



ARCHITECTURAL DESIGN MANUAL

SIERRA PACIFIC CLAD PUSHOUT CASEMENT

OPERATING - FRENCH - PICTURE

	<u>Page</u>
Section 1: Product Features _____	2 - 4
Section 2: Common Features and Accessories _____	5
Section 3: CSI Specifications _____	6
Section 4: Elevations _____	7 - 18
Section 5: Section Details _____	19 - 29
Section 6: Revit Models _____	30
Section 7: Relative Dimensions and Formulas _____	31 - 34
Section 8: Performance Data -NFRC _____	35 - 37
Section 9: Performance Data – STC/OITC _____	38 - 39
Section 10: Performance Data – Air/Water/Structural _____	40 - 41
Section 11: Egress _____	42 - 47

Although the information contained in this manual was considered to be accurate when written, Sierra Pacific Windows make no guarantees, warranties or endorsements of any kind whatsoever regarding the accuracy or completeness of the content. In the normal course of business, we make ongoing changes to our products. Therefore, this content is subject to change without notice and may not reflect the most current product details or offerings. Please contact your SPW Representative to verify accuracy of information.



SECTION 1

PRODUCT FEATURES



Below is a summary of construction characteristics and standard features for the Sierra Pacific Aluminum Clad Pushout Casement covering rectangle pushout units in both single and French operating and picture.

Product Callouts:

- **C-SPPCS:** Sierra Pacific Clad Pushout Casement
- **C-SPPCSP:** Sierra Pacific Clad Pushout Casement Picture
- **C-SPPFCS:** Sierra Pacific Clad French Pushout Casement

Exterior Finish:

- Baked on, electrostatically applied super durable powder paint finish with virtually no VOC's.
- Available in 50 standard AAMA 2605 fluoropolymer finishes, from the following four design collections.
 - Color Stay™ (standard 2605)
 - Matte Textured (2604 polyester powder only)
 - Blended (standard 2605)
 - Metallics (standard 2605)
- Custom color match (standard 2605)
- Click [HERE](#) for complete list of color options.

Interior Finish:

- Wood components dried to moisture content of 12% or less.
- Standard natural (bare) select pine wood.
- Optional species: Upon request and availability. Click [HERE](#) for available wood species.
- Interior finish: Natural (standard), Clear Coat, Primed, Ultra Coat Painted and Ultra Stain
 - Primed Interior finish: white or black
 - Ultra Coat Painted: High quality, low maintenance water-based, environmentally friendly paint
 - Ultra Stain: water-based interior stain formulated with rich color tones
- Click [HERE](#) for complete list of color options.

Frame:

- Exterior .0625" thick extruded aluminum cladding for head, jambs, and sill; mechanically fastened mitered corners, fully injected for watertight seal; factory applied extruded drip cap.
- Interior wood frame components are select pine, solid or finger-jointed and veneer wrapped.
- Sash opening of the frame is wrapped in a black acrylic veneer.
- Frame thickness: 1-7/16" (interior), 9/16" (exterior)
- Overall frame depth: 5-3/4"
- Integral extruded aluminum nail fin with standard 4-9/16" jamb.
 - Additional jamb depths applied or loose: 4-3/4", 5", 5-1/8", 5-5/16", 6-7/16", 6-9/16", 6-11/16", 6-7/8", 7", 7-1/8", 7-1/4", 7-5/16", 7-3/8", 8-1/8", or custom specified

Sash:

- Exterior .0625" thick extruded aluminum cladding for both stiles and rails.
- 2-1/4" thick sash with sealed and fastened mortise and tenon joints.
- Interior wood sash components are treated solid select pine.
- Standard wide sash with 2-11/16" stiles and rails, and removable contemporary profile glazing bead; optional traditional profile.

Weatherstrip:

- Frame: perimeter compression style closed cell foam
- Sash: black perimeter polypropylene rigid cap with flexible thermal plastic hollow bulb leaf

Hardware:

- Operator Handle: Standard single zinc die cast handle, available in 7 finishes.
- Handle Location (from bottom of sash): 11" Standard; Optional 18", 27.5", and Centered
- Locking mechanism: Standard multi-point
- Hinges: Standard friction stay top and bottom hinge, with optional butt hinges.

Glazing:

- Interior glazed with exterior sealant and tape dam resulting in no excess squeeze out, with removable interior glazing beads.
- 3mm, 4mm, 5mm, 6mm, premium flat glass complying with ASTM C 1036
- Standard 3/4" and 1" argon filled dual insulated glass with black warm edge spacer, optional single pane, triple insulated, laminated and laminated insulated
 - Spacer options: Standard black structural foam warm edge or optional Cardinal Endur spacer (required on any Neat and Preserve glazing options)
 - Glazing options: Standard Low-E, Low-E 366, Low-E 340, Low-E 180, and Low-E i89
 - Tint options: Bronze, Grey, Spandrel, Solar Cool Grey or Bronze
 - Obscure options: Standard (Pattern 62), Rain, Narrow Reed, Gluechip, White Laminated, Satin Etch, or custom specified
- Click [HERE](#) for complete list of decorative glass options.

Grilles:

- Simulated Divided Lites (SDL) produced with color matched exterior aluminum bars and interior wood bars in matching interior wood species and finishes, with a shadow bar in between the glass
 - SDL bar width and profile options: 5/8", 7/8", 1" in Traditional, Putty, and Contemporary; 1-1/4" and 2" Traditional and Contemporary
- Grille Between the Glass (GBG) are installed in the insulated glass, in between the sealed glass panes, in a solid colors or optional 2-tone color.
 - GBG bar width and profile options: 5/8" x 3/16" Flat; 11/16" x 5/16" Contour; See [\[common features link here\]](#) for complete list of available colors.
 - Color options: Eight standard colors. Click [HERE](#) for complete list of available colors.
- Grille patterns for both SDL and GBG grilles include Equal, Prairie, Ladder, Craftsman, Cottage, Diamond, Cross, or custom specified

Screens:

- Standard interior full view wood hinged screen with View Clear (18x18) fiberglass mesh, optional View Clear Plus (20x20) fiberglass mesh. Optional Genius retractable screen with View Clear (18x18) fiberglass mesh.

Accessories:

- Exterior trim profile options: Selection of brickmould and flat casing profiles available as factory or field applied (requires thru frame install).
- Thirteen interior trim profile options in matching wood species
- Click [HERE](#) for complete list of exterior and interior trim profile options

Wood Preservative Treatment:

- Wood components, including all wood species, in direct contact with the exterior elements, aluminum clad, or glass are treated with our CoreGuard Plus™ patented wood preservative treatment process.



SECTION 2

COMMON PRODUCT FEATURES AND ACCESSORIES

Click [HERE](#) for the Common Product Features and Accessories



SECTION 3

CSI SPECIFICATIONS

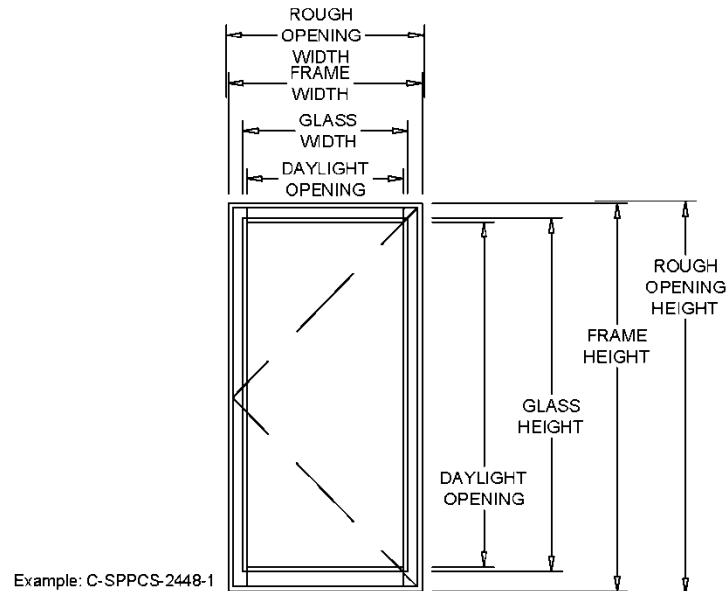
Click [HERE](#) for the Clad Pushout Casement CSI Specification



SECTION 4

ELEVATIONS





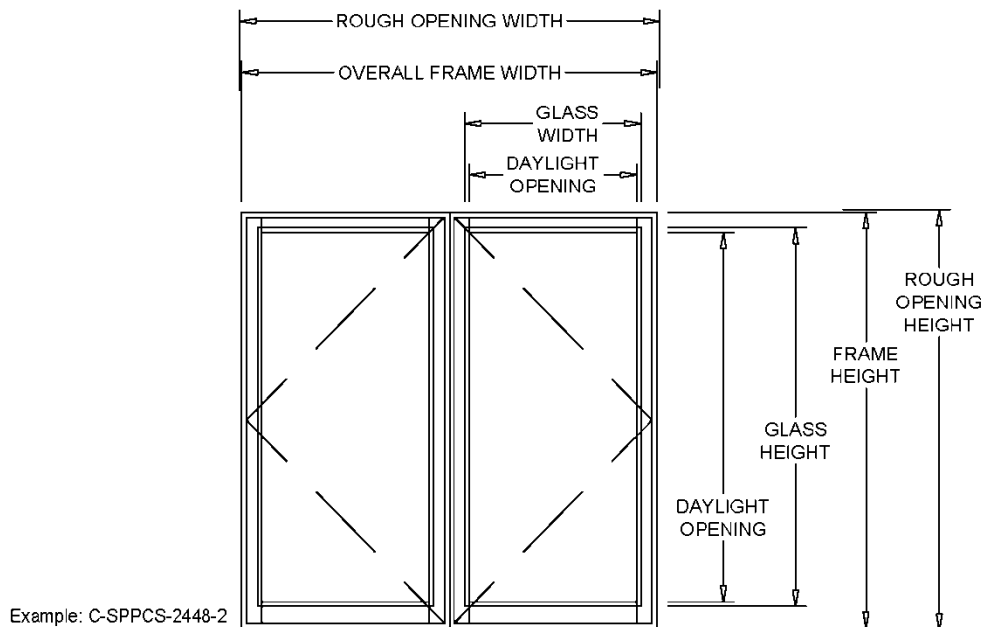
1-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	18 3/4" (476)	18" (457)	12 1/8" (308)	11" (279)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
20	20 3/4" (527)	20" (508)	14 1/8" (359)	13" (330)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)	30	30 3/4" (781)	30" (762)	24 1/8" (613)	23" (584)
28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
30	30 3/4" (781)	30" (762)	24 1/8" (613)	23" (584)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)	42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
					48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)

Operations available: Left, Right or Stationary

Chart reflects standard sizes. Custom sizes available in 1/16" increments.

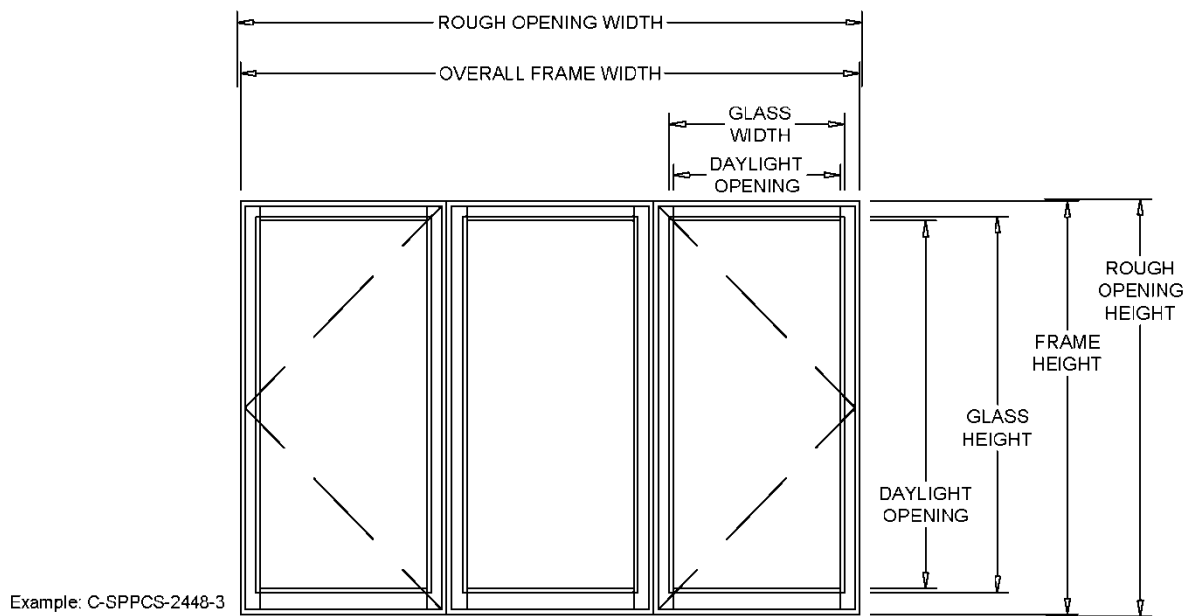
Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com

Elevations Viewed from Exterior



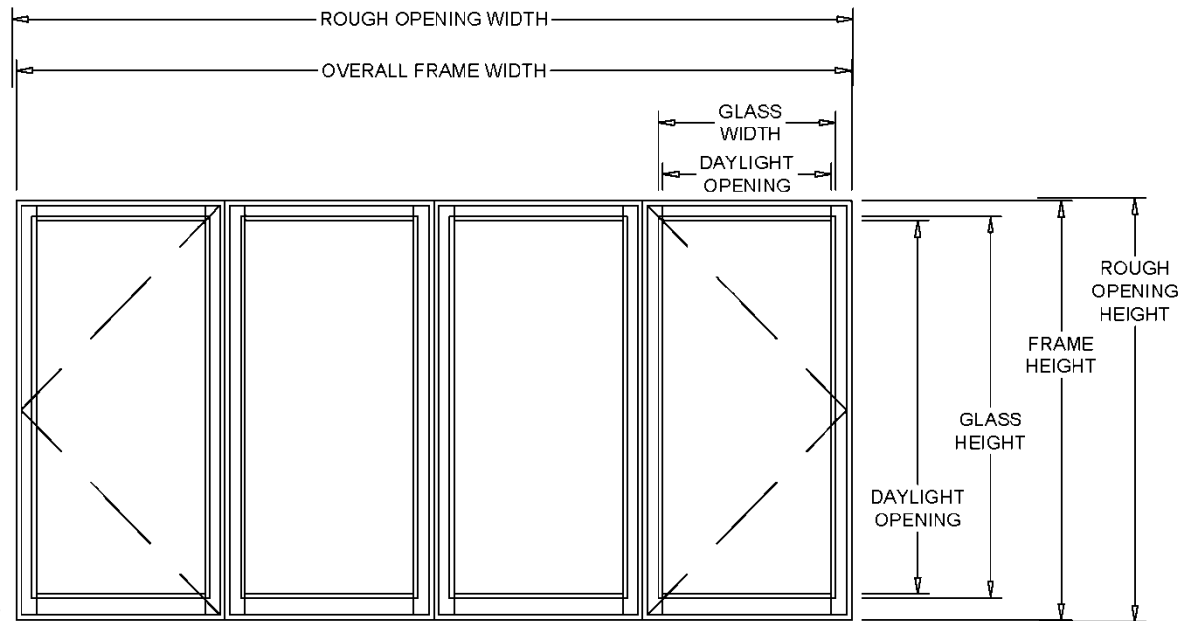
2-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	36 3/4" (933)	36" (914)	12 1/8" (308)	11" (279)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
20	40 3/4" (1035)	40" (1016)	14 1/8" (359)	13" (330)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
24	48 3/4" (1238)	48" (1219)	18 1/8" (460)	17" (432)	30	30 3/4" (781)	30" (762)	24 1/8" (613)	23" (584)
28	56 3/4" (1441)	56" (1422)	22 1/8" (562)	21" (533)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
30	60 3/4" (1543)	60" (1524)	24 1/8" (613)	23" (584)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
32	64 3/4" (1645)	64" (1626)	26 1/8" (664)	25" (635)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
36	72 3/4" (1848)	72" (1829)	30 1/8" (765)	29" (737)	42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
Operations available: Left, Right or Stationary Chart reflects standard sizes. Custom sizes available in 1/16" increments. Maximum Factory Mull: 144"x103-1/2" or 103-1/2"x144", or 18 united feet, or 80 sq. ft. Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com					48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)

