



Product Selection Guide

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Document Navigation Tips:

Items listed in the table of contents above are active links that will take you to the corresponding page.

The Pella logo on each page is a link back to this table of contents.

Bookmarks are also included in this PDF document and are available as an additional navigation option.

Supporting documents for this product:

Detailed Product Description (readable using Microsoft Word or other text editing application):

https://media.pella.com/professional/adm/Vinyl-HS-DS/PellaHurricaneShield_SlidingWindow.rtf

CSI Specs (readable using Microsoft Word or other text editing application):

https://media.pella.com/professional/adm/Vinyl-CSI_Specs/085313_HS.rtf

CAD cross sections (requires appropriate CAD software to read and use):

https://media.pella.com/professional/adm/Vinyl-HS-DS/CWS-8200-SW_D.dwg

The information published in this document is believed to be accurate at the time of publication. However, because we are constantly working to improve our products, specifications are subject to change without notice. Consult your local Pella representative for up-to-date product information.

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Hurricane Shield Series Sliding Window

Performance Data

Hurricane Shield Series Sliding Window	
Sizes	
Standard Sizes	S
Special Sizes Available Built on 1/8" Increments	O
Frames	
Nail Fin Only	O
Nail Fin with J-Channel	O
Block	O
Integral 5/8" Flange	O
Performance ₁	
Non-Impact Performance	
Meets or Exceeds AAMA/WDMA/HVHZ Ratings	R PG35 - LC PG40 Keystone Certified
Air Infiltration (cfm/ft ² of frame @ 1.57 psf wind pressure.) ₂	=/ < 0.30 cfm/sq ft
Design Pressure	35 - 40 psf
Water Penetration Resistance	5.4 - 6.1 psf
Impact Performance	
Meets or Exceeds AAMA/WDMA/HVHZ Ratings	LC PG50 - LC PG 60 Keystone Certified
Air Infiltration (cfm/ft ² of frame @ 1.57 psf wind pressure.) ₂	=/ < 0.30 cfm/sq ft
Design Pressure	50 - 60 psf
Water Penetration Resistance	7.5 - 9.2 psf
Other Performance Criteria	
Forced Entry Resistance (Minimum Security Grade) ₃	10
Operating Force (lb) Initiate Motion / Maintain Motion (of Hallmark tested size and glazing) ₄	30/40

Sound Transmission Class and Outdoor-Indoor Transmission Class

Frame Size Tested ₅	Glazing System			STC Rating	OITC Rating
	Overall Glazing Thickness	Exterior Glass Thickness	Interior Glass Thickness		
Sliding Window - Dual-Pane Standard Insulating Glass					
59.125 x 47.250	7/8"	3.175mm	3.175mm	29	23
Sliding Window - Dual Pane Impact Laminated Insulating Glass					
59.125 x 47.250	7/8"	3.175mm	7.9375mm	32	26

S = Standard; O = Optional, (-) = Not available

(1) Published performance data is for single unit only. See Design Data pages in this section for specific product performance class and grade values. Performance with additional options may not be the same as Standard and Special size units. Please contact your local Pella representative for complete information.

(2) Testing is conducted in accordance with ASTM E283. Air infiltration ratings for products will differ by size. The performance data does not apply to combination assemblies unless noted. Actual product performance may vary for a number of reasons including installation and product care.

(3) The higher the level, the greater the product's ability to resist forced entry.

(4) Glazing configurations may result in higher operational forces.

(5) ASTM E 1425 defines standard sizes for acoustical testing. Ratings achieved at that size are representative of all sizes of the same configuration. The presence of low-e or argon have negligible effect on sound attenuation characteristics.



Hurricane Shield Series Sliding Window

Features and Options

	Hurricane Shield Series Sliding Window
Glazing (Insulating Glass)	
Glazing Type	
Dual-pane insulating glass	S
Insulated Glass Options / Low-E Types	
Advanced Low-E	O
Coastal Low-E	O
SunDefense™ Low-E	O
Glass Configuration:	
Standard Insulating Glass	S
Non-Impact Laminated Glass	O
Impact Laminated Glass	O
Additional Glazing Options	
Annealed glass	S
Tempered glass	O
Obscure glass ¹	O
Neat glass	O
Bronze Tint	O
Gray Tint	O
Blue Tint	O
Gas Fill / High Altitude	
Argon	S
Sash	
Integrated Dual Slide Rail	S
Aluminum Sash Reinforcement	S
Recessed Pressure Prevention Sash	S
Interior / exterior color	
White Interior/White Exterior	S
Bronze Interior/Bronze Exterior	O
White Interior/Bronze Exterior	O

	Hurricane Shield Series Sliding Window
Hardware	
Color matched hardware	S
Sash locks	
Autolock	S
Screens	
InView™ Screens	S
Grilles	
Grilles-Between-the-Glass	
3/4" Contour	O
5/8" flat	O
1" Contour	O
Grille Patterns: Traditional, Prairie, Top Row, Custom - Equally Divided	O
Exterior Applied Grille with Grilles-Between-the-Glass	
7/8" Contour Applied with 1" Contour GBG	O
Grille Patterns: Traditional, Prairie, Top Row, Custom - Equally Divided	O

S = Standard; O = Optional

(1) Contact your local Pella sales representative for current offering.



