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**PRODUCT SPECIFICATIONS**

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**EXTERIOR FINISH**

Exterior aluminum surfaces are low maintenance extruded aluminum coated with a thermo set polyester finish that meets or exceeds the AAMA 2603 performance standards. Standard colors include Brilliant White, Chestnut Bronze, Desert Sand, French Vanilla, Hartford Green, Mesa Red, Black, Arctic Silver and Dark Chocolate.

**AURALAST® WOOD**

AuraLast® wood is fundamentally different from wood resulting from 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 the current preservation methods by its unique ability to achieve greater penetration of the active ingredients into the wood parts, with a penetration of the treatment being a minimum of 92%.

**INTERIOR FINISH**

All interior surfaces are unfinished clear pine ready for on site finishing. Primed and pre-finished interiors are available in paint: Pure White, Extra White, Natural Choice, Moderate White; in stain: Wheat, Cherry, Fruitwood, Cordovan, Cider and Clear Lacquer. Optional interior wood species include mixed grain Douglas Fir and Knotty Alder.

**FRAME**

Frame is assembled from select kiln dried pine 1-5/32" (29.4mm) using AuraLast® wood on all exterior parts. All exposed exterior parts are completely covered with .050" extruded aluminum cladding. Basic jamb width is 2-1/2". Standard jamb width is 4-9/16" and may be extended for different wall depths. Exterior of frame is grooved to accept separate nailing fin or masonry installation clip and retrofit trim system.

**SASH**

Radius units may be specified as Direct Glazed or In-Sash. Sash match Casement/Awning profiles. Clad sash is covered with .047 extruded aluminum. All clad radius interiors are laminated or clear. On In-Sash units glass is glazed into the sash with a durable clear silicone on the exterior and an acrylic sealant on the interior.

**GLAZING**

3/4" thick sealed insulating glass is constructed from two panes of glass, utilizing a continuous roll formed stainless steel spacer with dual seal sealant. All insulating glass units comply with the performance requirements of IGCC in accordance with either ASTM E774 or E2190.

*In-Sash* - Glass is glazed into the sash with a durable clear silicone on the exterior and an acrylic sealant on the interior.

**GLAZING OPTIONS**

3/4" insulating glass available in Low-E with Argon, Low-E, Low-E 366, Clear, Neat Glass, reflective, tinted, 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. 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.

**GRILLES**

**SDL** (Simulated Divided Lites) - extruded aluminum muntins permanently applied to the exterior of the insulating glass unit (not available on textured glass) in 7/8" (22mm), 1-1/8" (28.5mm), or 1-3/8" (34.9mm) widths, and a putty profile in 5/8" (15.9mm), 7/8" (22mm) and 1-1/8" (28.5mm) 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" (59mm) SDL bar, which simulates a double-hung checkrail.

**Wood Grilles** - Rectangular unfinished clear pine wood grilles in 7/8" (22mm) are available in patterns selected by the owner. In-Sash are only available with Full Surround Grilles.

**GBG** (Grilles between the Glass) - 5/8" (15.9mm) flat and 23/32" or 1" contour mounted between the glass panes suspended within the air cavity.

**APPLIED ALUMINUM DRIP CAP**

Drip cap is made from .040" extruded aluminum, and is shaped by a precision bending process.

**EXTENSION JAMBS**

Extension jambs are factory applied to the interior on all four sides of the frame and are 4/4 standard thick pine to accommodate wall depths up to 7-1/4" with one piece, and up to 12" with two pieces. 9/16" (14.2mm) and 5/4 option also available.

**RADIUS INSIDE TRIM**

Laminated radius trim in Pine or Oak available in a variety of patterns. 3 x 3 Corner blocks in Pine or Oak also available.

**INSTALLATION**

Installation per JELD-WEN Installation Method for Metal Clad Windows JII002 or JII013. See [www.jeld-wen.com/resources](http://www.jeld-wen.com/resources) for instructions.

**PERFORMANCE**

**NFRC Certified** - (Rated and labeled in accordance with NFRC)

WDMA Hallmark Certified -  
In accordance with **AAMA/NWWDA/101/I.S.2-97**

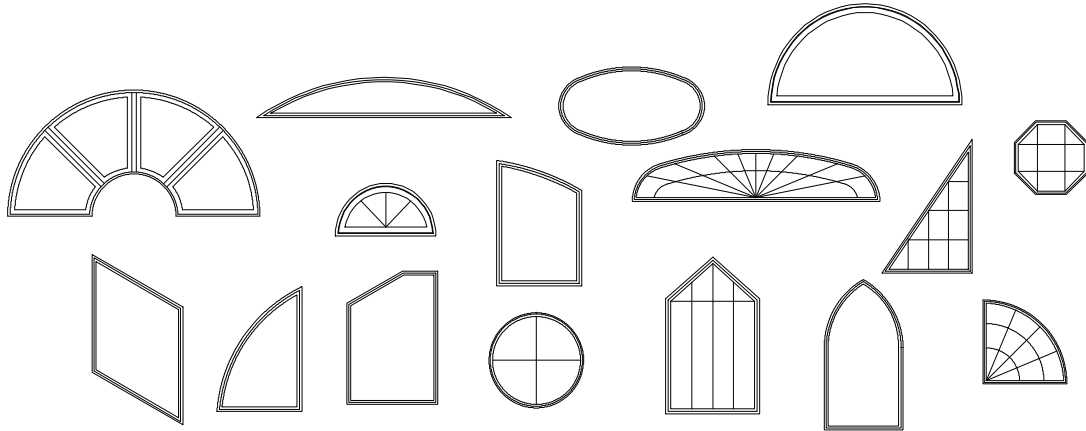
**QUICK SPEC GUIDE**

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>Brilliant White</li> <li>Chestnut Bronze</li> <li>Desert Sand</li> <li>French Vanilla</li> <li>Mesa Red</li> <li>Hartford Green</li> <li>Black</li> <li>Arctic Silver</li> <li>Dark Chocolate</li> </ul>	<ul style="list-style-type: none"> <li>Bronze</li> <li>Heirloom White</li> <li>Bone White</li> <li>Dark Buckskin</li> <li>Smoke</li> <li>Mocha Cream</li> <li>Hunter Green</li> <li>Sage Brown</li> <li>Redwood</li> <li>Sea Foam</li> <li>Ivory</li> <li>Cascade</li> </ul>
<b>EXTERIOR TRIM</b>	<ul style="list-style-type: none"> <li>Nailing Fin</li> <li>Angle Shapes - Vinyl Drip Cap</li> <li>Radius Shapes -Clad Metal Drip Cap</li> </ul>	<ul style="list-style-type: none"> <li>Commercial Grade Kynar 500® Resin System</li> <li>Aluminum 1-5/8" Brickmould with integral nailing fin</li> <li>Adams or 3-1/2" Flat Casing with integral nailing fin</li> <li>Angle Shapes - Clad Metal Drip Cap</li> </ul>
<b>INTERIOR WOOD</b>	<ul style="list-style-type: none"> <li>Western Pine</li> </ul>	<ul style="list-style-type: none"> <li>Knotty Alder</li> <li>Mixed Grain Douglas Fir</li> </ul>
<b>INTERIOR FINISH</b>	<ul style="list-style-type: none"> <li>Natural</li> </ul>	Prefinished Interior Options are: <ul style="list-style-type: none"> <li>Priming Available</li> <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>	Radius Units <ul style="list-style-type: none"> <li>Half Rounds: 25 Sizes</li> <li>Quarter Rounds: 12 Sizes</li> <li>Full Circles: 7 Sizes</li> </ul> Geometric Units <ul style="list-style-type: none"> <li>All window units are made to specified Frame Dimensions, see sample elevations for required dimensions</li> </ul>	Size Limitations <ul style="list-style-type: none"> <li>Units May Not Exceed 50 square feet</li> <li>Some Sizes May Require Tempered Glazing</li> </ul>
<b>GLAZING</b>	<ul style="list-style-type: none"> <li>Low-E Insulating Glass</li> <li>Preserve® Protective Film</li> </ul>	<ul style="list-style-type: none"> <li>Clear</li> <li>Obscure</li> <li>Bronze</li> <li>Low-E 366</li> <li>Neat Glass</li> <li>Dual Low-E</li> <li>Reflective</li> <li>Tempered</li> <li>Decorative Glass               <ul style="list-style-type: none"> <li>Craftsman</li> <li>Classic</li> <li>Contemporary</li> <li>Estate</li> </ul> </li> <li>Custom Design Capability</li> </ul>
<b>GRILLES</b>		<ul style="list-style-type: none"> <li>5/8" Flat, 23/32" or 1" Contour GBG</li> <li>Direct Glazed: 7/8" KD Wood Grilles</li> </ul> SDL Bead Profile: <ul style="list-style-type: none"> <li>7/8", 1-1/8", 1-3/8", 2-5/16" with Light Bronze Shadow Bar</li> <li>7/8", 1-1/8", 1-3/8", 2-5/16" with Silver Shadow Bar</li> </ul> Patterns may be Colonial, Renaissance, Prairie or Gothic (not limited to stated patterns) SDL Putty Profile: <ul style="list-style-type: none"> <li>5/8", 7/8", 1-1/8" with Light Bronze Shadow Bar</li> <li>5/8", 7/8", 1-1/8" with Silver Shadow Bar</li> </ul>
<b>INTERIOR RADIUS CASING</b>		<ul style="list-style-type: none"> <li>Seven Patterns</li> <li>Other casings may be available</li> </ul>
<b>JAMB</b>	<ul style="list-style-type: none"> <li>4-9/16"</li> </ul>	<ul style="list-style-type: none"> <li>Minimum: 2-1/2"</li> <li>Maximum: 7-1/4" (one piece)</li> <li>Maximum: 12" (two piece)</li> </ul>

