

Part 1 - GENERAL

Scope - The curtain wall framing system shall be _____ Series as manufactured by METRO ALUMINUM Products Ltd. Supply and install aluminum framing, as described on the architectural drawings and as specified herein.

Work Not Included - See: Specifier's lists of excluded items; Items furnished but not installed and/or Items installed but not furnished.

Related Work Specified Elsewhere - See: Specifier's lists and related Sections.

Design & Performance Requirements - Framing to fully comply with applicable standard specifications as typically referenced to the following performance requirements criteria: Air Tightness, Water Tightness, Wind (and other applicable) Load Resistance, Temperature Index and Energy Performance. (Specifier's selection)

Submittals - Shop Drawings & Samples - Submit all documentation and samples for review by Consultant at one time, prior to fabrication of curtain wall products.

Quality Assurance - Provide all necessary information to show that all involved products meet or exceed the requirements of these specifications.

Delivery, Storage and Handling - Deliver, store, handle, protect and schedule materials and products so as to avoid any damage. Follow recommendations of AAMA CW-10 "Care and Handling of Architectural Aluminum from Shop to Site" and others as applicable.

Part 2 - PRODUCTS

Materials - All materials to meet the applicable minimum design and specifications requirements. Any defects impairing strength, durability or appearance are not acceptable. Extruded aluminum shall be AA 6063 T6 alloy and temper - Fy = 110 MPa (16 KSI) minimum. Sufficient strength and size assembly fasteners and anchoring bolts shall be made of corrosion-resistant and compatible material such as cadmium or zinc plated carbon steel or stainless steel. Separate incompatible materials and prevent galvanic action (electrolytic corrosion). Structurally adequate anchoring metal brackets shall be anticorrosive painted. Standard gaskets, dense exterior and sponge interior, shall be extruded from Neoprene, EPDM, or other equal material as required for conventional dry-dry, outside glazing method. Gasket profile shall be designed and sized to uniformly fit tight and properly seal glass-metal interfacing. Acceptable gasket compression range to be 0.7 to 1.7 kN/m (4 – 10 lbs/in). Glass setting to be compatible with glass unit seals and/or other parts involved as required.

System Description - Framing System, thermally broken/insulated for sealed insulating glass units and spandrel single glass, utilizing Rainscreen Principle and allowing for full integration with the building envelope, shall be 2400/2500 - METRO Series (Specifier's selection) as manufactured by METRO ALUMINUM Products Ltd.

Reference dimensions of extruded profiles shall be (Specifier's selection):

2400 Series - 2" (50.8 mm) face width, and
2500 Series - 2.5" (63.5 mm) face width.

Glass retention, as for dry-dry glazing method, shall be achieved by 4-side pressure plate (retainer) profile and inorganic rubber gasket. Glass hard bite to be 12.7 mm (0.5") minimum.

Whenever substitute/alternative products are considered, supporting data to be submitted ten (10) days prior to bid date to allow for valid comparison. Approval of alternates to be confirmed in advance of bid closing by addendum only.

Fabrication - Extruded profiles shall be accurately fabricated and assembled and sealed to provide air/water tight fit hairline joints only. Fastening shall allow for permanent true and square set of frame elements. Assembly shall utilize concealed spigots and screws and/or screws only. Properly sealed frame assembly joints and corner blocks to result in continuity of air barrier and full compartmentization. Frame assemblies shall be free of warp. Uniformly compressed glazing gaskets shall secure glass in place. No exposed fasteners are permitted.

Finish - All exposed surfaces shall be finished as specified. The finish, as per AAM designation, shall be (Specifier's selection):

Standard clear anodizing to AA - M12C22A31

Standard perma bronze to AA - M12C22A44

Standard black anodized to AA - M10C21A44

Duracron acrylic enamel to AA - M12C4XR1X

Custom paint qualities and colors - Specifier's selection.

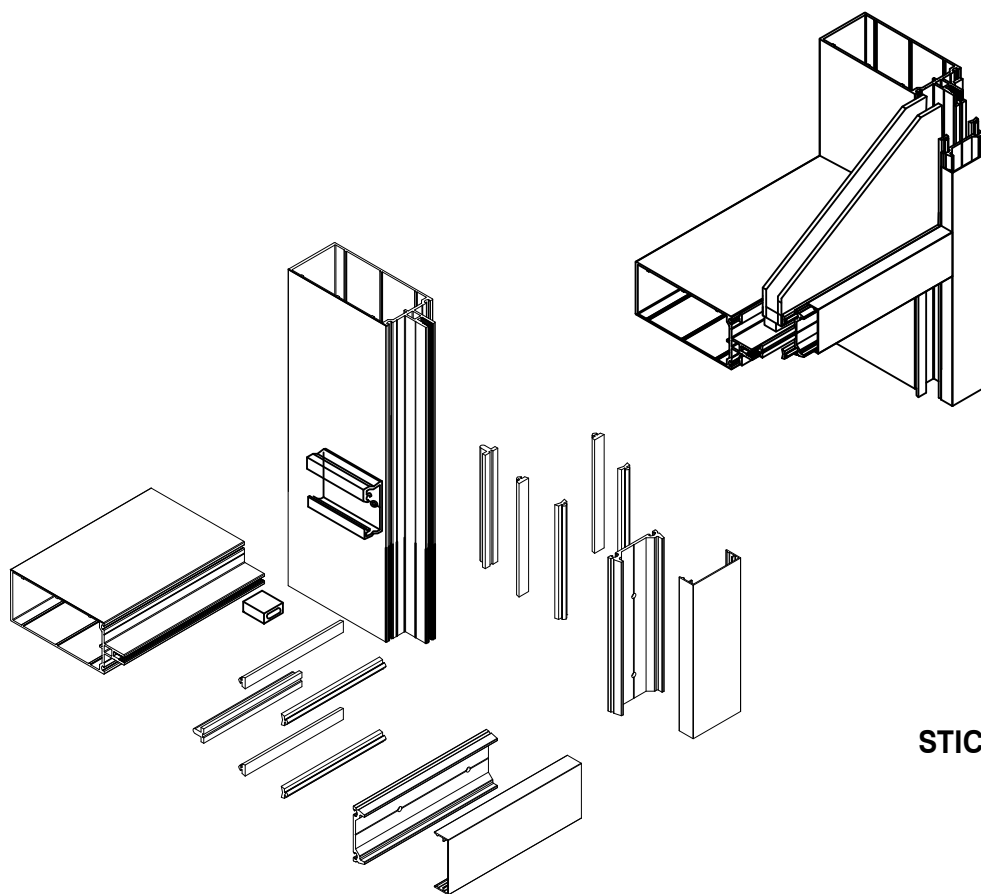
Hardware to have manufacturer's standard finish.

