



**Series 3903 Thermal  
3 1/4" Heavy Commercial Projected Window**

Manufacturer  
Of  
Architectural  
And  
Commercial  
Grade  
Windows,  
Curtain Walls,  
Entrances,  
And  
Storefronts

**Configurations** Project-In • Project-Out • Casement In • Casement Out • Fixed

Series 3903 retains an AAMA Heavy Commercial and Architectural Grade rating to meet the most demanding specifications. Designed for educational, institutional and high-rise residential, the 3903 window system is an attractive product for a wide range of applications. Multiple glazing options provide flexibility to meet specific design requirements. E-Strut™ thermal isolators provide outstanding thermal performance and dual finish capability. Offered with a complete line of sub frames, mullions and architectural sills, the 3903 window provides the complete solution for your fenestration needs.

**Features**

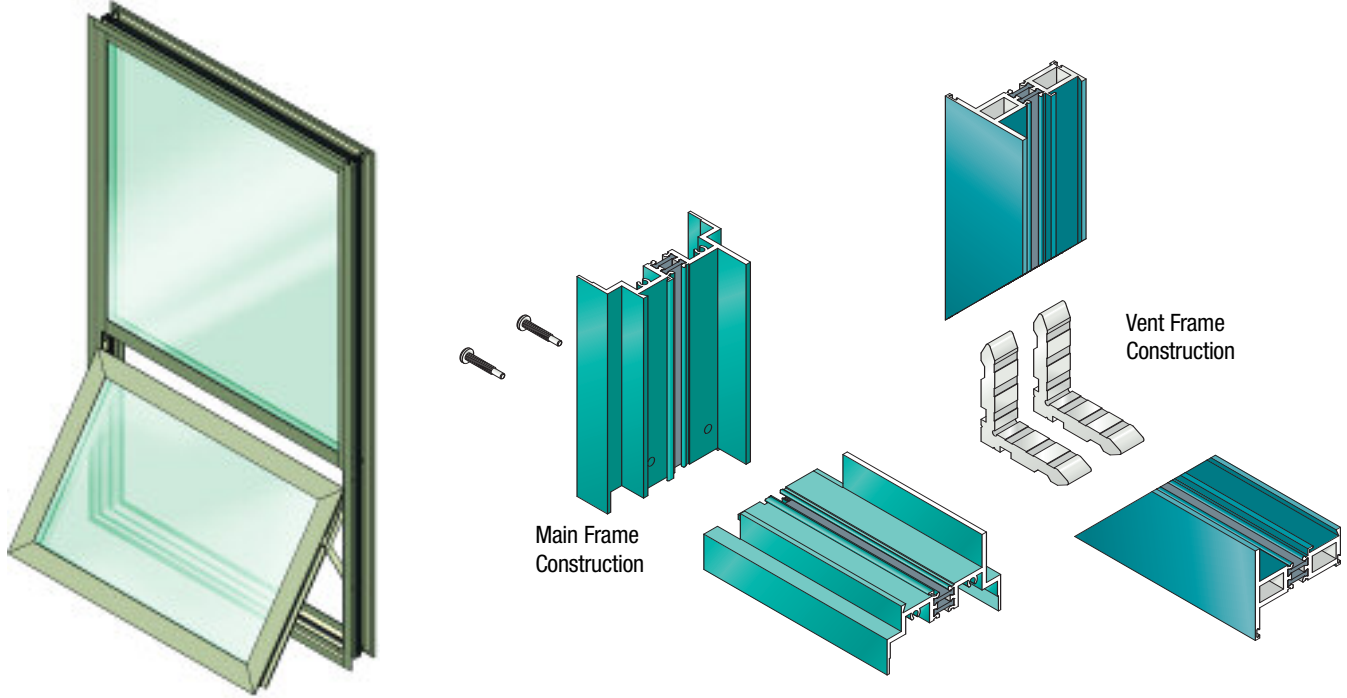
**Benefits**

|  |  |
|--|--|
| E-Strut™ thermal isolator                                      | Allows dual finish capability<br>Improved thermal performance<br>Completely eliminates dry shrinkage |
| Accommodates glazing units from 3/16" to 2" depth              | Expands design and energy savings options  |
| Dual glazing with optional integral blinds                     | Improved energy savings and interior light or privacy control with low maintenance                   |
| Wide variety of locking and operating hardware available       | Permits hardware options to address specific requirements  |
| Angle reinforced vent corners                                  | Improves sash/vent rigidity  |
| Accessory line of subframes, mullions, and architectural sills | Allows custom designs with standard product  |
| Anodized and painted finishes available                        | Unlimited options to answer economic and aesthetic concerns  |