## GENERAL INFORMATION

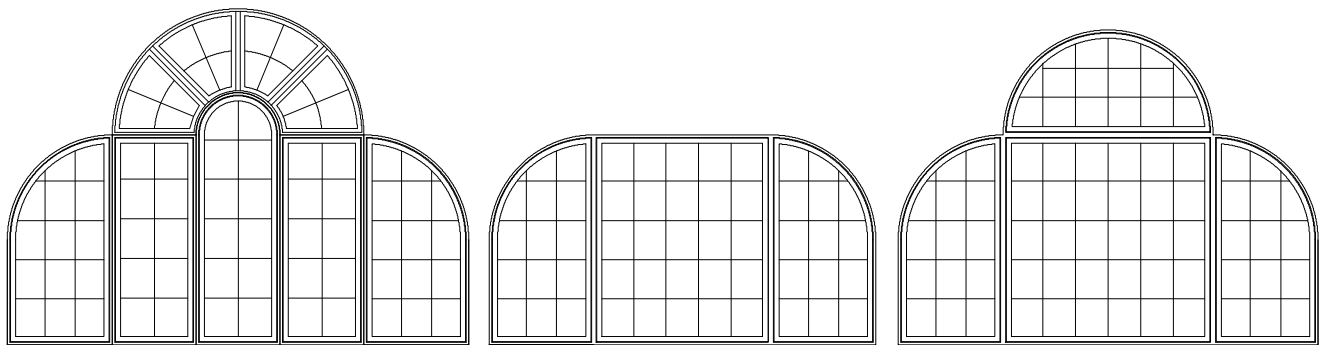
### STANDARD SIZES & DESIGNS

Clad geometric in-sash 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

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



## ELEVATION NOTES

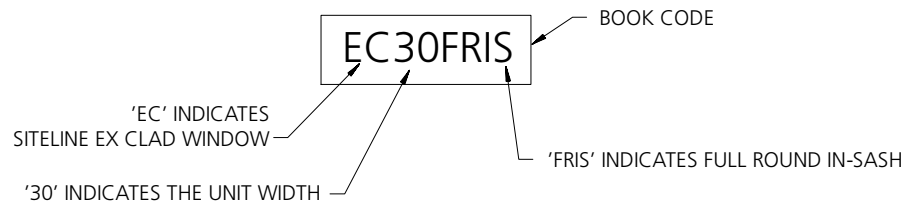
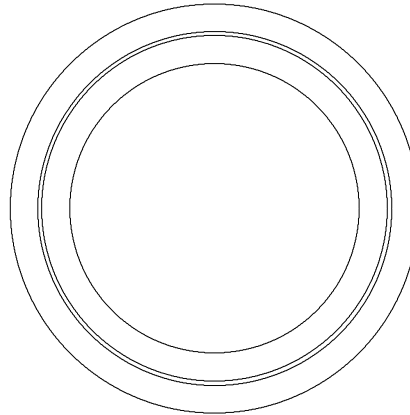
ELEVATION DRAWINGS UTILIZE A LIMITED NUMBER OF PROJECTED LINES TO PRODUCE A RUDIMENTARY DRAWING INTENDED TO BE USED IN A SMALL GRAPHICAL SCALE. ELEVATIONS ARE VIEWED PERPENDICULAR FROM THE EXTERIOR OF THE STRUCTURE. IF MORE DIMENSIONS ARE NEEDED, USE THE SECTION DRAWINGS FOR MORE COMPLETE DEPICTIONS.

### BOOK CODE DEFINITIONS

- |              |   |
|--------------|---|
| 1. ECXXHRIS  | SITELINE EX CLAD HALF ROUND IN-SASH                         |
| 2. ECDXXHRIS | SITELINE EX CLAD DOUBLE-HUNG AND DOOR HALF ROUND IN-SASH    |
| 3. ECXXQRIS  | SITELINE EX CLAD QUARTER ROUND IN-SASH                      |
| 4. ECXXFRIS  | SITELINE EX CLAD FULL ROUND IN-SASH                         |
| 5. ECDXXQRIS | SITELINE EX CLAD DOUBLE-HUNG AND DOOR QUARTER ROUND IN-SASH |

M.O. Brickmould	33 1/2"(851)
M.O. Adams/Flat Casing	36 1/2"(927)
Rough Opening	30 3/4"(781)
Frame Size	30"(762)
Daylight Opening	24 3/32"(612)

33 1/2"(851)  
36 1/2"(927)  
30 3/4"(781)  
30"(762)  
24 3/32"(612)



### GENERAL NOTES

1. UNIT ELEVATIONS ARE SHOWN WITHOUT EXTERIOR TRIM.
2. VALUES IN PARENTHESES ARE MILLIMETER CONVERSIONS.

### ELEVATION SYMBOL LEGEND:

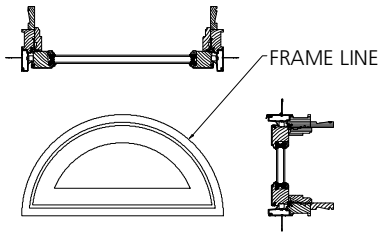
**M.O.** MASONRY OPENING

## 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



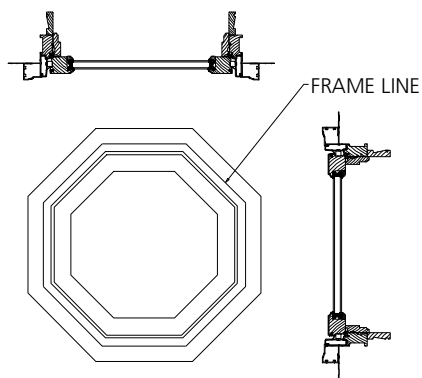
### STANDARD GEOMETRIC ELEVATIONS

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 CLAD UNITS

All clad elevations are shown without any exterior trim. When mulling clad units the outside line is always the frame. Refer to Mullion Details for specifications.

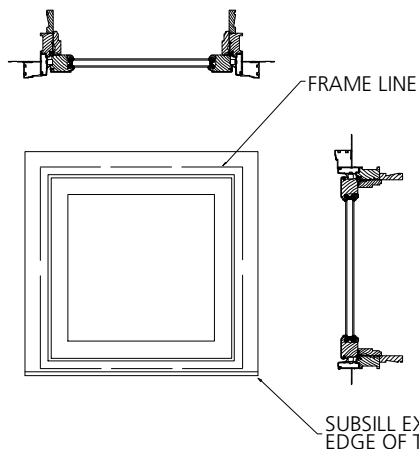
### TRIM - ALL SIDES



### 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.

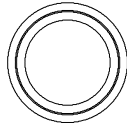
### SUBSILL RESTRICTIONS

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

**FULL ROUND UNITS**

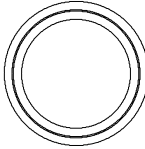
**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

33 1/2" (851)  
36 1/2" (927)  
30 3/4" (781)  
30" (762)  
24 3/32" (612)



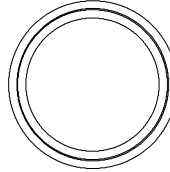
EC30FRIS

39 1/2" (1003)  
42 1/2" (1080)  
36 3/4" (933)  
36" (914)  
30 3/32" (764)



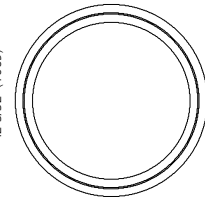
EC36FRIS

45 1/2" (1156)  
48 1/2" (1232)  
42 3/4" (1086)  
42" (1067)  
36 3/32" (917)



EC42FRIS

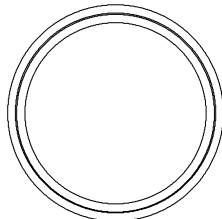
51 1/2" (1308)  
54 1/2" (1384)  
48 3/4" (1238)  
48" (1219)  
42 3/32" (1069)



EC48FRIS

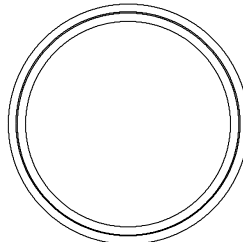
**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

57 1/2" (1461)  
60 1/2" (1537)  
54 3/4" (1391)  
54" (1372)  
48 3/32" (1222)



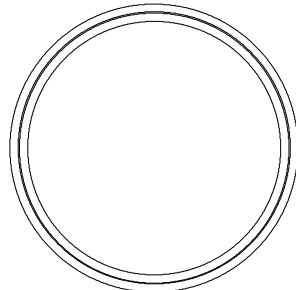
EC54FRIS

63 1/2" (1613)  
66 1/2" (1689)  
60 3/4" (1543)  
60" (1524)  
54 3/32" (1374)



EC60FRIS

75 1/2" (1918)  
78 1/2" (1994)  
72 3/4" (1848)  
72" (1829)  
66 3/32" (1679)



EC72FRIS

**ELEVATION SYMBOL LEGEND:**  
**M.O.** = MASONRY OPENING  
VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS

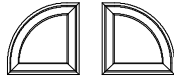
Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

### CASEMENT AND DOOR QUARTER ROUND UNITS

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

21 1/2" (546)  
 24 1/2" (622)  
 18 3/4" (476)  
 18" (457)  
 12 3/32" (307)

20 5/16" (516)  
 21 13/16" (554)  
 18 3/4" (476)  
 18" (457)  
 12 3/32" (307)



EC18QRIS

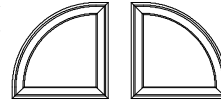
22 5/16" (578)  
 23 13/16" (605)  
 20 3/4" (527)  
 20" (508)  
 14 3/32" (358)