Hurricane Shield Series Sliding Window

Glazing Performance - Total Unit

Glazing Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ₁				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown							
			Ext.	Int.		U-Factor	SHGC	VLT	CR	U. S.				Canada ₂			
										Zone				ER	Zone		
Vent - Dual Pane Sliding Window - Low-E Glazing										N	NC	SC	S	CA			
7/8"	SunDefense™ Low-E IG	K-274	3.175	3.175	Argon	0.32	0.21	0.49	53				S				
	with Grilles-Between-the-Glass					0.32	0.19	0.4	53				S				
7/8"	SunDefense™ Low-E IG	K-274	4.7625	4.7625	Argon	0.31	0.21	0.48	52				S				
	with Grilles-Between-the-Glass					0.32	0.19	0.43	52				S				
7/8"	SunDefense™ Low-E IG - Impact Laminated	K-274	3.175	7.9375	Argon	0.3	0.21	0.48	53		NC	SC	S				
	with Grilles-Between-the-Glass					0.32	0.19	0.42	53				S				
7/8"	SunDefense™ Low-E IG - Impact Laminated - Gray Interlayer	K-274	3.175	7.9375	Argon	0.3	0.21	0.33	53		NC	SC	S				
	with Grilles-Between-the-Glass					0.31	0.17	0.29	53				S				
7/8"	SunDefense™ Low-E IG - Impact Laminated	K-274	4.7625	7.9375	Argon	0.32	0.21	0.47	52				S				
	with Grilles-Between-the-Glass					0.34	0.19	0.42	52				S				
7/8"	SunDefense™ Low-E IG - Impact Laminated - Gray Interlayer	K-274	4.7625	7.9375	Argon	0.32	0.21	0.33	52				S				
	with Grilles-Between-the-Glass					0.34	0.19	0.29	52				S				
7/8"	SunDefense™ Low-E IG - Impact Laminated	K-274	4.7625	11.1125	Argon	0.39	0.22	0.46	47				S				
7/8"	SunDefense™ Low-E IG - Impact Laminated - Gray Interlayer	K-274	4.7625	11.1125	Argon	0.39	0.2	0.26	47				S				
7/8"	SunDefense™ Low-E IG - Non-Impact Laminated	K-274	3.175	4.7625	Argon	0.31	0.21	0.48	53				S				
	with Grilles-Between-the-Glass					0.31	0.19	0.43	53				S				
7/8"	SunDefense™ Low-E IG - Non-Impact Laminated	K-274	4.7625	6.35	Argon	0.31	0.21	0.48	52				S				
	with Grilles-Between-the-Glass					0.32	0.19	0.43	52				S				
7/8"	Advanced Low-E IG	K-274	3.175	3.175	Argon	0.32	0.28	0.53	53				S				
	with Grilles-Between-the-Glass					0.32	0.26	0.47	53				S				
7/8"	Advanced Low-E IG	K-274	4.7625	4.7625	Argon	0.32	0.28	0.52	51				S				
	with Grilles-Between-the-Glass					0.32	0.25	0.46	51				S				
7/8"	Advanced Low-E IG - Impact Laminated	K-274	3.175	7.9375	Argon	0.31	0.28	0.52	52				S				
	with Grilles-Between-the-Glass					0.32	0.25	0.46	52				S				
7/8"	Advanced Low-E IG - Impact Laminated	K-274	4.7625	7.9375	Argon	0.32	0.28	0.51	52				S				
	with Grilles-Between-the-Glass					0.34	0.25	0.45	52				S				
7/8"	Advanced Low-E IG - Impact Laminated	K-274	4.7625	11.1125	Argon	0.39	0.28	0.5	47				S				
7/8"	Advanced Low-E IG - Non-Impact Laminated	K-274	3.175	4.7625	Argon	0.31	0.28	0.52	52				S				
	with Grilles-Between-the-Glass					0.31	0.25	0.46	52				S				
7/8"	Advanced Low-E IG - Non-Impact Laminated	K-274	4.7625	6.35	Argon	0.32	0.28	0.52	52				S				
	with Grilles-Between-the-Glass					0.33	0.25	0.46	52				S				
7/8"	Coastal Low-E IG	K-274	3.175	3.175	Argon	0.32	0.14	0.29	53				S				
	with Grilles-Between-the-Glass					0.32	0.13	0.26	53				S				
7/8"	Coastal Low-E IG	K-274	4.7625	4.7625	Argon	0.31	0.14	0.29	52				S				
	with Grilles-Between-the-Glass					0.32	0.13	0.26	52				S				
7/8"	Coastal Low-E IG - Impact Laminated	K-274	3.175	7.9375	Argon	0.31	0.14	0.29	53				S				
	with Grilles-Between-the-Glass					0.32	0.13	0.25	53				S				
7/8"	Coastal Low-E IG - Impact Laminated	K-274	4.7625	7.9375	Argon	0.32	0.15	0.28	52				S				
	with Grilles-Between-the-Glass					0.34	0.13	0.25	52				S				
7/8"	Coastal Low-E IG - Impact Laminated	K-274	4.7625	11.1125	Argon	0.39	0.15	0.28	47				S				
7/8"	Coastal Low-E IG - Non-Impact Laminated	K-274	3.175	4.7625	Argon	0.31	0.14	0.29	53				S				
	with Grilles-Between-the-Glass					0.31	0.13	0.26	53				S				
7/8"	Coastal Low-E IG - Non-Impact Laminated	K-274	4.7625	6.35	Argon	0.31	0.14	0.29	52				S				
	with Grilles-Between-the-Glass					0.33	0.13	0.26	52				S				

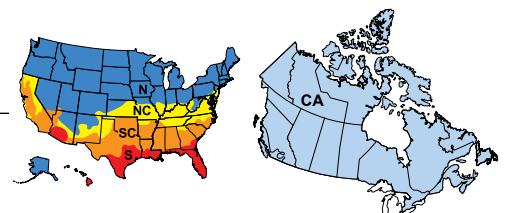
R-Value = 1/U-Factor
 SHGC = Solar Heat Gain Coefficient
 VLT % = Visible Light Transmission
 CR = Condensation Resistance
 ER = Canadian Energy Rating

(1) Glazing performance values are calculated based on NFRC 100, NFRC 200 and NFRC 500. ENERGY STAR® values are updated to 2016 (Version 6) criteria.

