



Architectural Design Manual

Sierra Pacific Clad Direct Set

	Page
Section 1: Product Features _____	3-5
Section 2: Common Product Features and Accessories _____	6
Section 3: CSI Specifications _____	7
Section 4: Elevations _____	8-9
Section 5: Section Views _____	10
Clad Direct Set Section Details _____	11-14
Clad Direct Set Mull Details _____	15-17
Section 6: Revit _____	18
Section 7: Relative Dimensions and Formulas _____	19-20
Section 8: Performance Data – NFRC _____	21-28
Section 9: Performance Data – STC/OITC _____	29-30
Section 10: Performance Data – Air/Water/Structural _____	31-32

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SECTION 1

PRODUCT FEATURES



Below is a summary of construction characteristics and standard features for the Aluminum Clad Direct Set unit, available in both angular and radius shapes. Rectangle direct sets will be available as an interior or exterior glazed product.

Product Callout:

- **C-SPDS00:** Sierra Pacific Clad Direct Set Rectangle
- **C-SPDSX00:** Sierra Pacific Clad Direct Set Rectangle Exterior Glaze

Exterior Finish:

- Baked on, electrostatically applied powder paint finish with virtually no VOC's.
- Available in 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: specially formulated two-part catalyzed polyurethane 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, sill, and jambs; mechanically fastened mitered corners, fully injected for watertight seal; factory applied fully extruded drip cap.
- Interior wood frame components are treated select pine, solid or finger-jointed and veneer wrapped
- Frame thickness is 1-1/16"
- Overall frame depth is 5-3/4"
- Integral extruded aluminum nail fin with standard 4-9/16"
 - 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" (184), 7-5/16", 7-3/8", 8-1/8", or custom specified

Glazing:

- Interior or exterior glazed with exterior sealant and tape dam resulting in no excess squeeze out, with removable glazing beads
- 3mm, 4mm, 5mm, 6mm, 8mm premium flat glass complying with ASTM C1036
- Standard 3/4" argon filled dual insulated glass with black warm edge spacer, ≥1" glass depending on size, 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, available 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 solid colors or optional 2-tone color
- GIA bar width and profile options: 5/8" x 3/16" Flat; 11/16" x 5/16" Contour
- 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

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 trim and [HERE](#) for 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 Direct Set CSI Specification

