



Size and Performance Data	W-HW-2
Features and Options	W-HW-3
Grille Types.....	W-HW-4
Typical Grille Patterns	W-HW-5
Size Tables and Design Data	W-HW-6
Detailed Product Descriptions	
Clad	W-HW-7
Wood	W-HW-8
Unit Sections	
Clad	W-HW-9
Wood	W-HW-10

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.



Pella® Reserve™ Hopper Window

Size and Performance Data

	Clad	Wood
Sizes		
Standard Vent Sizes	●	●
Special Sizes Available	●	●



Pella® Reserve™ Hopper Window

Features and Options

Standard	Options / Upgrades
Glazing	
Glazing Type	
Dual-Pane Insulating Glass	Triple-Pane Insulating Glass
Insulated Glass Options/Low-E Types	
Advanced Low-E	SunDefense™ Low-E
	AdvancedComfort Low-E
	NaturalSun Low-E
	Clear (no Low-E coating)
Additional Glass Options	
Annealed Glass	Tempered Glass
	Obscure Glass ¹
	Tinted Glass (Bronze, Gray and Green)
	Custom
Gas Fill/High Altitude	
Argon	High altitude
Wood Types	
Pine	Mahogany, Douglas Fir
Exterior	
Exterior Sash Profile	
Ogee - clad, Putty - wood	Putty - clad
Exterior Finish	
EnduraClad® protective finish	EnduraClad Plus protective finish, Factory Primed Pine wood exterior, Unfinished Mahogany wood exterior
Cladding Colors¹	
Standard colors	Feature Colors, Custom Colors
Interior	
Interior Sash Profile	
Ogee	—
Interior Finish	
Unfinished wood	Factory primed ² , Factory prefinished paint ² , Factory prefinished stain
Hardware	
Champagne, White or Brown	Satin Brass, Satin Nickel or Oil-Rubbed Bronze
Sash Locks	
Multi-point® System	—
Grilles	
Integral Light Technology® Grilles	
—	Traditional, Prairie, Top Row, Cross, New England, Victorian, Simulated French, Custom
Grilles-Between-the-Glass	
—	Traditional, Prairie, Cross, Top Row ¹ , Custom-Equally Divided, Factory Primed Pine wood exterior, Unfinished Mahogany wood exterior
Screens	
—	InView™ screens

(1) Contact your local Pella sales representative for current designs and color options.

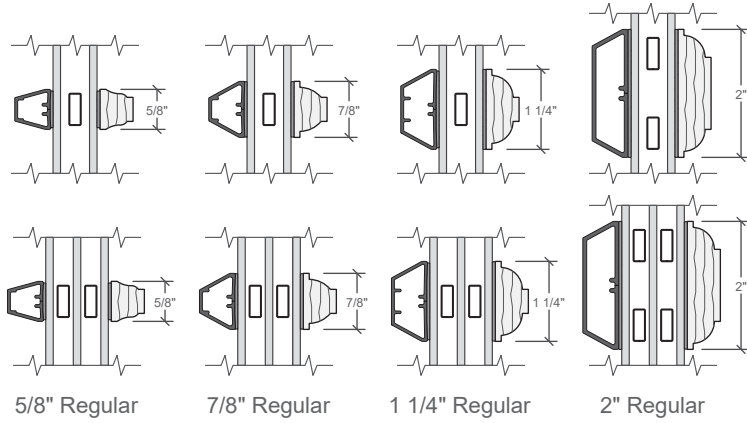
(2) Not available on Mahogany and Douglas Fir interiors.