Part 3 - EXECUTION

Installation - Steel embeds and anchoring brackets to be placed and ready as required. Anchoring shall suit perimeter conditions of rough openings and seals as required. Stick or prefabricated framing to be installed at prepared structure, at correct locations as shown on drawings, set level, plumb, square and aligned with other work in accordance with manufacturer's instructions, approved shop and erection drawings. Perimeter joints to be sealed/caulked as specified and detailed to ensure weathertight assembly.

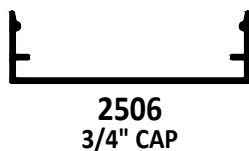
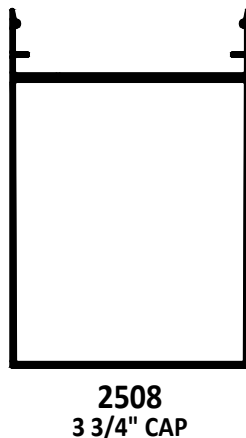
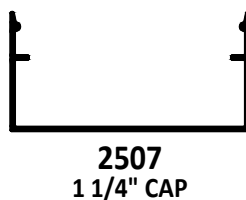
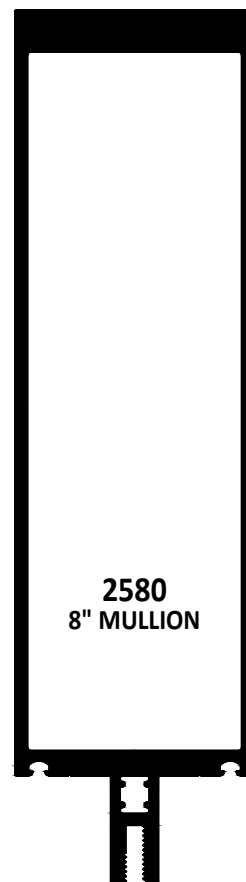
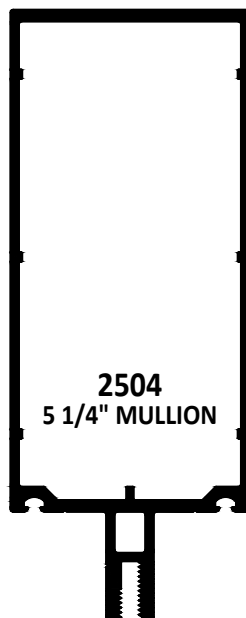
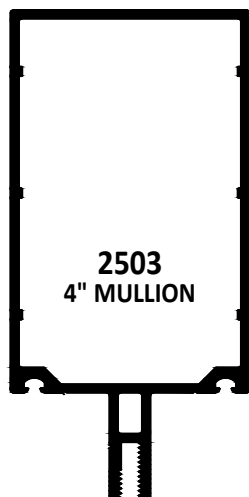
Protection and Cleaning - Work to be protected from damage during and after installation. Consult with manufacturer and installer to determine appropriate protective measures. The General Contractor shall be responsible for protection during construction and for final cleaning. After installation, aluminum work and glass to be cleaned according to instructions/manuals provided by product manufacturers and glaziers. Use appropriate cleaning materials and methods. Do not scratch or damage glass or finishes.

PICTORIAL (3D) PRESENTATION

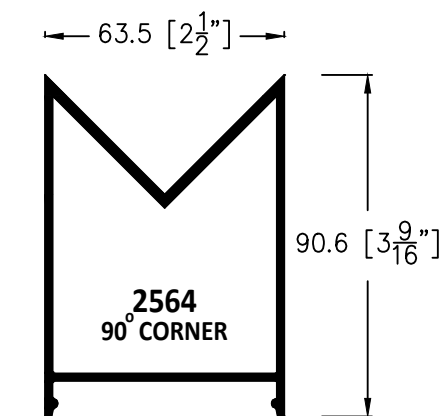
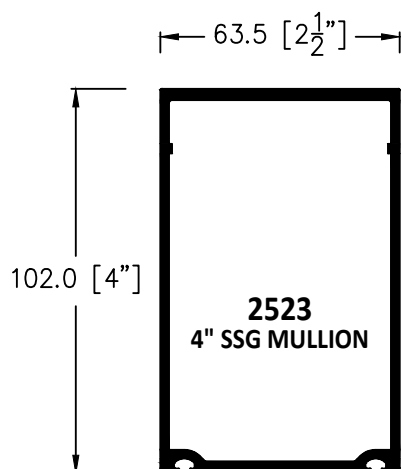


STICK SYSTEM FRAMING

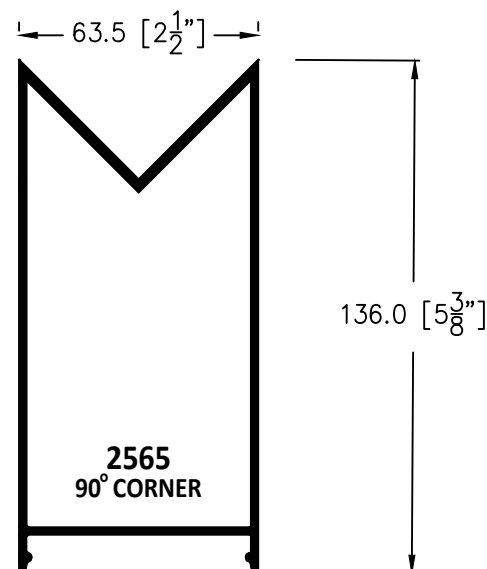
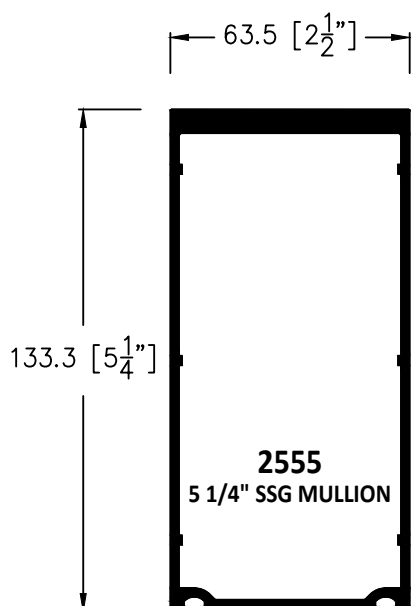
BACK SECTIONS