Elevations Viewed from Exterior



3-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	54 3/4" (1391)	54" (1372)	12 1/8" (308)	11" (279)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
20	60 3/4" (1543)	60" (1524)	14 1/8" (359)	13" (330)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
24	72 3/4" (1848)	72" (1829)	18 1/8" (460)	17" (432)	30	30 3/4" (781)	30" (762)	24 1/8" (613)	23" (584)
28	84 3/4" (2153)	84" (2134)	22 1/8" (562)	21" (533)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
30	90 3/4" (2305)	90" (2286)	24 1/8" (613)	23" (584)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
32	96 3/4" (2457)	96" (2438)	26 1/8" (664)	25" (635)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
36	108 3/4" (2762)	108" (2743)	30 1/8" (765)	29" (737)	42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
Operations available: Left, Right or Stationary Chart reflects standard sizes. Custom sizes available in 1/16" increments. Maximum Factory Mull: 144"x103-1/2" or 103-1/2"x144" or 18 united feet, or 80 sq. ft. Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com					48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)

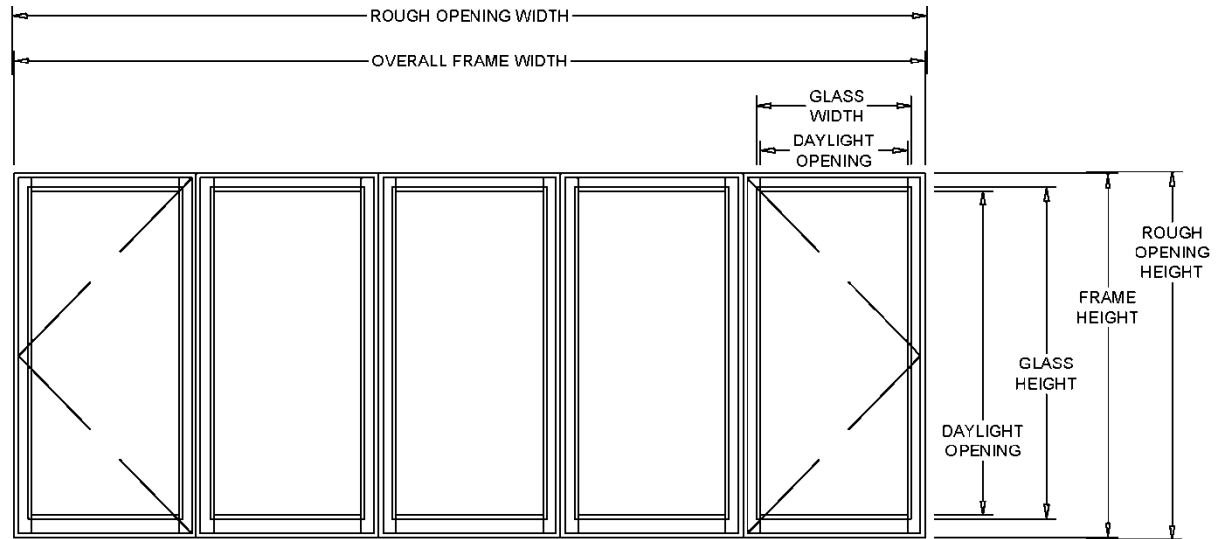
Elevations Viewed from Exterior



Example: C-SPPCS-2448-4

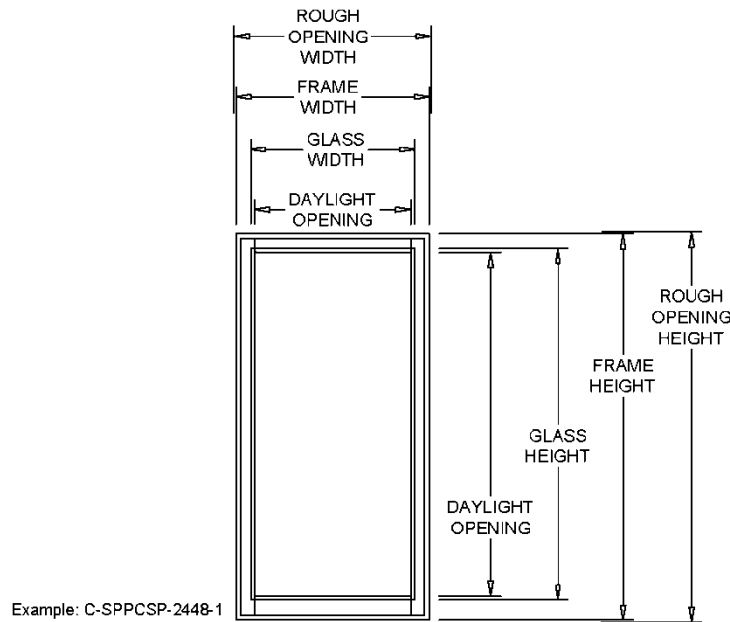
4-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	72 3/4" (1848)	72" (1829)	12 1/8" (308)	11" (279)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
20	80 3/4" (2051)	80" (2032)	14 1/8" (359)	13" (330)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
24	96 3/4" (2457)	96" (2438)	18 1/8" (460)	17" (432)	30	30 3/4" (781)	30" (762)	24 1/8" (613)	23" (584)
28	112 3/4" (2864)	112" (2845)	22 1/8" (562)	21" (533)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
30	120 3/4" (3067)	120" (3048)	24 1/8" (613)	23" (584)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
32	128 3/4" (3270)	128" (3251)	26 1/8" (664)	25" (635)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
36	144 3/4" (3677)	144" (3658)	30 1/8" (765)	29" (737)	42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
Operations available: Left, Right or Stationary Chart reflects standard sizes. Custom sizes available in 1/16" increments. Maximum factory mull: 144"x103-1/2" or 103-1/2"x144" or 18 united feet, or 80 sq. ft. Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com					48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)

Elevations Viewed from Exterior



5-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	90 3/4" (2305)	90" (2286)	12 1/8" (308)	11" (279)	18	18 3/4" (476)	18" (457)	12 1/8" (308)	11" (279)
24	120 3/4" (3067)	120" (3048)	18 1/8" (460)	17" (432)	20	20 3/4" (527)	20" (508)	14 1/8" (359)	13" (330)
28	140 3/4" (3575)	140" (3556)	22 1/8" (562)	21" (533)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
Operations available: Left, Right or Stationary Chart reflects standard sizes. Custom sizes available in 1/16" increments. Maximum factory mull: 144"x103-1/2" or 103-1/2"x144" or 18 united feet, or 80 sq. ft. Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com					28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
					30	30 3/4" (781)	30" (762)	24 1/8" (613)	23" (584)
					32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
					36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
					40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
					42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
					48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)

Elevations Viewed from Exterior

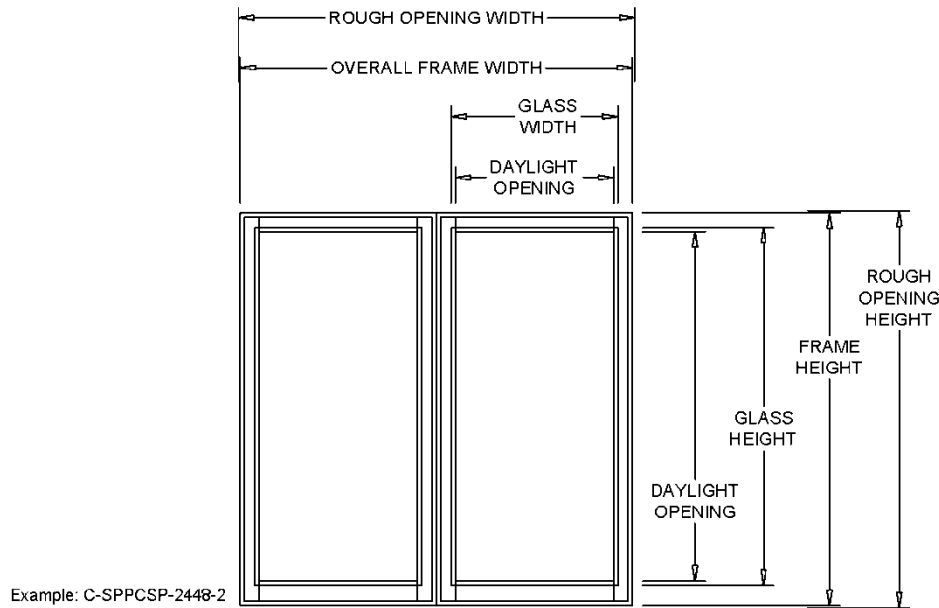


1-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	18 3/4" (476)	18" (457)	12 1/8" (308)	11" (279)	18	18 3/4" (476)	18" (457)	12 1/8" (308)	11" (279)
20	20 3/4" (527)	20" (508)	14 1/8" (359)	13" (330)	20	20 3/4" (527)	20" (508)	14 1/8" (359)	13" (330)
24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
30	30 3/4" (781)	30" (762)	24 1/8" (613)	23" (584)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)	42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)	48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)	54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)	60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)	64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)	66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
76	76 3/4" (1949)	76" (1930)	70 1/8" (1781)	69" (1753)	72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
80	80 3/4" (2051)	80" (2032)	74 1/8" (1883)	73" (1854)	78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)	80	80 3/4" (2051)	80" (2032)	74 1/8" (1883)	73" (1854)
96	96 3/4" (2457)	96" (2438)	90 1/8" (2289)	89" (2261)	84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)
					96	96 3/4" (2457)	96" (2438)	90 1/8" (2289)	89" (2261)

Chart reflects standard sizes. Custom sizes available in 1/16" increments.

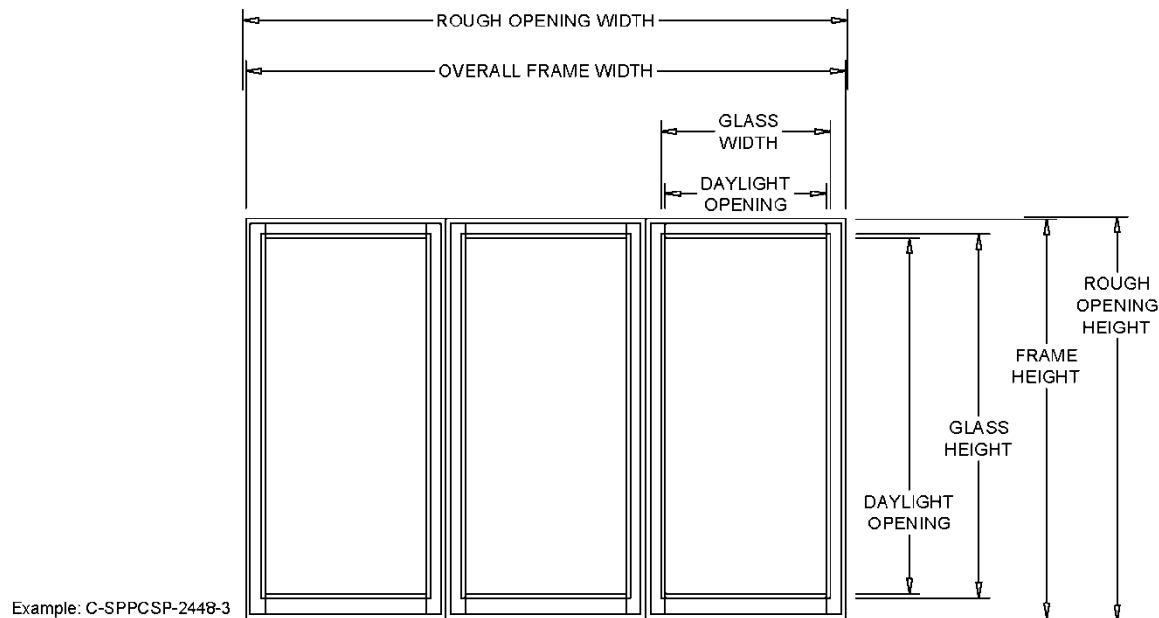
Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com

Elevations Viewed from Exterior



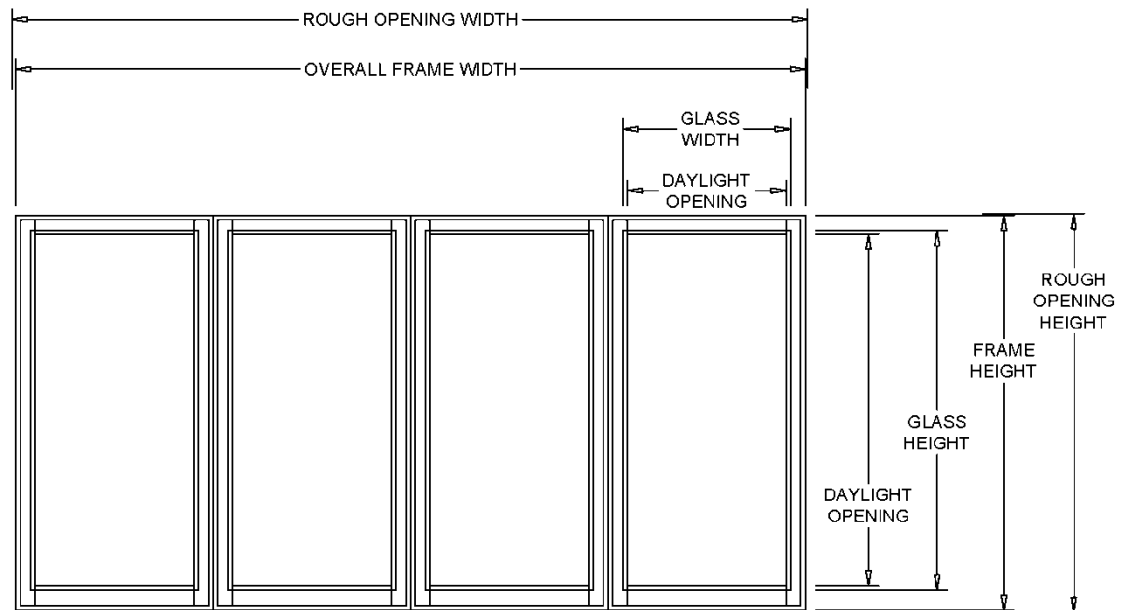
2-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	36 3/4 (933)	36" (914)	12 1/8" (308)	11" (279)	18	18 3/4" (476)	18" (457)	12 1/8" (308)	11" (279)
20	40 3/4 (1035)	40" (1016)	14 1/8" (359)	13" (330)	20	20 3/4" (527)	20" (508)	14 1/8" (359)	13" (330)
24	48 3/4 (1238)	48" (1219)	18 1/8" (460)	17" (432)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
28	56 3/4 (1441)	56" (1422)	22 1/8" (562)	21" (533)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
30	60 3/4 (1543)	60" (1524)	24 1/8" (613)	23" (584)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
32	64 3/4 (1645)	64" (1626)	26 1/8" (664)	25" (635)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
36	72 3/4 (1848)	72" (1829)	30 1/8" (765)	29" (737)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
42	84 3/4 (2153)	84" (2134)	36 1/8" (918)	35" (889)	42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
48	96 3/4 (2457)	96" (2438)	42 1/8" (1070)	41" (1041)	48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
54	108 3/4 (2762)	108" (2743)	48 1/8" (1222)	47" (1194)	54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
60	120 3/4 (3067)	120" (3048)	54 1/8" (1375)	53" (1346)	60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
66	132 3/4 (3372)	132" (3353)	60 1/8" (1527)	59" (1499)	64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
72	144 3/4 (3677)	144" (3658)	66 1/8" (1680)	65" (1651)	66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
Chart reflects standard sizes. Custom sizes available in 1/16" increments. Maximum factory mull: 144"x103-1/2" or 103-1/2"x144" or 18 united feet, or 80 sq. ft. Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					80	80 3/4" (2051)	80" (2032)	74 1/8" (1883)	73" (1854)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)
					96	96 3/4" (2457)	96" (2438)	90 1/8" (2289)	89" (2261)

