



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_Awning.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-8450-AW_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 Awning

Performance Data

	Hurricane Shield Series Awning
Sizes	
Special Sizes Available Built on 1/8" Increments	O
Frames	
Nail Fin	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	C65 Keystone Certified
Air Infiltration (cfm/ft² of frame @ 1.57 psf wind pressure.)	≤0.30
Design Pressure	65-67.5 psf
Water Penetration Resistance	10.5 psf
Performance Upgrade	
Meets or Exceeds AAMA/WDMA/HVHZ Ratings	C65 Keystone Certified
Air Infiltration (cfm/ft² of frame @ 1.57 psf wind pressure.)	≤0.30
Design Pressure	67.5 psf
Water Penetration Resistance	10.5 psf
Other Performance Criteria	
Forced Entry Resistance (Minimum Security Grade)2	10
Maximum Operating Force (lbs) (Initiate Motion/Maintain Motion)	15/6

Sound Transmission Class and Outdoor-Indoor Transmission Class

Frame Size Tested3	Glazing System			STC Rating	OITC Rating
	Overall Glazing Thickness	Exterior Glass Thickness	Interior Glass Thickness		
Awning Dual Pane Standard Insulating Glass					
Vent 59.125" x 23.625"	7/8"	4.7625mm	4.7625mm	31	24
Awning Dual Pane Impact Laminated Insulating Glass					
Vent 59.125" x 23.625"	7/8"	3.175mm	7.9375mm	35	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.

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

(3) 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 Awning

Features and Options

	Hurricane Shield Series Awning
Glazing (Insulating Glass)	
Glazing Type	
Dual-pane insulating glass	S
Glass Configuration	
Standard Insulating Glass	S
Non-Impact Laminated Glass	O
Impact Laminated Glass	O
Insulated Glass Options / Low-E Types	
Advanced Low-E	O
Coastal Low-E	O
SunDefense™ Low-E	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	
Aluminum Sash Reinforcement	S
Interior / Exterior Color	
White Interior/White Exterior	S
Bronze Interior/Bronze Exterior	O
White Interior/Bronze Exterior	O
Hardware	
Color matched hardware	S
Screens	
InView™ black fiberglass screens - flat	S
Grilles	
Grilles-Between-the-Glass	
3/4" Contour	O
5/8" Flat	O
1" Contour	O
Grille Patterns: Traditional, Prairie, Top Row ² , Custom - Equally Divided	O
Exterior Applied Grille with Grilles-Between-the-Glass	
7/8" contour profile	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.

(2) Top Row is only available with 5/8" flat grilles between-the-glass.