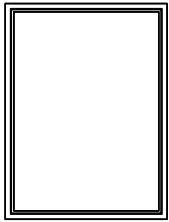


SECTION 4

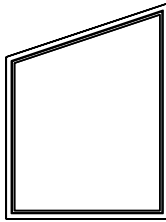
ELEVATIONS



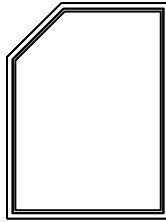
Geometric Shapes



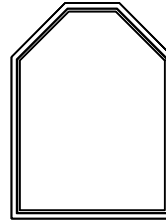
C-SPDS00
Rectangle



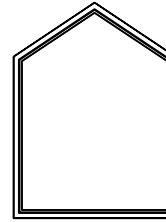
C-SPDS12
Trapezoid



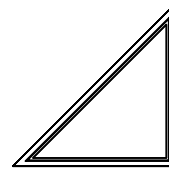
C-SPDS22
Clip Corner



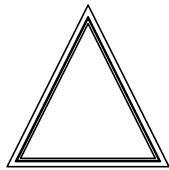
C-SPDS23
Double Clip
Corner



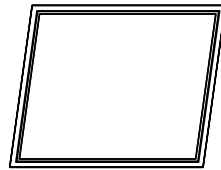
C-SPDS13
Pentagon



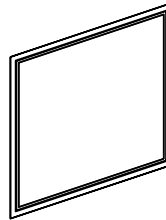
C-SPDS21
Right
Triangle



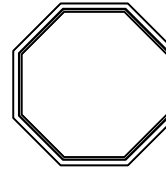
C-SPDS10
Isosceles
Triangle



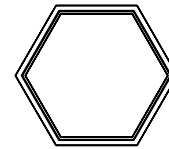
C-SPDS25
Parallelogram



C-SPDS24
Pitched
Parallelogram



C-SPDS14
Octagon

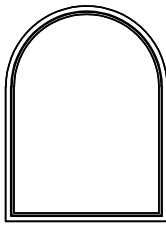


C-SPDS15
Hexagon

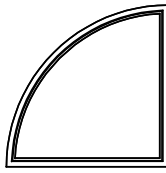
Radius Shapes



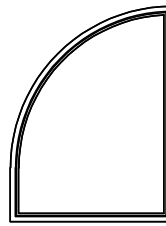
C-SPDS08
Half Round