(2) The values shown are based on Canada's updated ENERGY STAR® 2020 initiative.

Based on unit size, some products will use 2.5mm glass that may have improved glazing performance from what is shown.

See the Product Performance section for more detailed information or visit www.energystar.gov for Energy Star guidelines.





Hurricane Shield Series Sliding Window

Glazing Performance - Total Unit

Glazing Thickness	Type of Glazing	NFRC Certified Product #	Glass (mm)		Gap Fill	Performance Values ₁				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown					
			Ext.	Int.		U-Factor	SHGC	VLT	CR	U. S.				Canada ₂	
										Zone				ER	Zone
Vent - Dual Pane Sliding Window - Tinted Glazing										N	NC	SC	S	CA	
7/8"	Bronze IG	K-274	3.175	3.175	Argon	0.47	0.48	0.47	42						
	with Grilles-Between-the-Glass					0.47	0.43	0.42	42						
7/8"	Bronze IG	K-274	4.7625	4.7625	Argon	0.46	0.43	0.4	42						
	with Grilles-Between-the-Glass					0.47	0.38	0.36	42						
7/8"	Bronze IG - Impact Laminated	K-274	3.175	7.9375	Argon	0.46	0.46	0.45	43						
	with Grilles-Between-the-Glass					0.46	0.41	0.4	43						
7/8"	Bronze IG - Impact Laminated	K-274	4.7625	7.9375	Argon	0.47	0.41	0.39	42						
	with Grilles-Between-the-Glass					0.48	0.37	0.35	42						
7/8"	Bronze IG - Impact Laminated	K-274	4.7625	11.1125	Argon	0.5	0.4	0.38	40						
7/8"	Bronze IG - Non-Impact Laminated	K-274	3.175	4.7625	Argon	0.46	0.46	0.46	43						
	with Grilles-Between-the-Glass					0.46	0.41	0.41	43						
7/8"	Bronze IG - Non-Impact Laminated	K-274	4.7625	6.35	Argon	0.46	0.42	0.4	42						
	with Grilles-Between-the-Glass					0.47	0.37	0.35	42						
7/8"	Gray IG	K-274	3.175	3.175	Argon	0.47	0.46	0.43	42						
	with Grilles-Between-the-Glass					0.47	0.42	0.38	42						
7/8"	Gray IG	K-274	4.7625	4.7625	Argon	0.46	0.39	0.34	42						
	with Grilles-Between-the-Glass					0.47	0.35	0.31	42						
7/8"	Gray IG - Impact Laminated	K-274	3.175	7.9375	Argon	0.46	0.44	0.41	43						
	with Grilles-Between-the-Glass					0.46	0.39	0.37	43						
7/8"	Gray IG - Impact Laminated	K-274	4.7625	7.9375	Argon	0.47	0.38	0.34	42						
	with Grilles-Between-the-Glass					0.48	0.34	0.3	42						
7/8"	Gray IG - Impact Laminated	K-274	4.7625	11.1125	Argon	0.5	0.37	0.33	40						
7/8"	Gray IG - Non-Impact Laminated	K-274	3.175	4.7625	Argon	0.46	0.45	0.42	43						
	with Grilles-Between-the-Glass					0.46	0.4	0.37	43						
7/8"	Gray IG - Non-Impact Laminated	K-274	4.7625	6.35	Argon	0.46	0.38	0.34	42						
	with Grilles-Between-the-Glass					0.47	0.35	0.31	42						
7/8"	Blue IG	K-274	3.175	3.175	Argon	0.47	0.34	0.48	N/A						
7/8"	Blue IG - Impact Laminated	K-274	3.175	7.9375	Argon	0.48	0.57	0.62	N/A						
7/8"	Blue IG - Impact Laminated	K-274	4.7625	11.1125	Argon	0.47	0.58	0.62	N/A						

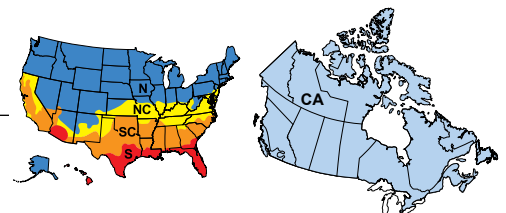
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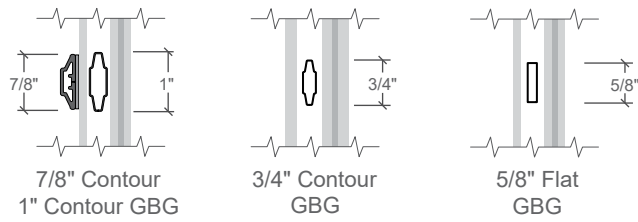




Grilles

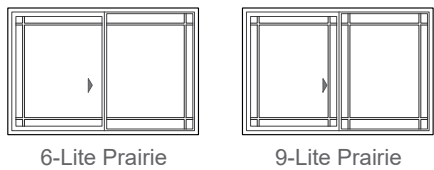
Grille Profiles

Grilles-Between-the-Glass



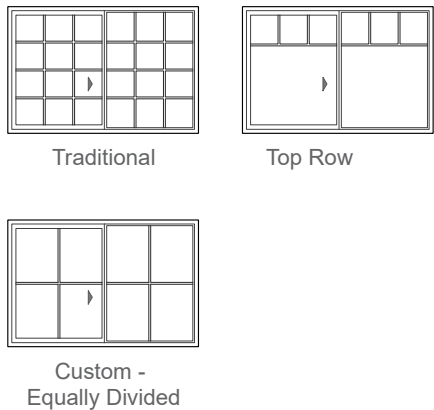
Grille Patterns

Prairie Lite Patterns



- Prairie**
- Approximately 4" from edge of sash to center of bar.
 - Minimum actual glass is 13".