Hurricane Shield™ Series Awning

Glazing Performance - Total Unit

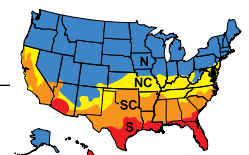
Glazing Thickness	Type of Glazing	CPD #	Glass (mm)		Gap Fill	Performance Values ¹				Shaded Areas Meet ENERGY STAR® Performance Criteria in Zones Shown			
			Ext.	Int.		U-Factor	SHGC	VLT	CR	U. S.			
										Zone			
Vent - Dual Pane Casement Window - Low-E Glazing										N	NC	SC	S
7/8"	SunDefense™ Low-E IG	K-263	3.175	3.175	Argon	0.27-0.32	0.18	0.42	49-54	N	NC	SC	S
	with Grilles-Between-the-Glass					0.27-0.32	0.15-0.17	0.34-0.38	49-54	N	NC	SC	S
7/8"	SunDefense™ Low-E IG	K-263	4.7625	4.7625	Argon	0.26-0.31	0.18-0.19	0.41	53-60	N	NC	SC	S
	with Grilles-Between-the-Glass					0.26-0.32	0.15-0.17	0.33-0.37	53-60	N	NC	SC	S
7/8"	SunDefense™ Low-E IG - Impact Laminated	K-263	3.175	7.9375	Argon	0.26-0.31	0.18	0.41	53-59	N	NC	SC	S
	with Grilles-Between-the-Glass					0.27-0.32	0.15-0.17	0.33-0.37	53-59	N	NC	SC	S
1"	SunDefense™ Low-E IG - Impact Laminated	K-263	4.7625	7.9375	Argon	0.27-0.31	0.18-0.19	0.41	53-59	N	NC	SC	S
	with Grilles-Between-the-Glass					0.28-0.32	0.15-0.17	0.33-0.37	53-59	N	NC	SC	S
7/8"	Advanced Low-E IG	K-263	3.175	3.175	Argon	0.27-0.32	0.24-0.25	0.45	49-54	N	NC	SC	S
	with Grilles-Between-the-Glass					0.27-0.32	0.20-0.22	0.37-0.41	49-54	N	NC	SC	S
7/8"	Advanced Low-E IG	K-263	4.7625	4.7625	Argon	0.27-0.31	0.24	0.44	52-59	N	NC	SC	S
	with Grilles-Between-the-Glass					0.27-0.32	0.20-0.22	0.36-0.40	52-59	N	NC	SC	S
7/8"	Advanced Low-E IG - Impact Laminated	K-263	3.175	7.9375	Argon	0.27-0.31	0.24	0.44	53-59	N	NC	SC	S
	with Grilles-Between-the-Glass					0.28-0.32	0.20-0.22	0.36-0.40	53-59	N	NC	SC	S
1"	Advanced Low-E IG - Impact Laminated	K-263	4.7625	7.9375	Argon	0.27-0.32	0.24	0.44	53-59	N	NC	SC	S
	with Grilles-Between-the-Glass					0.28-0.33	0.20-0.22	0.34-0.40	53-59	N	NC	SC	S
7/8"	Coastal Low-E IG	K-263	3.175	3.175	Argon	0.27-0.32	0.12	0.25	49-54	N	NC	SC	S
	with Grilles-Between-the-Glass					0.27-0.32	0.10-0.11	0.20-0.23	49-54	N	NC	SC	S
7/8"	Coastal Low-E IG	K-263	4.7625	4.7625	Argon	0.27-0.31	0.12-0.13	0.25	53-60	N	NC	SC	S
	with Grilles-Between-the-Glass					0.27-0.32	0.11-0.12	0.20-0.22	53-60	N	NC	SC	S
7/8"	Coastal Low-E IG - Impact Laminated	K-263	3.175	7.9375	Argon	0.26-0.31	0.12-0.13	0.24	53-60	N	NC	SC	S
	with Grilles-Between-the-Glass					0.27-0.32	0.10-0.12	0.20-0.22	53-59	N	NC	SC	S
1"	Coastal Low-E IG - Impact Laminated	K-263	4.7625	7.9375	Argon	0.27-0.31	0.13	0.24	53-59	N	NC	SC	S
	with Grilles-Between-the-Glass					0.28-0.32	0.11-0.12	0.20-0.22	53-59	N	NC	SC	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.