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MONETT, MO 65708  
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# Series 3903 Thermal 3 1/4" Heavy Commercial Projected Window



## Performance Data

### Projected Architectural Grade

|                       |                        |
|-----------------------|------------------------|
| AAMA Rating (NAFS-02) | AP-AW85                |
| Air Infiltration      | <.10 cfm/sf @ 6.24 psf |
| Water                 | No Leakage @ 15.0 psf  |
| Structural            | ±127.5 psf             |
| CRF-Frame (1503-98)   | .57°                   |
| CRF-Glass (1503-98)   | .51°                   |
| U-Value (1503-98)     | .61°                   |
| U-Value (NFRC-97)     | .58°                   |

### Casement Architectural Grade

|                       |                        |
|-----------------------|------------------------|
| AAMA Rating (NAFS-02) | C-AW100                |
| Air Infiltration      | <.10 cfm/sf @ 6.24 psf |
| Water                 | No Leakage @ 15.0 psf  |
| Structural            | ±150.0 psf             |
| CRF-Frame (1503-98)   | .60°                   |
| CRF-Glass (1503-98)   | .59°                   |
| U-Value (1503-98)     | .57°                   |
| U-Value (NFRC-102)    | .55°                   |

A = Estimated values and/or designations  
 B = Non-standard size or configuration  
 C = Dual glazed  
 D = 1" Insulated - 1/4" clear, 1/2" air, 1/4" clear  
 E = 1" Insulated - 1/4" clear (Low Emissivity), 1/2" air, 1/4" clear  
 F = 1" Insulated - 1/4" clear (Low Emissivity), 1/2" argon, 1/4" clear  
 G = 1" Insulated - 1/4" clear, 1/2" air, 1/4" clear (Low Emissivity)

| S-3903 Hardware Chart              | Butt Hinges | 4-Bar Arms | Friction Adjuster | Key Release Limit Arm | Rotor Operator* | Cam Handle | Pole Ring Cam Handle | Pole Ring Pull** | Access Controlled Lock | Lift Lock |
|------------------------------------|-------------|------------|-------------------|-----------------------|-----------------|------------|----------------------|------------------|------------------------|-----------|
| Project-In                         |             | S          |                   |                       |                 | S          | 0                    |                  | 0                      |           |
| Project-Out                        |             | S          |                   |                       |                 | S          | 0                    | 0                | 0                      |           |
| Casement Inswing With 4-Bar Arms   |             | S          |                   |                       |                 | S          | 0                    |                  | 0                      |           |
| Casement Outswing With 4-Bar Arms  |             | S          |                   |                       |                 | S          | 0                    |                  | 0                      | 0         |
| Casement Inswing With Butt Hinges  | S           |            | 0                 | 0                     |                 | S          | 0                    |                  | 0                      |           |
| Casement Outswing With Butt Hinges | S           |            | S                 | 0                     | 0               | S          | 0                    |                  | 0                      | 0         |

Some size restrictions may apply depending on hardware selected.  
 \*-Casements requiring rotor operators will be furnished with lift locks, providing vents meet minimum width requirements.  
 \*\*-Pole ring pull will be furnished on project-out vents when optional pole ring cam handle is selected.

