EXTERIOR.



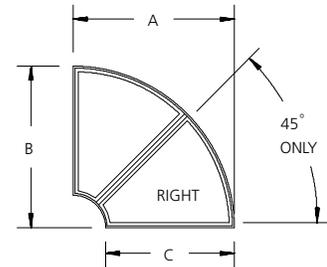
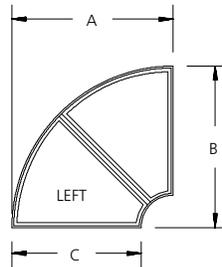
**INVERTED HALF ROUND**  
STATIONARY ONLY



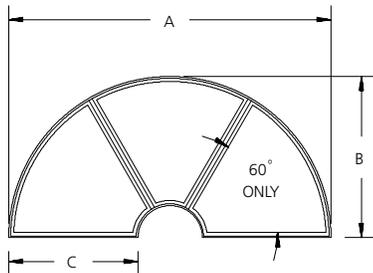
**INVERTED QUARTER ROUND**  
STATIONARY ONLY



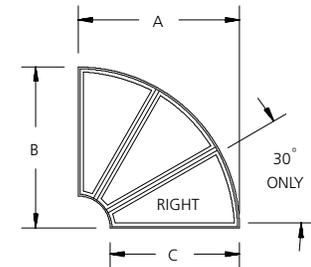
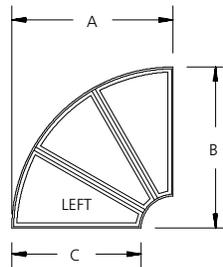
**INVERTED HALF ROUND - TWIN**  
STATIONARY ONLY



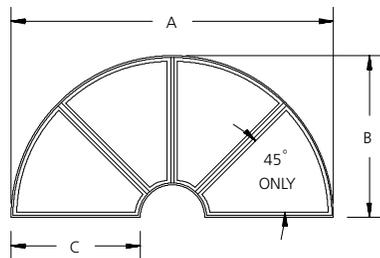
**INVERTED QUARTER ROUND - TWIN**  
STATIONARY ONLY



**INVERTED HALF ROUND - TRIPLE**  
STATIONARY ONLY



**INVERTED QUARTER ROUND - TRIPLE**  
STATIONARY ONLY

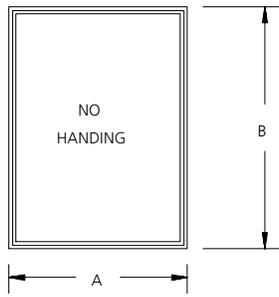


**INVERTED HALF ROUND - QUAD**  
STATIONARY ONLY

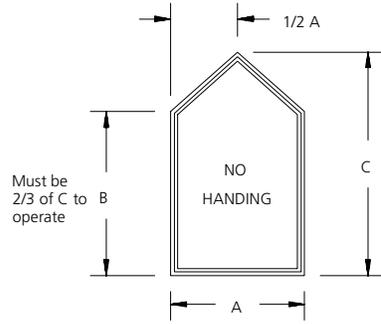
**INVERTED HALF ROUND AND QUARTER ROUND UNITS**

Inverted half round and quarter round units have continuous head and sill configurations which utilize mullion posts from frame to frame. See Section Details & Dimensions for mullion post specifications. The mullion posts are positioned radially from the center point of the sill radius.