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 Awning

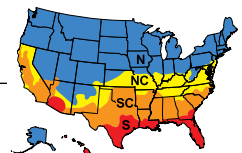
Glazing Performance - Total Unit

Glazing Thickness	Type of Glazing	CPD #	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.			
										Zone			
Vent - Dual Pane Casement Window - Tinted Glazing										N	NC	SC	S
7/8"	Bronze IG	K-263	3.175	3.175	Argon	0.40-0.43	0.41	0.39-0.40	45-48				
	with Grilles-Between-the-Glass					0.40-0.43	0.34-0.37	0.32-0.36	45-48				
7/8"	Bronze IG	K-263	4.7625	4.7625	Argon	0.40-0.43	0.36-0.37	0.34	43-47				
	with Grilles-Between-the-Glass					0.40-0.43	0.29-0.33	0.27-0.31	43-47				
7/8"	Bronze IG - Impact Laminated	K-263	3.175	7.9375	Argon	0.40-0.42	0.39	0.38-0.39	44-47				
	with Grilles-Between-the-Glass					0.39-0.42	0.32-0.35	0.31-0.35	44-47				
1"	Bronze IG - Impact Laminated	K-263	4.7625	7.9375	Argon	0.40-0.43	0.35-0.36	0.34	43-46				
	with Grilles-Between-the-Glass					0.40-0.43	0.29-0.33	0.27-0.30	43-46				
7/8"	Gray IG	K-263	3.175	3.175	Argon	0.40-0.43	0.38-0.40	0.35-0.36	45-48				
	with Grilles-Between-the-Glass					0.40-0.43	0.31-0.36	0.29-0.33	45-48				
7/8"	Gray IG	K-263	4.7625	4.7625	Argon	0.40-0.43	0.33-0.34	0.29	43-47				
	with Grilles-Between-the-Glass					0.40-0.43	0.27-0.31	0.24-0.26	43-47				
7/8"	Gray IG - Impact Laminated	K-263	3.175	7.9375	Argon	0.40-0.42	0.36-0.38	0.34-0.35	44-47				
	with Grilles-Between-the-Glass					0.39-0.42	0.30-0.34	0.28-0.32	44-47				
7/8"	Gray IG - Impact Laminated	K-263	4.7625	7.9375	Argon	0.40-0.43	0.33	0.29	43-46				
	with Grilles-Between-the-Glass					0.40-0.43	0.27-0.30	0.23-0.26	43-46				
7/8"	Blue IG	K-263	3.175	3.175	Argon	0.42	0.27	0.39	N/A				
	with Grilles-Between-the-Glass					0.44-0.47	0.29	0.25	40-43				
7/8"	Blue IG	K-262	3.175	3.175	Argon	0.42	0.27	0.39	N/A				

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.

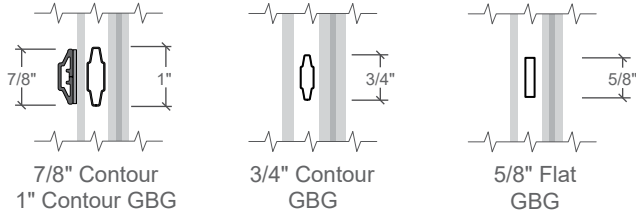
Based on unit size, some products will use 2.5mm glass that may have improved glazing performance from what is shown. See the Product Performance section for more detailed information or visit www.energystar.gov for Energy Star guidelines.





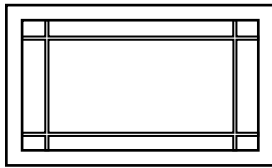
Grille Profiles

Grilles-Between-the-Glass



Grille Patterns

Prairie Lite Patterns

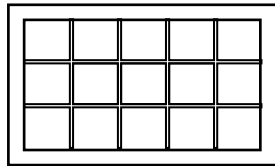


9-Lite Prairie

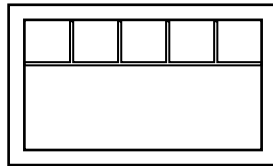
Prairie

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

Other Available Patterns



Traditional



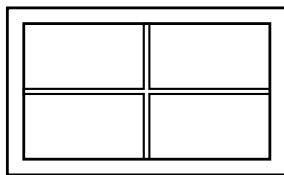
Top Row

Traditional

- Specify number of lites.
- Grilles must be equally divided on visible glass.
- Minimum 6" x 6".

Top Row

- Standard visible glass to separator bar must be $\leq 1/2$ upper actual glass.

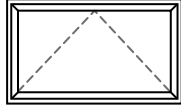


Custom - Equally Divided

For traditional patterns, see size tables.



