Selecting a Cedar Shingle

Red or white? Re-shingling their house in Manchester, the McCues have ended up with the best of both colors.

By Brett Reily of This Old House TV

This Old House TV: Manchester house project

Selecting the right shingle to re-side a once magnificent Shingle-style house is every bit as important a decision as it sounds. Traditionally, red cedar was the choice for grand houses like the McCues' Shingle in Manchester. Tight-grained and virtually saturated with tannic acid — a natural preservative, red cedar is a tough, long-lasting material. It tends to weather to a dark, rich look. It was with this material that the original house on this site was clad in 1883. Over time, however, the seaside climate takes a harsher toll on the appearance of red cedar, causing it to turn black and blotchy. So in the 1979 renovation, the house was re-sided using white cedar. And while it does weather to a pleasing, uniform silver, with less tannin and wider grain, white cedar is not as durable or long-lived as its red cousin.

Although they liked the silver hue of their white-cedar house, undertaking a complete architectural overhaul of their home also presented the McCues with the opportunity to re-side using the more historically correct red cedar. In the end, modern shingle-treatment technologies have allowed them to have the benefits of both.

Because of the historical approach to the restoration, most of the newer solutions in siding materials were out from the beginning. For instance, had longevity been the only factor, a material such as fiber-cement siding stained with water-based coating would have been a perfectly viable option. But fiber cement and wood shingles weather very differently. There would be little natural weathering effect with fiber cement, and the appearance over time would not have been appropriate for a traditional Shingle-style house.

Historical accuracy, as well as the McCues' own aesthetic preference, dictated that the new siding should be cedar. But would it be white or red? Even though this large Manchester Shingle has worn it for the past 20 years, white cedar is traditionally a material more typical of Nantucket-style cottages. Red cedar, coming mainly from the Pacific Northwest, has long been considered the more high-end shingle material. More expensive than white cedar, hardy red — often dipped

in creosote to combat weather and decay — was a premium building material that accentuated the prestigious character of grand New England Shingle-style homes.

What the McCues decided was to go with red cedar shingles that have been treated with bleaching oil. Regardless of color, cedar shingles do require initial treatment and some maintenance. Proper shingle coating and protecting stains are critical to the longevity and desired appearance of a house's exterior. Basically composed of linseed oil and bleach crystals, the bleaching oil not only will protect the McCues' shingles against decay, fungus and other coastal contamination, but also impart a much different visual effect than creosote. Contact with the elements will activate the bleach crystals in the oil, causing the red cedar shingles over a few months' time to take on a natural, light gray color similar to the weathered look of white cedar.

Mildecide, another key agent in the bleaching oil, works against the often misunderstood blackening effect many red-cedar-shingled buildings undergo when left untreated, especially by the sea. This blackening is a combination of mildew infestation and natural extractives in the wood. But treated with bleaching oil, the red cedar shingles can weather naturally and evenly while enjoying protection against discoloring mildew.

