

Series 3902 Thermal 3 1/4" Heavy Commercial Projected Window

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

Series 3902 retains an AAMA Heavy Commercial and Architectural Grade rating to meet the most demanding specifications. Designed for educational, institutional and high-rise residential, the 3902 window system is an attractive product for a wide range of applications. Multiple glazing options provide flexibility to meet specific design requirements. The window is thermally improved for enhanced energy saving potential. Offered with a complete line of sub frames, mullions and architectural sills, the 3902 window provides the complete solution for your fenestration needs.

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

Features

Thermal barriers in frame and sash consist of a two part, high density polyurethane

Pressure equalization

Angle reinforced vent corners

All vents are dual weather-stripped with dual-durometer Santoprene® gasket

Two weep slots per vent through the window frame

Wide variety of locking and operating hardware available

Accommodates glazing units from 3/8" to 2" depth

Dual glazing with optional integral blinds

Screen frames of extruded aluminum alloy are available

Accessory line of subframes, mullions, and architectural sills

Anodized or painted finishes available

Benefits

Improves U-Value performance and enhances energy savings potential

Superior water resistance

Improves sash/vent rigidity

Provides superior air and water resistance

Moisture weeps to the exterior quickly

Permits hardware options to address specific requirements

Expands design and energy savings options

Improved energy savings and interior light or privacy control with low maintenance

