



SIERRA
PACIFIC
WINDOWS



ARCHITECTURAL DESIGN MANUAL

SIERRA PACIFIC CLAD Direct Set

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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

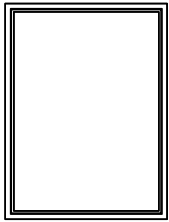


SECTION 4

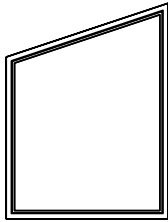
ELEVATIONS



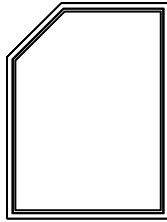
Geometric Shapes



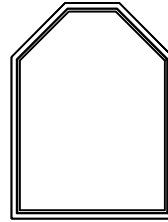
C-SPDS00
Rectangle



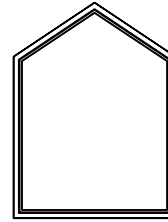
C-SPDS12
Trapezoid



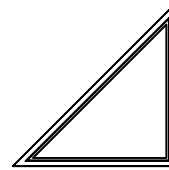
C-SPDS22
Clip Corner



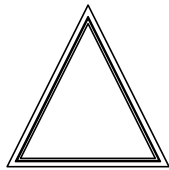
C-SPDS23
Double Clip
Corner



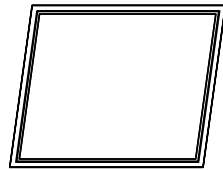
C-SPDS13
Pentagon



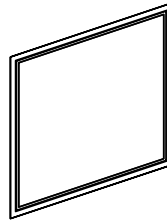
C-SPDS21
Right
Triangle



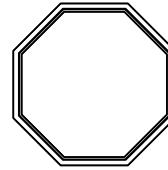
C-SPDS10
Isosceles
Triangle



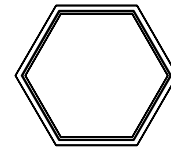
C-SPDS25
Parallelogram



C-SPDS24
Pitched
Parallelogram



C-SPDS14
Octagon

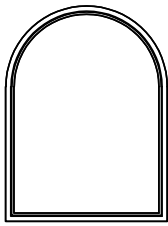


C-SPDS15
Hexagon

