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PRODUCT SPECIFICATIONS**EXTERIOR FINISH**

Exterior aluminum surfaces are finished with a fluoropolymer (70% Kynar 500®) multi-coat finish system to meet the performance standards required by AAMA specification #2605. 41 standard colors include Brilliant White, Chestnut Bronze, Desert Sand, French Vanilla, Hartford Green, Mesa Red, Black Licorice, Heirloom White, Hunter Green, Redwood, Sage Brown, Smoke and more. Custom Color Matching available. Three copper finishes are available on window sash.

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. Optional interior wood species include vertical grain Douglas Fir, Mahogany and Knotty Alder.

FRAME

Frame is assembled from select kiln-dried pine AuraLast® wood on all exterior parts. Exterior surface is covered with .050 gauge extruded aluminum cladding. Standard jamb width is 4-9/16". Integral nailing fin is part of the frame extrusion on all four sides.

SASH

2-3/32" thick select kiln-dried pine AuraLast® wood. Exterior surface is covered with .050 gauge extruded aluminum cladding. 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 screens are available in Ponderosa Pine, vertical-grain Douglas Fir, Mahogany, and Knotty Alder. 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 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

Drip cap and integral nailing fin standard with optional extruded aluminum brickmould, 3-1/2" flat, 3-1/2" Adams and Heritage trims. 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 7-15/16" for 4/4 and up to 12-1/2" for 5/4, factory applied.

Continued on next page

PRODUCT SPECIFICATIONS

INSTALLATION

Installation per JELD-WEN Installation Method for Metal Clad Windows. See 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 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>	
EXTERIOR FINISH	<ul style="list-style-type: none"> • Brilliant White • Chestnut Bronze • Desert Sand • French Vanilla • Mesa Red • Hartford Green • Black Licorice • Heirloom White • Hunter Green • Redwood • Sage Brown • Smoke • Artic Silver • Dark Chocolate • Black Emerald • Bone White • Bronze • Buckskin • Cambridge White • Capri Blue • Cascade 	<ul style="list-style-type: none"> • Champagne • Clover Mist • Dark Buckskin • Dark Ivy • Deep Summer • Garnet • Haverstraw • Hudson Blue • Ivory • Ivy • Liberty Blue • Mocha Cream • Mosiac Green • Pueblo Tan • Rosewood • Scarlet Haze • Sea Foam • Teal • Wedgewood • White 	<ul style="list-style-type: none"> • Custom Color Matching <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Sash Only:</p> <ul style="list-style-type: none"> • Bright Copper • Speckled Patina Copper • Hand Rubbed Patina Copper </div>
EXTERIOR TRIM	<ul style="list-style-type: none"> • Drip Cap & Integral Nailing Fin 	<ul style="list-style-type: none"> • Extruded Aluminum Brickmould • Adams Casing (2 pc) 	<ul style="list-style-type: none"> • 3-1/2" Flat Casing (2 pc) • Heritage Casing
INTERIOR WOOD	<ul style="list-style-type: none"> • Western Pine 	<ul style="list-style-type: none"> • Knotty Alder • Vertical Grain Douglas Fir • Mahogany 	
INTERIOR FINISH	<ul style="list-style-type: none"> • Natural 	<ul style="list-style-type: none"> • Priming Available <p>Pre-finished Interior Options are:</p> <ul style="list-style-type: none"> • Paint - Pure White, Extra White, Natural Choice, Moderate White • Stain - Wheat, Fruitwood, Cherry, Cordovan, Cider • Clear Lacquer 	
SIZE	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Custom sizes and shapes from 6" to 120" • Smallest frame angle is 11 degrees • Smallest frame radius is 9" • Smallest full round is 18" diameter • Operating Geometrics cannot exceed 32" in width, cannot exceed 15 sq. ft., and the short leg must be 2/3 of the overall height. 	
GLAZING	<ul style="list-style-type: none"> • Low-E Insulating Glass (with Argon) • Low-E 366 • Preserve® Protective Film 	<ul style="list-style-type: none"> • Clear • Obscure • Reflective • Tints: Bronze, Gray, Green • Glue Chip • Safety Laminate in Clear, Bronze or Gray 	<ul style="list-style-type: none"> • Neat Glass • Seedy Reamy • Rain • Narrow Reed • Sandblasted • Tempered • Impact Resistant
		<ul style="list-style-type: none"> • High Altitude (Breather Tube, no Argon) 	

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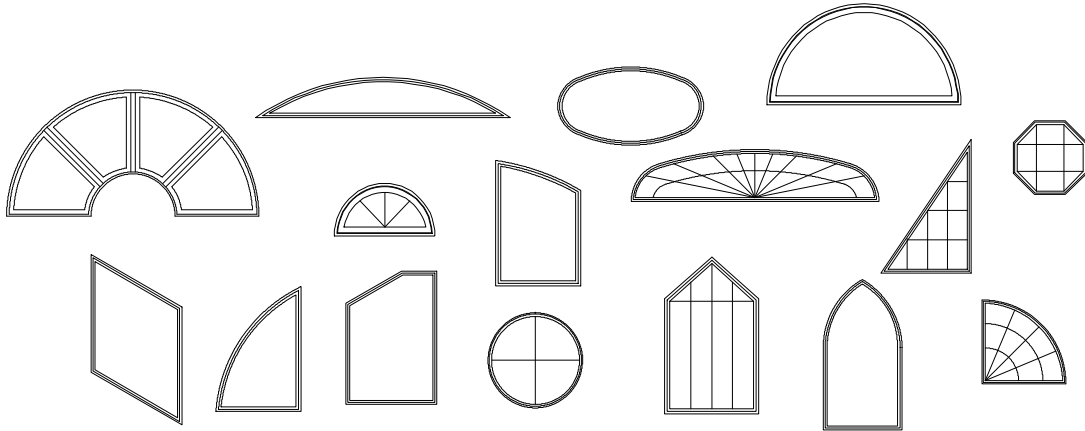
QUICK SPEC GUIDE

SPECIFICATION	STANDARD FEATURES	OPTIONAL FEATURES <i>Some options may require additional lead times. Consult your JELD-WEN Sales Representative.</i>
GRILLES		SDL Bead Profile: <ul style="list-style-type: none"> • 5/8", 7/8", 1-1/8", 1-3/8", 2-5/16" with Light Bronze Shadow Bar • 5/8", 7/8", 1-1/8", 1-3/8", 2-5/16" with Silver Shadow Bar SDL Putty Profile: <ul style="list-style-type: none"> • 5/8", 7/8" and 1-1/8" with Light Bronze Shadow Bar • 5/8", 7/8" and 1-1/8" with Silver Shadow Bar GBG (Grilles between the Glass): <ul style="list-style-type: none"> • 5/8" Flat, 23/32" Contour, 1" Contour Full Surround: <ul style="list-style-type: none"> • 7/8", 1-1/8", 1-3/8"
HARDWARE		<ul style="list-style-type: none"> • Roto Operator (single arm) • Concealed Locking System
HARDWARE COLOR		<ul style="list-style-type: none"> • White • Chestnut Bronze • Desert Sand • Polished Brass • Antique Brass • Polished Chrome • Brushed Chrome • Oil-Rubbed Bronze
JAMB	<ul style="list-style-type: none"> • Applied, 4/4 • 4-9/16" 	<ul style="list-style-type: none"> • Up to 7-15/16" 4/4 • Up to 12-1/2" 5/4
INSECT SCREENS	<ul style="list-style-type: none"> • Fiberglass 	<ul style="list-style-type: none"> • Wood veneer wrapped screens available in Pine, Fir, Knotty Alder, and Mahogany
SCREEN FRAME COLOR		<ul style="list-style-type: none"> • White • Chestnut Bronze • Desert Sand Wood Veneer (Interior) <ul style="list-style-type: none"> • Ponderosa Pine • Vertical Grain Douglas Fir • Mahogany • Knotty Alder

GENERAL INFORMATION

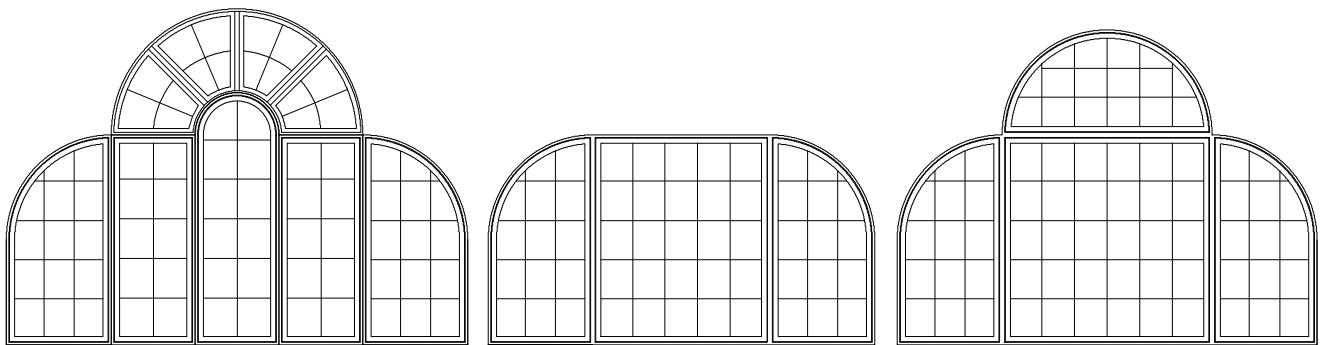
STANDARD SIZES & DESIGNS

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).

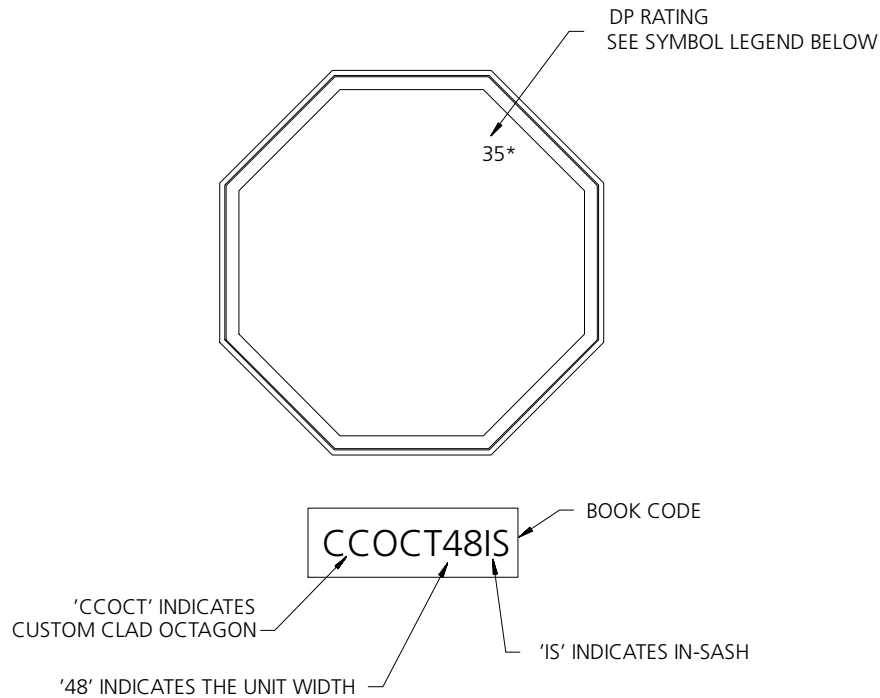


ELEVATION NOTES

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. CCXXHRIS | CUSTOM CLAD HALF ROUND IN-SASH |
| 2. CCDHRXXHRIS | CUSTOM CLAD DOUBLE-HUNG HALF ROUND IN-SASH |
| 3. CCIPDXXHRIS | CUSTOM CLAD IN-SWING PATIO DOOR HALF ROUND IN-SASH |
| 4. CCIPDTXXHRIS | CUSTOM CLAD IN-SWING PATIO DOOR TRUE HALF ROUND IN-SASH |
| 5. CCOPDXXHRIS | CUSTOM CLAD OUT-SWING PATIO DOOR HALF ROUND IN-SASH |
| 6. CCOPDTXXHRIS | CUSTOM CLAD OUT-SWING PATIO DOOR TRUE HALF ROUND IN-SASH |
| 7. CCXXQRIS | CUSTOM CLAD QUARTER ROUND IN-SASH |
| 8. CCXXFRIS | CUSTOM CLAD FULL ROUND IN-SASH |
| 9. CCOCTXXIS | CUSTOM CLAD OCTAGON IN-SASH |
| 10. CCDHRXXQRIS | CUSTOM CLAD DOUBLE-HUNG QUARTER ROUND IN-SASH |



GENERAL NOTES

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

ELEVATION SYMBOL LEGEND:

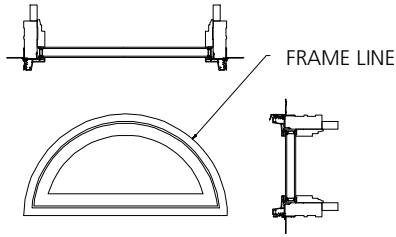
NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING ON OPERATING OR STATIONARY UNITS.

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



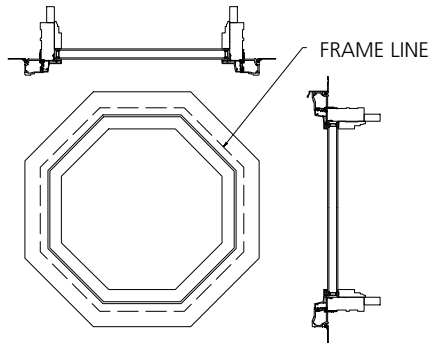
STANDARD GEOMETRIC ELEVATIONS

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.

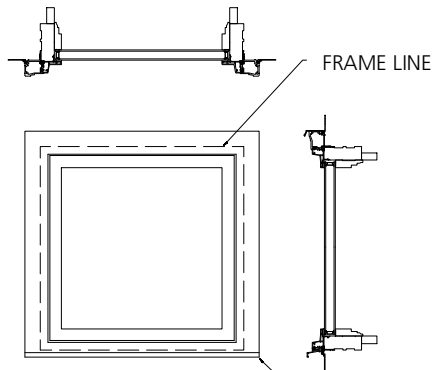
TRIM - ALL SIDES



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.

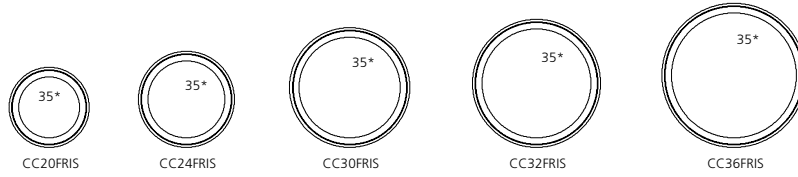
SUBSILL RESTRICTIONS

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

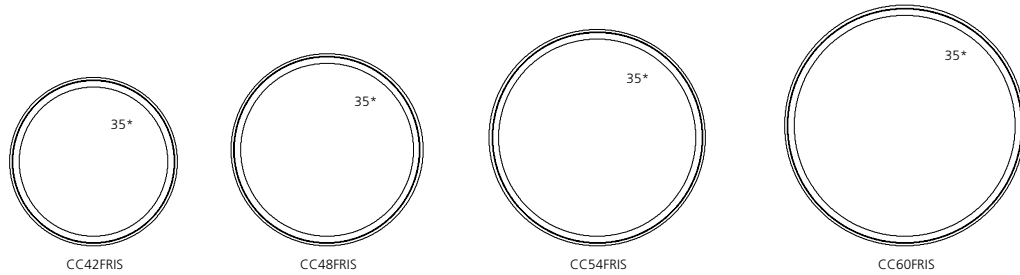
SUBSILL EXTENDS TO OUTSIDE
EDGE OF THE TRIM

FULL ROUND UNITS

M.O. BRICKMOULD	23 1/4"(591)	27 1/4"(692)	33 1/4"(845)	35 1/4"(895)	39 1/4"(997)
M.O. ADAMS/FLAT CASING	26 5/16"(668)	30 5/16"(770)	36 5/16"(922)	38 5/16"(973)	42 5/16"(1074)
ROUGH OPENING	20 3/4"(527)	24 3/4"(629)	30 3/4"(781)	32 3/4"(832)	36 3/4"(933)
FRAME SIZE	20"(508)	24"(610)	30"(762)	32"(813)	36"(914)
DAYLIGHT OPENING	15 13/64"(386)	19 13/64"(488)	25 13/64"(640)	27 13/64"(691)	31 13/64"(793)



M.O. BRICKMOULD	45 1/4"(1149)	51 1/4"(1302)	57 1/4"(1454)	63 1/4"(1607)
M.O. ADAMS/FLAT CASING	48 5/16"(1227)	54 5/16"(1379)	60 5/16"(1532)	66 5/16"(1684)
ROUGH OPENING	42 3/4"(1086)	48 3/4"(1238)	54 3/4"(1391)	60 3/4"(1543)
FRAME SIZE	42"(1067)	48"(1219)	54"(1372)	60"(1524)
DAYLIGHT OPENING	37 13/64"(945)	43 13/64"(1097)	49 13/64"(1250)	55 13/64"(1402)



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)

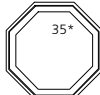
27 1/4" (692)
30 5/16" (770)
24 3/4" (629)
24" (610)
19 13/64" (488)

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

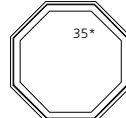
35 1/4" (895)
38 5/16" (973)
32 3/4" (832)
32" (813)
27 13/64" (691)