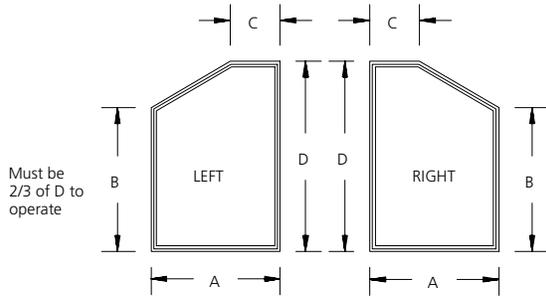
**STANDARD WIDE BOTTOM RAIL SHAPES**



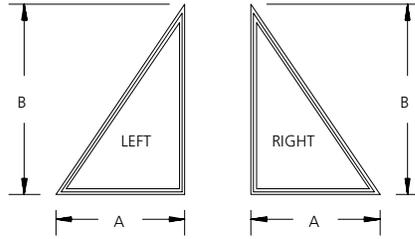
**RECTANGLE**  
STATIONARY OR OPERATOR



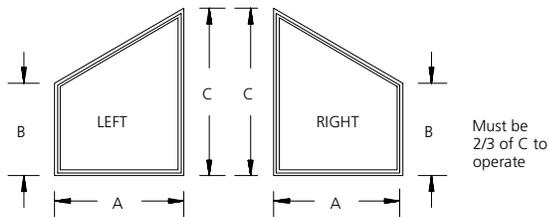
**PENTAGON**  
STATIONARY OR OPERATOR



**CLIPPED CORNER**  
STATIONARY OR OPERATOR



**RIGHT TRIANGLE**  
STATIONARY ONLY

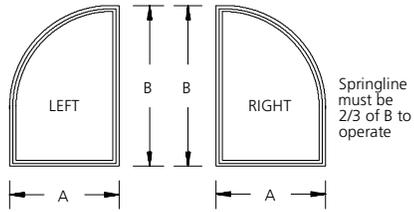


**TRAPEZOID**  
STATIONARY OR OPERATOR

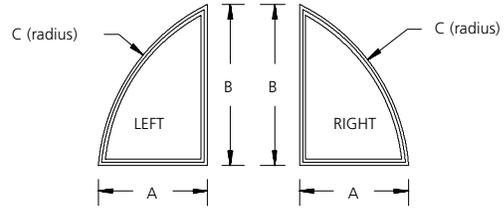
*Continued on next page*

**STANDARD WIDE BOTTOM RAIL SHAPES**

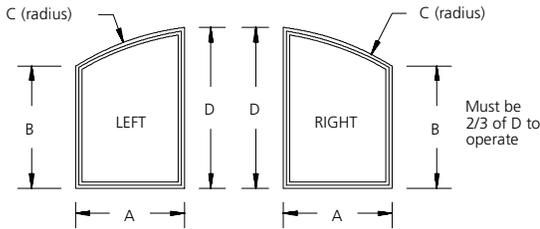
ALL GEOMETRIC WINDOW SHAPES ARE VIEWED FROM THE EXTERIOR.



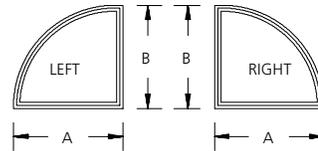
**EXTENDED  
QUARTER ROUND**  
STATIONARY OR OPERATOR



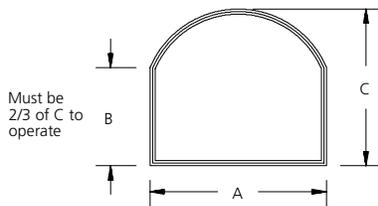
**QUARTER SEGMENT**  
STATIONARY ONLY



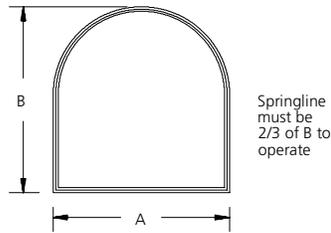
**EXTENDED  
QUARTER SEGMENT**  
STATIONARY OR OPERATOR



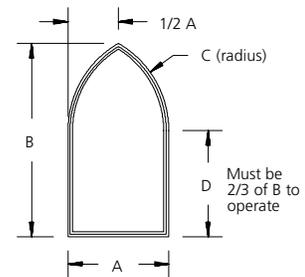
**QUARTER ROUND**  
STATIONARY OR OPERATOR



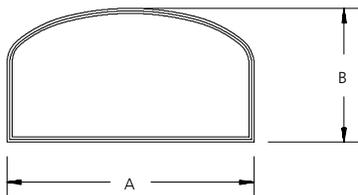
**EXTENDED  
CIRCLE SEGMENT**  
STATIONARY OR OPERATOR



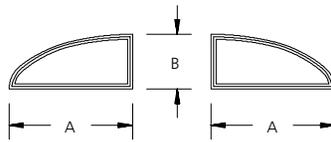
**EXTENDED  
HALF ROUND**  
STATIONARY OR OPERATOR



