

# Series 660 Single Hung • Series 670 Double Hung • Series 6600 Fixed 3 7/8" Heavy Commercial Hung Thermal Window



## CONFIGURATIONS

### Single Hung • Double Hung • Fixed

This product family of hung windows retains an AAMA Architectural Grade rating to meet the most demanding specifications and is a proven performer in projects ranging from historical replication to new construction. This hung window series is an attractive and economical product for a wide range of applications. Multiple glazing options offer flexibility to meet specific design requirements. A thermal barrier in the frame and sash improves thermal performance enhancing energy saving potential. Offered with a complete line of sub frames, mullions and architectural sills, this product family provides the complete solution for fenestration needs.

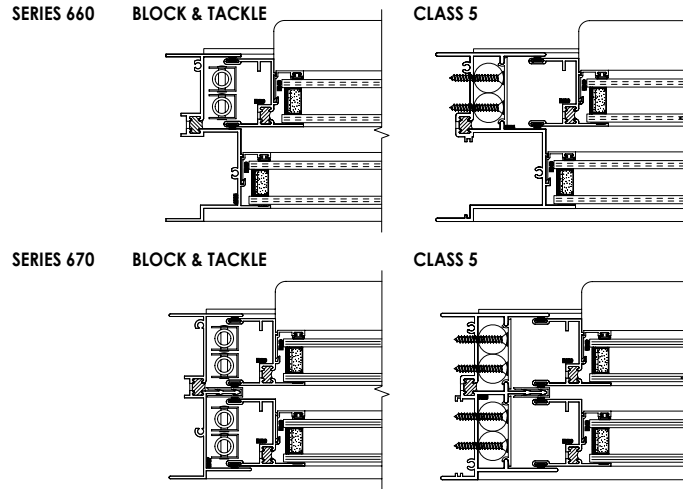
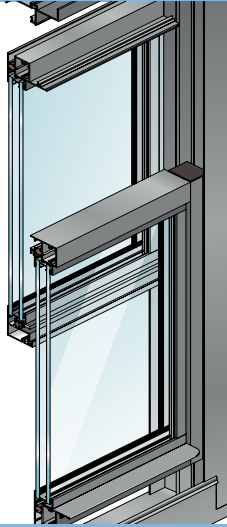
## Features

## Benefits

Thermal barrier in vent and frame	Improves U-Factor performance Enhances energy saving potential
Weather-stripped sash and sill	Provides superior air and water performance
Continuous interlock meeting rails	Improves air infiltration resistance
Accommodates glazing from 1/8" to 1 1/4" depth	Expands design and energy saving options
Inside or outside glazed sash	Flexibility in design requirements for glazing
Dual glazing with optional integral blinds	Improved energy savings and interior light or privacy control with low maintenance
Automatic top and bottom sash locks available	Increased convenience
Screen frames of extruded aluminum alloy are available	Stronger, more durable screens
Trim-All™ panning available	Allows matching of existing sight lines in restoration projects
Accessory line of subframes, mullions, and architectural sills	Allows custom designs with standard product
Anodized or painted finishes available	Multiple options to answer economic and aesthetic concerns



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## PERFORMANCE DATA

### S-660 SINGLE HUNG

AAMA RATING	AW-PG60
AIR INFILTRATION	<.10 CFM/SF @ 6.24 PSF
WATER	NO LEAKAGE @ 12.0 PSF
STRUCTURAL	±90.0 PSF
CRF-FRAME	56
CRF-GLASS	66

### S-6600 CORRESPONDING FIXED WINDOW ARCHITECTURAL GRADE

AAMA RATING	AW-PG80
AIR INFILTRATION	<.06 CFM/SF @ 6.24 PSF
WATER	NO LEAKAGE @ 15.0 PSF
STRUCTURAL	±120.0 PSF
CRF-FRAME	65
CRF-GLASS	68

### S-670 DOUBLE HUNG

AAMA RATING	AW-PG50
AIR INFILTRATION	<.18 CFM/SF @ 6.24 PSF
AAMA RATING	H-HC50
AIR INFILTRATION	<.10 CFM/SF @ 1.56A PSF
WATER	NO LEAKAGE @ 12.0 PSF
STRUCTURAL	±75.0 PSF
CRF-FRAME	52
CRF-GLASS	65

Note: All performance data is subject to change based on testing recertification and/or revised AAMA testing protocol. Please contact EFCO for latest performance values.