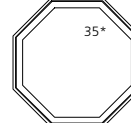
CCOCT20IS



CCOCT24IS



CCOCT30IS



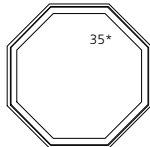
CCOCT32IS

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

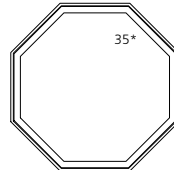
39 1/4" (997)
42 5/16" (1074)
36 3/4" (933)
36" (914)
31 13/64" (792)

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

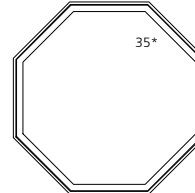
51 1/4" (1302)
54 5/16" (1379)
48 3/4" (1238)
48" (1219)
43 13/64" (1105)



CCOCT36IS



CCOCT42IS



CCOCT48IS

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. 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)
12 47/64" (323)

11 1/2" (292)
13" (330)
9 3/4" (248)
9" (229)
4 13/64" (107)



CC18HRIS

12 1/2" (318)
14" (356)
10 3/4" (273)
10" (254)
5 13/64" (132)



CC20HRIS

23 1/4" (591)
26 5/16" (668)
20 3/4" (527)
20" (508)
14 47/64" (374)

14 1/2" (368)
16" (406)
12 3/4" (324)
12" (305)
7 13/64" (183)



CC24HRIS

27 1/4" (692)
30 5/16" (770)
24 3/4" (629)
24" (610)
18 47/64" (476)

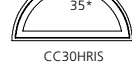
16 1/2" (419)
18" (457)
14 3/4" (375)
14" (356)
9 13/64" (234)



CC28HRIS

31 1/4" (794)
34 5/16" (871)
28 3/4" (730)
28" (711)
22 47/64" (559)

17 1/2" (445)
19" (483)
15 3/4" (400)
15" (381)
10 13/64" (259)



CC30HRIS

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

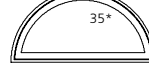
35 1/4" (895)
38 5/16" (973)
32 3/4" (832)
32" (813)
26 47/64" (679)

18 1/2" (470)
19 1/2" (508)
16" (406)
16" (406)
11 13/64" (285)



CC32HRIS

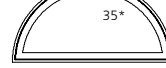
20 1/2" (521)
22" (559)
18 3/4" (476)
18" (457)
13 13/64" (335)



CC36HRIS

39 1/4" (997)
42 5/16" (1074)
36 3/4" (933)
36" (914)
30 47/64" (781)

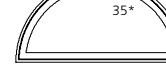
22 1/2" (571)
24" (610)
20 3/4" (527)
20" (508)
15 13/64" (386)



CC40HRIS

43 1/4" (1099)
46 5/16" (1176)
40 3/4" (1035)
40" (1016)
34 47/64" (882)

23 1/2" (597)
25" (635)
21 3/4" (552)
21" (533)
16 13/64" (412)



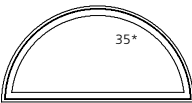
CC42HRIS

45 1/4" (1149)
48 5/16" (1227)
42 3/4" (1086)
42" (1067)
36 47/64" (933)

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

51 1/4" (1302)
54 5/16" (1379)
48 3/4" (1236)
48" (1219)
42 47/64" (1085)

26 1/2" (673)
28" (711)
24 3/4" (629)
24" (610)
19 13/64" (488)



CC48HRIS

29 1/2" (749)
31" (787)
27 3/4" (705)
27" (686)
22 13/64" (564)



CC54HRIS

57 1/4" (1545)
60 5/16" (1532)
54 3/4" (1391)
54" (1372)
48 47/64" (1238)

30 1/2" (775)
32" (813)
28 3/4" (730)
28" (711)
23 13/64" (589)



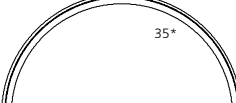
CC56HRIS

59 1/4" (1505)
62 5/16" (1582)
56 3/4" (1441)
56" (1422)
50 47/64" (1289)

M.O. BRICKMOULD
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 47/64" (1390)

32 1/2" (826)
34" (864)
30 3/4" (781)
30" (762)
25 13/64" (640)



CC60HRIS

34 1/2" (876)
36" (914)
32 3/4" (832)
32" (813)
27 13/64" (691)



CC64HRIS

67 1/4" (1708)
70 5/16" (1786)
64 3/4" (1645)
64" (1626)
58 47/64" (1492)

35 1/2" (902)
37" (940)
33 3/4" (857)
33" (838)
28 13/64" (716)



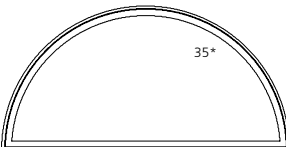
CC66HRIS

69 1/4" (1759)
72 5/16" (1836)
66 3/4" (1695)
66" (1676)
60 47/64" (1543)

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

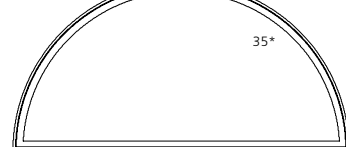
75 1/4" (1911)
78 5/16" (1989)
72 3/4" (1848)
72" (1829)
66 47/64" (1695)

38 1/2" (978)
40" (1016)
36 3/4" (933)
36" (914)
31 13/64" (793)



CC72HRIS

44 1/2" (1130)
46" (1168)
42 3/4" (1086)
42" (1067)
37 13/64" (945)



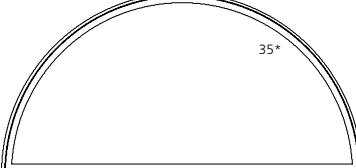
CC84HRIS

87 1/4" (2216)
90 5/16" (2294)
84 3/4" (2153)
84" (2134)
78 47/64" (2000)

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

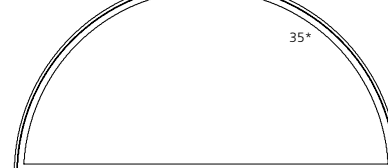
93 1/4" (2369)
96 5/16" (2446)
90 3/4" (2305)
90" (2286)
84 47/64" (2152)

47 1/2" (1207)
49" (1245)
45 3/4" (1162)
45" (1143)
40 13/64" (1021)



CC90HRIS

50 1/2" (1283)
52" (1321)
48 3/4" (1238)
48" (1219)
43 13/64" (1097)



CC96HRIS

99 1/4" (2521)
102 5/16" (2598)
96 3/4" (2457)
96" (2438)
90 47/64" (2305)

ELEVATION SYMBOL LEGEND:

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

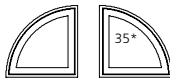
Note: Elevations shown DO NOT have exterior trim. Subtract 1/2" (12.7) from M.O. (Masonry Opening) for Unit Sizes. Masonry Openings above include Sill Nose, see Trim Options page for Sill Nose specifications. For other Trim Options refer to the Unit Sizing, Rough Opening & Masonry Openings page.

SCALE: 1/4" = 1'

CASEMENT QUARTER ROUND UNITS

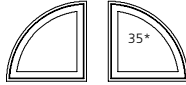
M.O. BRICKMOULD 21 1/4"(540)
M.O. ADAMS/FLAT CASING 24 5/16"(617)
ROUGH OPENING 18 3/4"(476)
FRAME SIZE 18"(457)
DAYLIGHT OPENING 13 1/64"(331)

20 1/2"(521)
22"(559)
18 3/4"(476)
13 1/64"(331)



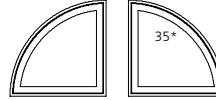
CC18QRIS

22 1/2"(571)
24"(610)
20 3/4"(527)
20"(508)
15 1/32"(382)



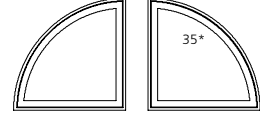
CC20QRIS

26 1/2"(673)
28"(711)
24 3/4"(629)
24"(610)
19 1/16"(484)



CC24QRIS

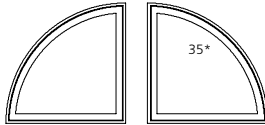
30 1/2"(775)
32"(813)
28 3/4"(730)
28"(711)
23 1/16"(586)



CC28QRIS

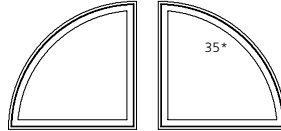
M.O. BRICKMOULD 33 1/4"(845)
M.O. ADAMS/FLAT CASING 36 5/16"(922)
ROUGH OPENING 30 3/4"(781)
FRAME SIZE 30"(762)
DAYLIGHT OPENING 25 1/16"(637)

32 1/2"(826)
34"(864)
30 3/4"(781)
30"(762)
25 1/16"(637)



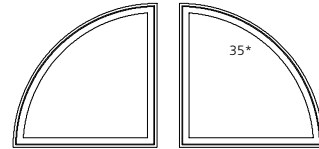
CC30QRIS

34 1/2"(876)
35"(914)
32 3/4"(832)
32"(813)
27 7/64"(689)



CC32QRIS

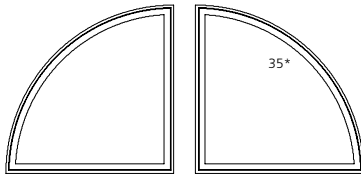
38 1/2"(978)
40"(1016)
36 3/4"(933)
36"(914)
31 7/64"(790)



CC36QRIS

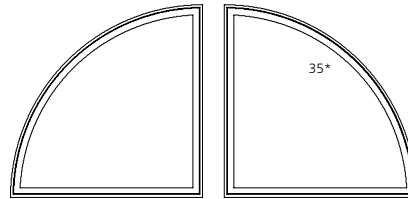
M.O. BRICKMOULD 45 1/4"(1149)
M.O. ADAMS/FLAT CASING 48 5/16"(1227)
ROUGH OPENING 42 3/4"(1086)
FRAME SIZE 42"(1067)
DAYLIGHT OPENING 37 1/8"(943)

44 1/2"(1130)
46"(1168)
42 3/4"(1086)
42"(1067)
37 1/8"(943)



CC42QRIS

50 1/2"(1283)
52"(1321)
48 3/4"(1238)
48"(1219)
43 9/64"(1096)



CC48QRIS

51 1/4"(1302)
54 5/16"(1379)
48 3/4"(1238)
48"(1219)
43 9/64"(1096)

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.

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 1/8" (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)

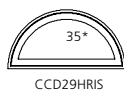
13 3/16" (336)
14 11/16" (374)
11 7/16" (291)
10 11/16" (272)
5 57/64" (150)



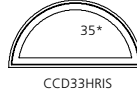
15 3/16" (386)
16 11/16" (424)
13 7/16" (341)
12 11/16" (322)
7 57/64" (200)



17 3/16" (437)
18 11/16" (475)
15 7/16" (392)
14 11/16" (373)
9 57/64" (251)



19 3/16" (487)
20 11/16" (525)
17 1/16" (443)
16 11/16" (424)
11 57/64" (302)



21 3/16" (536)
22 11/16" (574)
19 7/16" (491)
18 11/16" (475)
13 57/64" (353)



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

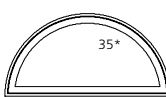
44 5/8" (1133)
47 11/16" (1211)
42 1/8" (1070)
41 3/8" (1051)
35 55/64" (911)

48 5/8" (1235)
51 11/16" (1313)
46 1/8" (1171)
45 3/8" (1153)
39 55/64" (1012)

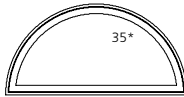
46" (1168)
49 1/16" (1246)
43 1/2" (1105)
42 3/4" (1086)
37 41/64" (956)

54" (1372)
57 1/16" (1449)
51 1/2" (1308)
50 3/4" (1289)
45 41/64" (1159)

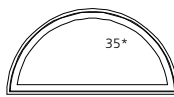
23 3/16" (589)
24 11/16" (627)
21 7/16" (544)
20 11/16" (525)
15 57/64" (404)



25 3/16" (640)
26 11/16" (678)
23 7/16" (595)
22 11/16" (576)
17 57/64" (454)



23 7/8" (606)
25 3/8" (645)
22 1/8" (562)
21 3/8" (543)
16 37/64" (421)



27 7/8" (708)
29 3/8" (746)
26 1/8" (663)
25 3/8" (645)
20 37/64" (523)



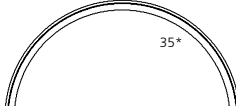
M.O. BRICKMOULD
M.O. ADAMS/FLAT CASING
ROUGH OPENING
FRAME SIZE
DAYLIGHT OPENING

62" (1575)
65 1/16" (1652)
59 1/2" (1511)
58 3/4" (1492)
53 41/64" (1362)

70" (1778)
73 1/16" (1855)
67 1/2" (1714)
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)

31 7/8" (810)
33 3/8" (848)
30 1/8" (765)
29 3/8" (746)
24 37/64" (624)



35 7/8" (911)
37 3/8" (949)
34 1/8" (867)
33 3/8" (848)
28 37/64" (726)



40 5/8" (1032)
43 11/16" (1109)
38 1/8" (968)
37 3/8" (949)
32 37/64" (827)



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)

43 7/8" (1114)
45 3/8" (1153)
42 1/8" (1070)
41 3/8" (1051)
36 37/64" (929)



47 7/8" (1216)
49 3/8" (1254)
46 1/8" (1171)
45 3/8" (1153)
41 37/64" (1056)



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.

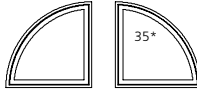
SCALE: 1/4" = 1'

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)

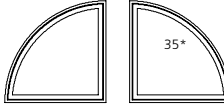
23 7/8" (606)
25 3/8" (645)
22 1/8" (562)
21 3/8" (543)
17 1/2" (445)



CCD21QRIS

28 5/8" (727)
31 11/16" (805)
26 1/8" (663)
25 3/8" (645)
21 1/2" (546)

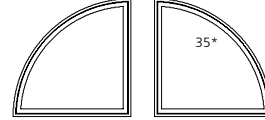
27 7/8" (708)
29 3/8" (746)
26 1/8" (663)
25 3/8" (645)
21 1/2" (546)



CCD25QRIS

32 5/8" (829)
35 11/16" (906)
30 1/8" (765)
29 3/8" (746)
25 1/2" (648)

31 7/8" (810)
33 3/8" (848)
30 1/8" (765)
29 3/8" (746)
25 1/2" (648)

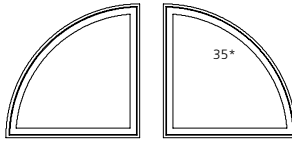


CCD29QRIS

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)

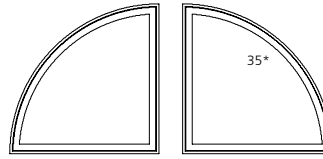
35 7/8" (911)
37 3/8" (949)
34 1/8" (867)
33 3/8" (848)
29 1/2" (749)



CCD33QRIS

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

39 7/8" (1013)
41 3/8" (1051)
38 1/8" (968)
37 3/8" (949)
33 1/2" (851)

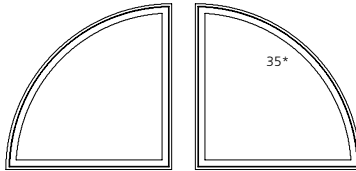


CCD37QRIS

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)

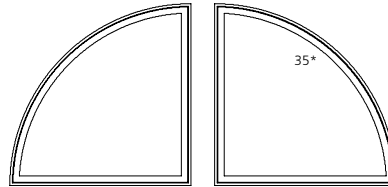
43 7/8" (1114)
45 3/8" (1153)
42 1/8" (1070)
41 3/8" (1051)
37 1/2" (953)



CCD41QRIS

48 5/8" (1235)
51 11/16" (1313)
46 1/8" (1171)
45 3/8" (1153)
41 1/2" (1054)

47 7/8" (1216)
49 3/8" (1254)
46 1/8" (1171)
45 3/8" (1153)
41 1/2" (1054)



CCD45QRIS

ELEVATION SYMBOL LEGEND:






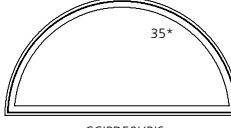






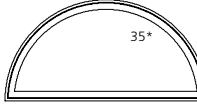



M.O. = MASONRY OPENING

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.