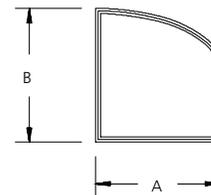
**GOTHIC**  
STATIONARY OR OPERATOR



**EXTENDED ELLIPSE**

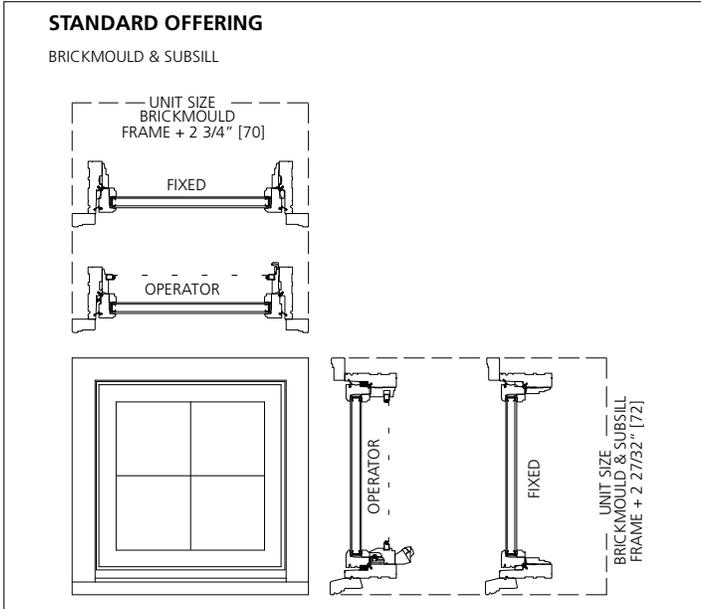


**QUARTER ELLIPSE**



**EXTENDED  
QUARTER ELLIPSE**

**UNIT SIZING, ROUGH OPENINGS & MASONRY OPENINGS**

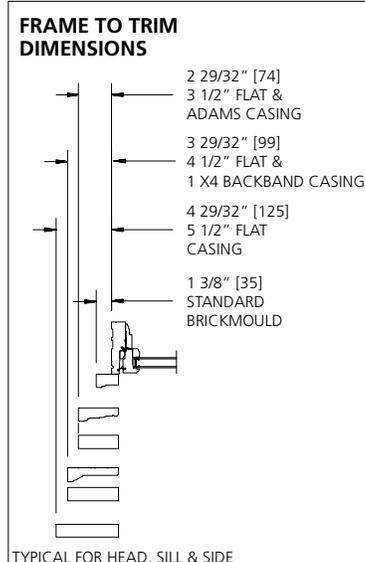
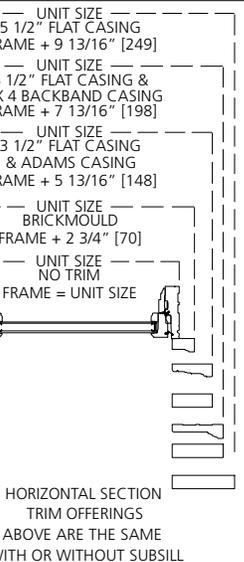
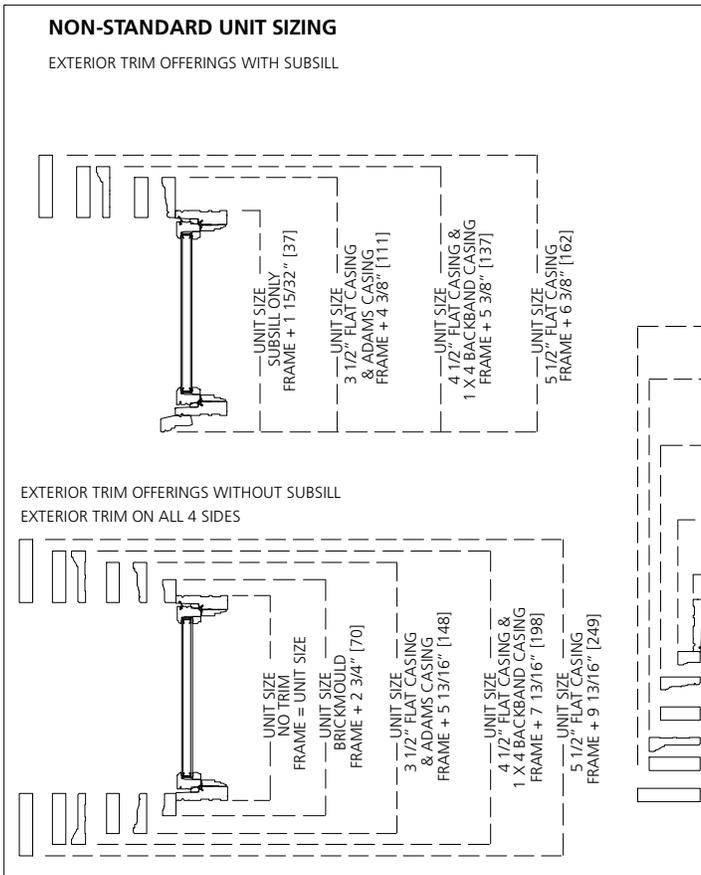
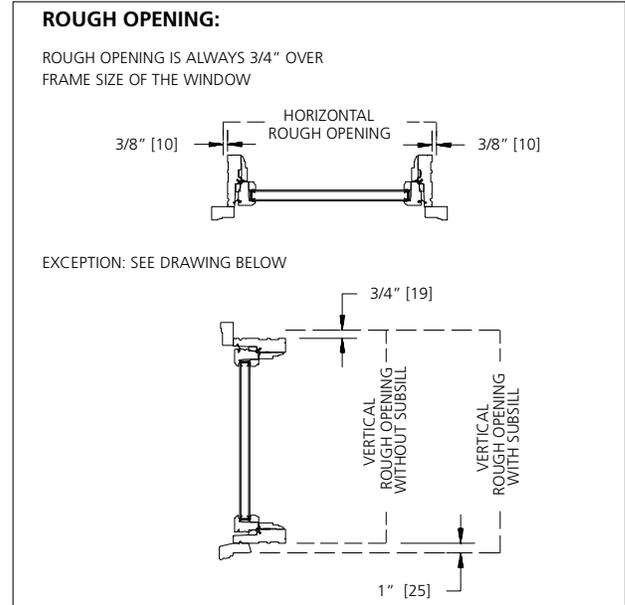