EC20QRIS

23 1/2" (597)  
 26 1/2" (673)  
 20 3/4" (527)  
 20" (508)  
 14 3/32" (358)

26 5/16" (668)  
 27 13/16" (706)  
 24 3/4" (629)  
 24" (610)  
 18 3/32" (460)



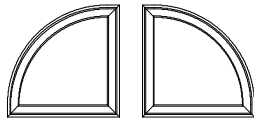
EC24QRIS

27 1/2" (699)  
 30 1/2" (775)  
 24 3/4" (629)  
 24" (610)  
 18 3/32" (460)

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

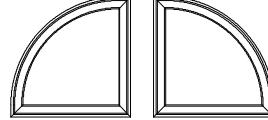
31 1/2" (800)  
 34 1/2" (876)  
 28 3/4" (730)  
 28" (711)  
 22 3/32" (561)

30 5/16" (770)  
 31 13/16" (808)  
 28 3/4" (730)  
 28" (711)  
 22 3/32" (561)



EC28QRIS

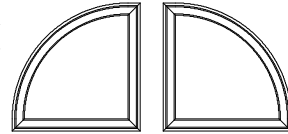
32 5/16" (821)  
 33 13/16" (859)  
 30 3/4" (781)  
 30" (762)  
 24 3/32" (612)



EC30QRIS

33 1/2" (851)  
 36 1/2" (927)  
 30 3/4" (781)  
 30" (762)  
 24 3/32" (612)

35 1/2" (902)  
 38 1/2" (978)  
 32 3/4" (832)  
 32" (813)  
 26 3/32" (663)

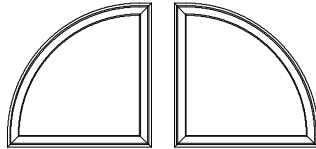


EC32QRIS

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

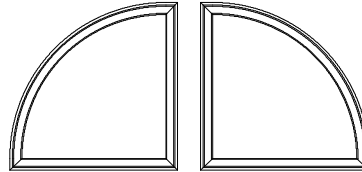
39 1/2" (1003)  
 42 1/2" (1080)  
 36 3/4" (933)  
 36" (914)  
 30 3/32" (764)

38 5/16" (973)  
 39 13/16" (1011)  
 36 3/4" (933)  
 36" (914)  
 30 3/32" (764)



EC36QRIS

44 5/16" (1126)  
 45 13/16" (1164)  
 42 3/4" (1086)  
 42" (1067)  
 36 3/32" (917)



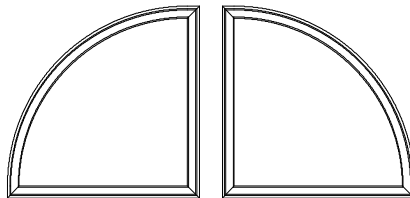
EC42QRIS

45 1/2" (1156)  
 48 1/2" (1232)  
 42 3/4" (1086)  
 42" (1067)  
 36 3/32" (917)

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

51 1/2" (1308)  
 54 1/2" (1384)  
 48 3/4" (1238)  
 48" (1219)  
 42 3/32" (1069)

50 5/16" (1278)  
 51 13/16" (1316)  
 48 3/4" (1238)  
 48" (1219)  
 42 3/32" (1069)



EC48QRIS

#### ELEVATION SYMBOL LEGEND:

M.O. = MASONRY OPENING

VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS

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 AND DOOR HALF ROUND UNITS

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

33 1/2" (851)  
36 1/2" (927)  
30 3/4" (781)  
30" (762)  
24 3/32" (612)

17 5/16" (440)  
18 13/16" (478)  
15 3/4" (400)  
15" (381)  
9 3/32" (231)



EC30HRIS

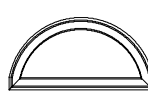
35 1/2" (902)  
38 1/2" (978)  
32 3/4" (832)  
32" (813)  
26 3/32" (663)

18 5/16" (465)  
19 13/16" (503)  
16 3/4" (425)  
16" (406)  
10 3/32" (256)



EC32HRIS

39 1/2" (1003)  
42 1/2" (1080)  
36 3/4" (933)  
36" (914)  
30 3/32" (764)



EC36HRIS

43 1/2" (1105)  
46 1/2" (1181)  
40 3/4" (1035)  
40" (1016)  
34 3/32" (866)

22 5/16" (578)  
23 13/16" (605)  
20 3/4" (527)  
20" (508)  
14 3/32" (358)

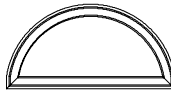


EC40HRIS

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

45 1/2" (1156)  
48 1/2" (1232)  
42 3/4" (1086)  
42" (1067)  
36 3/32" (917)

23 5/16" (592)  
24 13/16" (630)  
21 3/4" (552)  
21" (533)  
15 3/32" (383)



EC42HRIS

51 1/2" (1308)  
54 1/2" (1384)  
48 3/4" (1238)  
48" (1219)  
42 3/32" (1069)

26 5/16" (668)  
27 13/16" (706)  
24 3/4" (629)  
24" (610)  
18 3/32" (460)



EC48HRIS

57 1/2" (1461)  
60 1/2" (1537)  
54 3/4" (1391)  
54" (1372)  
48 3/32" (1222)

29 5/16" (745)  
30 13/16" (783)  
27 3/4" (705)  
27" (686)  
21 3/32" (536)

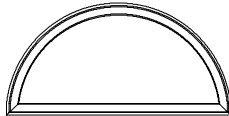


EC54HRIS

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

59 1/2" (1511)  
62 1/2" (1588)  
56 3/4" (1441)  
56" (1422)  
50 3/32" (1272)

30 5/16" (770)  
31 13/16" (808)  
28 3/4" (730)  
28" (711)  
22 3/32" (561)



EC56HRIS

63 1/2" (1613)  
66 1/2" (1689)  
60 3/4" (1543)  
60" (1524)  
54 3/32" (1374)

32 5/16" (821)  
33 13/16" (859)  
30 3/4" (781)  
30" (762)  
24 3/32" (612)



EC60HRIS

67 1/2" (1715)  
70 1/2" (1791)  
64 3/4" (1645)  
64" (1626)  
58 3/32" (1476)

34 5/16" (872)  
35 13/16" (910)  
32 3/4" (832)  
32" (813)  
26 3/32" (663)

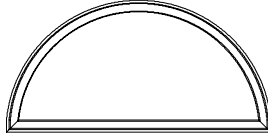


EC64HRIS

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

69 1/2" (1765)  
72 1/2" (1842)  
66 3/4" (1695)  
66" (1676)  
60 3/32" (1526)

35 5/16" (897)  
36 13/16" (935)  
33 3/4" (857)  
33" (838)  
27 3/32" (688)



EC66HRIS

75 1/2" (1918)  
78 1/2" (1994)  
72 3/4" (1848)  
72" (1829)  
66 3/32" (1679)

38 5/16" (973)  
39 13/16" (1011)  
36 3/4" (933)  
36" (914)  
30 3/32" (764)

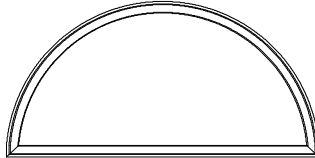


EC72HRIS

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

81 1/2" (2070)  
84 1/2" (2146)  
78 3/4" (2000)  
78" (1981)  
72 3/32" (1831)

41 5/16" (1049)  
42 13/16" (1087)  
39 3/4" (1010)  
39" (991)  
33 3/32" (841)



EC78HRIS

87 1/2" (2223)  
90 1/2" (2299)  
84 3/4" (2153)  
84" (2134)  
78 3/32" (1984)

44 5/16" (1126)  
45 13/16" (1164)  
42 3/4" (1086)  
42" (1067)  
36 3/32" (917)



EC84HRIS

#### ELEVATION SYMBOL LEGEND:

M.O. = MASONRY OPENING

VALUES IN () ARE IN MILLIMETER CONVERSIONS

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.

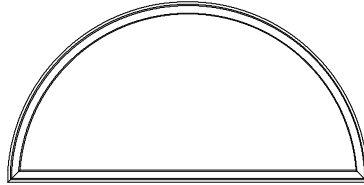
**CASEMENT AND DOOR HALF ROUND UNITS**

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

93 1/2" (2380)  
96 1/2" (2451)  
90 3/4" (2305)  
90" (2286)  
84 3/32" (2136)

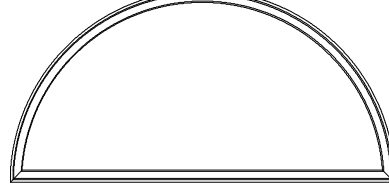
99 1/2" (2527)  
102 1/2" (2604)  
96 3/4" (2457)  
96" (2438)  
90 3/32" (2288)

47 5/16" (1202)  
48 13/16" (1240)  
45 3/4" (1162)  
45" (1143)  
39 3/32" (993)



EC90HRIS

50 5/16" (1278)  
51 13/16" (1316)  
48 3/4" (1238)  
48" (1219)  
42 3/32" (1069)



EC96HRIS

**ELEVATION SYMBOL LEGEND:**

**M.O.** = MASONRY OPENING

VALUES IN () ARE IN MILLIMETER CONVERSIONS

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.