Elevations Viewed from Exterior



3-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	54 3/4" (1391)	54" (1372)	12 1/8" (308)	11" (279)	18	18 3/4" (476)	18" (457)	12 1/8" (308)	11" (279)
20	60 3/4" (1543)	60" (1524)	14 1/8" (359)	13" (330)	20	20 3/4" (527)	20" (508)	14 1/8" (359)	13" (330)
24	72 3/4" (1848)	72" (1829)	18 1/8" (460)	17" (432)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
28	84 3/4" (2153)	84" (2134)	22 1/8" (562)	21" (533)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
30	90 3/4" (2305)	90" (2286)	24 1/8" (613)	23" (584)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
32	96 3/4" (2457)	96" (2438)	26 1/8" (664)	25" (635)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
36	108 3/4" (2762)	108" (2743)	30 1/8" (765)	29" (737)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
42	126 3/4" (3219)	126" (3200)	36 1/8" (918)	35" (889)	42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
48	144 3/4" (3677)	144" (3658)	42 1/8" (1070)	41" (1041)	48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
Chart reflects standard sizes. Custom sizes available in 1/16" increments. Maximum Factory Mull: 144"x103-1/2" or 103-1/2"x144" or 18 united feet, or 80 sq. ft. Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					80	80 3/4" (2051)	80" (2032)	74 1/8" (1883)	73" (1854)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)
					96	96 3/4" (2457)	96" (2438)	90 1/8" (2289)	89" (2261)

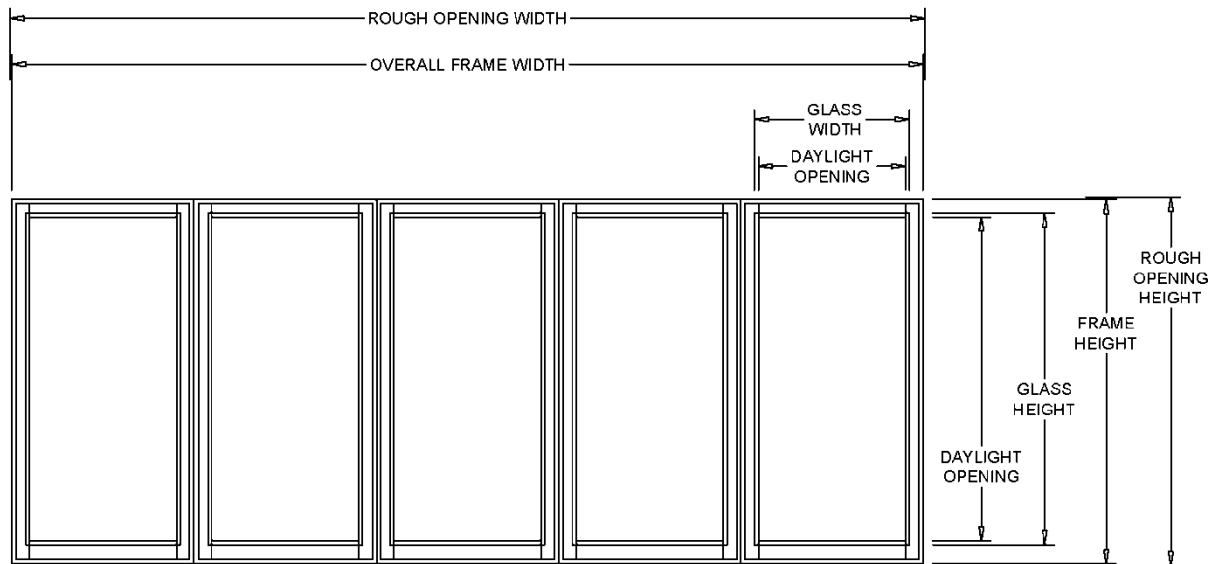
Elevations Viewed from Exterior



Example: C-SPPCSP-2448-4

4-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	72 3/4" (1848)	72" (1829)	12 1/8" (308)	11" (279)	18	18 3/4" (476)	18" (457)	12 1/8" (308)	11" (279)
20	80 3/4" (2051)	80" (2032)	14 1/8" (359)	13" (330)	20	20 3/4" (527)	20" (508)	14 1/8" (359)	13" (330)
24	96 3/4" (2457)	96" (2438)	18 1/8" (460)	17" (432)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
28	112 3/4" (2864)	112" (2845)	22 1/8" (562)	21" (533)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
30	120 3/4" (3067)	120" (3048)	24 1/8" (613)	23" (584)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
32	128 3/4" (3270)	128" (3251)	26 1/8" (664)	25" (635)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
36	144 3/4" (3677)	144" (3658)	30 1/8" (765)	29" (737)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
Chart reflects standard sizes. Custom sizes available in 1/16" increments. Maximum Factory Mull: 144"x103-1/2" or 103-1/2"x144" or 18 united feet, or 80 sq. ft. Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com					42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
					48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					80	80 3/4" (2051)	80" (2032)	74 1/8" (1883)	73" (1854)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)
					96	96 3/4" (2457)	96" (2438)	90 1/8" (2289)	89" (2261)

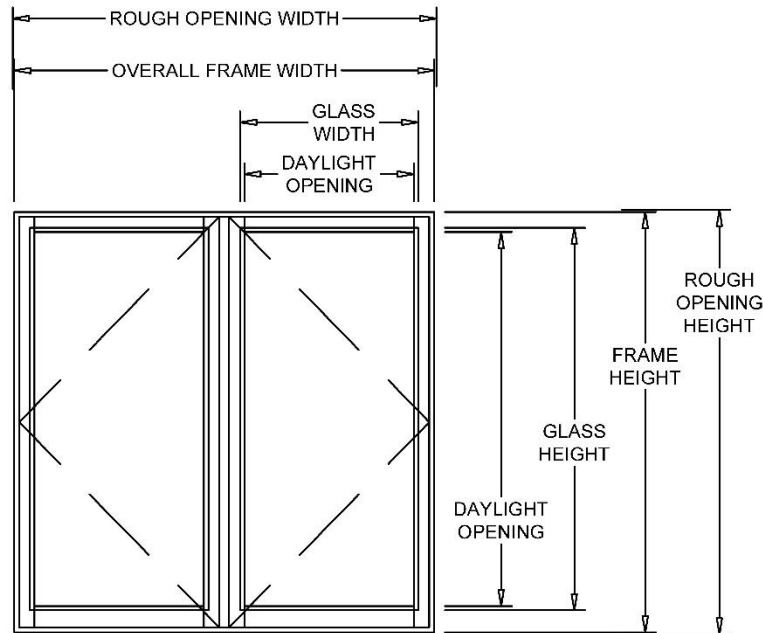
Elevations Viewed from Exterior



Example: C-SPPCSP-2448-5

5-Wide Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
18	90 3/4" (2305)	90" (2286)	12 1/8" (308)	11" (279)	18	18 3/4" (476)	18" (457)	12 1/8" (308)	11" (279)
20	100 3/4" (2559)	100" (2540)	14 1/8" (359)	13" (330)	20	20 3/4" (527)	20" (508)	14 1/8" (359)	13" (330)
24	120 3/4" (3067)	120" (3048)	18 1/8" (460)	17" (432)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
28	140 3/4" (3575)	140" (3556)	22 1/8" (562)	21" (533)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
Chart reflects standard sizes. Custom sizes available in 1/16" increments. Maximum Factory Mull: 144"x103-1/2" or 103-1/2"x144" or 18 united feet, or 80 sq. ft. Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com					32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
					36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
					40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
					42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
					48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					80	80 3/4" (2051)	80" (2032)	74 1/8" (1883)	73" (1854)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)
					96	96 3/4" (2457)	96" (2438)	90 1/8" (2289)	89" (2261)

Elevations Viewed from Exterior



Example: C-SPFCS-3648

French Pushout Width					Height				
CALL OUT WIDTH	ROUGH OPENING WIDTH	OVERALL FRAME WIDTH	GLASS WIDTH	DAYLIGHT OPENING	CALL OUT HEIGHT	ROUGH OPENING HEIGHT	FRAME HEIGHT	GLASS HEIGHT	DAYLIGHT OPENING
36	36 3/4" (933)	36" (914)	12 1/8" (308)	11" (279)	24	24 3/4" (629)	24" (610)	18 1/8" (460)	17" (432)
40	40 3/4" (1035)	40" (1016)	14 1/8" (359)	13" (330)	28	28 3/4" (730)	28" (711)	22 1/8" (562)	21" (533)
48	48 3/4" (1238)	48" (1219)	18 1/8" (460)	17" (432)	30	30 3/4" (781)	30" (762)	24 1/8" (613)	23" (584)
56	56 3/4" (1441)	56" (1422)	22 1/8" (562)	21" (533)	32	32 3/4" (832)	32" (813)	26 1/8" (664)	25" (635)
60	60 3/4" (1543)	60" (1524)	24 1/8" (613)	23" (584)	36	36 3/4" (933)	36" (914)	30 1/8" (765)	29" (737)
64	64 3/4" (1645)	64" (1626)	26 1/8" (664)	25" (635)	40	40 3/4" (1035)	40" (1016)	34 1/8" (867)	33" (838)
72	72 3/4" (1848)	72" (1829)	30 1/8" (765)	29" (737)	42	42 3/4" (1086)	42" (1067)	36 1/8" (918)	35" (889)
					48	48 3/4" (1238)	48" (1219)	42 1/8" (1070)	41" (1041)
					54	54 3/4" (1391)	54" (1372)	48 1/8" (1222)	47" (1194)
					60	60 3/4" (1543)	60" (1524)	54 1/8" (1375)	53" (1346)
					64	64 3/4" (1645)	64" (1626)	58 1/8" (1476)	57" (1448)
					66	66 3/4" (1695)	66" (1676)	60 1/8" (1527)	59" (1499)
					72	72 3/4" (1848)	72" (1829)	66 1/8" (1680)	65" (1651)
					78	78 3/4" (2000)	78" (1981)	72 1/8" (1832)	71" (1803)
					84	84 3/4" (2153)	84" (2134)	78 1/8" (1984)	77" (1956)

Operations available: Left/Right or Right/Left

Chart reflects standard sizes. Custom sizes available in 1/16" increments.