1-Wide
Vent Unit



MINIMUM

20" W x 17.875" H

(508 x 454)

MAXIMUM

48" W x 36" H

(1 219 x 914)

General Notes:

- To convert areas to square meters (m2), multiply square feet by 0.0929.
- Rough Opening = Frame Dimension + 1/2".
- Keep frame dimensions to the nearest 1/8" increment.
- Tempered glass must measure ≥ 19" diagonally.

Miscellaneous Formulas

1-Wide Vent	
Visible Glass	VGW = FW - 6.188" VGH = FH - 6.188"
Actual Glass	AGW = FW - 5.5" AGH = FH - 5.5"
Vent Area	$((FW - 5.625") \times (8.25")) \div 144$

Key:

- AGW = Actual Glass Width
- AGH = Actual Glass Height
- FW = Frame Width
- FH = Frame Height
- VGW = Visible Glass Width
- VGH = Visible Glass Height



Detailed Product Description

Frame

- Overall frame depth: 3-1/4" on all frame types.
- Frame members are mitered and heat fused to provide a fully welded corner assembly. Sill is fitted with weeps.
- Frame: [1-1/8" setback nail fin for 2-1/8" wall depth] [Block frame for 3-1/4" wall depth] [Integral 5/8" flange for 3" 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.
- Contains sealed insulating glass.

Weatherstripping

- Vent units include weatherstripping around the sash perimeter with a fin-type, pile and an extruded bulb weatherstrip.

Glazing System

- Quality float glass complying with ASTM C 1036.
- Exterior face-glazed sealed insulating glass.
- Dual-Pane insulating glass [[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

- Dual lock with dual handles. Lock handles on jambs. Lock tie-bars are stainless steel.
- High quality [steel] [stainless steel] dual-arm roto-operator with fold down crank handle located on sill.
- Hinge arms are [steel] [stainless steel].
- Corrosion-resistant fasteners of PVC-compatible material.
- Hardware finish is [White] [Bronze].

Screens

- Set in aluminum frame and fitted to interior of window.
- Screen frame finish is baked enamel, color to match interior.
- 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] [9-Lite Prairie] [Top Row¹].
 - Interior grille color matches interior frame.
 - Exterior grille color matches exterior frame.
- or-
- 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] [9-Lite Prairie].
 - Grilles match color of interior and exterior frame.

Hardware

- Optional limited opening hardware available for vent units in [White] [Bronze] extruded vinyl to match the unit; nominal 3" opening.
- 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.

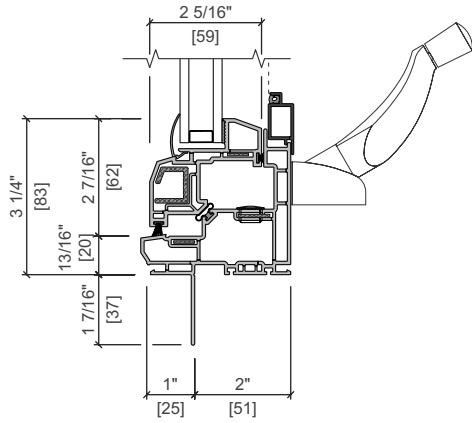
(1) Top Row is only available with 5/8" flat grilles between-the-glass.