IN-SWING PATIO DOOR HALF ROUND UNITS

M.O. BRICKMOULD M.O. ADAMS/FLAT CASING ROUGH OPENING FRAME SIZE DAYLIGHT OPENING	26 11/16" (678) 29 3/4" (755) 24 3/16" (614) 23 7/16" (595) 18 1/64" (459)	32 11/16" (830) 35 3/4" (908) 30 3/16" (767) 29 7/16" (748) 24 1/64" (611)	34 11/16" (881) 37 3/4" (959) 32 3/16" (818) 31 7/16" (799) 26 1/64" (662)	38 11/16" (983) 41 3/4" (1060) 36 3/16" (919) 35 7/16" (900) 30 1/64" (764)	49 7/8" (1267) 52 15/16" (1344) 47 3/8" (1203) 46 5/8" (1184) 41 35/64" (1055)	14 1/4" (361) 15 3/4" (399) 12 1/2" (317) 11 3/4" (298) 6 59/64" (176)	 CCIPD20HRIS	17 1/4" (437) 18 3/4" (475) 15 1/2" (394) 14 3/4" (374) 9 59/64" (252)	 CCIPD26HRIS	18 1/4" (463) 19 3/4" (501) 16 1/2" (419) 13 3/4" (359) 10 59/64" (277)	 CCIPD28HRIS	20 1/4" (514) 21 3/4" (552) 18 1/2" (460) 17 3/4" (450) 12 59/64" (328)	 CCIPD30HRIS	25 13/16" (656) 27 5/16" (694) 24 1/16" (611) 23 5/16" (592) 18 33/64" (470)	 CCIPD40HRIS
M.O. BRICKMOULD M.O. ADAMS/FLAT CASING ROUGH OPENING FRAME SIZE DAYLIGHT OPENING	61 7/8" (1572) 64 15/16" (1649) 59 3/8" (1508) 58 5/8" (1489) 53 35/64" (1360)	65 7/8" (1673) 68 15/16" (1751) 63 3/8" (1610) 62 5/8" (1591) 57 35/64" (1462)	73 7/8" (1876) 76 15/16" (1954) 71 3/8" (1813) 70 5/8" (1794) 65 35/64" (1665)	31 13/16" (808) 33 5/16" (846) 30 1/16" (764) 29 5/16" (745) 24 33/64" (623)	 CCIPD50HRIS	33 13/16" (859) 35 5/16" (897) 32 1/16" (814) 31 5/16" (795) 26 33/64" (673)	 CCIPD54HRIS	37 13/16" (960) 39 5/16" (998) 36 1/16" (916) 35 5/16" (897) 30 33/64" (775)	 CCIPD60HRIS						
M.O. BRICKMOULD M.O. ADAMS/FLAT CASING ROUGH OPENING FRAME SIZE DAYLIGHT OPENING	28 11/16" (729) 31 3/4" (806) 26 3/16" (665) 25 7/16" (646) 20 1/64" (510)	36 11/16" (932) 39 3/4" (1009) 34 3/16" (868) 33 7/16" (849) 28 1/64" (713)	40 11/16" (1033) 43 3/4" (1111) 38 3/16" (970) 37 7/16" (951) 32 1/64" (814)	46 11/16" (1186) 49 3/4" (1263) 44 3/16" (1122) 43 7/16" (1103) 38 1/64" (967)	15 1/4" (387) 16 3/4" (425) 13 1/2" (343) 12 3/4" (323) 7 59/64" (201)	 CCIPDT20HRIS	19 1/4" (488) 20 3/4" (526) 17 1/2" (444) 16 3/4" (425) 11 59/64" (303)	 CCIPDT28HRIS	21 1/4" (539) 22 3/4" (577) 19 1/2" (495) 18 3/4" (475) 13 59/64" (354)	 CCIPDT30HRIS	24 1/4" (615) 25 3/4" (653) 22 1/2" (571) 21 3/4" (552) 16 59/64" (430)	 CCIPDT36HRIS			
M.O. BRICKMOULD M.O. ADAMS/FLAT CASING ROUGH OPENING FRAME SIZE DAYLIGHT OPENING	53 7/8" (1368) 56 15/16" (1446) 51 3/8" (1305) 50 5/8" (1286) 45 35/64" (1157)	69 7/8" (1775) 72 15/16" (1852) 67 3/8" (1711) 66 5/8" (1692) 61 35/64" (1563)	77 7/8" (1978) 80 15/16" (2055) 75 3/8" (1914) 74 5/8" (1895) 69 35/64" (1766)	27 13/16" (706) 29 5/16" (745) 26 1/16" (662) 25 5/16" (643) 20 33/64" (521)	 CCIPDT40HRIS	35 13/16" (910) 37 5/16" (948) 34 1/16" (865) 33 5/16" (846) 28 33/64" (724)	 CCIPDT54HRIS	39 13/16" (1011) 41 5/16" (1049) 38 1/16" (967) 37 5/16" (948) 32 33/64" (826)	 CCIPDT60HRIS						
M.O. BRICKMOULD M.O. ADAMS/FLAT CASING ROUGH OPENING FRAME SIZE DAYLIGHT OPENING	89 7/8" (2283) 92 15/16" (2360) 87 3/8" (2219) 86 5/8" (2200) 81 35/64" (2071)	45 13/16" (1164) 47 5/16" (1202) 44 1/16" (1119) 43 5/16" (1100) 38 33/64" (978)	 CCIPDT70HRIS												

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

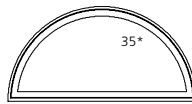
M.O. BRICKMOULD
M.O. ADAMS/FLAT CASING
ROUGH OPENING
FRAME SIZE
DAYLIGHT OPENING

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)

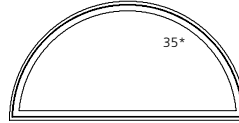
66 7/16" (1688)
69 1/2" (1765)
63 15/16" (1624)
63 3/16" (1605)
58 7/64" (1476)

26 1/8" (663)
29 5/8" (750)
24 3/8" (619)
23 5/8" (599)
18 5/164" (477)



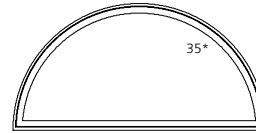
CCOPD40HRIS

32 1/8" (834)
35 5/8" (912)
30 3/8" (772)
29 5/8" (752)
24 5/164" (630)



CCOPD50HRIS

34 1/8" (866)
35 5/8" (904)
32 3/8" (822)
31 5/8" (802)
26 5/164" (681)

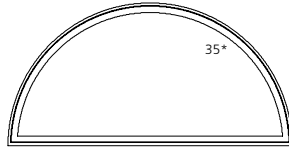


CCOPD54HRIS

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 1/8" (968)
39 5/8" (1006)
36 3/8" (924)
35 5/8" (904)
30 5/164" (782)



CCOPD60HRIS

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)
21 19/32" (548)

37 1/4" (946)
40 5/16" (1024)
34 3/4" (883)
34" (864)
29 19/32" (752)

41 1/4" (1048)
44 5/16" (1125)
38 3/4" (984)
38" (965)
33 19/32" (853)

47 1/4" (1200)
50 5/16" (1278)
44 3/4" (1137)
44" (1118)
39 19/32" (1006)

15 1/2" (394)
17 1/4" (432)
13 3/4" (349)
13" (330)
8 13/64" (208)



CCOPDT20HRIS

19 1/2" (495)
21" (533)
17 3/4" (451)
17" (432)
12 13/64" (310)



CCOPDT28HRIS

21 1/2" (546)
23" (584)
19 3/4" (502)
19" (483)
14 13/64" (361)



CCOPDT30HRIS

24 1/2" (622)
26" (660)
22 3/4" (578)
22" (559)
17 13/64" (437)



CCOPDT36HRIS

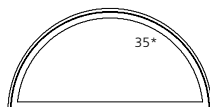
M.O. BRICKMOULD
M.O. ADAMS/FLAT CASING
ROUGH OPENING
FRAME SIZE
DAYLIGHT OPENING

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" (1864)
67 15/16" (1726)
67 3/16" (1707)
62 7/64" (1576)

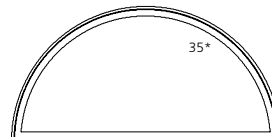
78 7/16" (1992)
81 1/2" (2070)
75 15/16" (1929)
75 3/16" (1910)
70 7/64" (1781)

38 1/8" (712)
39 5/8" (750)
36 3/8" (668)
35 5/8" (649)
20 5/164" (528)



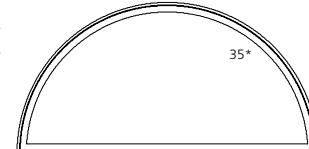
CCOPDT40HRIS

36 1/8" (917)
37 5/8" (955)
34 3/8" (873)
33 5/8" (853)
27 5/164" (706)



CCOPDT54HRIS

40 1/8" (1018)
41 5/8" (1056)
38 3/8" (975)
37 5/8" (955)
32 5/164" (833)

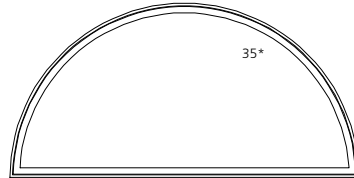


CCOPDT60HRIS

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 1/8" (1171)
47 5/8" (1209)
44 3/8" (1127)
43 5/8" (1107)
38 5/164" (985)



CCOPDT70HRIS

ELEVATION SYMBOL LEGEND:

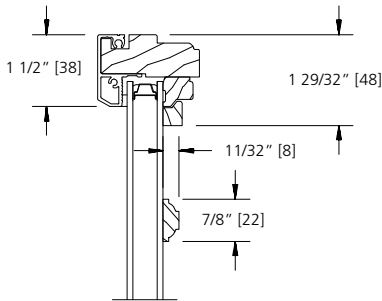
M.O. = MASONRY OPENING
VALUES IN () ARE IN MILLIMETER CONVERSIONS.
##* NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING.

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.

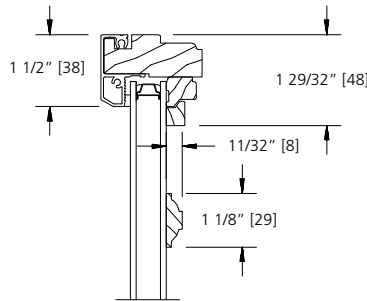
SCALE: 1/4" = 1'

GLAZING OPTIONS

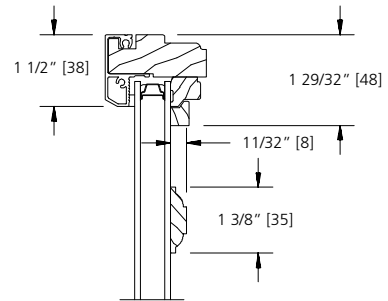
INTERIOR GLAZED
INSULATED 3/4" [19] GLASS



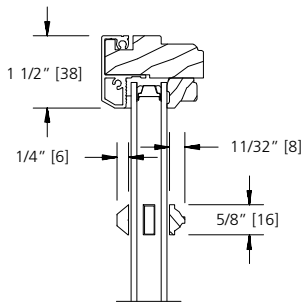
7/8" GRILLE BAR



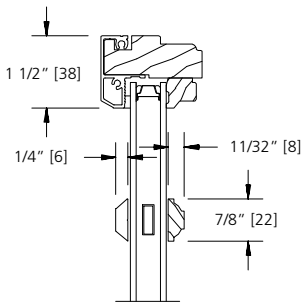
1 1/8" GRILLE BAR



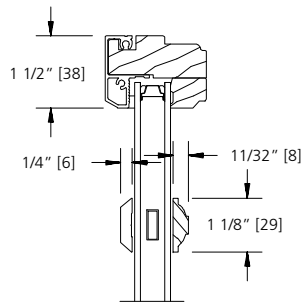
1 3/8" GRILLE BAR



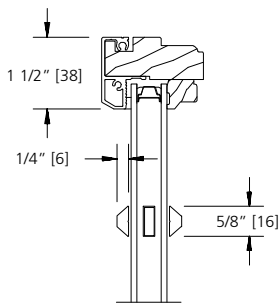
**5/8" SDL BAR
(PUTTY/BEAD)**



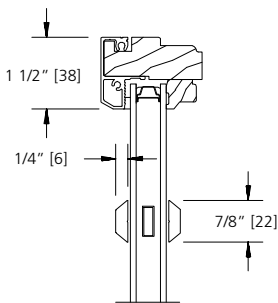
**7/8" SDL BAR
(PUTTY/BEAD)**



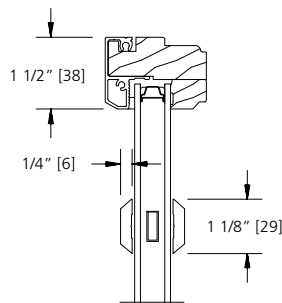
**1 1/8" SDL BAR
(PUTTY/BEAD)**



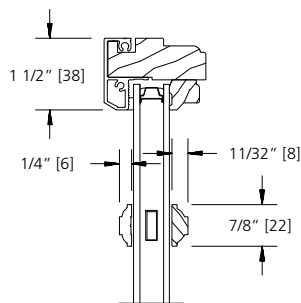
**5/8" SDL BAR
(PUTTY/PUTTY)**



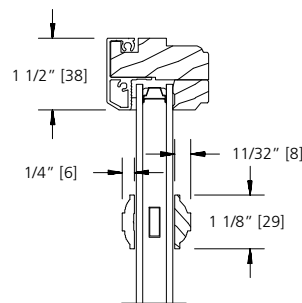
**7/8" SDL BAR
(PUTTY/PUTTY)**



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



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



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

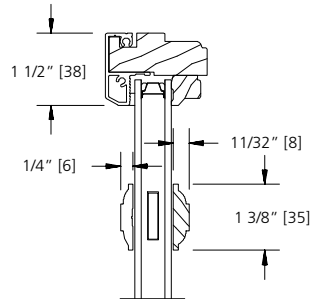
Continued on next page

Scale: 3" = 1'

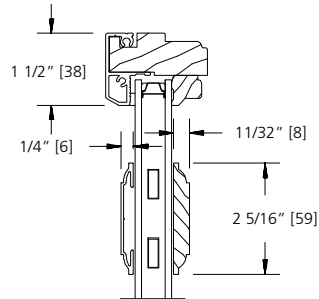
GLAZING OPTIONS

INTERIOR GLAZED

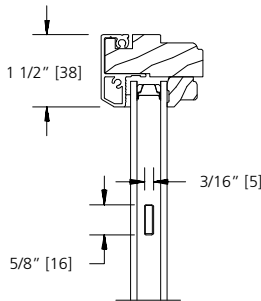
INSULATED 3/4" [19] GLASS



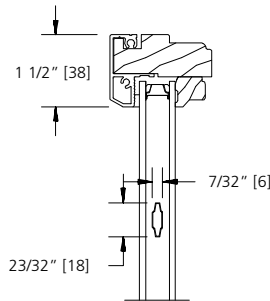
**1 3/8" SDL BAR
(BEAD STOP)**



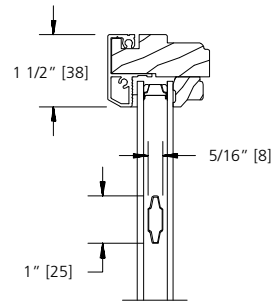
**2 5/16" SDL BAR
(BEAD STOP)**



**5/8" FLAT
GBG**



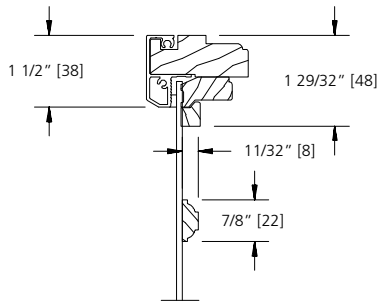
**23/32" CONTOUR
GBG**



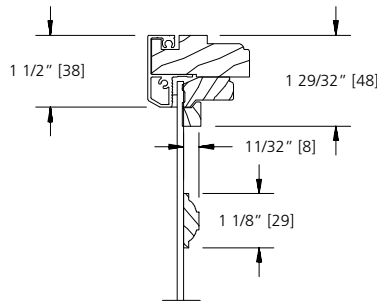
**1" CONTOUR
GBG**

GLAZING OPTIONS

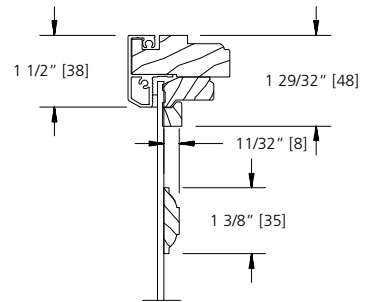
INTERIOR GLAZED
SINGLE GLAZED 1/8" [3] GLASS



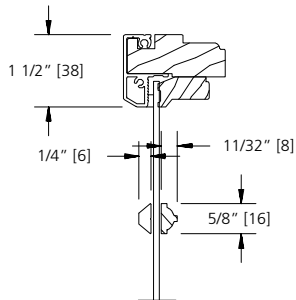
7/8" GRILLE BAR



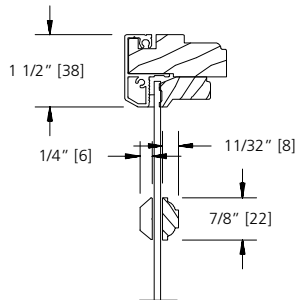
1 1/8" GRILLE BAR



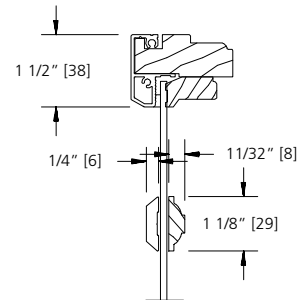
1 3/8" GRILLE BAR



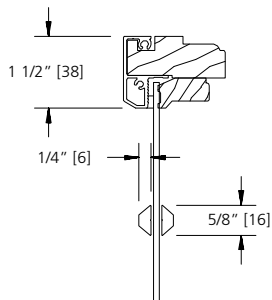
**5/8" SDL BAR
(PUTTY/BEAD)**



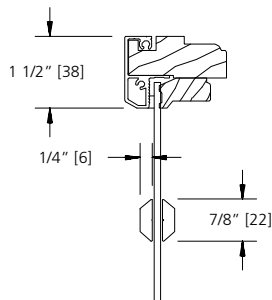
**7/8" SDL BAR
(PUTTY/BEAD)**



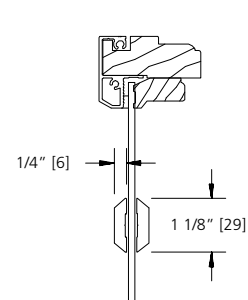
**1 1/8" SDL BAR
(PUTTY/BEAD)**



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



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

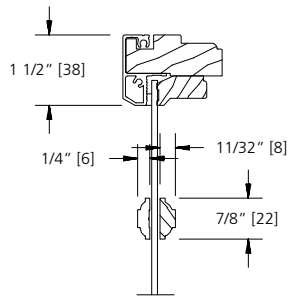


**1 1/8" SDL BAR
(PUTTY/PUTTY)**

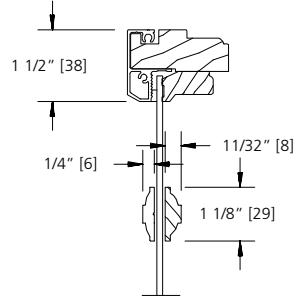
Continued on next page

GLAZING OPTIONS

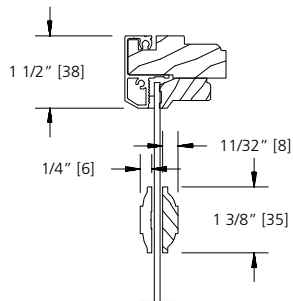
INTERIOR GLAZED
SINGLE GLAZED 1/8" [3] GLASS