**DOUBLE-HUNG QUARTER ROUND UNITS**

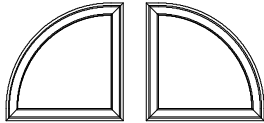
**M.O. BRICKMOULD**  
**M.O. ADAMS/FLAT CASING**  
**ROUGH OPENING**  
**FRAME SIZE**  
**DAYLIGHT OPENING**

32 7/8" (835)  
35 7/8" (911)  
30 1/8" (765)  
29 3/8" (746)  
23 15/32" (596)

36 7/8" (937)  
39 7/8" (1013)  
34 1/8" (867)  
33 3/8" (848)  
27 15/32" (698)

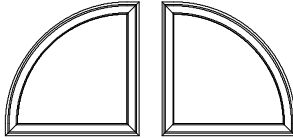
40 7/8" (1038)  
43 7/8" (1114)  
38 1/8" (968)  
37 3/8" (949)  
31 15/32" (799)

31 11/16" (805)  
33 3/16" (843)  
30 1/8" (765)  
29 3/8" (746)  
23 15/32" (596)



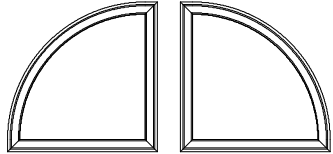
ECD29QRIS

35 11/16" (906)  
37 3/16" (945)  
34 1/8" (867)  
33 3/8" (848)  
27 15/32" (698)



ECD33QRIS

39 11/16" (1008)  
41 3/16" (1046)  
38 1/8" (968)  
37 3/8" (949)  
31 15/32" (799)



ECD37QRIS

**ELEVATION SYMBOL LEGEND:**

**M.O.** = MASONRY OPENING

VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS

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.

#### DOUBLE-HUNG HALF ROUND UNITS

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

32 7/8" (835)  
 35 7/8" (911)  
 30 1/8" (765)  
 29 3/8" (746)  
 23 15/32" (596)

17" (432)  
 18 1/2" (470)  
 15 7/16" (392)  
 14 11/16" (373)  
 8 25/32" (223)



ECD29HRIS

36 7/8" (937)  
 39 7/8" (1013)  
 34 1/8" (867)  
 33 3/8" (848)  
 27 15/32" (698)

19" (483)  
 20 7/16" (521)  
 17 7/16" (443)  
 16 11/16" (424)  
 10 25/32" (274)



ECD33HRIS

40 7/8" (1038)  
 43 7/8" (1114)  
 38 1/8" (968)  
 37 3/8" (949)  
 31 15/32" (799)

21" (533)  
 22 1/2" (572)  
 19 7/16" (494)  
 18 11/16" (475)  
 12 25/32" (325)



ECD37HRIS

44 7/8" (1140)  
 47 7/8" (1216)  
 42 1/8" (1070)  
 41 3/8" (1051)  
 35 15/32" (901)

23" (584)  
 24 1/2" (645)  
 21 7/16" (545)  
 20 11/16" (525)  
 14 25/32" (375)



ECD41HRIS

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

56 7/8" (1445)  
 59 7/8" (1521)  
 54 1/8" (1375)  
 53 3/8" (1356)  
 47 15/32" (1206)

29" (737)  
 30 1/2" (775)  
 27 7/16" (697)  
 26 11/16" (678)  
 20 25/32" (528)



ECD53HRIS

62 1/4" (1581)  
 65 1/4" (1657)  
 59 1/2" (1511)  
 58 3/4" (1492)  
 52 27/32" (1342)

31 11/16" (805)  
 33 3/16" (845)  
 30 18" (765)  
 29 3/8" (746)  
 23 15/32" (596)



ECD58HRIS

70 1/4" (1784)  
 73 1/4" (1861)  
 67 1/2" (1715)  
 66 3/4" (1695)  
 60 27/32" (1545)

35 11/16" (906)  
 37 3/16" (945)  
 34 1/8" (867)  
 33 3/8" (848)  
 27 15/32" (698)

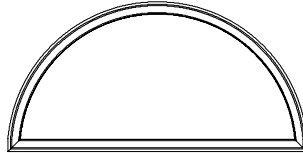


ECD66HRIS

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

78 1/4" (1988)  
 81 1/4" (2064)  
 75 1/2" (1918)  
 74 3/4" (1899)  
 68 27/32" (1748)

39 11/16" (1008)  
 41 3/16" (1046)  
 38 1/8" (968)  
 37 3/8" (949)  
 31 15/32" (799)



ECD74HRIS

86 1/4" (2191)  
 89 1/4" (2267)  
 83 1/2" (2121)  
 82 3/4" (2102)  
 76 27/32" (1952)

43 11/16" (1110)  
 45 3/16" (1148)  
 42 1/8" (1070)  
 41 3/8" (1051)  
 35 15/32" (901)



ECD82HRIS

#### ELEVATION SYMBOL LEGEND:

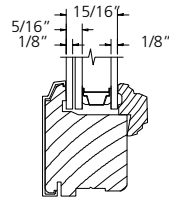
**M.O.** = MASONRY OPENING

VALUES IN ( ) ARE IN MILLIMETER CONVERSIONS

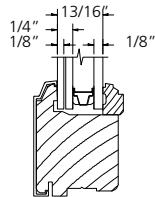
Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

**GLAZING OPTIONS**

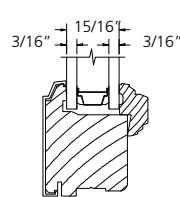
**INTERIOR GLAZING OPTIONS**



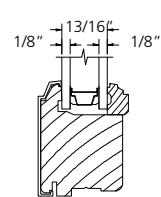
**PICTURE  
WINDOWS  
ONLY**  
**7.3L//DS**



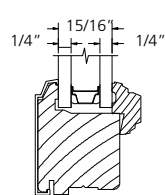
**CASEMENT  
PICTURE**  
**7.0L//5/DS**



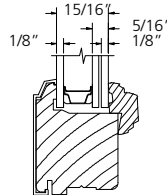
**PICTURE  
WINDOWS  
ONLY**  
**3/16//3/16**



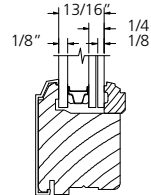
**CASEMENT  
PICTURE**  
**5/DS//5/DS**



**PICTURE  
WINDOWS  
ONLY**  
**1/4//1/4**



**PICTURE  
WINDOWS  
ONLY**  
**DS//7.3L**

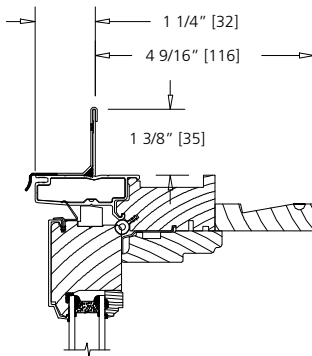


**CASEMENT  
PICTURE**  
**5/DS//7.0L**

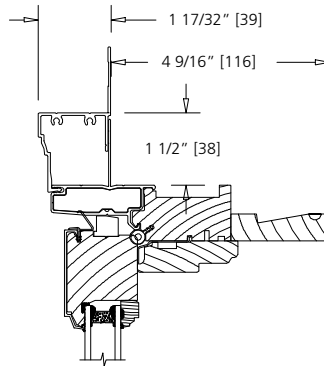
SCALE 3" = 1'

**TRIM OPTIONS**

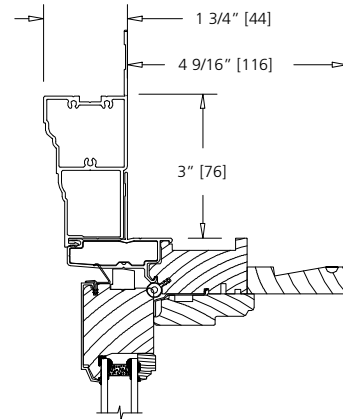
**STRAIGHTLINE EXTERIOR TRIM**



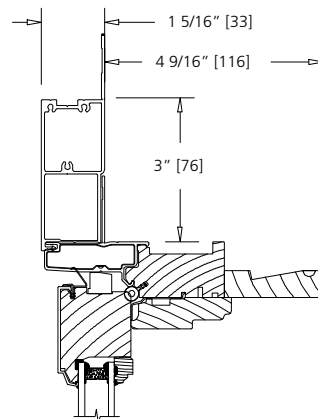
**STANDARD**



**BRICKMOULD**

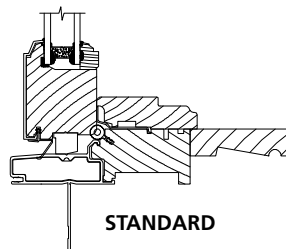


**ADAMS  
CASING**

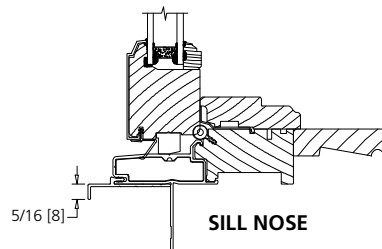


**3 1/2\"  
FLAT CASING**

**SILL OPTIONS**



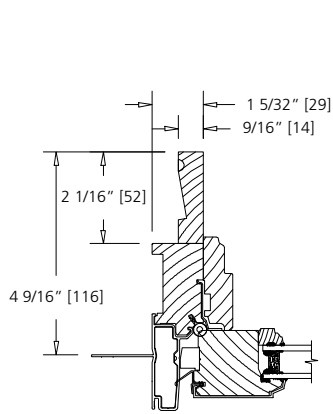
**STANDARD**



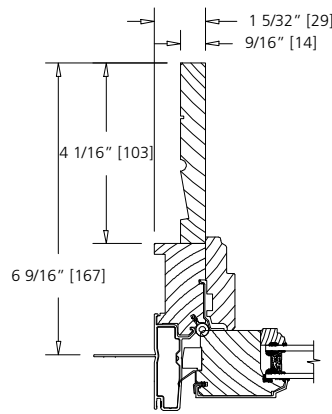
**SILL NOSE**

SCALE: 3" = 1'

