

TECHNICAL DATA

DESCRIPTION: 2" (50.8mm) WIDE, TWO SIDED, STRUCTURAL SILICONE GLAZED THERMALLY BROKEN WALL SYSTEM, WITH 4" (101.6mm) MULLION BACK SECTIONS.

COMPATIBILITY: ADHESION TESTING OF SILICONE TO FINISHED SECTIONS IS RECOMMENDED BY THE SILICONE MANUFACTURERS. DESIGNED TO SUIT ALL DOORS AND DOOR HARDWARE.

FINISH: PROFILES STOCKED IN MILL FINISH ONLY. OTHER FINISHES ARE AVAILABLE, SAMPLES UPON REQUEST.

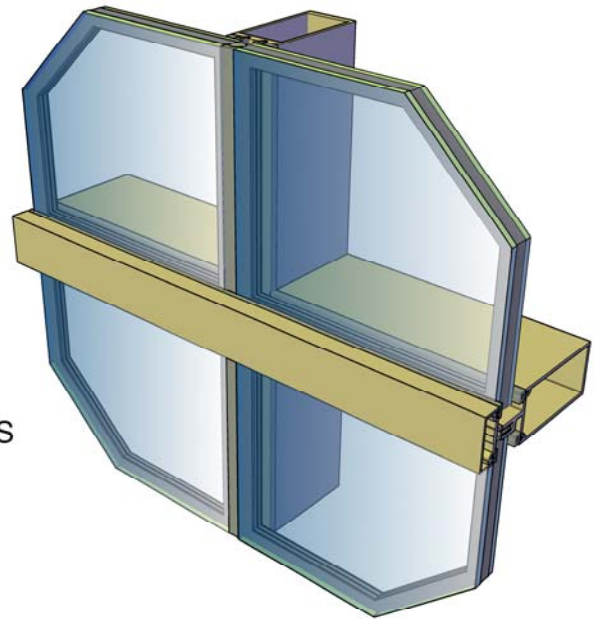
STOCK LENGTH: 24'-2" (7.37 METERS).

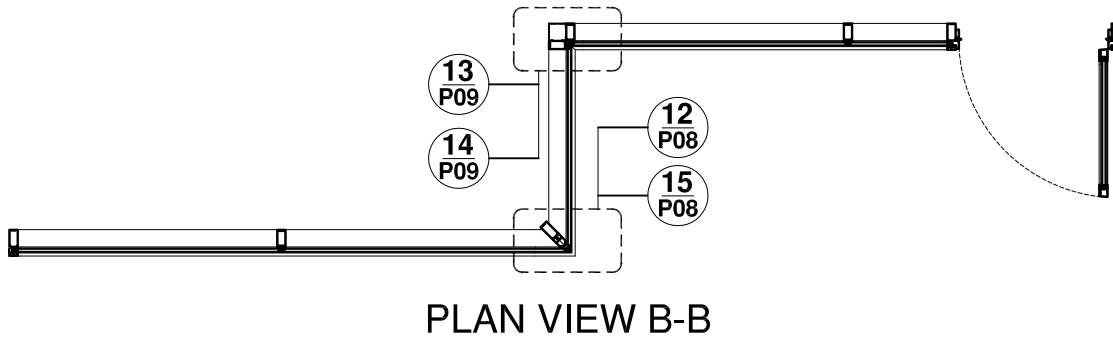
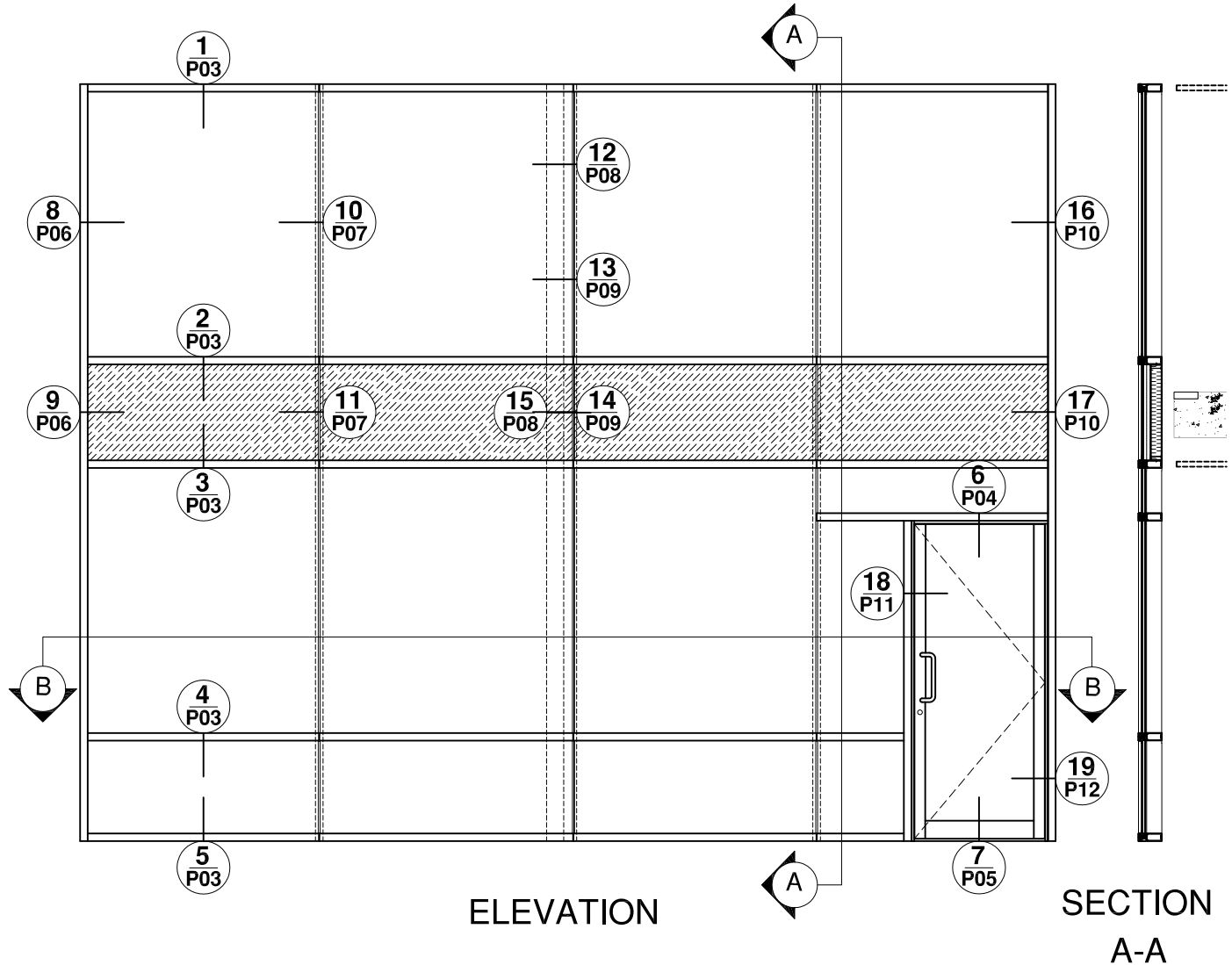
ASSEMBLY: DESIGNED FOR SHEAR BLOCK ASSEMBLY.

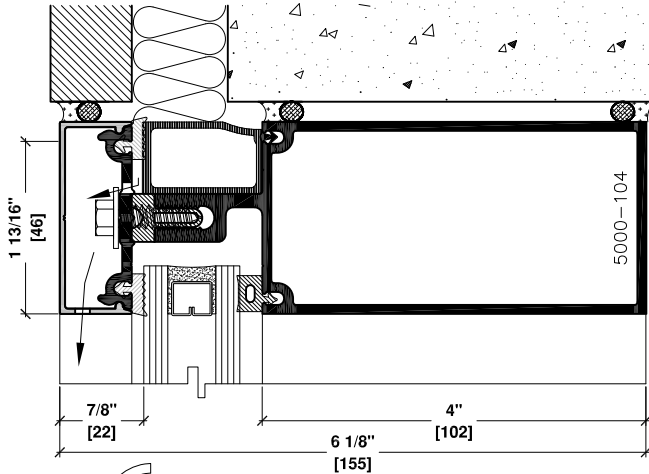
STRENGTH: REFER TO WIND LOAD CHARTS FOR MAXIMUM ALLOWABLE SPANS.