C-SPDS20
Springline Half
Round



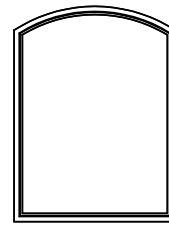
C-SPDS07
Quarter
Round



C-SPDS26
Quarter Springline
Half Round



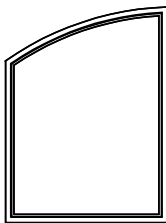
C-SPDS29
Chord



C-SPDS27
Equal Arched
Head



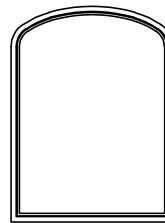
C-SPDS30
Unequal Quarter
Round



C-SPDS28
Unequal
Arched Head



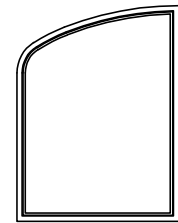
C-SPDS04
Ellipse



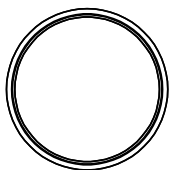
C-SPDS31
Extended
Ellipse



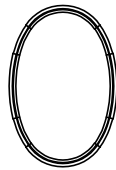
C-SPDS32
Extended
Ellipse



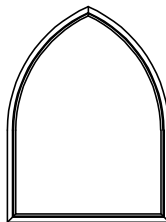
C-SPDS33
Extended Quarter
Ellipse



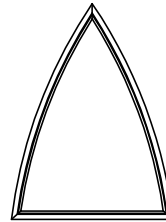
C-SPDS09
Full Circle



C-SPDS
Oval



C-SPDS34
Extended
Gothic



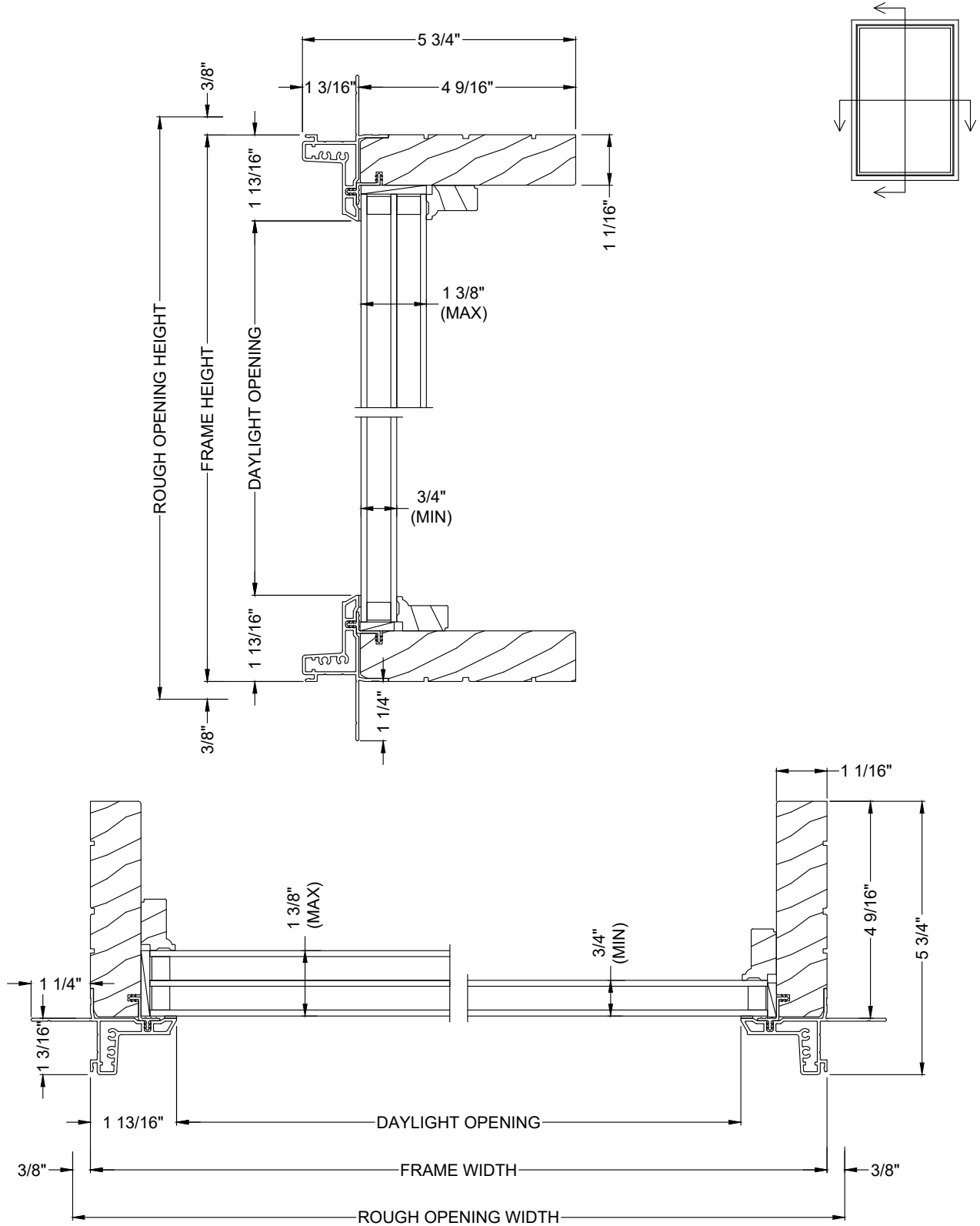
C-SPDS05
Gothic

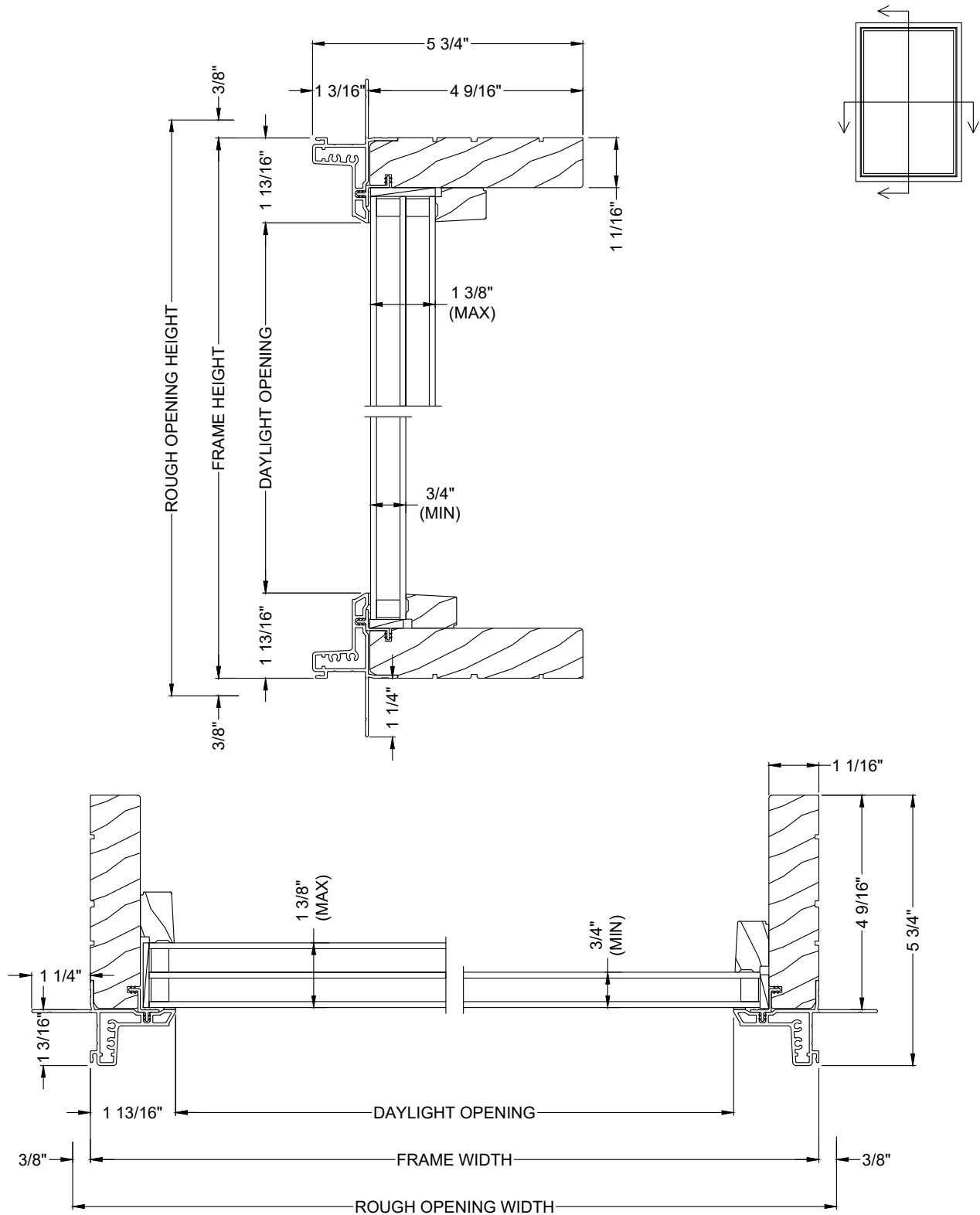


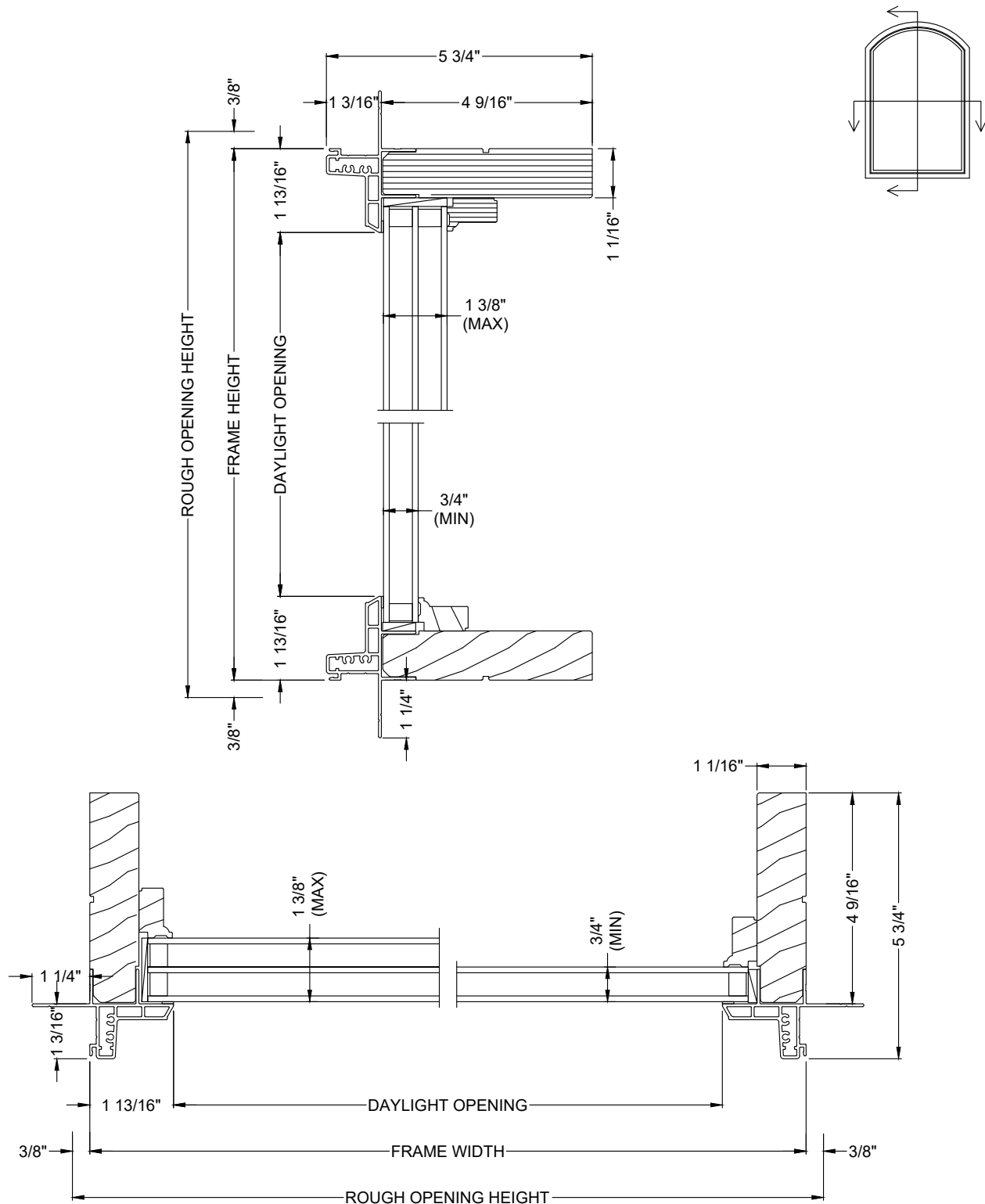
SECTION 5

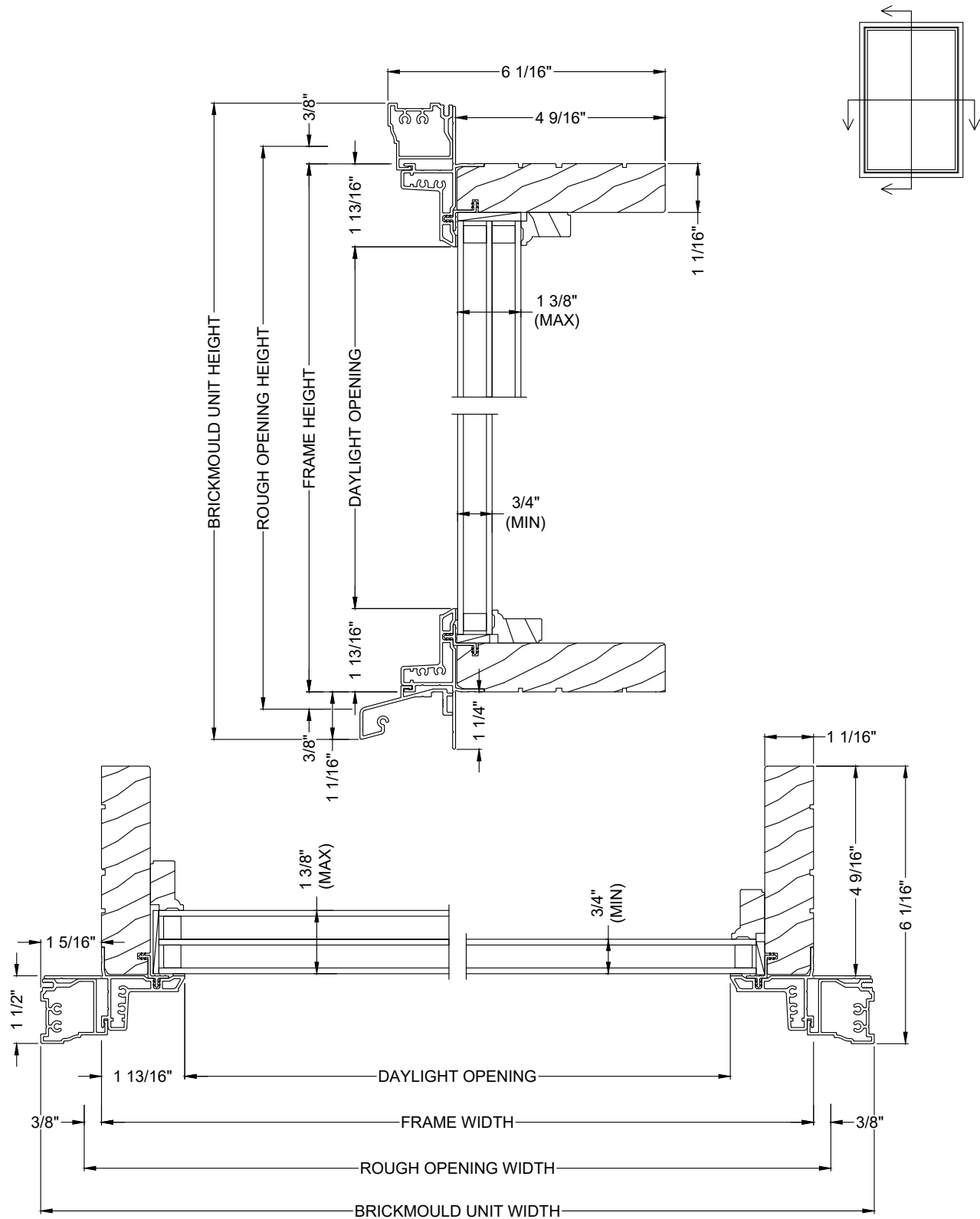
