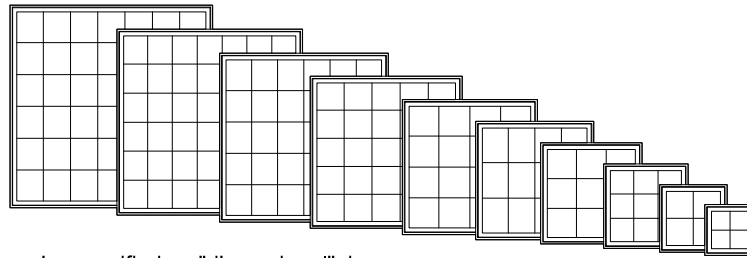

TABLE OF CONTENTS

General Information	1-2
Elevation Notes	1-3
Lite Cut Information	1-4
Unit Sizing	1-5
Jamb Extender Options	1-6
Trim Options	1-7
Mullion Options	1-8
Handing & Operation	1-9
Sections	1-10
Min & Max Sizing	1-15

GENERAL INFORMATION



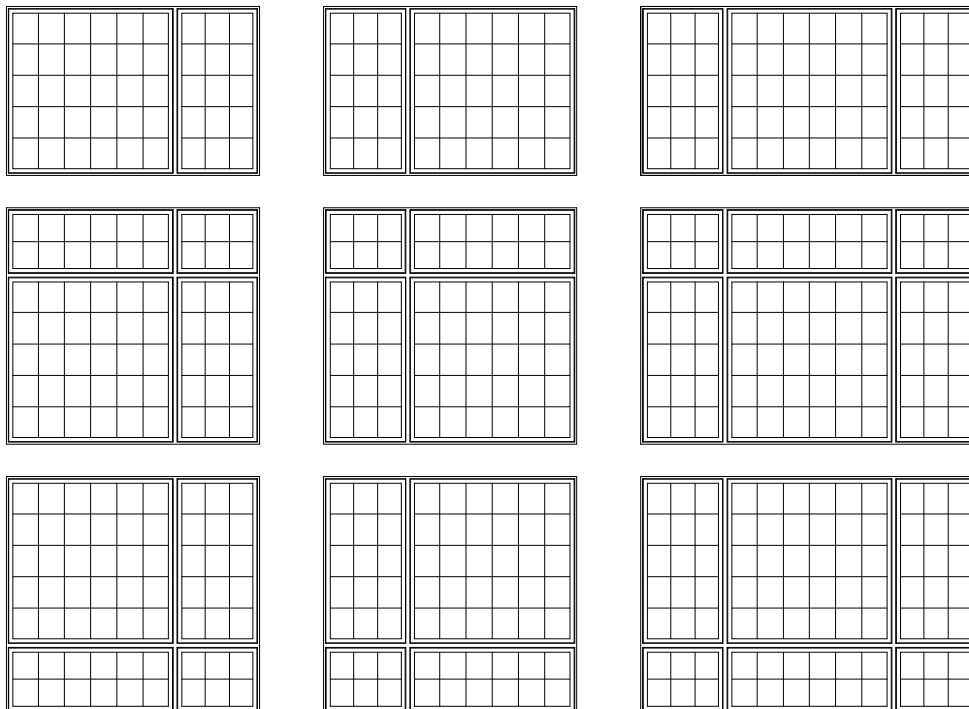
DIMENSIONAL WINDOWS

Custom clad tilt and turn windows may be specified as "dimensional", by adjusting the desired rough opening width or height in 1/4" increments from standard.

Custom clad tilt and turn windows are available with left or right hand operation, or stationary (non-venting). Operating mechanism includes corrosion resistant steel hinges and dual arm roto-type operator with hardened steel gears and operating arms. Sash locks are concealed unison type with an exposed locking lever and escutcheon plate. There are several interior hardware finish options. Refer to the Specifications for finish options.

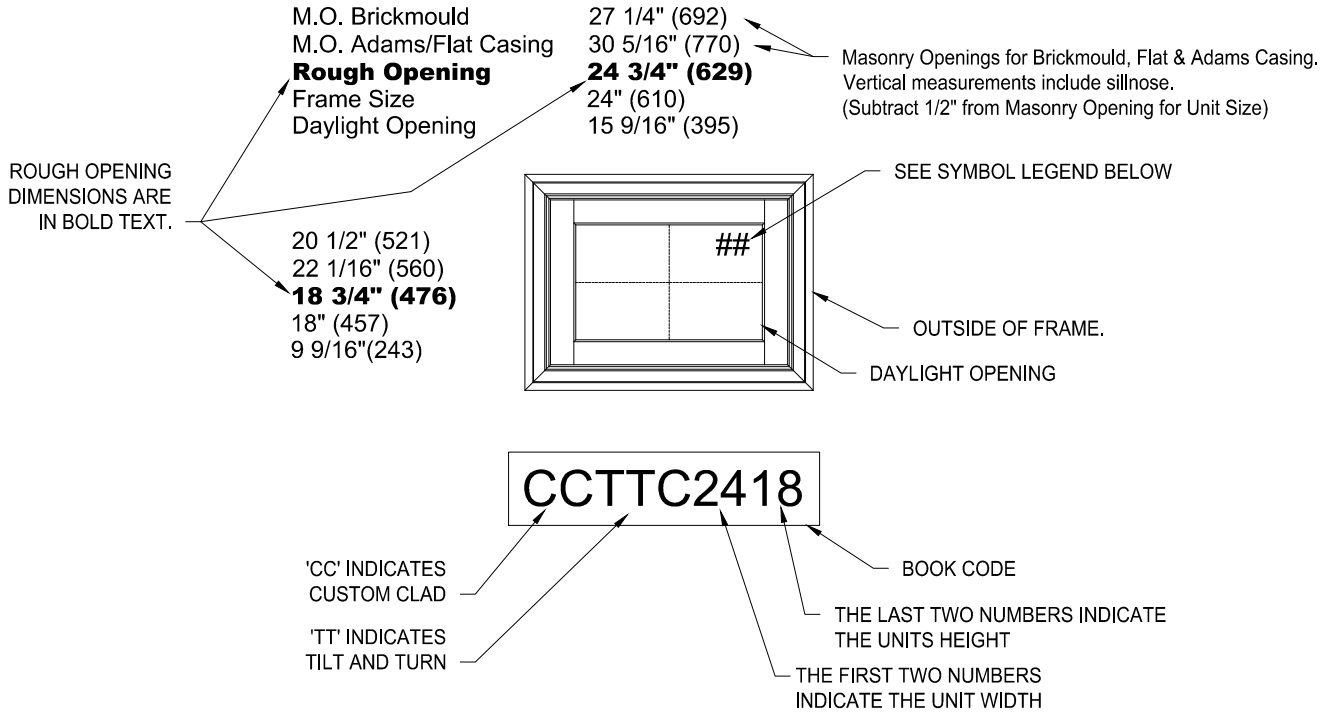
MULTIPLE ASSEMBLIES

Custom clad tilt and turn windows may be mullied above, below, or beside other clad tilt and turn windows, or other clad window products. Factory assembled mulls are limited in height (100"), width (150").