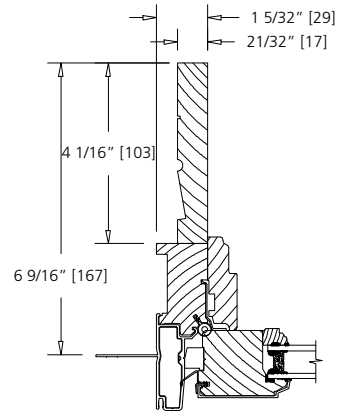
**JAMB EXTENDER OPTIONS**



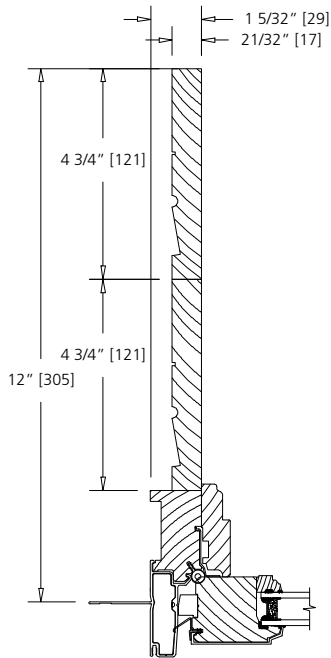
**4 9/16" WALL**  
9/16" JAMB THICKNESS (OPTION)



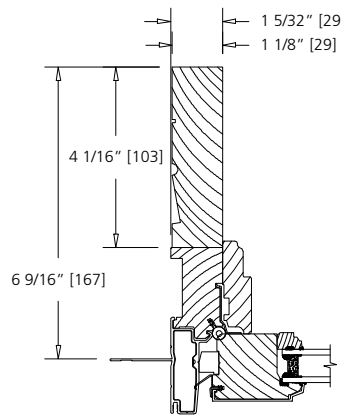
**6 9/16" WALL**



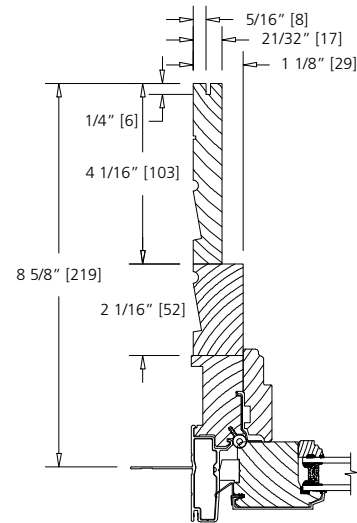
**6 9/16" WALL**  
4/4 JAMB THICKNESS (STANDARD)



**12" WALL**  
4/4 JAMB THICKNESS (STANDARD)  
2 PC JAMB EXTENSION SHOWN



**6 9/16" WALL**  
5/4 JAMB THICKNESS (OPTION)



**8 5/8" WALL**  
5/4-4/4 STACKED KERFED  
JAMB OPTION

**Notes:**

Jamb Extension (9/16" thick) only available on Jamb's up to 6 9/16".  
Jamb's over 6 9/16" will only have a 4/4 or 5/4 option.  
Jamb's over 7 1/4" up to 12" will be 2 layers.  
Kerfed Jamb Extension only available on 4/4 or 5/4 options.

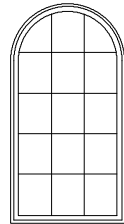
SCALE: 3" = 1'

## LITE CUT INFORMATION

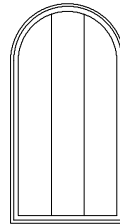
Clad in-sash geometric windows are available in 7/8", 1-1/8" and 1-3/8" widths for SDL (Simulated Divided Lites); 5/8" Flat, 23/32" and 1" Contour GBG (Grilles between the Glass); and 7/8", 1-1/8" and 1-3/8" Full Surround removable grilles. Standard lite cuts are rectangular.

### LITE CUT OPTIONS

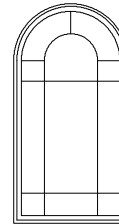
Special lite cut patterns can include a wide variety of straight line and radius patterns. The illustrations shown here represent just a few of the possibilities. Rectangular, horizontal, vertical and Prairie lite patterns are available in all standard size clad in-sash geometric windows. Uneven, diamond, radius and Gothic lite cuts are available, subject to approval. Approvals are based on the ability to fulfill the design requirement while maintaining the construction integrity of the finished product.



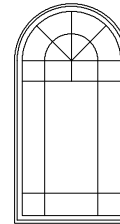
RECTANGULAR



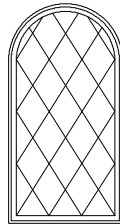
VERTICAL



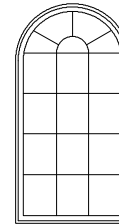
PRAIRIE



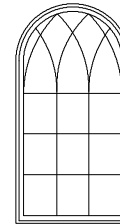
UNEVEN



DIAMOND



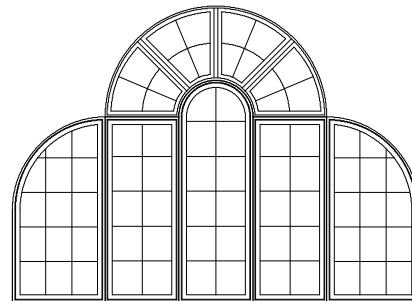
RADIUS



GOTHIC

### 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.



*Continued on next page*

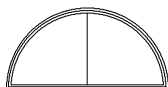


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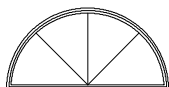
**LITE CUT INFORMATION**

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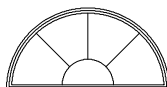
**HALF ROUND LITE PATTERNS**



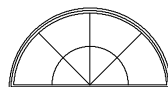
200 SERIES



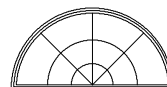
400 SERIES



500 SERIES



800 SERIES



1200 SERIES

**QUARTER ROUND LITE PATTERNS**



200 SERIES

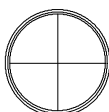


400 SERIES

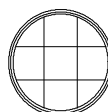


600 SERIES

**FULL ROUND LITE PATTERNS**



400 SERIES



900 SERIES

**OCTAGON LITE PATTERNS**



400 SERIES



900 SERIES

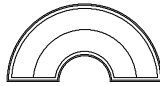
**LITE CUT INFORMATION**

**INVERTED RADIUS SILL NOTE:**

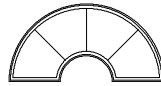
Windows with inverted radius sills have continuous head and sill configurations. The twin, triple and quad units utilize a mullion post as part of a single unit. Single lines represent grille and thermal bar lite break ups. Twin, triple and quad units are single units with mullion posts being represented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

**INVERTED HALF ROUND BREAKUP PATTERNS**

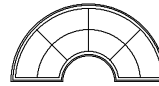
**INVERTED HALF ROUND SILL**



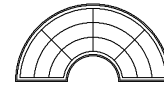
200 SERIES  
RADIUS HUB



400 SERIES

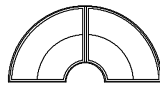


800 SERIES

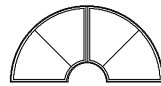


1200 SERIES

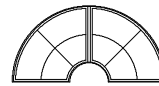
**INVERTED HALF ROUND SILL - TWIN**



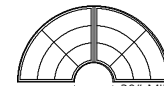
200 SERIES  
RADIUS HUB



200 SERIES



400 SERIES

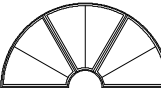


30" MIN. ON  
ALL INVERTS  
600 SERIES

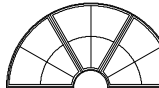
**INVERTED HALF ROUND SILL - TRIPLE**



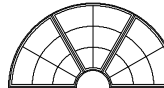
200 SERIES  
RADIUS HUB



200 SERIES

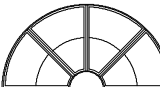


400 SERIES

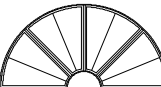


600 SERIES

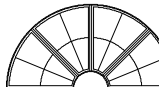
**INVERTED HALF ROUND SILL - QUAD**



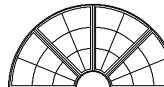
200 SERIES  
RADIUS HUB



200 SERIES



400 SERIES



600 SERIES

**INVERTED QUARTER ROUND BREAKUP PATTERNS**

**INVERTED QUARTER ROUND SILL**



200 SERIES  
RADIUS HUB



200 SERIES



15" MIN. ON  
ALL INVERTS  
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

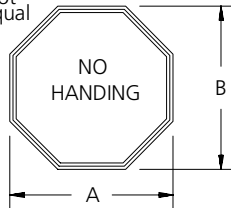


600 SERIES

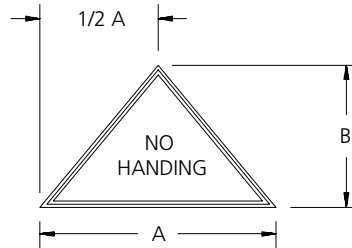
**NARROW SASH LAYOUT SHAPES**  
**ALL SIDES**

ALL GEOMETRIC WINDOW SHAPES ARE  
VIEWED FROM THE EXTERIOR.