**GENERAL NOTES:**

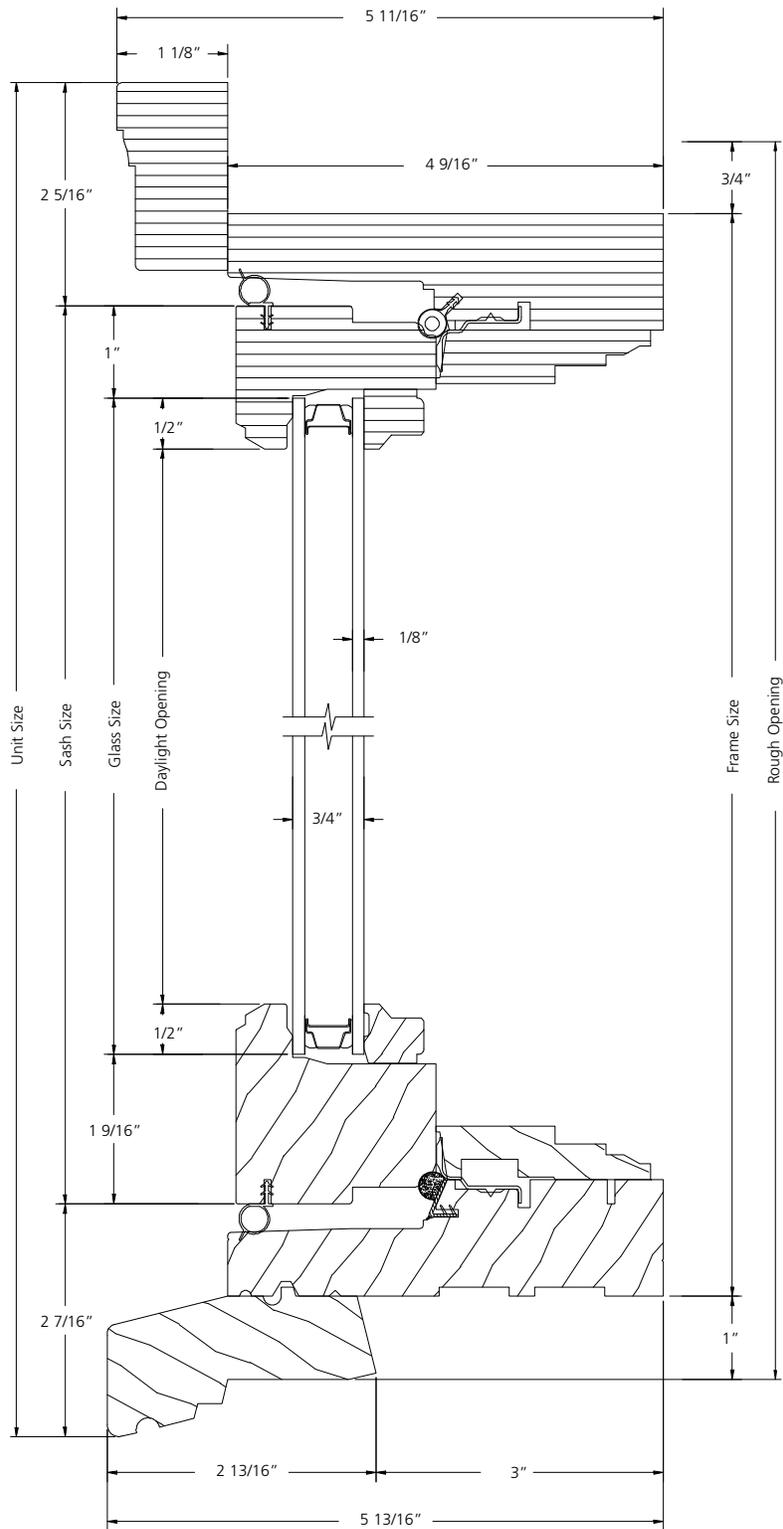
UNITS WITH NO TRIM AND SUBSILL:  
UNIT SIZE = FRAME SIZE