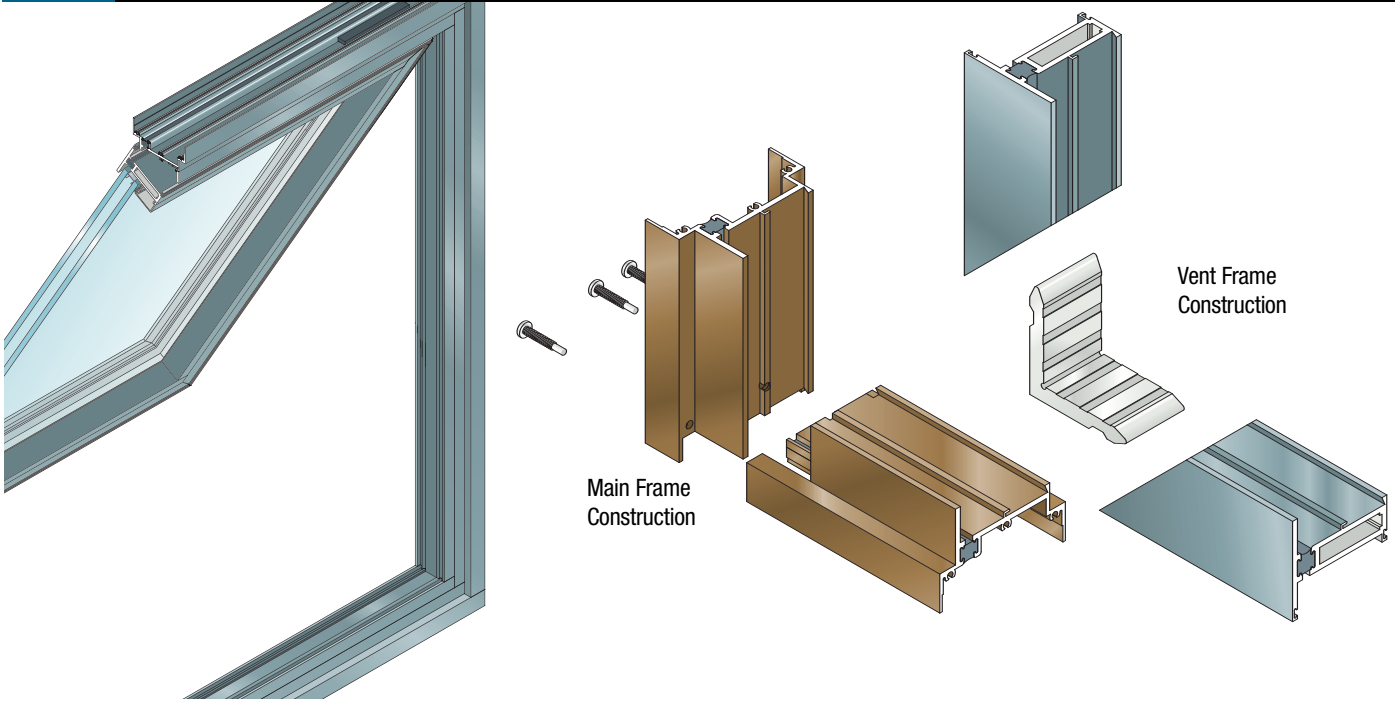
Stronger more durable screens

Allows custom designs with standard product

Unlimited options to answer economic and aesthetic concerns



Series 3902 Thermal 3 1/4" Heavy Commercial Projected Window



Performance Data

Projected Heavy Commercial

Rating (NAFS-1)	AP-HC100
Air Infiltration	<.10 cfm/sf @ 6.24 psf
Water	No Leakage @ 15.0 psf
Structural	±150.0 psf
CRF-Frame (1503-98)	52°
CRF-Glass (1503-98)	51°
U-Value (1503-98)	.66°
U-value (NFRC-97)	.63°

Projected Architectural Grade

AAMA Rating (101-97)	AP-AW50
Air Infiltration	<.10 cfm/sf @ 6.24 psf
Water	No Leakage @ 10.0 psf
Structural	±75.0 psf
CRF-Frame (1503-98)	52°
CRF-Glass (1503-98)	51°
U-Value (1503-98)	.66°
U-Value (NFRC-97)	.63°

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)

Casement Architectural Grade

AAMA Rating (NAFS-02)	C-AW95
Air Infiltration	<.10 cfm/sf @ 6.24 psf
Water	No Leakage @ 15.0 psf
Structural	±142.5 psf
CRF-Frame (1503-98)	52° ^D
CRF-Glass (1503-98)	51° ^A
U-Value (1503-98)	.66° ^D

S-3902 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-3902 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	A	A	A
Dual Glazing	Exterior Lite	I	I	I	I	I	I	I	I	I	I	I	I	I			A			
	Interior Lite	A	A	A		A	A	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 3902 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. The exterior gasket is intentionally omitted at the vent bottom rail for project-out vents and at the vent top rail for project-in vents. This allows the 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.

Thermal Barrier

All frames and sash are thermally improved using the latest technology in two part, high density polyurethane. See Illustration 3.

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.

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 1/8", 3/16", and 1/4" glass. Aluminum blinds between the glass are available with dual glazed windows. See the Glazing Chart for exact sizes.