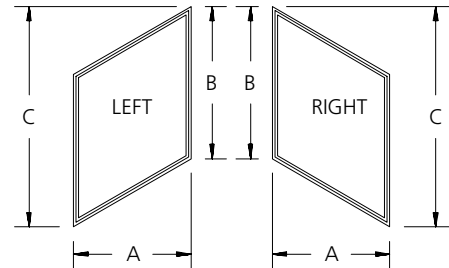
A and B do not  
have to be equal



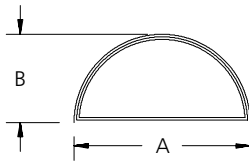
**OCTAGON**  
FIXED OR OPERATOR



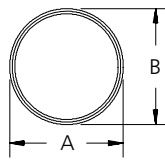
**TRIANGLE**  
STATIONARY ONLY



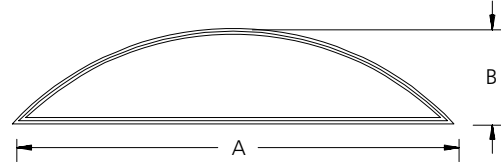
**PARALLELOGRAM**  
STATIONARY ONLY



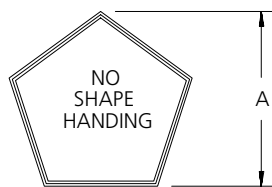
**HALF ROUND**  
STATIONARY ONLY



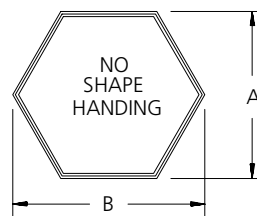
**FULL ROUND**  
STATIONARY ONLY



**CIRCLE SEGMENT**



**EQUAL PENTAGON**

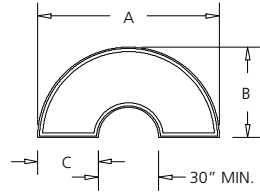


**HEXAGON**

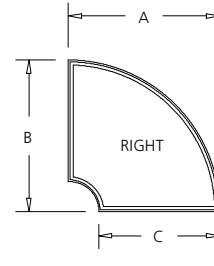
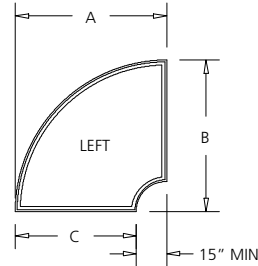
*Continued on next page*

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

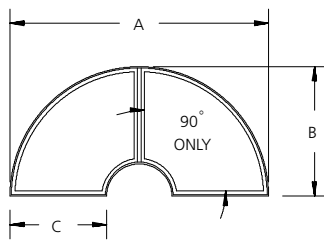
ALL GEOMETRIC WINDOW SHAPES ARE  
VIEWED FROM THE EXTERIOR.



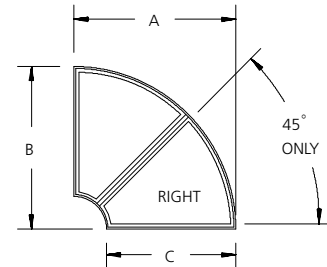
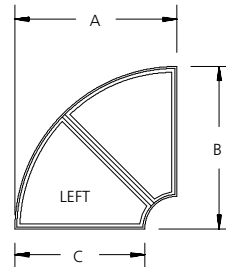
**INVERTED HALF ROUND**  
STATIONARY ONLY



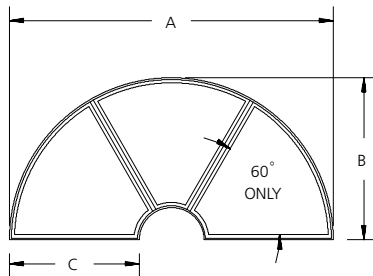
**INVERTED QUARTER ROUND**  
STATIONARY ONLY



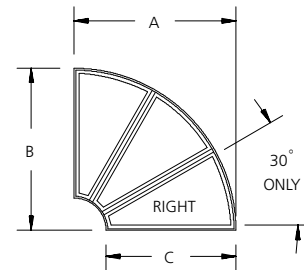
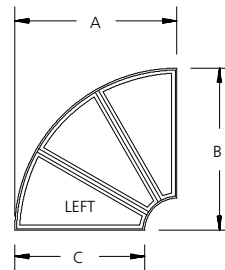
**INVERTED HALF ROUND - TWIN**  
STATIONARY ONLY



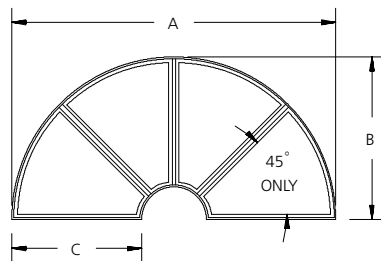
**INVERTED QUARTER ROUND - TWIN**  
STATIONARY ONLY



**INVERTED HALF ROUND - TRIPLE**  
STATIONARY ONLY



**INVERTED QUARTER ROUND - TRIPLE**  
STATIONARY ONLY

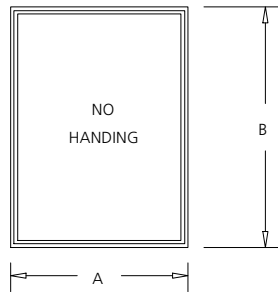


**INVERTED HALF ROUND - QUAD**  
STATIONARY ONLY

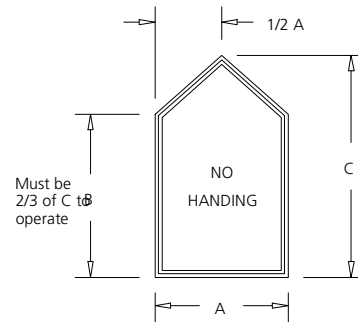
**INVERTED HALF ROUND AND QUARTER ROUND UNITS**

Inverted half round and quarter round units have continuous head and sill configurations which utilize mullion posts from frame to frame. See page 10-25 (Section Details & Dimensions) for mullion post specifications. The mullion posts are positioned radially from the center point of the sill radius.

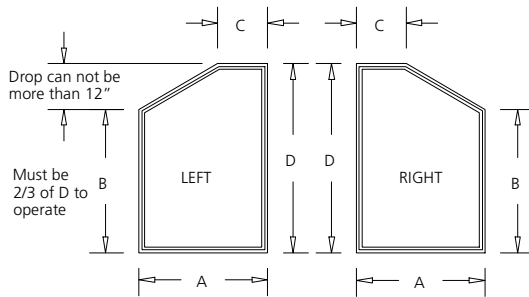
**STANDARD WIDE BOTTOM RAIL SHAPES**



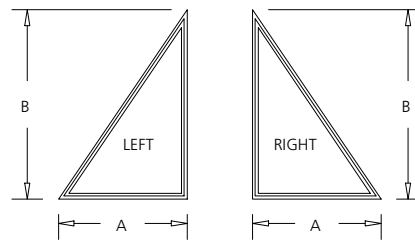
**RECTANGLE**  
FIXED OR OPERATOR



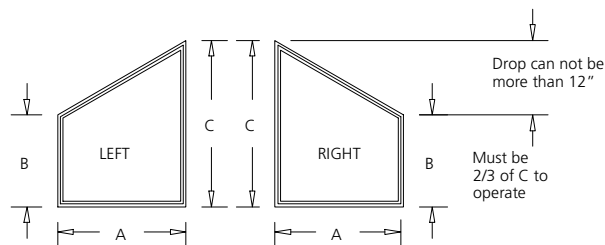
**PENTAGON**  
FIXED ONLY



**CLIPPED CORNER**  
FIXED OR OPERATOR



**RIGHT TRIANGLE**  
FIXED ONLY

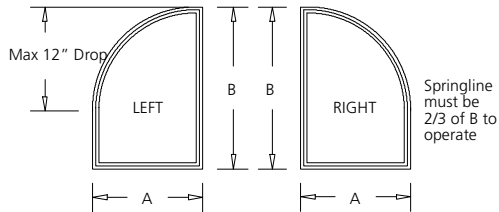


**TRAPEZOID**  
FIXED OR OPERATOR

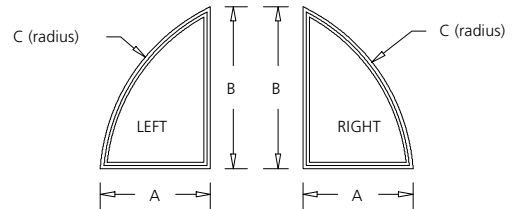
*Continued on next page*

**STANDARD WIDE BOTTOM RAIL SHAPES**

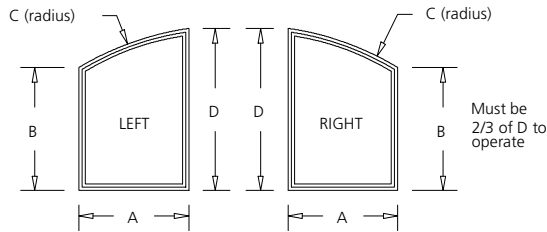
ALL GEOMETRIC WINDOW SHAPES ARE  
VIEWED FROM THE EXTERIOR.