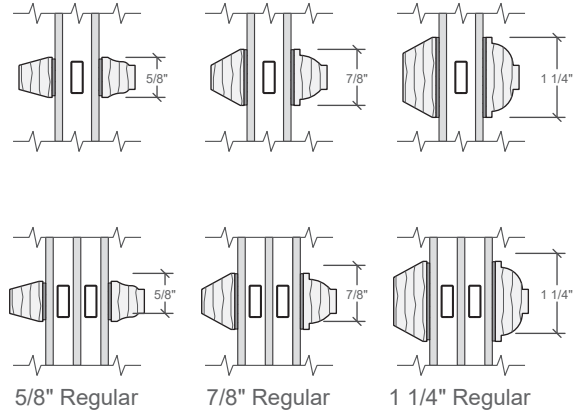
Grille Profiles

Traditional Style Collection - Integral Light Technology®

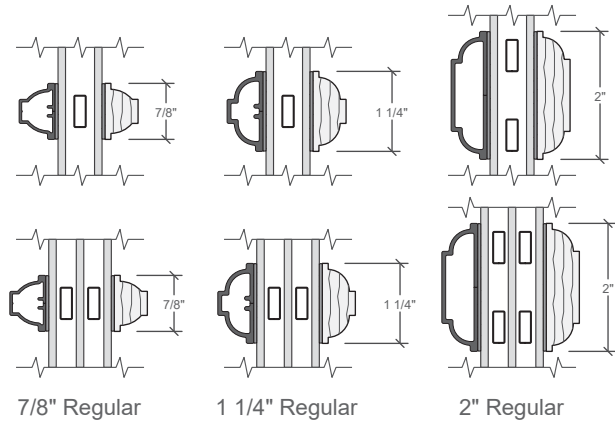
Putty Glaze and Ogee Grilles
Clad Exterior - Wood Interior



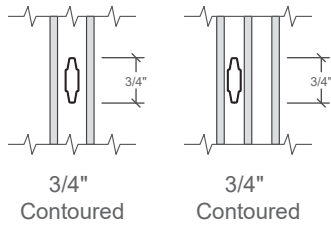
Putty Glaze and Ogee Grilles
Wood Exterior - Wood Interior



Ogee Grilles
Clad Exterior - Wood Interior



Grilles-Between-the-Glass



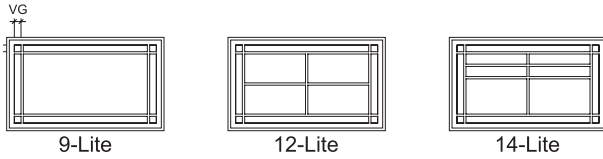
Interior ILT grilles available in Pine, Mahogany or Douglas Fir to match complete unit.
Wood exterior ILT grilles available in Pine or Mahogany to match complete unit.



Grille Patterns

Integral Light Technology® Grilles

Prairie Lite Patterns



Standard corner lite dimension for Prairie patterns = 2-1/2" VG.

9-Lite

- Available in all standard and special sizes.

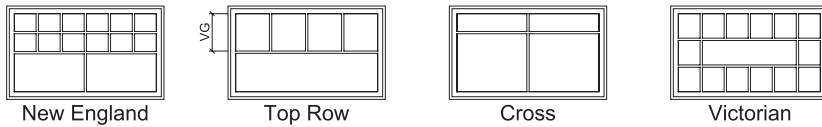
12-Lite

- Available in units ≥ 1'9" and ≤ 2'11" in width, and ≥ 1'9" in height.

14-Lite

- Available in units ≥ 1'9" in width and ≥ 2'11" in height.

Other Available ILT Grille Patterns



New England

- Standard visible glass to separator bar dimension = half of total visible glass height.

Top Row

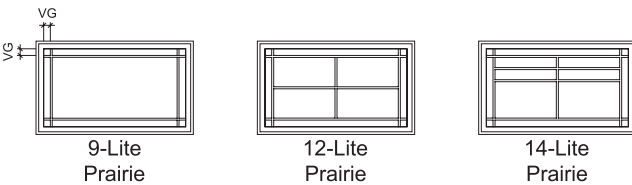
- Standard visible glass to separator bar dimension = 14" or half of total visible glass height if frame height is < 2'11".

Cross

- Standard visible glass to separator bar dimension = one-quarter of total visible glass height.

Grilles-Between-the-Glass

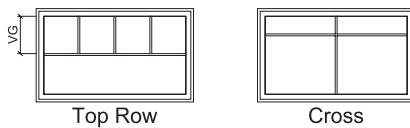
Prairie Lite Patterns



Top Row

- Standard visible glass to separator bar = 14" for frame heights > 35".
- Standard visible glass to separator bar = 12" for 35" frame heights and optional for 41" frame height.
- Separator bar at 12" or 16" optional for frame heights > 41".