ANCHORING: REFER TO FABRICATION AND INSTALLATION MANUAL.

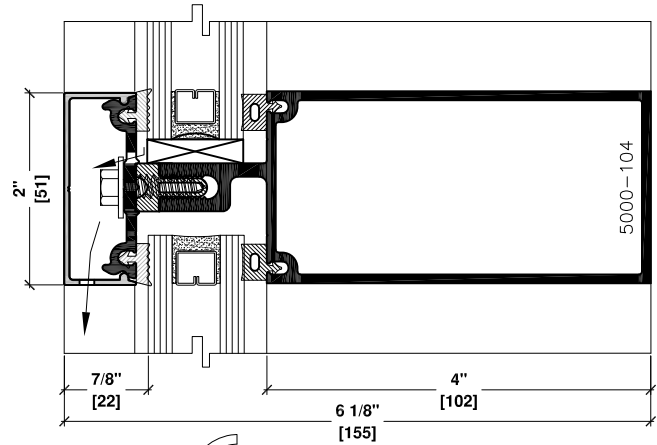
GLAZING: 5000 SSG SERIES IS AN EXTERIOR GLAZED SYSTEM WHICH WILL ACCEPT 1/4" (6mm) SINGLE GLASS AND 1" (25mm) SEALED UNIT GLASS



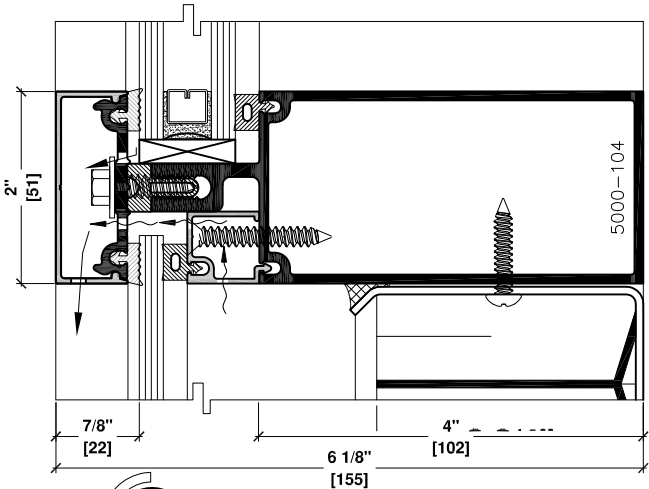




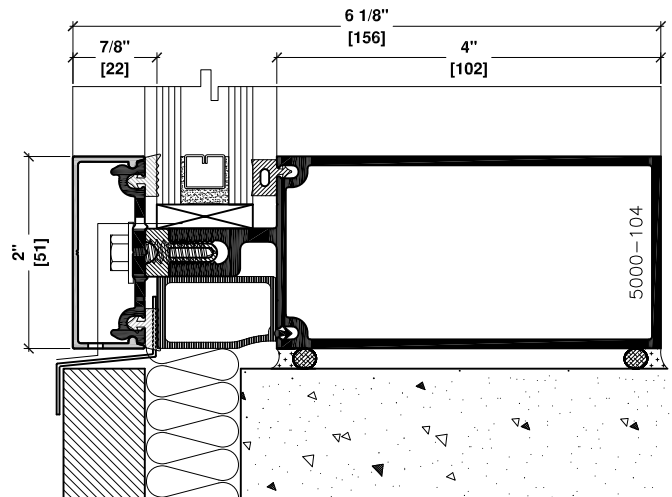
1 4" HORIZONTAL TUBE
FIXED GLASS
SLAB CONDITION



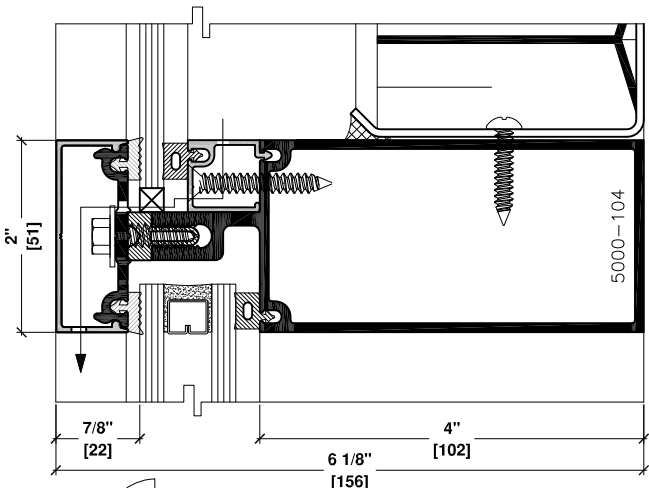
4 4" HORIZONTAL TUBE
FIXED GLASS/FIXED GLASS