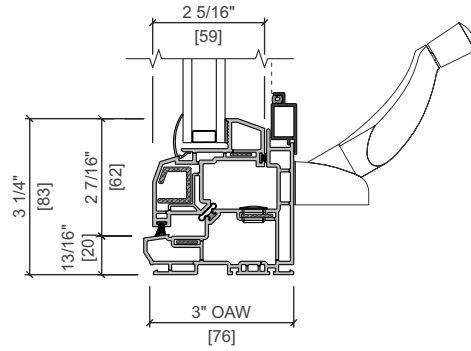
Hurricane Shield™ Series Awning

Unit Sections - Frame Types

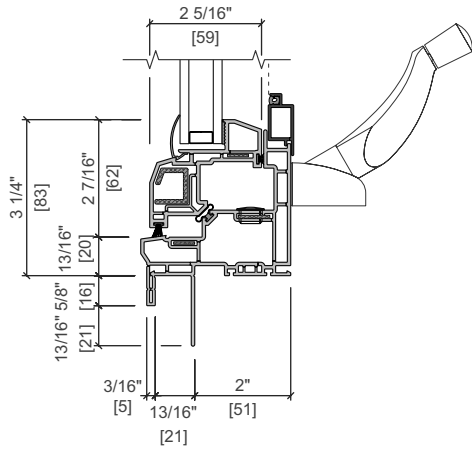
NEW CONSTRUCTION FRAME Standard Nail Fin