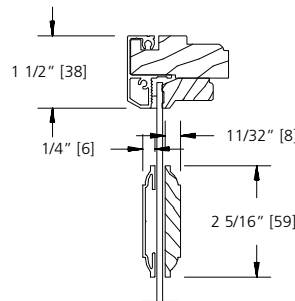
7/8" SDL BAR
(BEAD STOP)



1 1/8" SDL BAR
(BEAD STOP)



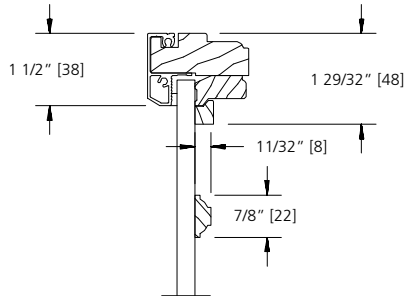
1 3/8" SDL BAR
(BEAD STOP)



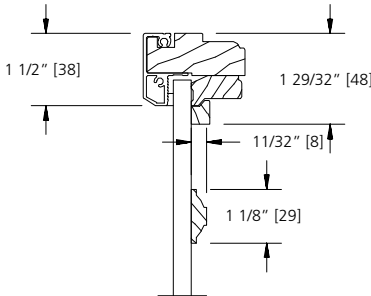
2 5/16" SDL BAR
(BEAD STOP)

GLAZING OPTIONS

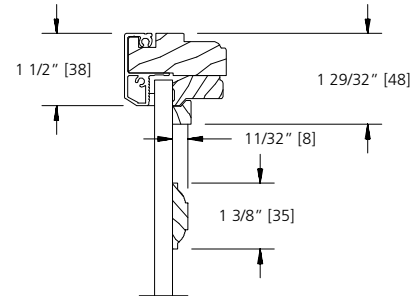
INTERIOR GLAZED
IMPACT RESISTANT GLASS



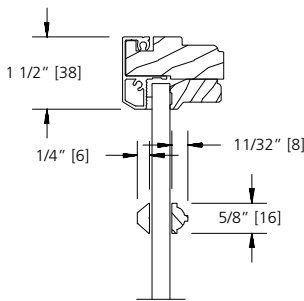
7/8" GRILLE BAR



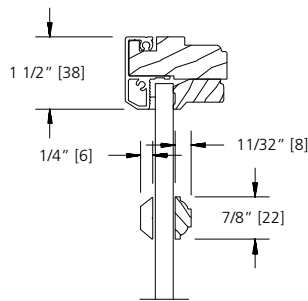
1 1/8" GRILLE BAR



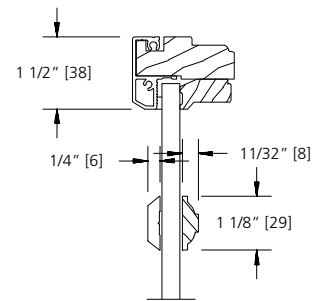
1 3/8" GRILLE BAR



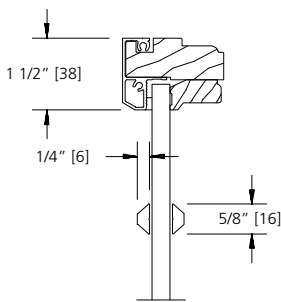
**5/8" SDL BAR
(PUTTY/BEAD)**



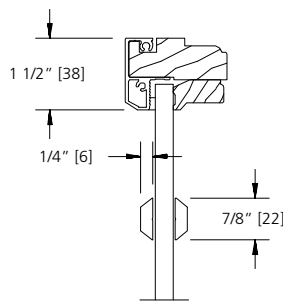
**7/8" SDL BAR
(PUTTY/BEAD)**



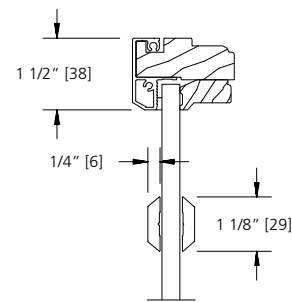
**1 1/8" SDL BAR
(PUTTY/BEAD)**



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



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

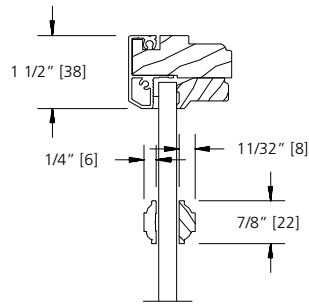


**1 1/8" SDL BAR
(PUTTY/PUTTY)**

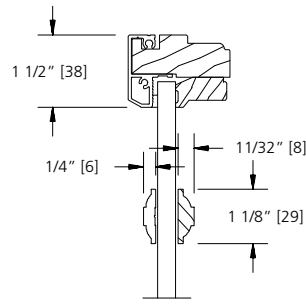
Continued on next page

GLAZING OPTIONS

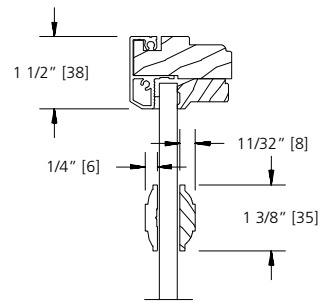
INTERIOR GLAZED
IMPACT RESISTANT GLASS



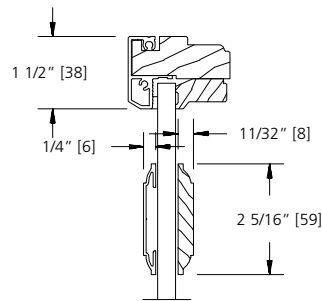
**7/8" SDL BAR
(BEAD STOP)**



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



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

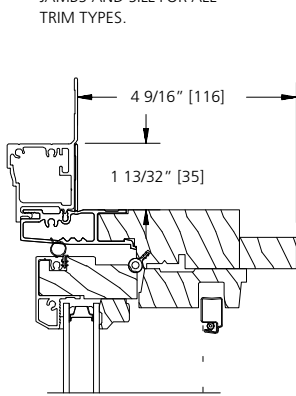


**2 5/16" SDL BAR
(BEAD STOP)**

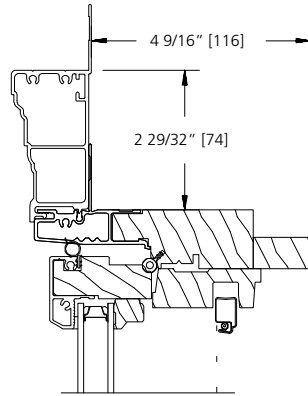
TRIM OPTIONS

STRAIGHTLINE EXTERIOR TRIM

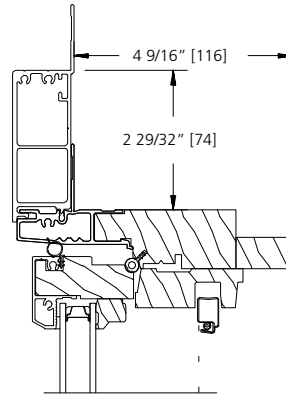
FOLDING NAILING FLANGE
WILL BE USED ON SIDE
JAMBS AND SILL FOR ALL
TRIM TYPES.



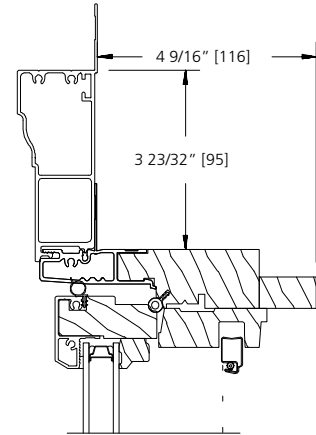
BRICKMOULD



**3 1/2"
FLAT CASING**

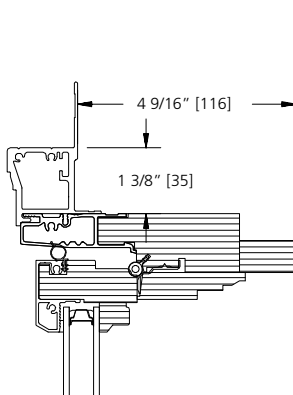


**ADAMS
CASING**

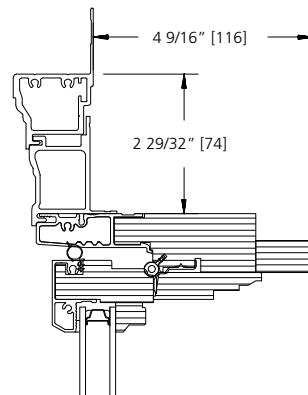


**HERITAGE
CASING**

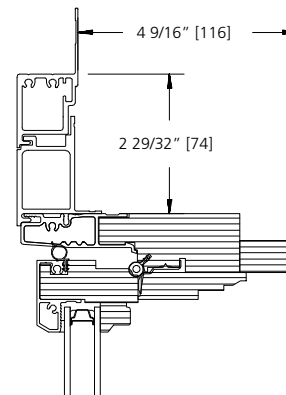
RADIUS EXTERIOR TRIM



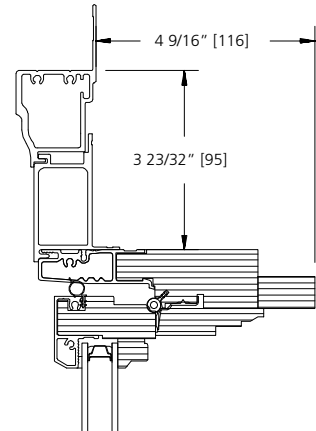
**RADIUS
BRICKMOULD**



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



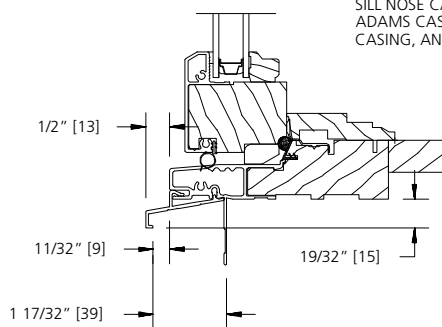
**RADIUS
ADAMS
CASING**



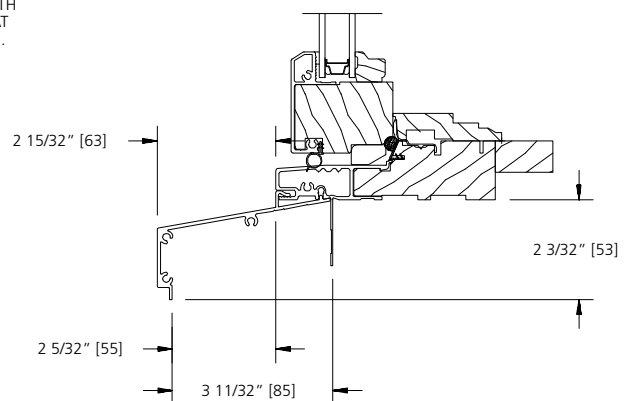
**RADIUS
HERITAGE
CASING**

SILL NOSE

SILL NOSE CAN BE USED WITH
ADAMS CASING, 3 1/2" FLAT
CASING, AND BRICKMOULD.



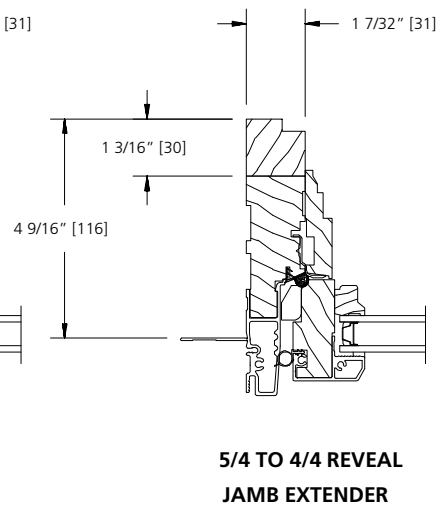
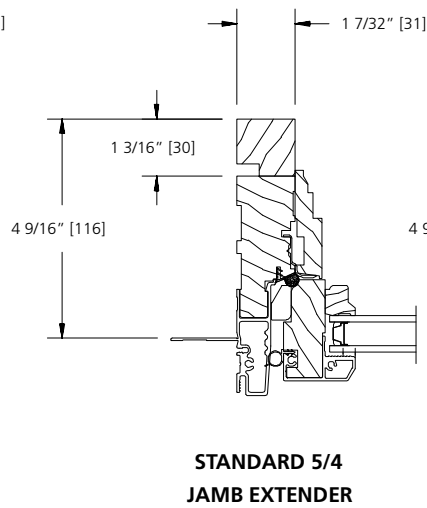
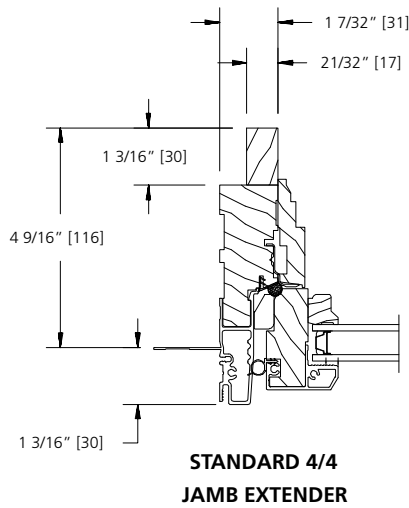
EXTENDED SILL NOSE



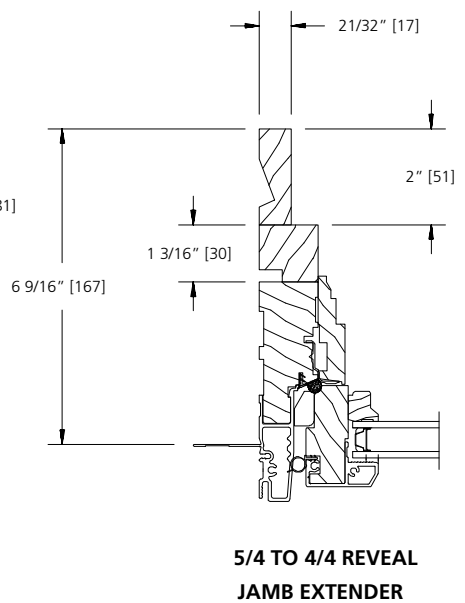
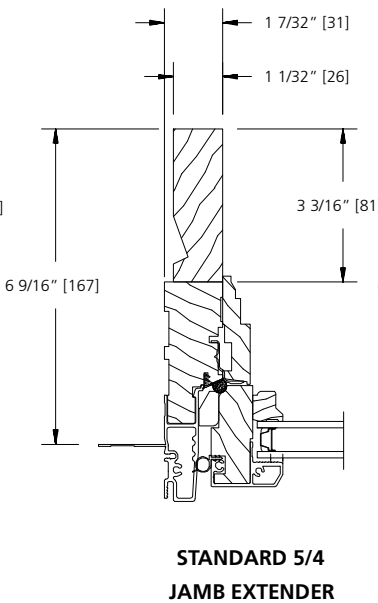
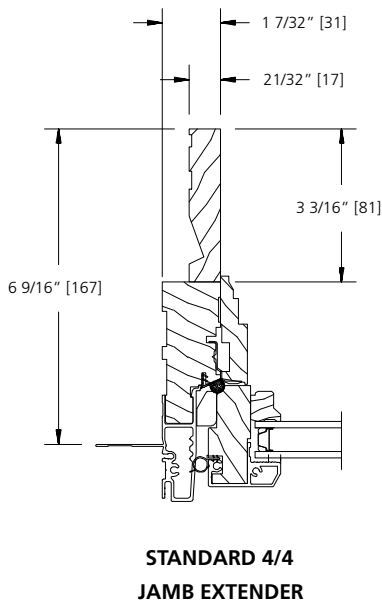
SCALE: 3" = 1'