Other Available GBG Grille Patterns



Cross

- Available for units with frame heights ≥ 17".
- Standard visible glass to separator bar = 1/4 of total visible glass height.

For traditional patterns, see size tables.

VG = Visible Glass

Lite dimensions noted can vary.

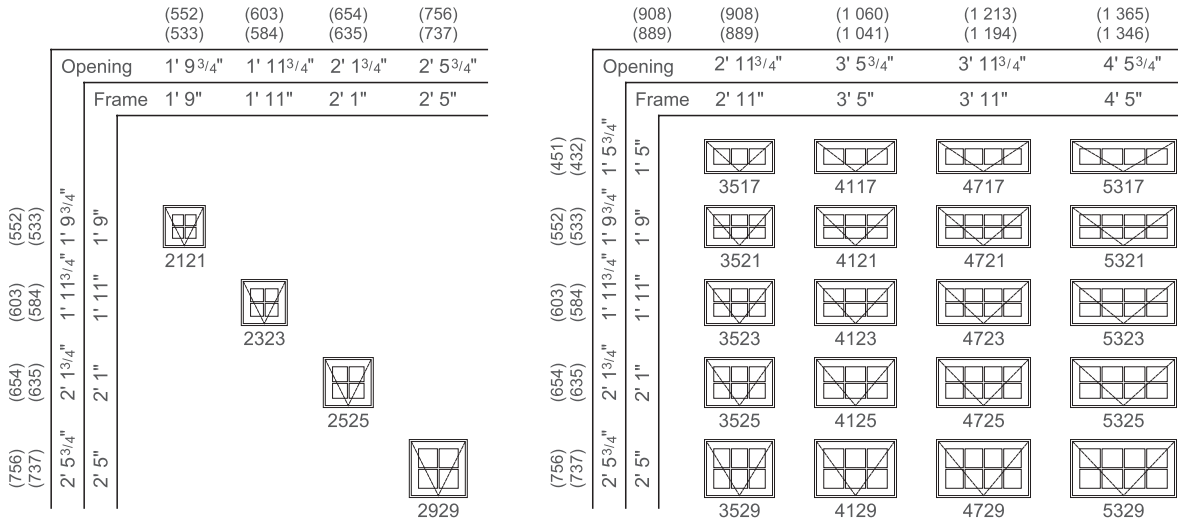
Custom configurations are also available, for details contact your local Pella sales representative.



Pella® Reserve™ Hopper Window

Size Tables and Design Data

Vent Units



VENT UNITS

Unit	Vent Area Ft ²	Visible Glass Ft ²	Frame Area Ft ²
2121	1.5	1.0	3.1
2323	1.9	1.3	3.7
2525	2.4	1.7	4.3
2929	3.5	2.7	5.8
3517	2.2	1.4	4.1
3521	2.9	2.1	5.1
3523	3.3	2.5	5.6
3525	3.7	2.8	6.1
3529	4.5	3.5	7.0
4117	2.6	1.7	4.8
4121	3.6	2.6	6.0
4123	4.0	3.0	6.5
4125	4.5	3.5	7.1
4129	5.4	4.4	8.3
4717	3.1	2.0	5.5
4721	4.2	3.1	6.9
4723	4.7	3.6	7.5
4725	5.3	4.1	8.2
4729	6.4	5.2	9.5
5317	3.5	2.4	6.3
5321	4.8	3.6	7.7
5323	5.5	4.2	8.5
5325	6.1	4.8	9.2
5329	7.4	6.0	10.7

Not to scale.

Traditional grille patterns shown. Refer to grille section for additional patterns and profiles.

Contact your local Pella representative for the availability of custom sizes smaller or larger than the parameters shown.

Dimensions shown in tables are rough opening dimensions.