UNIT SIZE IS ALWAYS THE  
EXTREME SIZE OF THE WINDOW  
WITH OR WITHOUT TRIM

MASONRY OPENING:  
MASONRY OPENING IS ALWAYS 1/2" OVER  
THE UNIT SIZE OF THE WINDOW



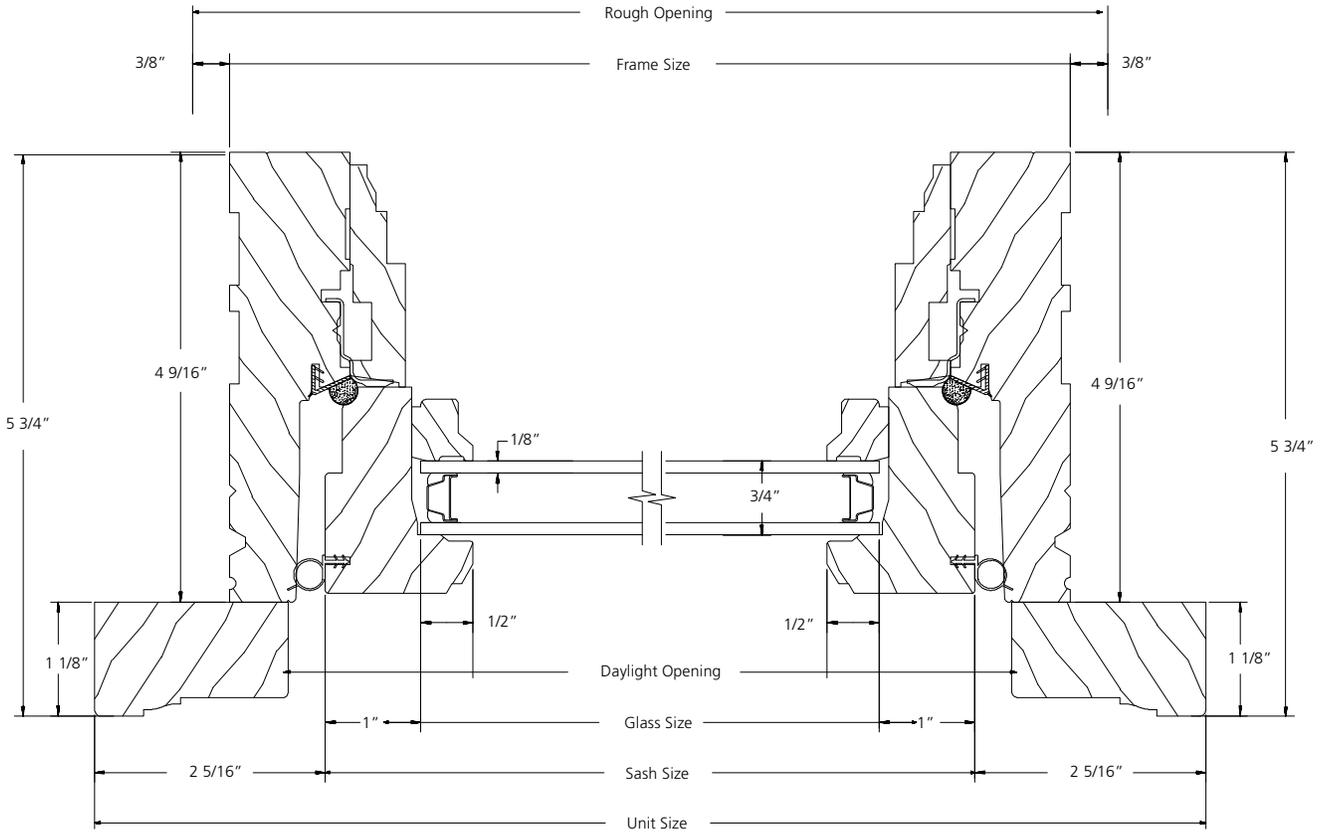
**STATIONARY UNIT**



**VERTICAL SECTION**

SCALE: 6" = 1'

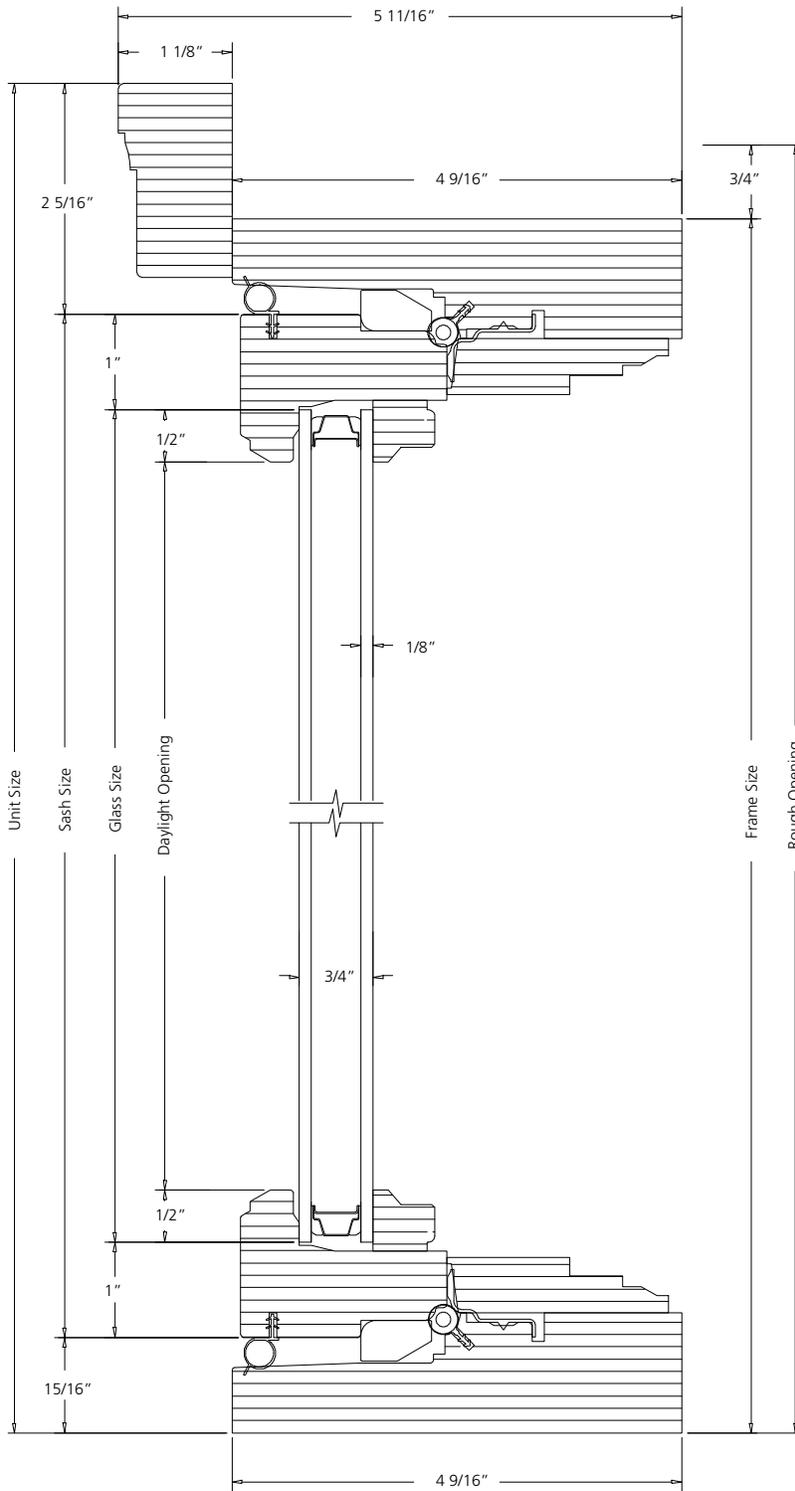
**STATIONARY UNIT**



**HORIZONTAL SECTION**

SCALE: 6" = 1'