2 4" HORIZONTAL TUBE
FIXED GLASS/SPANDREL

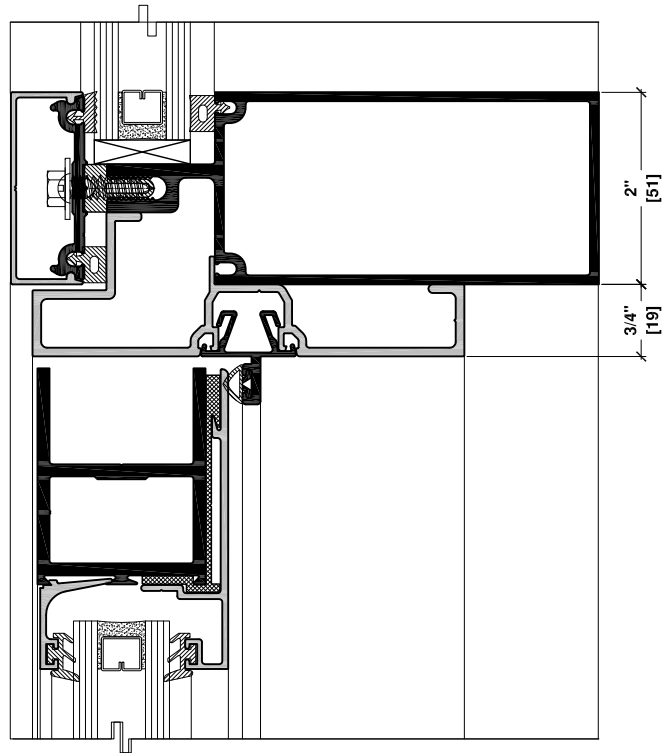


5 4" HORIZONTAL TUBE
FIXED GLASS
SLAB CONDITION

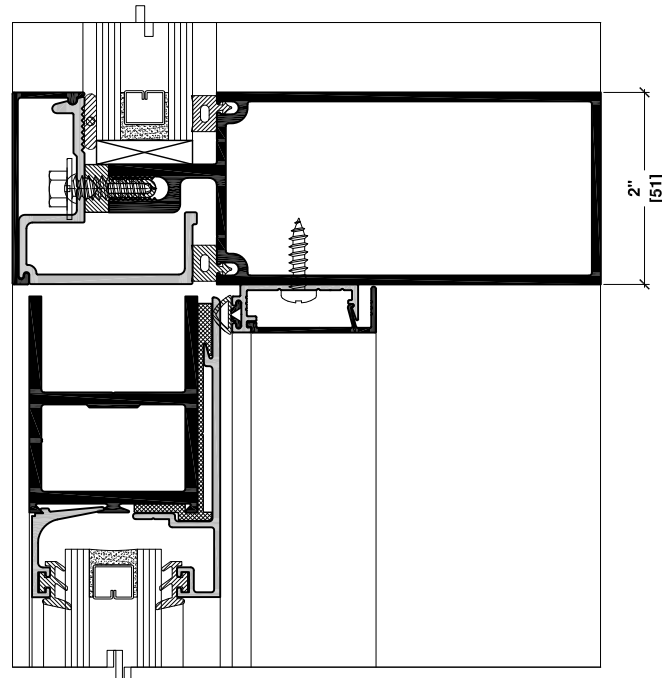


3 4" HORIZONTAL TUBE
SPANDREL/FIXED GLASS

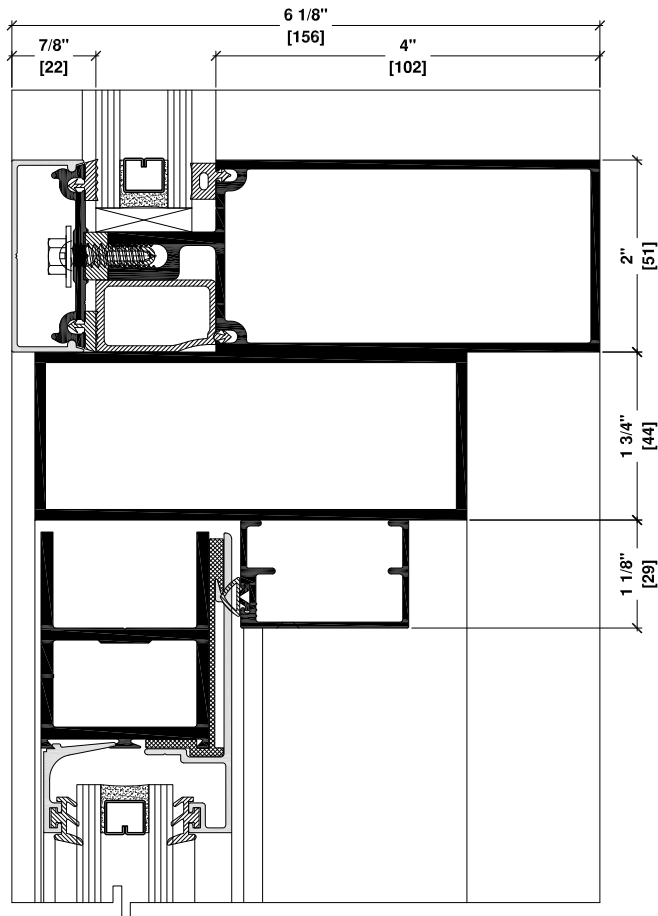
6 4" HORIZONTAL TUBE
SERIES 175 DOOR
HEADER ADAPTOR CONDITION



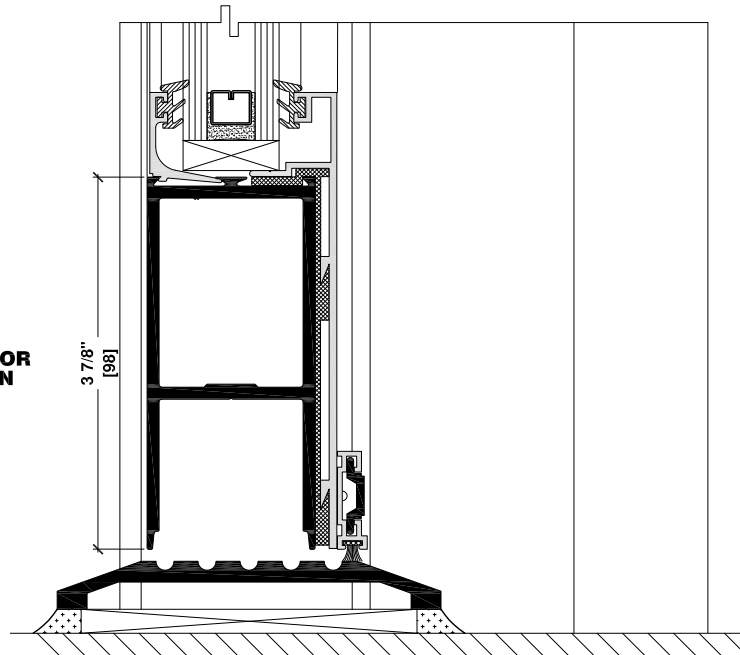
6a 4" VERTICAL TUBE
SERIES 175 DOOR
HEAD CONDITION

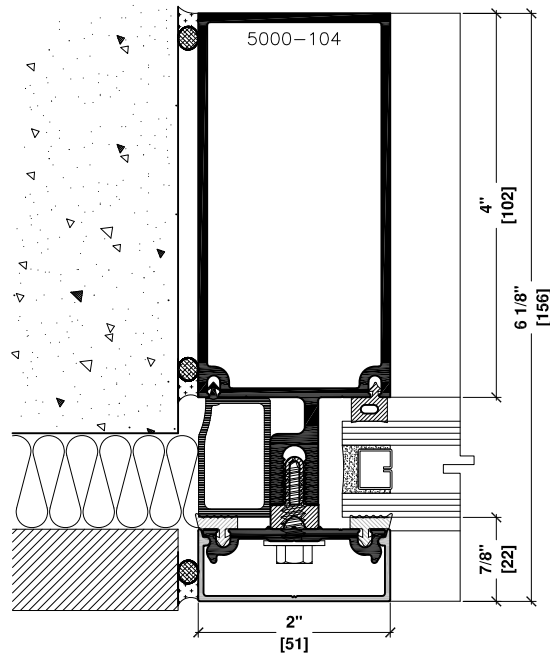


6b 4" VERTICAL TUBE
SERIES 175 DOOR
HEAD CONDITION

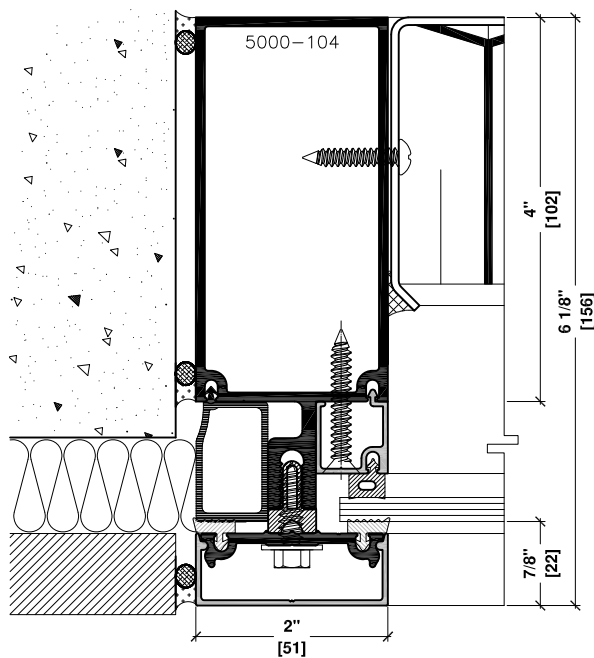


7 SERIES 175 DOOR
SILL CONDITION

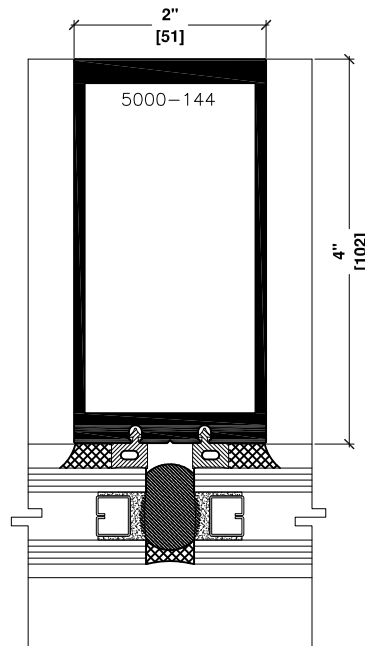




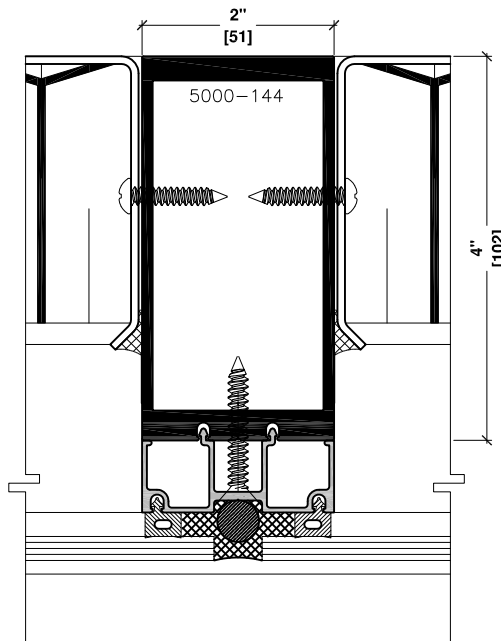
8 4" HORIZONTAL TUBE
FIXED GLASS
JAMB CONDITION