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



Detailed Product Description - Clad

Frame

- Select woods, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [pine] [mahogany] [douglas fir].
- Exterior surfaces are clad with aluminum.
- Overall frame depth is 5" (127 mm) for a wall depth of 3-11/16" (94 mm).
- Optional factory-applied jamb extensions available between 4-9/16" (116 mm) and 7-3/16" (183 mm) wall depths.

Sash

- Select woods, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear [pine] [mahogany] [douglas fir].
- Exterior surfaces are clad with aluminum and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 2-3/4" (69 17/20 mm) for [11/16"] or [1"] glazing.
- Exterior sash profile is [ogee] [putty glaze], interior sash profile is ogee.

Weatherstripping

- Dual weatherstripping.
 - A foam filled close cell sheathed weather-strip on the full frame perimeter is compressed between frame and sash for positive seal on all four sides.
 - Secondary leaf-type weather strip between edge of sash and frame.

Glazing System¹

- Quality float glass complying with ASTM C 1036.
- Silicone-glazed 11/16" dual-seal insulating glass [[annealed] [tempered]] [[clear] [Advanced Low-E coated with argon]] [SunDefense™ Low-E with Argon] [AdvancedComfort Low-E] [NaturalSun Low-E] [[bronze] [gray] [green] air-filled Advanced Low-E coated]].
- Custom and high altitude glazing available for 11/16" glazing only.
 - or –
- Silicone-glazed triple-pane 1-1/16" dual-seal insulating glass [[annealed] [tempered]] [[Advanced Low-E with argon] [Advanced Low-E with krypton]] [SunDefense™ Low-E with argon] [SunDefense™ Low-E with krypton] [NaturalSun Low-E with krypton] [Obscure [standard] [fern]].

Exterior

- Exterior aluminum surfaces are finished with EnduraClad® multi-stage finish system.
 - Color is [Standard₂] Custom₂].
 - or –
- Exterior aluminum surfaces are finished with EnduraClad Plus 70% fluoropolymer-based multi-stage finish system.
 - Color is [Standard₂] Custom₂].

Interior

- [Unfinished, ready for site finishing] [Factory-primed with one coat acrylic latex] [Pine: [factory prefinished [paint] [stain]₂]].

Hardware

- Multi-point lock system—A single handle locking system engages multiple locking points around the sash.
- Finish of handle is [baked enamel, [Champagne] [White] [Brown]] [Satin Brass] [Satin Nickel] [Oil-Rubbed Bronze].

Optional Products

Grilles

- Integral Light Technology® Grilles
 - Interior grilles are [5/8"] [7/8"] [1-1/4"] [2"] ogee profile that are solid [Pine] [Mahogany] [Douglas Fir]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [paint] [stain]₂].
 - Exterior grilles are [5/8" putty glaze profile] [7/8" [putty glaze] [ogee] profile] [1-1/4" [putty glaze] [ogee] profile] [2" ogee profile] that are extruded aluminum.
 - Patterns are [Traditional] [Prairie] [Top Row] [Cross] [New England] [Victorian] [Simulated French].
 - Insulating glass contains non-glare spacer between the panes of glass.
 - Bars are adhered to both sides of the insulating glass with VHB acrylic adhesive tape and aligned with the non-glare spacer.
 - or –
- Grilles-Between-the-Glass³
 - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass (exterior air-space on triple-pane insulating glass).
 - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
 - Interior color is [Black] [White] [Brown₄] [Fossil] [Harvest] [Cordovan] [Ivory] [Tan₄] [Brickstone] [Putty₄].
 - Exterior color₅ is [standard] [feature]₂.

Flat Insect Screen

- InView™ Fiberglass
 - Black vinyl-coated 18/18 mesh fiberglass screen cloth complying with SMA 1201, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
 - Screen frame finish is [baked enamel] [anodized], color to match window cladding.

(1) Insulating glass with argon is Low-E coated (except high altitude). All other insulating glass (including high altitude Low-E) is air-filled.

(2) Contact your local Pella sales representative for current color options.

(3) Available in clear or Low-E and obscure insulating glass.

(4) Tan, Brown and Putty Interior GBG colors are available in single-tone (Brown/Brown, Tan/Tan or Putty/Putty). Other interior colors are also available with Tan or Brown exterior.