0 -Optional  
 S -Standard  
 blank - N/A

| S-3903 Glazing Chart         |               | Polycarbonate |       |      | Glass or Panel |       |       |       |      |      |      |      |      |      |    |        |        |        |        |    |
|------------------------------|---------------|---------------|-------|------|----------------|-------|-------|-------|------|------|------|------|------|------|----|--------|--------|--------|--------|----|
|                              |               | 1/8"          | 3/16" | 1/4" | 1/8"           | .156" | 3/16" | .200" | 1/4" | 1/4" | 1/2" | 5/8" | 3/4" | 7/8" | 1" | 1-1/8" | 1-1/4" | 1-1/2" | 1-3/4" | 2" |
| Monolithic & Insulated Glass |               |               | A     | A    |                | A     | A     | A     | A    | A    |      | A    | A    | A    |    |        |        | A      | A      | A  |
| Dual Glazing                 | Exterior Lite |               | I     | I    |                |       | I     | I     | I    |      | I    |      |      |      |    |        |        |        |        |    |
|                              | Interior Lite |               |       |      |                |       | A     | A     | A    |      |      |      |      |      |    |        |        |        |        |    |

\*-Obscure Glass Thickness  
 \*\*-Laminated Glass Thickness  
 A -Available Glazing Option  
 I -Internal Blinds Can Be Used With This Type of Dual Glazing  
 blank - N/A

# Series 3903 Thermal 3 1/4" Heavy Commercial Projected Window



## Main Frame Construction

The frame is constructed from .125" nominal material wall thickness aluminum of 6063-T6 alloy with a depth of 3 1/4". An equal leg frame is standard. Corners are of screw spline construction and back sealed with a small-joint seam sealer. See Illustration 1.

## Vent Frame Construction

The 2 7/16" deep vent consists of tubular aluminum members with .125" nominal material wall thickness of 6063-T6 alloy. Vent corners are mitered, angle reinforced, crimped, cold epoxy welded, and back sealed with a small-joint seam sealer. See Illustration 2.

## Weather Stripping

All vents are dual weather-stripped with a dual-durometer Santoprene® gasket. Exterior gasket is intentionally omitted at vent bottom rail for project-out vents and at the vent top rail for project-in vents, allowing air to pressure equalize the void between the vent and frame. Each vent utilizes the pressure equalization technique for superior water resistance performance. Two holes or slots per vent through the window frame facilitate weepage.

## Screens

Full width hinged wickets or fully hinged screens are available. Screen frames are extruded 6063-T6 aluminum alloy frames. 18 x 16 mesh screens are available in fiberglass and .011" diameter aluminum. 18 x 18 mesh screens are available in .009" diameter stainless steel.

## Thermal Barrier

All frames and vents are thermally isolated with two thermal struts consisting of glass reinforced polyamide nylon, mechanically crimped in raceways extruded in the exterior and interior extrusions.

## Hardware

Locking cam handles, access controlled locks, and keepers are of cast white bronze in a US25D finish. 4-bar arms are fabricated from stainless steel meeting AAMA 904.1 requirements. Butt hinges are fabricated from extruded aluminum of 6063-T6 alloy with stainless steel pins. See Hardware Chart for available hardware types.

## Glazing

Windows are inside glazed with an extruded aluminum snap-in glazing bead. Glazings of 3/16" to 2" can be accommodated. Dual glazing is also available in 3/16" and 1/4" glass. Aluminum blinds between the glass are available with dual glazed windows. See the Glazing below for the exact size.