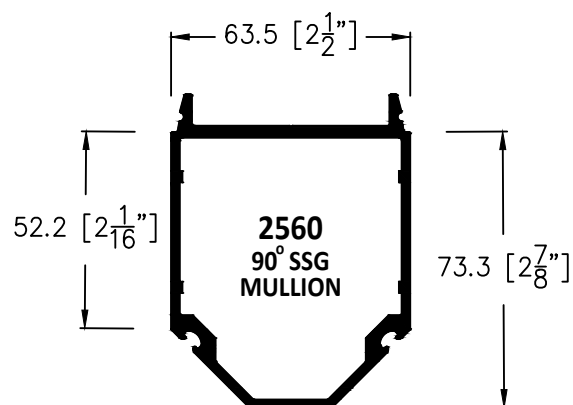
SSG COMPONENTS



EXTENSION CAP FOR 4" BACK



EXTENSION CAP FOR 5 1/4" BACK





**METRO
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Products Ltd.

2500 SERIES

CURTAIN WALL & WINDOW SYSTEM
2 1/2" (63.5 mm) - FRAME

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23**

MISC. COMPONENTS



2410
THERMAL BREAK



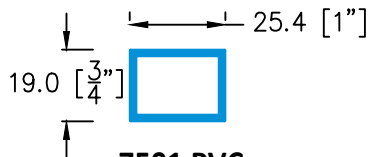
2515
CORNER BLOCK



2460
SPONGE GASKET
(INTERIOR)

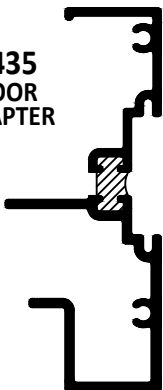


2450
DENSE GASKET
(EXTERIOR)



7501 PVC
ANTI-ROTATION

2435
DOOR
ADAPTER



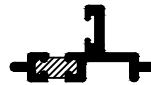
2520
SPIGOT



2409
SINGLE GLASS
ADAPTOR



2417/2418
SURFACE APPLIED
DOOR STOP



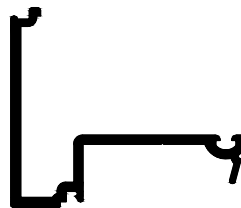
20120T
DOOR STOP
FOR 2" DOORS



2430
BACK-PAN
ADAPTOR



2012T
DOOR STOP
FOR 1 3/4" DOORS



2517
FLUSH DOOR
ADAPTOR



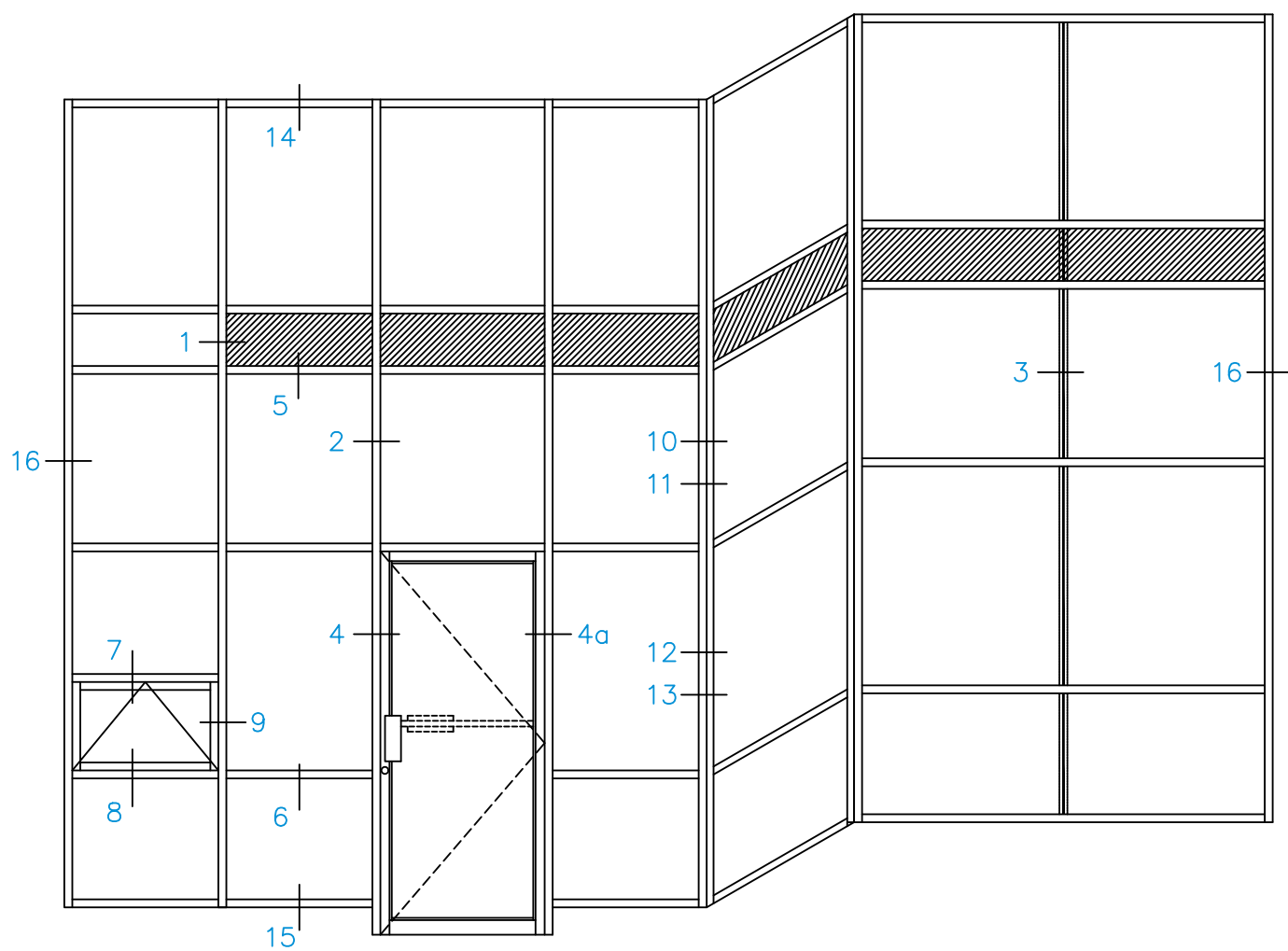
2518
FLUSH DOOR
ADAPTOR CAP



5102
1" X 2" PERIMETER ANGLE



5103
1" X 3" PERIMETER ANGLE



ELEVATION



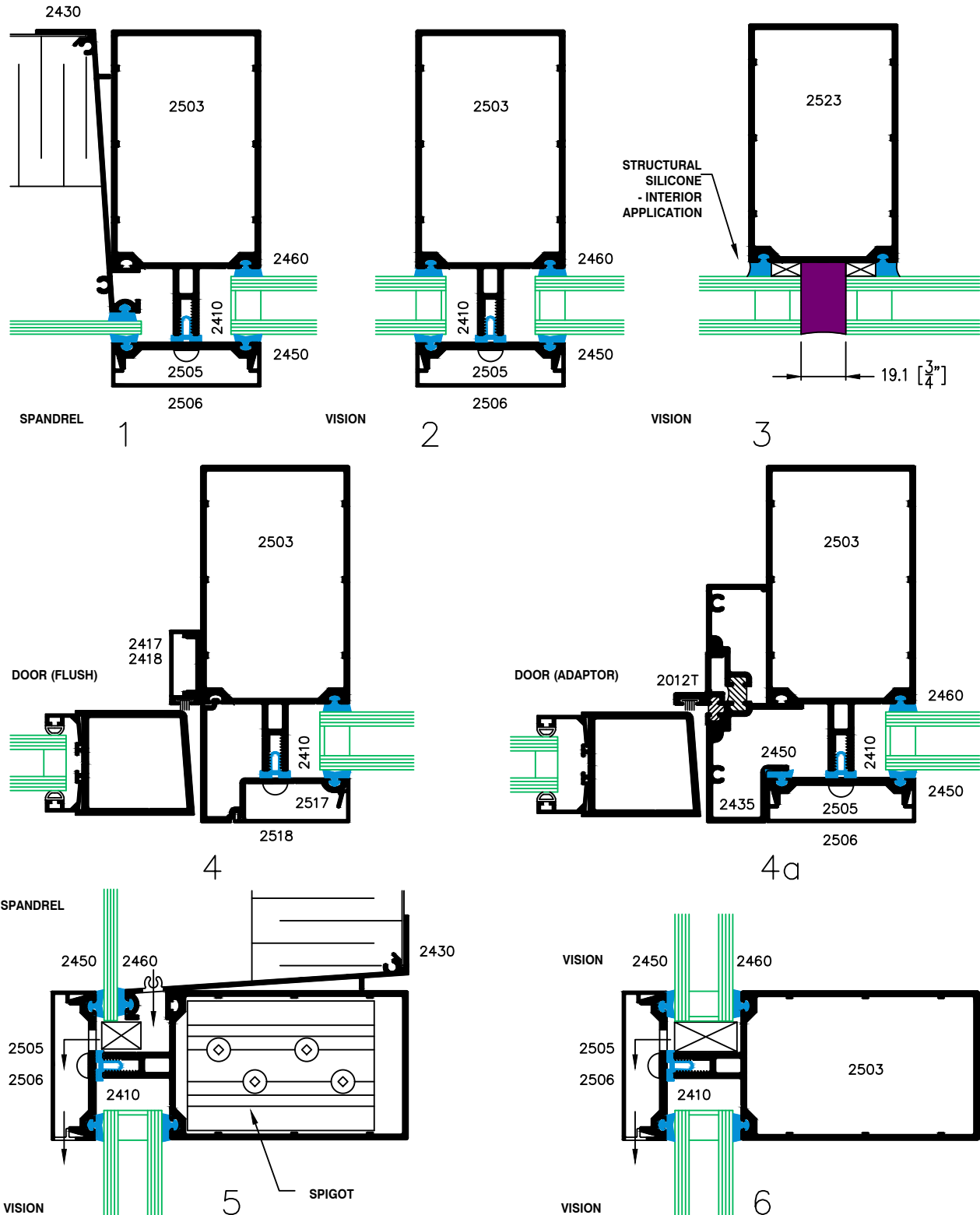
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2500 SERIES