SECTION VIEWS

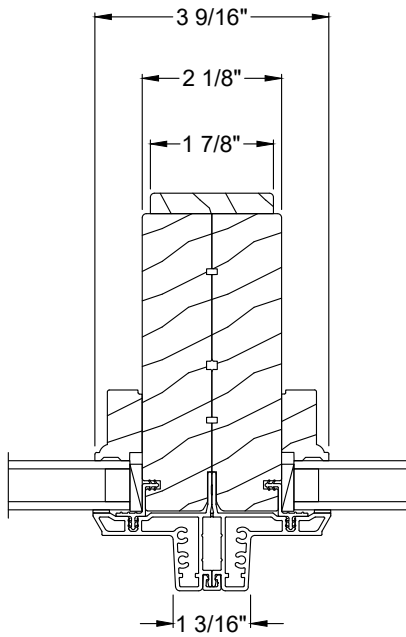




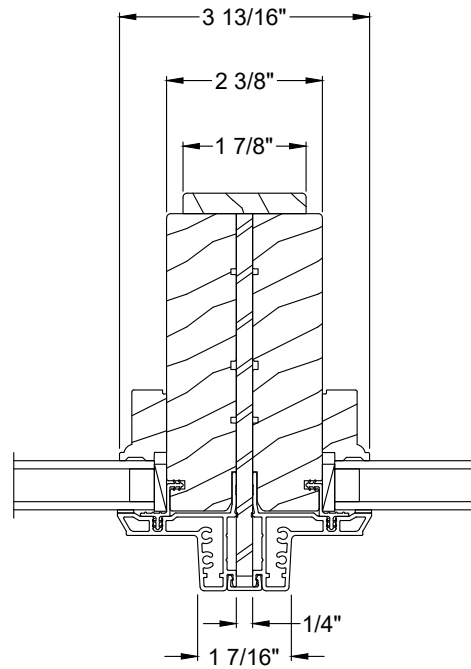




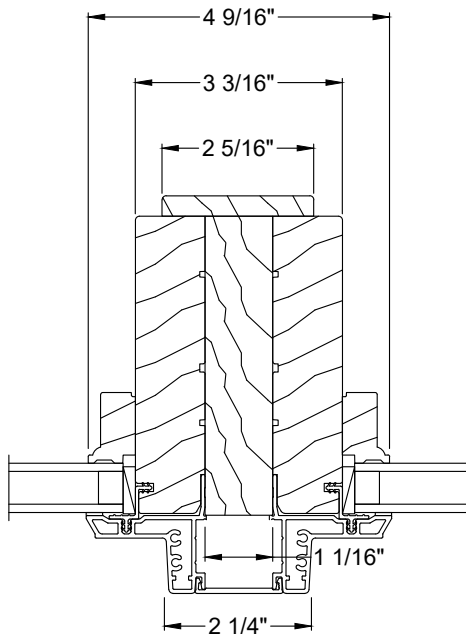




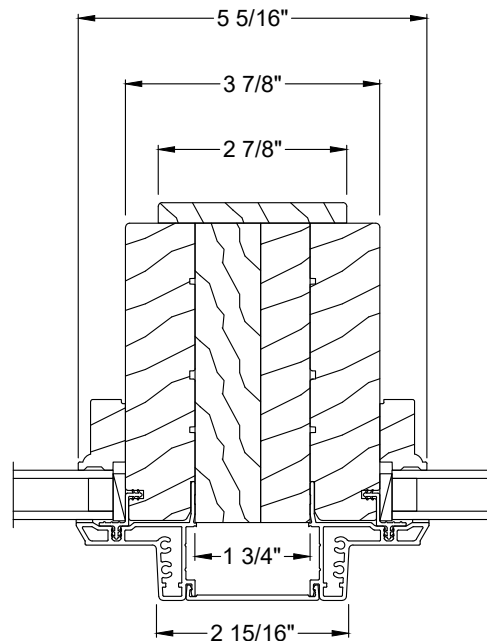
TIGHT MULL



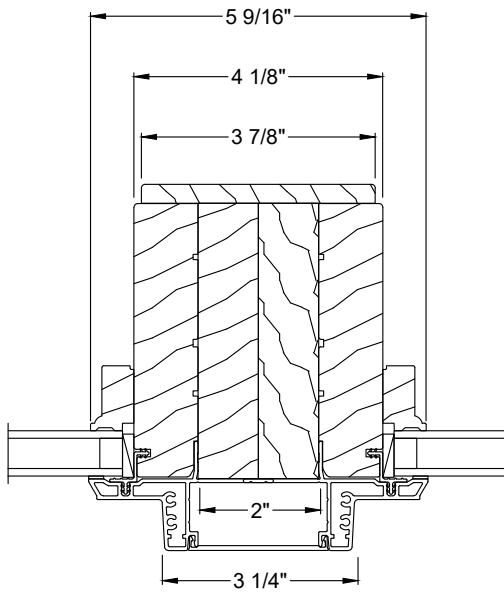
**1/4" PLATE
MULL**



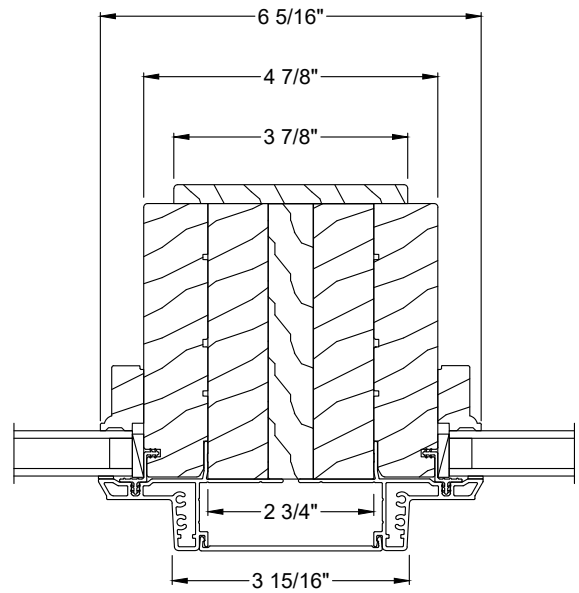
**1" SOLID
SPREAD MULL**



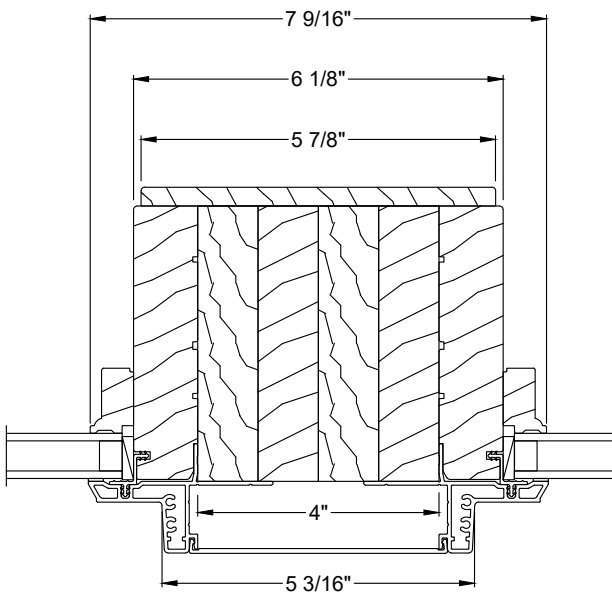
**1 3/4" SOLID
SPREAD MULL**



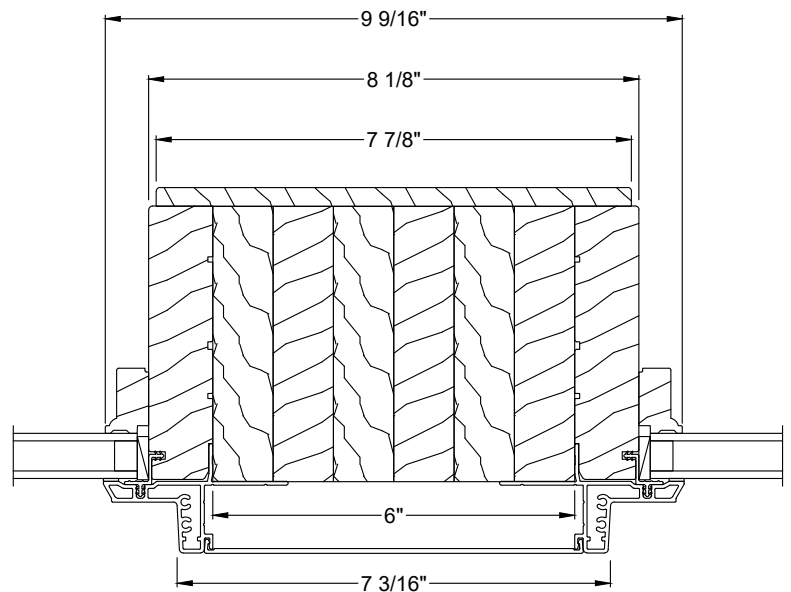
**2" SOLID
SPREAD MULL**



**2 3/4" SOLID
SPREAD MULL**

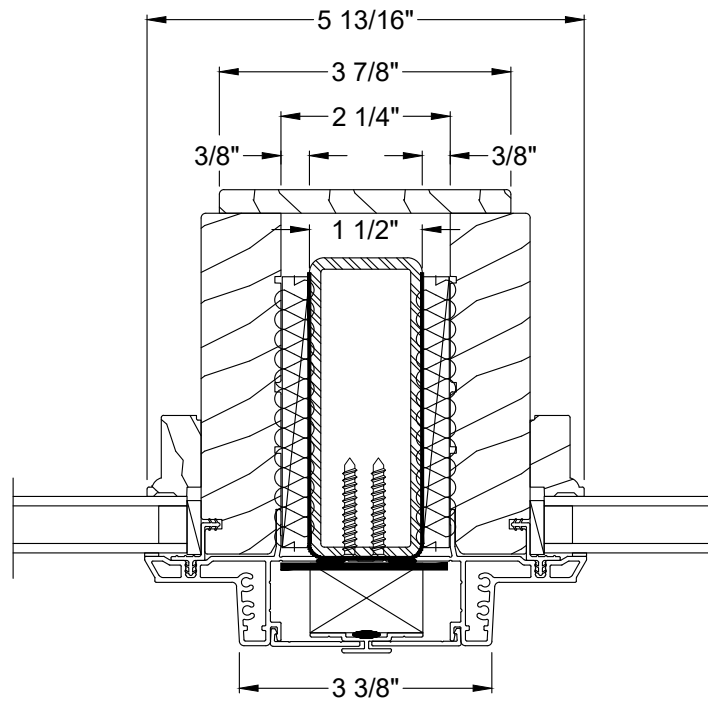


**4" SOLID
SPREAD MULL**

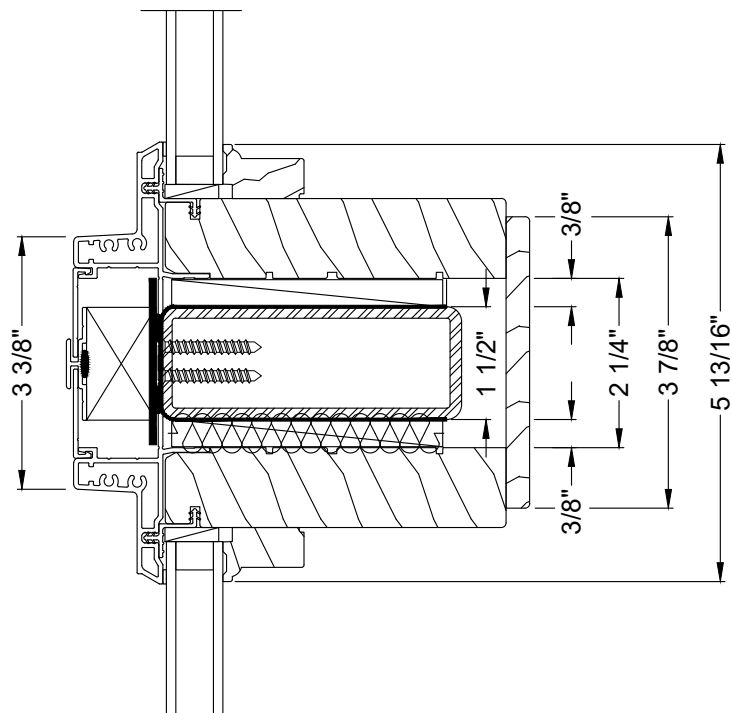


**6" SOLID
SPREAD MULL**

VERTICAL 1-1/2"
STRUCTURAL
TUBE STEEL
MULL DETAIL



HORIZONTAL 1-1/2"
STRUCTURAL
TUBE STEEL
MULL DETAIL





SECTION 6

REVIT MODELS



Click [HERE](#) for the Clad Direct Set Revit Models



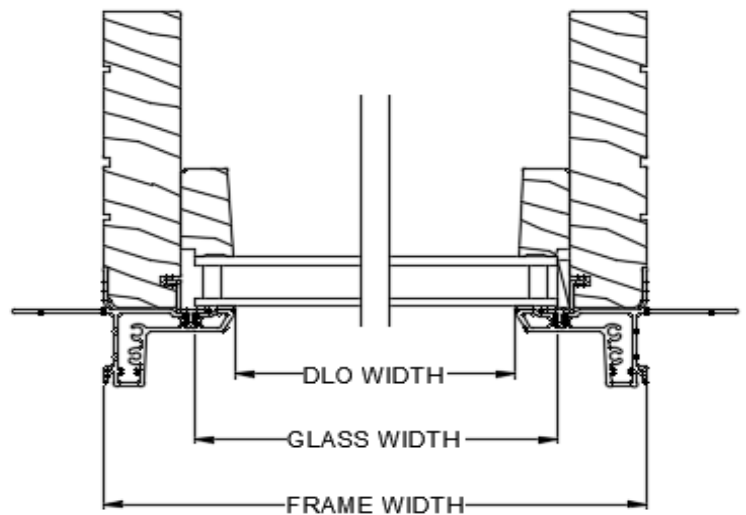
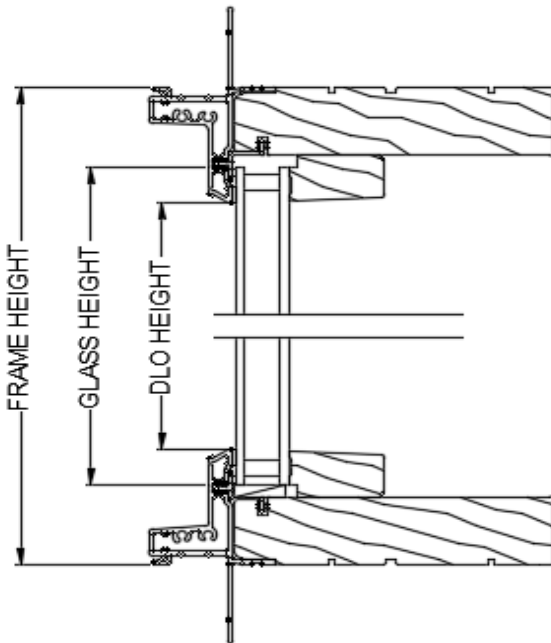
SECTION 7