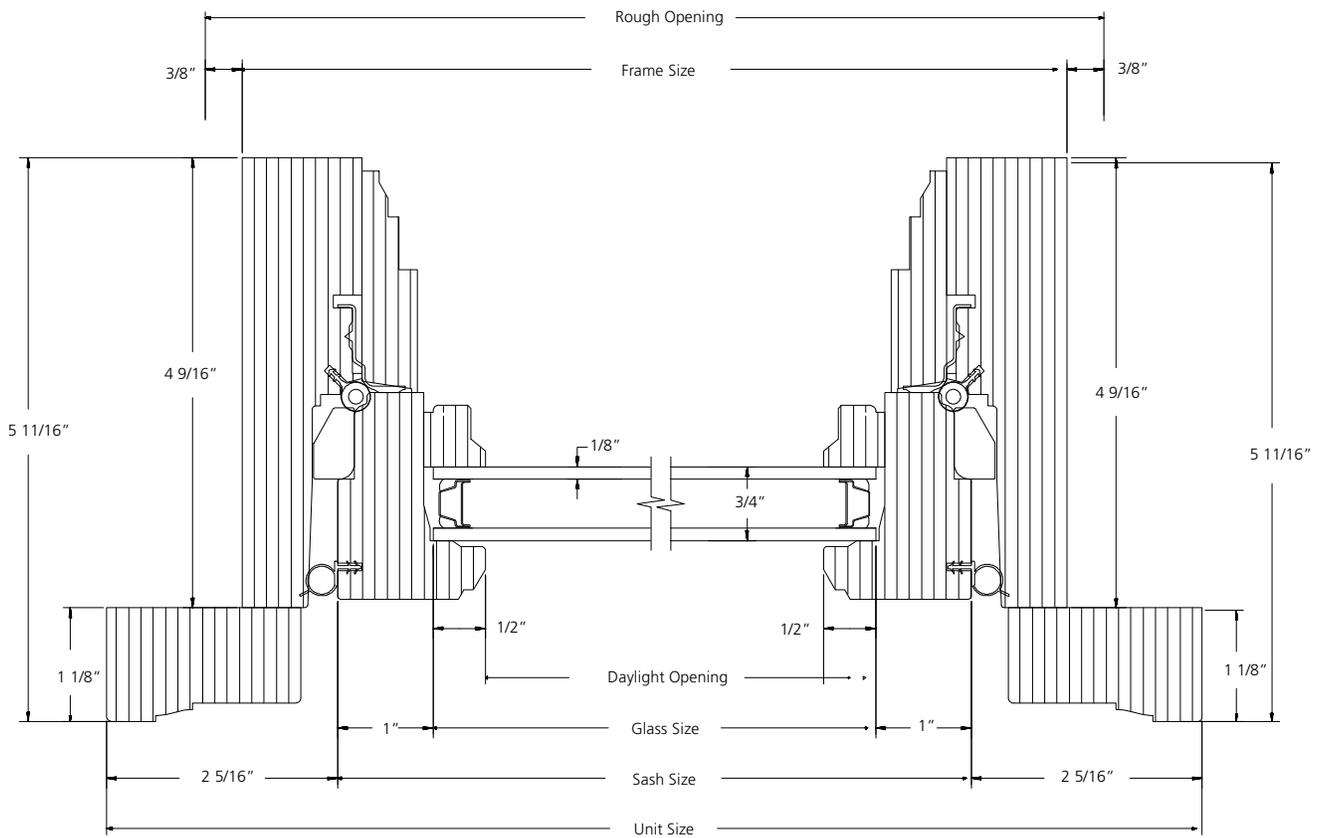
**INVERTED RADIUS SILL**



**VERTICAL SECTION**

SCALE: 6" = 1'