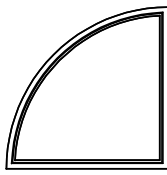
Radius Shapes



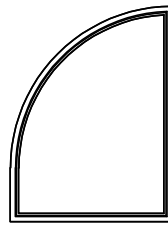
C-SPDS08
Half Round



C-SPDS20
Springline Half
Round



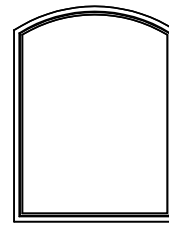
C-SPDS07
Quarter
Round



C-SPDS26
Quarter Springline
Half Round



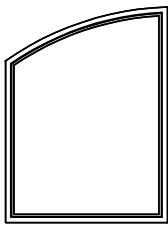
C-SPDS29
Chord



C-SPDS27
Equal Arched
Head



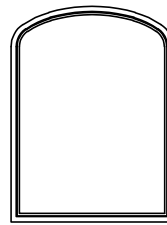
C-SPDS30
Unequal Quarter
Round



C-SPDS28
Unequal
Arched Head



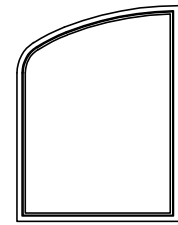
C-SPDS04
Ellipse



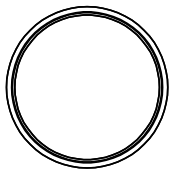
C-SPDS31
Extended
Ellipse



C-SPDS32
Extended
Ellipse



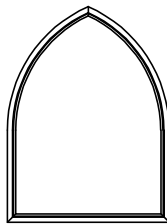
C-SPDS33
Extended Quarter
Ellipse



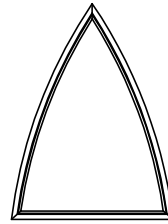
C-SPDS09
Full Circle



C-SPDS
Oval



C-SPDS34
Extended
Gothic



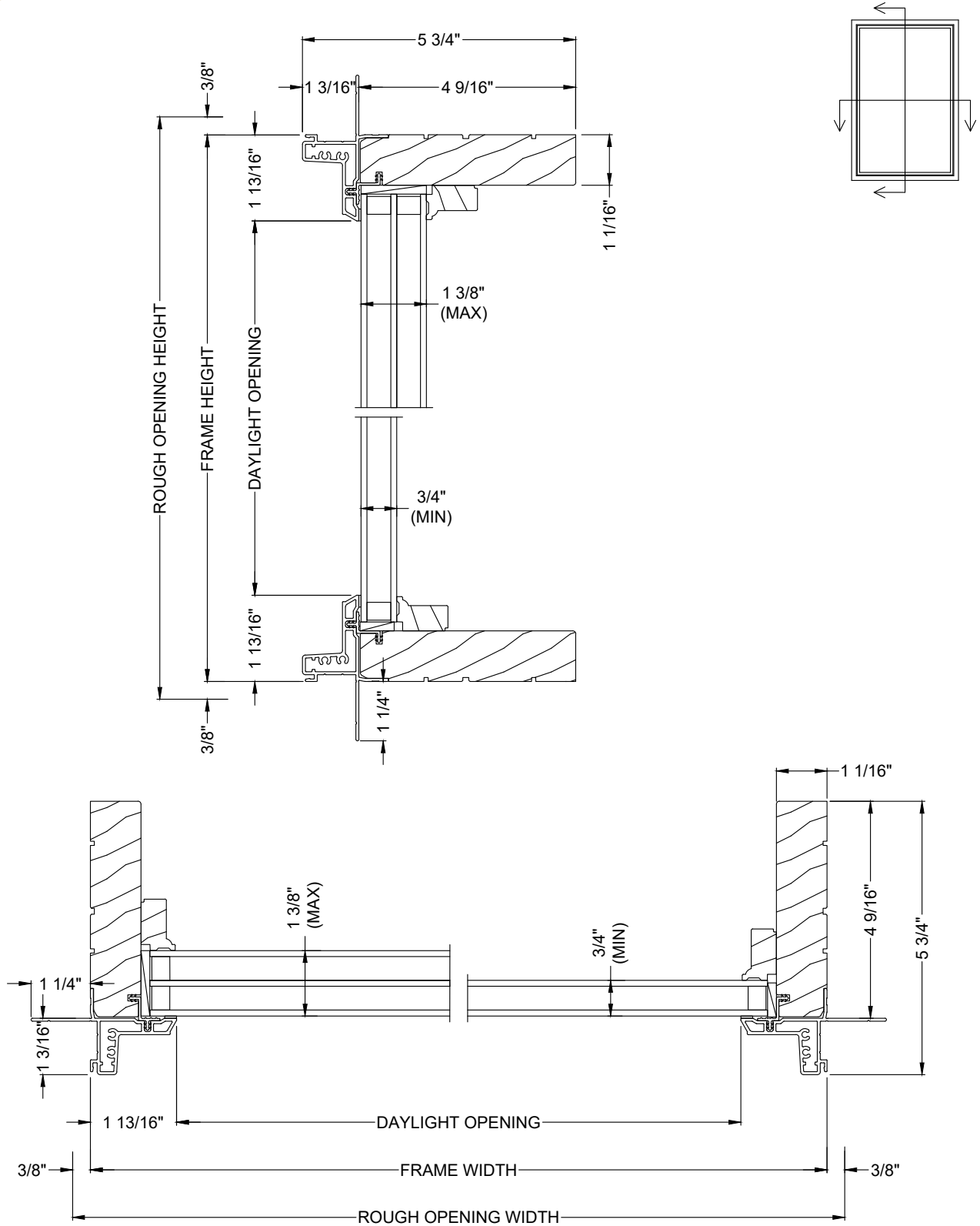
C-SPDS05
Gothic

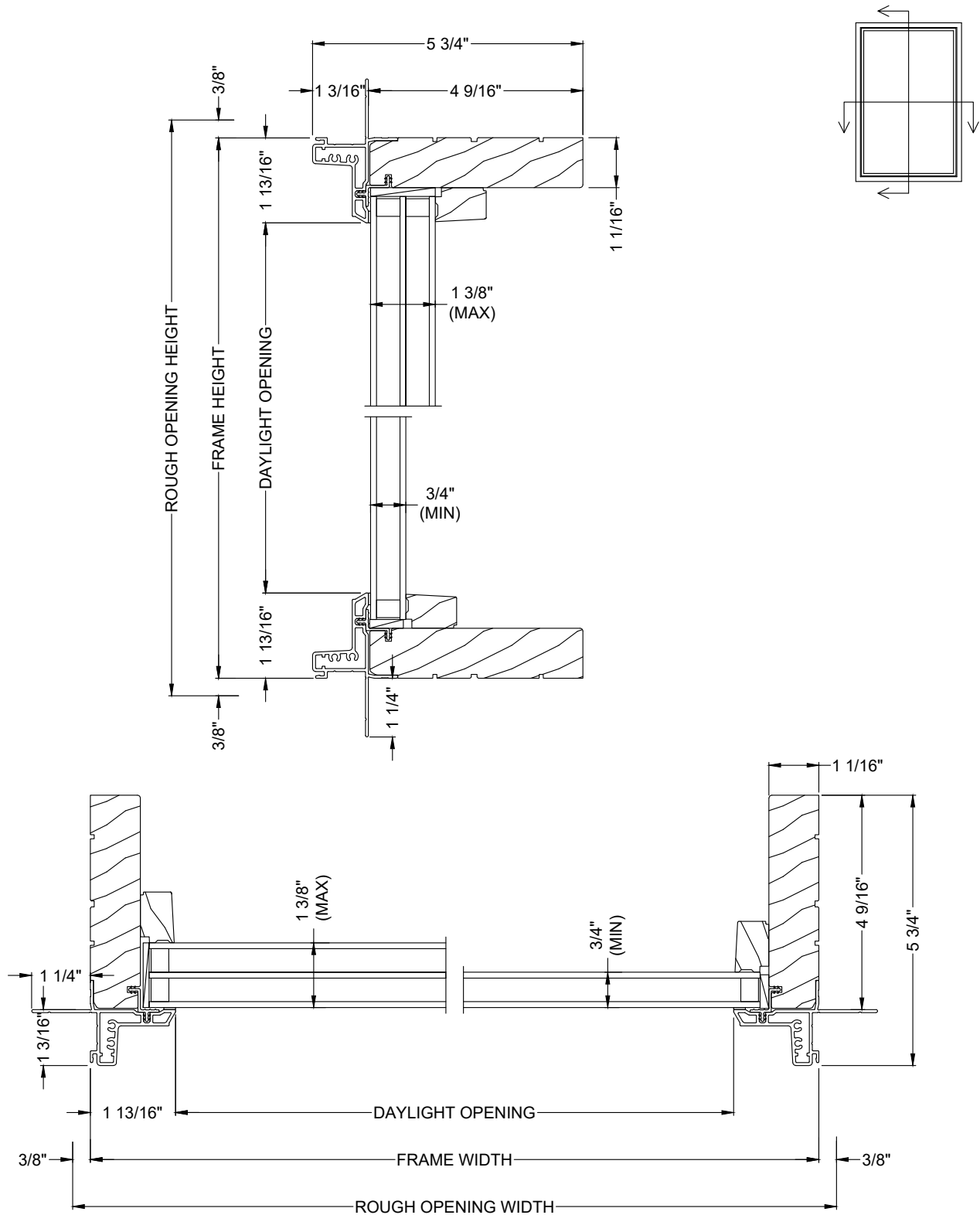


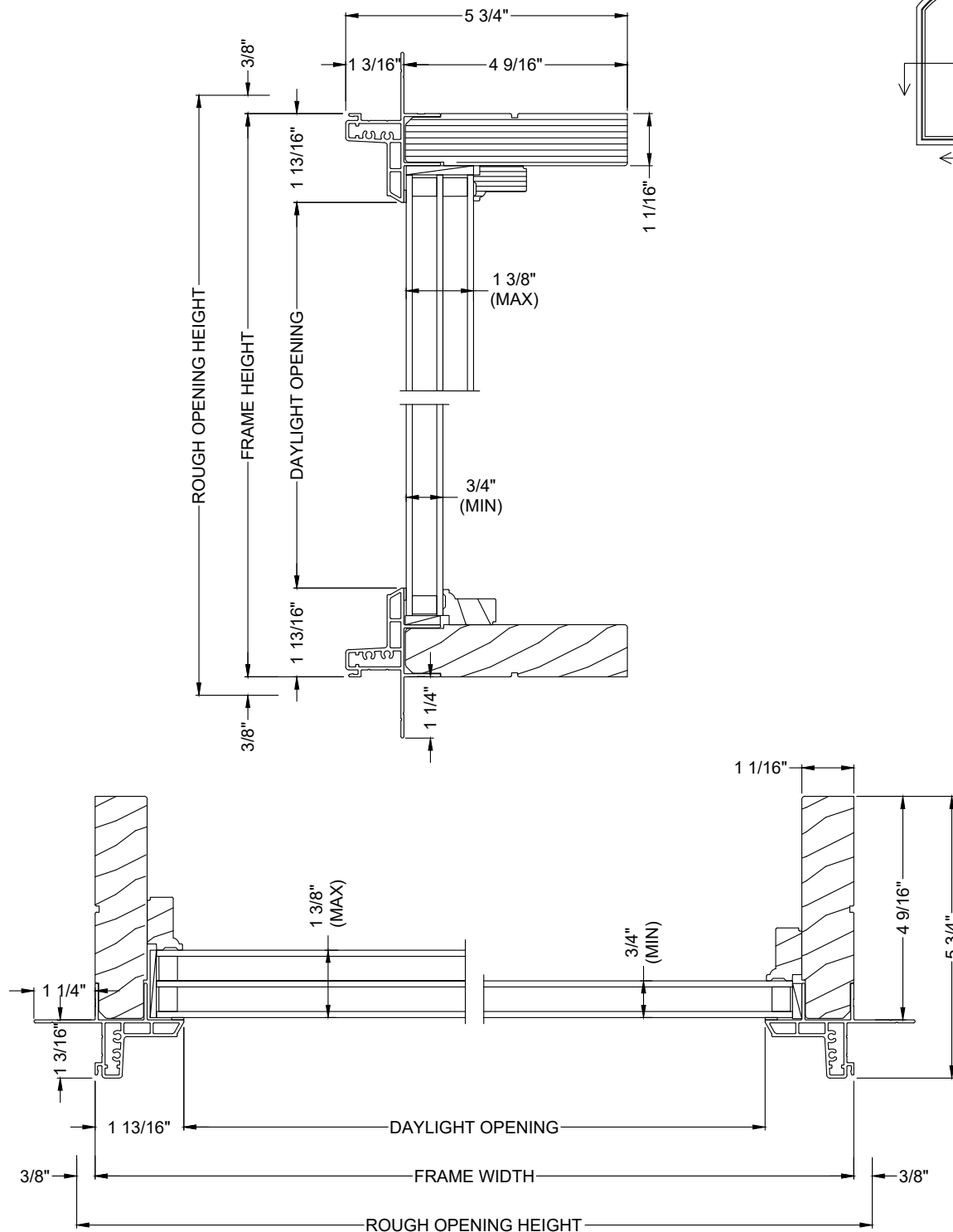
SECTION 5

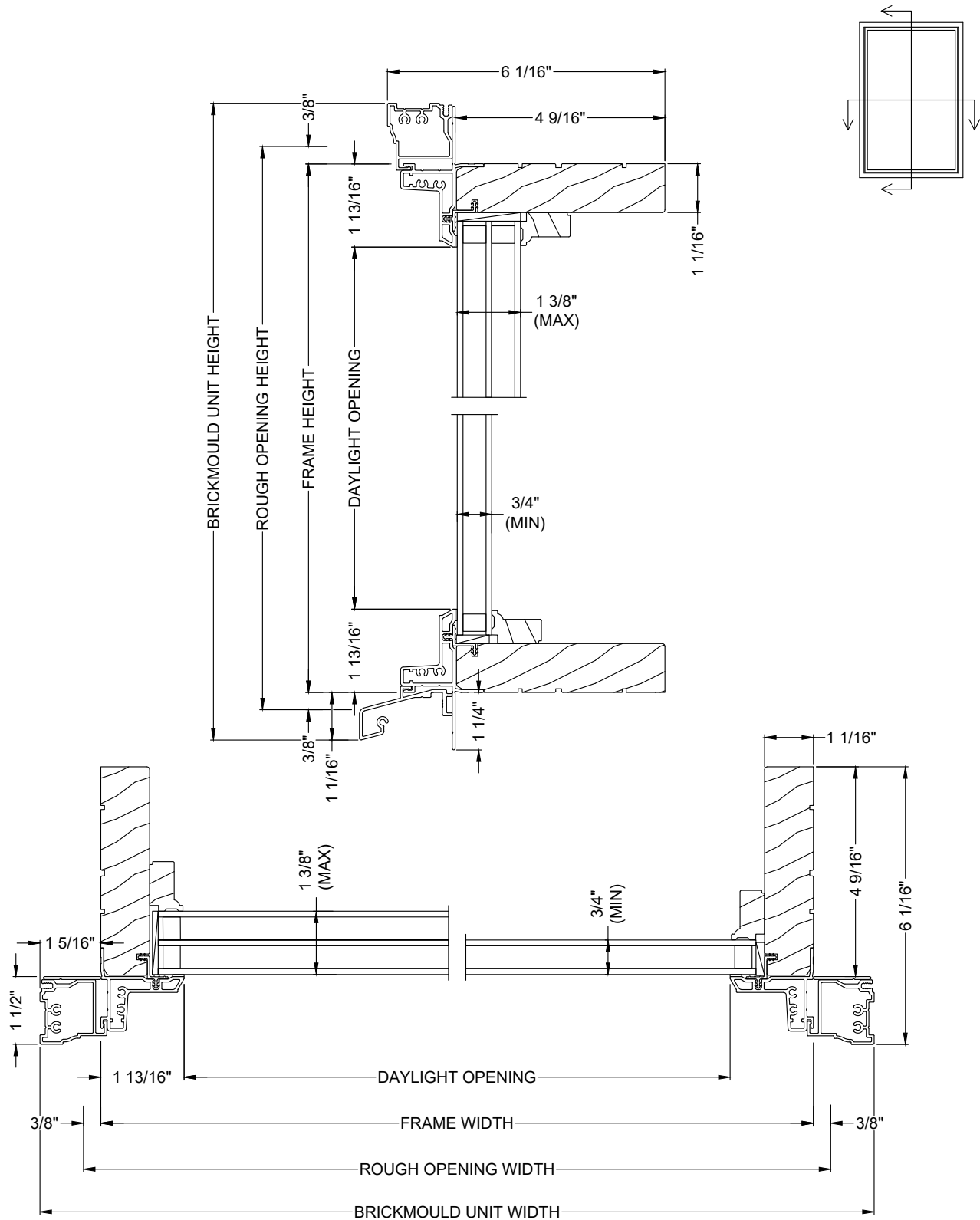
SECTION VIEWS