Other Available Patterns



- Traditional**
- Specify number of lites.
 - Grille Bars (Grilles) must be equally divided on visible glass.
 - Minimum lite size = 6".

- Top Row**
- Top Row dimension must be $\leq 1/2$ actual glass.

For traditional patterns, see size tables.



Hurricane Shield Series Sliding Window

Special Sizes and Dimensions

Listed sizes are the minimum and maximum manufacturable sizes. Please reference the Florida Building & Product Approval site, Texas Department of Insurance site, or your local rep for specific sizing based on needed performance.

		Minimum	Maximum
XO or OX Units		21" W x 13-1/2" H (546 x 292)	72" W x 62" H 74" W x 54" H (2 438 x 1 575)
XOX units		45" W x 17-7/8" H (1 207 x 292)	125-5/8" W x 62" H 111" W x 63" H (2 743 x 1 575)

Frame area cannot be greater than 40 Ft² on 2-panel dual pane annealed units or greater than 50 Ft² on 3-panel dual pane annealed units.

General Notes:

XO/OX Units:

Rough Opening = Frame Dimension + 1/2"

Maximum Frame Height ≤ Frame Width x 1.75

XOX Units:

Rough Opening = Frame Dimension + 1/2"

Sash split options are 1/4 width and 1/3 width of frame

1/4 Vent XOX Units: Max frame height ≤ frame width X 0.875

1/3 Vent XOX Units: Max frame height ≤ frame width X 1.167

Miscellaneous Formulas

Actual Glass	Equal Vent (XO and OX)			Quarter Vent (XOX)		Third vent (XOX)	
		Vent	Fixed	Vent	Fixed	Vent	Fixed
	Height	FH - 5.748	FH - 3.217	FH - 5.748	FH - 3.217	FH - 5.748	FH - 3.217
	Width	(FW/2) - 2.980	(FW/2) - 2.983	(FW/4) - 2.025	(FW/2) - 4.649	(FW/3) - 2.824	(FW/3) - 3.051
Visible Glass	Height	AGHV - 1	AGHF - 1	AGHV - 1	AGHF - 1	AGHV - 1	AGHF - 1
	Width	AGWV - 1	AGWF - 1	AGWV - 1	AGWF - 1	AGWV - 1	AGWF - 1
Clear Opening ₁	Height	FH - 4.25		FH - 4.25		FH - 4.25	
	Width	(FW ÷ 2) - 4.958		(FW ÷ 4) - 2.813		(FW ÷ 3) - 4.9	

KEY:

AGWV = Actual Glass Width Vent
AGWF = Actual Glass Width Fixed
AGHV = Actual Glass Height Vent
AGHF = Actual Glass Height Fixed

VGHV = Visible Glass Height Vent
VGHF = Visible Glass Height Fixed
VGWV = Visible Glass Width Vent
VGWF = Visible Glass Width Fixed

(1) Calculated based on standard hardware.

To convert areas to square meters (m²), multiply square feet by 0.0929



Hurricane Shield Series Sliding Window

Detailed Product Description

Frame

- Overall frame depth: 3" on all frame types.
- Frame members are mitered and heat fused to provide a fully welded corner assembly. Sill is fitted with weeps.
- Frame: [1" setback nail fin for 2" wall depth] [Block frame for 3" wall depth] [Integral 5/8" flange for 2-13/16" wall depth].
- Interior and exterior frame surfaces are extruded rigid PVC.

Sash

- Sash members are extruded, rigid PVC.
- Sash members are mitered and heat-fused to provide a fully welded corner assembly.
- Includes an integral extruded sash slide.
- Contains sealed insulating glass.

Weatherstripping

- Sash is weatherstripped around the sash perimeter with a fin-type, pile weatherstripping.

Glazing System

- Quality float glass complying with ASTM C 1036.
- Exterior face-glazed sealed insulating glass.
- Dual-Pane [[annealed] [tempered]] [[Advanced] [Coastal] [SunDefense™] [Neat, SunDefense], [Obscure, SunDefense] Low-E coated [with Argon]] [Obscure] [Gray] [Blue] [Bronze].

Interior/Exterior

- Window frame and sash members are [[White] [Bronze] with integral color extruded throughout the profiles] [Bronze] exterior, white integral on interior. Exterior, consisting of a solar reflective coating exceeding AAMA 613 test requirements, with White integral color extruded throughout the profiles on the interior].
- All exposed PVC surfaces are smooth, glossy and uniform in appearance.

Hardware

- Locks are factory-installed, zinc die cast, self aligning, [autolocks] located on the checkrail.
- One sash lock is installed on units with frame heights less than 35-1/2". Two sash locks on units with frame heights greater than 35-1/2" on units with frame heights greater than or equal to 36" vent sashes are equipped with two nylon roller housings containing two nylon rollers each.
- Hardware finish is [White] [Matte Black].