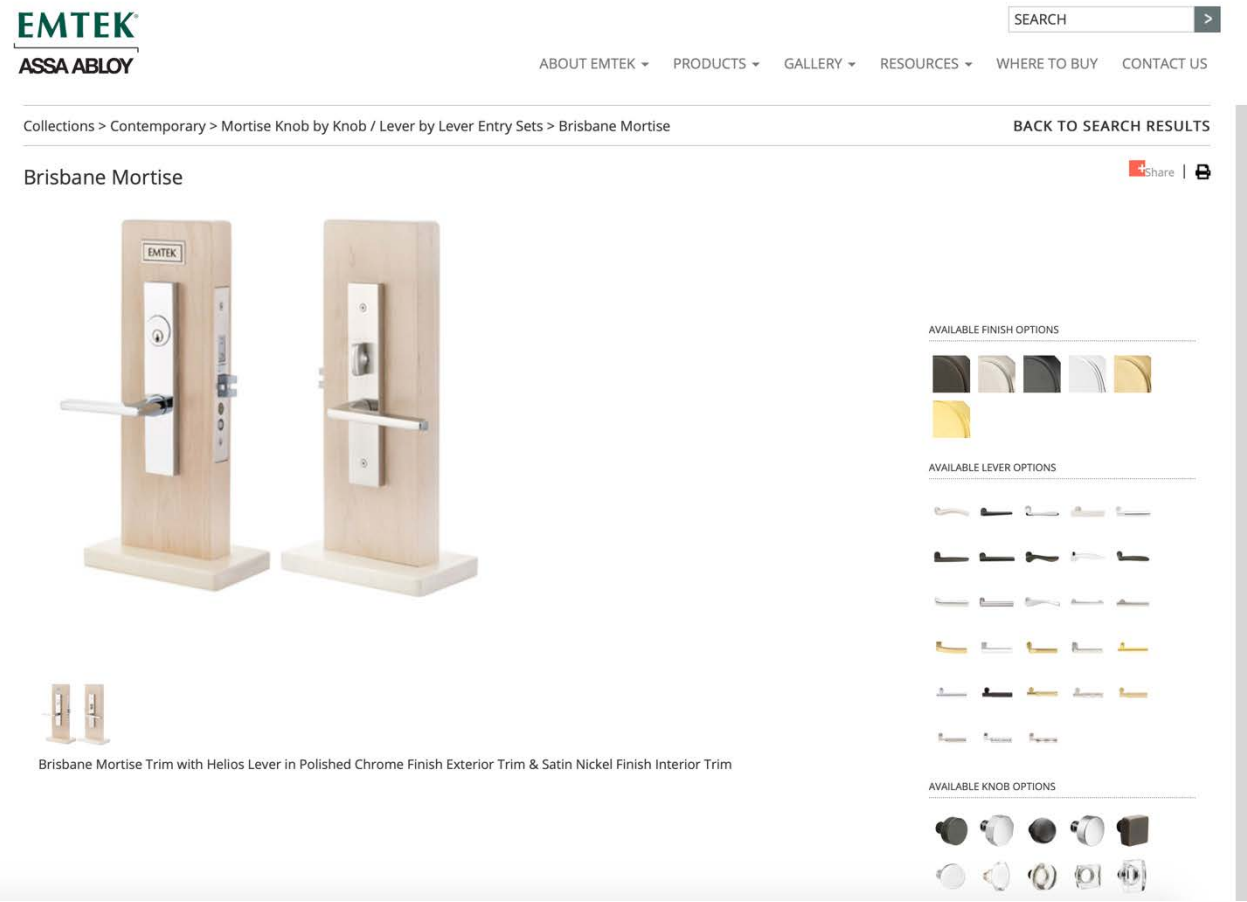
To keep their shingles in good working order, the McCues will need to re-coat them with bleaching oil every four to seven years, depending on the severity of the seaside weather. But in return, their house will have its historically proper shingles once again, as well as a beautiful, naturally weathered appearance that will last for many years to come.

Brett Reily is a representative of Samuel Cabot, Inc., who supplied wood-care products for the Manchester project.

OTHER VIDEOS

[How to Replace Damaged Vinyl Siding]

DOO



FINISH: OIL RUBBED BRONZE

Green Mountain Window & Door™ Company

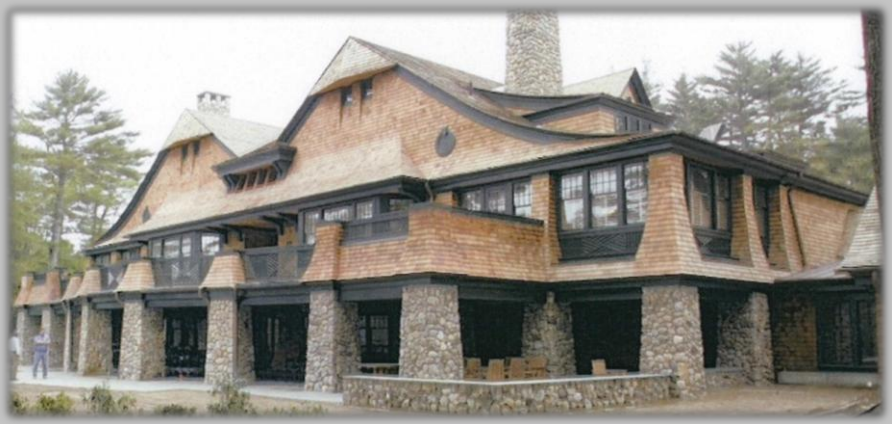
News

New Construction

Green Mountain Window Specializes in New Construction Window Solutions for Buildings Designed to Match the Northeast's Unique Architectural Style.
Our Windows are Designed to Blend the Details and Patterns Once Used By Local Craftsman in Northeastern Sash Mills With The Latest Energy Performance Technology.