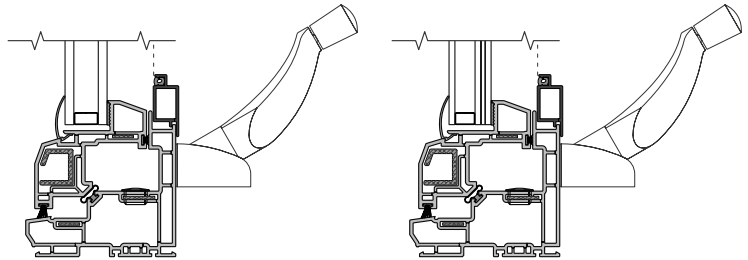
REPLACEMENT FRAME Block Frame



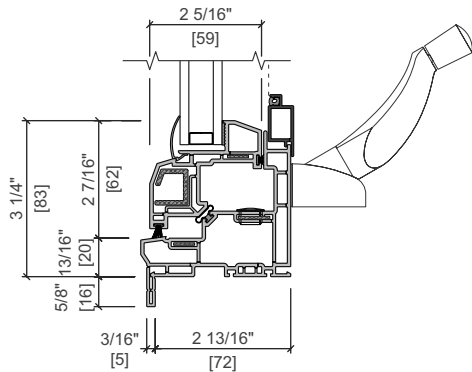
Nail Fin J-Channel



GLAZING OPTIONS 7/8\" IG 7/8\" IMPACT IG



Flush Flange

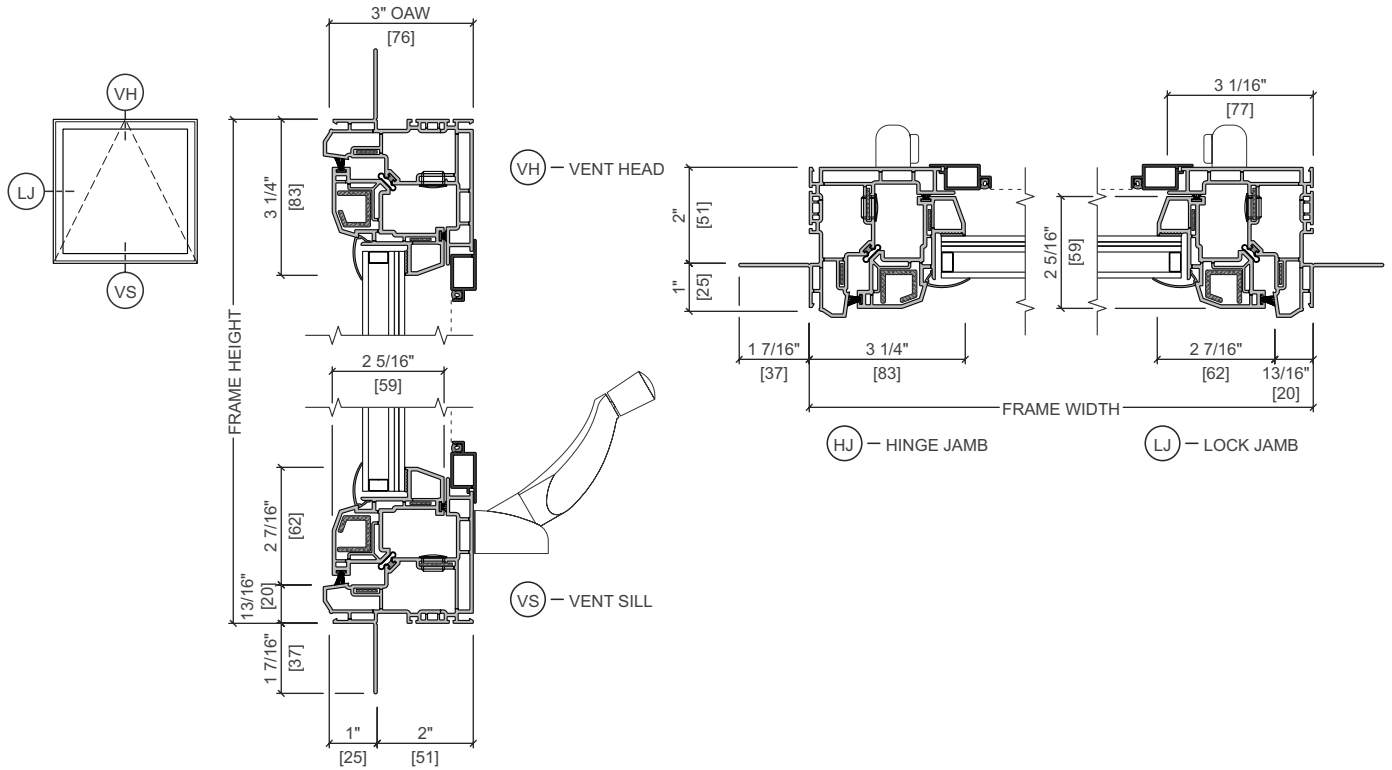


Scale 3" = 1' 0"
All dimensions are approximate.