(5) Appearance of exterior grille color will vary depending on Low-E coating on glass.



Frame

- Select woods, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [Pine] [Mahogany].
- Exterior surfaces are [Pine: primed] [Mahogany: [primed] [ready-to-stain]].
- Overall frame depth is 4-3/8" (111 mm) for a wall depth of 4-3/16" (106 mm).
- Optional factory-applied jamb extensions available between 4-9/16" (116 mm) and 7-3/16" (183 mm) wall depths, with Pella's standard wood exterior trim.

Sash

- Select woods, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [Pine] [Mahogany].
- Exterior surfaces are [Pine: primed] [Mahogany: [primed] [ready-to-stain]].
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 2-3/4" (69 17/20 mm) for [1 1/16"] or [1"] glazings.
- Exterior sash profile is putty glaze, interior sash profile is ogee.

Weatherstripping

- Dual weatherstripping.
 - A foam filled close cell sheathed weather-strip on the full frame perimeter is compressed between frame and sash for positive seal on all four sides.
 - Secondary leaf-type weather strip between edge of sash and frame

Glazing System¹

- Quality float glass complying with ASTM C 1036.
- Silicone-glazed 1 1/16" dual-seal insulating glass [[annealed] [tempered]] [[clear] [Advanced Low-E coated with argon]] [SunDefense™ Low-E with Argon] [Advanced Comfort Low-E] [NaturalSun Low-E] [[bronze] [gray] [green] air-filled Advanced Low-E coated]].
- Custom and high altitude [with argon] glazing available.
 - or –
- Silicone-glazed triple-pane 1-1/16" dual-seal insulating glass [[annealed] [tempered]] [[Advanced Low-E with argon] [Advanced Low-E with krypton] [SunDefense™ Low-E with argon] [SunDefense™ Low-E with krypton] [NaturalSun Low-E with krypton] [Obscure [standard] [fern]].

Interior

- [Unfinished, ready for site finishing] [primed with one coat acrylic latex] [Pine: [factory prefinished [paint] [stain]₃].

Hardware

- Multi-point lock system—A single handle locking system engages multiple locking points around the sash.
- Finish of handle is [baked enamel, Champagne] [baked enamel, White] [baked enamel, Brown] [Satin Brass] [Satin Nickel] [Oil-Rubbed Bronze]. All vent units are available with left- or right-hand hinging.

Optional Products

Grilles

- Integral Light Technology®
 - Interior grilles are [5/8"] [7/8"] [1-1/4"] [2"] ogee profile that are solid [pine] [mahogany]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [paint] [stain]₃].
 - Exterior grilles are solid [5/8" putty profile] [7/8" [putty] [ogee] profile] [1-1/4" [putty] [ogee] profile] [2" ogee profile] that are [pine] [mahogany]. Exterior surfaces are water repellent, preservative-treated in accordance with WDMA I.S.-4, and are [unfinished, ready for site finishing] [factory primed].
 - Patterns are [Traditional] [Prairie] [Top Row] [Cross] [New England] [Victorian] [Simulated French].
 - Insulating glass contains non-glare spacer between the panes of glass.
 - Grilles are adhered to both sides of the insulating glass with VHB acrylic adhesive tape and aligned with the non-glare spacer.
 - or –

Grilles-Between-the-Glass²

- Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass (exterior air-space on triple-pane insulating glass).
 - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
 - Interior color is [Black] [White] [Brown₄] [Fossil] [Harvest] [Cordovan] [Ivory] [Tan₄] [Brickstone] [Putty₄].
 - Exterior color₅ is [standard₃].

Insect Screen

- InView™ Fiberglass
 - Black vinyl-coated 18/18 mesh fiberglass screen cloth complying with SMA 1201, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
 - Screen frame finish is [baked enamel, white] [feature₃].

(1) Insulating glass with argon is Low-E coated. All other insulating glass is air-filled.

(2) Available in clear, Low-E and obscure insulating glass.

(3) Contact your local Pella sales representative for current color options.