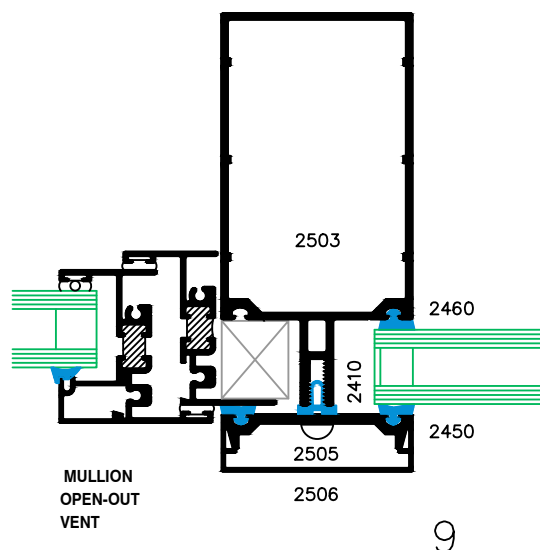
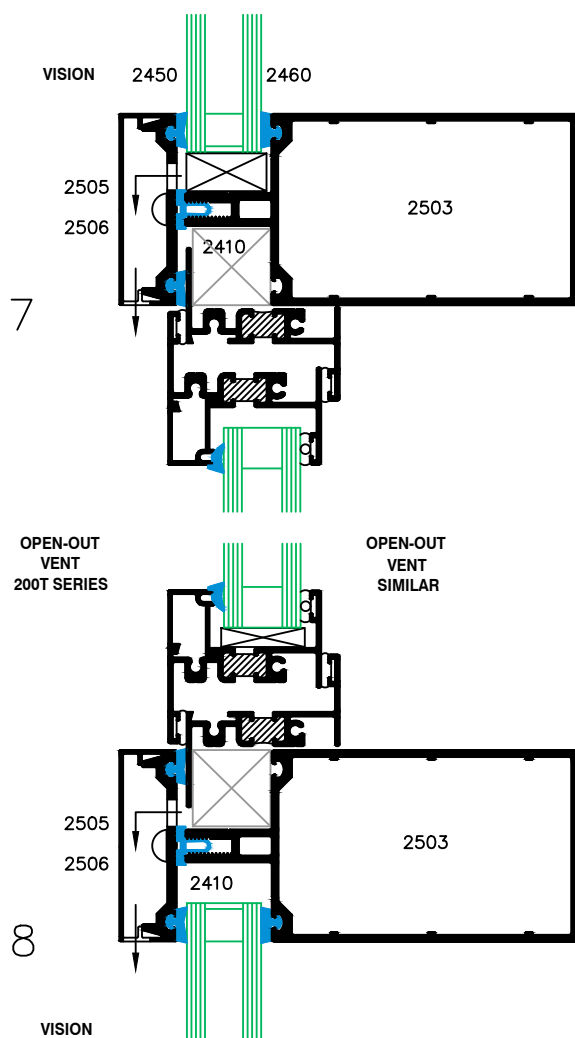
CURTAIN WALL & WINDOW SYSTEM
2 1/2" (63.5 mm) - FRAME