Hurricane Shield™ Series Awning

Unit Sections - Integral Nail-Fin

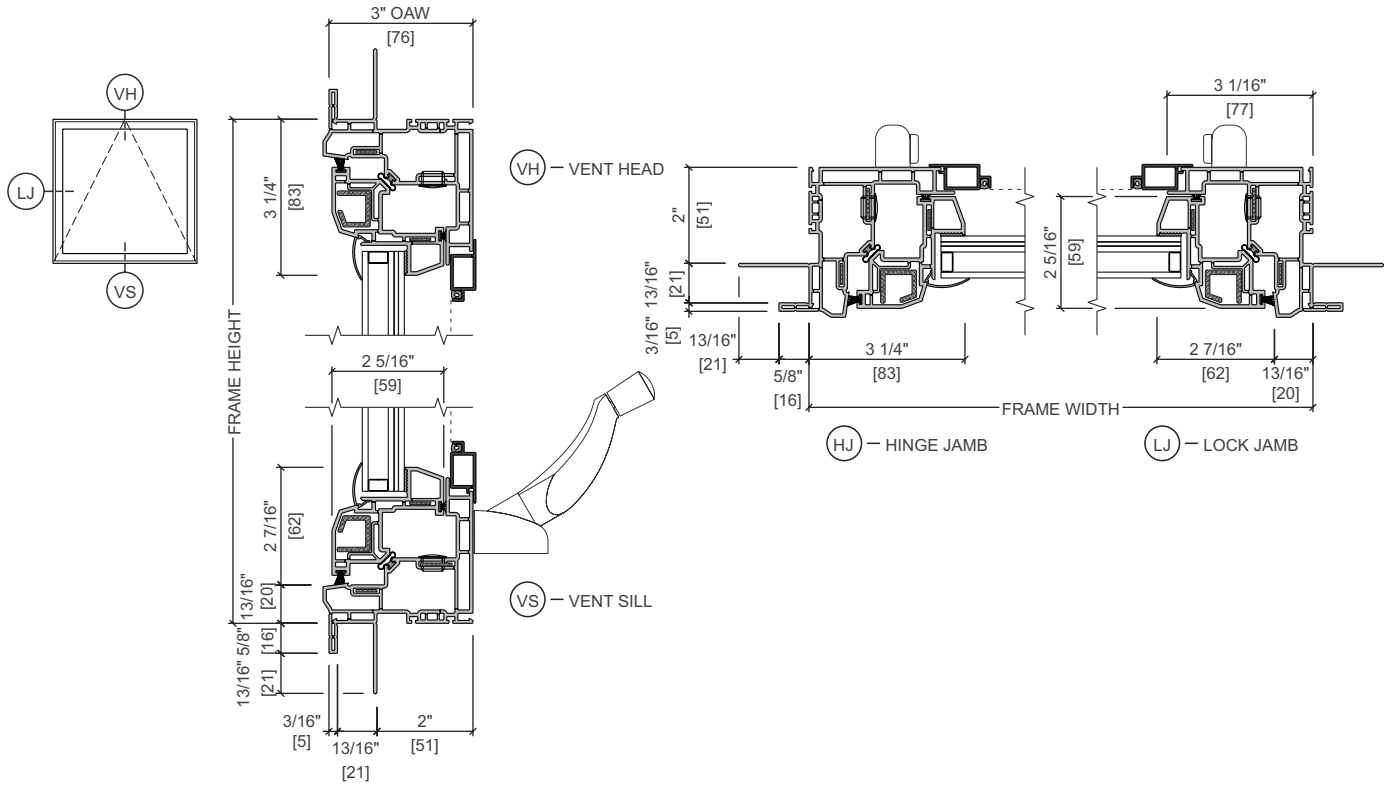


Scale 3" = 1' 0"
All dimensions are approximate.



Hurricane Shield™ Series Awning

Unit Sections - Integral Nail-Fin with J-Channel

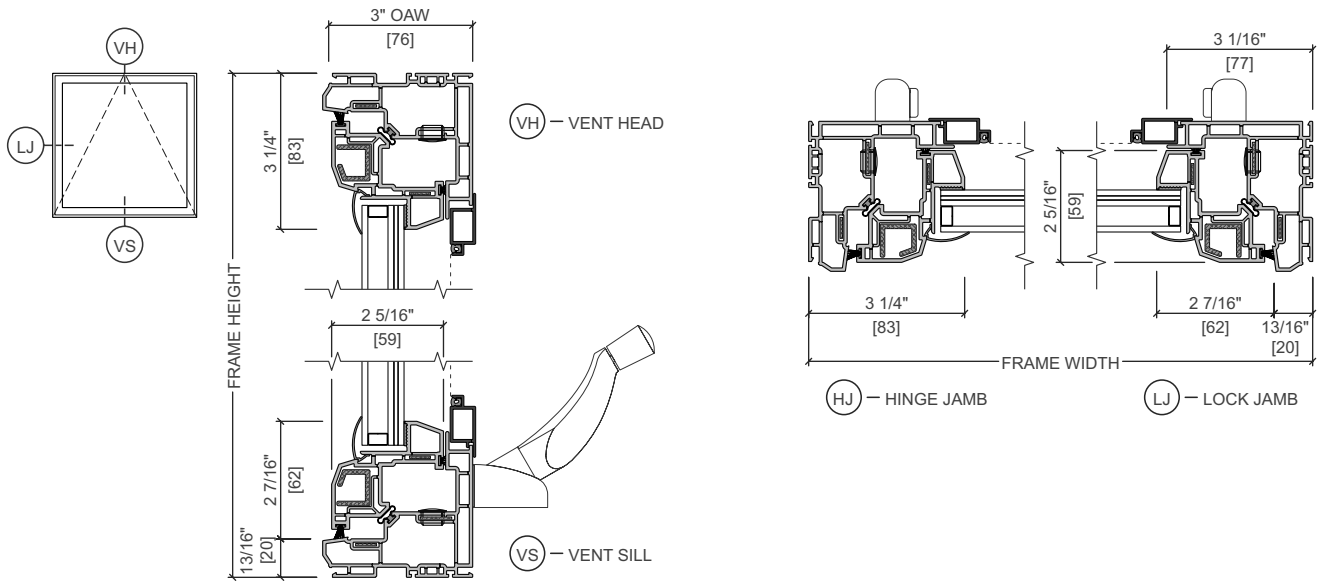


Scale 3" = 1' 0"
All dimensions are approximate.