ELEVATION NOTES

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



GENERAL CASEMENT NOTES

1. CUSTOM CLAD TILT AND TURN(CCTT) UNITS ARE AVAILABLE AS OPERATING OR FIXED UNITS.
2. 'CCTTP' IN A BOOK CODE DENOTES THE UNIT IS A CLAD TILT AND TURN PICTURE (FIXED) UNIT.
3. UNIT ELEVATIONS ARE SHOWN WITHOUT EXTERIOR TRIM. UNIT SIZES & MASONRY OPENING DIMENSIONS WILL CHANGE WITH THE ADDITION OF EXTERIOR TRIM. SEE THE 'UNIT SIZING, ROUGH OPENINGS & MASONRY OPENINGS' PAGE FOR EXTERIOR TRIM EFFECTS.
4. OPERATING UNITS ARE AVAILABLE AS LEFT OR RIGHT HAND OPERATION.
5. DIMENSIONAL VALUES IN BRACKETS ARE MILLIMETER CONVERSIONS.

ELEVATION SYMBOL LEGEND:

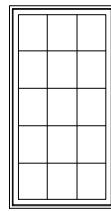
- E** BASIC UNIT CLEAR OPENING EXCEEDS 20" IN WIDTH, 24" IN HEIGHT & A MINIMUM OF 5.7 SQ. FT.
- *** INDICATES STATIONARY UNIT.
- ##** NUMBER INDICATES DESIGN PRESSURE (DP) RATING WITH STANDARD GLAZING. OPERATING UNITS UTILIZE A CONCEALED LOCKING SYSTEM FOR DP RATINGS.

LITE CUT INFORMATION

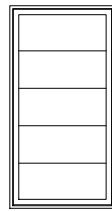
Custom clad tilt and turn windows are available with removable grilles in 7/8", 1-1/8" and 1-3/8" widths, Airspace (between the panes) grilles, and Simulated Divided Lites. Standard lite cuts are rectangular, and conform to the layouts noted in the charts on the next page. To use the chart, refer to the appropriate table by the type of window and type of bars or grilles the section drawings illustrate. Then simply cross reference the frame Height and Width to determine the standard lite cut.

LITE CUT OPTIONS

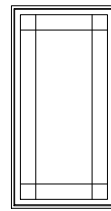
Special lite cut patterns can include a wide variety of straight line and radius patterns. The illustrations shown here represent just a few of the possibilities. Rectangular, horizontal, vertical and Prairie lite patterns are available in all standard size clad casement windows. Uneven, diamond, radius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



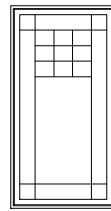
RECTANGULAR



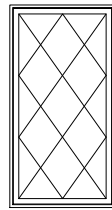
HORIZONTAL



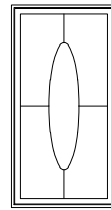
PRAIRIE



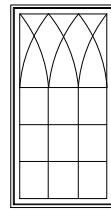
UNEVEN



DIAMOND



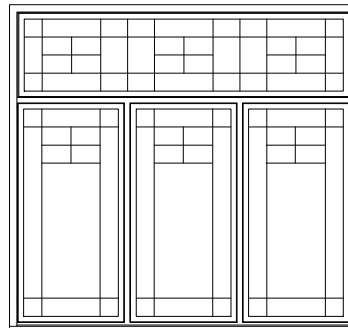
RADIUS



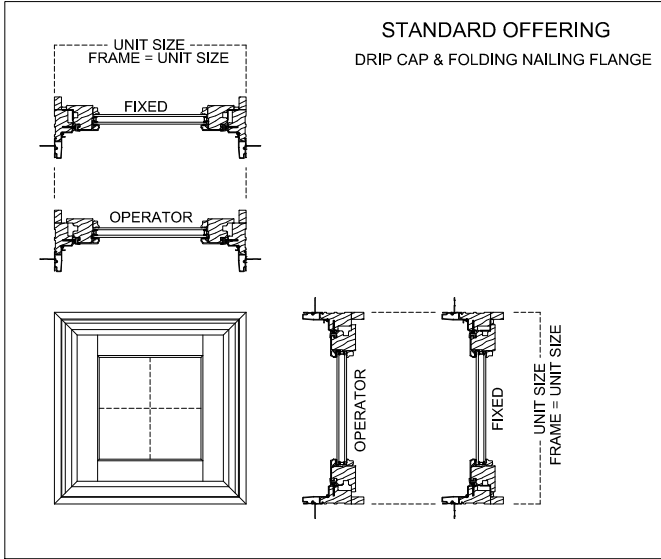
GOTHIC

BAR ALIGNMENT

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



UNIT SIZING



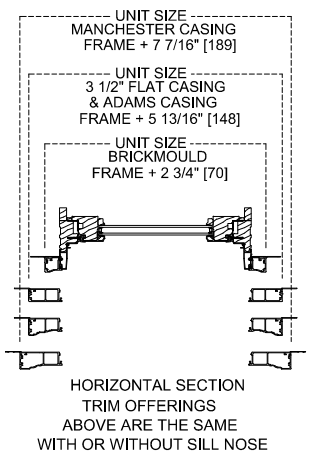
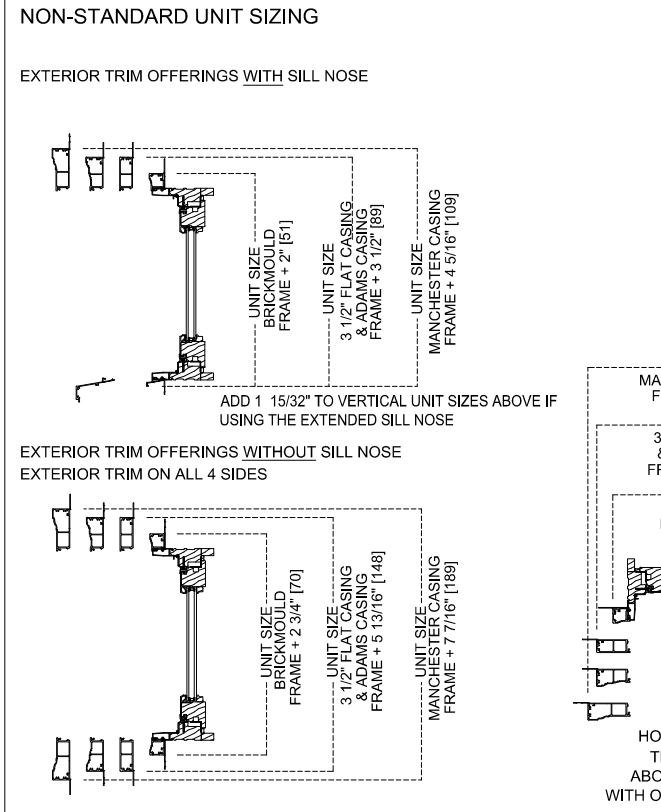
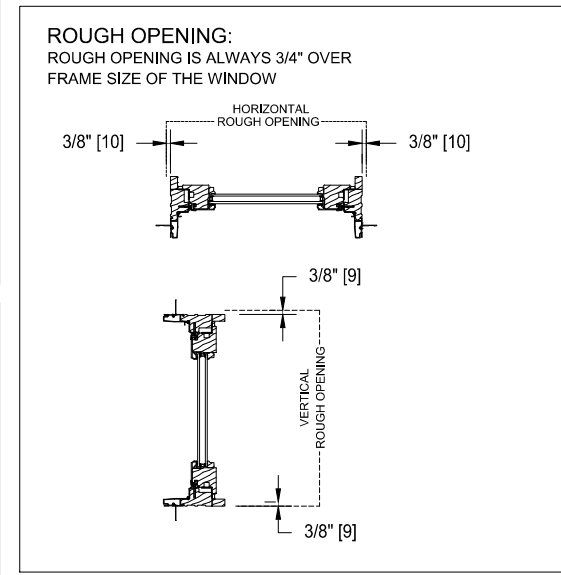
GENERAL NOTES:

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

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

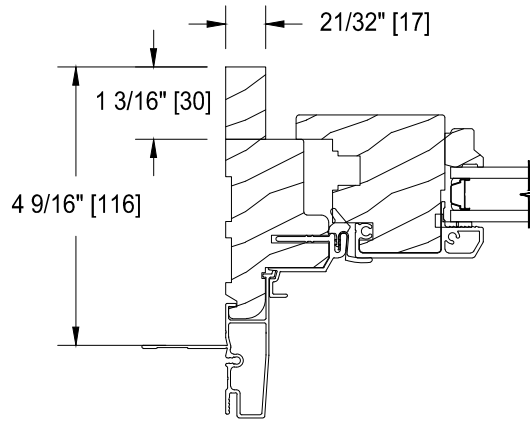
MASONRY OPENING:
MASONRY OPENING IS ALWAYS 1/2" OVER
THE UNIT SIZE OF THE WINDOW

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



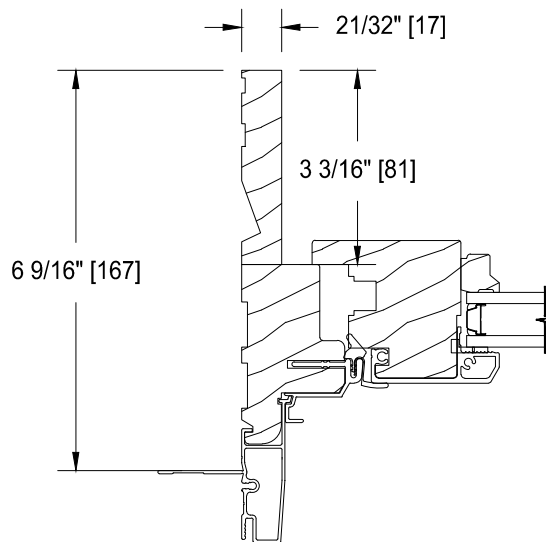
JAMB EXTENDER OPTIONS

4 9/16" WALL



**STANDARD 4/4
JAMB EXTENDER**

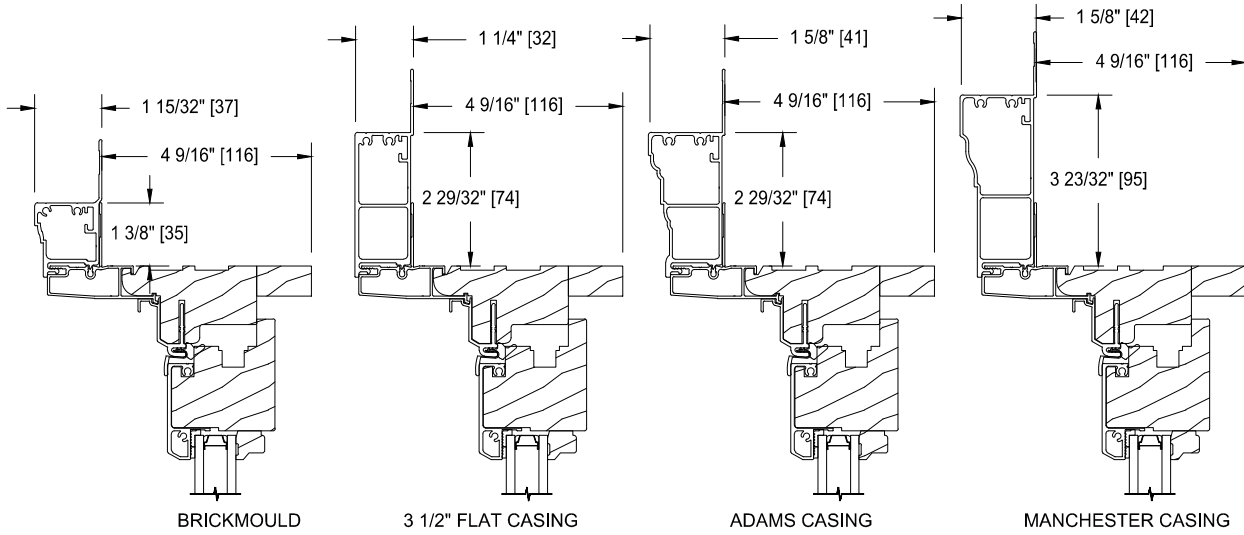