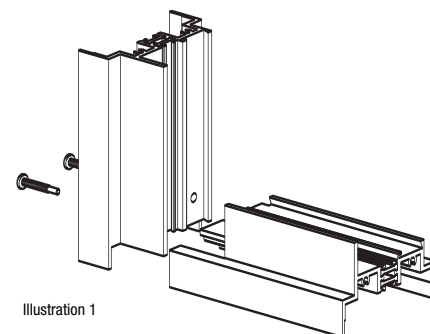


Illustration 1

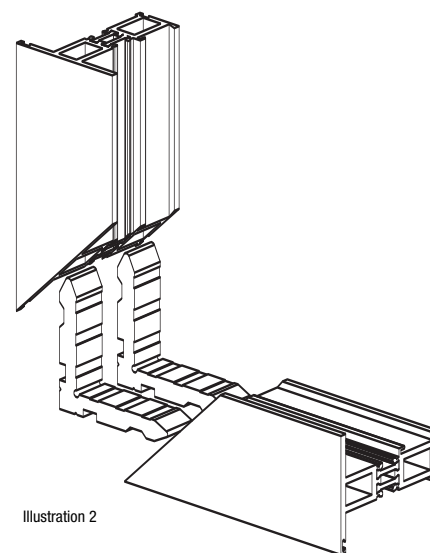


Illustration 2

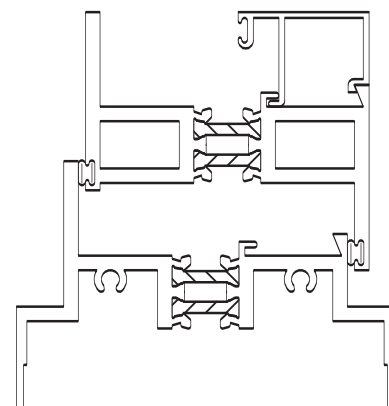
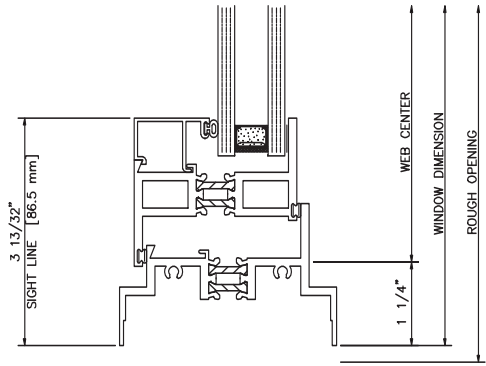
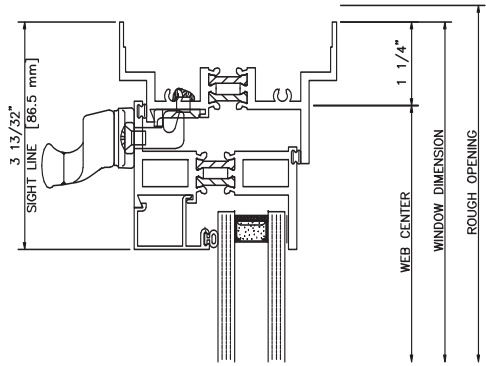


Illustration 3

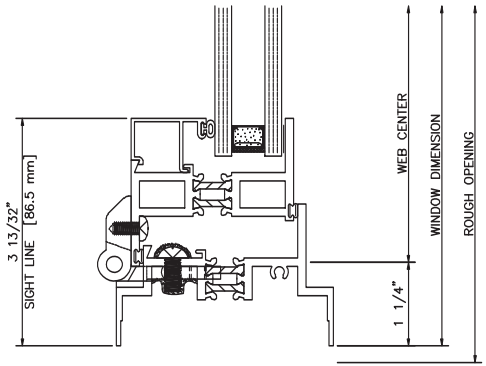
408 JAMB



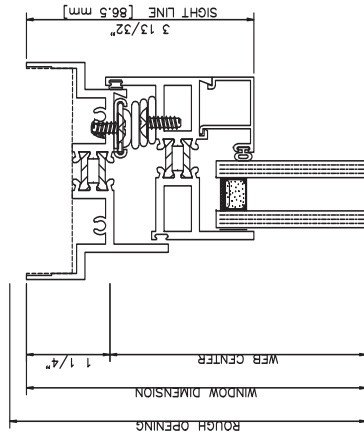