**D
25**

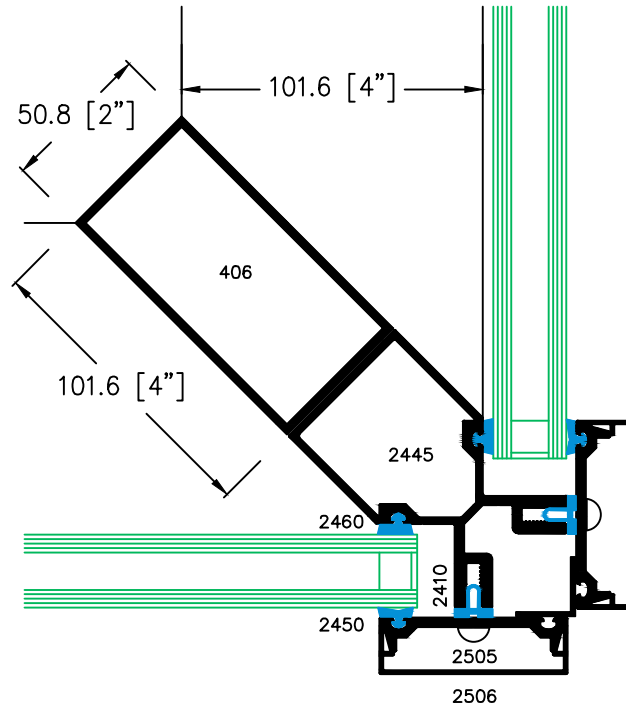
TYPICAL DETAILS



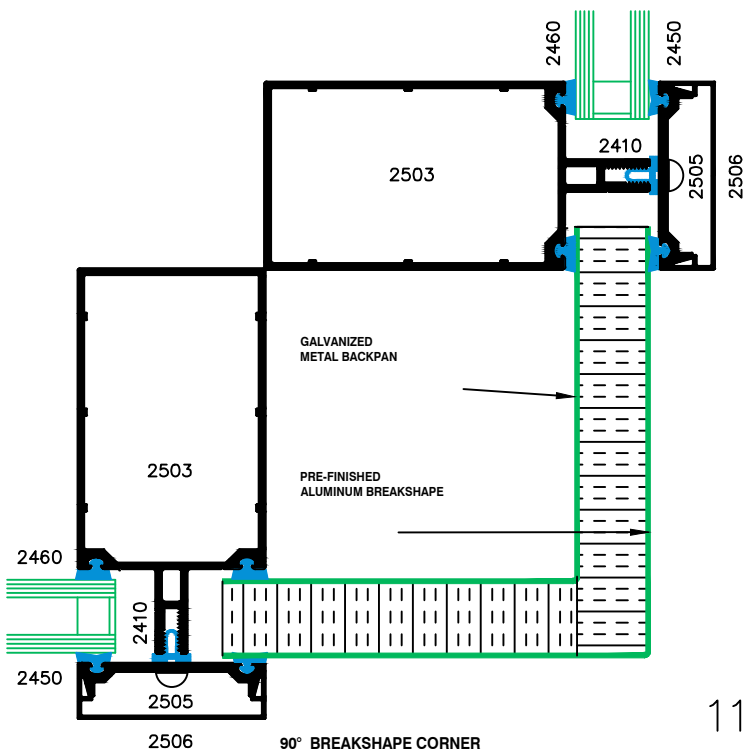
TYPICAL DETAILS



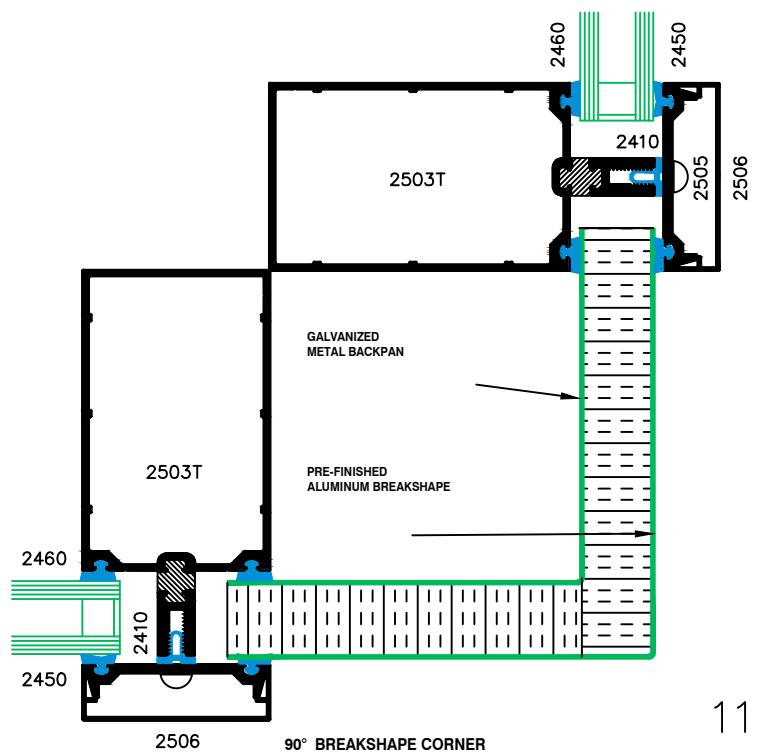
TYPICAL CAPTURED CORNER DETAILS



90° CAPTURED CORNER

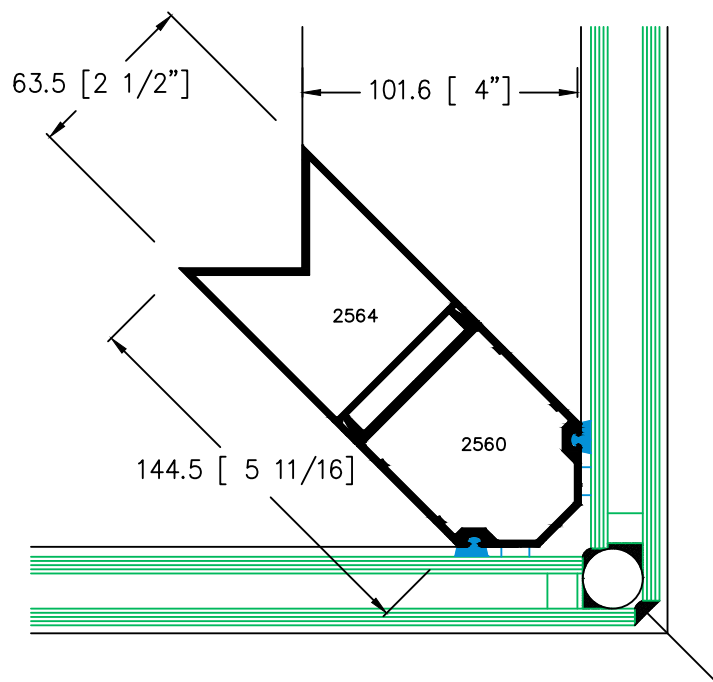


90° BREAKSHAPE CORNER