Screens

- Set in aluminum frame and fitted to exterior of window.
- Screen frame finish is baked enamel, color to match exterior
- Supplied complete with all necessary hardware.
- InView™ Screens
 - Black vinyl coated 18/18 mesh fiberglass screen cloth complying with SMA 1201.

Optional Products

Grilles

- Grilles-Between-the-Glass
 - [Dual-Pane Insulating glass contains [[3/4"] [1"] contoured] [5/8" flat] aluminum grilles permanently installed between two panes of glass.
 - Patterns are [Traditional] [6-Lite Prairie] [9-Lite Prairie] [Top Row].
 - Interior grille color matches interior frame.
 - Exterior grille color matches exterior frame.
- Exterior Applied Grille with Grilles-Between-the-Glass
 - 7/8" Grilles permanently bonded to the exterior of glass with 1" contour grilles permanently installed between two panes of glass.
 - Patterns are [Traditional] [6-Lite Prairie] [9-Lite Prairie].
 - Grilles match color of interior and exterior frame.

Hardware

- Optional window opening control device available for field installation. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-10.

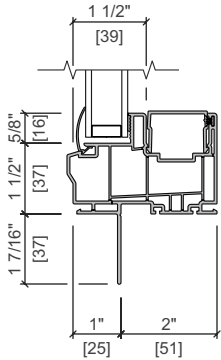
(1) Top Row Only available with 5/8" flat grilles-between-the-glass.



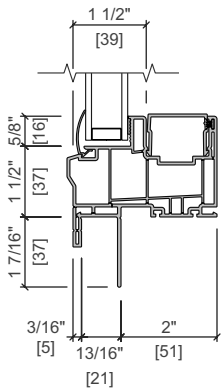
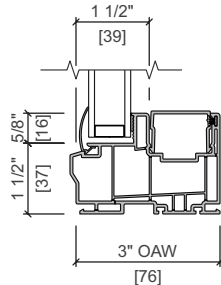
Hurricane Shield Series Sliding Window

Unit sections - Frame Types

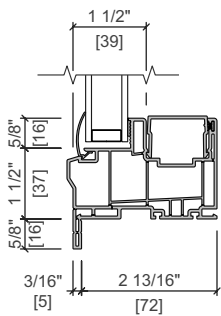
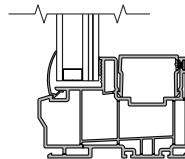
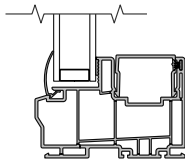
NEW CONSTRUCTION FRAME