JAMB EXTENDER OPTIONS

4 9/16" WALL

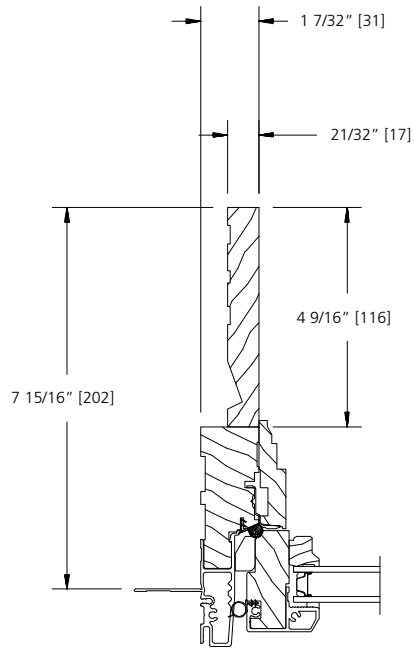


6 9/16" WALL

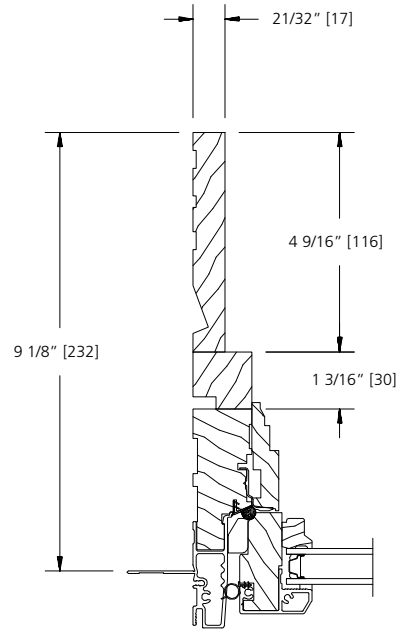


SCALE: 3" = 1'

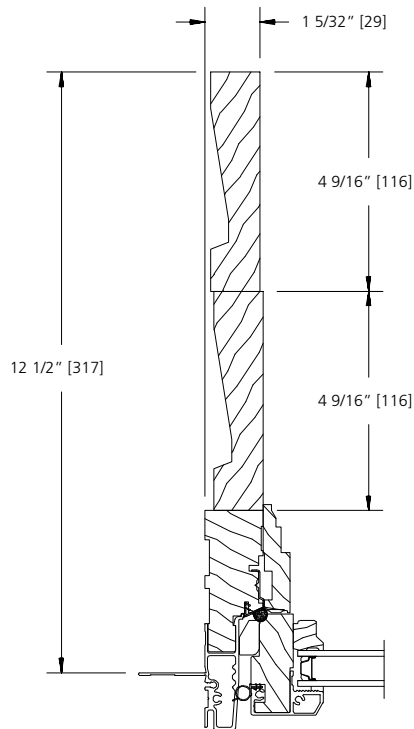
MAXIMUM JAMB WIDTHS



**STANDARD 4/4
JAMB EXTENDER**



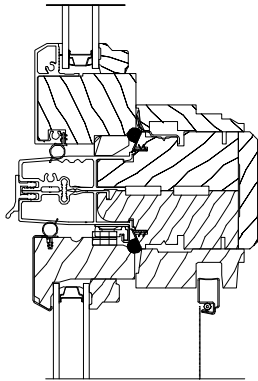
**5/4 TO 4/4 REVEAL
JAMB EXTENDER**



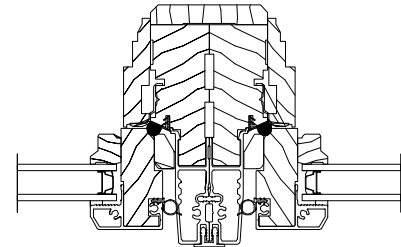
**STANDARD 5/4
JAMB EXTENDER**

SCALE: 3" = 1'

**MULLION DETAILS
WITH CUSTOM CASEMENT**

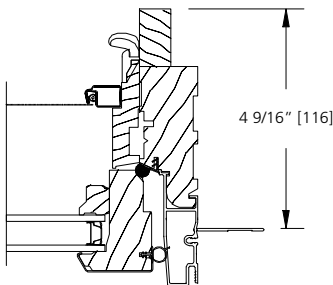


**HORIZONTAL MULLION
IN-SASH GEOMETRIC
CUSTOM CASEMENT
4 9/16" & 6 9/16" JAMB**

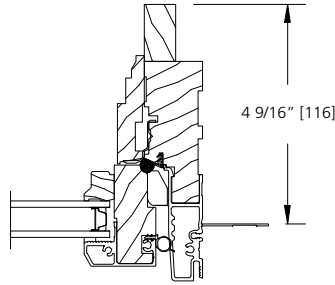


**VERTICAL MULLION
AT IN-SASH GEOMETRIC
4 9/16" & 6 9/16" JAMB**

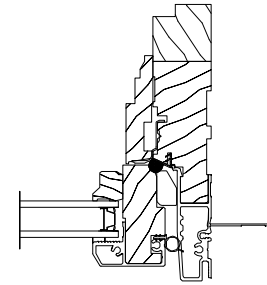
4 9/16" JAMB



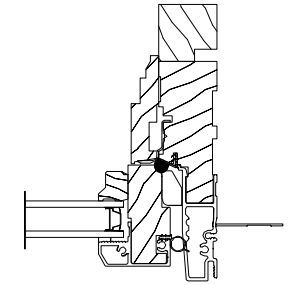
**VERTICAL
AT CUSTOM CASEMENT
4/4 JAMB EXTENDER OPTION**



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

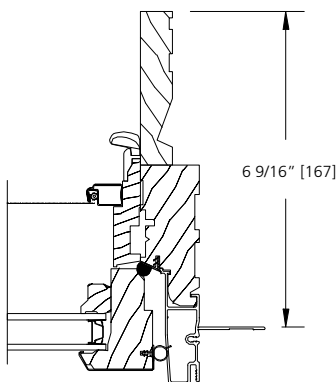


**5/4 TO 4/4 REVEAL
JAMB EXTENDER OPTION**

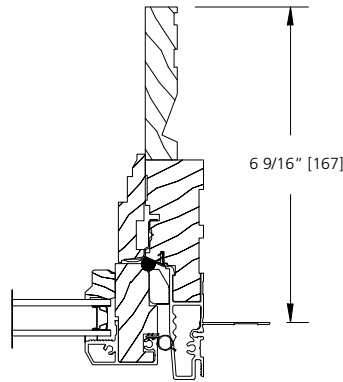


5/4 JAMB EXTENDER OPTION

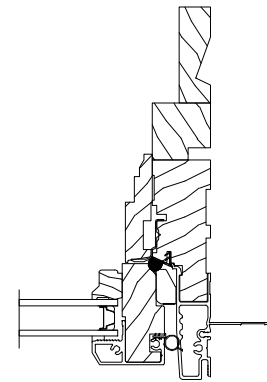
6 9/16" JAMB



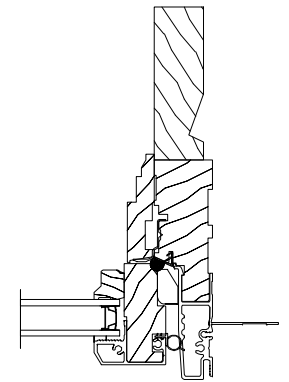
**VERTICAL
AT CUSTOM CASEMENT
4/4 JAMB EXTENDER OPTION**



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



**5/4 TO 4/4 REVEAL
JAMB EXTENDER OPTION**

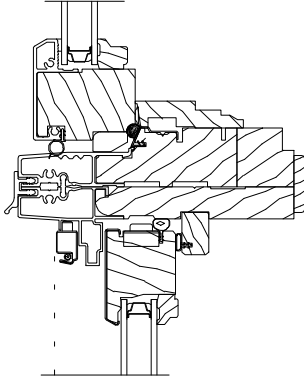


5/4 JAMB EXTENDER OPTION

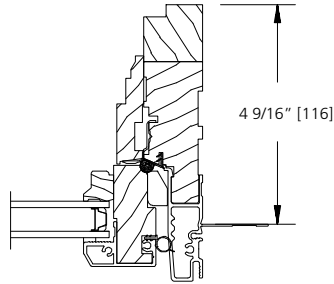
SCALE: 3" = 1'

**MULLION DETAILS
WITH CUSTOM DOUBLE-HUNG**

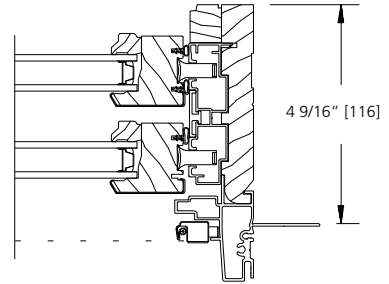
4 9/16" JAMB



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

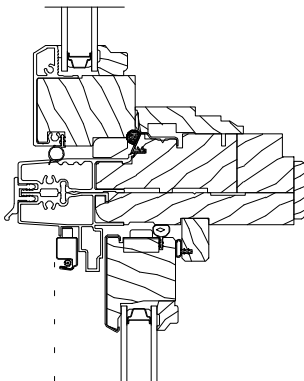


**VERTICAL
AT IN-SASH GEOMETRIC**

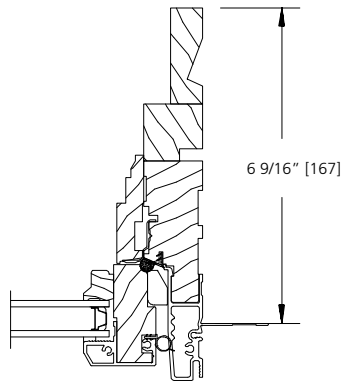


**VERTICAL
AT CUSTOM DOUBLE-HUNG**

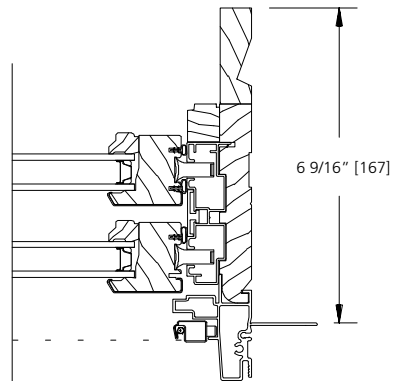
6 9/16" JAMB



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



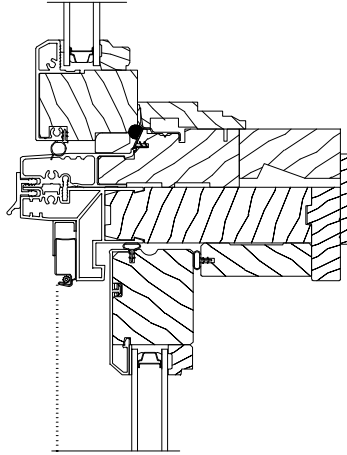
**VERTICAL
AT IN-SASH GEOMETRIC**



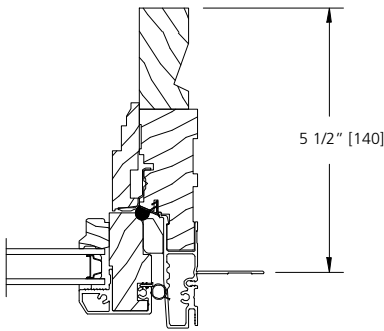
**VERTICAL
AT CUSTOM DOUBLE-HUNG**

SCALE: 3" = 1'

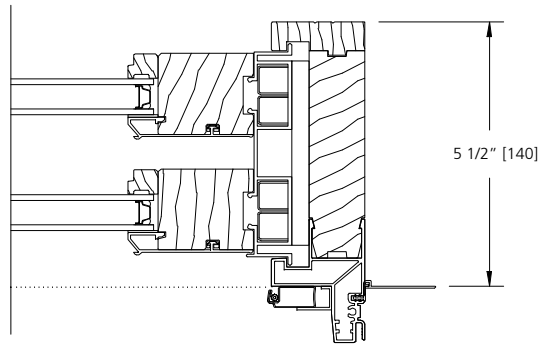
**MULLION DETAILS
WITH CUSTOM EPIC DOUBLE-HUNG**



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



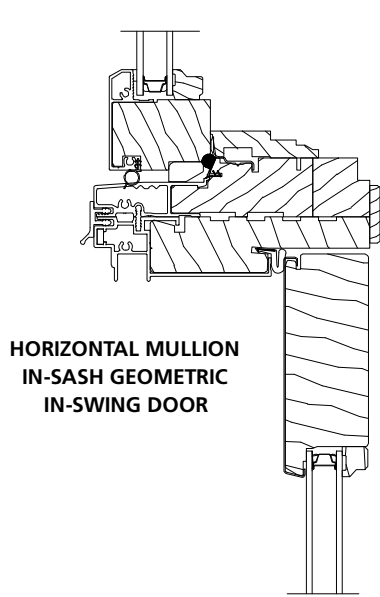
**VERTICAL
AT IN-SASH GEOMETRIC**



**VERTICAL
AT EPIC DOUBLE-HUNG**

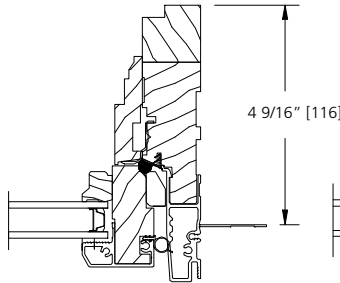
SCALE: 3" = 1'

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

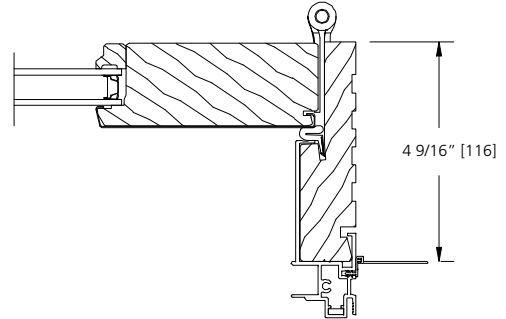


**HORIZONTAL MULLION
IN-SASH GEOMETRIC
IN-SWING DOOR**

4 9/16" JAMB

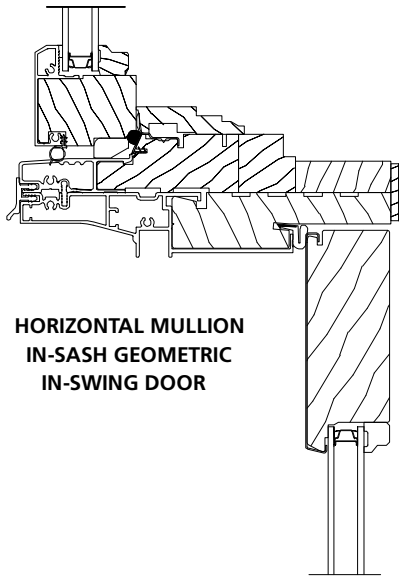


**VERTICAL
AT IN-SASH GEOMETRIC**

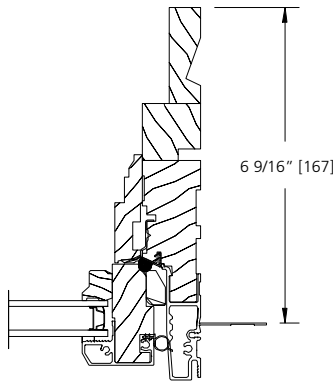


**VERTICAL
AT IN-SWING DOOR**

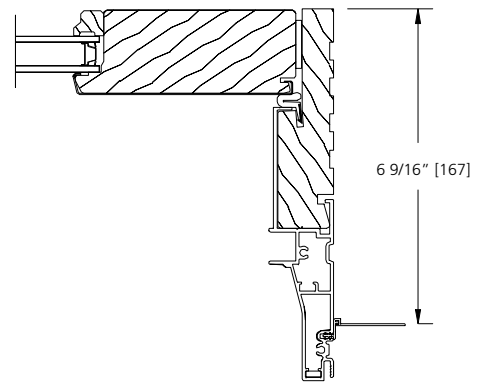
6 9/16" JAMB



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



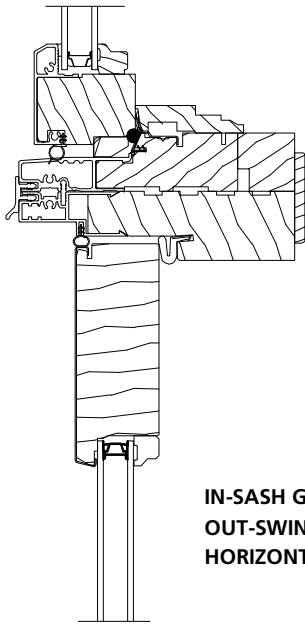
**VERTICAL
AT IN-SASH GEOMETRIC**



**VERTICAL
AT IN-SWING DOOR**

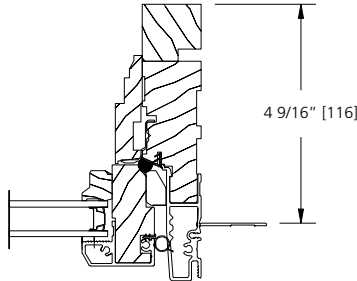
SCALE: 3" = 1'

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

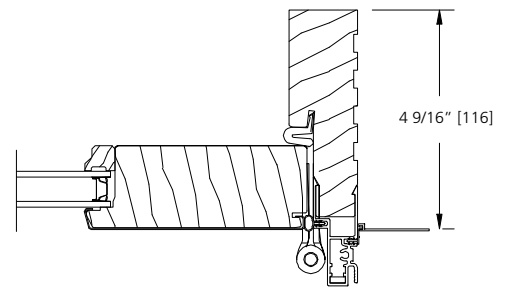


**IN-SASH GEOMETRIC
OUT-SWING DOOR
HORIZONTAL MULLION**

4 9/16" JAMB

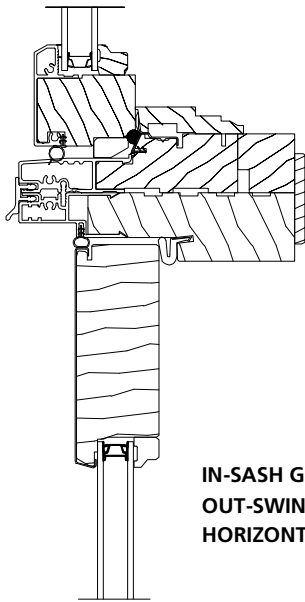


**VERTICAL
AT IN-SASH GEOMETRIC**

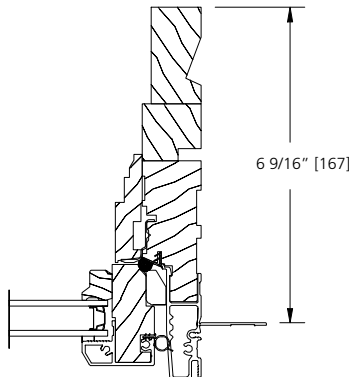


**VERTICAL
AT OUT-SWING DOOR**

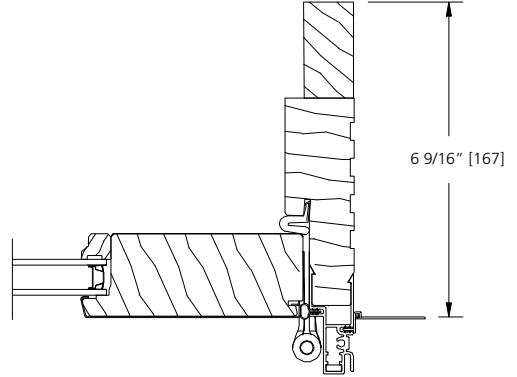
6 9/16" JAMB



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



**VERTICAL
AT IN-SASH GEOMETRIC**



**VERTICAL
AT OUT-SWING DOOR**

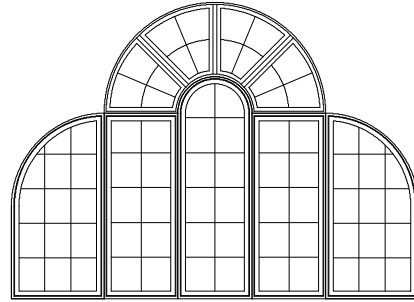
SCALE: 3" = 1'

LITE CUT INFORMATION

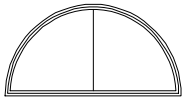
Clad in-sash geometric windows are available with removable grilles in 7/8", 1-1/8" and 1-3/8" widths, GBG (Grilles between the Glass) and Simulated Divided Lites.