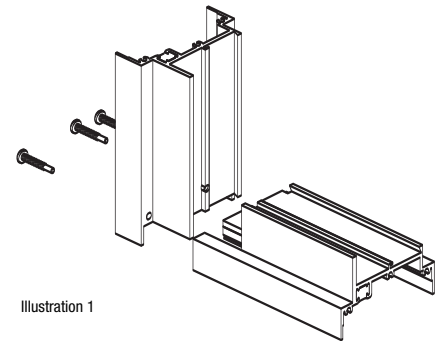


Illustration 1

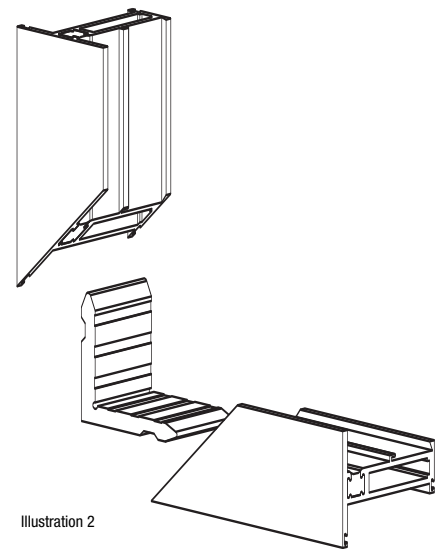


Illustration 2

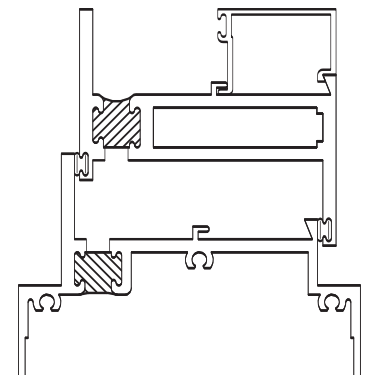
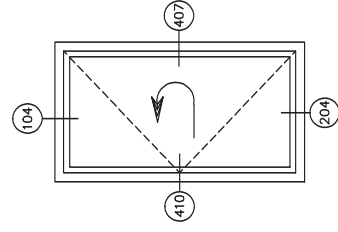
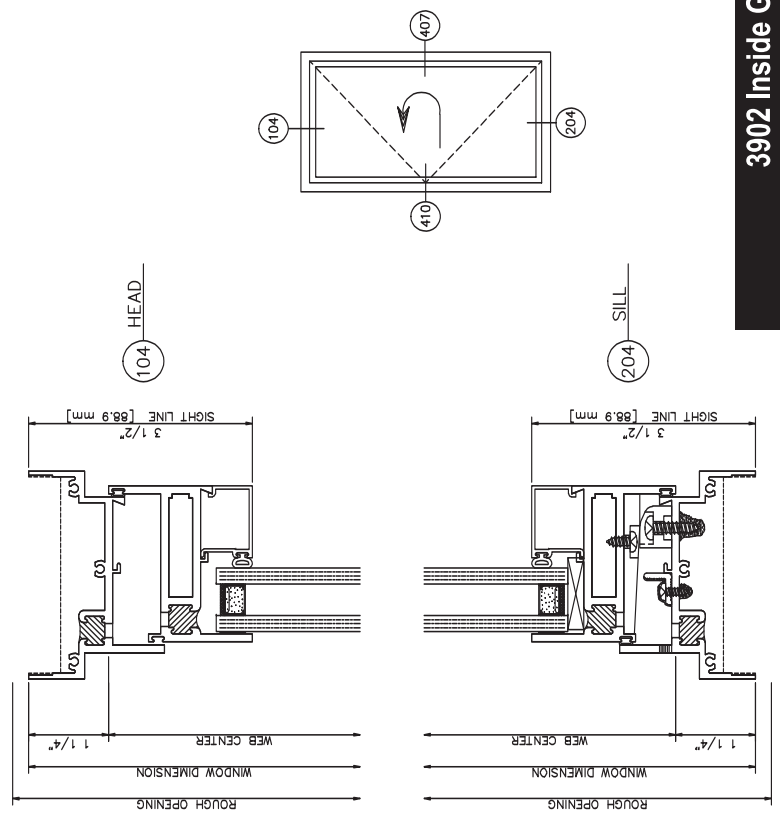
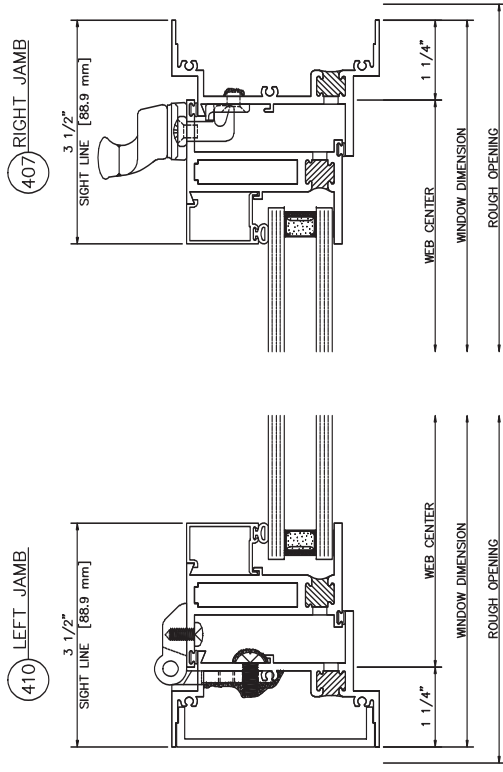
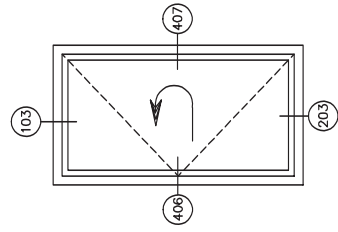
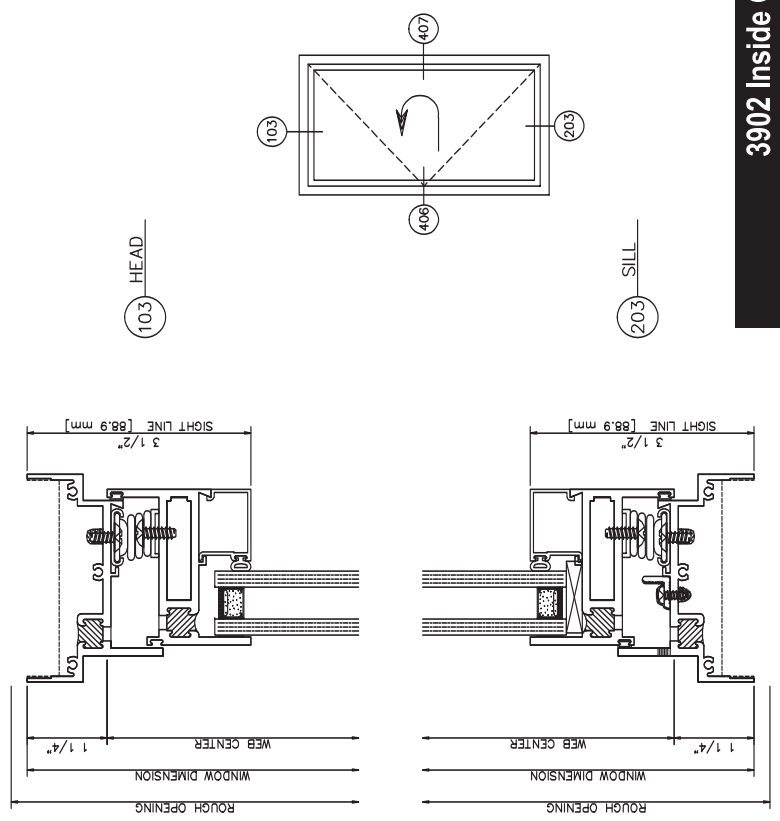
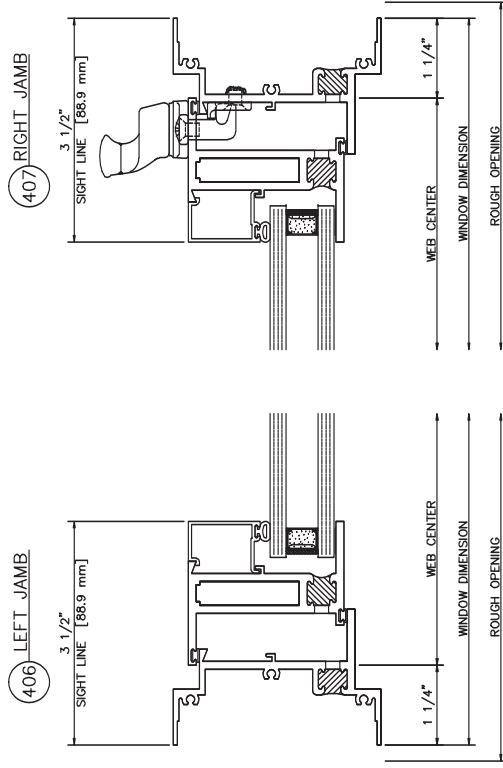