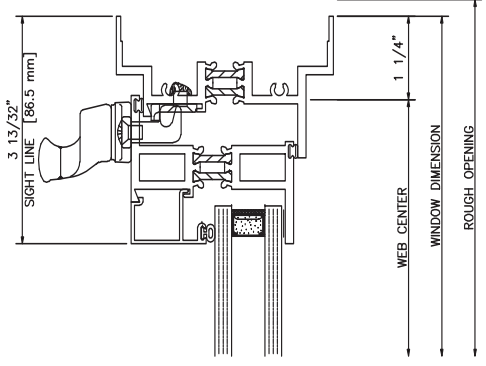
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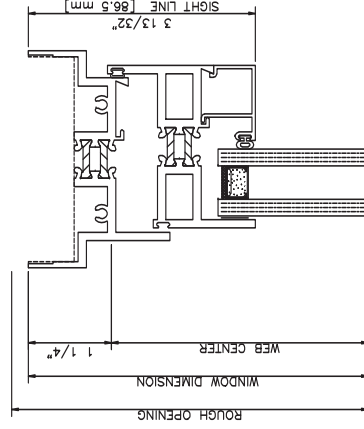
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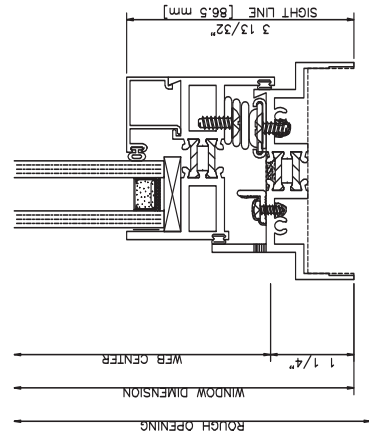
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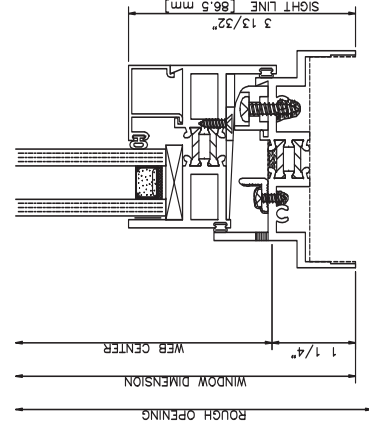
104 HEAD