RELATIVE DIMENSIONS AND FORMULAS

Sierra Pacific Clad Direct Set				
REQUIRED DIMENSIONS & FORMULAS				
KNOWN DIMENSIONS		GLASS SIZE (actual)	FRAME SIZE	DAYLIGHT OPENING
	GLASS SIZE (actual)		Glass Width + 2.50" Glass Height + 2.50"	Glass Width - 1.125" Glass Height - 1.125"
	FRAME SIZE	Frame Width - 2.50" Frame Height - 2.50"		Frame Width - 3.625" Frame Height - 3.625"
	DAYLIGHT OPENING	DLO Width + 1.125" DLO Height + 1.125"	DLO Width + 3.625" DLO Height + 3.625"	

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

Minimum/Maximum Frame Sizes	
Min. Frame Width 6.50"	Min. Frame Height 6.50"
Max. Frame Width 144"	Max. Frame Height 144"
Maximum Square Footage - 70	
Max. Square Footage w/Triple Glaze - 52	





SECTION 8

PERFORMANCE DATA - NFRC

SP Direct Set								
Air-Filled								
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	R-Value	SHGC	VT	CR	Energy Star Zone	Can ER Rating
DUAL GLAZED OPTIONS								
SIE-N-169-02978-00001	Clear-Warm Edge Spacer	0.46	2.17	0.68	0.71	42	None	22
SIE-N-169-02980-00001	LowE 272 -Cardinal Spacer	0.31	3.23	0.36	0.62	53	None	23
SIE-N-169-04573-00001	LowE 272 -Warm Edge Spacer	0.30	3.33	0.36	0.62	55	None	23
SIE-N-169-02984-00001	LowE 272/LEi89-Cardinal Spacer	0.25	4.00	0.35	0.61	42	N/C	29
SIE-N-169-04577-00001	LowE 272/LEi89-Warm Edge Spacer	0.25	4.00	0.35	0.61	43	N/C	30
SIE-N-169-02990-00001	LowE 366 -Cardinal Spacer	0.30	3.33	0.24	0.56	54	None	16
SIE-N-169-04583-00001	LowE 366 -Warm Edge Spacer	0.30	3.33	0.24	0.56	55	None	17
SIE-N-169-02994-00001	LowE 366/LEi89* -Cardinal Spacer	0.25	4.00	0.24	0.55	42	N/C	23
SIE-N-169-04587-00001	LowE 366/LEi89* -Warm Edge Spacer	0.24	4.17	0.24	0.55	43	N/C	23
SIE-N-169-03000-00001	Clear/LowE 180 -Cardinal Spacer	0.32	3.13	0.59	0.69	53	None	35
SIE-N-169-04593-00001	Clear/LowE 180 -Warm Edge Spacer	0.31	3.23	0.59	0.69	55	None	35
SIE-N-169-03004-00001	LowE 180/LEi89* -Cardinal Spacer	0.26	3.85	0.54	0.67	41	N	39
SIE-N-169-04597-00001	LowE 180/LEi89* -Warm Edge Spacer	0.25	4.00	0.54	0.67	42	N	40
SIE-N-169-03010-00001	LowE 340 -Cardinal Spacer	0.30	3.33	0.16	0.34	54	S	11
SIE-N-169-04603-00001	LowE 340 -Warm Edge Spacer	0.30	3.33	0.16	0.34	55	S	12
LAMI OPTIONS								
SIE-N-169-03394-00001	Clear/Lami-Cardinal Spacer	0.45	2.22	0.65	0.70	43	None	21
SIE-N-169-03614-00001	Lami/Clear-Cardinal Spacer	0.45	2.22	0.61	0.70	43	None	19
SIE-N-169-03616-00001	Lami/LowE 272 -Cardinal Spacer	0.30	3.33	0.41	0.61	54	None	26
SIE-N-169-03620-00001	Lami/LowE 366 -Cardinal Spacer	0.30	3.33	0.32	0.55	55	None	26
SIE-N-169-03396-00001	LowE 272/Lami-Cardinal Spacer	0.30	3.33	0.36	0.61	53	None	23
SIE-N-169-04993-00001	LowE 366/Lami-Cardinal Spacer	0.29	3.45	0.24	0.55	55	None	17
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-169-03186-00001	3mm Clear/5mm Clear-Cardinal Spacer	0.46	2.17	0.67	0.71	47	None	22
SIE-N-169-04779-00001	3mm Clear/5mm Clear-Warm Edge Spacer	0.45	2.22	0.67	0.71	43	None	22
SIE-N-169-03188-00001	3mm LowE 272/5mm Clear-Cardinal Spacer	0.31	3.23	0.36	0.62	52	None	23
SIE-N-169-04781-00001	3mm LowE 272/5mm Clear -Warm Edge Spacer	0.30	3.33	0.36	0.62	54	None	23
SIE-N-169-03198-00001	3mm LowE 366/5mm Clear-Cardinal Spacer	0.30	3.33	0.24	0.56	53	None	16
SIE-N-169-04791-00001	3mm LowE 366/5mm Clear-Warm Edge Spacer	0.30	3.33	0.24	0.56	54	None	17
SIE-N-169-03202-00001	3mm LowE 366/5mm LEi89* -Cardinal Spacer	0.25	4.00	0.23	0.54	41	N/C, S/C, S	23
SIE-N-169-04795-00001	3mm LowE 366/5mm LEi89* -Warm Edge Spacer	0.24	4.17	0.23	0.54	43	N/C, S/C, S	23
SIE-N-169-03208-00001	3mm Clear/ 5mm LowE 180 -Cardinal Spacer	0.31	3.23	0.59	0.68	52	None	35
SIE-N-169-04801-00001	3mm Clear/5mm LowE 180 -Warm Edge Spacer	0.31	3.23	0.59	0.68	54	None	35
SIE-N-169-03212-00001	3mm LowE 180/5mm LEi89* -Cardinal Spacer	0.25	4.00	0.54	0.67	40	N	39
SIE-N-169-04805-00001	3mm LowE 180/5mm LEi89* -Warm Edge Spacer	0.25	4.00	0.54	0.67	42	N	40
SIE-N-169-03218-00001	3mm LowE 340/5mm Clear-Cardinal Spacer	0.30	3.33	0.16	0.33	53	S	11
SIE-N-169-04811-00001	3mm LowE 340/5mm Clear -Warm Edge Spacer	0.30	3.33	0.16	0.33	54	S	12
TRIPLE GLAZE OPTIONS								
SIE-N-169-04060-00001	LowE 272/Clear/Clear-Cardinal Spacer	0.23	4.35	0.33	0.57	63	N/C	30
SIE-N-169-05445-00001	LowE 272/Clear/Clear -Warm Spacer	0.23	4.35	0.33	0.57	64	N/C	31
SIE-N-169-04064-00001	LowE 272/Clear/LowE 272-Cardinal Spacer	0.18	5.56	0.31	0.50	68	N, N/C	35
SIE-N-169-05449-00001	LowE 272/Clear/LowE 272 -Warm Spacer	0.18	5.56	0.31	0.50	70	N, N/C	35
SIE-N-169-04074-00001	LowE 272/LowE 272/LEi89*-Cardinal Spacer	0.16	6.25	0.28	0.49	56	N, N/C	36
SIE-N-169-05459-00001	LowE 272/LowE 272/LEi89* -Warm Spacer	0.16	6.25	0.28	0.49	58	N, N/C	36
SIE-N-169-04088-00001	LowE 272/LowE 180/LEi89*-Cardinal Spacer	0.16	6.25	0.31	0.54	55	N, N/C	37
SIE-N-169-05473-00001	LowE 272/LowE 180/LEi89* -Warm Spacer	0.16	6.25	0.31	0.54	57	N, N/C	38
SIE-N-169-04128-00001	LowE 180/Clear/LowE 180 -Cardinal Spacer	0.19	5.26	0.48	0.61	47	N	43