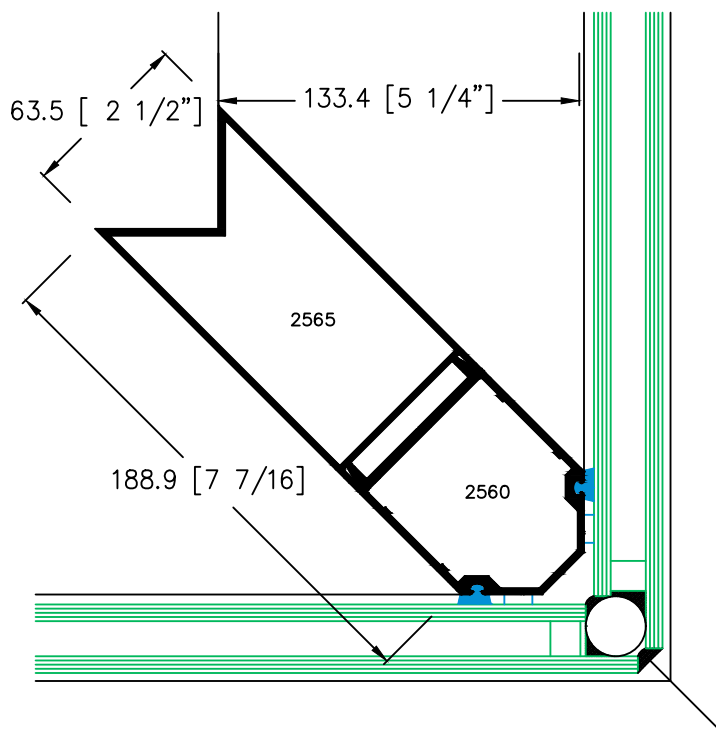
90° BREAKSHAPE CORNER

TYPICAL BUTT-JOINT CORNER DETAILS



90° BUTT-JOINT CORNER
AT 4" BACK MEMBER

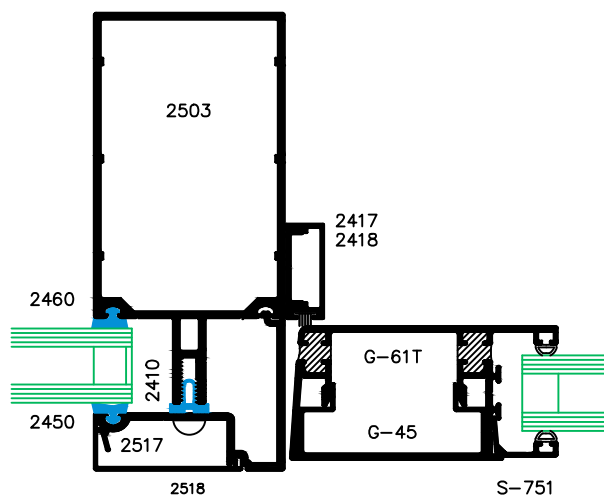
12



90° BUTT-JOINT CORNER
AT 5 1/4" BACK MEMBER

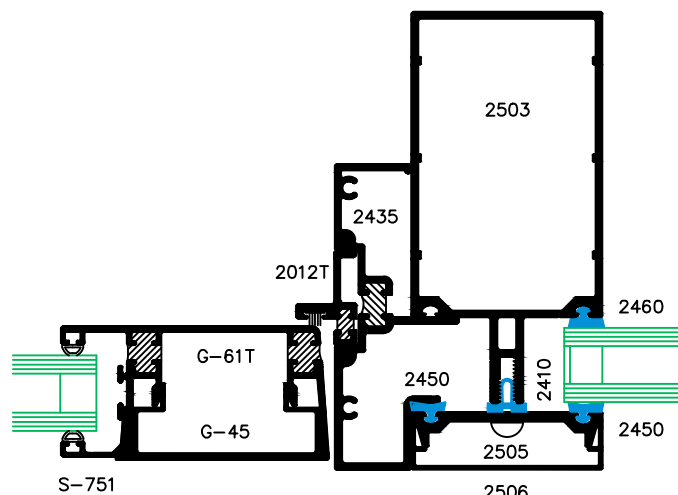
13

ALTERNATE DOOR DETAILS