6 9/16" WALL



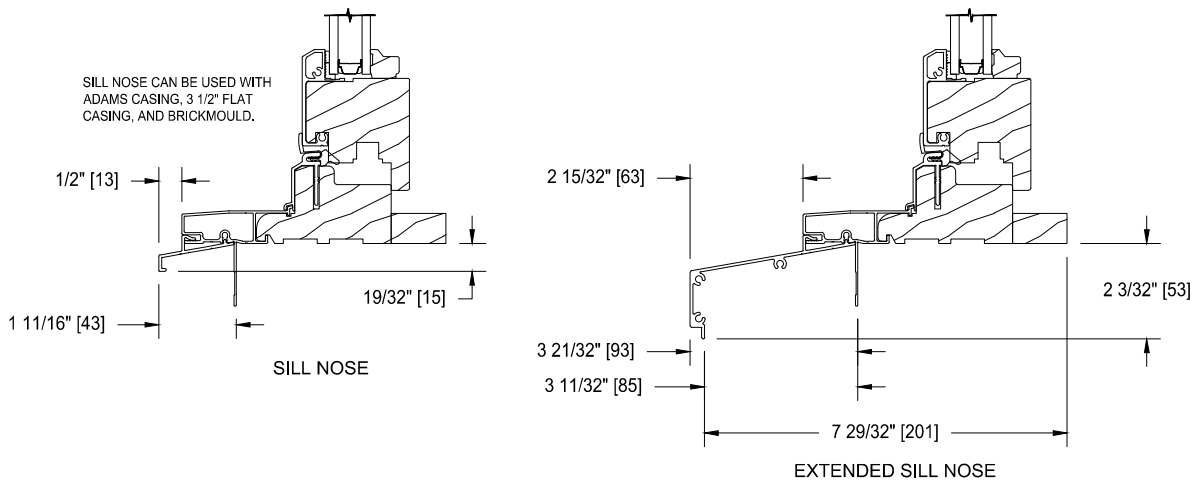
**STANDARD 4/4
JAMB EXTENDER**

TRIM OPTIONS

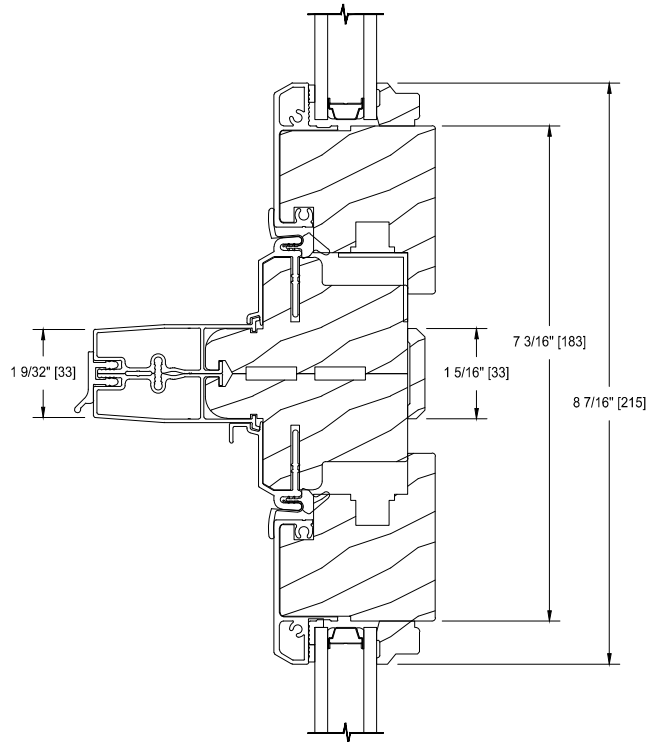
EXTERIOR TRIM



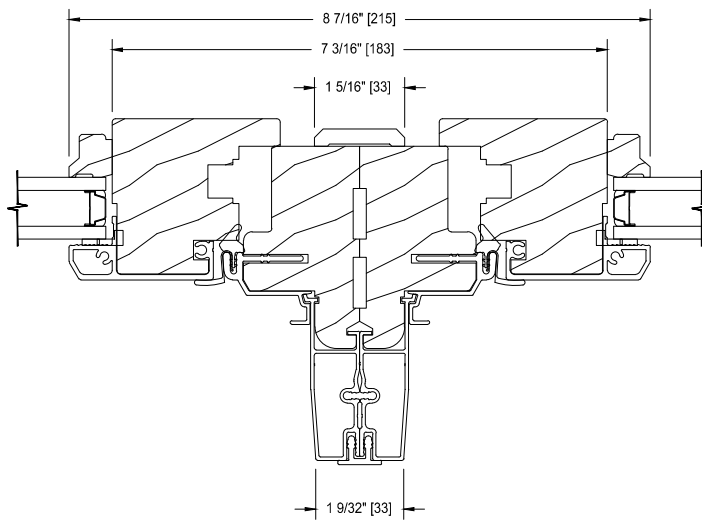
SILL NOSE OPTIONS



MULLION OPTIONS

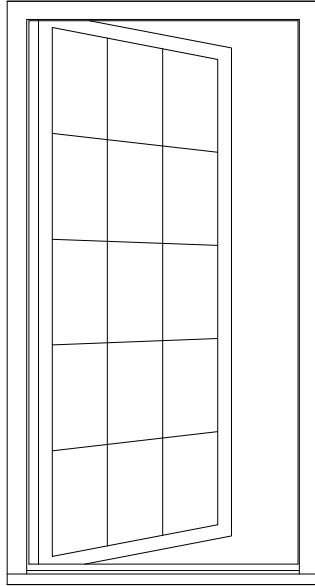


HEAD/SILL

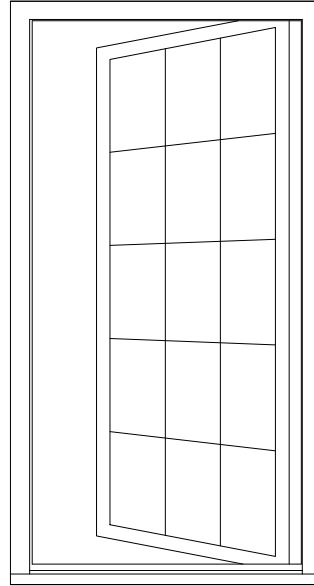


JAMB

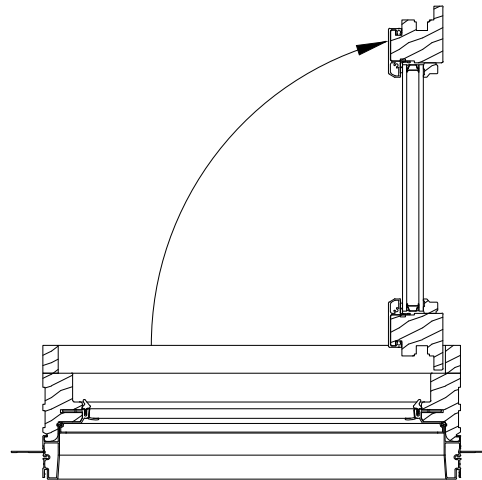
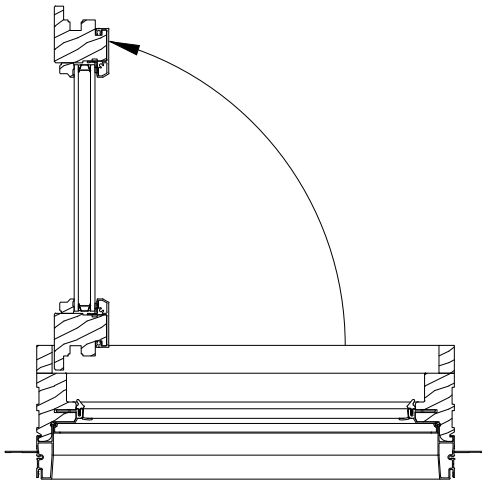
HANDING AND OPERATIONS