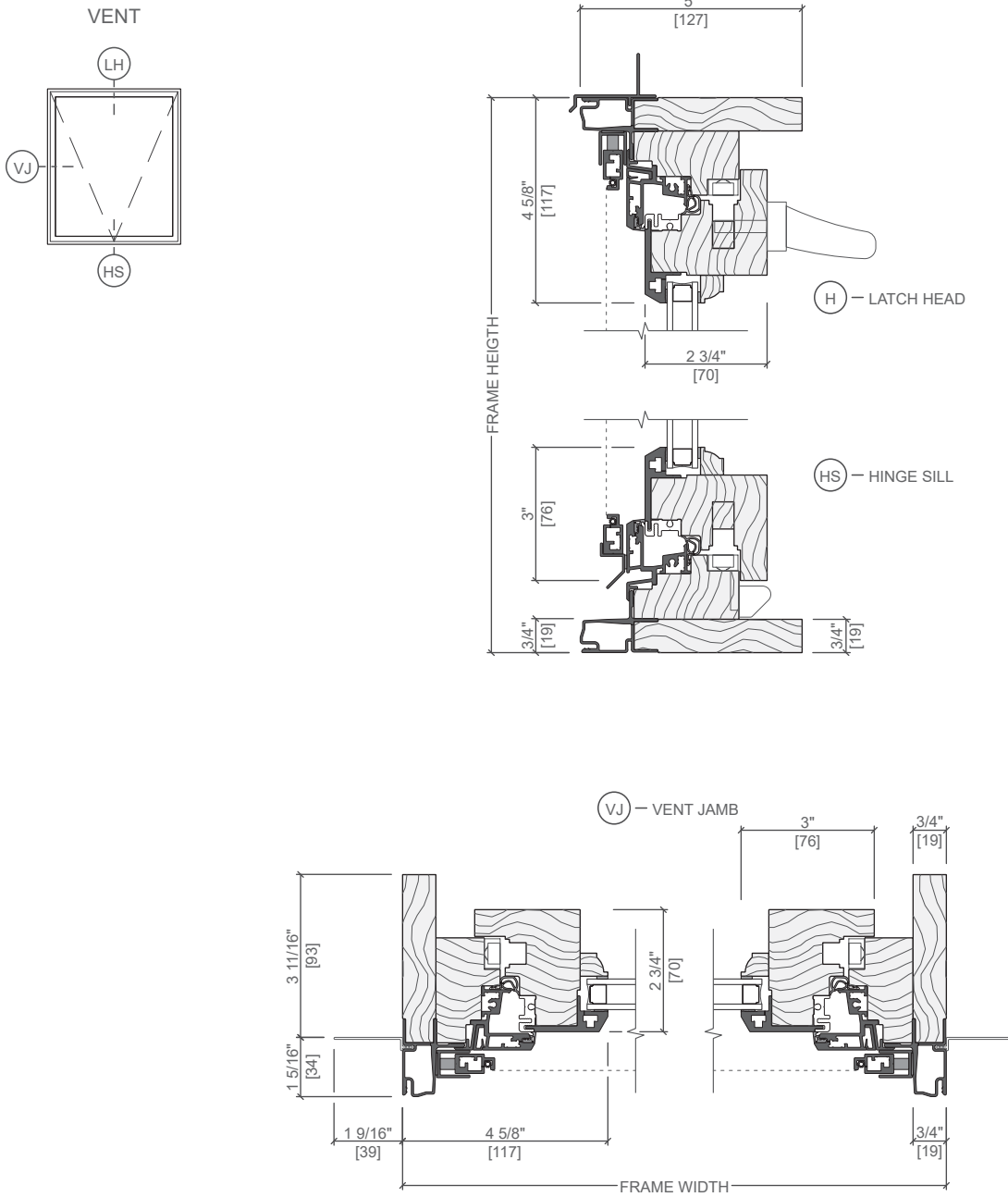
(4) Tan, brown and putty Interior GBG colors are available in single-tone (brown/brown, tan/tan or putty/putty). Other interior colors are also available with tan or brown exterior.