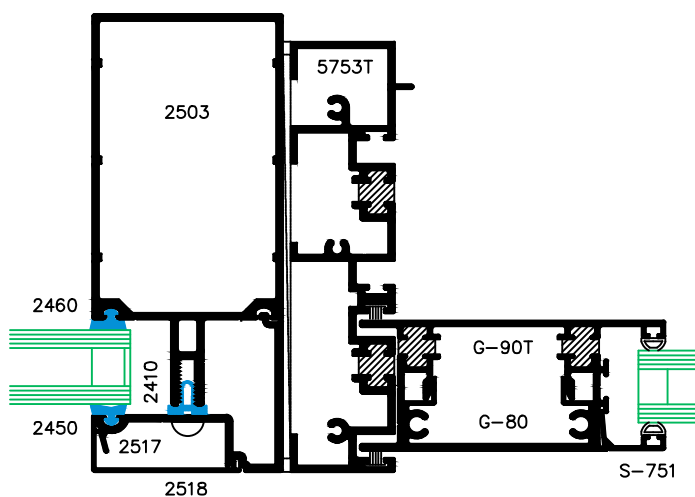
GLACIER DOOR

15



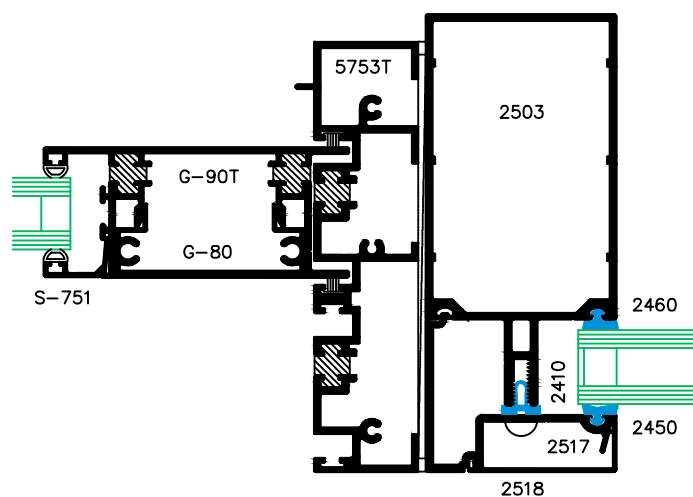
GLACIER DOOR

15a



1100T JAMB AT SLIDER

16



1100T JAMB AT FIXED PANEL

16a



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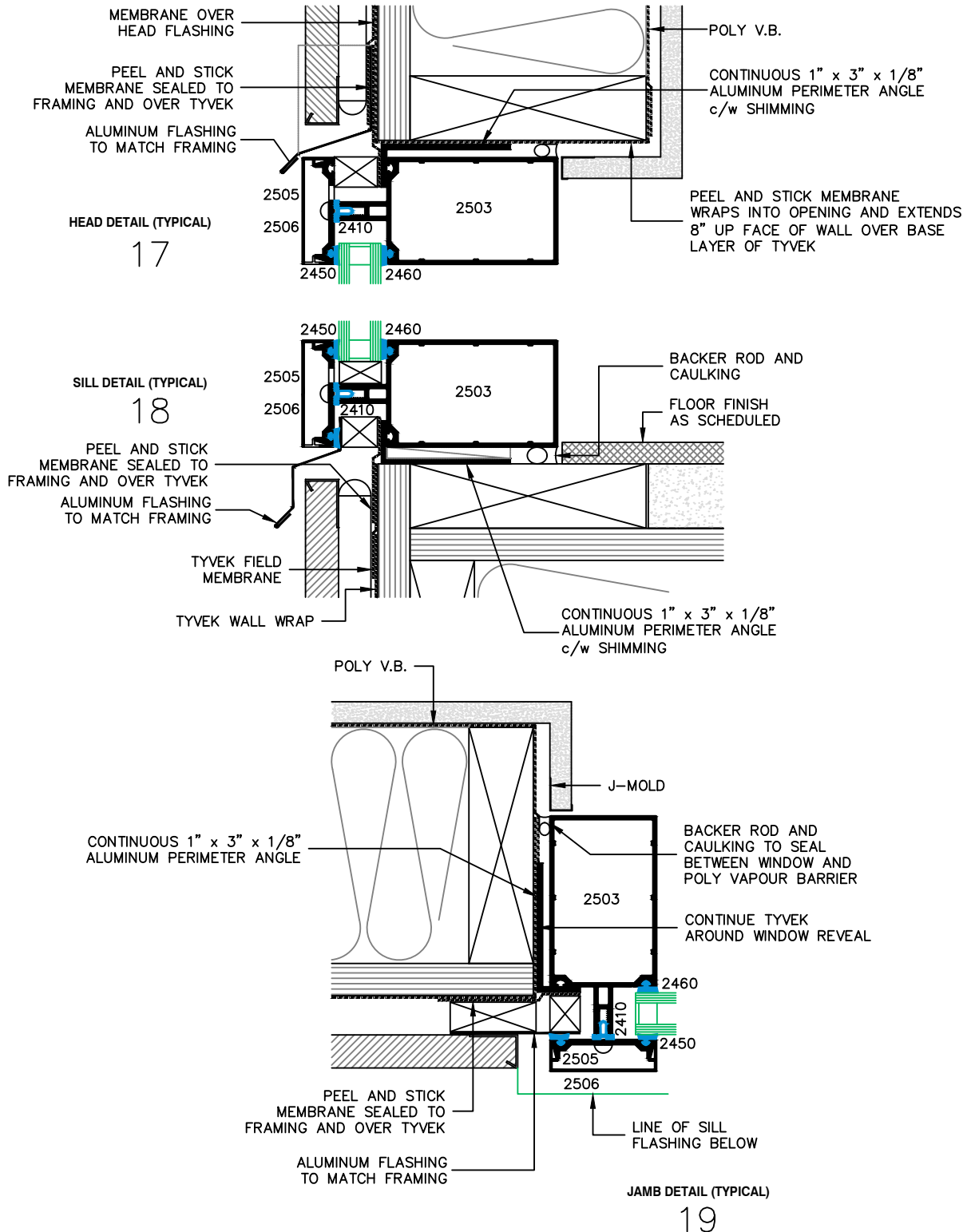
2500 SERIES