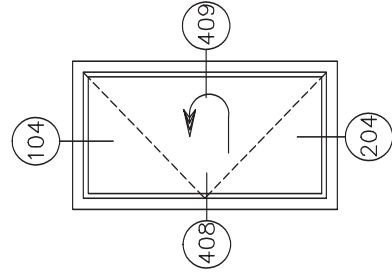
105 HEAD



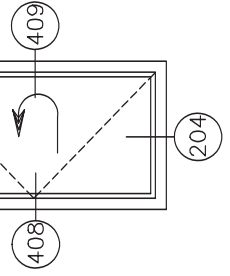
204 SILL



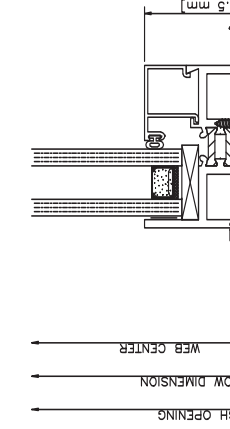
205 SILL



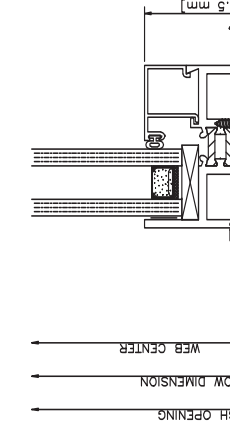
104 HEAD



409 HEAD



204 SILL



205 SILL

**3903 Inside Glazed**

Casement In • Left Swing • 4 Bar Arms • Cam Locks

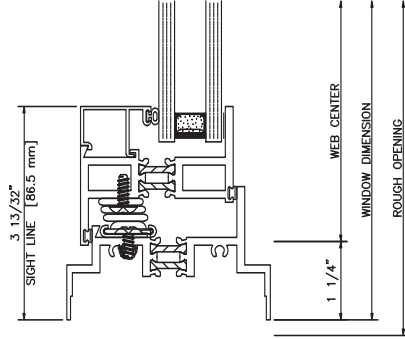
**3903 Inside Glazed**

Casement In • Left Swing • Butt hinge • Cam Locks

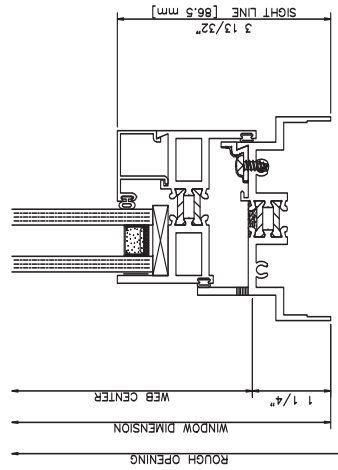
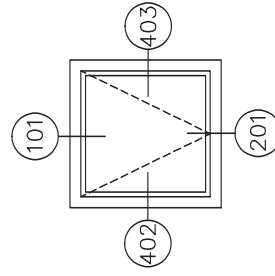
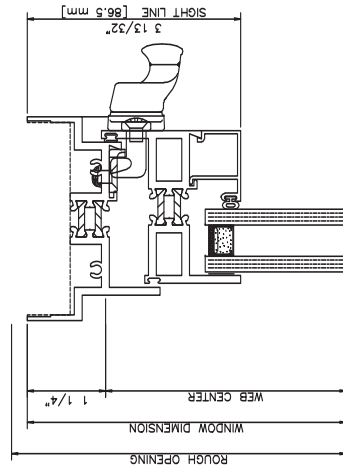
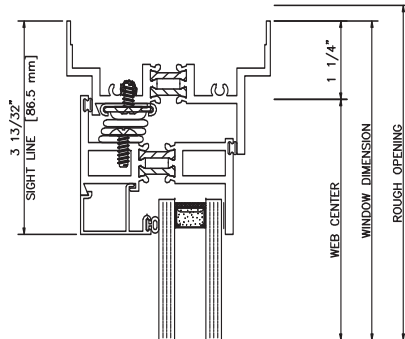
### 3903 Inside Glazed

Project In

402 JAMB



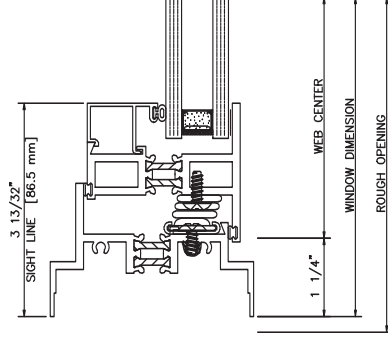
403 JAMB



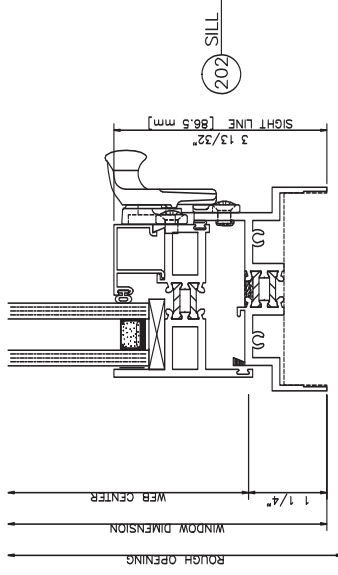
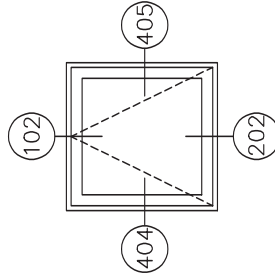
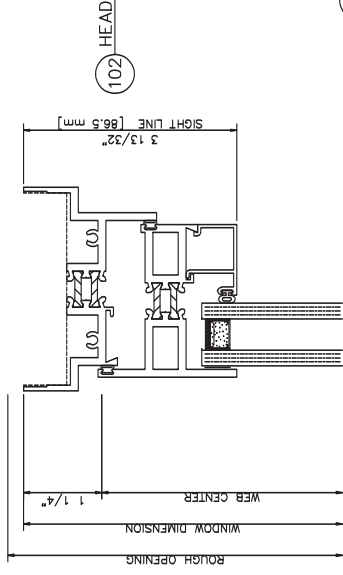
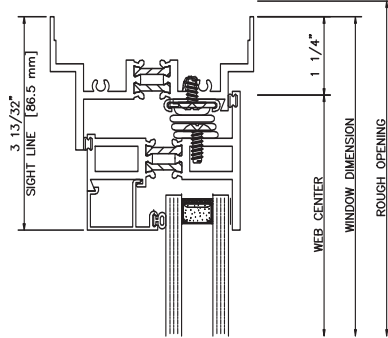
### 3903 Inside Glazed