CENTER OF GLASS U-FACTOR	660/670 THERMAL U-FACTORS*			
	CONFIGURATION AND SIZE			
	SINGLE HUNG** 47" X 59"	SINGLE HUNG 66" X 82"	DBL HUNG** 47" X 59"	DBL HUNG 66" X 82"
0.47	0.61	0.57	0.63	0.58
0.34	0.53	0.47	0.54	0.48
0.29	0.49	0.43	0.50	0.45
0.25	0.46	0.41	0.48	0.42
0.20	0.42	0.37	0.45	0.38

\* Based on NFRC 100  
\*\* NFRC Gateway size

S-660 SINGLE HUNG & S-670 DOUBLE HUNG HARDWARE CHART	SWEEP LOCK	AUTO HEAD LOCK	AUTO SILL LOCK	POLE RING SWEEP LOCK	POLE SOCKET	ACCESS CONTROLLED SWEEP HANDLE	2 OR 4 BLOCK & TACKLE BALANCES	2 OR 4 CLASS 5 BALANCES
SINGLE HUNG	S		O	O	O	O	S	O
DOUBLE HUNG	S	S	O	O	O	O	S	O

Some size restrictions may apply depending on hardware selected.

O -Optional  
S -Standard  
Blank - N/A

INSIDE GLAZED S-660 SINGLE HUNG & S-670 DOUBLE HUNG 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				
DUAL GLAZING	EXTERIOR LITE			I	I	I	I	I	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

OUTSIDE GLAZED S-660 SINGLE HUNG & S-670 DOUBLE HUNG 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				

FIXED S-6600 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									
	INTERIOR LITE					A	A	A												



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## Main Frame Construction

The frames have a depth of 3 7/8" and are constructed of 6063-T6 aluminum alloy. The nominal material wall thickness for the frame is .080", 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 .080" nominal material wall thickness of 6063-T6 alloy. Corners are of screw spline construction and sealed. Dual weather-stripped, continuous interlock at the sash meeting rail(s) offers superior weathering and structural performance. See Illustration 2.

## Weather Stripping

All sash are weather-stripped with FIN-SEAL® or equal. Two holes or slots per sash through the window frame facilitate weepage.

## Screens

Screen frames are extruded 6063-T6 aluminum alloy. Screens are easily removed by retracting two plungers located on the interior face of the screen frame near the sill at each jamb. Full or half screens are available. 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

Sills are thermally isolated with two thermal struts, consisting of glass reinforced polyamide nylon, mechanically crimped in raceways extruded in the exterior and interior extrusions. All other frames and sash are thermally broken using the latest technology in two-part high density polyurethane. See Illustration 3.

## Hardware

Sweep locks, access controlled sweep locks, pole ring sweep locks, and keepers are of cast white bronze with a US25D finish. Automatic head and sill locks are fabricated of aluminum alloy and finished to match the window. Two types of balance systems are available. A spring loaded block and tackle balance rated Class 1 with a .70 MAF\* ratio is standard. A high performance torsion spring and extension spring balance rated Class 5 with a .30 MAF\* ratio is optional. EFCO reserves the right to substitute a higher performance balance as project conditions dictate, i.e., large, heavy sash requiring minimum operating force. See the Hardware Chart for available hardware types.

## Glazing

Sash is inside or outside glazed with an extruded aluminum snap-in glazing bead. Glazing of 1/8" to 1 1/4" can be accommodated. Dual glazing is also available in 1/8", 3/16", and 1/4" glass. Between the glass 5/8" aluminum blinds are available with dual glazed windows. Series 6600 fixed frame windows accommodate glass or panels from 1/8" to 3 1/2" thick. See the Glazing Chart for the exact size.

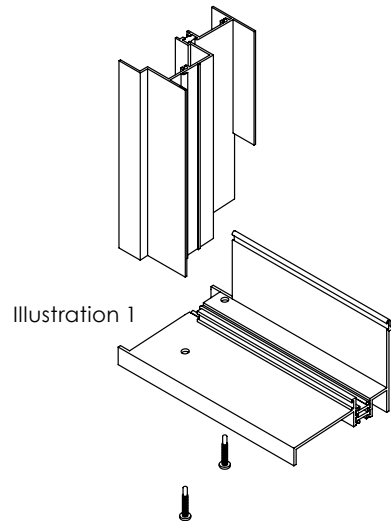


Illustration 1

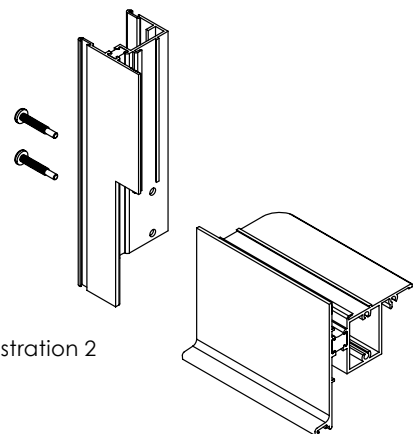


Illustration 2

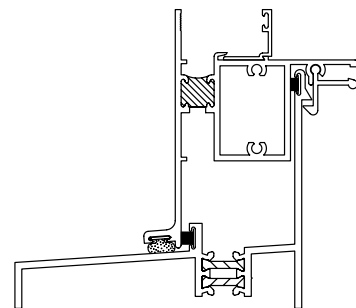


Illustration 3