Hurricane Shield™ Series Awning

Unit Sections - Block Frame

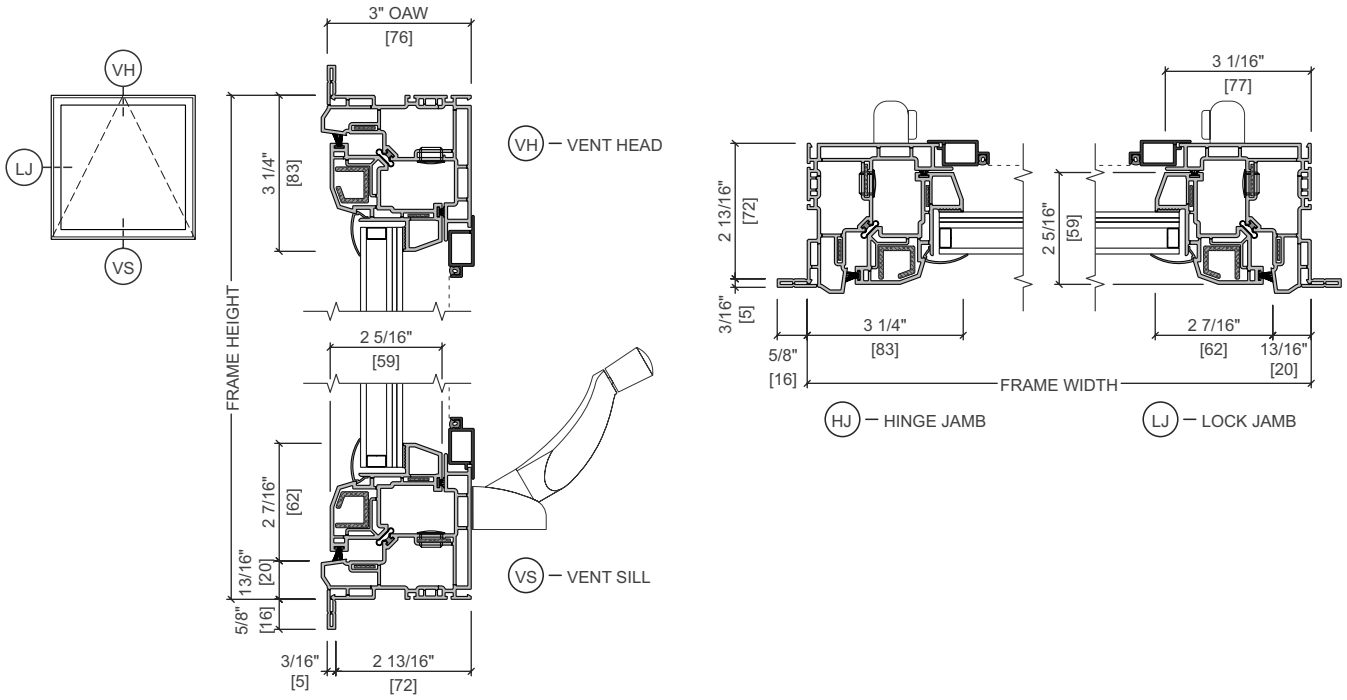


Scale 3" = 1' 0"
All dimensions are approximate.



Hurricane Shield™ Series Awning

Unit Sections - Flush Flange Frame



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