Note: For standard CAD layout elevations, visit www.SierraPacificWindows.com

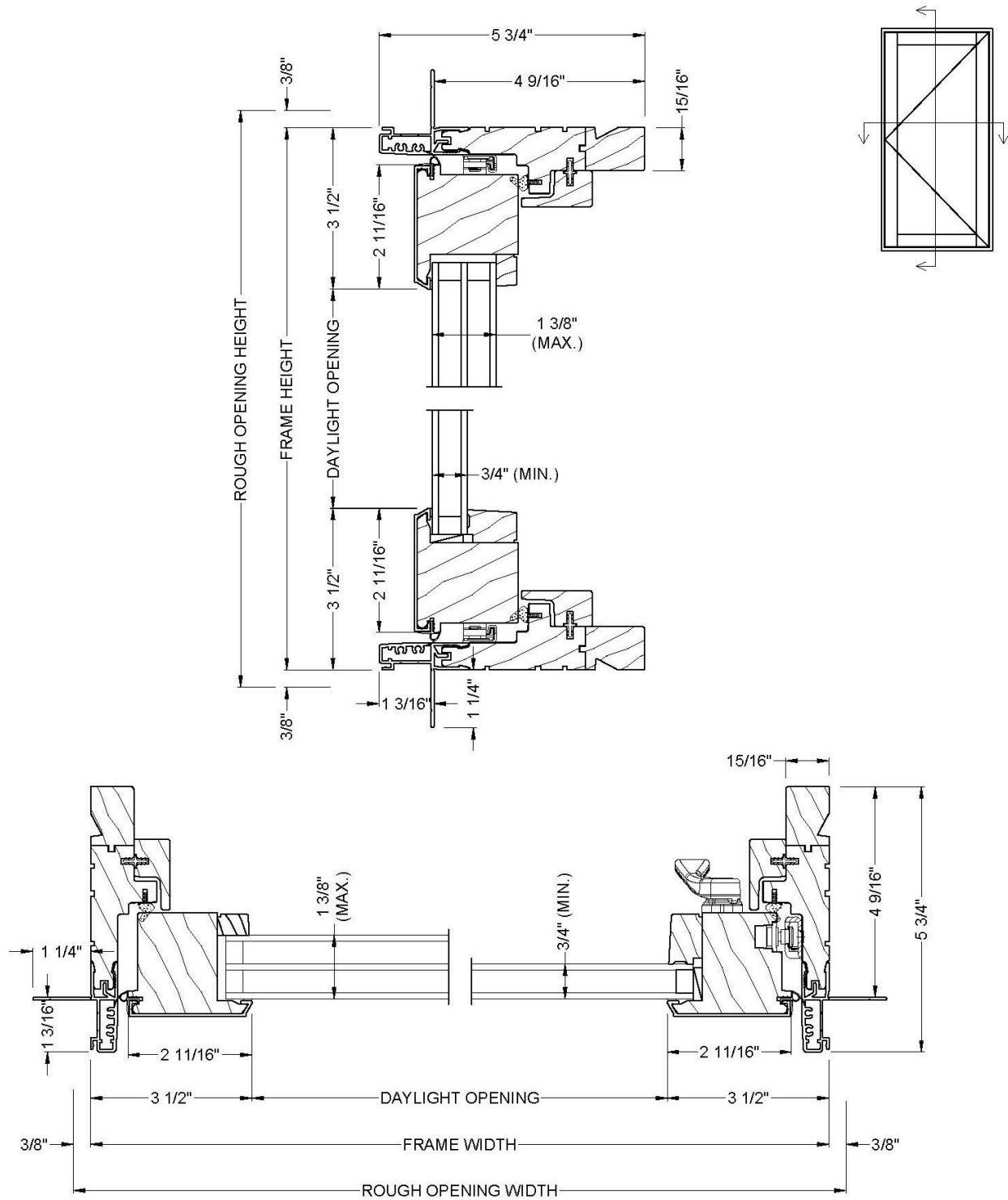
Elevations Viewed from Exterior

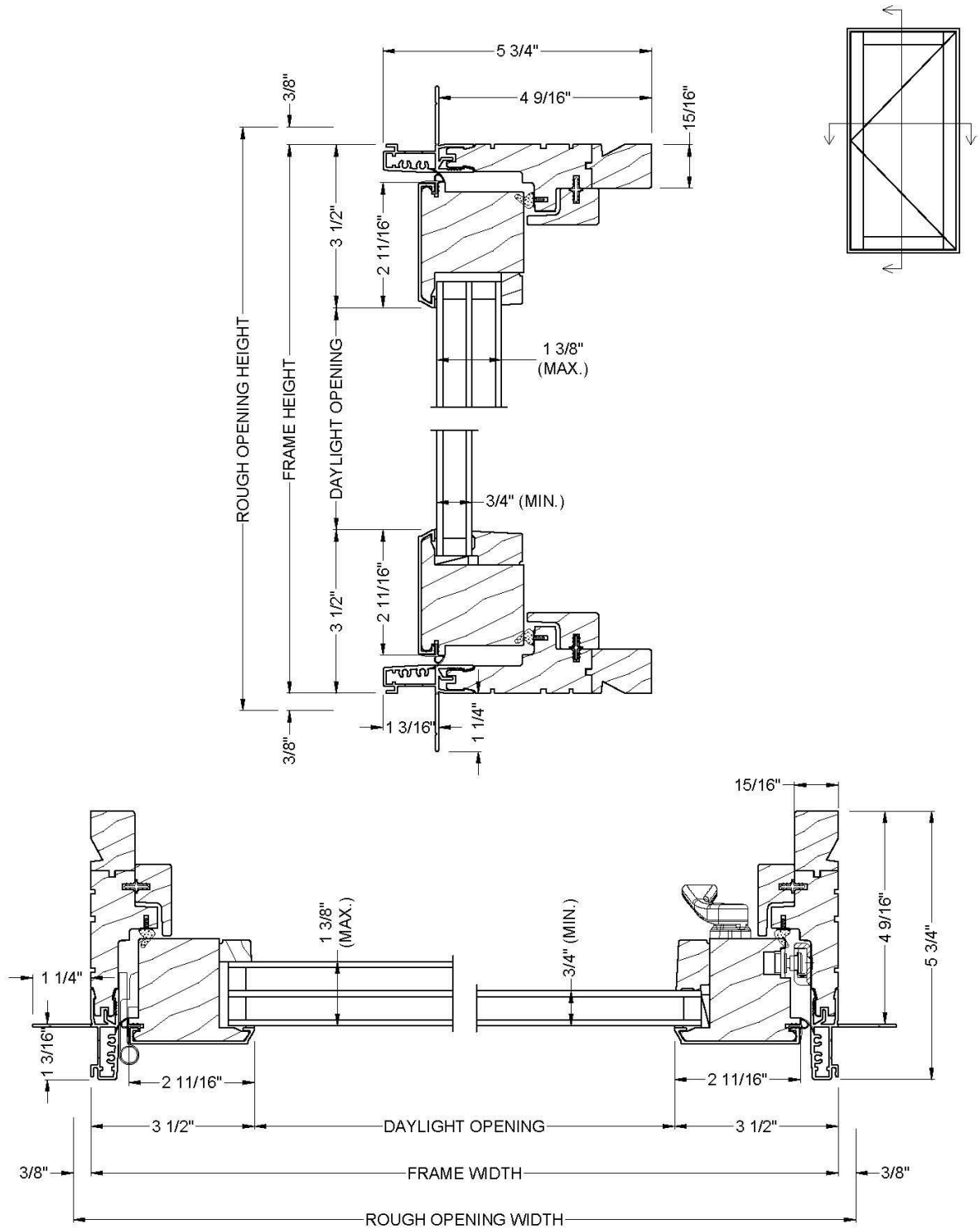


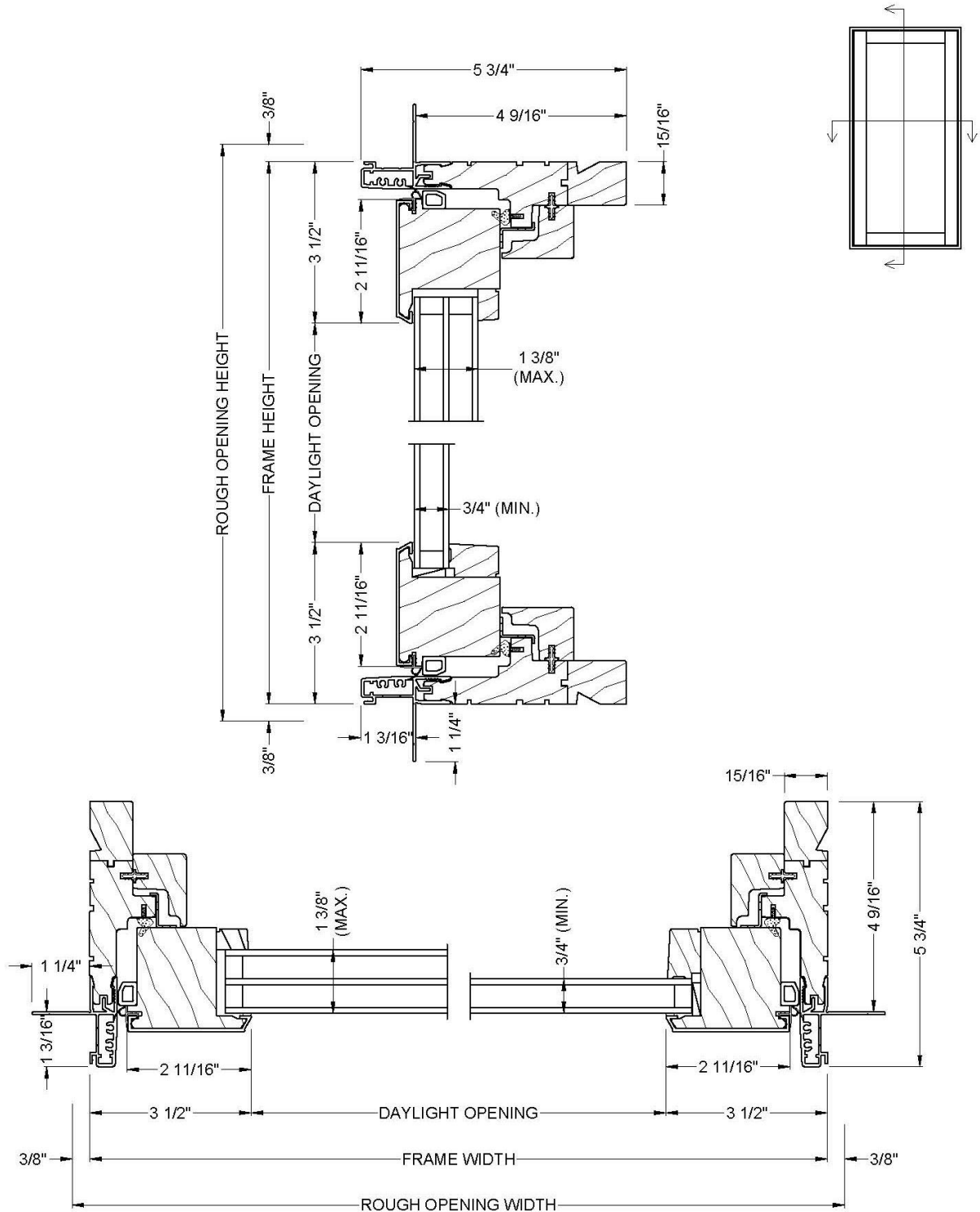
SECTION 5

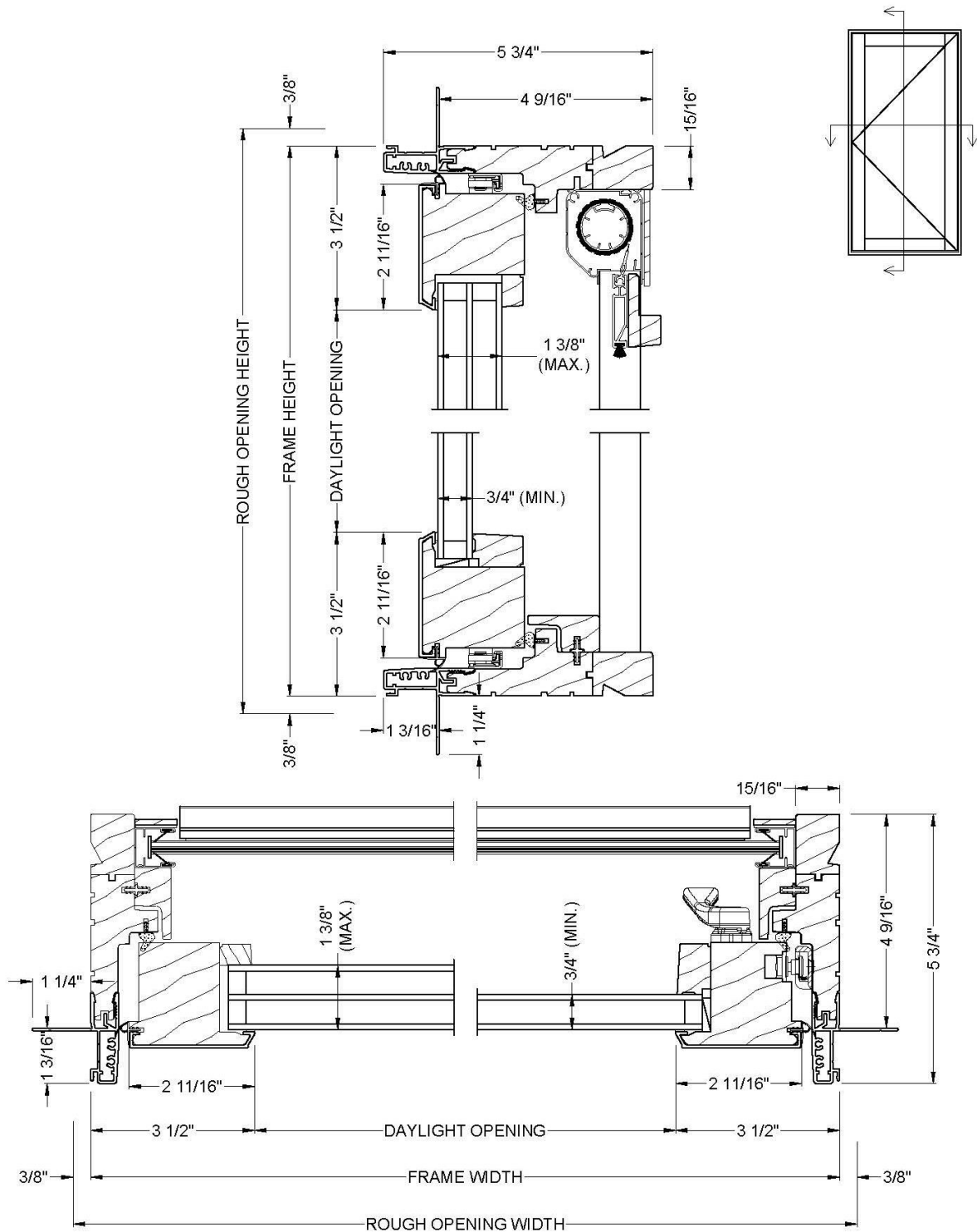
SECTION VIEWS

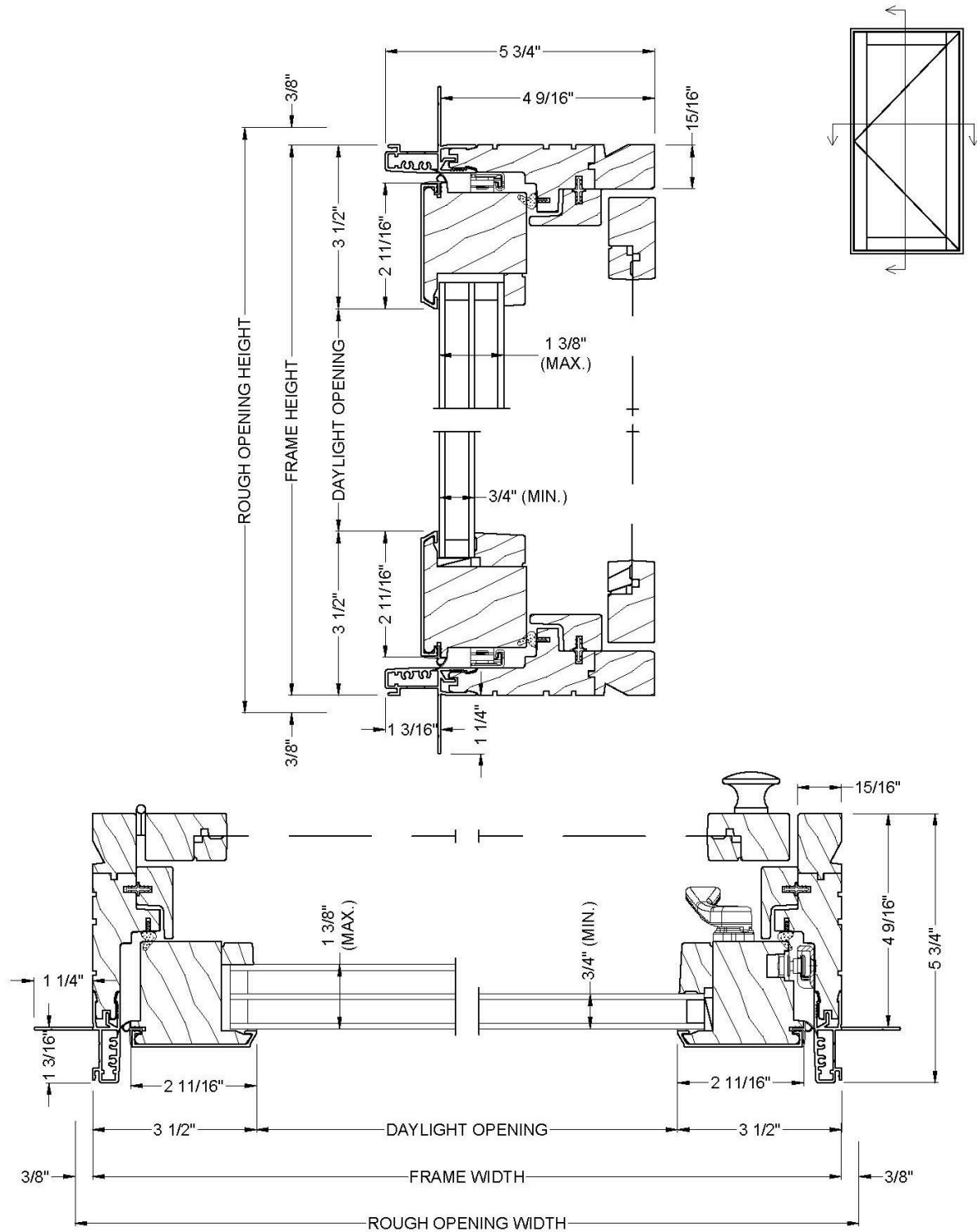


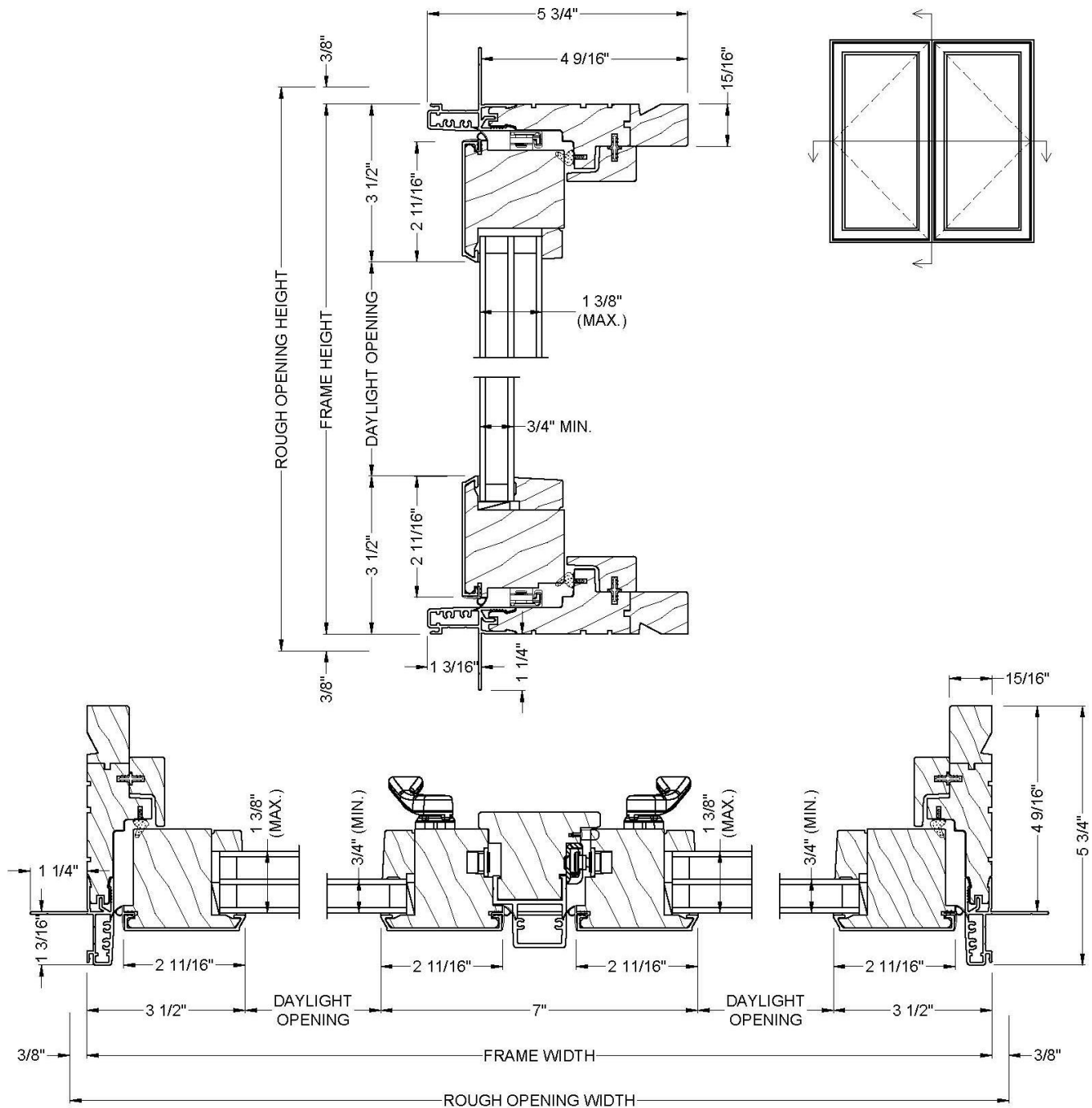


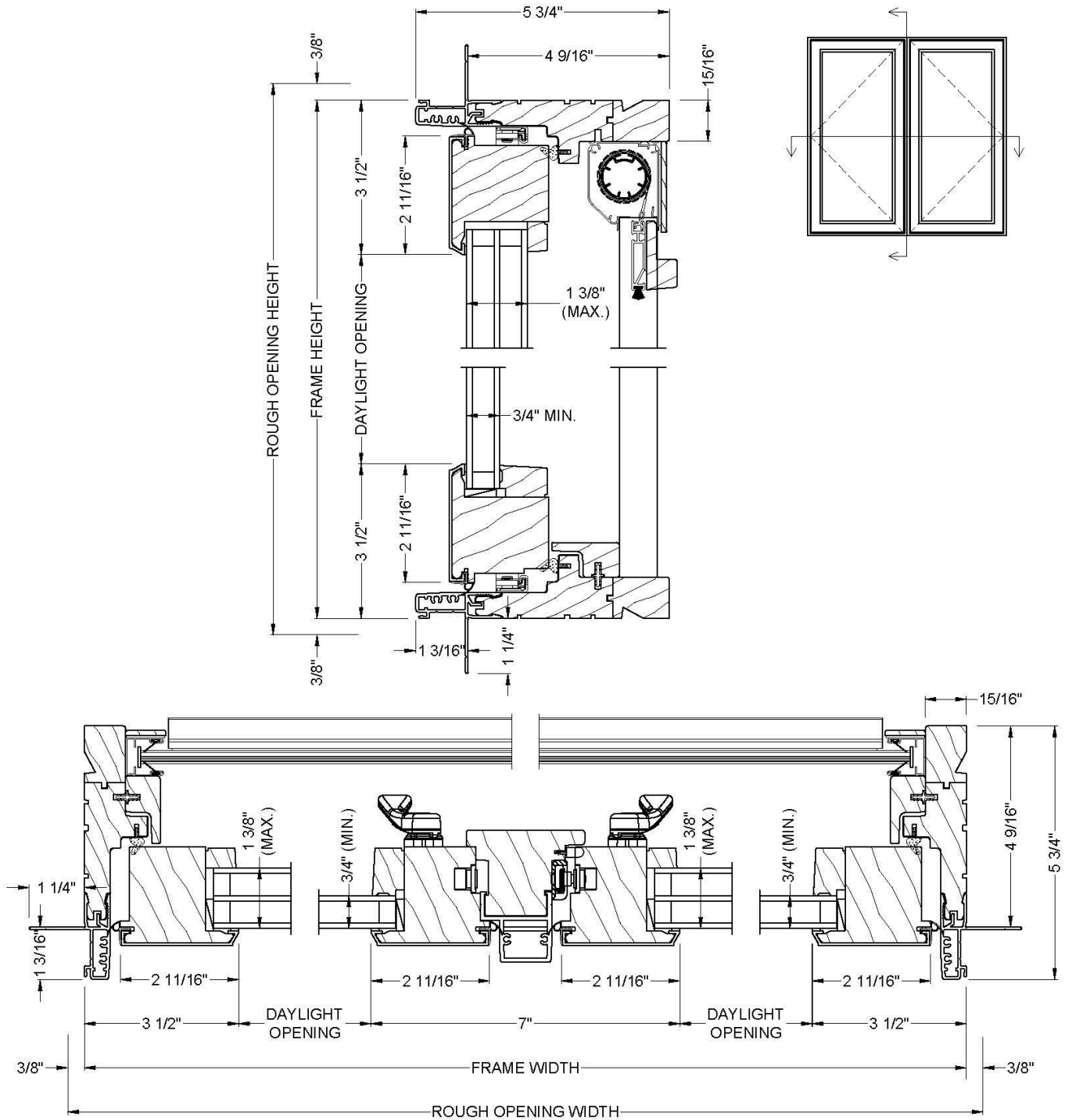


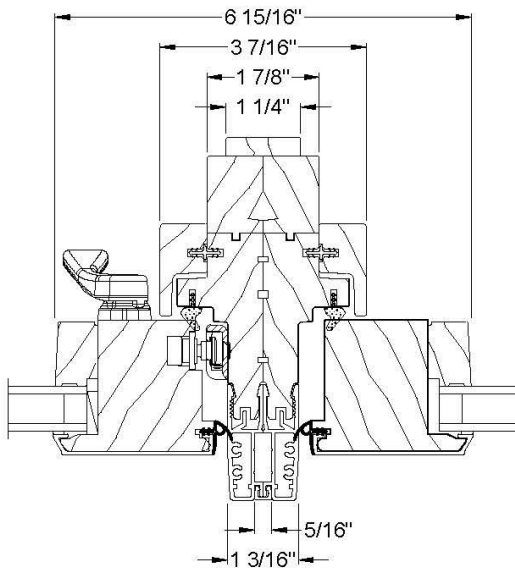




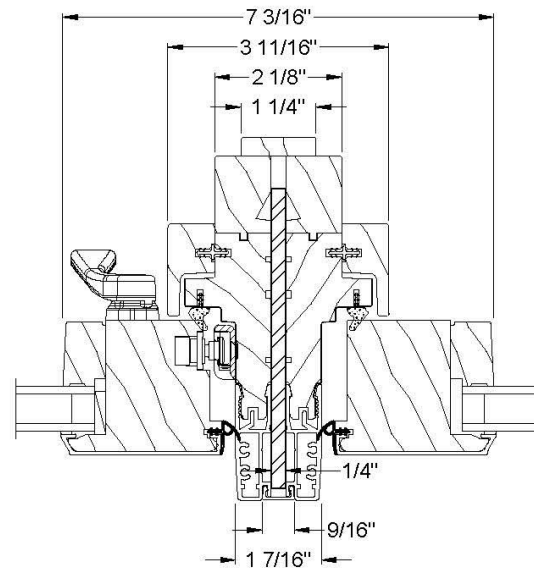




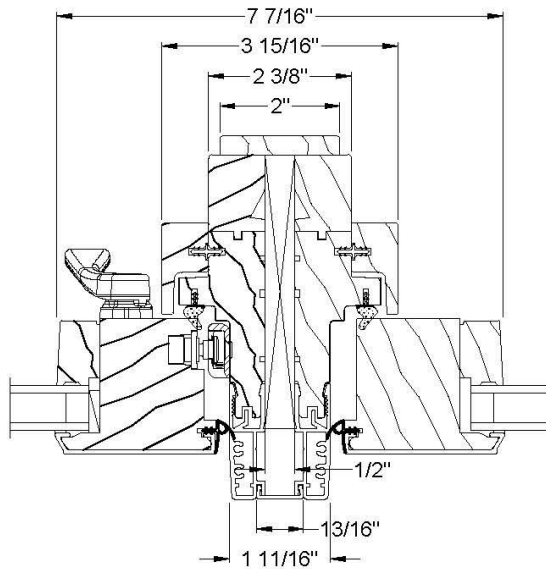




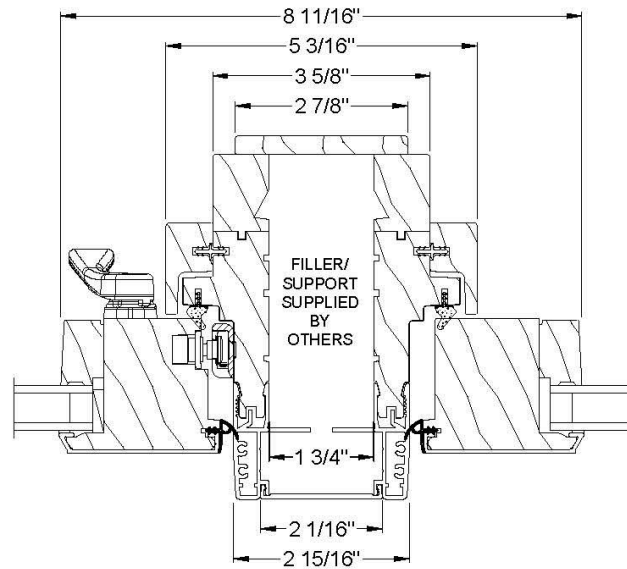
TIGHT MULL



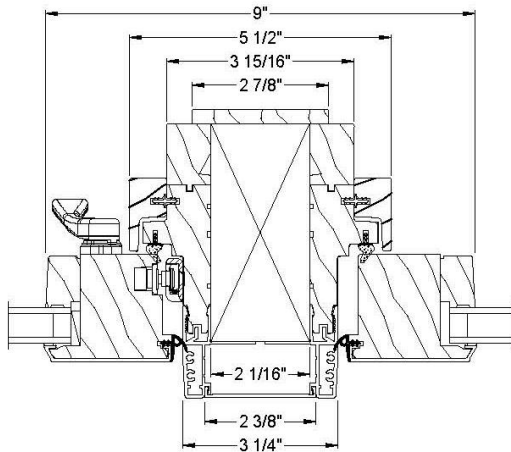