LEFT
HAND

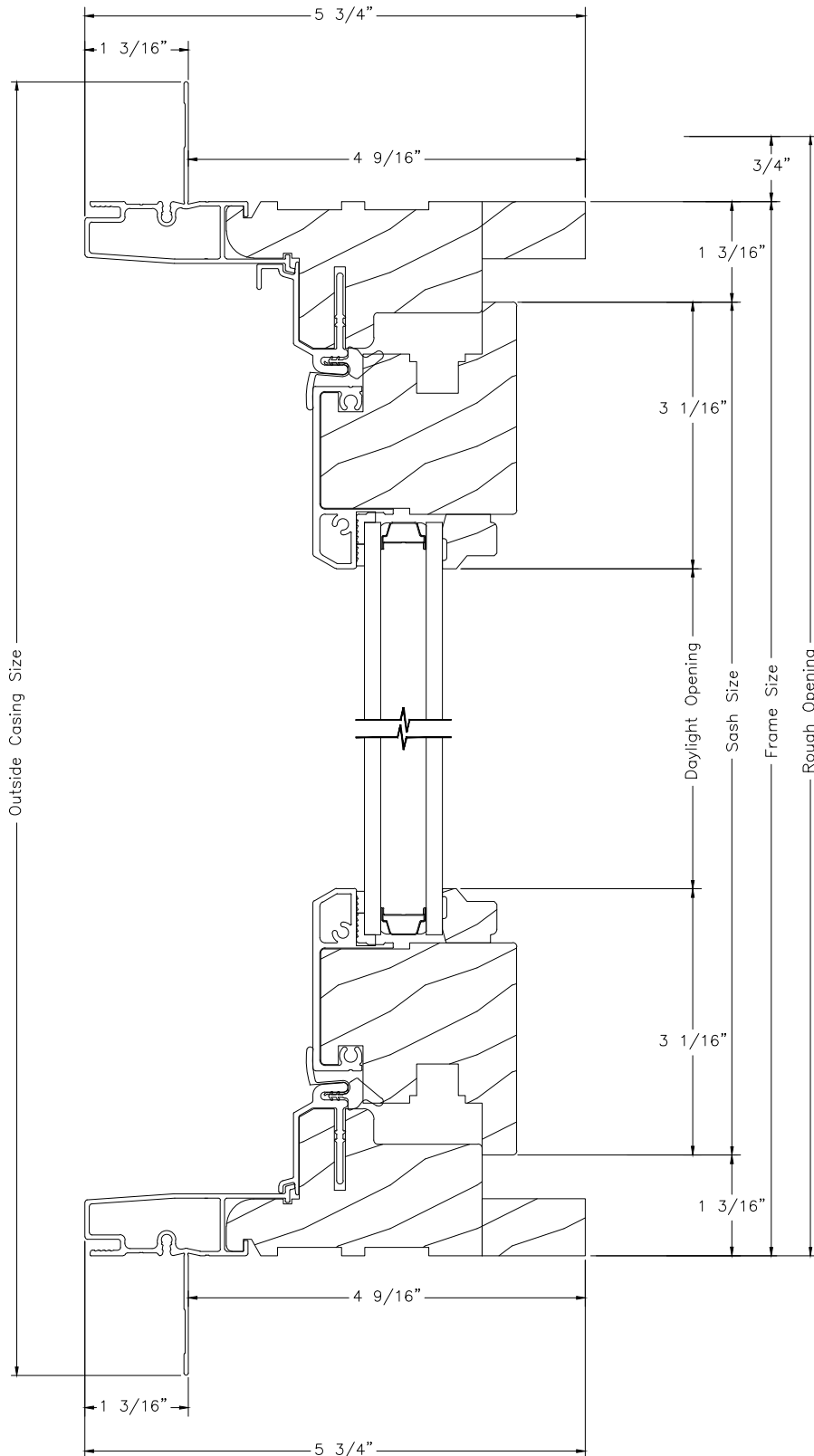


RIGHT
HAND

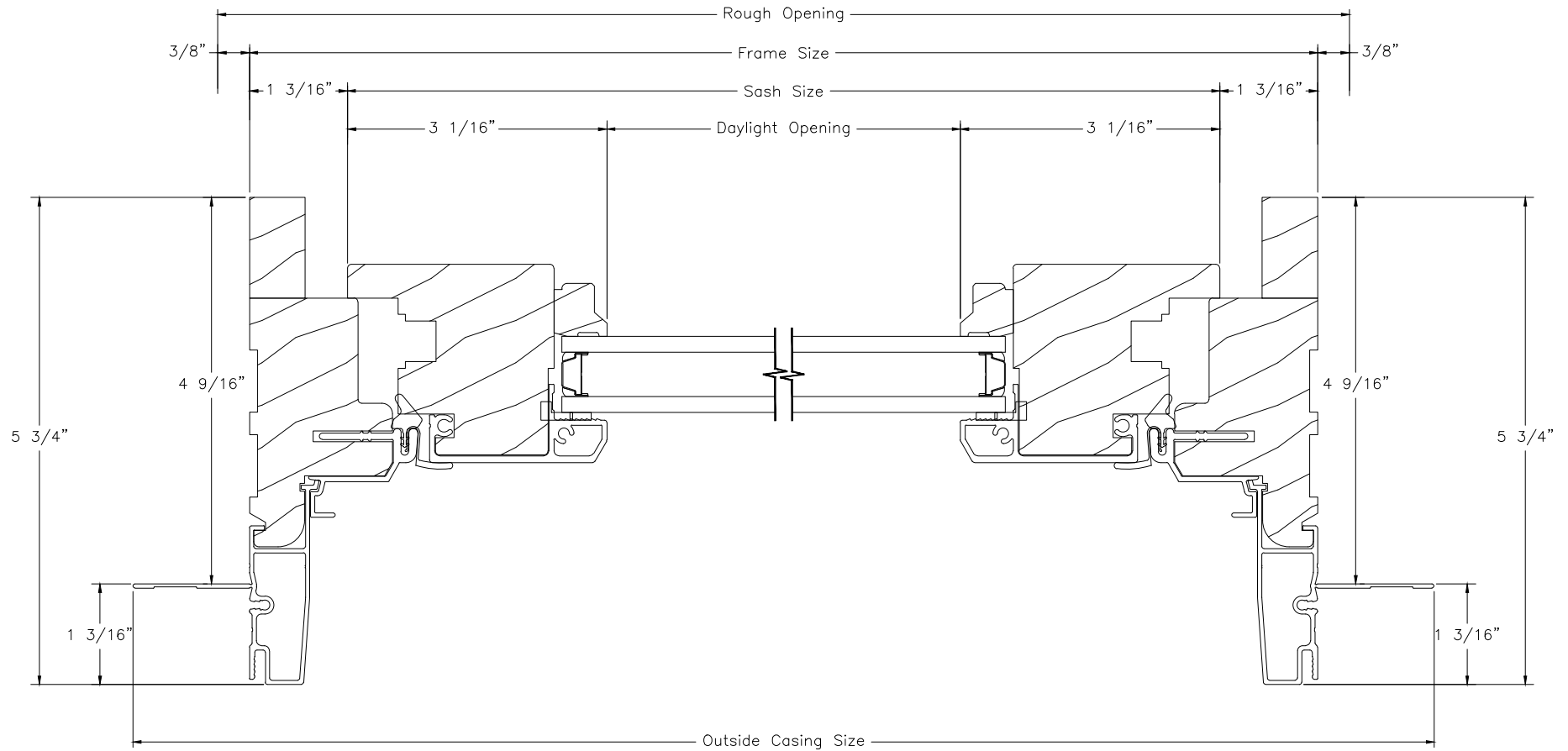


CASEMENT UNIT HANDING:
UNIT HANDING IS DEFINED (FROM
THE EXTERIOR) AS THE
DIRECTION THE SASH OPENS.

