



Series 321X, 321G Thermal Impact 3 1/4" Architectural Grade Projected Flush-Face Window

CONFIGURATIONS

Project-Out • Casement Out • Fixed

The 321X and 321G XForce™ window series, were developed to bring the thermal advantages of the 321X and 321G in an impact version for the coastal impact markets. The deeper strutted thermal break allows for superior thermal separation of the framing materials. This window system is an attractive and versatile product that can be utilized on a wide range of applications from educational, to office and healthcare facilities. Offered with a complete line of thermal subframes, mullions and architectural sills, the 321X and 321G provide the complete solution for your fenestration needs.

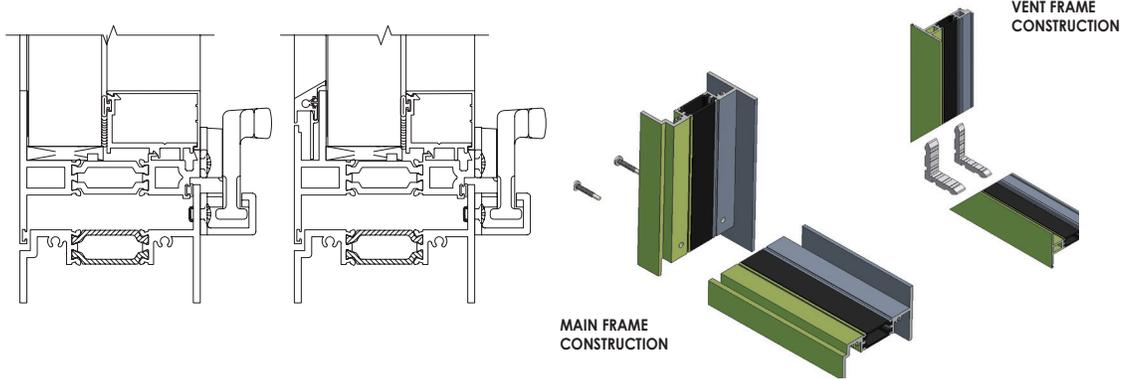
Features

Benefits

35 mm E-Strut™ thermal isolator	Exceptional U-Value performance Dual finish capability Eliminates potential for dry shrinkage
Factory Glazed	Assures quality and testing compliance
Florida product approvals	Independent agency tested and approved
Pressure equalization	Superior water resistance
Angle reinforced vent corners	Improves sash/vent rigidity
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
Screen frames of extruded aluminum alloy are available	Stronger, more durable screens
Snap-In grid available with 321G version	Removes grid from glazing pocket Easily removed for exterior glass cleaning



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PERFORMANCE DATA

FIXED ARCHITECTURAL GRADE

AAMA RATING	AW-150PG-FW
AIR INFILTRATION	<.10 CFM/SF @ 6.24 PSF
WATER	NO LEAKAGE @ 15.0 PSF
CRF-FRAME70

Note: All performance value data is based on laboratory testing per AAMA 101/I.S.2/A440 for Air/Water/Structural, ASTM E90 and or E413 for Acoustical, AAMA 507 and or NFRC 100/200/500 for UFactors and AAMA 1503 for Condensation Resistance Factor (CRF). Printed values are subject to change pending the frequency of recertification testing. Field results will vary depending on size, the field test method, the addition of sub-frames, panning, mullions, accessories and installation into the surrounding condition.

PROJECTED ARCHITECTURAL GRADE

AAMA RATING OUTSWING	AW-120PG-C
AIR INFILTRATION	<.10 CFM/SF @ 6.24 PSF
WATER	NO LEAKAGE @ 15.0 PSF
CRF-FRAME68

325X THERMAL U-FACTORS*				
CENTER OF GLASS U-FACTOR	CONFIGURATION AND SIZE			
	PO	PO Csmf	FX	
	59" X 24"	24" X 59"	47" X 59"	
0.46	0.59	0.58	0.54	
0.34	0.50	0.51	0.43	
0.28	0.47	0.48	0.38	
0.24	0.45	0.46	0.35	
0.20	0.43	0.44	0.32	

*Note: Based on NFRC 100. Job specific performance ratings may vary due to differences in glass and glass spacer selection. If NFRC certified ratings are required, EFCO recommends requesting a CMA Bid Report at the bid stage from EFCO's Product Technical Support Group to ensure performance will meet project specifications

S-321X GLAZING CHART	POLYCARBONATE		GLASS OR PANEL												
	3/16"	1/4"	3/16"	.200**	1/4"	1/4"***	7/8"	1"	1-1/8"	1-1/4"	1-5/16"	1-1/2"	1-3/4"	2"	
INSULATED GLASS												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

S-321G GLAZING CHART	POLYCARBONATE		GLASS OR PANEL												
	3/16"	1/4"	3/16"	.200**	1/4"	1/4"***	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-5/16"	1-1/2"	1-3/4"
INSULATED GLASS													A		

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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 3 1/4" 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. Vents present a flush appearance with the frame in the closed position. 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 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.