**1/4" PLATE
MULL**



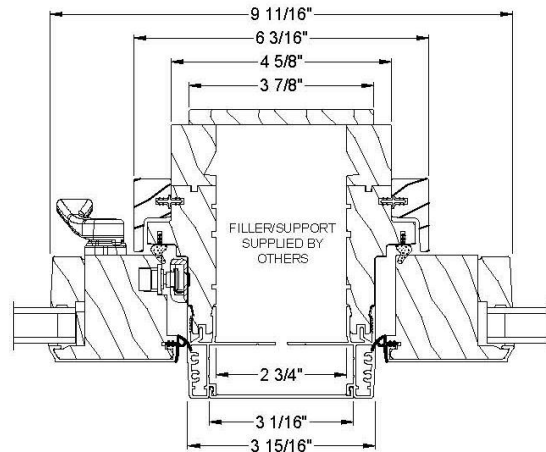
**1" SOLID
SPREAD MULL**



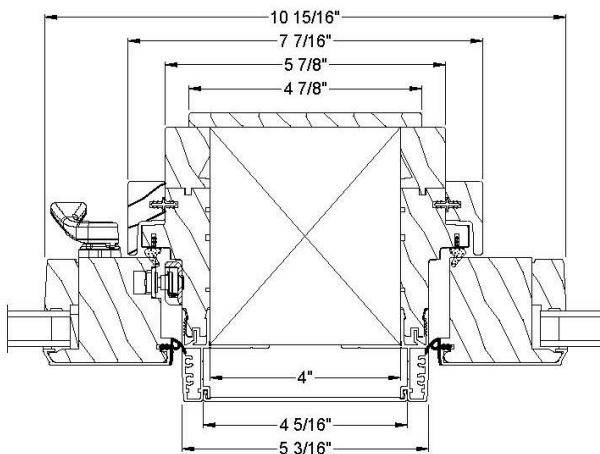
**1 3/4"
SPREAD
MULL**



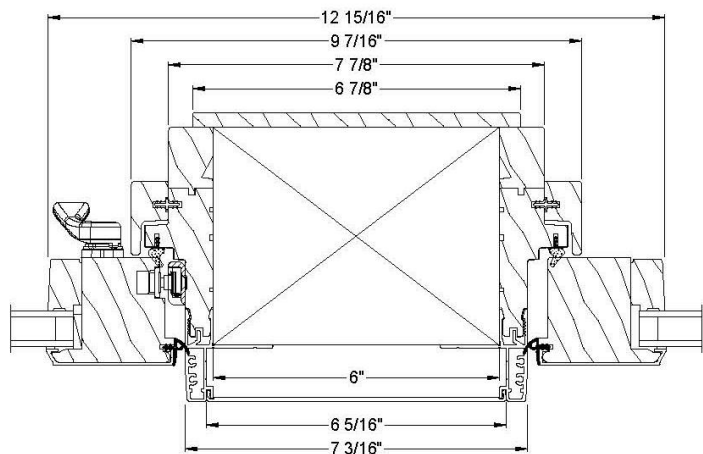
**2" SOLID
SPREAD MULL**



**2 3/4"
SPREAD MULL**

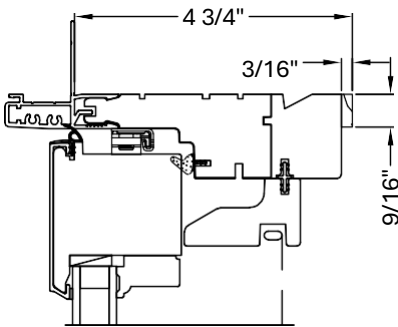


**4" SOLID
SPREAD MULL**

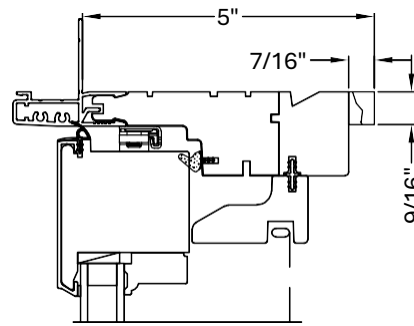


**6" SOLID
SPREAD MULL**

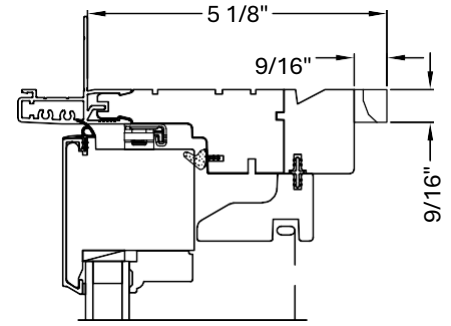
The details shown below are representative of the typical jamb extension application. Refer to the ADM Common Features and Accessories document or the SeedLink bid system for full list of available standard jamb extension sizes.