SP Direct Set								
7/25/2025								
Air-Filled								
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	R-Value	SHGC	VT	CR	Energy Star Zone	Can ER Rating
TRIPLE GLAZE OPTIONS								
SIE-N-169-05513-00001	LowE 180/Clear/LowE 180-Warm Edge Spacer	0.19	5.26	0.48	0.61	49	N	44
SIE-N-169-04132-00001	LowE 180/LowE 180/LEi89*-Cardinal Spacer	0.17	5.88	0.46	0.59	55	N	46
SIE-N-169-05517-00001	LowE 180/LowE 180/LEi89* -Warm Spacer	0.16	6.25	0.46	0.59	57	N	46
SIE-N-169-04112-00001	LowE 366/LowE 180/LEi89*-Cardinal Spacer	0.16	6.25	0.21	0.48	56	N,N/C, S/C, S	32
SIE-N-169-05497-00001	LowE 366/LowE 180/LEi89* -Warm Spacer	0.16	6.25	0.21	0.48	58	N,N/C, S/C, S	32
*i89 glazing options may have an increased risk of room side condensation in areas when outdoor temperatures are below freezing (32°F/0°C)								

SP Direct Set								7/25/2025
Argon-Filled								
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	R-Value	SHGC	VT	CR	Energy Star Zone	Can ER Rating
DUAL GLAZED OPTIONS								
SIE-N-169-02982-00001	LowE 272-Cardinal Spacer	0.27	3.70	0.36	0.62	57	None	27
SIE-N-169-04575-00001	LowE 272-Warm Edge Spacer	0.26	3.85	0.36	0.62	58	None	28
SIE-N-169-02987-00001	LowE 272/LEi89-Cardinal Spacer	0.22	4.55	0.35	0.61	45	N, N/C	32
SIE-N-169-04580-00001	LowE 272/LEi89-Warm Edge Spacer	0.22	4.55	0.35	0.61	46	N, N/C	33
SIE-N-169-02992-00001	LowE 366-Cardinal Spacer	0.26	3.85	0.24	0.56	57	None	21
SIE-N-169-04585-00001	LowE 366-Warm Edge Spacer	0.26	3.85	0.24	0.56	59	None	22
SIE-N-169-02997-00001	LowE 366/LEi89-Cardinal Spacer	0.22	4.55	0.23	0.55	46	N,N/C, S/C, S	26
SIE-N-169-04590-00001	LowE 366/LEi89-Warm Edge Spacer	0.21	4.76	0.23	0.55	47	N,N/C, S/C, S	27
SIE-N-169-03002-00001	LowE 180-Cardinal Spacer	0.28	3.57	0.60	0.69	57	None	40
SIE-N-169-04595-00001	LowE 180-Warm Edge Spacer	0.27	3.70	0.60	0.69	58	None	40
SIE-N-169-03007-00001	LowE 180/LEi89-Cardinal Spacer	0.23	4.35	0.54	0.67	44	N	43
SIE-N-169-04600-00001	LowE 180/LEi89-Warm Edge Spacer	0.23	4.35	0.54	0.67	46	N	43
SIE-N-169-03012-00001	LowE 340-Cardinal Spacer	0.26	3.85	0.16	0.34	57	S/C, S	16
SIE-N-169-04605-00001	LowE 340-Warm Edge Spacer	0.26	3.85	0.16	0.34	59	S/C, S	17
LAMI OPTIONS								
SIE-N-169-03618-00001	Lami/LowE 272-Cardinal Spacer	0.27	3.70	0.41	0.61	58	None	26
SIE-N-169-03622-00001	Lami/LowE 366-Cardinal Spacer	0.26	3.85	0.32	0.55	58	None	26
SIE-N-169-03398-00001	LowE 272/Lami-Cardinal Spacer	0.27	3.70	0.35	0.61	56	None	27
SIE-N-169-04995-00001	LowE 366/Lami-Cardinal Spacer	0.25	4.00	0.23	0.55	59	N/C, S/C, S	22
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-169-03190-00001	3mm LowE 272/5mm Clear-Cardinal Spacer	0.27	3.70	0.36	0.62	56	None	27
SIE-N-169-04783-00001	3mm LowE 272/5mm Clear-Warm Edge Spacer	0.26	3.85	0.36	0.62	57	None	28
SIE-N-169-03200-00001	3mm LowE 366/5mm Clear-Cardinal Spacer	0.26	3.85	0.24	0.56	56	None	21
SIE-N-169-04793-00001	3mm LowE 366/5mm Clear-Warm Edge Spacer	0.26	3.85	0.24	0.56	58	None	22
SIE-N-169-03205-00001	3mm LowE 366/5mm LEi89-Cardinal Spacer	0.22	4.55	0.23	0.54	44	N,N/C, S/C, S	26
SIE-N-169-04798-00001	3mm LowE 366/5mm LEi89 -Warm Edge Spacer	0.21	4.76	0.23	0.54	46	N,N/C, S/C, S	27
SIE-N-169-03210-00001	3mm Clear/5mm LowE 180-Cardinal Spacer	0.28	3.57	0.59	0.68	55	None	40
SIE-N-169-04803-00001	3mm Clear/5mm LowE 180 -Warm Edge Spacer	0.27	3.70	0.59	0.68	57	None	40
SIE-N-169-03215-00001	3mm LowE 180/5mm LEi89-Cardinal Spacer	0.23	4.35	0.54	0.67	43	N	42
SIE-N-169-04808-00001	3mm LowE 180/5mm LEi89 -Warm Edge Spacer	0.22	4.55	0.54	0.67	45	N	43
SIE-N-169-03220-00001	3mm LowE 340/5mm Clear-Cardinal Spacer	0.26	3.85	0.16	0.33	56	S/C, S	16
SIE-N-169-04813-00001	3mm LowE 340/5mm Clear-Warm Edge Spacer	0.26	3.85	0.16	0.33	58	S/C, S	17
TRIPLE GLAZE OPTIONS								
SIE-N-169-04062-00001	LowE 272/Clear/Clear-Cardinal Spacer	0.21	4.76	0.33	0.57	65	N, N/C	33
SIE-N-169-05447-00001	LowE 272/Clear/Clear-Warm Edge Spacer	0.20	5.00	0.33	0.57	67	N, N/C	34
SIE-N-169-04066-00001	LowE 272/Clear/LowE 272 -Cardinal Spacer	0.15	6.67	0.31	0.50	71	N, N/C	38
SIE-N-169-05451-00001	LowE 272/Clear/LowE 272 -Warm Edge Spacer	0.15	6.67	0.31	0.50	73	N, N/C	39
SIE-N-169-04077-00001	LowE 272/LowE 272/LEi89 -Cardinal Spacer	0.14	7.14	0.28	0.49	59	N, N/C	39
SIE-N-169-05462-00001	LowE 272/LowE 272/LEi89 -Warm Edge Spacer	0.13	7.69	0.28	0.49	61	N, N/C	39
SIE-N-169-04091-00001	LowE 272/LowE 180/LEi89 -Cardinal Spacer	0.14	7.14	0.31	0.54	58	N, N/C	40
SIE-N-169-05476-00001	LowE 272/LowE 180/LEi89 -Warm Edge Spacer	0.14	7.14	0.31	0.54	61	N, N/C	41
SIE-N-169-04130-00001	LowE 180/Clear/LowE 180 -Cardinal Spacer	0.18	5.56	0.49	0.61	50	N	46
SIE-N-169-05515-00001	LowE 180/Clear/LowE 180-Warm Edge Spacer	0.17	5.88	0.49	0.61	52	N	46
SIE-N-169-04135-00001	LowE 180/LowE 180/LEi89 -Cardinal Spacer	0.14	7.14	0.46	0.59	58	N	49
SIE-N-169-05520-00001	LowE 180/LowE 180/LEi89 -Warm Edge Spacer	0.14	7.14	0.46	0.59	60	N	49
SIE-N-169-04115-00001	LowE 366/LowE 180/LEi89 -Cardinal Spacer	0.14	7.14	0.21	0.48	59	N,N/C, S/C, S	34
SIE-N-169-05500-00001	LowE 366/LowE 180/LEi89 -Warm Edge Spacer	0.14	7.14	0.21	0.48	61	N,N/C, S/C, S	35