Illustration 3



3902 Inside Glazed

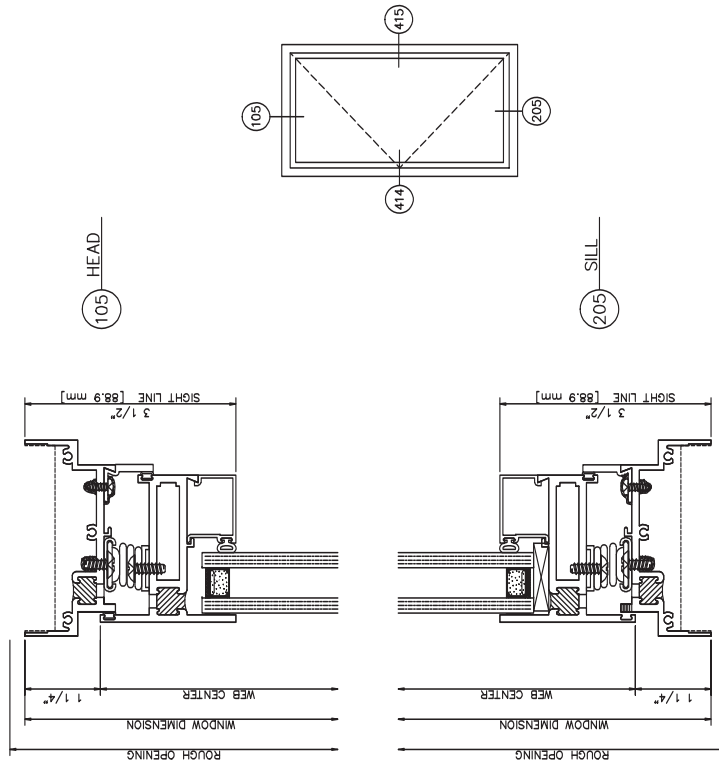
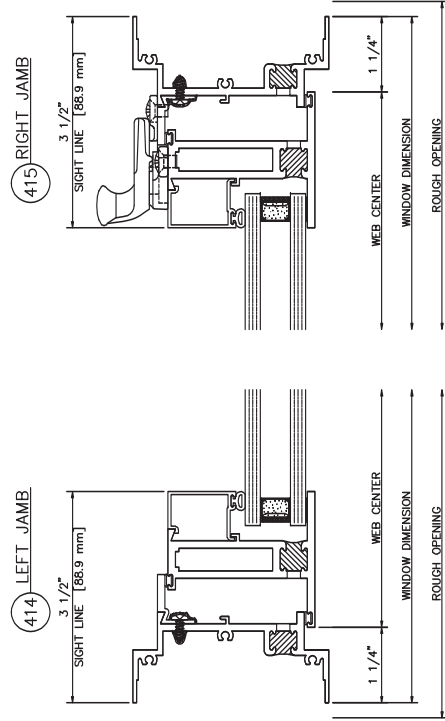
Caseament In • Left Swing • 4 Bar Arms • Cam Locks