CURTAIN WALL & WINDOW SYSTEM

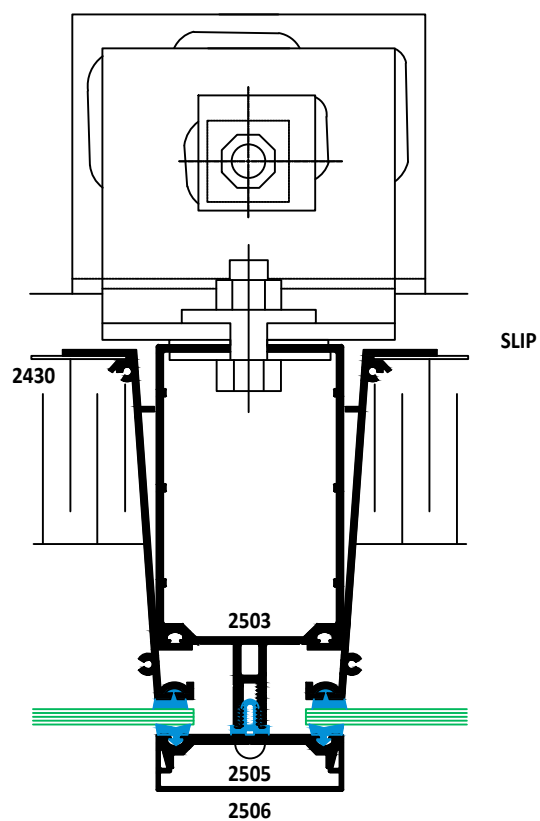
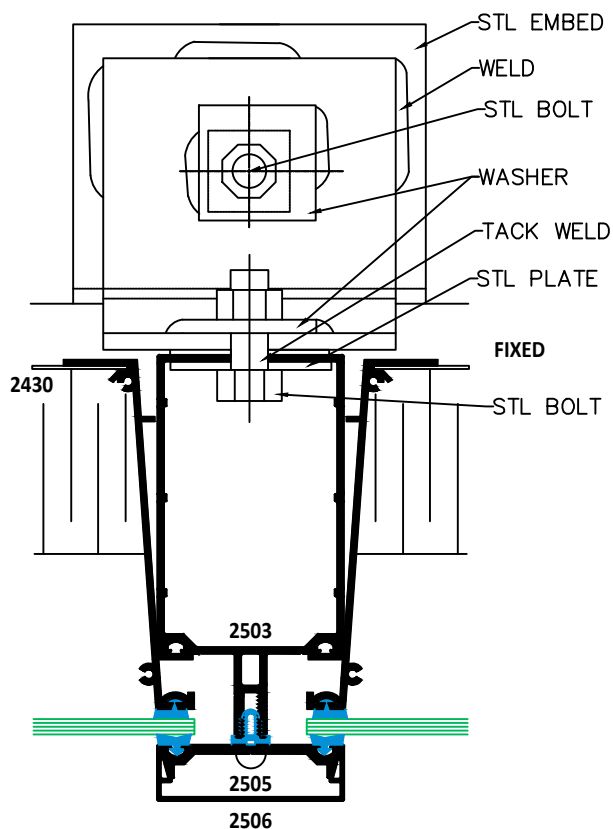
2 1/2" (63.5 mm) - FRAME

**D
29**

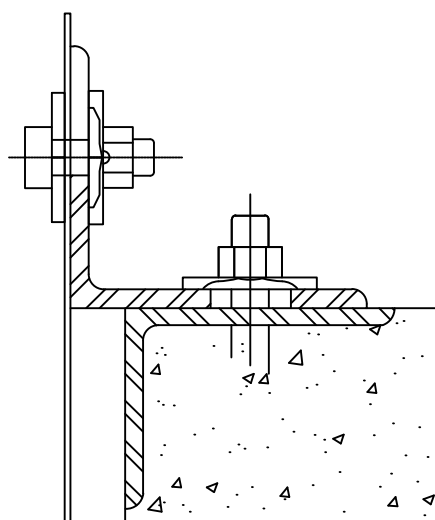
INTERFACE DETAILS (SUGGESTED ONLY)



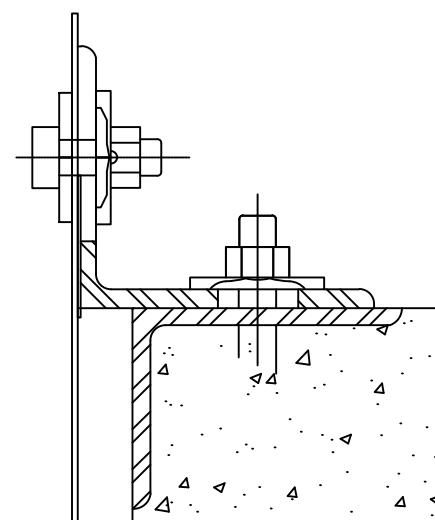
TYPICAL ANCHORING DETAILS



PLAN DETAILS



FIXED



SLIP

SECTION DETAILS

EXPANSION & SPLICE DETAILS