<u>Two Different New Construction Systems:</u>

- Milestone Series for historical accuracy and superior energy performance
- Classic Series for budget driven projects that still demand correct window proportions and great energy efficiency



92 Park Street • Rutland, Vermont 05701 • Phone: 802.747.6915 • Fax: 802.747.7864 • www.greenmountainwindow.com

We offer two different product lines to fit any budget:

1. Milestone Series Double Hung: This is the most traditional looking double hung window on the market. The sash and frame details are all proportioned to match the historic widows used around the northeast in the 19th and early 20th century. Modern materials such as vinyl and metal are concealed by our exclusive frame design. The sash can tilt in by releasing our hidden release latches. Our hardware options mimic period appropriate design. Options of 5/8", 7/8" or 1 ¼" wide muntins allow you to design to the architectural period of your choice. And our sash is engineered to hide the fact that it holds the most energy efficient glazing available in a narrow glazing pocket; often people don't even realize that it is insulated glass.

2. Milestone Series Casement / Awning: Do you hate the look and operation of modern crank out hardware? Then this window was designed with you in mind. This is a push out system with hardware to hold the sash in any open position. Wide stiles and rails create an old world charm. And a wood framed screen on the interior compliments the traditional design. We offer a concealed friction hinge version and a butt hinge with a sash stay bar version. The window to the right shows the butt hinge / stay bar option on a French Casement (two sash in one frame).

3. Classic Series Double Hung: With this window you won't be sacrificing much to satisfy a more limited budget. The main difference between the Classic and Milestone double hung is the use of exposed vinyl tracks on the sides of the frame to hold the sash in place. These vinyl tracks make the sash a little more difficult to tilt in, are slightly less air tight and are less historic looking than the Milestone system. However, if your windows are painted white the vinyl will blend right in and no one will know that you paid less since all other features and options are the same as the Milestone. Classic window with transom in photo to the left.

4. Classic Series Casement / Awning: This window line has the roto crank hardware, narrow stiles / rails, and aluminum framed interior screen that is commonly found in modern casement and awning windows. However, creative use of our trim packages and muntin options will still make these windows draw attention. To the right is a Classic Series casement with a wood shutter.

Green Mountain Window and Door Co.

Unit Specifications

Frame:

- Pine wood interior and exterior standard. Options include South American Mahogany, Philippine Mahogany (Marenti), Douglas Fir, Western Red Cedar, Teak, or other. Optional species can be specified for specific parts only (sill, sill nose, casing, etc.)
- Frame width: 4 9/16"
- Frame thickness: 5/8"
- Sill: 14 degree bevel, 1" standard sill nose. Optional 2" "historic" sill nose
- Pine exterior parts are dipped in a water repellent preservative.

Sash:

- Pine wood interior and exterior standard. Options include South American Mahogany, Philippine Mahogany (Marenti), Douglas Fir, Western Red Cedar, Teak, or other.
- Check rail thickness: 1 5/8"
- Stile and top & bottom rail thickness: 1 1/4"
- Operating sash tilt in for easy cleaning. The top sash of reverse cottage windows can not be tilted in.
- Pine exterior parts are dipped in a water repellent preservative.

Interior and exterior finish:

- Bare wood interior, white primed exterior standard.
- Pre-finished exterior options. See you Green Mountain Window Representative for colors and availability.

