

Series 3503 Thermal • Series 3903 Fixed Thermal 3 1/4" Architectural Grade Horizontal Sliding Window



CONFIGURATIONS

XX

Series 3503 retains an AAMA Architectural Grade rating to meet the most demanding specifications. The 3503 window system is an attractive product for a wide range of applications. The sash glides on tandem steel ball bearing rollers. 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 3503 and 3903 window provides the complete solution for your fenestration needs.

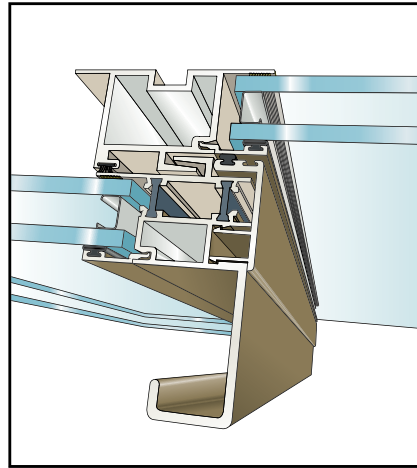
Features

Benefits

E-Strut™ thermal isolator	Improves thermal performance Enhances energy saving potential Allows dual finish capability
Raised sill track	Minimizes the effects of debris and dirt buildup on the sill
Sash glides on tandem steel ball bearing rollers	Allows easier operation
Variety of locking and operating hardware	Allows flexibility in design
Accommodates glazing units from 1/8" to 1 " depth	Expands design and energy saving options
Screen frames of extruded aluminum alloy are available	Stronger, more durable screens
Anodized and painted finishes available	Multiple options to answer economic and aesthetic concerns



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3503 MEETING RAIL

PERFORMANCE DATA

S-3503 HORIZONTAL SLIDING WINDOW HEAVY COMMERCIAL

AAMA RATING (101-97)	HS-HC55
AIR INFILTRATION	<.10 CFM/SF @ 6.24 PSF
WATER	NO LEAKAGE @ 15.0 PSF
STRUCTURAL	±82.5 PSF
CRF-FRAME (1503-98)	.46°
CRF-GLASS (1503-98)	.58°

S-3503 HORIZONTAL SLIDING WINDOW ARCHITECTURAL GRADE

AAMA RATING (101-97)	HS-AW60
AIR INFILTRATION	<.10 CFM/SF @ 6.24 PSF
WATER	NO LEAKAGE @ 15.0 PSF
STRUCTURAL	±90.0 PSF
CRF-FRAME (1503-98)	.46°
CRF-GLASS (1503-98)	.58°

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)

3903 THERMAL U-FACTORS*		
CENTER OF GLASS U-FACTOR	CONFIGURATION AND SIZE	
	FIXED** 47" X 59"	FIXED 60" X 108"
0.48	0.56	0.53
0.34	0.45	0.41
0.28	0.40	0.36
0.24	0.37	0.33
0.20	0.34	0.29

3503 THERMAL U-FACTORS*		
CENTER OF GLASS U-FACTOR	CONFIGURATION AND SIZE	
	XX** 59" X 47"	XX SIZE 96" X 78"
0.47	0.67	0.59
0.34	0.58	0.49
0.29	0.56	0.46
0.25	0.53	0.43
0.20	0.50	0.39

* Based on NFRC 100
 **NFRC Gateway size

S-3503 HARDWARE CHART	CONCEALED PLUNGER LOCK	SWEEP LOCK	AUTO JAMB LOCK	POLE RING SWEEP LOCK	POLE SOCKET	ACCESS CONTROLLED SWEEP HANDLE	ZINC PLATED STEEL BALL BEARING ROLLERS	STAINLESS PLATED STEEL BALL BEARING ROLLERS
HORIZONTAL SLIDING	S	O		O		O	S	O

Some size restrictions may apply depending on hardware selected.

O - Optional
 S - Standard
 Blank - N/A

S-3503 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	EXTERIOR LITE				A	A	A	A	A				A	A	A	A					
	INTERIOR LITE							A	A	A											
DUAL GLAZING	EXTERIOR LITE							A	A	A											
	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



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Frame Construction

The frames have a depth of 3 1/4" and are constructed of 6063-T6 aluminum alloy. Nominal material wall thickness for the frame is .062", and the sill has a minimum wall thickness of .094". Corners are of screw spline construction and sealed. See Illustration 1.

Sash Frame Construction

The sash consists of aluminum members with .062" nominal material wall thickness of 6063-T6 alloy. Sash verticals telescope into sash horizontals. Corners are of screw spline construction and sealed. Cam sash design and continuous interlock at the sash meeting rail offers superior weathering and structural performance. See Illustration 2.

Weather Stripping

The perimeter of the sash is weather-stripped with FIN-SEAL® or equal. Two holes or slots through the window sill facilitate weepage.

Screens

Half screens are mounted inset within the window frame. Screen frames are extruded 6063-T6 aluminum alloy. 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

Sash horizontal rails and handle rail are thermally improved using the latest in two-part, high density polyurethane. All other members are thermally isolated with two thermal struts, consisting of glass reinforced polyamide nylon, mechanically crimped in raceways extruded in the exterior and interior extrusions. See Illustration 3.

Hardware

Concealed plunger lock at sash meeting rail with a flush mounted actuating handle is standard. Optional sweep locks, access controlled sweep locks, pole ring sweep locks, and keepers are of cast white bronze with a US25D finish. The sash glides on steel ball bearing rollers over a raised sill track ensuring smooth operation and minimizing the effects of debris and dirt build-up on the sill. See the Hardware Chart for available hardware types.