BAR ALIGNMENT

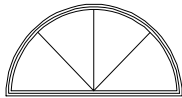
Alignment of divided lite muntin bars from one window to the next is often required by fine architectural design. Wood grilles, GBG (Grilles between the Glass), and Simulated Divided Lites may be specified with muntin bars aligned.



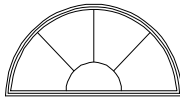
HALF ROUND BREAKUP PATTERNS



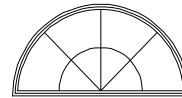
200 SERIES



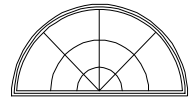
400 SERIES



500 SERIES



800 SERIES



1200 SERIES

QUARTER ROUND BREAKUP PATTERNS



200 SERIES

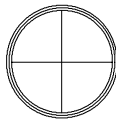


400 SERIES

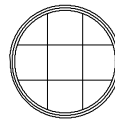


600 SERIES

FULL ROUND BREAKUP PATTERNS

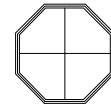


400 SERIES

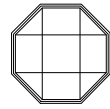


900 SERIES

OCTAGON BREAKUP PATTERNS



400 SERIES



900 SERIES

Continued on next page

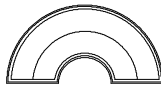
LITE CUT INFORMATION

INVERTED RADIUS SILL NOTE:

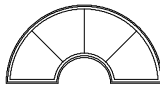
Windows with inverted radius sills have continuous head and sill configurations. The twin, triple and quad units utilize a mullion post as part of a single unit. Single lines represent grille and thermal bar lite break ups. Twin, triple and quad units are single units with mullion posts being represented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

INVERTED HALF ROUND BREAKUP PATTERNS

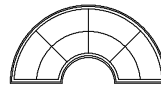
INVERTED HALF ROUND SILL



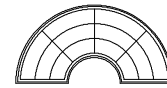
200 SERIES
RADIUS HUB



400 SERIES

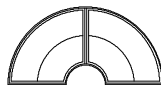


800 SERIES

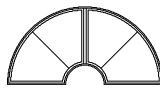


1200 SERIES

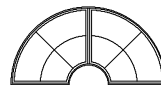
INVERTED HALF ROUND SILL - TWIN



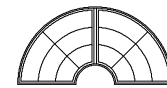
200 SERIES
RADIUS HUB



200 SERIES



400 SERIES

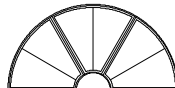


600 SERIES

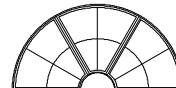
INVERTED HALF ROUND SILL - TRIPLE



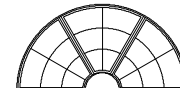
200 SERIES
RADIUS HUB



200 SERIES



400 SERIES

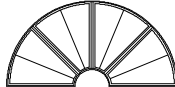


600 SERIES

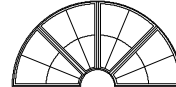
INVERTED HALF ROUND SILL - QUAD



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

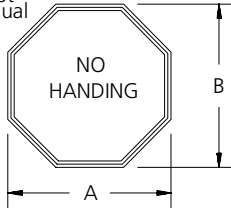


600 SERIES

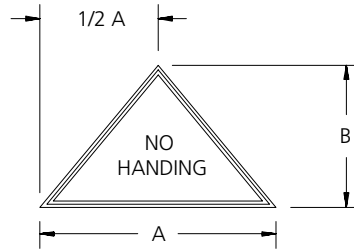
**NARROW SASH LAYOUT SHAPES
ALL SIDES**

ALL GEOMETRIC WINDOW SHAPES ARE
VIEWED FROM THE EXTERIOR.

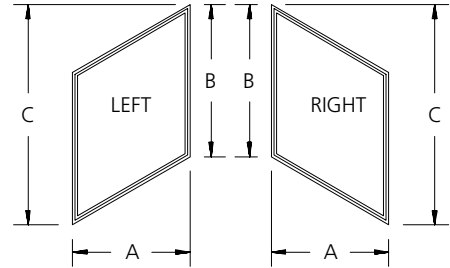
A and B do not
have to be equal



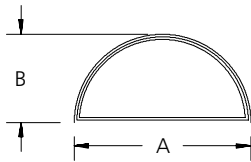
OCTAGON
FIXED OR OPERATOR



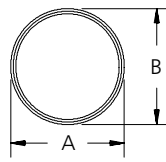
TRIANGLE
STATIONARY ONLY



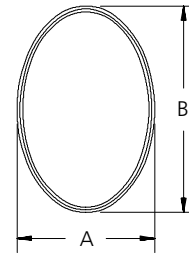
PARALLELOGRAM
STATIONARY ONLY



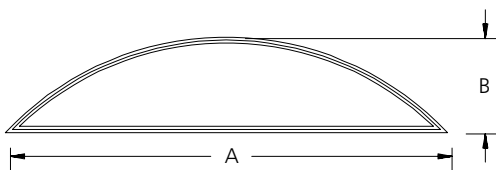
HALF ROUND
STATIONARY ONLY



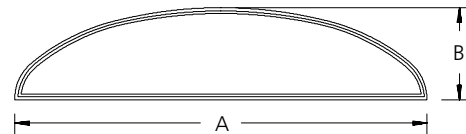
FULL ROUND
STATIONARY ONLY



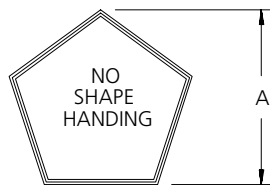
OVAL



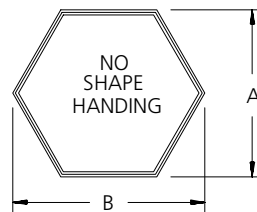
CIRCLE SEGMENT



ELLIPSE



EQUAL PENTAGON

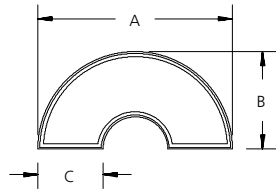


HEXAGON

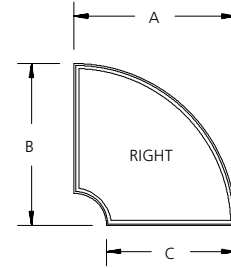
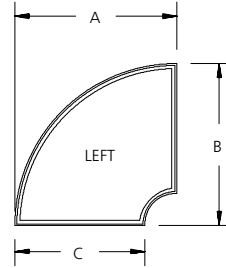
Continued on next page

NARROW SASH LAYOUT SHAPES
ALL SIDES

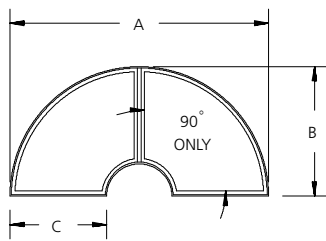
ALL GEOMETRIC WINDOW SHAPES ARE VIEWED FROM THE EXTERIOR.



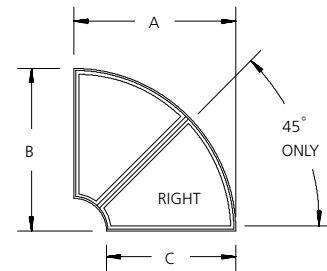
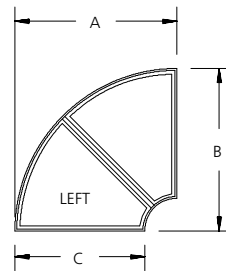
INVERTED HALF ROUND
STATIONARY ONLY



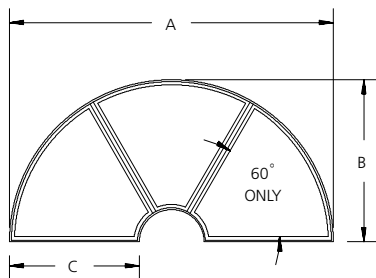
INVERTED QUARTER ROUND
STATIONARY ONLY



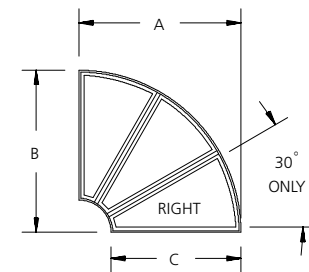
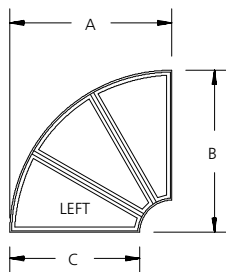
INVERTED HALF ROUND - TWIN
STATIONARY ONLY



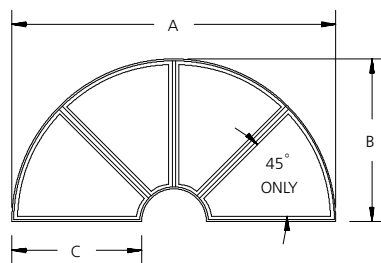
INVERTED QUARTER ROUND - TWIN
STATIONARY ONLY



INVERTED HALF ROUND - TRIPLE
STATIONARY ONLY



INVERTED QUARTER ROUND - TRIPLE
STATIONARY ONLY

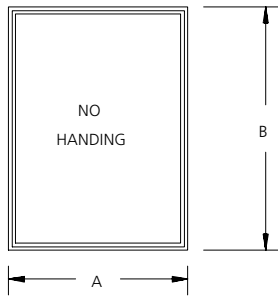


INVERTED HALF ROUND - QUAD
STATIONARY ONLY

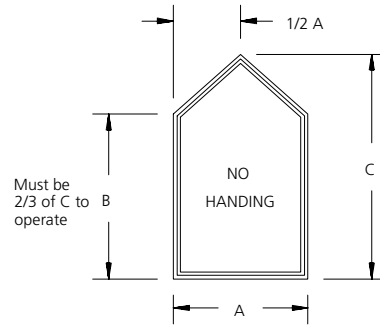
INVERTED HALF ROUND AND QUARTER ROUND UNITS

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.

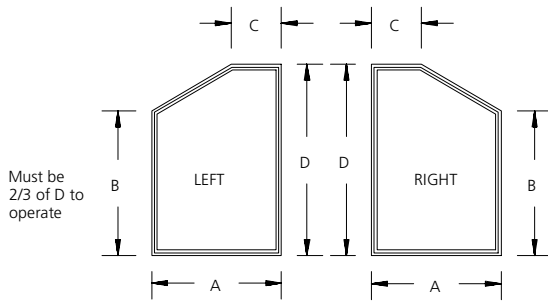
STANDARD WIDE BOTTOM RAIL SHAPES



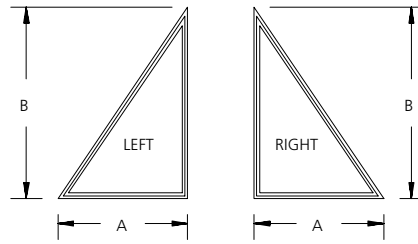
RECTANGLE
STATIONARY OR OPERATOR



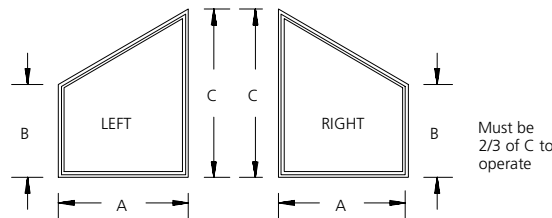
PENTAGON
STATIONARY OR OPERATOR



CLIPPED CORNER
STATIONARY OR OPERATOR



RIGHT TRIANGLE
STATIONARY ONLY

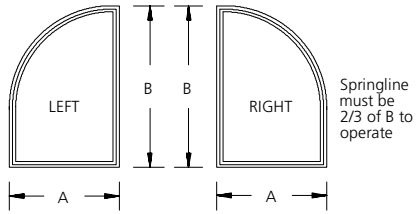


TRAPEZOID
STATIONARY OR OPERATOR

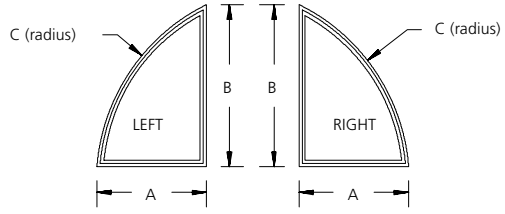
Continued on next page

STANDARD WIDE BOTTOM RAIL SHAPES

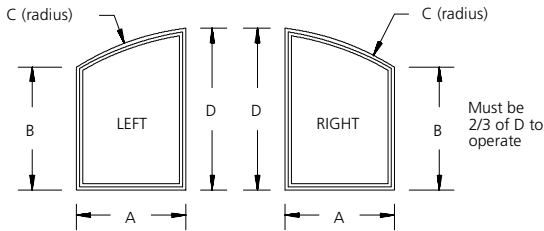
ALL GEOMETRIC WINDOW SHAPES ARE VIEWED FROM THE EXTERIOR.