9 4" VERTICAL TUBE
SPANDREL
JAMB CONDITION

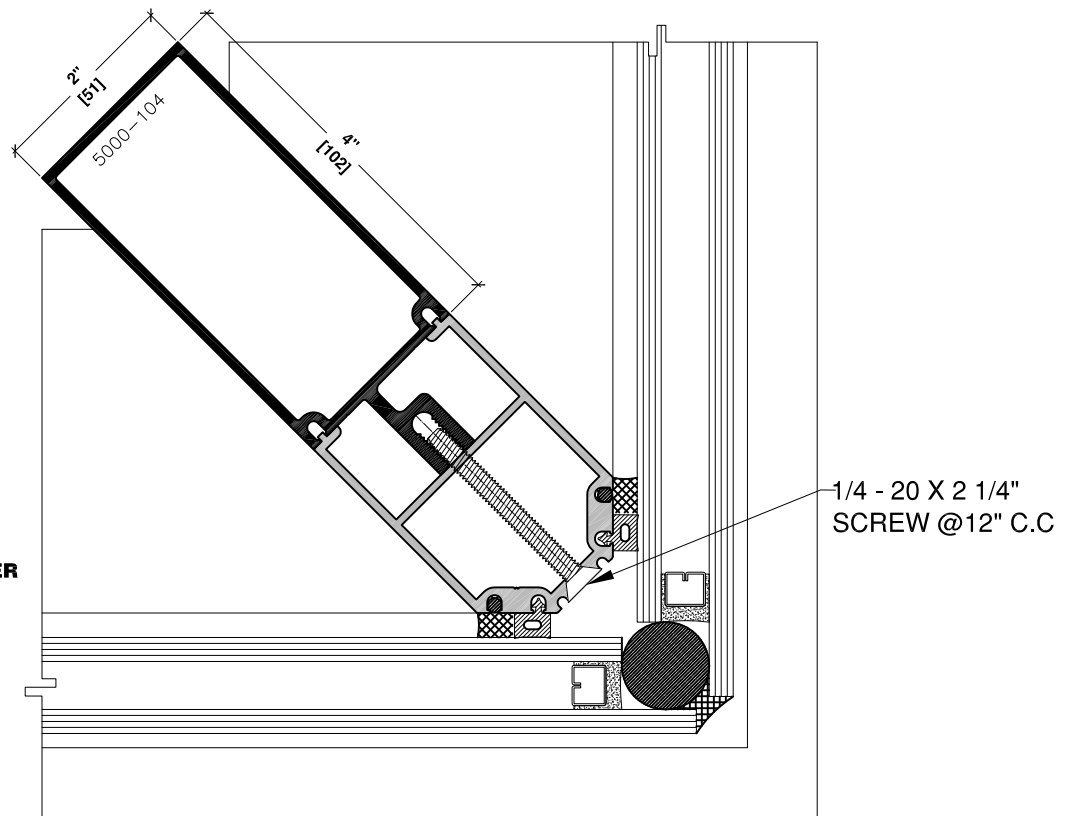


10 4" HORIZONTAL TUBE
FIXED GLASS
SLAB CONDITION

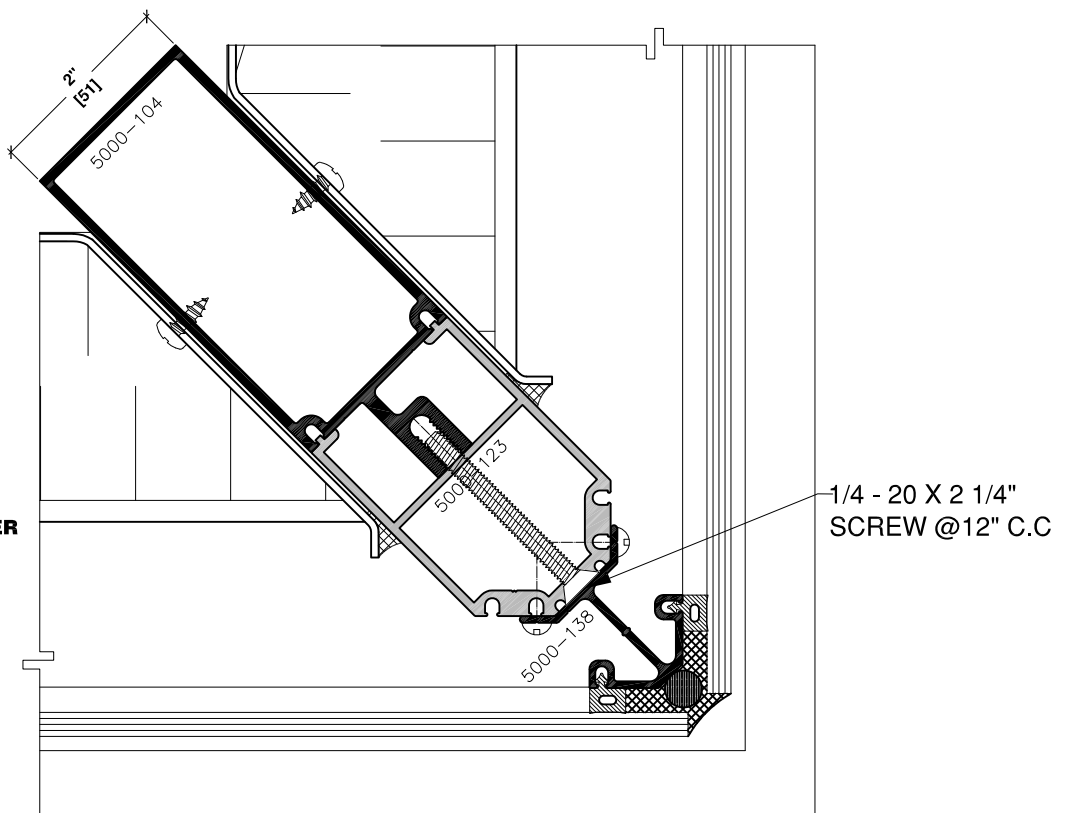


11 4" VERTICAL TUBE
SPANDREL-SPANDREL

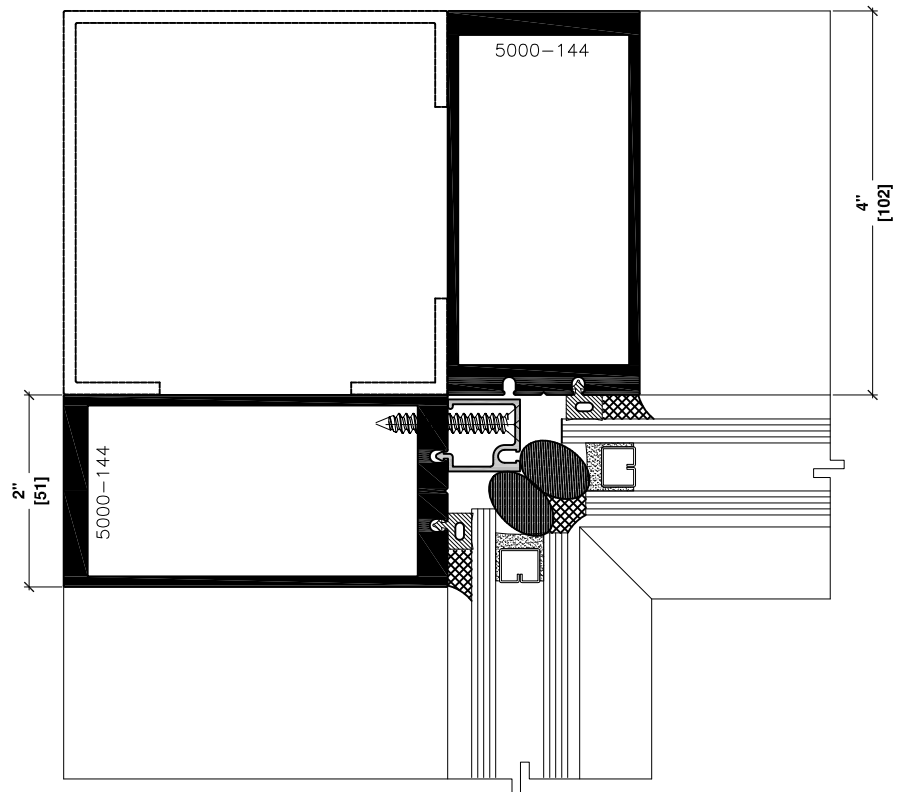
12 4" VERTICAL TUBE
FIXED GLASS
90° OUTSIDE CORNER