Screens

Screen frames are extruded 6063-T6 aluminum alloy frames. Full width hinged wickets or fully hinged screens are available. 18 x 16 mesh screens are available in fiberglass and in .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 which consist of glass reinforced polyamide nylon, mechanically crimped in raceways extruded in the exterior and interior extrusions. See Illustration 3.

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 screw applied glazing retainer and snap-in glazing bead. Glazing of 1-5/16" glass can be accommodated.

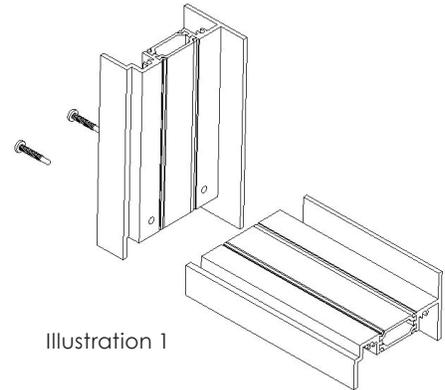


Illustration 1

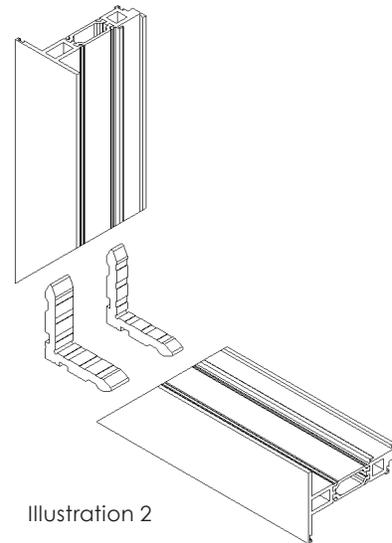


Illustration 2

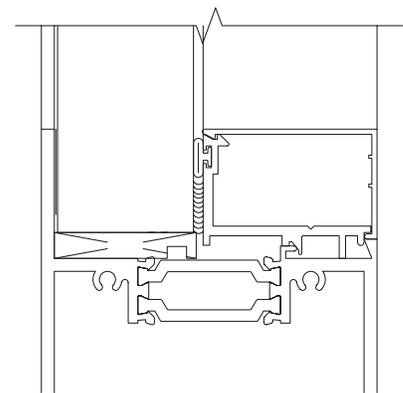
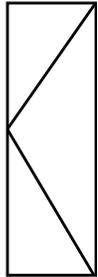


Illustration 3

PROJECTED WINDOW HARDWARE CHART

Casement-Out



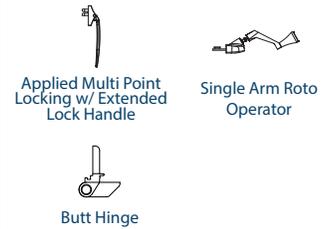
Locking Hardware



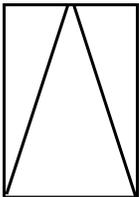
Operating Hardware



Reduced Motion & Operating Forces Hardware (AAMA 513)



Project-Out



Locking Hardware



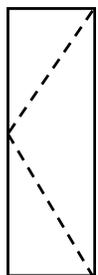
Operating Hardware



Reduced Motion & Operating Forces Hardware (AAMA 513)



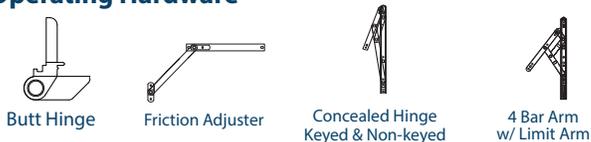
Casement-In



Locking Hardware



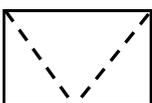
Operating Hardware



Reduced Motion & Operating Forces Hardware (AAMA 513)



Project-In



Locking Hardware



Operating Hardware



Some hardware options and/or combinations may not be available due to size and weight limitations. Please contact your local sales rep for more information. PX32, 325X, and 450X hardware options are not included on this chart.