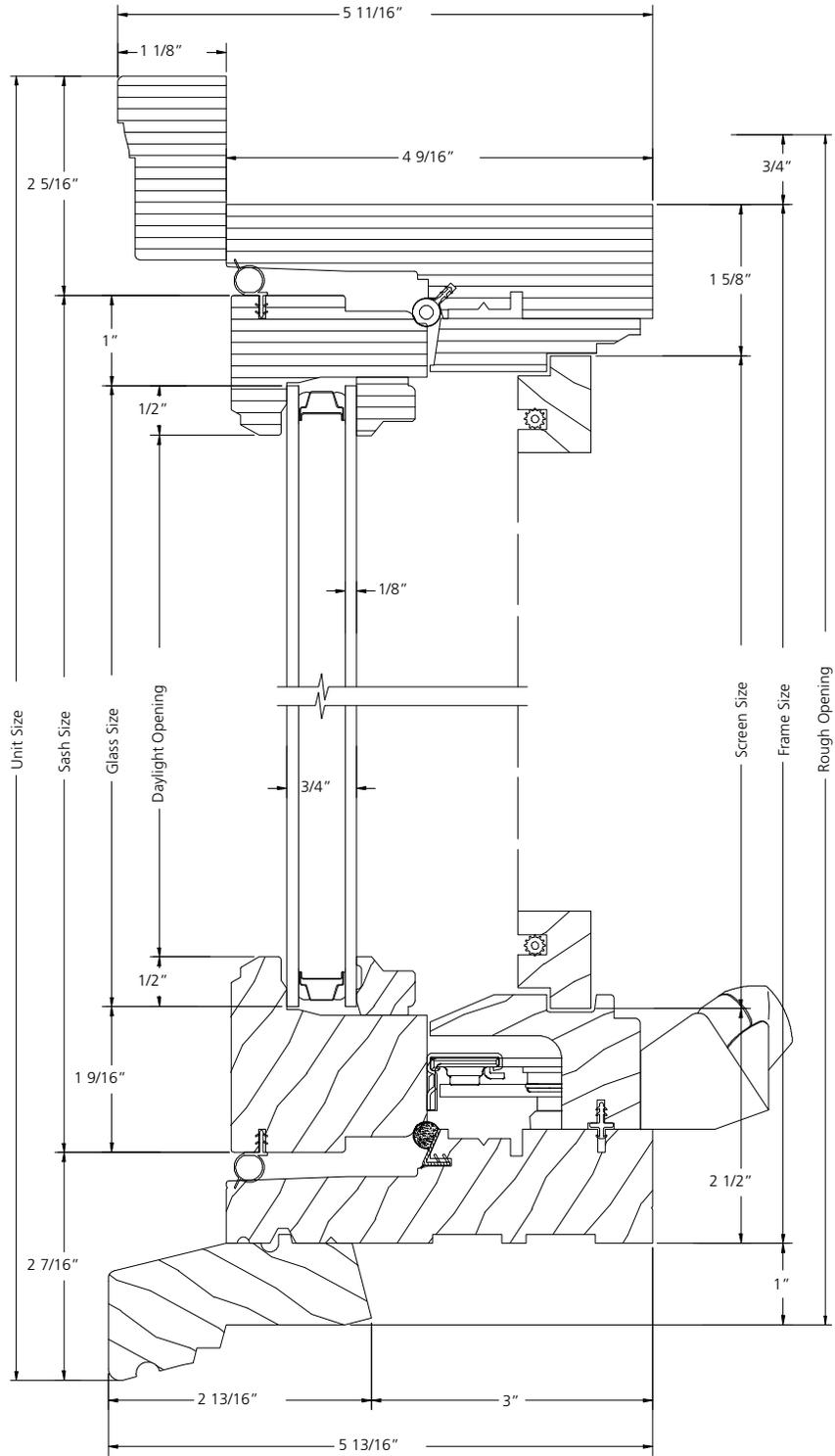
**INVERTED RADIUS SILL**



**HORIZONTAL SECTION**

SCALE: 6" = 1'