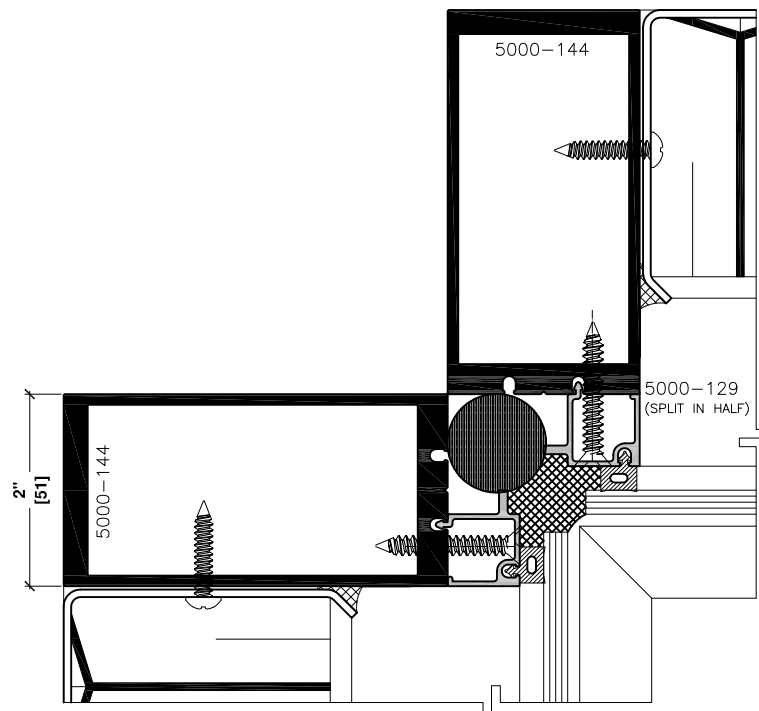
15 4" VERTICAL TUBE
SPANDREL
90° OUTSIDE CORNER



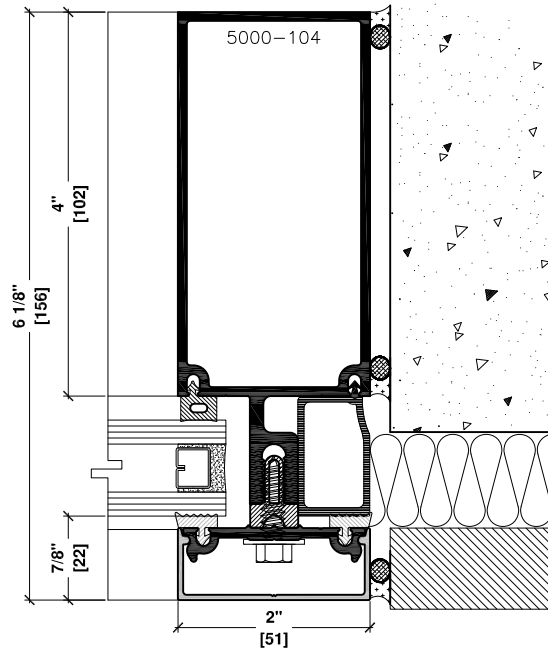
13 4" VERTICAL TUBE
FIXED GLASS
90° INSIDE CORNER



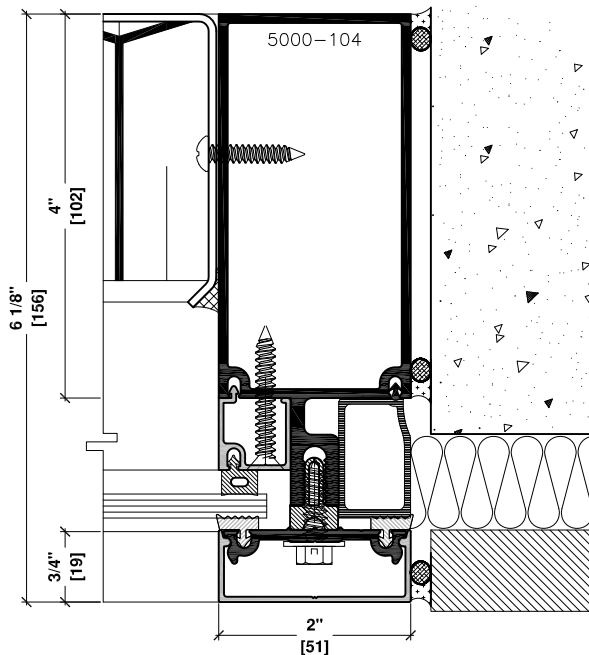
14 4" VERTICAL TUBE
SPANDREL
90° INSIDE CORNER



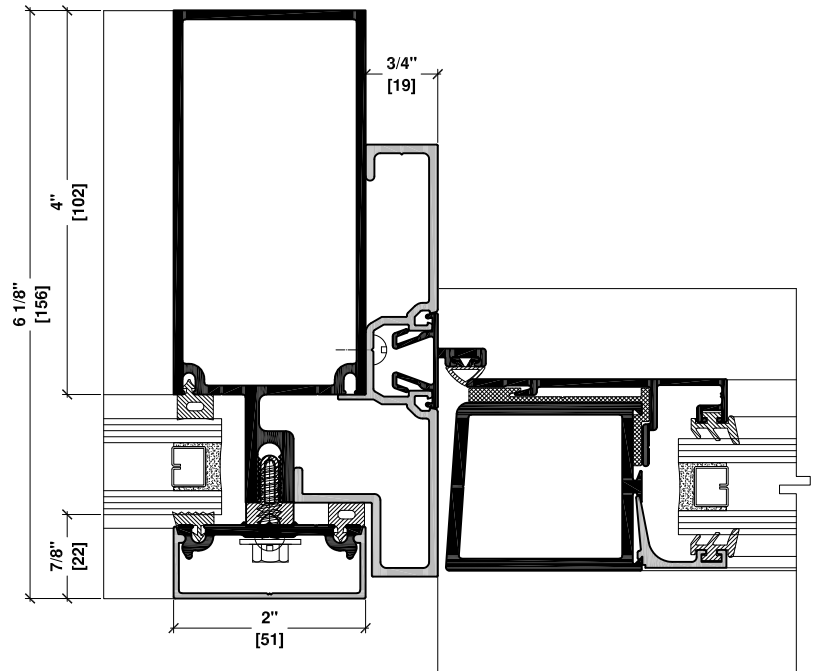
16 4" VERTICAL TUBE
FIXED GLASS
JAMB CONDITION