3902 Inside Glazed

Caseament In • Left Swing • Butt Hinge • Cam Locks

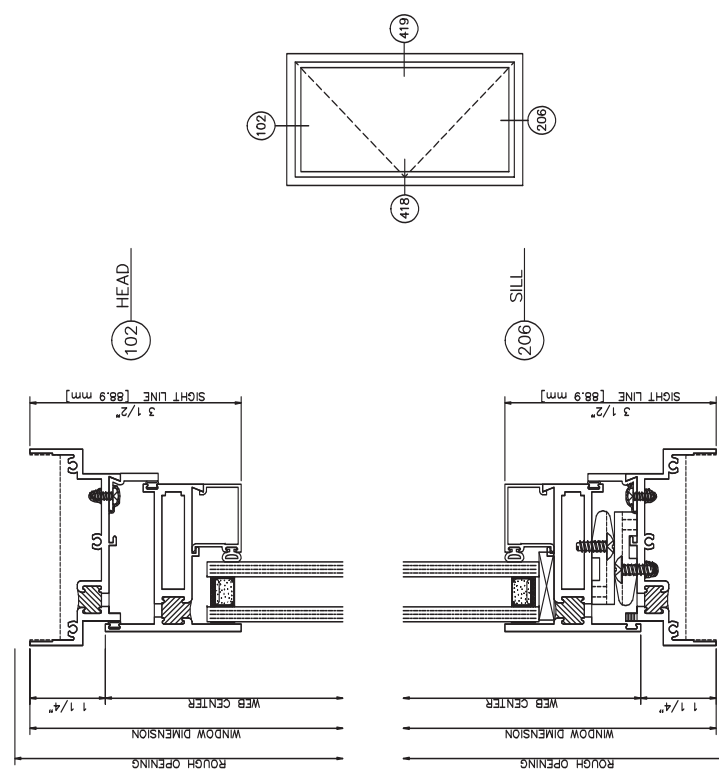
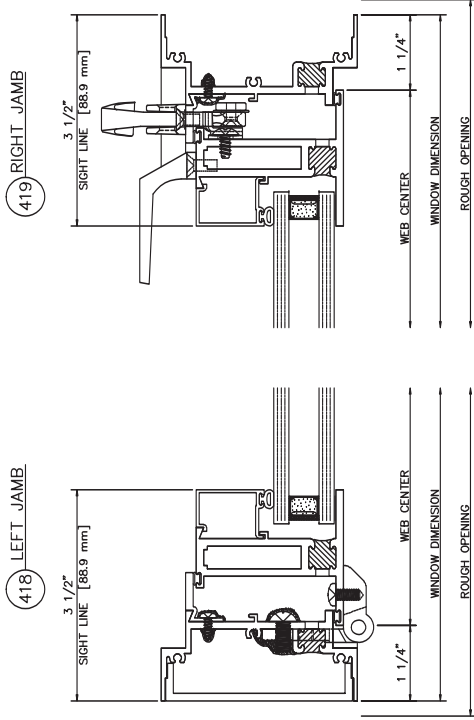
3902 Inside Glazed