**RADIUS HEAD**

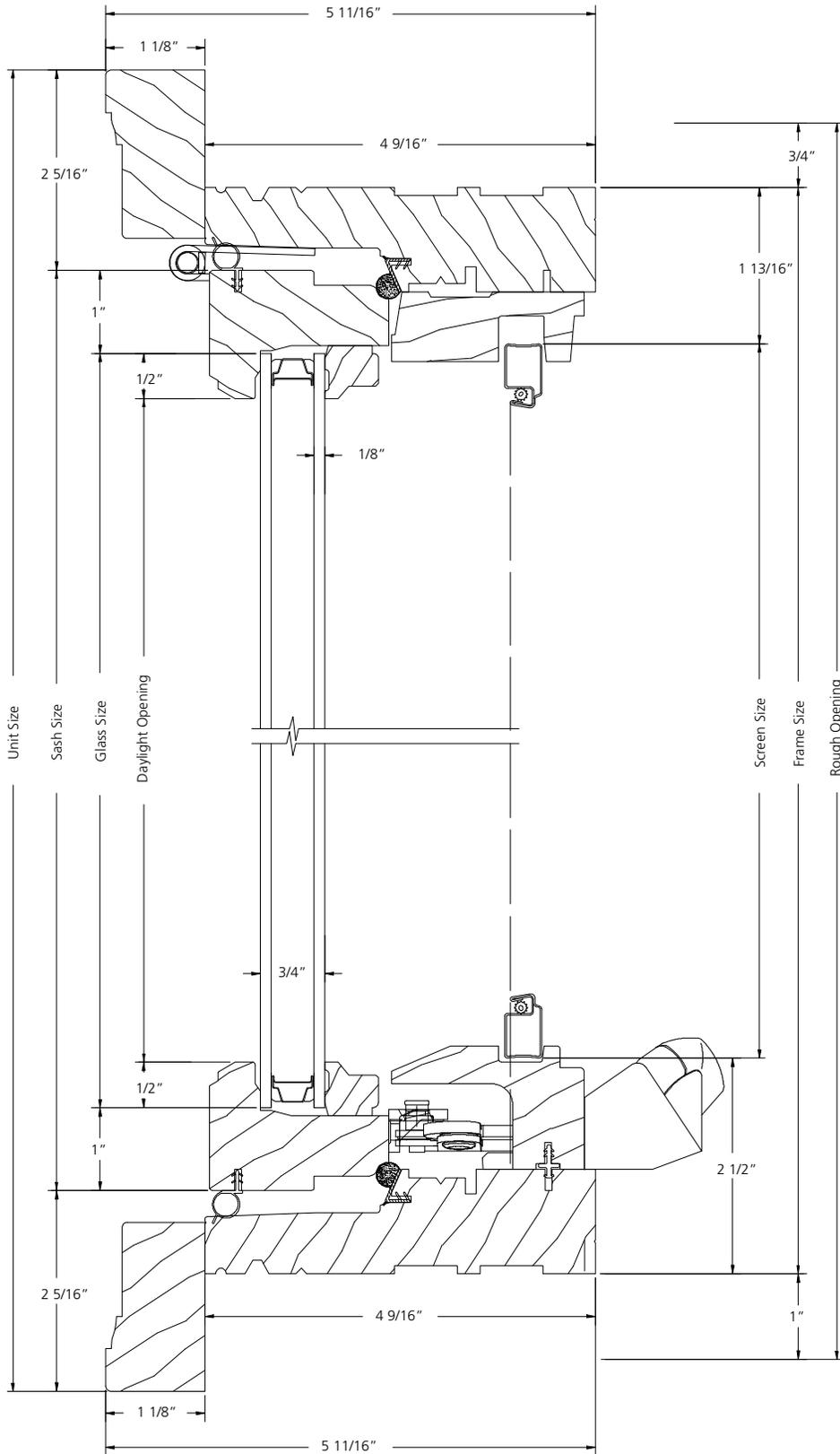


**VERTICAL SECTION**

SCALE: 6" = 1'



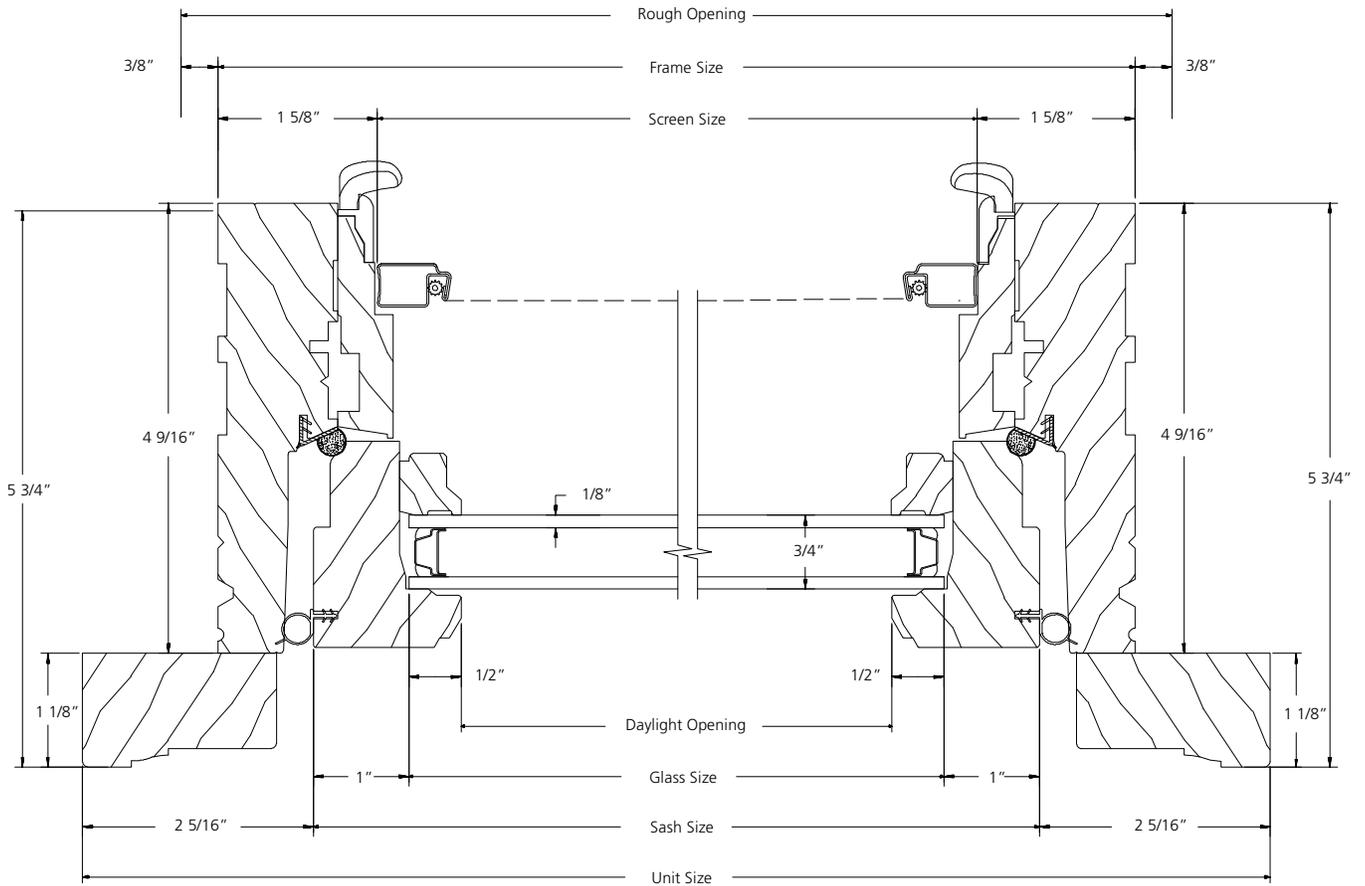
**OCTAGONS**



**VERTICAL SECTION**

SCALE: 6" = 1'

**OCTAGONS**



**HORIZONTAL SECTION**

SCALE: 6" = 1'