Glazing

Windows are inside glazed with an extruded aluminum snap-in glazing bead. Glazings of 1/8" to 1" can be accommodated. See the Glazing Chart for the exact size.

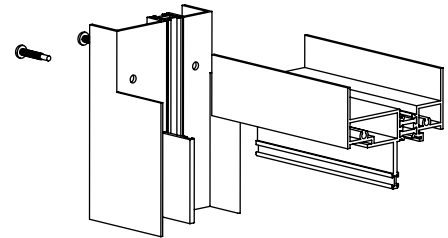


Illustration 1

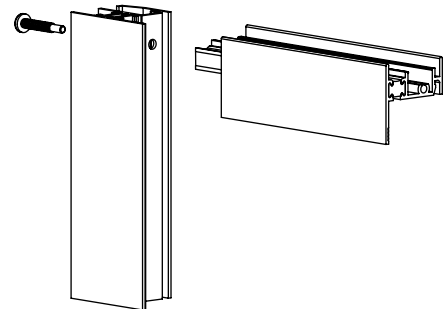


Illustration 2

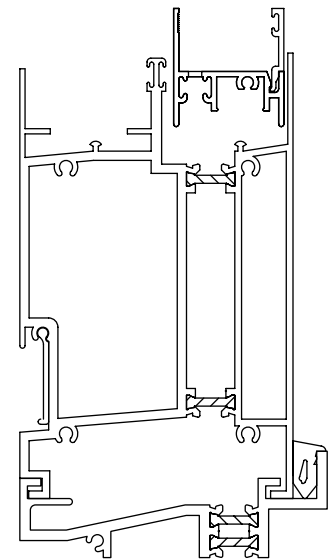
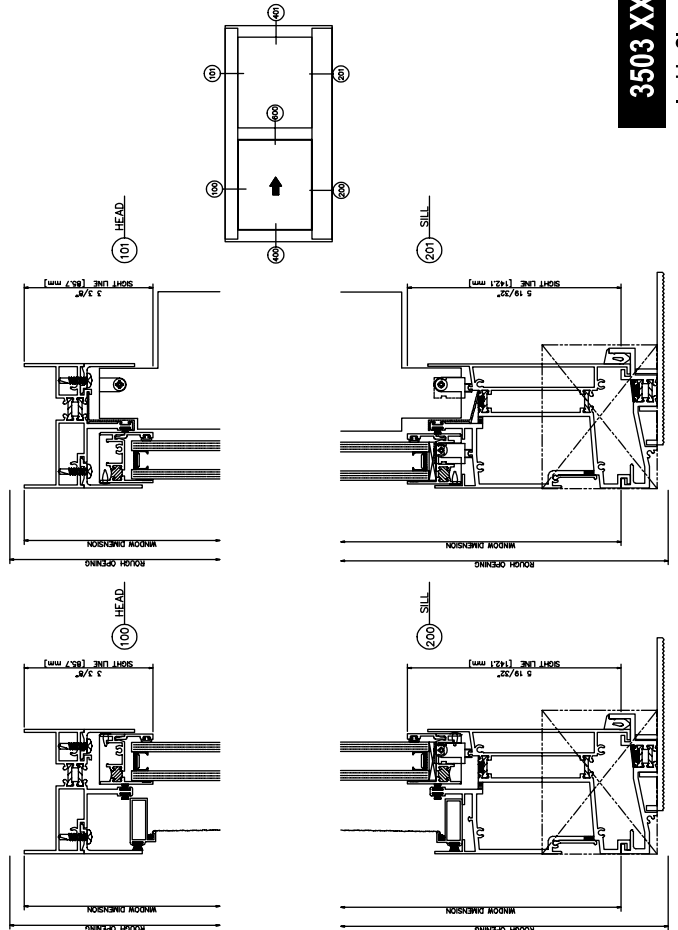
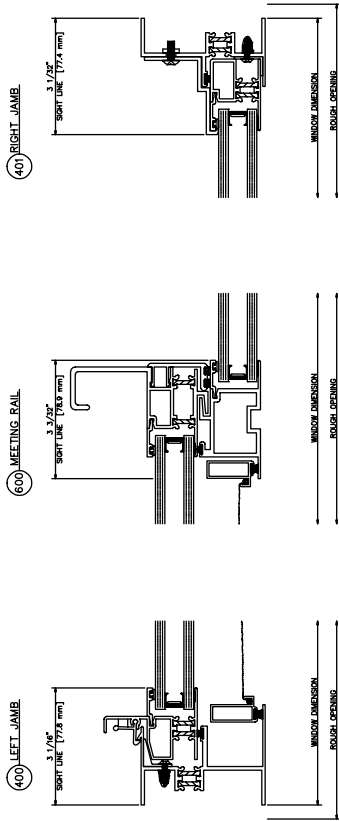
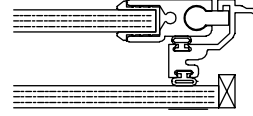


Illustration 3

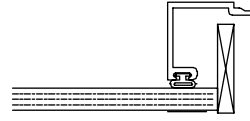




ER65 - 1/4"
INTERIOR PANEL
1/4" MONOLITHIC



1/4"
MONOLITHIC



3503 XX
Inside Glazed

3503 Glazing