Hardware:

- Standard sash lock and keeper: Truth cam lock in Bronze. Option finish: white.
- Upgraded sash lock and keeper: Colonial cam lock in Oil Rubbed Bronze, Nickel, Polished Chrome or Brass. Arts & Crafts pivot lock available in Brass only.
- Sash lift: Truth sash lift in Bronze. Option: finish to match lock choice.
- Balance system: block and tackle balance
- White – Compression jamb liner. Option: beige

Weatherstrip:

- Weatherstrip on top rail meeting rail and bottom.
- Leaf weatherstrip on head parting stop

Jamb extension:

- Applied jamb extension available to match virtually any wall thickness
- Standard thickness: 21/32"

Insect Screens:

- Aluminum framed full screen with charcoal fiberglass mesh screening standard. Optional surround colors: Dark Bronze, Tan or Green. Optional mesh: charcoal aluminum or bright aluminum
- Optional wood screen: full or half screens with charcoal fiberglass mesh screening. Species and finish to match window. Optional mesh: charcoal aluminum, bright aluminum or bright bronze

Glass:

- Double strength glass sealed with Gray Duraseal warm edge spacer. Standard overall glass thickness on wood exterior units is ½" with wood exterior glazing bead. Optional 11/16" glass thickness with white vinyl exterior glazing bead.
- Glazing method: silicone wet seal interior and exterior
- Glazing types: single glass, insulating glass
- Option for black Duraseal warm edge spacer
- Standard insulating glass options include: (see NFRC ratings for performance comparison)
  - 1/2" regular insulating glass
  - 1/2" Low E with Argon gas fill
  - 1/2" Low E with Krypton gas fill
  - 11/16" regular insulating glass (white vinyl glazing bead on exterior)
  - 11/16" Low E with Argon (white vinyl glazing bead on exterior)
- Other glass options: tempered, laminated, obscure, mouth blown restoration (wavy), tinted, UL rated, any specified

Optional Divided Lites:

- Options include: 5/8" white flat airspace grille, 5/8"white profiled airspace grille, 7/8"removable stick grille (interior only), 7/8" removable full surround grille (interior only), 5/8" true divided lite (single glass only), 5/8" simulated divided lite (SDL) with or without spacer bar, 7/8" SDL with our without a spacer and 1 1/4" SDL with our without a spacer bar. Gray SDL spacer is standard with gray SDL tape. Optional black spacer and tape is used when black glass spacer option is chosen.
- See "section details: divided lites for muntin profiles" for standard cuts. Custom configurations are available

Green Mountain Window and Door Co.

NFRC Values, Energy Star Rating Information and DP Ratings

ENERGY DATA		U-Factor		R-Value		SHGC		VT		NFRC Certified	ENERGY STAR †
		Res	Non-Res	Res	Non-Res	Res	Non-Res	Res	Non-Res		
Wood Exterior Glazing Bead	1/2" Clear Insulated	.54	.54	1.85	1.85	.55	.55	.57	.59	X	
	1/2" Low E / Argon	.41	.40	2.44	2.50	.47	.48	.53	.55	X	
	1/2" Low E / Krypton	.35	.34	2.86	2.94	.47	.48	.53	.55	X	X
Vinyl Exterior Glazing Bead	11/16" Clear Insulated	.495	.495	2.02	2.94	.55	.55	.57	.59	X	
	11/16" Low E / Argon	.35	.34	2.86	2.94	.47	.48	.53	.55	X	X

† ENERGY STAR compliant for northern and central regions

A note on comparing NFRC ratings: the above ratings are based on NFRC 100-97 & 200 test standards. The new 2004 NFRC test procedure typically yield better energy ratings for the same window. Many window companies have already retested their windows and are publishing the new better rating. Green Mountain Window will be retesting this product in the spring of 2004. Please contact your Green Mountain Window Representative for updates.