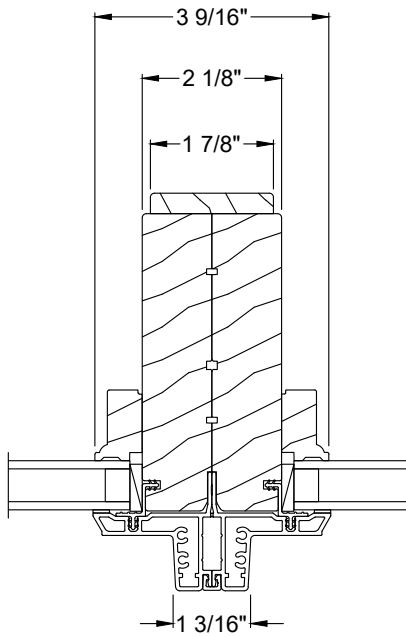




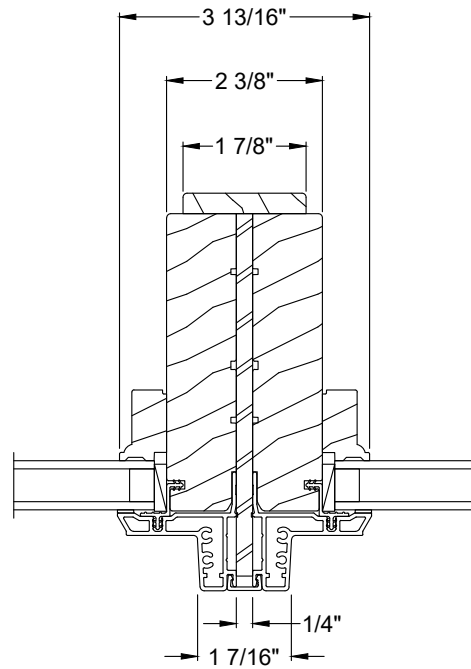




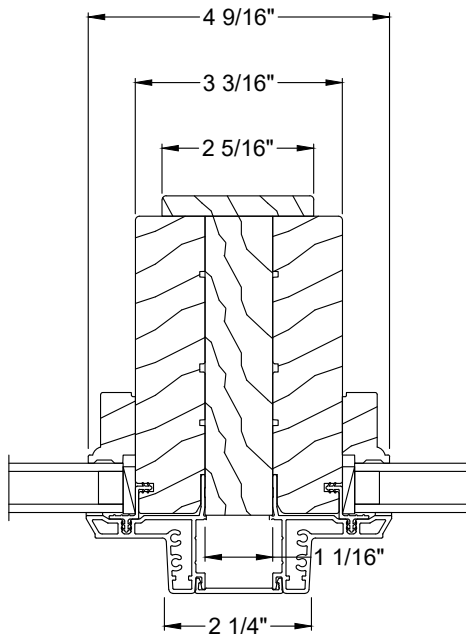




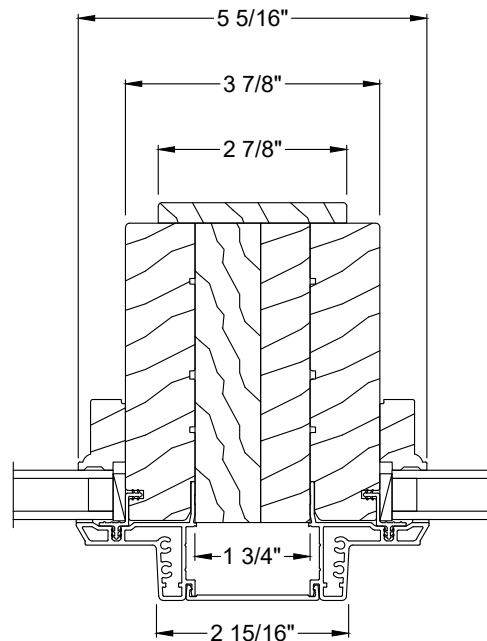
TIGHT MULL



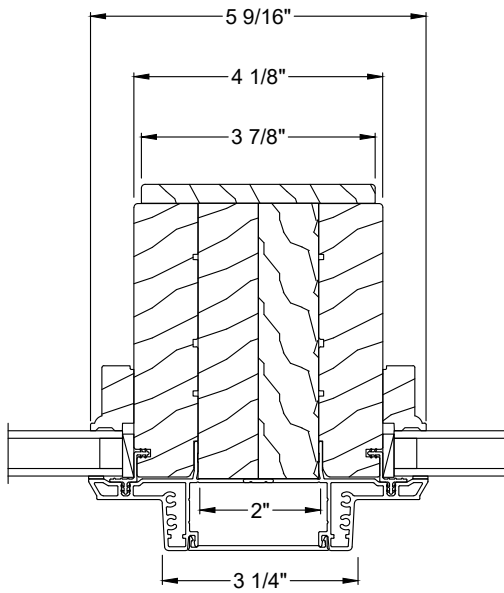
**1/4" PLATE
MULL**



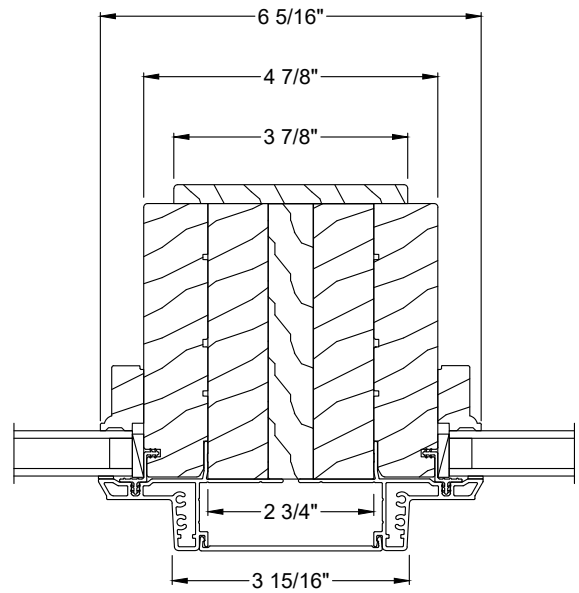
**1" SOLID
SPREAD MULL**



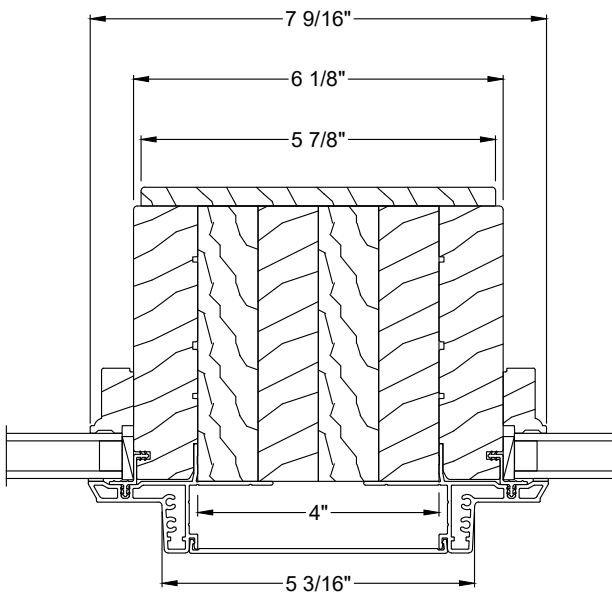
**1 3/4" SOLID
SPREAD MULL**



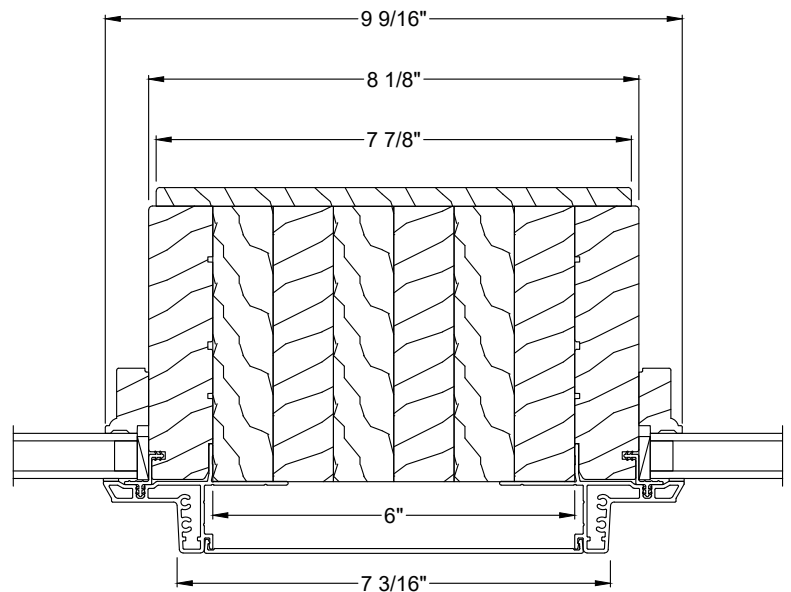
**2" SOLID
SPREAD MULL**



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