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SP Radius Direct Set								
Air-Filled								
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CPD NUMBER	GLAZING DESCRIPTION	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone	Can ER Rating
DUAL GLAZED OPTIONS								
SIE-N-169-02978-00001	Clear-Warm Edge Spacer	0.46	2.17	0.68	0.71	42	None	22
SIE-N-169-00003-00001	LowE 272 -Cardinal Spacer	0.32	3.13	0.36	0.62	51	None	21
SIE-N-169-01596-00001	LowE 272 -Warm Edge Spacer	0.31	3.23	0.36	0.62	53	None	22
SIE-N-169-00007-00001	LowE 272/LEI89-Cardinal Spacer	0.26	3.85	0.35	0.61	40	None	28
SIE-N-169-01600-00001	LowE 272/LEI89-Warm Edge Spacer	0.26	3.85	0.35	0.61	41	None	28
SIE-N-169-00017-00001	LowE 366 -Cardinal Spacer	0.25	4.00	0.24	0.55	40	N/C	22
SIE-N-169-01610-00001	LowE 366 -Warm Edge Spacer	0.25	4.00	0.24	0.55	41	N/C	22
SIE-N-169-00017-00001	LowE 366/LEI89* -Cardinal Spacer	0.25	4.00	0.24	0.55	40	N/C	22
SIE-N-169-01610-00001	LowE 366/LEI89* -Warm Edge Spacer	0.25	4.00	0.24	0.55	41	N/C	22
SIE-N-169-00023-00001	Clear/LowE 180 -Cardinal Spacer	0.32	3.13	0.59	0.69	51	None	34
SIE-N-169-01616-00001	Clear/LowE 180 -Warm Edge Spacer	0.32	3.13	0.59	0.69	52	None	34
SIE-N-169-00027-00001	LowE 180/LEI89* -Cardinal Spacer	0.26	3.85	0.54	0.67	39	N	38
SIE-N-169-01620-00001	LowE 180/LEI89* -Warm Edge Spacer	0.26	3.85	0.54	0.67	40	N	38
SIE-N-169-00033-00001	LowE 340 -Cardinal Spacer	0.31	3.23	0.16	0.34	52	S	10
SIE-N-169-01626-00001	LowE 340 -Warm Edge Spacer	0.31	3.23	0.16	0.34	53	S	11
LAMI OPTIONS								
SIE-N-169-00417-00001	Clear/Lami-Cardinal Spacer	0.46	2.17	0.65	0.70	41	None	20
SIE-N-169-00637-00001	Lami/Clear-Cardinal Spacer	0.46	2.17	0.61	0.70	42	None	18
SIE-N-169-00859-00001	Lami/LowE 272 -Cardinal Spacer	0.31	3.23	0.34	0.60	52	None	22
SIE-N-169-00863-00001	Lami/LowE 366 -Cardinal Spacer	0.30	3.33	0.24	0.54	53	None	17
SIE-N-169-00419-00001	LowE 272/Lami-Cardinal Spacer	0.31	3.23	0.36	0.61	51	None	22
SIE-N-169-00423-00001	LowE 366/Lami-Cardinal Spacer	0.31	3.23	0.24	0.55	51	None	16
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-169-00209-00001	3mm Clear/5mm Clear-Cardinal Spacer	0.47	2.13	0.67	0.71	45	None	21
SIE-N-169-01802-00001	3mm Clear/5mm Clear-Warm Edge Spacer	0.46	2.17	0.67	0.71	41	None	21
SIE-N-169-00211-00001	3mm LowE 272/5mm Clear-Cardinal Spacer	0.32	3.13	0.36	0.62	50	None	21
SIE-N-169-01804-00001	3mm LowE 272/5mm Clear -Warm Edge Spacer	0.31	3.23	0.36	0.62	51	None	22
SIE-N-169-00221-00001	3mm LowE 366/5mm Clear-Cardinal Spacer	0.31	3.23	0.24	0.56	50	None	15
SIE-N-169-01814-00001	3mm LowE 366/5mm Clear-Warm Edge Spacer	0.31	3.23	0.24	0.56	52	None	16
SIE-N-169-00277-00001	3mm LowE 366/5mm LEI89* -Cardinal Spacer	0.25	4.00	0.23	0.54	38	N/C,S/C,S	22
SIE-N-169-01870-00001	3mm LowE 366/5mm LEI89* -Warm Edge Spacer	0.25	4.00	0.23	0.54	40	N/C,S/C,S	22
SIE-N-169-00231-00001	3mm Clear/ 5mm LowE 180 -Cardinal Spacer	0.32	3.13	0.59	0.68	50	None	34
SIE-N-169-01824-00001	3mm Clear/5mm LowE 180 -Warm Edge Spacer	0.32	3.13	0.59	0.68	51	None	34
SIE-N-169-00235-00001	3mm LowE 180/5mm LEI89* -Cardinal Spacer	0.26	3.85	0.54	0.67	38	N	38
SIE-N-169-01828-00001	3mm LowE 180/5mm LEI89* -Warm Edge Spacer	0.26	3.85	0.54	0.67	39	N	38
SIE-N-169-00137-00001	3mm LowE 340/5mm Clear-Cardinal Spacer	0.31	3.23	0.16	0.33	51	S	11
SIE-N-169-01730-00001	3mm LowE 340/5mm Clear -Warm Edge Spacer	0.31	3.23	0.16	0.33	52	S	11
TRIPLE GLAZE OPTIONS								
SIE-N-169-01083-00001	LowE 272/Clear/Clear-Cardinal Spacer	0.24	4.17	0.33	0.57	61	N/C	29
SIE-N-169-02468-00001	LowE 272/Clear/Clear -Warm Spacer	0.24	4.17	0.33	0.57	63	N/C	30
SIE-N-169-01087-00001	LowE 272/Clear/LowE 272-Cardinal Spacer	0.19	5.26	0.31	0.50	66	N, N/C	34
SIE-N-169-02472-00001	LowE 272/Clear/LowE 272 -Warm Spacer	0.18	5.56	0.31	0.50	68	N, N/C	35
SIE-N-169-01097-00001	LowE 272/LowE 272/LEI89* -Cardinal Spacer	0.17	5.88	0.28	0.49	54	N, N/C	35
SIE-N-169-02482-00001	LowE 272/LowE 272/LEI89* -Warm Spacer	0.16	6.25	0.28	0.49	56	N, N/C	36
*i89 glazing options may have an increased risk of room side condensation in areas when outdoor temperatures are below freezing (32°F/0°C)								

SP Radius Direct Set								
7/25/2025								
Air-Filled								
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CPD NUMBER	GLAZING DESCRIPTION	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone	Can ER Rating
TRIPLE GLAZE OPTIONS								
SIE-N-169-01111-00001	LowE 272/LowE 180/LEi89*-Cardinal Spacer	0.17	5.88	0.31	0.54	54	N, N/C	37
SIE-N-169-02496-00001	LowE 272/LowE 180/LEi89* -Warm Spacer	0.16	6.25	0.31	0.54	56	N, N/C	37
SIE-N-169-01151-00001	LowE 180/Clear/LowE 180 -Cardinal Spacer	0.20		0.48	0.61	46	N/C,S/C,S	43
SIE-N-169-02536-00001	LowE 180/Clear/LowE 180-Warm Edge Spacer	0.20	5.00	0.48	0.61	47	N	43
SIE-N-169-01155-00001	LowE 180/LowE 180/LEi89*-Cardinal Spacer	0.17	5.88	0.46	0.59	53	N	45
SIE-N-169-02540-00001	LowE 180/LowE 180/LEi89* -Warm Spacer	0.17	5.88	0.46	0.59	55	N	46
SIE-N-169-02516-00001	LowE 366/LowE 180/LEi89*-Cardinal Spacer	0.18	5.56	0.21	0.49	68	N,N/C, S/C, S	29
SIE-N-169-02520-00001	LowE 366/LowE 180/LEi89* -Warm Spacer	0.16	6.25	0.21	0.48	56	N,N/C, S/C, S	32
*i89 glazing options may have an increased risk of room side condensation in areas when outdoor temperatures are below freezing (32°F/0°C)								