REPLACEMENT FRAME



GLAZING OPTIONS

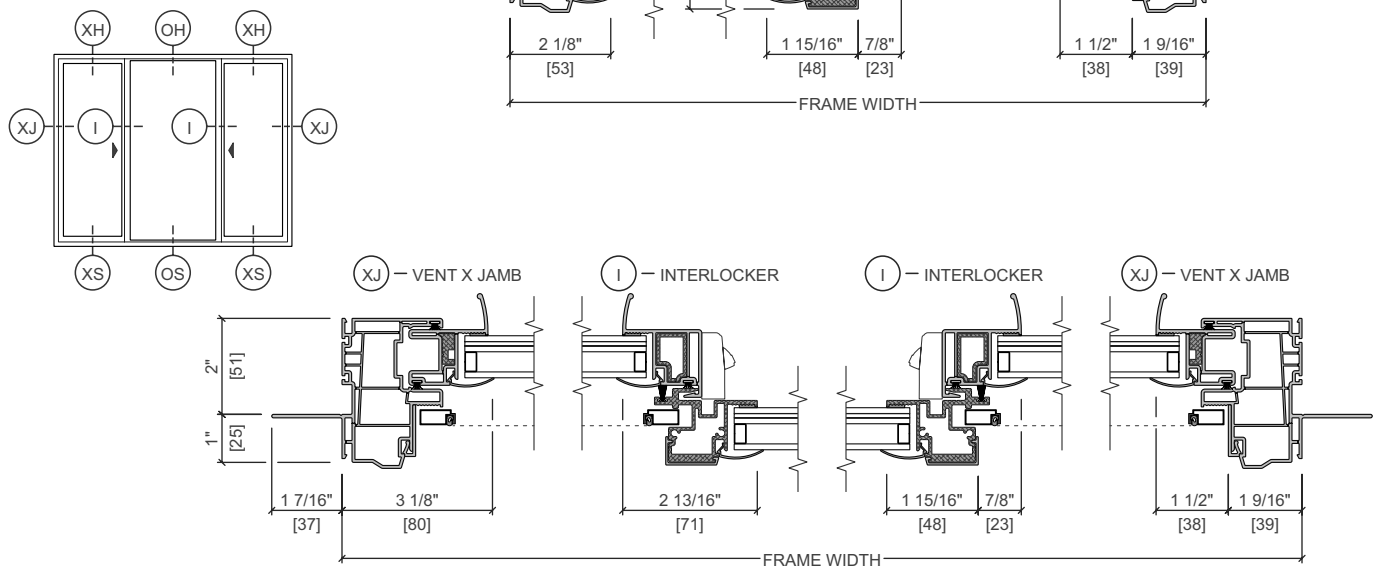
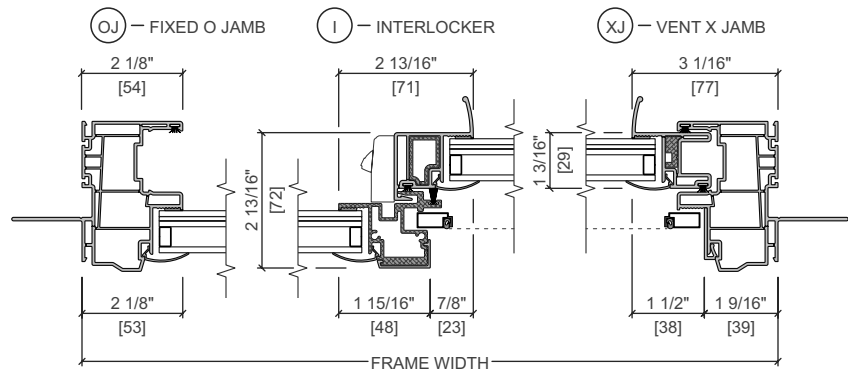
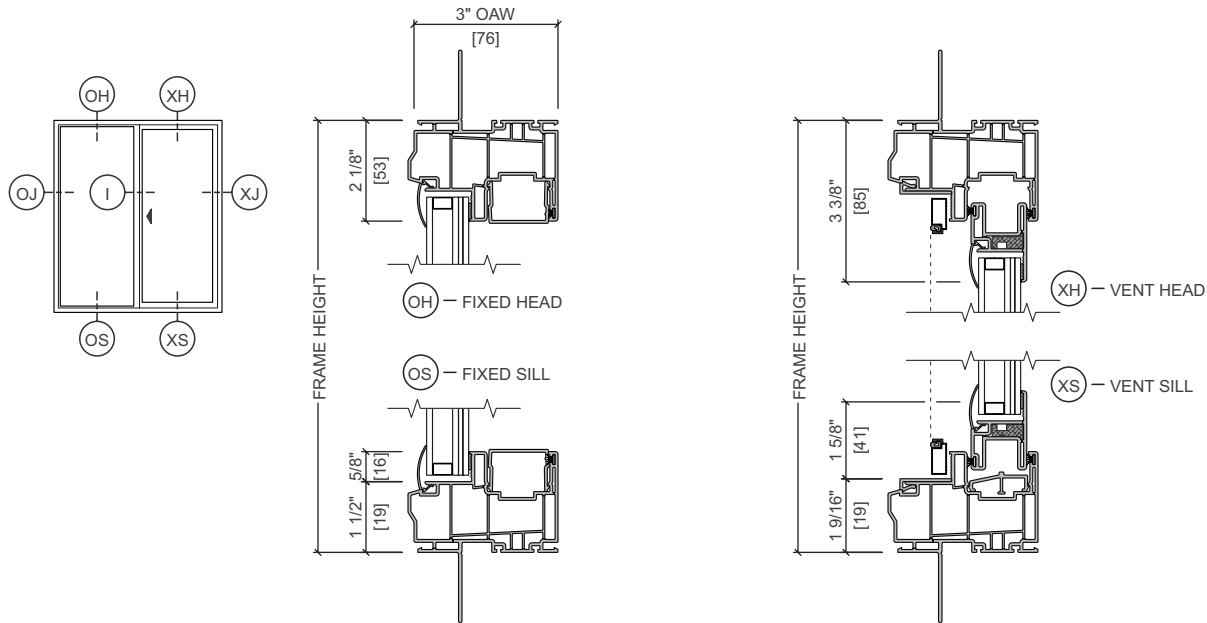


Scale 3" = 1' 0"
All dimensions are approximate.