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

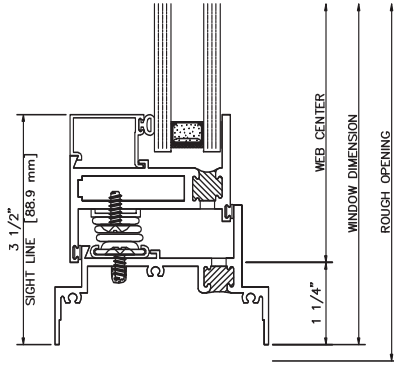


3902 Inside Glazed

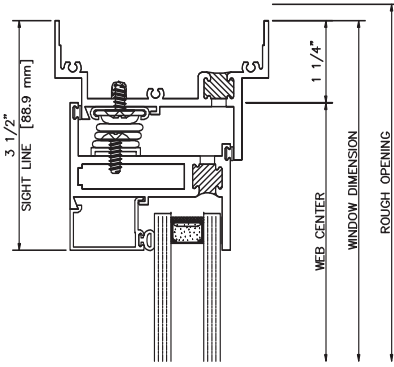
Casement Out • Left Swing • Butt Hinge • Lift Lock • Pull Handle



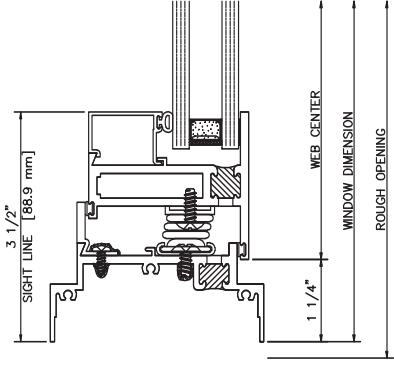
402 LEFT JAMB



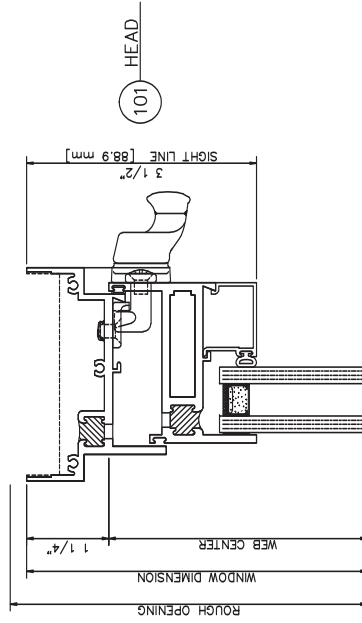
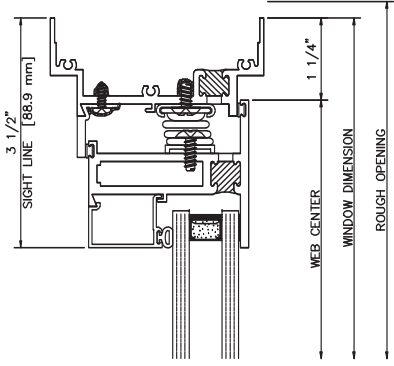
403 RIGHT JAMB



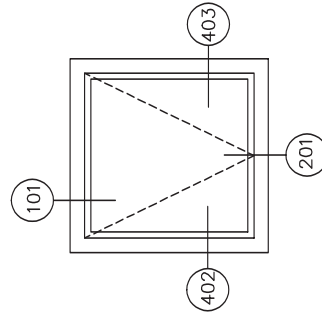
404 LEFT JAMB



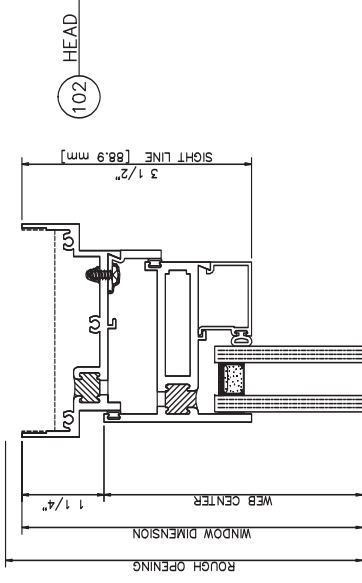
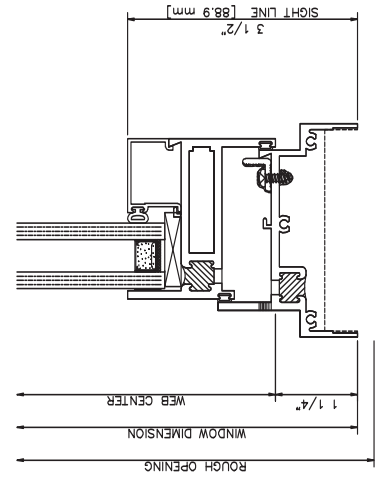
405 RIGHT JAMB