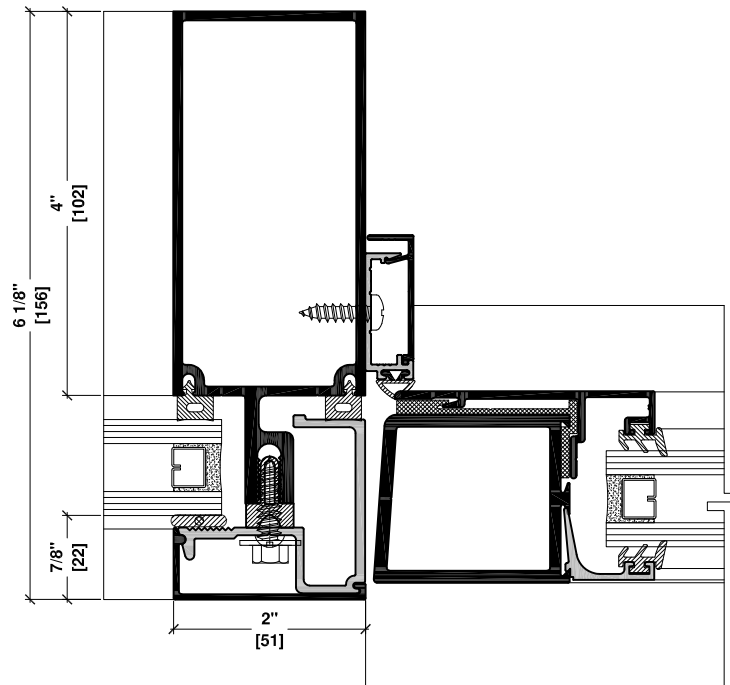
17 4" VERTICAL TUBE
SPANDREL
JAMB CONDITION

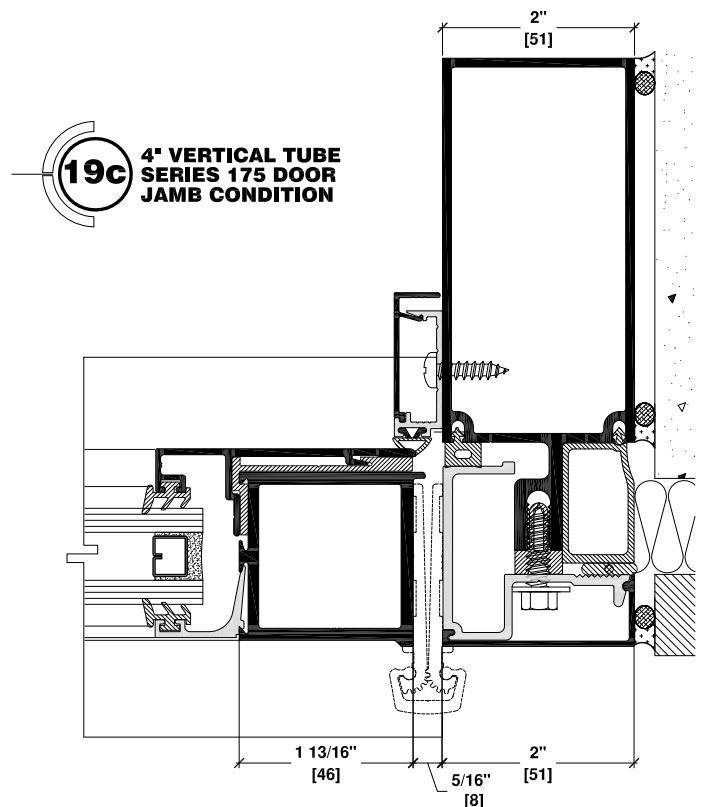
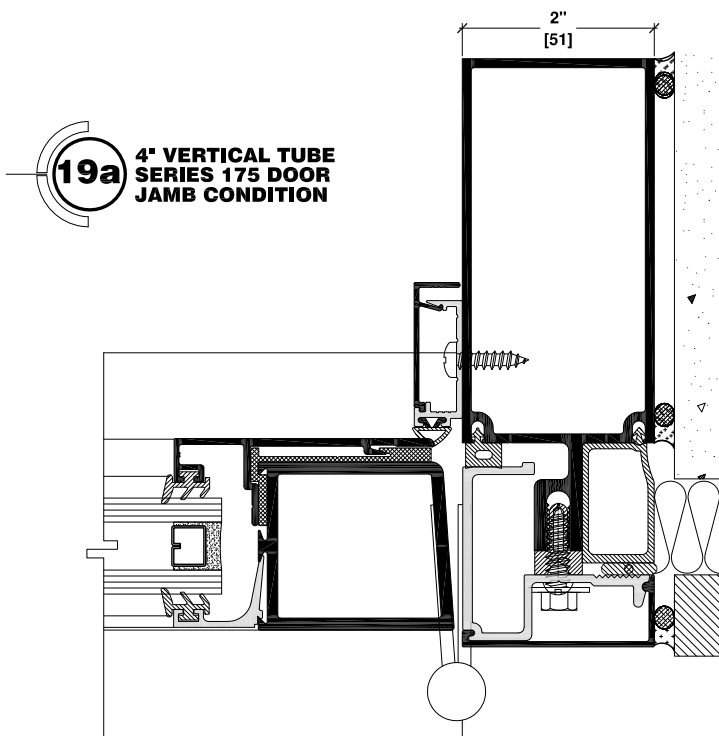
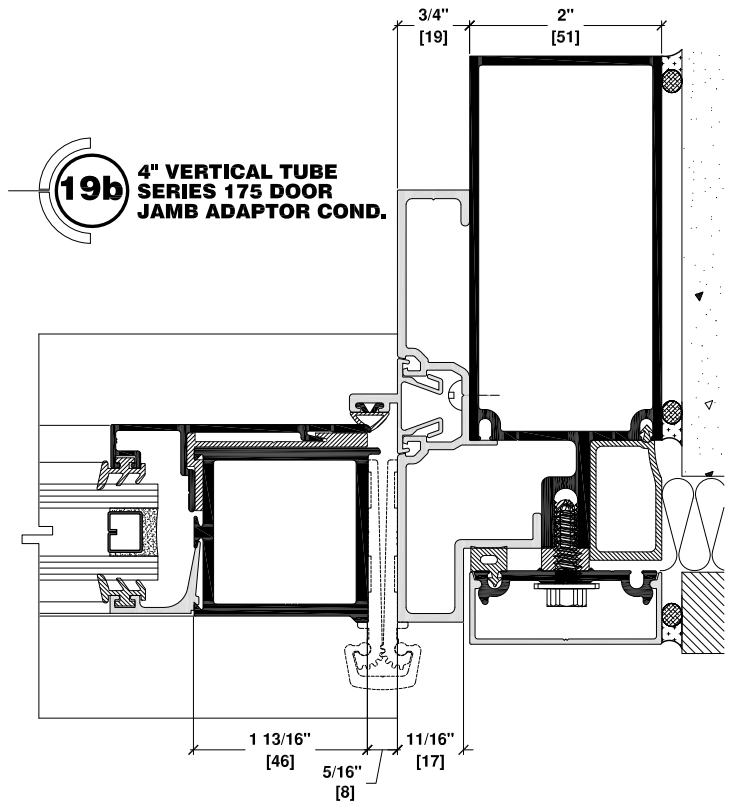
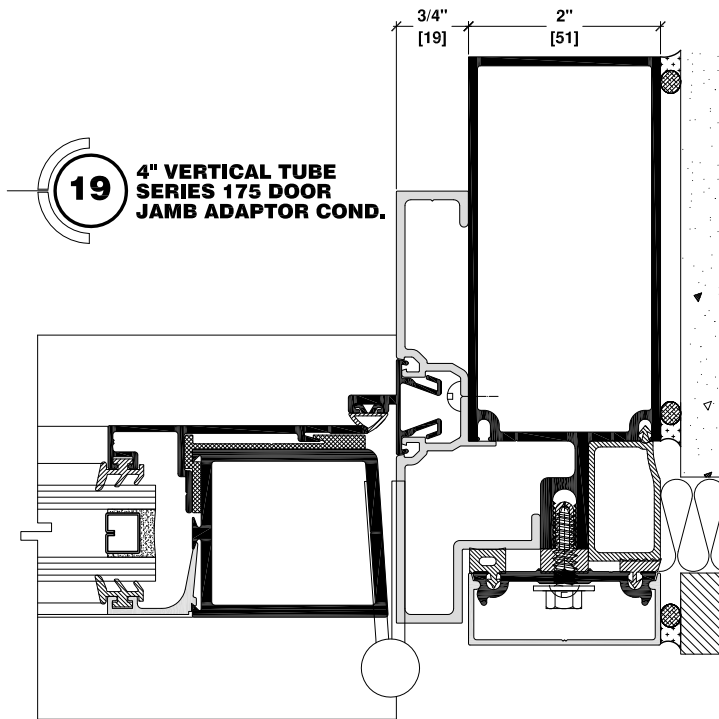