Hurricane Shield Series Sliding Window

Unit Sections - Nail Fin

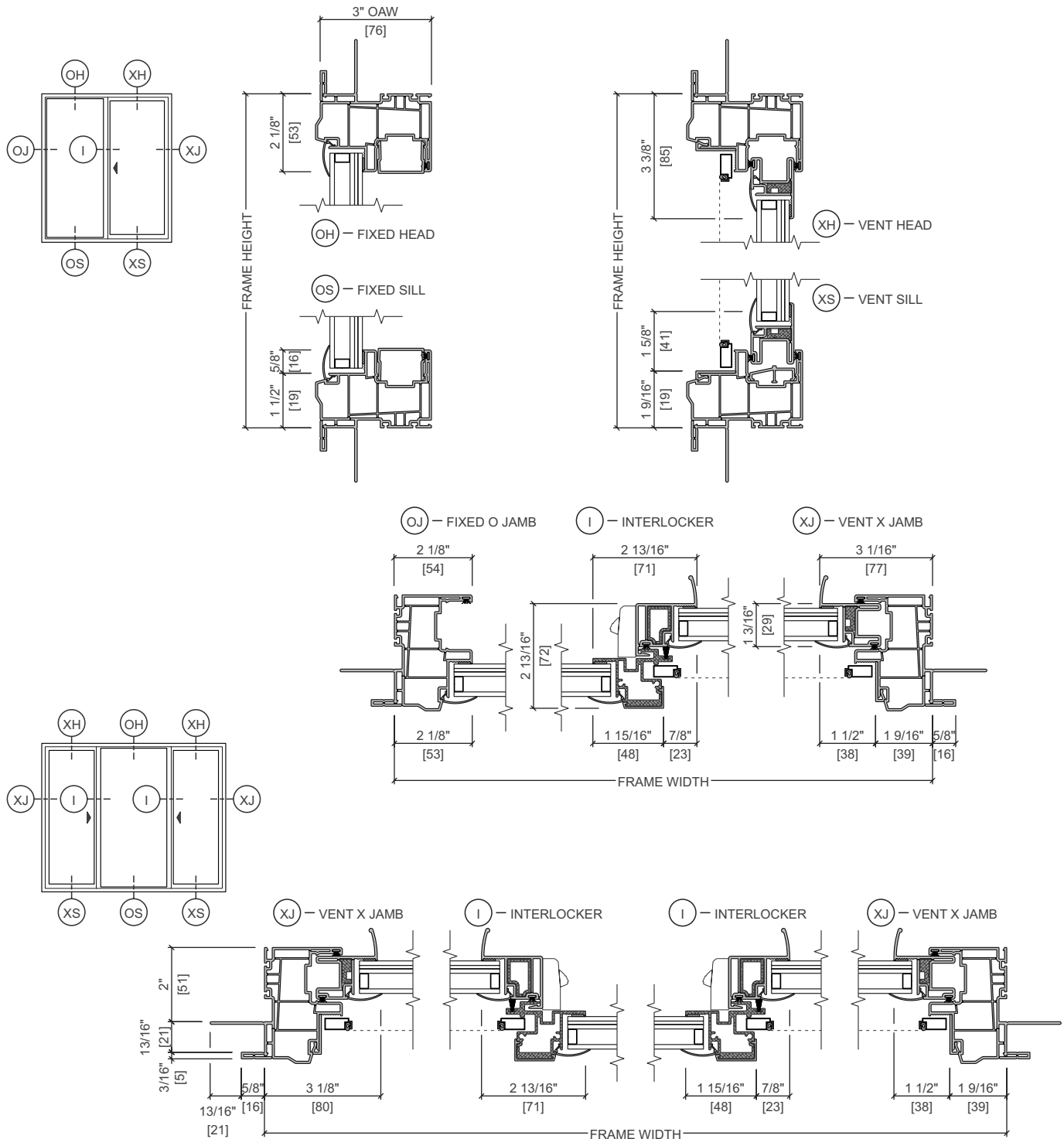


Scale 3" = 1' 0"
All dimensions are approximate.



Hurricane Shield Series Sliding Window

Unit Sections - Nail Fin with J-Channel

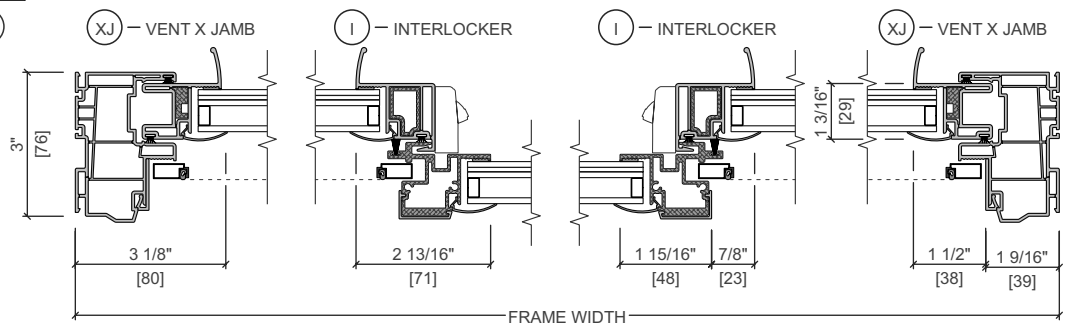
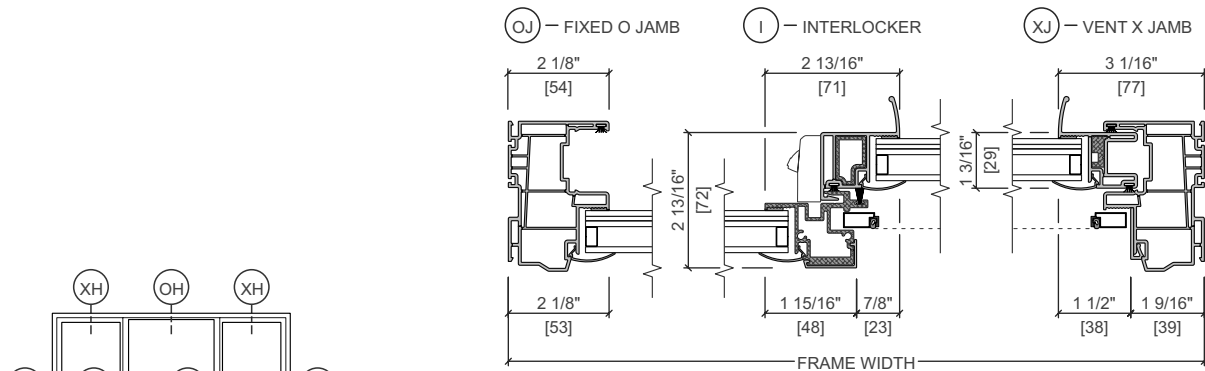
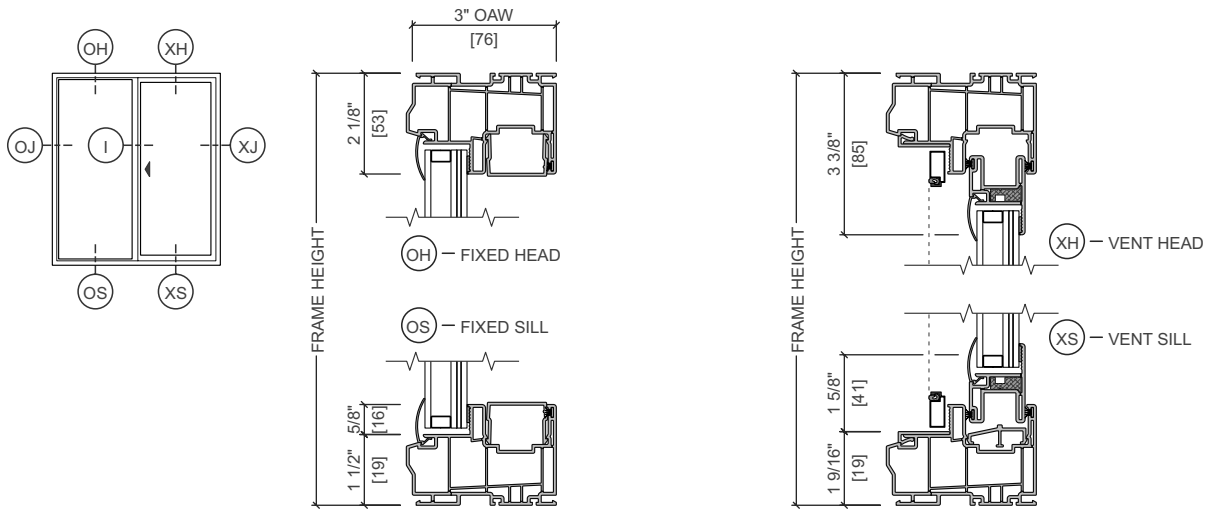