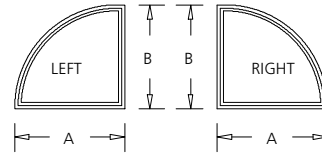
**OPEN BOTTOM  
QUARTER ROUND**  
FIXED OR OPERATOR



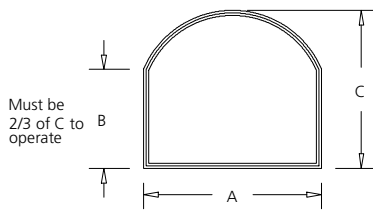
**QUARTER SEGMENT**  
FIXED ONLY



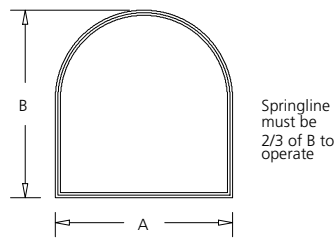
**EXTENDED  
QUARTER SEGMENT**  
FIXED OR OPERATOR



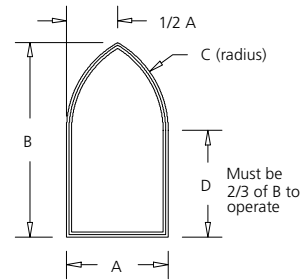
**QUARTER ROUND**  
FIXED ONLY



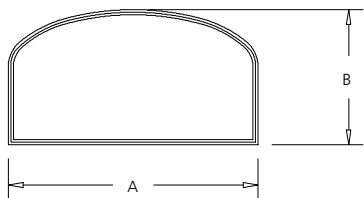
**EXTENDED  
CIRCLE SEGMENT**  
FIXED OR OPERATOR



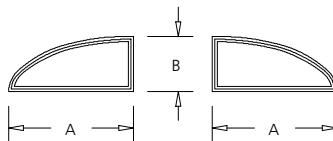
**EXTENDED  
HALF ROUND**  
FIXED ONLY



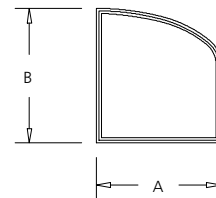
**GOTHIC**  
FIXED ONLY



**EXTENDED ELLIPSE**  
FIXED ONLY



**QUARTER ELLIPSE**  
FIXED ONLY

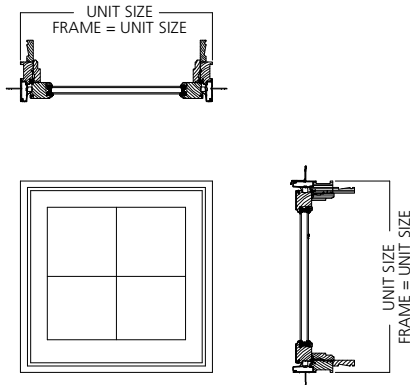


**EXTENDED  
QUARTER ELLIPSE**  
FIXED ONLY

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

**STANDARD OFFERING**

DRIP CAP & NAILING FLANGE



**GENERAL NOTES:**

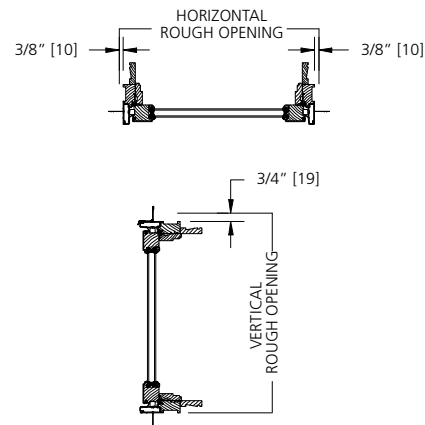
UNITS WITH NO TRIM AND SILL NOSE:  
UNIT SIZE = FRAME SIZE

UNIT SIZE IS ALWAYS THE  
EXTREME SIZE OF THE WINDOW  
WITH OR WITHOUT TRIM  
(DRIP CAP & NAILING FLANGE ARE  
NOT ADDED TO ANY UNIT SIZING)

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

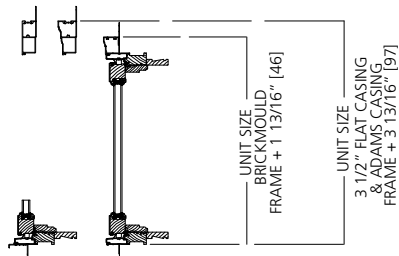
**ROUGH OPENING:**

ROUGH OPENING IS ALWAYS 3/4" OVER  
FRAME SIZE OF THE WINDOW

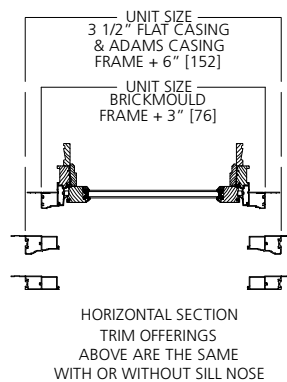
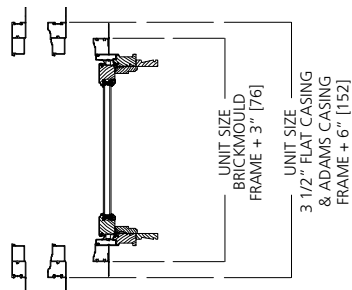