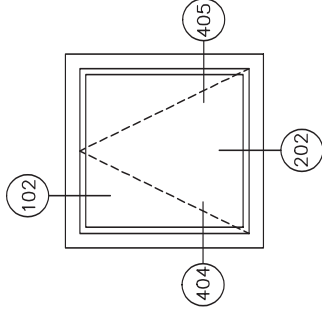
101 HEAD



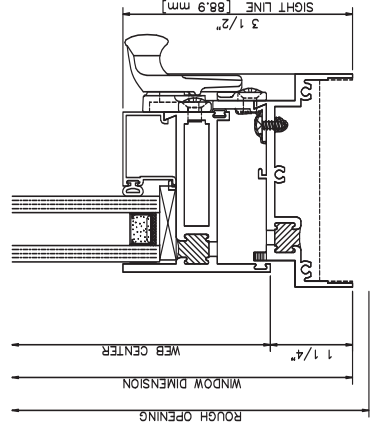
201 SILL



102 HEAD



202 SILL



3902 Inside Glazed

Project In

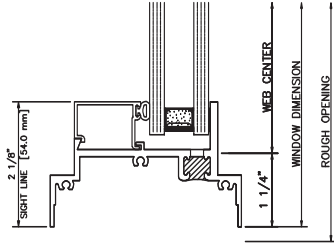
3902 Inside Glazed

Project Out

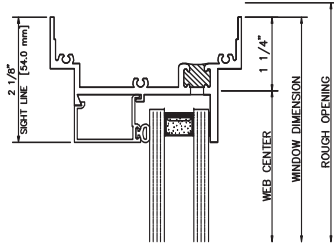
3902 Inside Glazed

Fixed Over Fixed

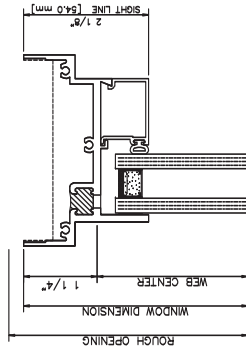
400 LEFT JAMB



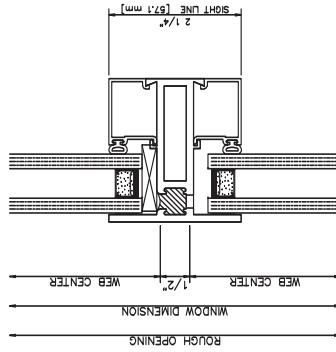
401 RIGHT JAMB



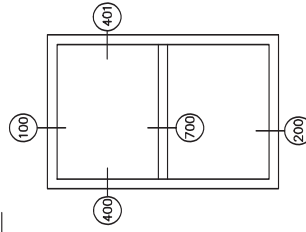
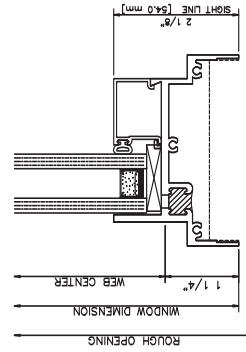
100 HEAD



700 HORIZONTAL TRUE MUNTIN

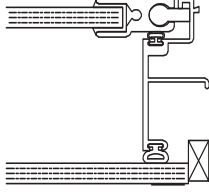


200 SILL

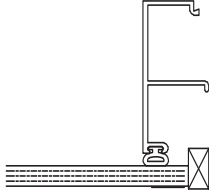


3902 Glazing

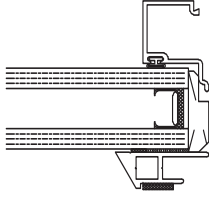
ER65 - 1/4" INTERIOR PANEL
1/4" GLAZE



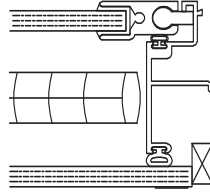
1/4" GLAZE



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



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



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