18 4" VERTICAL TUBE
SERIES 175 DOOR
JAMB ADAPTOR CONDITION

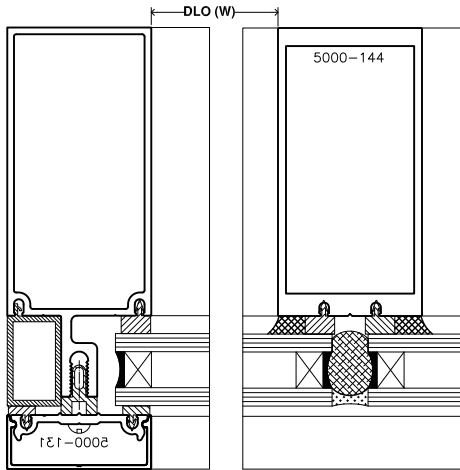


18a 4" VERTICAL TUBE
SERIES 175 DOOR
JAMB CONDITION





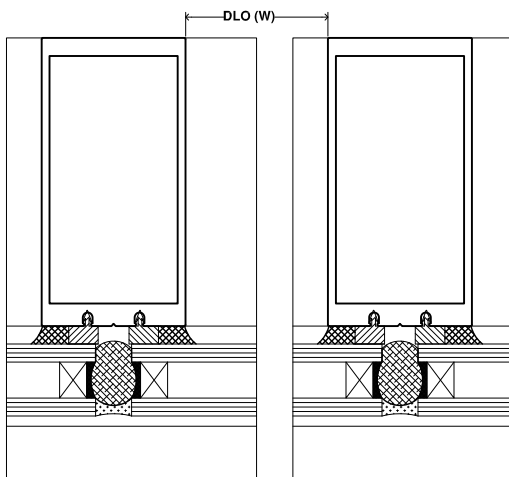
GLASS CALCULATION



JAMB

$$\begin{aligned} &1/4" (6\text{mm}) \quad \text{Glass (W)} = \text{DLO(W)} + 1\frac{1}{4}" \\ &1" (25.4\text{mm}) \quad (31.75\text{mm}) \end{aligned}$$

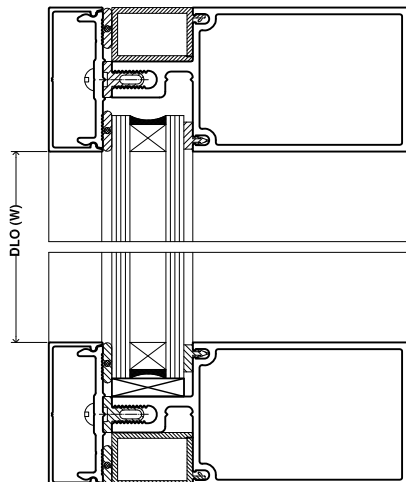
Note: use the appropriate spline



VERTICAL MULLION

$$\begin{aligned} &1/4" (6\text{mm}) \quad \text{Glass (W)} = \text{DLO(W)} + 1\frac{1}{2}" \\ &1" (25.4\text{mm}) \quad (38.1\text{mm}) \end{aligned}$$

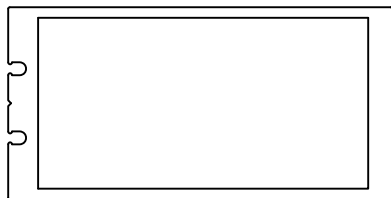
Note: use the appropriate spline



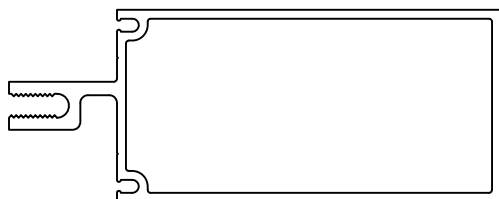
HORIZONTAL MULLION

$$\begin{aligned} &\text{Glass (W)} = \text{DLO(W)} + 1" (25.4\text{mm}) \\ &\text{Glass (H)} = \text{DLO(H)} + 1" (25.4\text{mm}) \end{aligned}$$

Note: use the appropriate spline



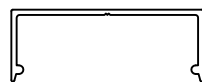
PART #: 5000-144
MULLION 4" (101.6mm) SSG
2" X 4"
(50.8mm X 101.6mm)
[WIND LOAD CHART](#)



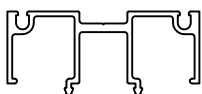
PART #: 5000-104
MULLION 4" (101.6mm)
2" X 4"
(50.8mm X 101.6mm)
[WIND LOAD CHART](#)



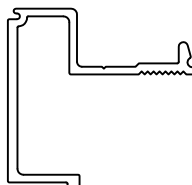
PART #: 5000-111
ADAPTOR
SINGLE GLAZED
1/4" (6mm) GLASS



PART #: 5000-130
SNAP ON CAP
3/4" (19mm)



PART #: 5000-129
ADAPTOR SSG
SINGLE GLAZED
1/4" (6mm) GLASS



PART #: 5000-121
DOOR ADAPTOR
FLUSH



PART #: 5000-131
PRESSURE PLATE
FOR DRY GLAZING



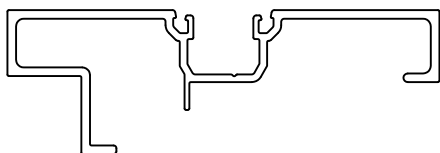
PART #: 5000-122
SNAP ON CAP
FOR PART #: 5000-121



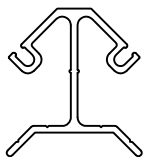
PART #: 1450-014
DOOR STOP
FOR 1 $\frac{3}{4}$ " (44.5mm)
DOOR



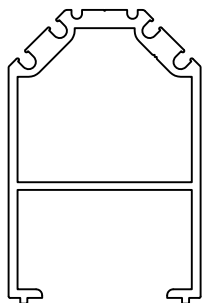
PART #: 1450-015
DOOR STOP
FOR 2" (50.8mm)
DOOR



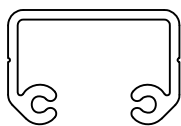
PART #: 5000-116
DOOR ADAPTOR
3/4" X 4-1/2"
(19.0mm X 114.3mm)





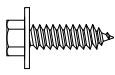

PART #: 5000-138
SINGLE GLAZED
ADAPTOR SSG FOR
90° OUTSIDE CORNER

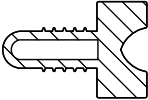



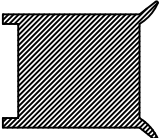
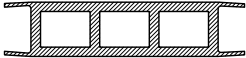
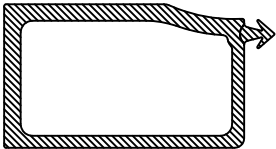




PART #: 5000-123
ADAPTOR
FOR 90°
OUTSIDE CORNER



5000 SERIES
SHEAR BLOCK
PART #: 5000-904 FOR 4" MULLION

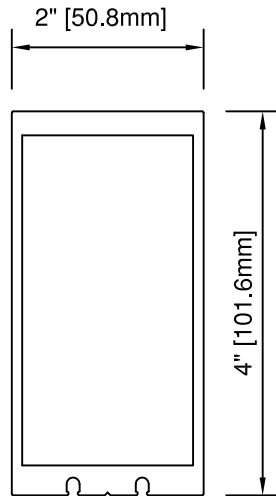
DRAWING	DESCRIPTION	APPLICATION	QTY/ JOINT
	PART #: 9902-400 # 10 X 1/2" RH SCREW	FASTEN DOOR ADAPTOR TO MULLION	2-3
	PART #: 9902-102 # 6 X 1" FH SCREW	FASTEN S. G. ADAPTOR TO MULLION	2 @ 24" C/C
	ART #: 9902-009# 1/4-20 X 1" HEX WASHER MACHINE SCREW	FASTEN PRESSURE PLATE TO MULLION	@ 4" C/C
	PART #: 9902-503 # 10 X 1" PH SCREW	FASTEN SHEAR BLOCK TO VERTICAL	2-3