**NON-STANDARD UNIT SIZING**

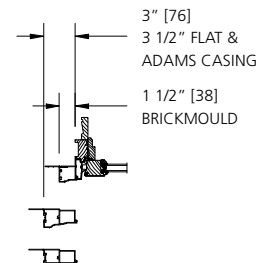
EXTERIOR TRIM OFFERINGS



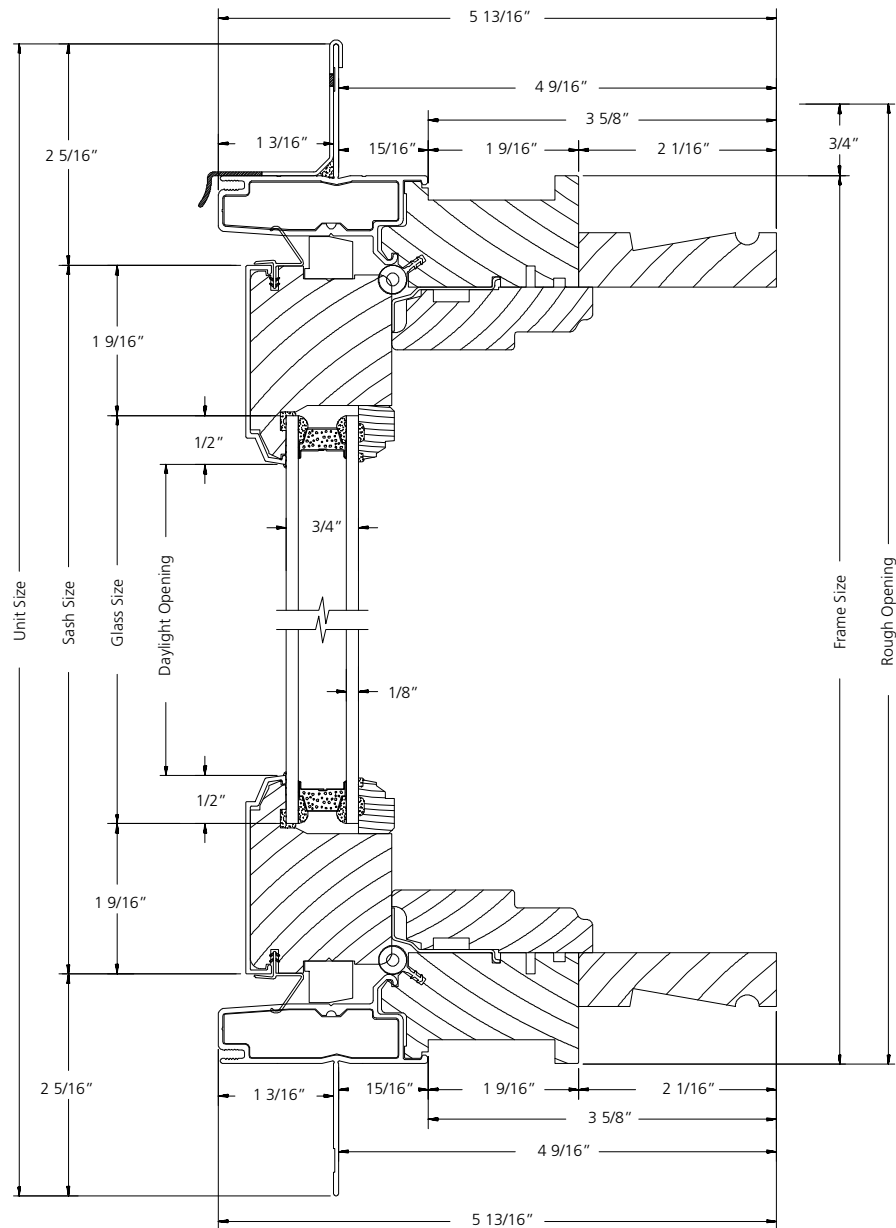
EXTERIOR TRIM OFFERINGS WITHOUT SILL NOSE  
EXTERIOR TRIM ON ALL 4 SIDES



**FRAME TO TRIM  
DIMENSIONS**



**IN-SASH UNIT**

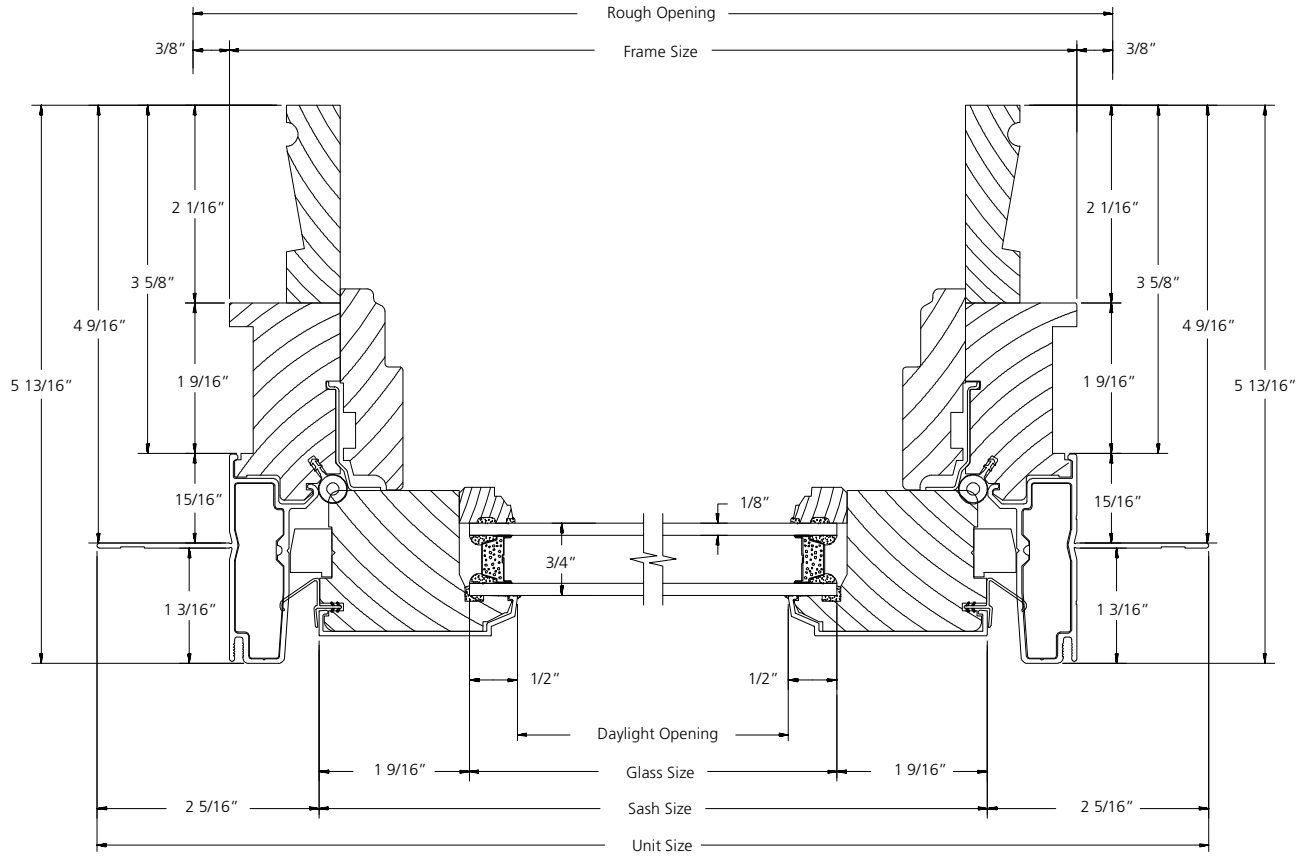


**VERTICAL SECTION**

SCALE: 6" = 1'



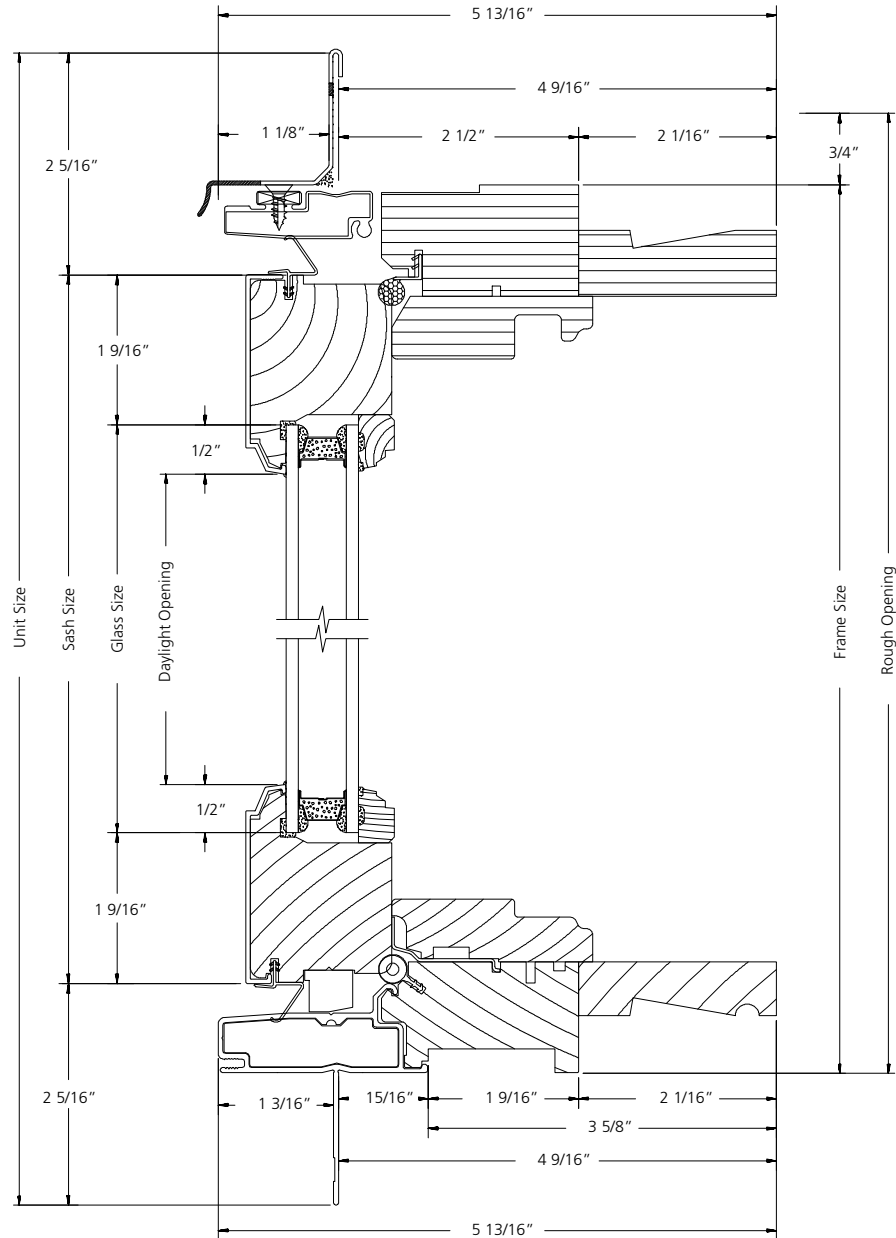
**IN-SASH UNIT**



**HORIZONTAL SECTION**

SCALE: 6" = 1'

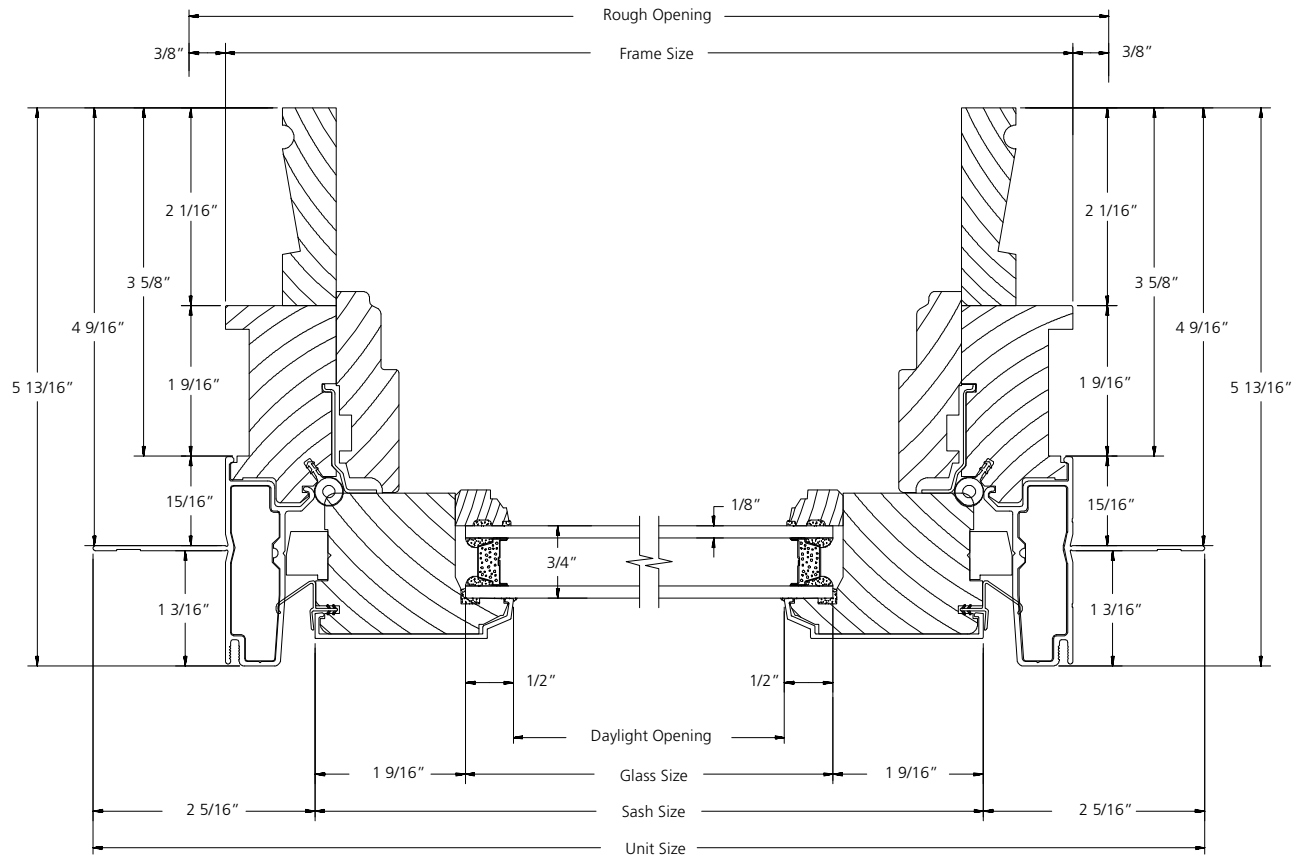
**IN-SASH RADIUS UNIT**



**VERTICAL SECTION**

SCALE: 6" = 1'

**IN-SASH RADIUS UNIT**



**HORIZONTAL SECTION**

SCALE: 6" = 1'