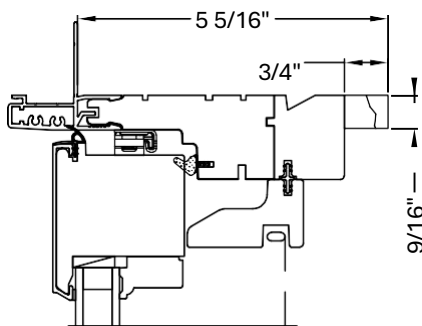
3/16" x 9/16" (4 3/4" Jamb)



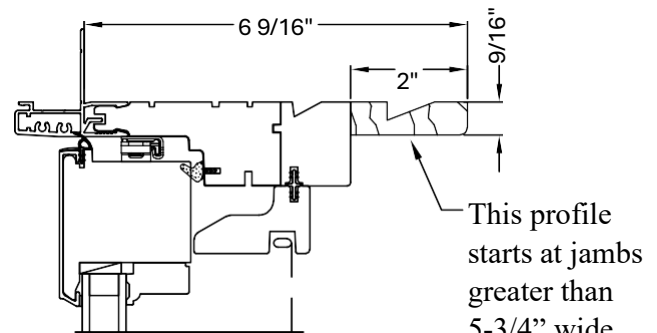
7/16" x 9/16" (5" Jamb)



9/16" x 9/16" (5 1/8" Jamb)



3/4" x 9/16" (5 5/16" Jamb)



2" x 9/16" (6 9/16" Jamb)



SECTION 6

REVIT MODELS



Click [HERE](#) for the Clad Pushout Casement Revit Models



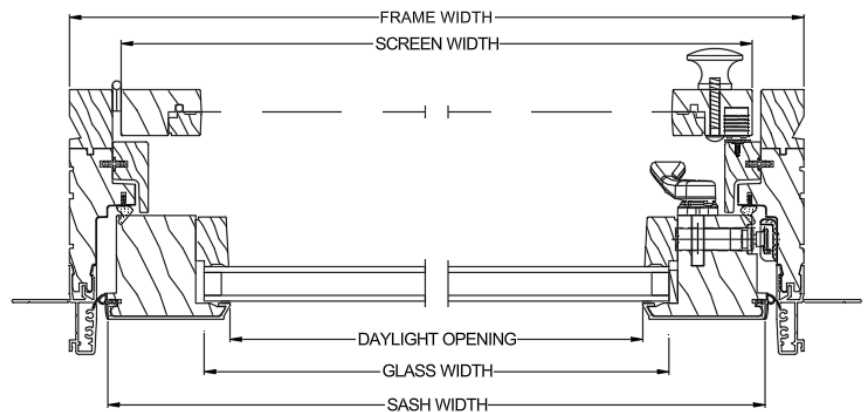
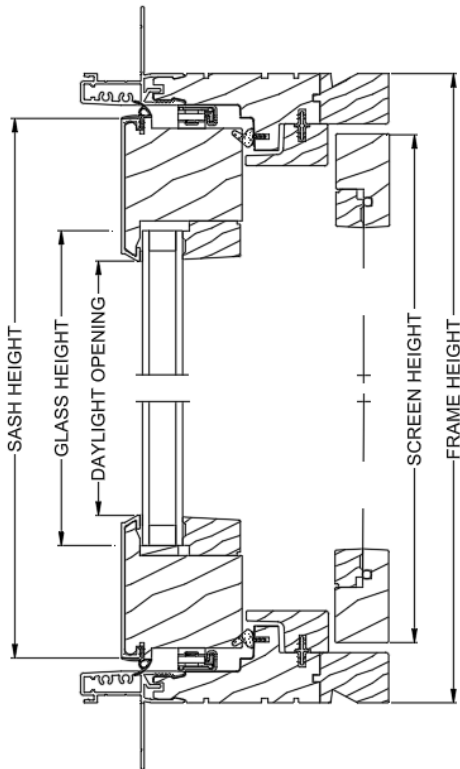
SECTION 7

RELATIVE DIMENSIONS AND FORMULAS

Clad Pushout Casement - Operating					
REQUIRED DIMENSIONS & FORMULAS					
KNOWN DIMENSIONS		GLASS SIZE	FRAME SIZE	SASH SIZE	DAYLIGHT OPENING
	GLASS SIZE		Glass Width + 5.875" Glass Height + 5.875"	Glass Width + 4.25" Glass Height + 4.25"	Glass Width - 1.125" Glass Height - 1.125"
	FRAME SIZE	Frame Width - 5.875" Frame Height - 5.875"		Frame Width - 1.625" Frame Height - 1.625"	Frame Width - 7" Frame Height - 7"
	SASH SIZE	Sash Width - 4.25" Sash Height - 4.25"	Sash Width + 1.625" Sash Height + 1.625"		Sash Width - 5.375" Sash Height - 5.375"
	DAYLIGHT OPENING	DLO Width + 1.125" DLO Height + 1.125"	DLO Width + 7" DLO Height + 7"	DLO Width + 5.375" DLO Height + 5.375"	

Note: Frame width or height + 3/4" equals Rough Opening

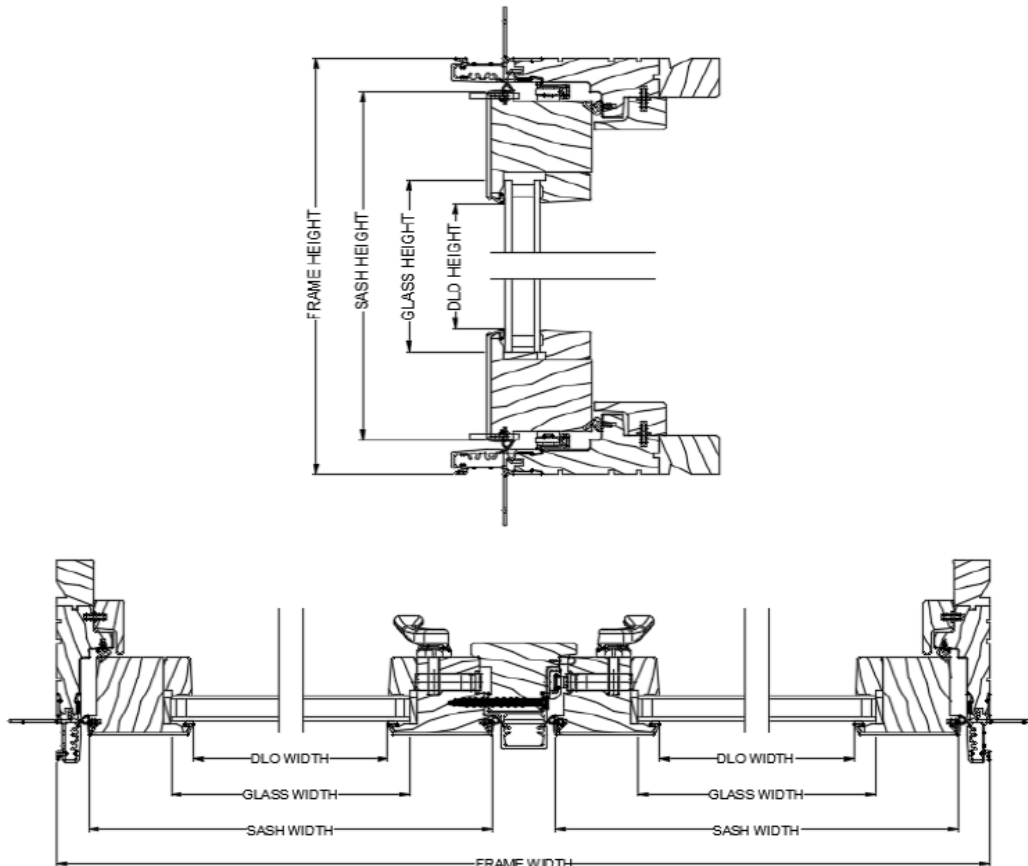
SCREEN SIZE	
Hinged Screen	
Frame Width - 2.25"	Frame Height - 2.25"
Retractable Screen	
Frame Width - 1.875"	Frame Height - 1.875"



Clad French Pushout Casement - Operating					
REQUIRED DIMENSIONS & FORMULAS					
KNOWN DIMENSIONS		GLASS SIZE	FRAME SIZE	SASH SIZE	DAYLIGHT OPENING
	GLASS SIZE		Glass Width * 2 + 11.75" Glass Height + 5.875"	Glass Width + 4.25" Glass Height + 4.25"	Glass Width – 1.125" Glass Height – 1.125"
	FRAME SIZE	Frame Width / 2 – 5.875" Frame Height – 5.875"		Frame Width / 2 – 1.625" Frame Height – 1.625"	Frame Width / 2 – 7" Frame Height – 7"
	SASH SIZE	Sash Width – 4.25" Sash Height – 4.25"	Sash Width * 2 + 3.25" Sash Height + 1.625"		Sash Width – 5.375" Sash Height – 5.375"
	DAYLIGHT OPENING	DLO Width + 1.125" DLO Height + 1.125"	DLO Width * 2 + 14" DLO Height + 7"	DLO Width + 5.375" DLO Height + 5.375"	

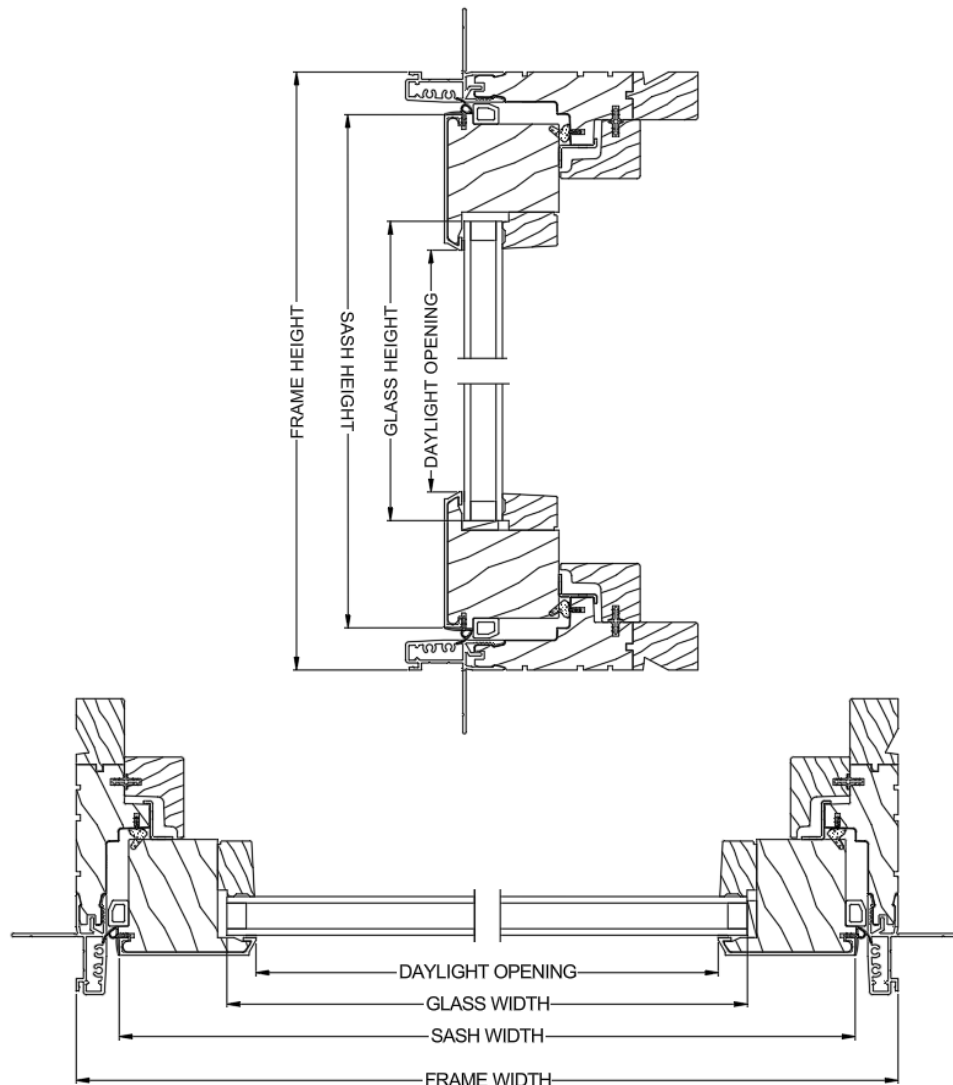
Note: Frame width or height + 3/4" equals Rough Opening

SCREEN SIZE	
Retractable Screen	
Frame Width – 1.875"	Frame Height – 1.875"



Clad Pushout Casement - Picture					
REQUIRED DIMENSIONS & FORMULAS					
KNOWN DIMENSIONS		GLASS SIZE	FRAME SIZE	SASH SIZE	DAYLIGHT OPENING
	GLASS SIZE		Glass Width + 5.875" Glass Height + 5.875"	Glass Width + 4.25" Glass Height + 4.25"	Glass Width - 1.125" Glass Height - 1.125"
	FRAME SIZE	Frame Width - 5.875" Frame Height - 5.875"		Frame Width - 1.625" Frame Height - 1.625"	Frame Width - 7" Frame Height - 7"
	SASH SIZE	Sash Width - 4.25" Sash Height - 4.25"	Sash Width + 1.625" Sash Height + 1.625"		Sash Width - 5.375" Sash Height - 5.375"
	DAYLIGHT OPENING	DLO Width + 1.125" DLO Height + 1.125"	DLO Width + 7" DLO Height + 7"	DLO Width + 5.375" DLO Height + 5.375"	

Note: Frame width or height + 3/4" equals Rough Opening





SECTION 8

PERFORMANCE DATA - NFRC

Air-Filled								9/9/25
Values represent 3mm lites unless otherwise stated. Different lite thickness and/or the addition of grilles can affect SHGC, VT and CR. Check the NFRC website or the bidding program for values.								
CPD NUMBER	GLAZING DESCRIPTION	U-Factor	SHGC	VT	CR	Energy Star Zone	Can ER Rating	
DUAL GLAZED OPTIONS								
SIE-N-171-00001-00001	Clear-Cardinal Spacer	0.41	0.49	0.51	45	None	17	
SIE-N-171-00765-00001	Clear-Warm Edge Spacer	0.41	0.49	0.51	45	None	17	
SIE-N-171-00020-00064	LowE 272 -Cardinal Spacer	0.31	0.27	0.45	56	None	14	
SIE-N-171-00784-00064	LowE 272 -Warm Edge Spacer	0.30	0.27	0.45	57	None	17	
SIE-N-171-00026-00001	LowE 272/LEI89-Cardinal Spacer	0.27	0.26	0.44	44	None	22	
SIE-N-171-00790-00001	LowE 272/LEI89-Warm Edge Spacer	0.26	0.26	0.44	44	None	22	
SIE-N-171-00036-00064	LowE 366 -Cardinal Spacer	0.30	0.18	0.40	57	S	12	
SIE-N-171-00800-00064	LowE 366 -Warm Edge Spacer	0.30	0.18	0.40	58	S	13	
SIE-N-171-00042-00001	LowE 366/LEI89* -Cardinal Spacer	0.26	0.17	0.39	44	S/C, S	18	
SIE-N-171-00806-00001	LowE 366/LEI89* -Warm Edge Spacer	0.26	0.17	0.39	45	S/C, S	18	
SIE-N-171-00004-00001	Clear/LowE 180 -Cardinal Spacer	0.31	0.43	0.49	56	None	26	
SIE-N-171-00768-00001	Clear/LowE 180 -Warm Edge Spacer	0.31	0.43	0.49	57	None	26	
SIE-N-171-00010-00001	LowE 180/LEI89* -Cardinal Spacer	0.26	0.39	0.48	43	None	29	
SIE-N-171-00774-00001	LowE 180/LEI89* -Warm Edge Spacer	0.25	0.39	0.48	44	N/C	29	
SIE-N-171-00052-00064	LowE 340 -Cardinal Spacer	0.30	0.12	0.24	57	S	9	
SIE-N-171-00816-00064	LowE 340 -Warm Edge Spacer	0.30	0.12	0.24	58	S	10	
LAMI OPTIONS								
SIE-N-171-00084-00001	Clear/Lami-Cardinal Spacer	0.41	0.47	0.50	46	None	16	
SIE-N-171-00084-00031	Lami/Clear-Cardinal Spacer	0.41	0.44	0.50	46	None	15	
SIE-N-171-00086-00031	Lami/LowE 272-Cardinal Spacer	0.31	0.30	0.44	56	None	19	
SIE-N-171-00087-00031	Lami/LowE 366-Cardinal Spacer	0.30	0.24	0.39	57	None	16	
SIE-N-171-00086-00001	LowE 272/Lami-Cardinal Spacer	0.31	0.26	0.44	56	None	17	
SIE-N-171-00087-00001	LowE 366/Lami-Cardinal Spacer	0.30	0.18	0.39	57	S	13	
OFFSET LITE OPTIONS-3mm/5mm								
3mm/6mm and 4mm/6mm options available- Visit www.nfrc.org for complete list or Ebid for values								
SIE-N-171-00001-00037	3mm Clear/5mm Clear-Cardinal Spacer	0.41	0.48	0.51	45	None	16	
SIE-N-171-00765-00037	3mm Clear/5mm Clear-Warm Edge Spacer	0.41	0.48	0.51	45	None	17	
SIE-N-171-00020-00076	3mm LowE 272/5mm Clear-Cardinal Spacer	0.31	0.26	0.44	56	None	17	
SIE-N-171-00784-00076	3mm LowE 272/5mm Clear -Warm Edge Spacer	0.30	0.26	0.44	57	None	17	
SIE-N-171-00036-00076	3mm LowE 366/5mm Clear-Cardinal Spacer	0.30	0.18	0.40	57	S	12	
SIE-N-171-00800-00076	3mm LowE 366/5mm Clear-Warm Edge Spacer	0.30	0.18	0.40	58	S	13	
SIE-N-171-00042-00005	3mm LowE 366/5mm LEI89* -Cardinal Spacer	0.26	0.17	0.39	44	N/C,S/C,S	17	
SIE-N-171-00806-00005	3mm LowE 366/5mm LEI89* -Warm Edge Spacer	0.26	0.17	0.39	45	N/C,S/C,S	18	
SIE-N-171-00004-00037	3mm Clear/ 5mm LowE 180 -Cardinal Spacer	0.31	0.43	0.49	56	None	26	
SIE-N-171-00768-00037	3mm Clear/5mm LowE 180 -Warm Edge Spacer	0.31	0.43	0.49	57	None	26	
SIE-N-171-00010-00005	3mm LowE 180/5mm LEI89* -Cardinal Spacer	0.27	0.39	0.48	43	None	29	
SIE-N-171-00774-00005	3mm LowE 180/5mm LEI89* -Warm Edge Spacer	0.27	0.39	0.48	44	None	29	
SIE-N-171-00052-00076	3mm LowE 340/5mm Clear-Cardinal Spacer	0.30	0.12	0.24	57	S	9	
SIE-N-171-00816-00076	3mm LowE 340/5mm Clear -Warm Edge Spacer	0.30	0.12	0.24	58	S	10	
TRIPLE GLAZE OPTIONS								
SIE-N-171-00120-00001	LowE 272/Clear/Clear-Cardinal Spacer	0.25	0.24	0.41	68	N/C	23	
SIE-N-171-00884-00001	LowE 272/Clear/Clear -Warm Edge Spacer	0.25	0.24	0.41	67	N/C	23	
SIE-N-171-00121-00001	LowE 272/Clear/LowE 272-Cardinal Spacer	0.21	0.23	0.36	72	N,N/C, S/C, S	26	
SIE-N-171-00885-00001	LowE 272/Clear/LowE 272 -Warm Edge Spacer	0.21	0.23	0.36	74	N,N/C, S/C, S	27	
SIE-N-171-00123-00001	LowE 272/LowE 272/LEI89*-Cardinal Spacer	0.20	0.20	0.35	59	N,N/C, S/C, S	27	
SIE-N-171-00887-00001	LowE 272/LowE 272/LEI89* -Warm Edge Spacer	0.20	0.20	0.35	60	N,N/C, S/C, S	27	
SIE-N-171-00126-00001	LowE 272/LowE 180/LEI89*-Cardinal Spacer	0.20	0.23	0.38	59	N,N/C, S/C, S	28	
SIE-N-171-00890-00001	LowE 272/LowE 180/LEI89* -Warm Edge Spacer	0.20	0.23	0.38	60	N,N/C, S/C, S	29	
SIE-N-171-00133-00001	LowE 180/Clear/LowE 180-Cardinal Spacer	0.22	0.35	0.43	72	N, N/C	33	
SIE-N-171-00897-00001	LowE 180/Clear/LowE 180-Warm Spacer	0.21	0.35	0.43	73	N, N/C	34	
SIE-N-171-00135-00001	LowE 180/LowE 180/LEI89* -Cardinal Spacer	0.20	0.34	0.42	59	N, N/C	34	
SIE-N-171-00899-00001	LowE 180/LowE 180/LEI89* -Warm Edge Spacer	0.20	0.34	0.42	60	N, N/C	35	
SIE-N-171-00131-00001	LowE 366/LowE 180/LEI89*-Cardinal Spacer	0.20	0.15	0.35	59	N/C, S/C, S	24	
SIE-N-171-00895-00001	LowE 366/LowE 180/LEI89* -Warm Edge Spacer	0.20	0.15	0.35	60	N/C, S/C, S	24	
*I89 glazing options may have an increased risk of room side condensation in areas when outdoor temperatures are below freezing (32°F/0°C)								
**If tempered, use LowE 272 values								