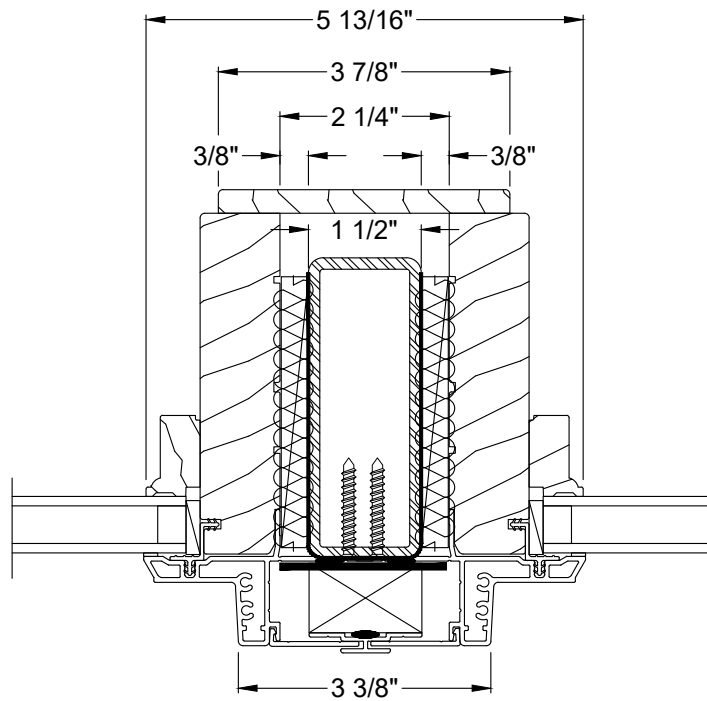


**4" SOLID
SPREAD MULL**

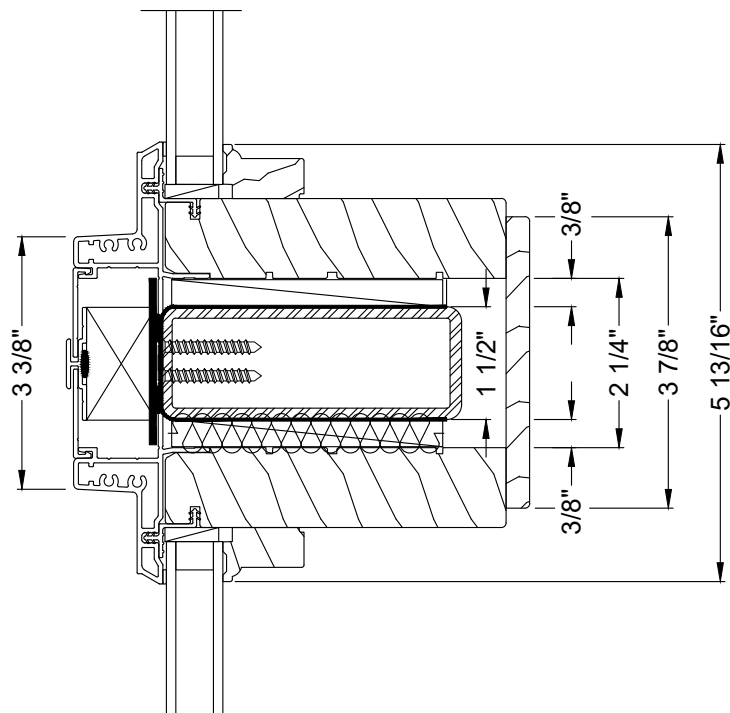


**6" SOLID
SPREAD MULL**

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



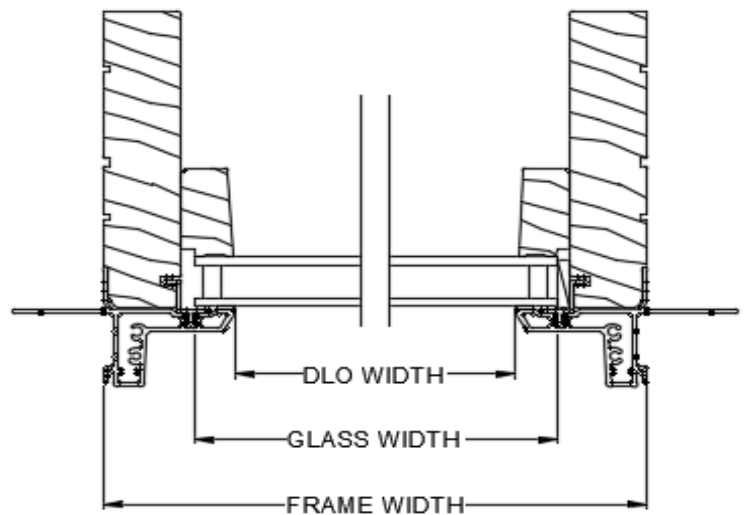
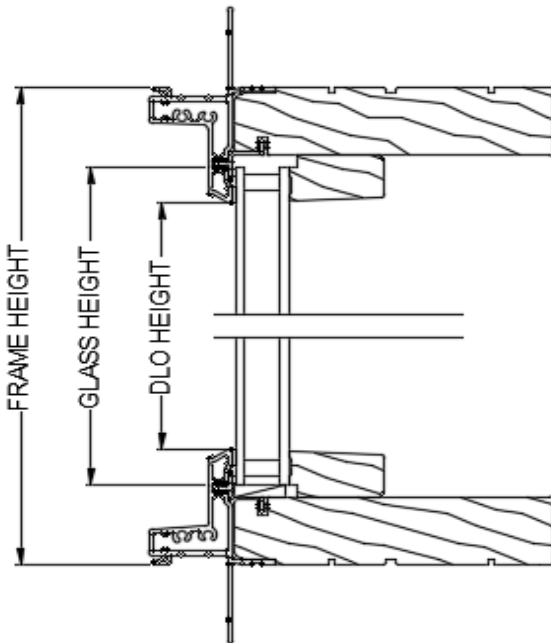
SECTION 7

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

Information Coming Soon



SECTION 9

PERFORMANCE DATA – STC/OITC

Information Coming Soon



SECTION 10

PERFORMANCE DATA – AIR/WATER/STRUCTURAL

Sierra Pacific Windows - Clad Direct Set												5/2/2025
	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			
	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			
	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			
	SP Direct Set		72" x 120" Single Springline Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	None	Pending			
	SP Direct Set		48" x 60"-2/48" x 60" - 2 Single/Mulled Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	Tight Horizontal Mull/ 1/4" Aluminum Vertical Mull; Nail Fin or Through Frame Installation	S5169.01			
	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			
	SP Direct Set		60" x 84" - 2 Single/Mulled Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	1" Spread Mull	Pending			
	SP Direct Set		60" x 84" - 2 Single/Mulled Unit	CW-PG50	+50/-50	7.52	.01/.01/FIXED	6" Spread Mull	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			
	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			
	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			