Scale 3" = 1' 0"
All dimensions are approximate.



Hurricane Shield Series Sliding Window

Unit Sections - Block Frame

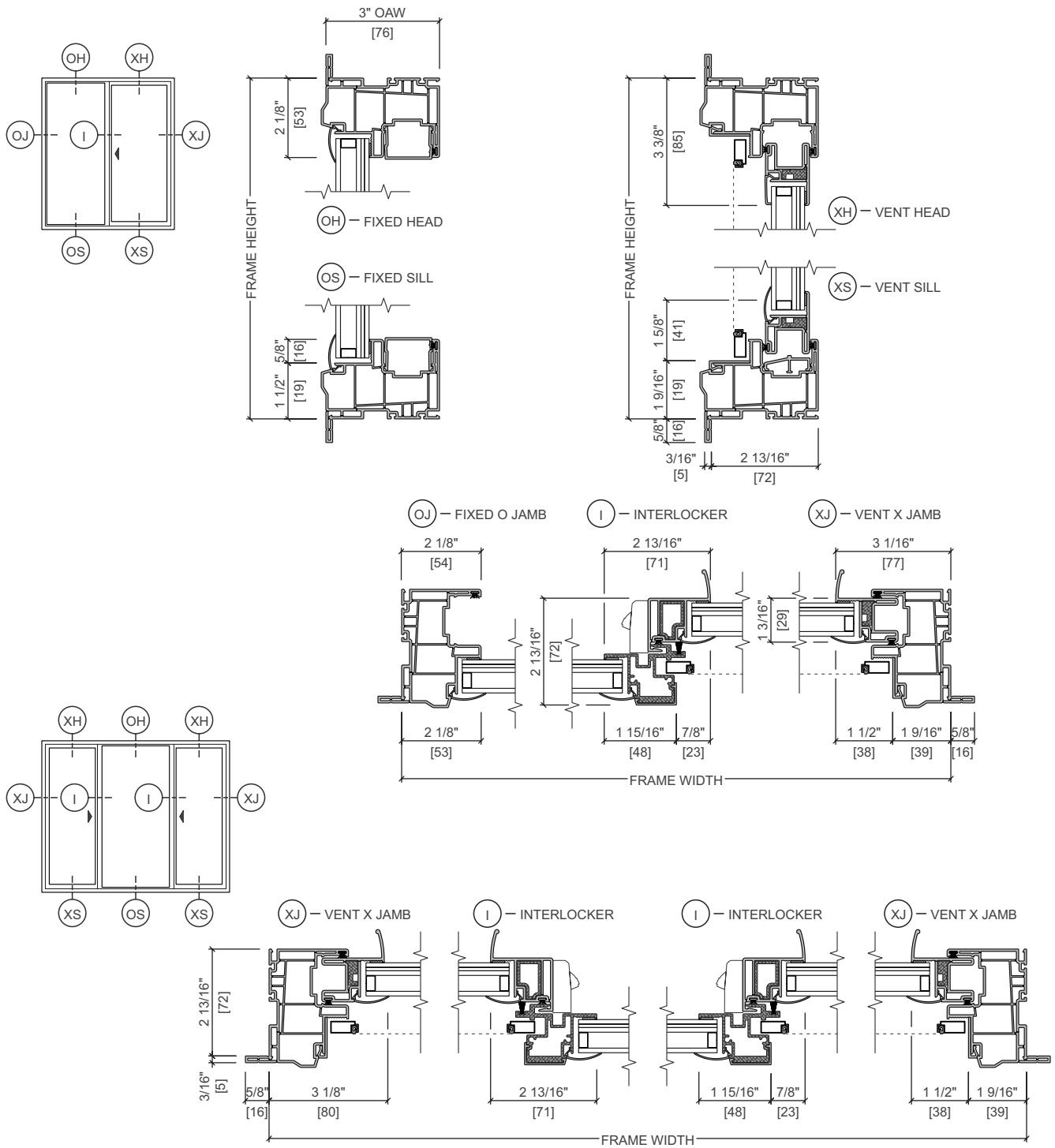


Scale 3" = 1' 0"
All dimensions are approximate.



Hurricane Shield Series Sliding Window

Unit Sections - Flush Flange



Scale 3" = 1' 0"
All dimensions are approximate.