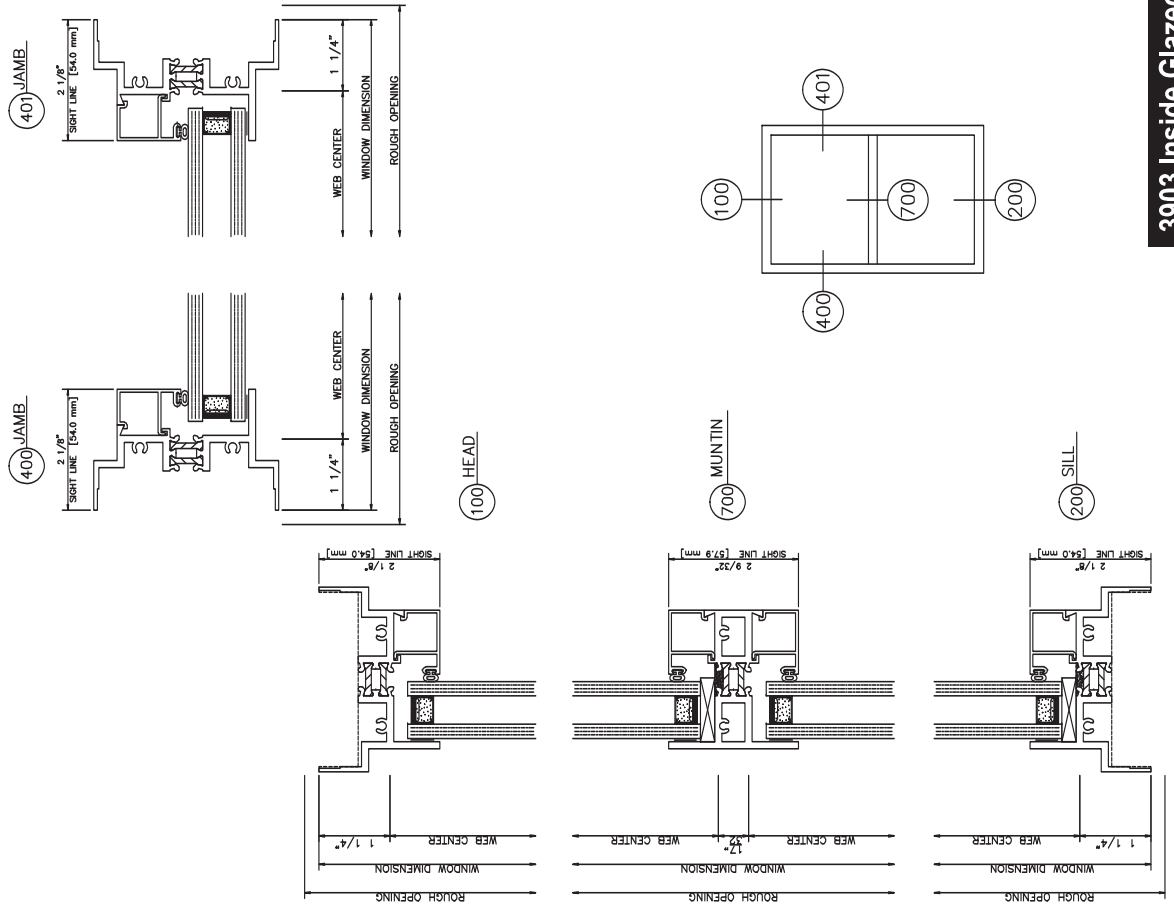
Project Out

404 JAMB



405 JAMB

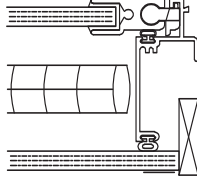
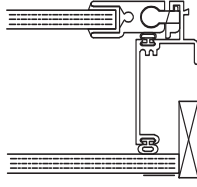
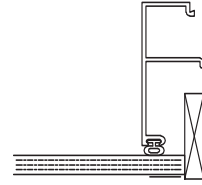




1/4" GLAZE

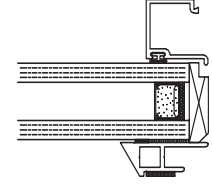
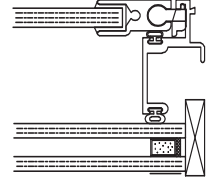
ER65 - 1/4" INTERIOR PANEL 1/4" GLAZE

ER65 - 1/4" INTERIOR PANEL 1/4" GLAZE 5/8" BLINDS



ER65 - 1/4" INTERIOR PANEL 5/8" INSULATED 3/16" - 3/16"

1" INSULATED 1/4" - 1/4" WITH GRID



**3903 Inside Glazed**

Fixed with Horizontal Muntin

**3903 Glazing**