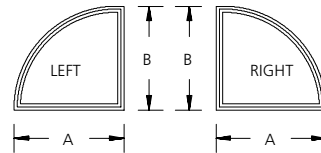
**EXTENDED
QUARTER ROUND**
STATIONARY OR OPERATOR



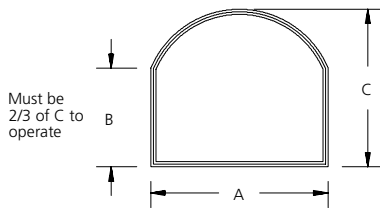
QUARTER SEGMENT
STATIONARY ONLY



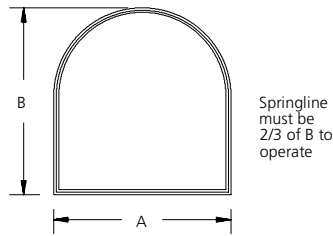
**EXTENDED
QUARTER SEGMENT**
STATIONARY OR OPERATOR



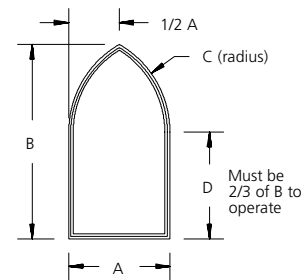
QUARTER ROUND
STATIONARY OR OPERATOR



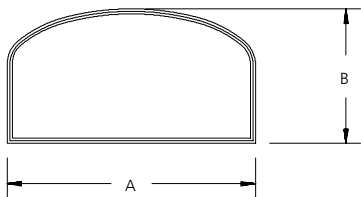
**EXTENDED
CIRCLE SEGMENT**
STATIONARY OR OPERATOR



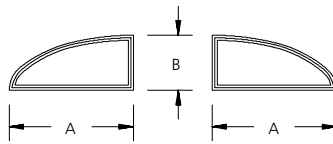
**EXTENDED
HALF ROUND**
STATIONARY OR OPERATOR



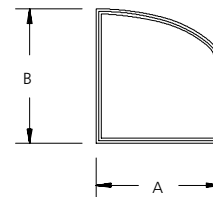
GOTHIC
STATIONARY OR OPERATOR



EXTENDED ELLIPSE



QUARTER ELLIPSE

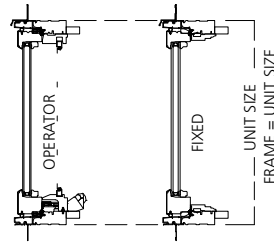
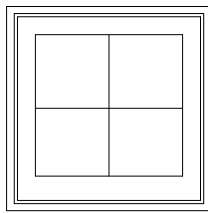
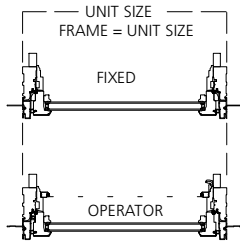


**EXTENDED
QUARTER ELLIPSE**

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

STANDARD OFFERING

DRIP CAP & NAILING FLANGE



GENERAL NOTES:

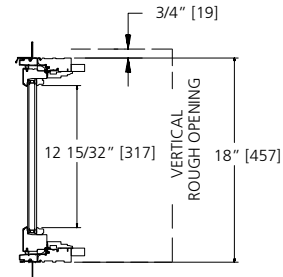
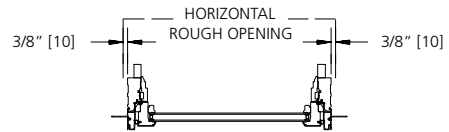
UNITS WITH NO TRIM AND SILL NOSE:
UNIT SIZE = FRAME SIZE

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

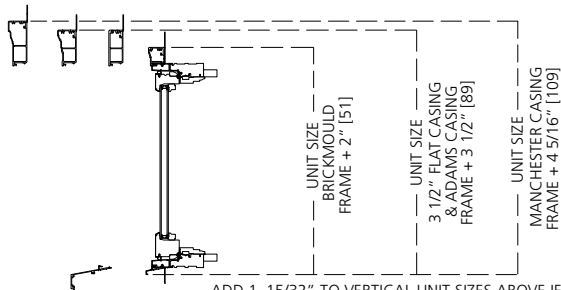
ROUGH OPENING:

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



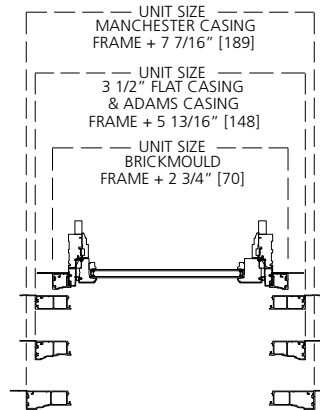
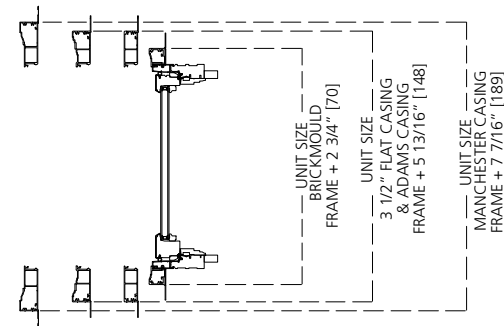
NON-STANDARD UNIT SIZING

EXTERIOR TRIM OFFERINGS WITH SILL NOSE



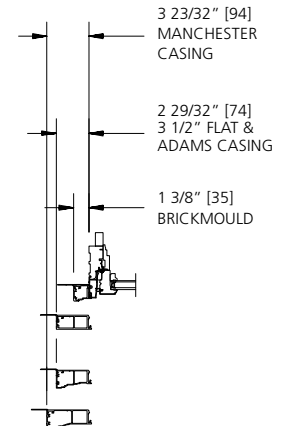
ADD 1 15/32" TO VERTICAL UNIT SIZES ABOVE IF USING THE EXTENDED SILL NOSE

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



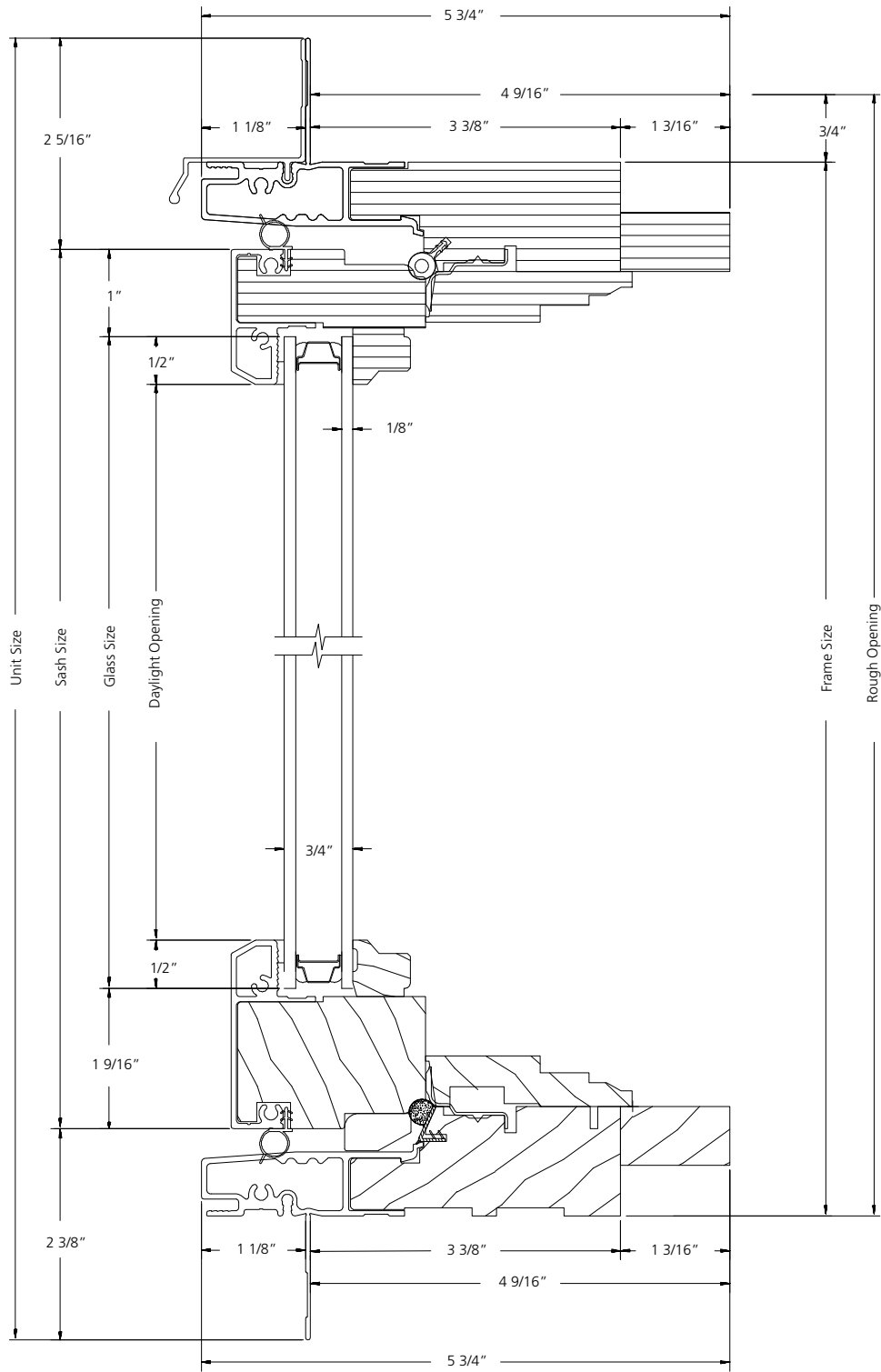
HORIZONTAL SECTION
TRIM OFFERINGS
ABOVE ARE THE SAME
WITH OR WITHOUT SILL NOSE

FRAME TO TRIM DIMENSIONS



TYPICAL FOR HEAD, SILL & SIDE

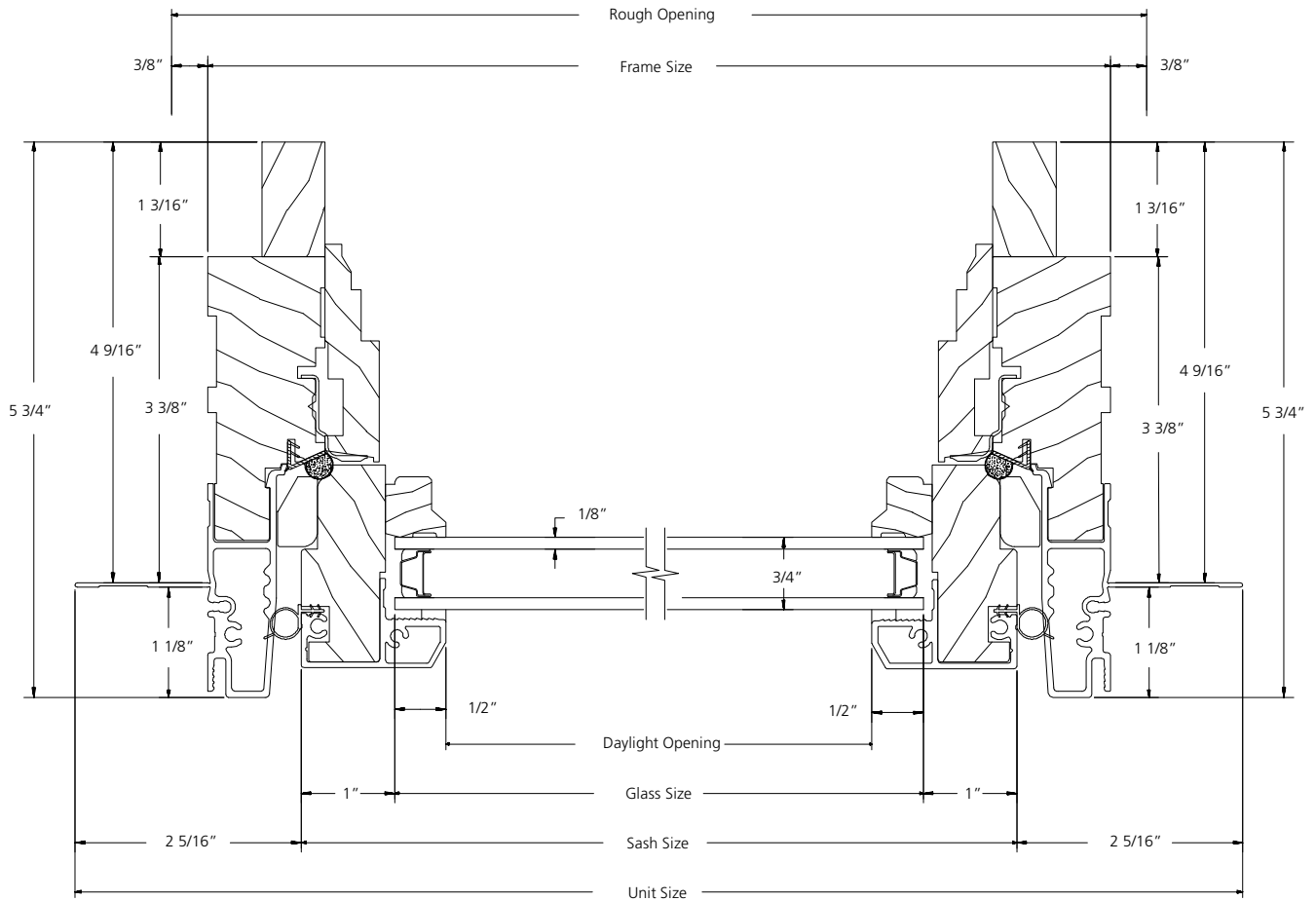
STATIONARY UNIT



VERTICAL SECTION

SCALE: 6" = 1'

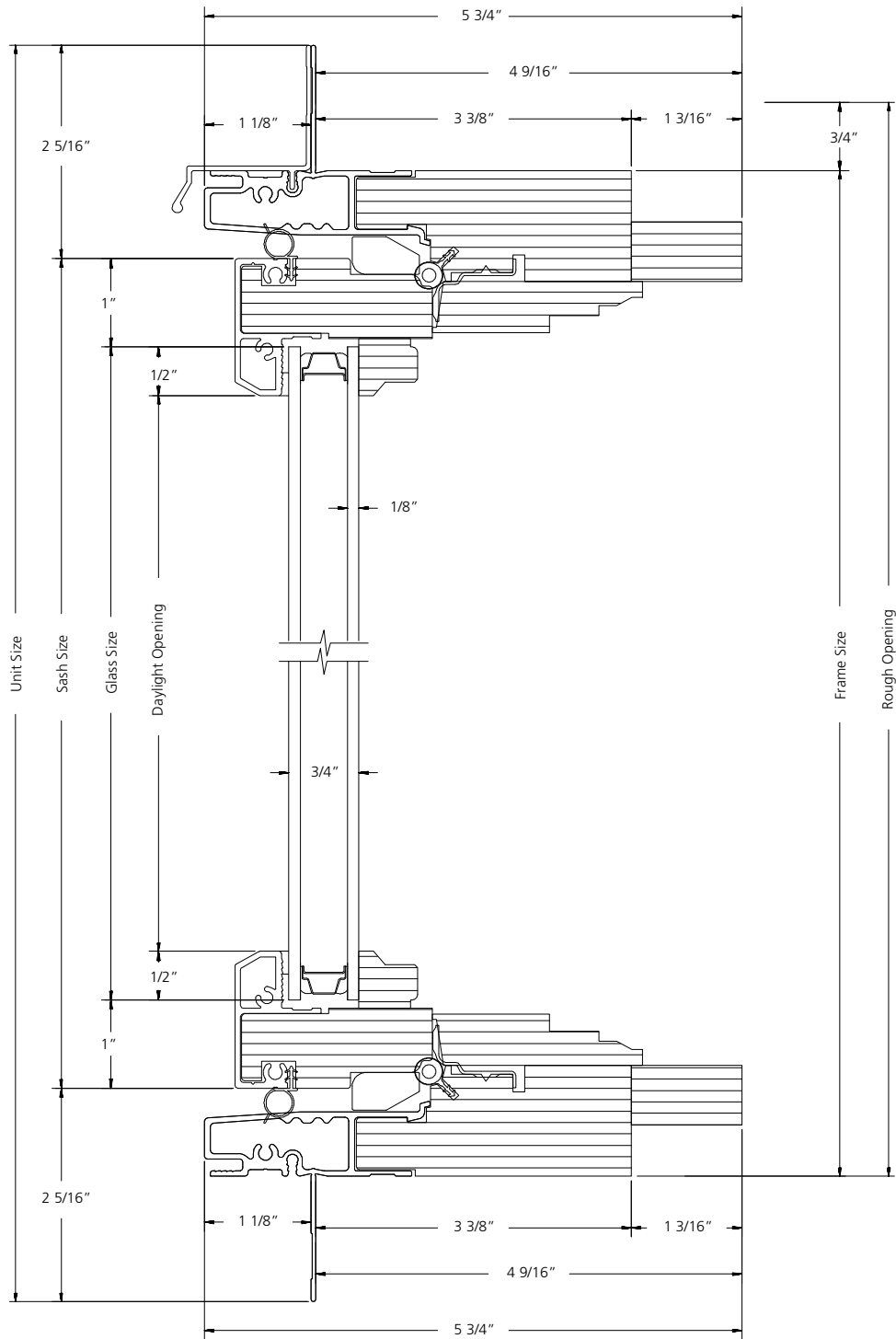
STATIONARY UNIT



HORIZONTAL SECTION

SCALE: 6" = 1'