DRAWING	DESCRIPTION	APPLICATION
	PART #: 9903-005 THERMAL BREAK SSG (GREY)	THERMAL BARRIER
	PART #: 9903-103 1/4" GLAZING SPLINE	APPLY TO MULLION
	PART #: 9903-104 1/8" GLAZING SPLINE	APPLY TO PRESSURE PLATE
	PART #: 9904-001 1/8" POLYSHIM TAPE BY TREMCO	APPLY TO WET GLAZED PRESSURE PLATE
	PART #: 9903-302 CORNER PLUG SSG (GREY)	APPLY ONE TO EACH CORNER
	PART #: 9903-215 SPACER FOR VERT.MULLION	APPLY TO HORIZ. BETWEEN OPENINGS
	PART #: 9906-108 POCKET FILLER (GREY)	APPLY INTO THE OUTSIDE POCKET OF EACH PERIMETER
	PART #: 9903-138 DOOR BULB SEAL REMOVABLE	APPLY TO THE DOOR STOP
	PART #: 9903-143-00 BULB-SEAL FOR DOOR STOP	APPLY TO THE DOOR STOP

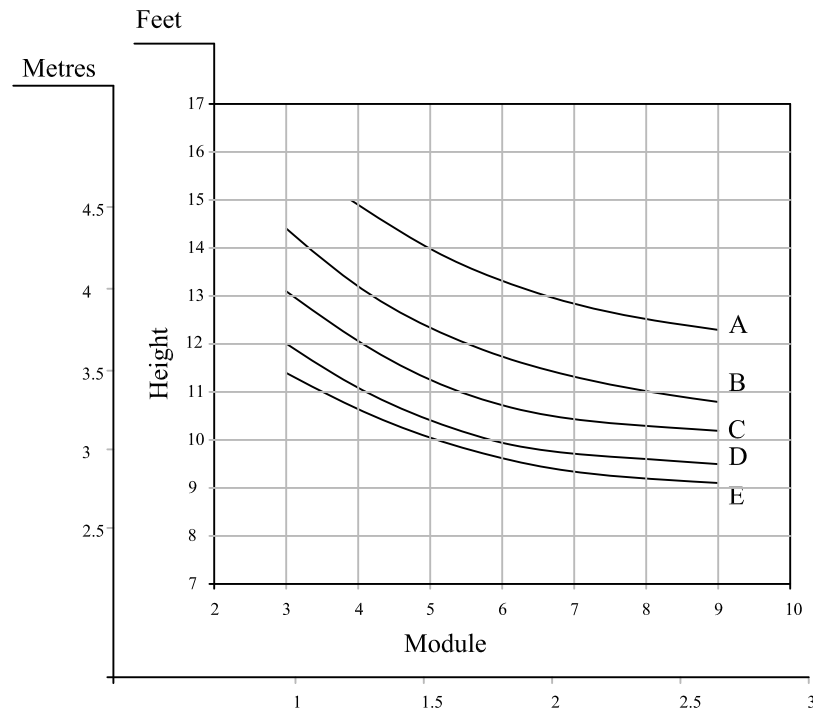
AWSF TEST RESULTS

TEST	RESULTS
Air Leakage Rate Test Pressure 300 Pa (5.20 psf)	0.263 m ³ /h/m ² (0.062 ft ³ /min/ft ²)
Water Pressure Achieved	700 Pa (14.62 psf)
Maximum Structural Pressure Achieved	Test Pressure of 2000 Pa (60 psf)

5000 -144
MULLION 4"(101.6mm) SSG
2" x 4" (50.8mm x 101.6mm)



A = 10 psf (0.479 KPa)
B = 15 psf (0.718 KPa)
C = 20 psf (0.958 KPa)
D = 25 psf (1.200 KPa)
E = 30 psf (1.437 KPa)



5000 SSG SERIES CURTAIN WALL SYSTEM SPECIFICATION

PART 1 - GENERAL

1.1 Work Included

Furnish labour, materials and services for the complete fabrication, assembly and installation of Series 5000 SSG Framing system manufactured by Commdoor Aluminum. Work to include all necessary accessories, anchors and sealants as required based on the purchase agreement.

1.2 Work Excluded

Structural steel, wood blocking or framing, interior trims, concrete masonry, final cleaning, protection, related work specified elsewhere, convactor covers and trims and ceiling trims.

1.3 Design

The 5000 SSG Series Curtain Wall System to be designed based on the "Open Rain Screen" and "Pressure Equalization" principles

1.4 Performance

Deflection of the vertical mullion to be $< 1/175$ of the span at the specified pressure level.

Permanent Deformation of vertical mullion to be $< 0.2\%$ of the Length of the mullion.

Air Leakage should not exceed $0.06 \text{ (ft}^3\text{/min)/ft}^2$.

1.5 Quality Assurance

The 5000 SSG Series 2" CURTAIN WALL System supplied under this specification must comply to the performance requirements of the Canadian Standards Association CAN3-A440-M90, classification fixed, B7, C5, I=52.1. A copy of the test report from an independent testing laboratory certifying compliance must be furnished upon request by the owner/architect.

1.6 Shop Drawings

All work of this section shall be executed in strict accordance with approved shop drawings.

1.7 Warranty

The work of this section shall be guaranteed against defects of materials and workmanship for a period of one year from date of certificate

of substantial completion.

PART 2 - PRODUCTS

2.1 Material

2.1.1 Aluminum Extrusion

A) All extruded aluminum sections to be 6063-T6 alloy or equivalent.

B) Frame members (back section) size will be 4" (101.6mm) only.

2.1.2 Thermal Break

If applicable, extruded virgin polyvinyl chloride (P.V.C).

2.1.3 Glazing Material

Exterior Glazing:

1) Macro-polyisobutylene tape with a continuous built in shim; highly adhesive and elastic, or

2) Extruded thermoplastic elastomers gasket.

Interior Glazing:

Extruded thermoplastic elastomers gasket.

2.1.4 Fasteners

Fasteners shall be zinc plated.

2.2 Fabrication

Fabrication will be carried out according to the approved shop drawings. All joints will be assembled tight using manufactures provided assembly brackets to maintain the product design performance.

2.3 Finish

2.3.1 Anodize

Anodic Oxide Treatments are to be processed in accordance with AAMA designations.

M12C22A31 class II designation is for #17 Clearanodized finish (0.0004). M12C22A41 class I designation is for #14 Clear Anodized finish (0.0007) and colour finishes such as #26 light bronze, #40 bronze and #29 black.

2.3.2 Paint

Thermosetting Acrylic Enamel coating are to be applied in accordance with AAMA 603.8. Specify colour and type from PPG. Standard charts.

2.3.3 Fluoropolymer paint Coating

Based on Kynar 500 Resins are to be applied in accordance AAMA 605.2. Specify colour from Valspar current chart.

PART 3 - EXECUTION

3.1 Protection

Aluminum shall be isolated from concrete, mortar, plaster and dissimilar materials with a coating of Bituminous paint. Exposed aluminum surface shall be protected from long term contamination of mortar,

concrete, paint, mud, etc.

Doors and door frames shall be protected from impact damage by wood sheathing and plastic wraps.

3.2 Installation

Comm-door products to be installed according to manufacturers instructions and in conjunction with approved shop drawings. The work shall be performed by qualified skilled personnel using proper equipment in order to expedite the project in an efficient professional manner.

3.3 Cleaning

Interim and final cleaning shall be performed in accordance with the general conditions listing methods outlined in AAMA 609 & 610-02 (2002).