(5) Appearance of exterior grille color will vary depending on Low-E coating on glass.



Pella® Reserve™ Hopper Window

Unit Sections - Aluminum-Clad Exterior



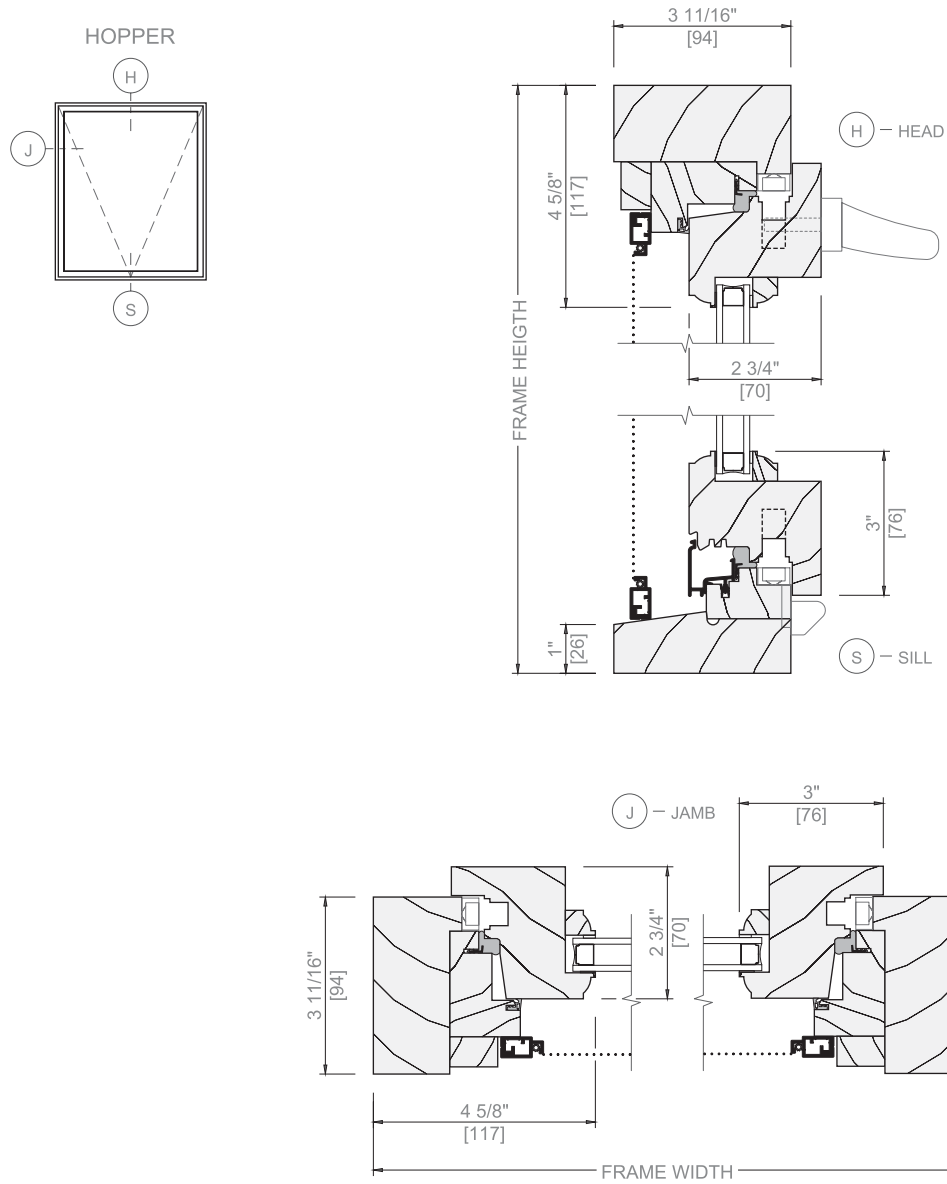
Scale 3" = 1' 0"

All dimensions are approximate.



Pella® Reserve™ Hopper Window

Unit Sections - Wood Exterior



Scale 3" = 1' 0"

All dimensions are approximate.