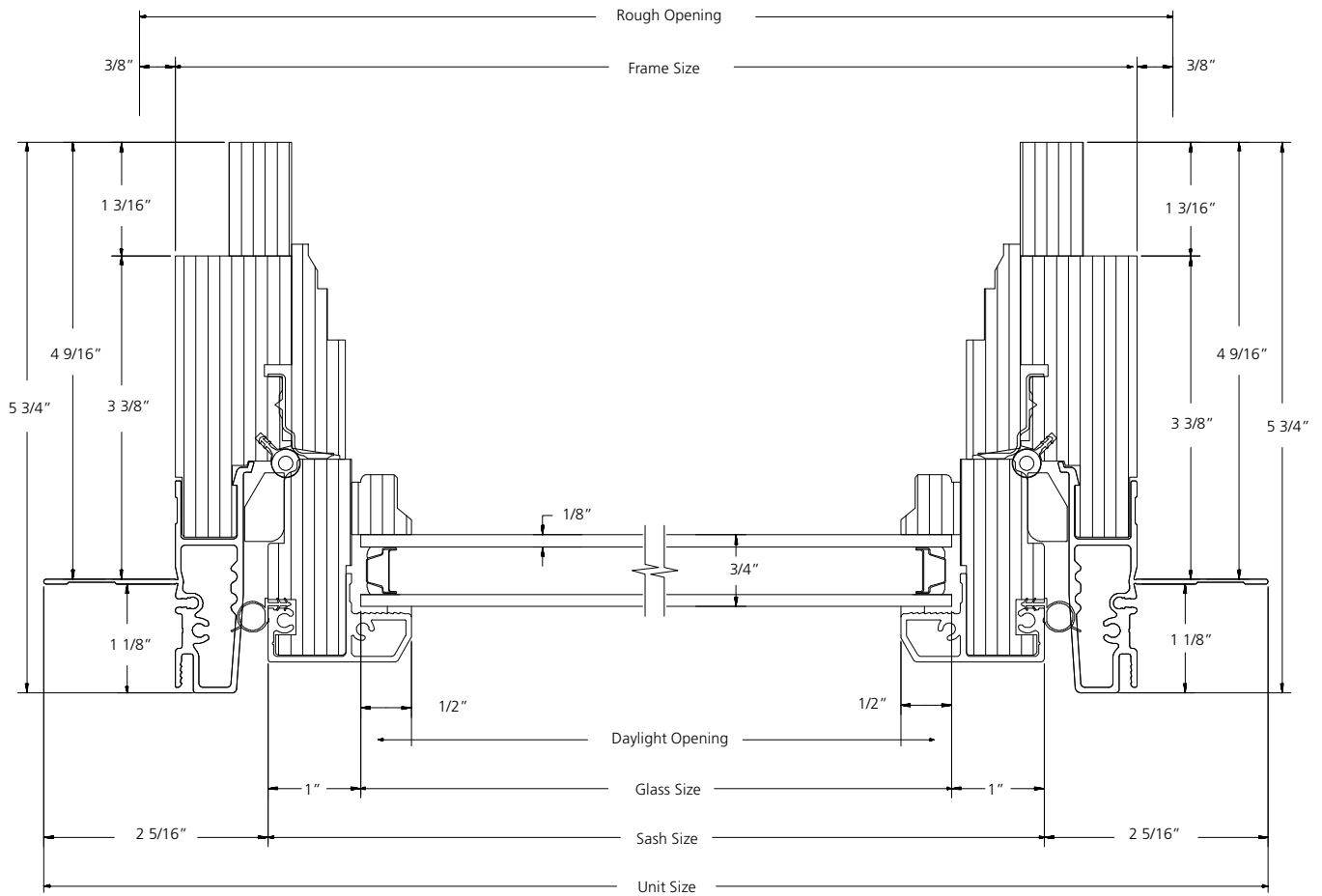
INVERTED RADIUS SILL



VERTICAL SECTION

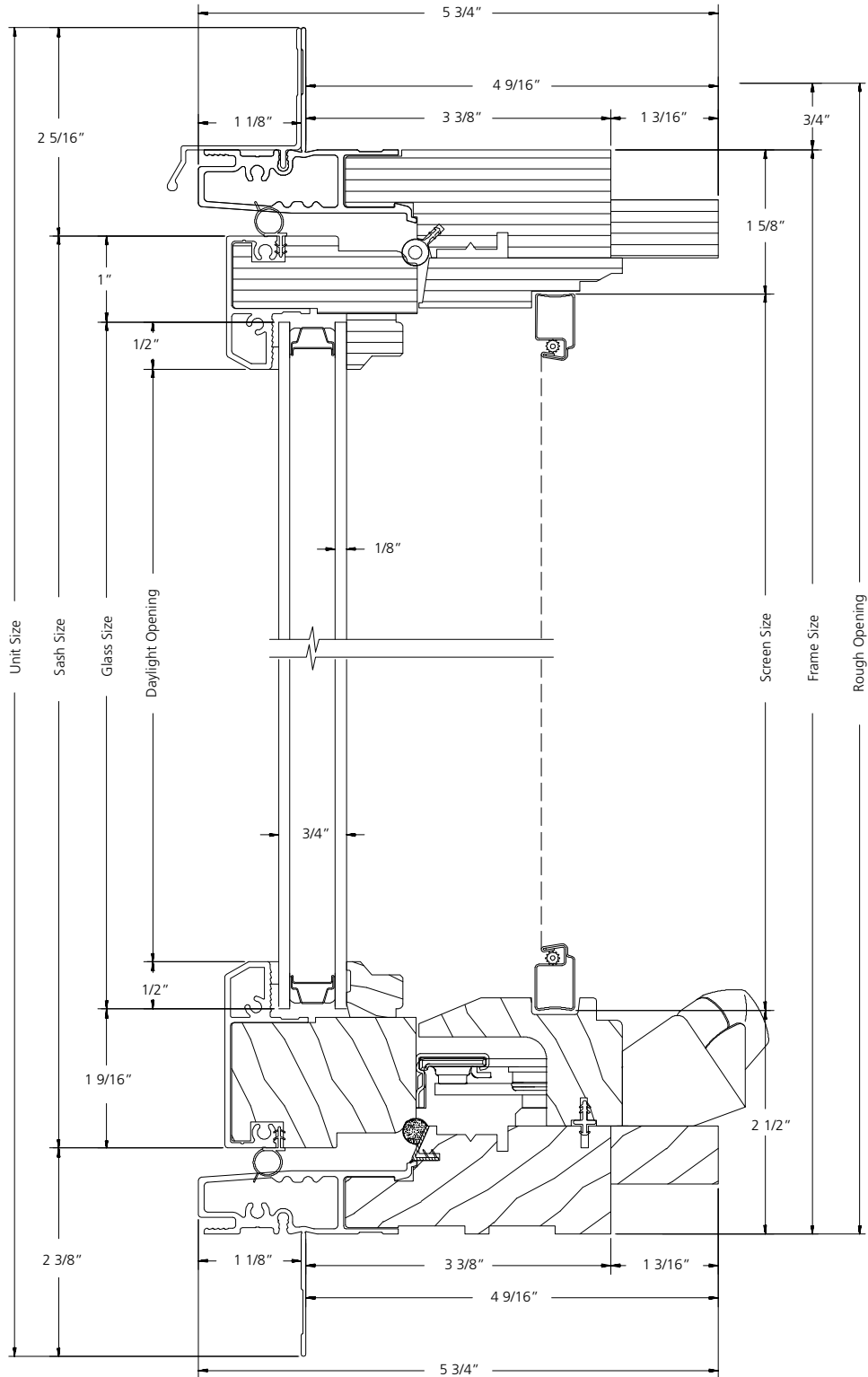
SCALE: 6" = 1'

INVERTED RADIUS SILL



SCALE: 6" = 1'

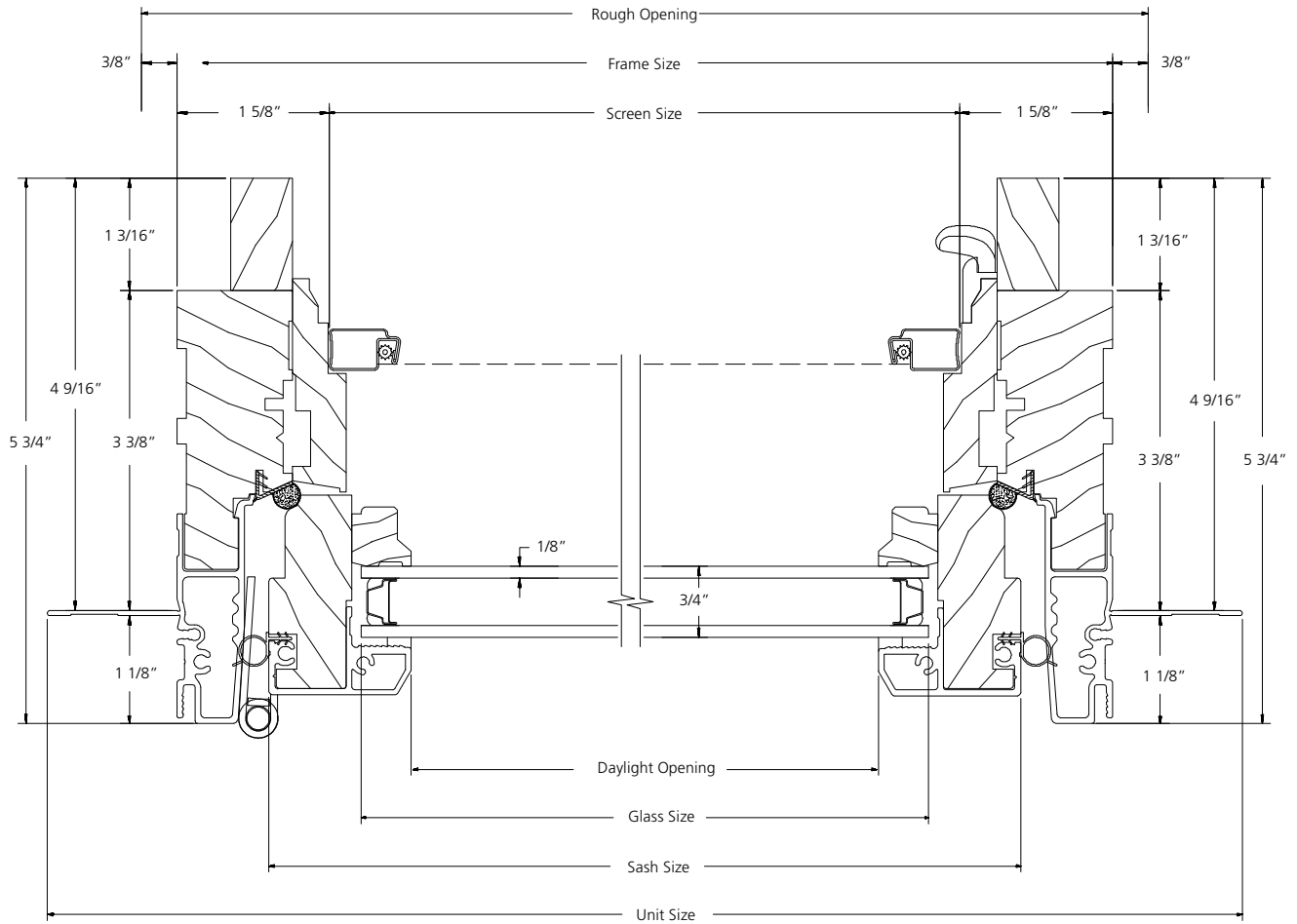
RADIUS HEAD



VERTICAL SECTION

SCALE: 6" = 1'

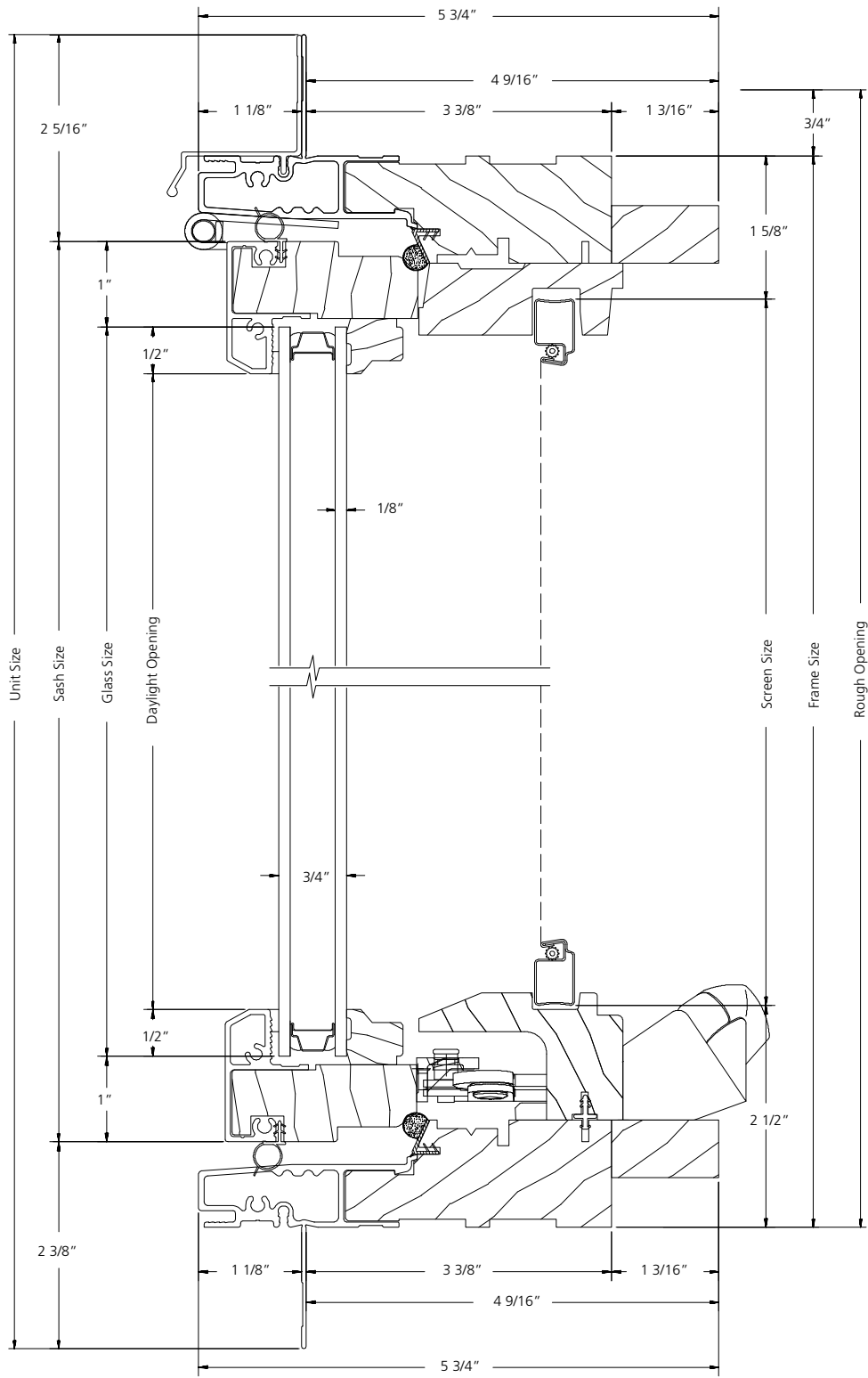
RADIUS HEAD



HORIZONTAL SECTION

SCALE: 6" = 1'

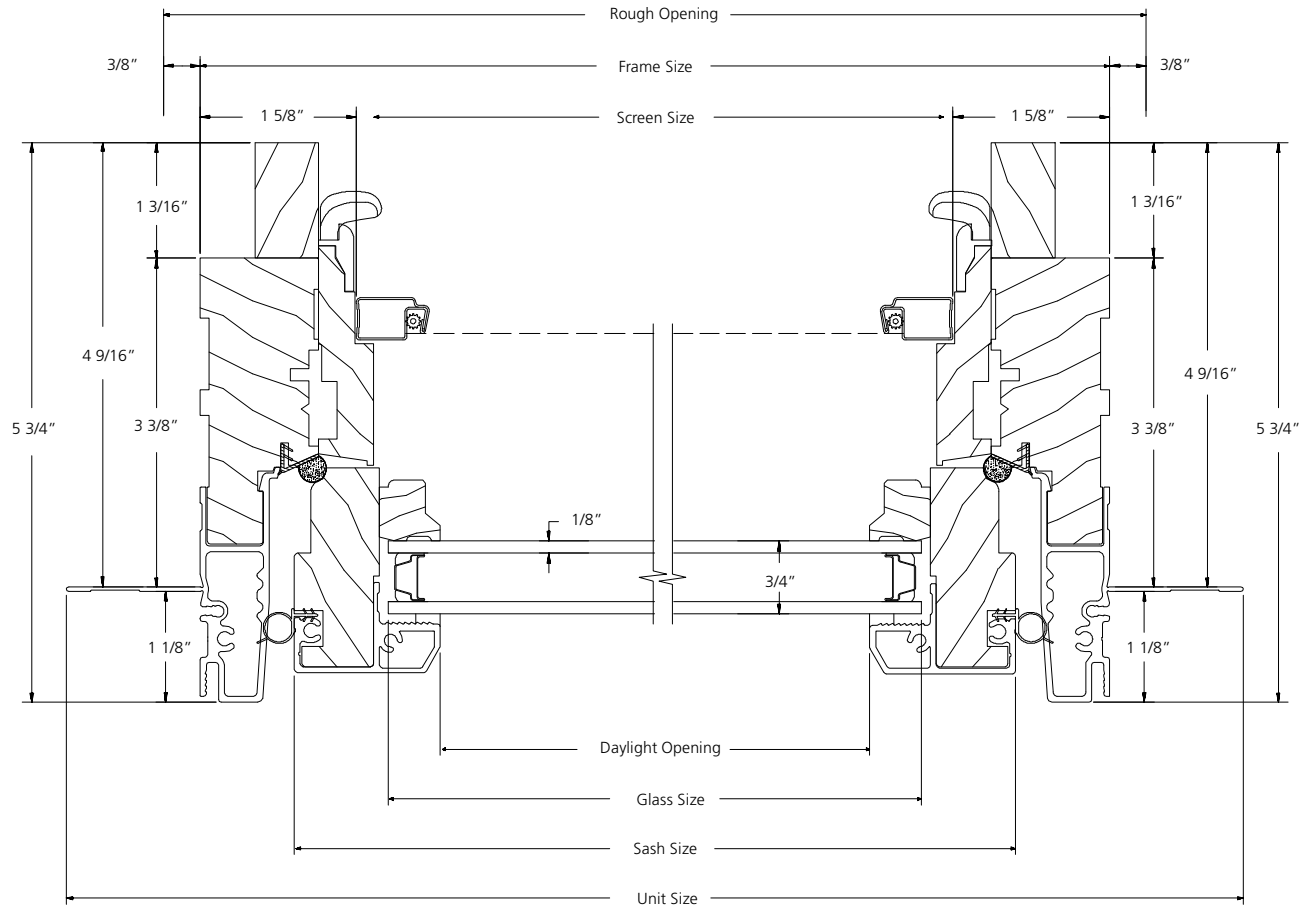
OCTAGONS



VERTICAL SECTION

SCALE: 6" = 1'

OCTAGONS



HORIZONTAL SECTION

SCALE: 6" = 1'