Argon-Filled								9/9/25
Values represent 3mm lites unless otherwise stated. Different lite thickness and/or the addition of grilles can affect SHGC, VT and CR. Check the NFRC website or the bidding program for values.								
CPD NUMBER	GLAZING DESCRIPTION	U-Factor	SHGC	VT	CR	Energy Star Zone	Can ER Rating	
DUAL GLAZED OPTIONS								
SIE-N-171-00023-00064	LowE 272-Cardinal Spacer	0.28	0.26	0.45	60	None	20	
SIE-N-171-00787-00064	LowE 272-Warm Edge Spacer	0.28	0.26	0.45	61	None	21	
SIE-N-171-00031-00001	LowE 272/LEI89-Cardinal Spacer	0.25	0.26	0.44	47	N/C	24	
SIE-N-171-00795-00001	LowE 272/LEI89-Warm Edge Spacer	0.24	0.26	0.44	48	N/C	24	
SIE-N-171-00039-00064	LowE 366-Cardinal Spacer	0.28	0.18	0.40	60	S/C, S	16	
SIE-N-171-00803-00064	LowE 366-Warm Edge Spacer	0.27	0.18	0.40	62	S/C, S	16	
SIE-N-171-00047-00001	LowE 366/LEI89-Cardinal Spacer	0.24	0.17	0.39	48	N/C, S/C, S	19	
SIE-N-171-00811-00001	LowE 366/LEI89-Warm Edge Spacer	0.24	0.17	0.39	49	N/C, S/C, S	20	
SIE-N-171-00007-00001	LowE 180-Cardinal Spacer	0.29	0.43	0.49	59	None	29	
SIE-N-171-00771-00001	LowE 180-Warm Edge Spacer	0.28	0.43	0.49	60	None	30	
SIE-N-171-00015-00001	LowE 180/LEI89-Cardinal Spacer	0.25	0.39	0.48	46	N/C	31	
SIE-N-171-00779-00001	LowE 180/LEI89-Warm Edge Spacer	0.25	0.39	0.48	47	N/C	32	
SIE-N-171-00055-00064	LowE 340-Cardinal Spacer	0.28	0.12	0.24	60	S/C, S	12	
SIE-N-171-00819-00064	LowE 340-Warm Edge Spacer	0.27	0.12	0.24	61	S/C, S	13	
LAMI OPTIONS								
SIE-N-171-00092-00031	Lami/LowE 272-Cardinal Spacer	0.28	0.30	0.44	60	None	22	
SIE-N-171-00093-00031	Lami/LowE 366-Cardinal Spacer	0.27	0.24	0.39	60	None	19	
SIE-N-171-00092-00001	LowE 272/Lami-Cardinal Spacer	0.28	0.26	0.44	60	None	20	
SIE-N-171-00093-00001	LowE 366/Lami-Cardinal Spacer	0.27	0.17	0.39	60	S/C, S	16	
OFFSET LITE OPTIONS-3mm/5mm								
3mm/6mm and 4mm/6mm options available- Visit www.nfrc.org for complete list or the bidding program for values								
SIE-N-171-00023-00076	3mm LowE 272/5mm Clear-Cardinal Spacer	0.28	0.26	0.44	60	None	20	
SIE-N-171-00787-00076	3mm LowE 272/5mm Clear-Warm Edge Spacer	0.28	0.26	0.44	61	None	21	
SIE-N-171-00039-00076	3mm LowE 366/5mm Clear-Cardinal Spacer	0.28	0.18	0.40	60	S/C, S	16	
SIE-N-171-00803-00076	3mm LowE 366/5mm Clear-Warm Edge Spacer	0.27	0.18	0.40	62	S/C, S	16	
SIE-N-171-00047-00005	3mm LowE 366/5mm LEI89-Cardinal Spacer	0.24	0.17	0.39	48	N/C, S/C, S	19	
SIE-N-171-00811-00005	3mm LowE 366/5mm LEI89-Warm Edge Spacer	0.24	0.17	0.39	49	N/C, S/C, S	20	
SIE-N-171-00007-00037	3mm Clear/5mm LowE 180-Cardinal Spacer	0.29	0.43	0.49	59	None	29	
SIE-N-171-00771-00037	3mm Clear/5mm LowE 180-Warm Edge Spacer	0.28	0.43	0.49	60	None	30	
SIE-N-171-00015-00005	3mm LowE 180/5mm LEI89-Cardinal Spacer	0.25	0.39	0.48	46	N/C	31	
SIE-N-171-00779-00005	3mm LowE 180/5mm LEI89-Warm Edge Spacer	0.25	0.39	0.48	47	N/C	32	
SIE-N-171-00055-00076	3mm LowE 340/5mm Clear-Cardinal Spacer	0.28	0.12	0.24	60	S/C, S	12	
SIE-N-171-00819-00076	3mm LowE 340/5mm Clear-Warm Edge Spacer	0.27	0.12	0.24	61	S/C, S	13	
TRIPLE GLAZE OPTIONS								
SIE-N-171-00142-00001	LowE 272/Clear/Clear-Cardinal Spacer	0.23	0.24	0.41	68	N/C	25	
SIE-N-171-00906-00001	LowE 272/Clear/Clear-Warm Edge Spacer	0.23	0.24	0.41	70	N/C	26	
SIE-N-171-00143-00001	LowE 272/Clear/LowE 272-Cardinal Spacer	0.19	0.22	0.36	74	N,N/C, S/C, S	29	
SIE-N-171-00907-00001	LowE 272/Clear/LowE 272-Warm Edge Spacer	0.19	0.22	0.36	75	N,N/C, S/C, S	29	
SIE-N-171-00145-00001	LowE 272/LowE 272/LEI89-Cardinal Spacer	0.18	0.20	0.35	63	N,N/C, S/C, S	29	
SIE-N-171-00909-00001	LowE 272/LowE 272/LEI89-Warm Edge Spacer	0.18	0.20	0.35	64	N,N/C, S/C, S	29	
SIE-N-171-00148-00001	LowE 272/LowE 180/LEI89-Cardinal Spacer	0.18	0.23	0.38	62	N,N/C, S/C, S	30	
SIE-N-171-00912-00001	LowE 272/LowE 180/LEI89-Warm Edge Spacer	0.18	0.23	0.38	63	N,N/C, S/C, S	31	
SIE-N-171-00155-00001	LowE 180/Clear/LowE 180-Cardinal Spacer	0.20	0.35	0.43	74	N, N/C	36	
SIE-N-171-00919-00001	LowE 180/Clear/LowE 180-Warm Edge Spacer	0.19	0.35	0.43	75	N, N/C	36	
SIE-N-171-00157-00001	LowE 180/LowE 180/LEI89-Cardinal Spacer	0.19	0.34	0.42	62	N, N/C	36	
SIE-N-171-00921-00001	LowE 180/LowE 180/LEI89-Warm Edge Spacer	0.18	0.34	0.42	63	N, N/C	37	
SIE-N-171-00153-00001	LowE 366/LowE 180/LEI89-Cardinal Spacer	0.18	0.15	0.35	63	N/C, S/C, S	26	
SIE-N-171-00917-00001	LowE 366/LowE 180/LEI89-Warm Edge Spacer	0.18	0.15	0.35	64	N/C, S/C, S	26	
*i89 glazing options may have an increased risk of room side condensation in areas when outdoor temperatures are below freezing (32°F/0°C)								
**If tempered, use LowE 272 values								



SECTION 9

PERFORMANCE DATA – STC/OITC

STC - Sound Transmission Class Test Summary						
Product Type	Glass Make-up			STC Rating	OITC Rating	Test Report #
	Exterior Glazing	Airspace	Interior Glazing			
Clad Casement	1/8" (3.0mm)	1/2" (12.7mm)	1/8" (3.0mm)	27	23	ESP044433P-2



SECTION 10

PERFORMANCE DATA – AIR/WATER/STRUCTURAL

8/11/2025											
Product	Tested Configuration	Size/Unit Type Tested	Performance Grade	Load	Water (PSF)	Air In/Ex (cfm/ft²) / CAN Level	Comments -Required Upgrades	Test Report	Hallmark CCL #	FBC #	TDI #
Clad Pushout Casement - Operator		36" x 84" Single/Mulled Unit	CW-PG50	+50/-50	7.52	.01/.01/A3	None	S6564.01			
Clad Pushout Casement - Picture		96" x 75" Single Unit						Pending			
		84" x 96" Single Unit						Pending			



SECTION 11

EGRESS



FRAME SIZE	CLEAR OPENING SQUARE FEET W/14" FRICTION HINGE	CLEAR OPENING SQUARE FEET W/10" FRICTION HINGE	CLEAR OPENING SQUARE FEET W/BUTT HINGE	CLEAR OPENING WIDTH 14" FRICTION HINGE (Frame Width-10.115")	CLEAR OPENING WIDTH 10" FRICTION HINGE (Frame Width-6.622")	CLEAR OPENING WIDTH BUTT HINGE (Frame Width-3.301")	CLEAR OPENING HEIGHT (Frame Height-3.438")
24 X 42	3.718	4.654	5.543	13.885	17.378	20.699	38.562
24 X 48	4.297	5.378	6.405	13.885	17.378	20.699	44.562
24 X 54	4.875	6.102	7.268	13.885	17.378	20.699	50.562
24 X 60	5.454	6.826	8.130	13.885	17.378	20.699	56.562
24 X 64	5.840	7.309	8.705	13.885	17.378	20.699	60.562
24 X 66	6.032	7.550	8.993	13.885	17.378	20.699	62.562
24 X 72	6.611	8.274	9.855	13.885	17.378	20.699	68.562
24 X 78	7.190	8.998	10.718	13.885	17.378	20.699	74.562
24 X 84	7.768	9.722	11.580	13.885	17.378	20.699	80.562
28 X 36	4.044	4.834	5.585	17.885	21.378	24.699	32.562
28 X 40	4.541	5.428	6.271	17.885	21.378	24.699	36.562
28 X 42	4.789	5.725	6.614	17.885	21.378	24.699	38.562
28 X 48	5.535	6.616	7.643	17.885	21.378	24.699	44.562
28 X 54	6.280	7.506	8.672	17.885	21.378	24.699	50.562
28 X 60	7.025	8.397	9.702	17.885	21.378	24.699	56.562
28 X 64	7.522	8.991	10.388	17.885	21.378	24.699	60.562
28 X 66	7.770	9.288	10.731	17.885	21.378	24.699	62.562
28 X 72	8.515	10.179	11.760	17.885	21.378	24.699	68.562
28 X 78	9.261	11.069	12.789	17.885	21.378	24.699	74.562
28 X 84	10.006	11.960	13.818	17.885	21.378	24.699	80.562
30 X 32	3.944	4.637	5.296	19.885	23.378	26.699	28.562
30 X 36	4.496	5.286	6.037	19.885	23.378	26.699	32.562
30 X 40	5.049	5.936	6.779	19.885	23.378	26.699	36.562
30 X 42	5.325	6.260	7.150	19.885	23.378	26.699	38.562
30 X 48	6.154	7.235	8.262	19.885	23.378	26.699	44.562
30 X 54	6.982	8.209	9.375	19.885	23.378	26.699	50.562
30 X 60	7.811	9.183	10.487	19.885	23.378	26.699	56.562
30 X 64	8.363	9.832	11.229	19.885	23.378	26.699	60.562
30 X 66	8.639	10.157	11.600	19.885	23.378	26.699	62.562
30 X 72	9.468	11.131	12.712	19.885	23.378	26.699	68.562
30 X 78	10.296	12.105	13.825	19.885	23.378	26.699	74.562
30 X 84	11.125	13.079	14.937	19.885	23.378	26.699	80.562
32 X 32	4.341	5.034	5.692	21.885	25.378	28.699	28.562
32 X 36	4.949	5.739	6.490	21.885	25.378	28.699	32.562
32 X 40	5.557	6.444	7.287	21.885	25.378	28.699	36.562
32 X 42	5.861	6.796	7.685	21.885	25.378	28.699	38.562
32 X 48	6.772	7.853	8.881	21.885	25.378	28.699	44.562
32 X 54	7.684	8.911	10.077	21.885	25.378	28.699	50.562
32 X 60	8.596	9.968	11.273	21.885	25.378	28.699	56.562
32 X 64	9.204	10.673	12.070	21.885	25.378	28.699	60.562
32 X 66	9.508	11.026	12.469	21.885	25.378	28.699	62.562
32 X 72	10.420	12.083	13.664	21.885	25.378	28.699	68.562
32 X 78	11.332	13.141	14.860	21.885	25.378	28.699	74.562
32 X 84	12.244	14.198	16.056	21.885	25.378	28.699	80.562
36 X 36	5.853	6.643	7.394	25.885	29.378	32.699	32.562
36 X 40	6.572	7.459	8.302	25.885	29.378	32.699	36.562
36 X 42	6.932	7.867	8.757	25.885	29.378	32.699	38.562
36 X 48	8.010	9.091	10.119	25.885	29.378	32.699	44.562
36 X 54	9.089	10.315	11.481	25.885	29.378	32.699	50.562
36 X 60	10.167	11.539	12.844	25.885	29.378	32.699	56.562
36 X 64	10.886	12.355	13.752	25.885	29.378	32.699	60.562
36 X 66	11.246	12.764	14.206	25.885	29.378	32.699	62.562
36 X 72	12.324	13.988	15.569	25.885	29.378	32.699	68.562
36 X 78	13.403	15.212	16.931	25.885	29.378	32.699	74.562
36 X 84	14.482	16.436	18.294	25.885	29.378	32.699	80.562
42 X 42	8.539	9.474	10.363	31.885	35.378	38.699	38.562
42 X 48	9.867	10.948	11.976	31.885	35.378	38.699	44.562
42 X 54	11.196	12.422	13.588	31.885	35.378	38.699	50.562
42 X 60	12.524	13.896	15.201	31.885	35.378	38.699	56.562
42 X 64	13.410	14.879	16.276	31.885	35.378	38.699	60.562
42 X 66	13.853	15.370	16.813	31.885	35.378	38.699	62.562
42 X 72	15.181	16.844	18.426	31.885	35.378	38.699	68.562
42 X 78	*	*	*	*	*	*	*
42 X 84	*	*	*	*	*	*	*

Shading indicates clear opening meets egress requirements with specific hinges.