SP Radius Direct Set								
Argon-Filled								
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	R-Value	SHGC	VT	CR	Energy Star Zone	Can ER Rating
DUAL GLAZED OPTIONS								
SIE-N-169-00005-00001	LowE 272-Cardinal Spacer	0.28	3.57	0.36	0.62	55	None	26
SIE-N-169-01598-00001	LowE 272-Warm Edge Spacer	0.27	3.70	0.36	0.62	56	None	26
SIE-N-169-00010-00001	LowE 272/LEI89-Cardinal Spacer	0.23	4.35	0.35	0.61	43	N, N/C	31
SIE-N-169-01603-00001	LowE 272/LEI89-Warm Edge Spacer	0.23	4.35	0.35	0.61	44	N, N/C	32
SIE-N-169-00015-00001	LowE 366-Cardinal Spacer	0.27	3.70	0.24	0.56	55	None	30
SIE-N-169-01608-00001	LowE 366-Warm Edge Spacer	0.27	3.70	0.24	0.56	56	None	30
SIE-N-169-00020-00001	LowE 366/LEI89-Cardinal Spacer	0.23	4.35	0.23	0.55	43	N/C, S/C, S	25
SIE-N-169-01613-00001	LowE 366/LEI89-Warm Edge Spacer	0.22	4.55	0.23	0.55	45	N,N/C, S/C, S	25
SIE-N-169-00025-00001	LowE 180-Cardinal Spacer	0.29	3.45	0.60	0.69	54	None	39
SIE-N-169-01618-00001	LowE 180-Warm Edge Spacer	0.28	3.57	0.60	0.69	56	None	39
SIE-N-169-00030-00001	LowE 180/LEI89-Cardinal Spacer	0.24	4.17	0.54	0.67	42	N	41
SIE-N-169-01623-00001	LowE 180/LEI89-Warm Edge Spacer	0.24	4.17	0.54	0.67	43	N	42
SIE-N-169-00035-00001	LowE 340-Cardinal Spacer	0.27	3.70	0.16	0.34	55	S/C, S	15
SIE-N-169-01628-00001	LowE 340-Warm Edge Spacer	0.27	3.70	0.16	0.34	56	S/C, S	15
LAMI OPTIONS								
SIE-N-169-00641-00001	Lami/LowE 272-Cardinal Spacer	0.27	3.70	0.41	0.61	56	None	30
SIE-N-169-00645-00001	Lami/LowE 366-Cardinal Spacer	0.26	3.85	0.32	0.55	56	None	25
SIE-N-169-00421-00001	LowE 272/Lami-Cardinal Spacer	0.27	3.70	0.35	0.61	54	None	26
SIE-N-169-00425-00001	LowE 366/Lami-Cardinal Spacer	0.27	3.70	0.23	0.55	54	S/C, S	20
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-169-00213-00001	3mm LowE 272/5mm Clear-Cardinal Spacer	0.28	3.57	0.36	0.62	53	None	26
SIE-N-169-01806-00001	3mm LowE 272/5mm Clear-Warm Edge Spacer	0.27	3.70	0.36	0.62	54	None	26
SIE-N-169-00223-00001	3mm LowE 366/5mm Clear-Cardinal Spacer	0.27	3.70	0.24	0.56	53	None	20
SIE-N-169-01816-00001	3mm LowE 366/5mm Clear-Warm Edge Spacer	0.27	3.70	0.24	0.56	55	None	20
SIE-N-169-00280-00001	3mm LowE 366/5mm LEI89-Cardinal Spacer	0.23	4.35	0.23	0.54	41	N/C, S/C, S	25
SIE-N-169-01873-00001	3mm LowE 366/5mm LEI89 -Warm Edge Spacer	0.22	4.55	0.23	0.54	43	N,N/C, S/C, S	26
SIE-N-169-00233-00001	3mm Clear/5mm LowE 180-Cardinal Spacer	0.29	3.45	0.59	0.68	53	None	38
SIE-N-169-01826-00001	3mm Clear/5mm LowE 180 -Warm Edge Spacer	0.28	3.57	0.59	0.68	54	None	39
SIE-N-169-00290-00001	3mm LowE 180/5mm LEI89-Cardinal Spacer	0.24	4.17	0.54	0.66	40	N	41
SIE-N-169-01883-00001	3mm LowE 180/5mm LEI89 -Warm Edge Spacer	0.23	4.35	0.54	0.66	42	N	42
SIE-N-169-00139-00001	3mm LowE 340/5mm Clear-Cardinal Spacer	0.27	3.70	0.16	0.33	54	S/C, S	15
SIE-N-169-01732-00001	3mm LowE 340/5mm Clear-Warm Edge Spacer	0.27	3.70	0.16	0.33	55	S/C, S	16
TRIPLE GLAZE OPTIONS								
SIE-N-169-01085-00001	LowE 272/Clear/Clear-Cardinal Spacer	0.21	4.76	0.33	0.57	63	N, N/C	33
SIE-N-169-02470-00001	LowE 272/Clear/Clear-Warm Edge Spacer	0.21	4.76	0.33	0.57	65	N, N/C	33
SIE-N-169-01089-00001	LowE 272/Clear/LowE 272 -Cardinal Spacer	0.16	6.25	0.31	0.50	69	N, N/C	38
SIE-N-169-02474-00001	LowE 272/Clear/LowE 272 -Warm Edge Spacer	0.15	6.67	0.31	0.50	71	N, N/C	38
SIE-N-169-01100-00001	LowE 272/LowE 272/LEI89 -Cardinal Spacer	0.14	7.14	0.28	0.49	57	N, N/C	38
SIE-N-169-02485-00001	LowE 272/LowE 272/LEI89 -Warm Edge Spacer	0.14	7.14	0.28	0.49	59	N, N/C	39
SIE-N-169-01114-00001	LowE 272/LowE 180/LEI89 -Cardinal Spacer	0.15	6.67	0.31	0.54	57	N, N/C	40
SIE-N-169-02499-00001	LowE 272/LowE 180/LEI89 -Warm Edge Spacer	0.14	7.14	0.31	0.54	59	N, N/C	40
SIE-N-169-01153-00001	LowE 180/Clear/LowE 180 -Cardinal Spacer	0.18	5.56	0.49	0.61	48	N	45
SIE-N-169-02538-00001	LowE 180/Clear/LowE 180-Warm Edge Spacer	0.18		0.49	0.61	50	N	46
SIE-N-169-01158-00001	LowE 180/LowE 180/LEI89 -Cardinal Spacer	0.15	6.67	0.46	0.59	56	N	48
*i89 glazing options may have an increased risk of room side condensation in areas when outdoor temperatures are below freezing (32°F/0°C)								

SP Radius Direct Set								
7/25/2025								
Argon-Filled								
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CPD NUMBER	GLAZING DESCRIPTION	U-Factor	R-Value	SHGC	VT	CR	Energy Star Zone	Can ER Rating
TRIPLE GLAZE OPTIONS								
SIE-N-169-02543-00001	LowE 180/LowE 180/LEi89 -Warm Edge Spacer	0.14	7.14	0.46	0.59	59	N	49
SIE-N-169-02518-00001	LowE 366/LowE 180/LEi89 -Cardinal Spacer	0.16	6.25	0.21	0.49	71	N,N/C, S/C, S	33
SIE-N-169-02523-00001	LowE 366/LowE 180/LEi89 -Warm Edge Spacer	0.14	7.14	0.21	0.48	59	N,N/C, S/C, S	34
*i89 glazing options may have an increased risk of room side condensation in areas when outdoor temperatures are below freezing (32°F/0°C)								



SECTION 9

PERFORMANCE DATA – STC/OITC

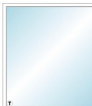
STC - Sound Transmission Class Test Summary						
Product Type	Glass Make-up			STC Rating	OITC Rating	Test Report#
	Exterior Glazing	Airspace	Interior Glazing			
SP Direct Set	5/32"(4.0mm)	1/2"(12.7MM)	5/32"(4.0mm)	28	24	PUS23000218-4
SP Direct Set	5/32"(4.0mm)	1/2"(12.7MM)w/SDL	5/32"(4.0mm)	32	27	PUS23000218-2
SP Direct Set	1/4"(6.0mm)	9/16"(14.3mm)	5/32"(4.0mm)	32	28	PUS23000218-3
SP Direct Set	Triple - 5/32"(4.0mm)	1/2"(12.7MM)	5/32"(4.0mm)	30	24	PUS23000218-1
SP Direct Set	1/4"(6.0mm) Laminated	3/8"(9.5mm)	5/32"(4.0mm)	33	28	PUS23000218-5
SP Direct Set	1/4"(6.0mm) Acoustical Laminated	1/2"(12.7MM)	5/32"(4.0mm)	34	28	PUS23000218-6



SECTION 10

PERFORMANCE DATA – AIR/WATER/STRUCTURAL



Sierra Pacific Windows - SP Clad Direct Set												8/3/2025
	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 #
SP Clad Direct Set	SP Direct Set		84" x 120" Single Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	None	S4466.01	429-H-567.00	47678	
	SP Direct Set		72" x 120" Single Unit	CW-PG50	+50/-50	7.52	0.01/0.01/FIXED	Nail Fin or Through Frame Installation	S4225.01	429-H-567.04	47678	
	SP Direct Set		84" x 96" Single Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	Nail Fin or Through Frame Installation	S4435.01	429-H-567.16		
	SP Direct Set		72" x 120" Single Springline Unit	CW-PG60	+60/-60	7.52	.01/.01/FIXED	None	QCT25-7551.01	429-H-567.19		
	SP Direct Set		48" x 60"-2/48" x 60" -2 Single/Mulled Unit	LC-PG50	+50/-50	7.52	.01/.01/FIXED	Tight Horizontal Mull/ 1/4" Aluminum Vertical Mull; Nail Fin or Through Frame Installation	S5169.01	429-H-567.12		
	SP Direct Set		60" x 84" - 2 Single/Mulled Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	Tight Mull; Nail Fin or Through Frame Installation	S5172.01	Pending		
	SP Direct Set		60" x 84" - 2 Single/Mulled Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	1" Spread Mull	Pending	Pending		
	SP Direct Set		60" x 84" - 2 Single/Mulled Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	6" Spread Mull	S7248	Pending		
	SP Direct Set/Awning		48" x 72"-2 Direct Set/ 48" x 36"-2 Mull Unit	CW-PG50	+50/-50	7.52	.01/.01/A3	1/4" Aluminum Horizontal Plate Mull; Anchorage on Either Side of Mulls	S3264.01	429-H-566.08	47678	
	SP Direct Set/Awning		96" x 72" Direct Set/ 48" x 36" -2	CW-PG35	+35/-35	5.43	.01/.01/A3	None	S3082.01	429-H-566.04	47678	
	SP Direct Set/Awning		96" x 72" Direct Set/ 48" x 36" -2	LC-PG45	+45/-45	6.75	.01/.01/A3	Anchorage on Either Side of Mull	S4436.01	429-H-529.16	47678	
SP Clad Exterior Glazed Direct Set	SP Direct Set -Exterior Glaze		84"x86" Single Unit	CW-PG50	+50/-50	7.52	0.01/0.01/FIXED	None	S4464	429-H-567.08	47678	
	SP Direct Set -Exterior Glaze		96"x144" Single Unit	CW-PG50	+50/-50	7.52	0.01/0.01/FIXED	None	Pending	Pending		