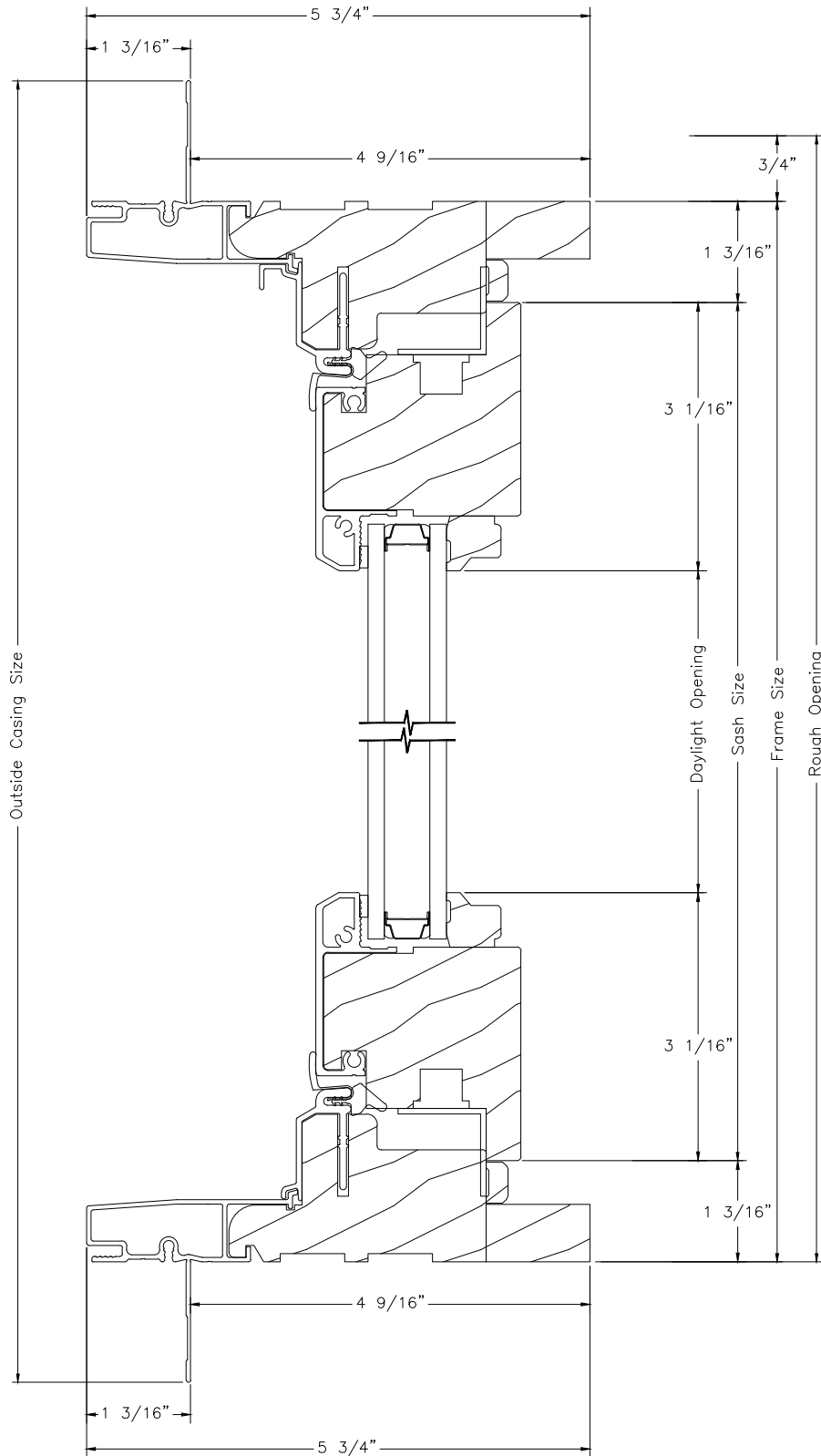
VERTICAL SECTION



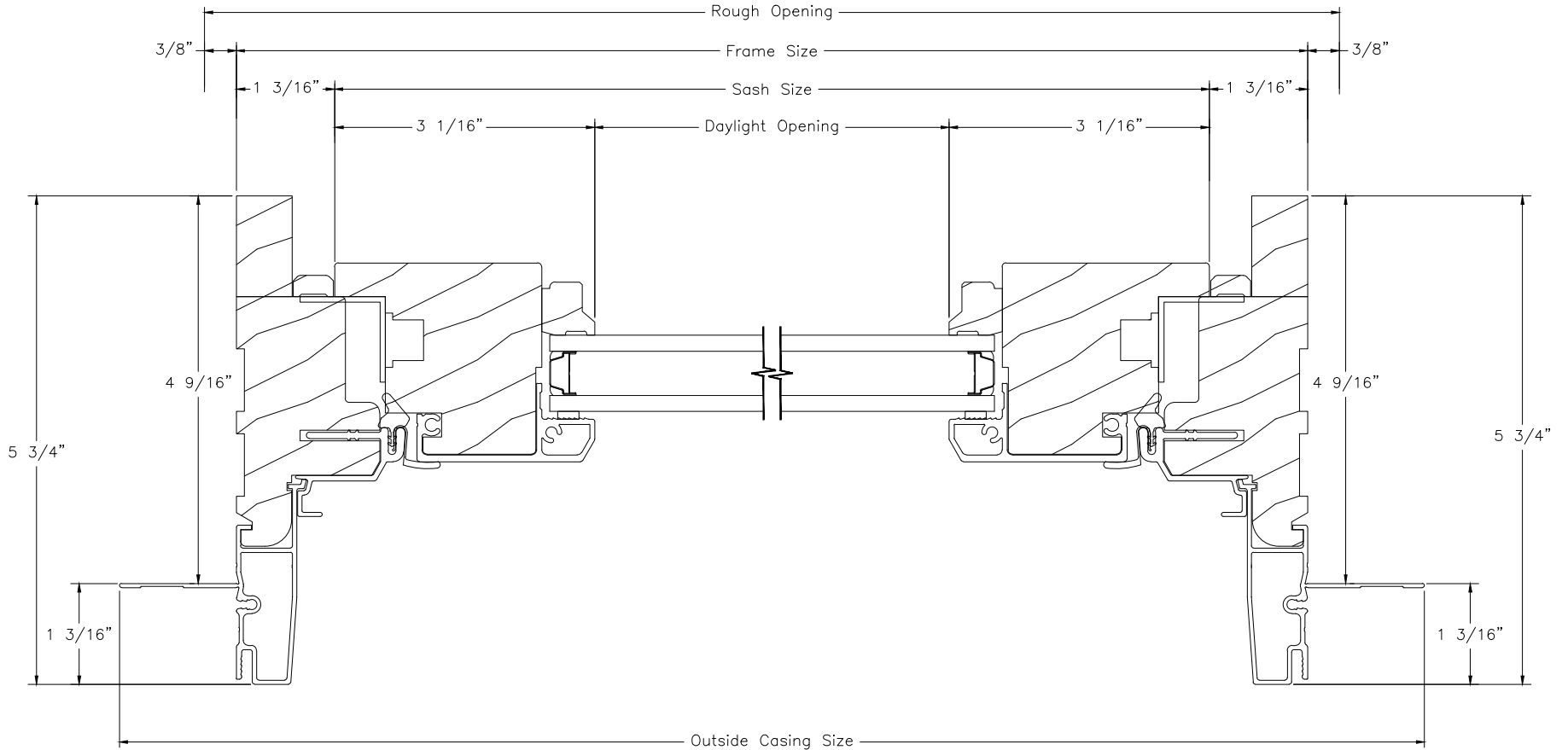
HORIZONTAL SECTION



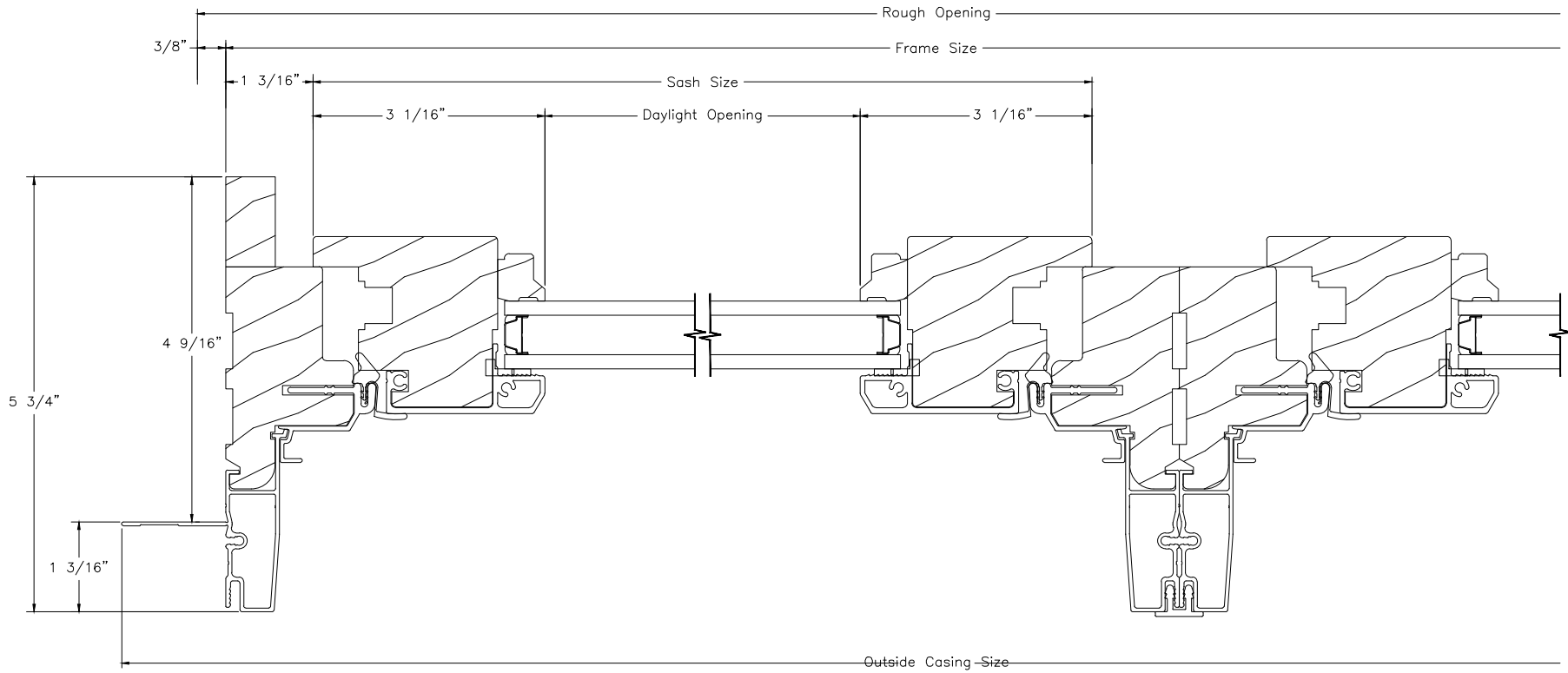
PICTURE VERTICAL SECTION



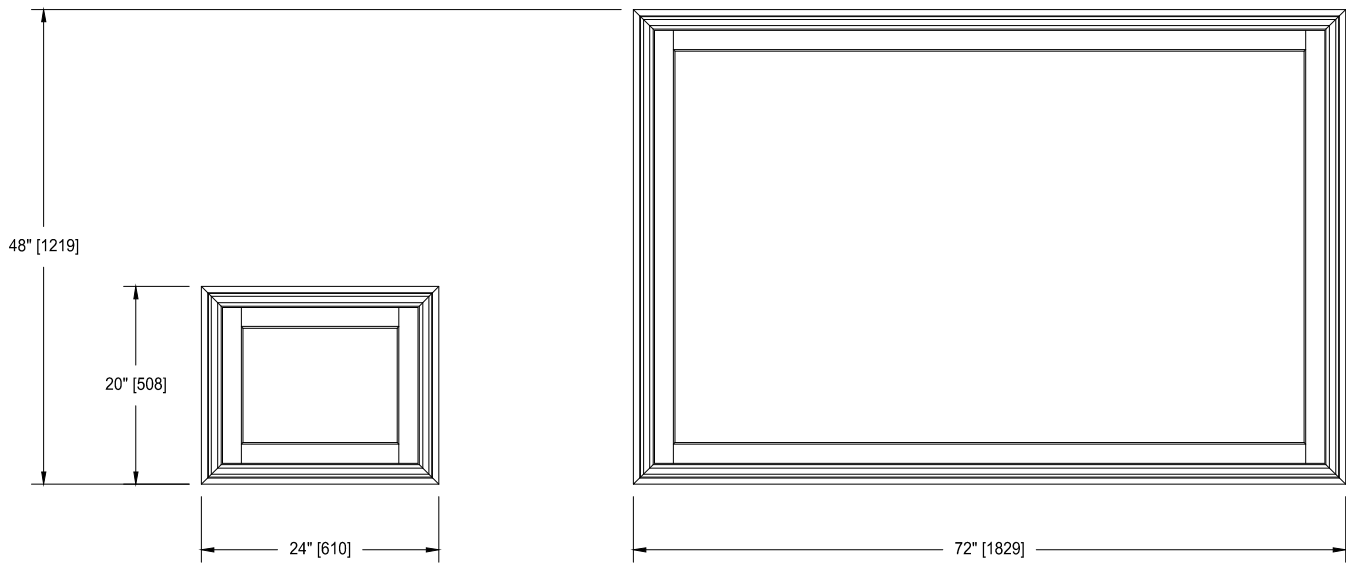
PICTURE HORIZONTAL SECTION



2 & 3 WIDE HORIZONTAL SECTION



MIN & MAX SIZING



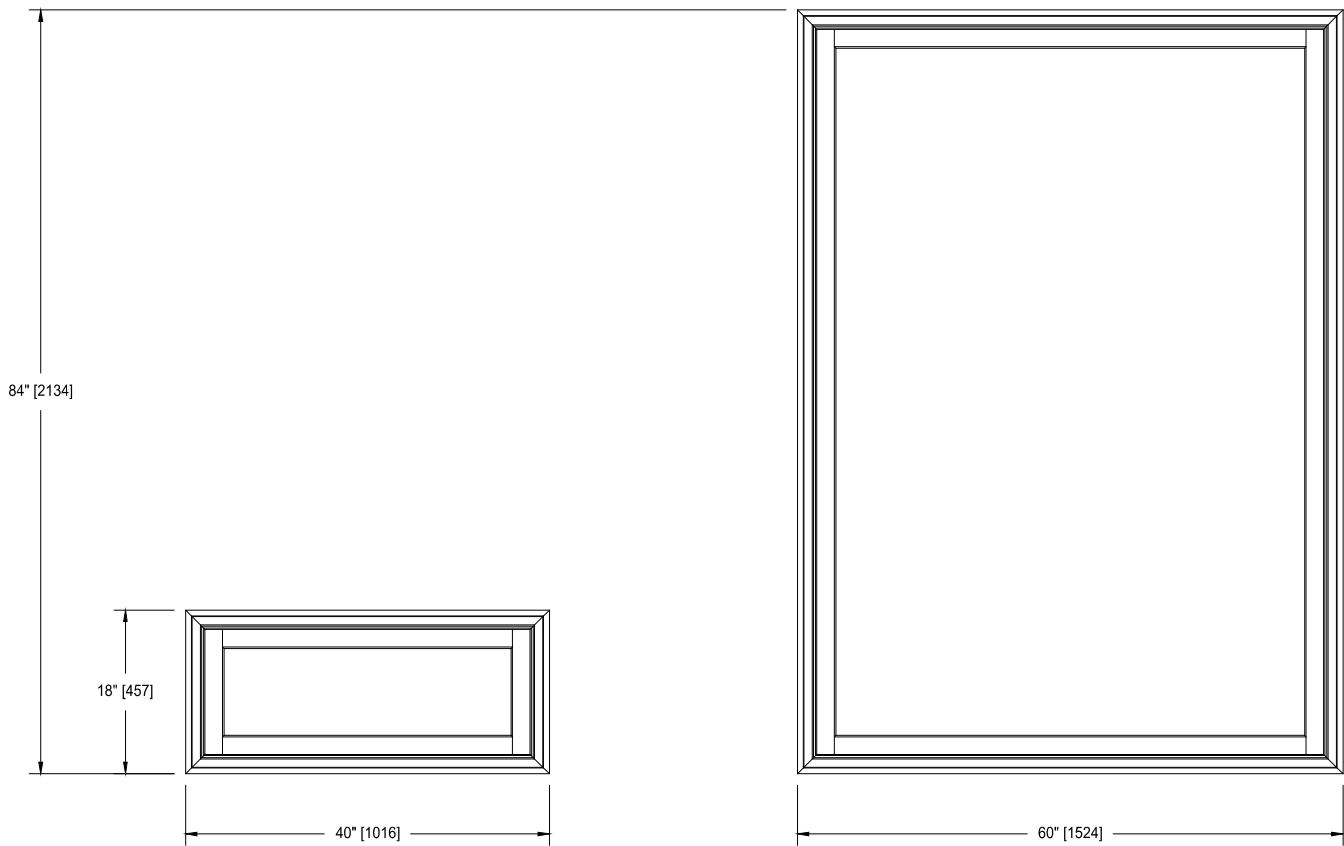
Standard widths for the Custom Clad Tilt & Turn:

24" (610 mm), 28" (711 mm), 30" (762 mm), 32" (813 mm), 36" (914 mm), 40" (1016 mm), 42" (1067 mm), 48" (1219 mm), 54" (1372 mm), 56" (1422 mm), 60" (1524 mm), 64" (1626 mm), 68" (1727 mm), 72" (1829 mm).

Standard heights for the Custom Clad Tilt & Turn:

20" (508 mm), 24" (610 mm), 28" (711 mm), 30" (762 mm), 32" (813 mm), 36" (914 mm), 40" (1016 mm), 42" (1067 mm), 48" (1219 mm).

MIN & MAX SIZING



Standard widths for the Custom Clad Picture Tilt & Turn:
40" (1016 mm), 42" (1067 mm), 48" (1219 mm), 54" (1372 mm), 56" (1422 mm), 60" (1524 mm).

Standard heights for the Custom Clad Picture Tilt & Turn:
20" (508 mm), 24" (610 mm), 28" (711 mm), 30" (762 mm), 32" (813 mm), 36" (914 mm), 40" (1016 mm), 42" (1067 mm), 48" (1219 mm), 54" (1372 mm), 56" (1422 mm), 60" (1524 mm), 64" (1626 mm), 66" (1676 mm), 72" (1829 mm), 84" (2134 mm).