* Sash weights may require a Limit Device so egress clear opening requirements cannot be met.

Clad Pushout Casement w/Retractable Screen

FRAME SIZE	CLEAR OPENING SQUARE FEET W/14" FRICTION HINGE	CLEAR OPENING SQUARE FEET W/10" FRICTION HINGE	CLEAR OPENING SQUARE FEET W/BUTT HINGE	CLEAR OPENING WIDTH 14" FRICTION HINGE (Frame Width-10.115")	CLEAR OPENING WIDTH 10" FRICTION HINGE (Frame Width-6.622")	CLEAR OPENING WIDTH BUTT HINGE (Frame Width-3.301")	CLEAR OPENING HEIGHT (Frame Height-3.438")
24 X 42	3.468	4.341	5.170	13.885	17.378	20.699	35.969
24 X 48	4.047	5.065	6.033	13.885	17.378	20.699	41.969
24 X 54	4.625	5.789	6.895	13.885	17.378	20.699	47.969
24 X 60	5.204	6.513	7.758	13.885	17.378	20.699	53.969
24 X 64	5.590	6.996	8.333	13.885	17.378	20.699	57.969
24 X 66	5.782	7.237	8.620	13.885	17.378	20.699	59.969
24 X 72	6.361	7.961	9.483	13.885	17.378	20.699	65.969
24 X 78	6.940	8.685	10.345	13.885	17.378	20.699	71.969
24 X 84	7.518	9.409	11.208	13.885	17.378	20.699	77.969
28 X 36	3.722	4.449	5.140	17.885	21.378	24.699	29.969
28 X 40	4.219	5.043	5.826	17.885	21.378	24.699	33.969
28 X 42	4.467	5.340	6.169	17.885	21.378	24.699	35.969
28 X 48	5.213	6.231	7.199	17.885	21.378	24.699	41.969
28 X 54	5.958	7.121	8.228	17.885	21.378	24.699	47.969
28 X 60	6.703	8.012	9.257	17.885	21.378	24.699	53.969
28 X 64	7.200	8.606	9.943	17.885	21.378	24.699	57.969
28 X 66	7.448	8.903	10.286	17.885	21.378	24.699	59.969
28 X 72	8.193	9.794	11.315	17.885	21.378	24.699	65.969
28 X 78	8.939	10.684	12.344	17.885	21.378	24.699	71.969
28 X 84	9.684	11.575	13.373	17.885	21.378	24.699	77.969
30 X 36	4.138	4.865	5.557	19.885	23.378	26.699	29.969
30 X 40	4.691	5.515	6.298	19.885	23.378	26.699	33.969
30 X 42	4.967	5.839	6.669	19.885	23.378	26.699	35.969
30 X 48	5.796	6.814	7.781	19.885	23.378	26.699	41.969
30 X 54	6.624	7.788	8.894	19.885	23.378	26.699	47.969
30 X 60	7.453	8.762	10.006	19.885	23.378	26.699	53.969
30 X 64	8.005	9.411	10.748	19.885	23.378	26.699	57.969
30 X 66	8.281	9.736	11.119	19.885	23.378	26.699	59.969
30 X 72	9.110	10.710	12.231	19.885	23.378	26.699	65.969
30 X 78	9.938	11.684	13.344	19.885	23.378	26.699	71.969
30 X 84	10.767	12.658	14.456	19.885	23.378	26.699	77.969
32 X 32	3.947	4.577	5.176	21.885	25.378	28.699	25.969
32 X 36	4.555	5.282	5.973	21.885	25.378	28.699	29.969
32 X 40	5.163	5.987	6.770	21.885	25.378	28.699	33.969
32 X 42	5.467	6.339	7.169	21.885	25.378	28.699	35.969
32 X 48	6.378	7.396	8.364	21.885	25.378	28.699	41.969
32 X 54	7.290	8.454	9.560	21.885	25.378	28.699	47.969
32 X 60	8.202	9.511	10.756	21.885	25.378	28.699	53.969
32 X 64	8.810	10.216	11.553	21.885	25.378	28.699	57.969
32 X 66	9.114	10.569	11.952	21.885	25.378	28.699	59.969
32 X 72	10.026	11.626	13.148	21.885	25.378	28.699	65.969
32 X 78	10.938	12.684	14.343	21.885	25.378	28.699	71.969
32 X 84	11.850	13.741	15.539	21.885	25.378	28.699	77.969
36 X 36	5.387	6.114	6.805	25.885	29.378	32.699	29.969
36 X 40	6.106	6.930	7.714	25.885	29.378	32.699	33.969
36 X 42	6.466	7.338	8.168	25.885	29.378	32.699	35.969
36 X 48	7.544	8.562	9.530	25.885	29.378	32.699	41.969
36 X 54	8.623	9.786	10.893	25.885	29.378	32.699	47.969
36 X 60	9.701	11.010	12.255	25.885	29.378	32.699	53.969
36 X 64	10.420	11.826	13.163	25.885	29.378	32.699	57.969
36 X 66	10.780	12.235	13.618	25.885	29.378	32.699	59.969
36 X 72	11.858	13.459	14.980	25.885	29.378	32.699	65.969
36 X 78	12.937	14.683	16.342	25.885	29.378	32.699	71.969
36 X 84	14.015	15.907	17.705	25.885	29.378	32.699	77.969
42 X 42	7.964	8.837	9.666	31.885	35.378	38.699	35.969
42 X 48	9.293	10.311	11.279	31.885	35.378	38.699	41.969
42 X 54	10.621	11.785	12.891	31.885	35.378	38.699	47.969
42 X 60	11.950	13.259	14.504	31.885	35.378	38.699	53.969
42 X 64	12.836	14.242	15.579	31.885	35.378	38.699	57.969
42 X 66	13.279	14.733	16.116	31.885	35.378	38.699	59.969
42 X 72	14.607	16.207	17.729	31.885	35.378	38.699	65.969
42 X 78	*	*	*	*	*	*	*
42 X 84	*	*	*	*	*	*	*

Shading indicates clear opening meets egress requirements with specific hinges.

* Sash weights may require a Limit Device so egress clear opening requirements cannot be met.

FRAME SIZE	CLEAR OPENING SQUARE FEET W/14" FRICTION HINGE	CLEAR OPENING SQUARE FEET W/10" FRICTION HINGE	CLEAR OPENING WIDTH 14" FRICTION HINGE (Frame Width/2-9.74")	CLEAR OPENING WIDTH 10" FRICTION HINGE (Frame Width/2-6.247")	CLEAR OPENING HEIGHT (Frame Height-3.438")
56 X 28	3.115	3.710	18.260	21.753	24.562
56 X 30	3.368	4.013	18.260	21.753	26.562
56 X 32	3.622	4.315	18.260	21.753	28.562
56 X 36	4.129	4.919	18.260	21.753	32.562
56 X 40	4.636	5.523	18.260	21.753	36.562
56 X 42	4.890	5.825	18.260	21.753	38.562
56 X 48	5.651	6.732	18.260	21.753	44.562
56 X 54	6.412	7.638	18.260	21.753	50.562
56 X 60	7.172	8.544	18.260	21.753	56.562
56 X 64	7.680	9.149	18.260	21.753	60.562
56 X 66	7.933	9.451	18.260	21.753	62.562
56 X 72	8.694	10.357	18.260	21.753	68.562
56 X 78	9.455	11.264	18.260	21.753	74.562
56 X 84	10.216	12.170	18.260	21.753	80.562
60 X 28	3.456	4.052	20.260	23.753	24.562
60 X 30	3.737	4.381	20.260	23.753	26.562
60 X 32	4.019	4.711	20.260	23.753	28.562
60 X 36	4.581	5.371	20.260	23.753	32.562
60 X 40	5.144	6.031	20.260	23.753	36.562
60 X 42	5.425	6.361	20.260	23.753	38.562
60 X 48	6.270	7.351	20.260	23.753	44.562
60 X 54	7.114	8.340	20.260	23.753	50.562
60 X 60	7.958	9.330	20.260	23.753	56.562
60 X 64	8.521	9.990	20.260	23.753	60.562
60 X 66	8.802	10.320	20.260	23.753	62.562
60 X 72	9.646	11.309	20.260	23.753	68.562
60 X 78	10.490	12.299	20.260	23.753	74.562
60 X 84	11.335	13.289	20.260	23.753	80.562
64 X 28	3.797	4.393	22.260	25.753	24.562
64 X 30	4.106	4.750	22.260	25.753	26.562
64 X 32	4.415	5.108	22.260	25.753	28.562
64 X 36	5.034	5.823	22.260	25.753	32.562
64 X 40	5.652	6.539	22.260	25.753	36.562
64 X 42	5.961	6.896	22.260	25.753	38.562
64 X 48	6.889	7.969	22.260	25.753	44.562
64 X 54	7.816	9.043	22.260	25.753	50.562
64 X 60	8.744	10.116	22.260	25.753	56.562
64 X 64	9.362	10.831	22.260	25.753	60.562
64 X 66	9.671	11.189	22.260	25.753	62.562
64 X 72	10.599	12.262	22.260	25.753	68.562
64 X 78	11.526	13.335	22.260	25.753	74.562
64 X 84	12.454	14.408	22.260	25.753	80.562
72 X 28	4.479	5.075	26.260	29.753	24.562
72 X 30	4.844	5.488	26.260	29.753	26.562
72 X 32	5.209	5.901	26.260	29.753	28.562
72 X 36	5.938	6.728	26.260	29.753	32.562
72 X 40	6.667	7.554	26.260	29.753	36.562
72 X 42	7.032	7.968	26.260	29.753	38.562
72 X 48	8.126	9.207	26.260	29.753	44.562
72 X 54	9.221	10.447	26.260	29.753	50.562
72 X 60	10.315	11.687	26.260	29.753	56.562
72 X 64	11.044	12.513	26.260	29.753	60.562
72 X 66	11.409	12.926	26.260	29.753	62.562
72 X 72	12.503	14.166	26.260	29.753	68.562
72 X 78	13.597	15.406	26.260	29.753	74.562
72 X 84	14.691	16.646	26.260	29.753	80.562
Shading indicates clear opening meets egress requirements.					

Clad French Pushout Casement w/Retractable Screen

FRAME SIZE	CLEAR OPENING SQUARE FEET W/14" FRICTION HINGE	CLEAR OPENING SQUARE FEET W/10" FRICTION HINGE	CLEAR OPENING WIDTH 14" FRICTION HINGE (Frame Width/2-9.74")	CLEAR OPENING WIDTH 10" FRICTION HINGE (Frame Width/2-6.247")	CLEAR OPENING HEIGHT (Frame Height-6.031")
56 X 28	2.786	3.319	18.260	21.753	21.969
56 X 30	3.039	3.621	18.260	21.753	23.969
56 X 32	3.293	3.923	18.260	21.753	25.969
56 X 36	3.800	4.527	18.260	21.753	29.969
56 X 40	4.307	5.131	18.260	21.753	33.969
56 X 42	4.561	5.434	18.260	21.753	35.969
56 X 48	5.322	6.340	18.260	21.753	41.969
56 X 54	6.083	7.246	18.260	21.753	47.969
56 X 60	6.844	8.153	18.260	21.753	53.969
56 X 64	7.351	8.757	18.260	21.753	57.969
56 X 66	7.604	9.059	18.260	21.753	59.969
56 X 72	8.365	9.965	18.260	21.753	65.969
56 X 78	9.126	10.872	18.260	21.753	71.969
56 X 84	9.887	11.778	18.260	21.753	77.969
60 X 28	3.091	3.624	20.260	23.753	21.969
60 X 30	3.372	3.954	20.260	23.753	23.969
60 X 32	3.654	4.284	20.260	23.753	25.969
60 X 36	4.216	4.943	20.260	23.753	29.969
60 X 40	4.779	5.603	20.260	23.753	33.969
60 X 42	5.061	5.933	20.260	23.753	35.969
60 X 48	5.905	6.923	20.260	23.753	41.969
60 X 54	6.749	7.913	20.260	23.753	47.969
60 X 60	7.593	8.902	20.260	23.753	53.969
60 X 64	8.156	9.562	20.260	23.753	57.969
60 X 66	8.437	9.892	20.260	23.753	59.969
60 X 72	9.281	10.882	20.260	23.753	65.969
60 X 78	10.126	11.871	20.260	23.753	71.969
60 X 84	10.126	11.871	20.260	23.753	71.969
64 X 28	3.396	3.929	22.260	25.753	21.969
64 X 30	3.705	4.287	22.260	25.753	23.969
64 X 32	4.014	4.644	22.260	25.753	25.969
64 X 36	4.633	5.360	22.260	25.753	29.969
64 X 40	5.251	6.075	22.260	25.753	33.969
64 X 42	5.560	6.433	22.260	25.753	35.969
64 X 48	6.488	7.506	22.260	25.753	41.969
64 X 54	7.415	8.579	22.260	25.753	47.969
64 X 60	8.343	9.652	22.260	25.753	53.969
64 X 64	8.961	10.367	22.260	25.753	57.969
64 X 66	9.270	10.725	22.260	25.753	59.969
64 X 72	10.198	11.798	22.260	25.753	65.969
64 X 78	11.125	12.871	22.260	25.753	71.969
64 X 84	12.053	13.944	22.260	25.753	77.969
72 X 28	4.006	4.539	26.260	29.753	21.969
72 X 30	4.371	4.952	26.260	29.753	23.969
72 X 32	4.736	5.366	26.260	29.753	25.969
72 X 36	5.465	6.192	26.260	29.753	29.969
72 X 40	6.195	7.019	26.260	29.753	33.969
72 X 42	6.559	7.432	26.260	29.753	35.969
72 X 48	7.654	8.672	26.260	29.753	41.969
72 X 54	8.748	9.911	26.260	29.753	47.969
72 X 60	9.842	11.151	26.260	29.753	53.969
72 X 64	10.571	11.977	26.260	29.753	57.969
72 X 66	10.936	12.391	26.260	29.753	59.969
72 X 72	12.030	13.630	26.260	29.753	65.969
72 X 78	13.124	14.870	26.260	29.753	71.969
72 X 84	14.219	16.110	26.260	29.753	77.969

Shading indicates clear opening meets egress requirements.

Egress Data:

The following opening specifications have been provided to assist you in determining compliance to Egress codes based on BOCA and UBC code requirements as follows:

1. The units must be operable from the inside without the use of separate tools.
2. Sill clear opening to the floor cannot exceed 44".
3. All egress from sleeping rooms must have a minimum net clear opening of 5.7 square feet.
4. The minimum clear opening width is 20".
5. The minimum clear opening height is 24".

* Size requires a Limit Device. Egress clear opening requirements cannot be met.

Clear Opening Formulas:**14" Friction Hinge**

Frame Width - 10.115" = Clear Opening Width

Frame Height - 3.438" = Clear Opening Height

10" Friction Hinge

Frame Width - 6.622" = Clear Opening Width

Frame Height - 3.438" = Clear Opening Height

Butt Hinge

Frame Width - 3.301" = Clear Opening Width

Frame Height - 3.438" = Clear Opening Height