Design Pressure Values are based on a 44"x60" window (per the industry test standard.) Overall Design Pressure:

DP 30

Specific Test Results for ANSI/AAMA/NWWDA/I.S.2:

		Results	Allowed
Air Infiltration – ASTM E283-91		.11 scfm/ft^2	.30 scfm/ft^2
Water Resistance – ASTM E547		Pass	No Leakage
Uniform Structural Load – ASTM E 330	pos – 22.5 psf	.020 in.	.164 in.
" "	neg – 22.5 psf	.012 in.	.164 in.
Forced Entry Resistance – ASTM F588 Grade 10			
Lock/Tool Manipulation		Pass	No Entry
Test 1,2,3,4,5,6,7		Pass	No Entry
Lock/Tool Manipulation		Pass	No Entry
Operating Force – ASTM E2068			
Bottom Sash – Open/Close		17 / 17 lbf	30 lbf
Top Sash – Open/Close		18 / 18 lbf	30 lbf
Deglazing – ASTM E987		0%	<100%

Green Mountain Window and Door Co.

Measurement Conversions

"Size" used for conversion purposes is the unit name.
Example: CDH 3224 double hung has a "size" of 32" wide and 24" high.

Double Hung:

	Width	Height
For Daylight Opening:	"Size" – 1/2"	"Size" –1/2"
For Sash Opening:	"Size" + 4"	"Size" x 2 + 6"
For Frame Size:	"Size" + 5 5/16"	"Size" x 2 + 8 7/8"
For Rough Opening:	"Size" + 6 5/16"	"Size" x 2 + 9 3/8"

Rough Openings of Mulled Units:		
Double Wide Unit:	(Single RO x2) -1"	No Conversion Necessary
Triple Wide Unit:	(Single RO x3) -2"	No Conversion Necessary
Four Wide Unit:	(Single RO x4) -3"	No Conversion Necessary

Picture Windows:

	Width	Height
For Daylight Opening:	"Size" – 5/8"	"Size" – 5/8"
For Sash Opening:	"Size" + 4"	"Size" + 5"
For Frame Size:	"Size" + 5 5/16"	"Size" + 7 7/8"
For Rough Opening:	"Size" + 6 5/16"	"Size" + 8 3/8"

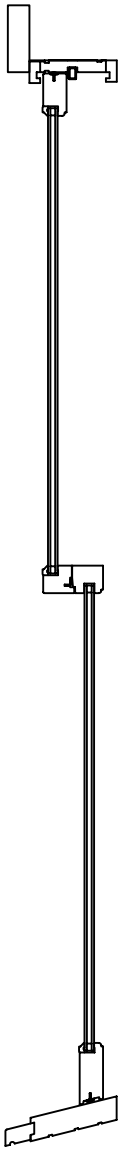
Rough Openings of Mulled Units:		
Double Wide Unit:	(Single RO x2) -1"	No Conversion Necessary
Triple Wide Unit:	(Single RO x3) -2"	No Conversion Necessary
Four Wide Unit:	(Single RO x4) -3"	No Conversion Necessary

Double Hung Transoms:

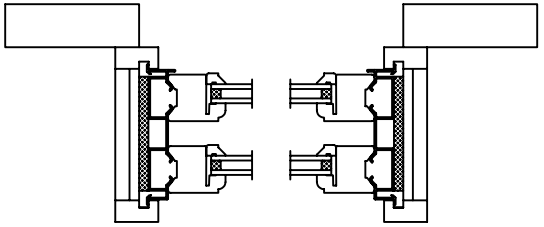
	Width	Height
For Daylight Opening:	"Size" – 1/2"	"Size" + 1/8"
For Sash Opening:	"Size" + 4"	"Size" + 4 3/8"
For Frame Size:	"Size" + 5 5/16"	"Size" + 7"
For Rough Opening:	"Size" + 6 5/16"	"Size" + 7 1/2"

Note: If transom is to be directly mulled above a double hung add the frame height of the transom to the rough opening height of the double hung for overall rough opening.

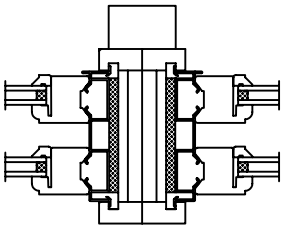
Rough Openings of Mulled Units:		
Double Wide Unit:	(Single RO x2) -1"	No Conversion Necessary
Triple Wide Unit:	(Single RO x3) -2"	No Conversion Necessary
Four Wide Unit:	(Single RO x4) -3"	No Conversion Necessary



Vertical Cross Section



Jamb View



Mullion Detail

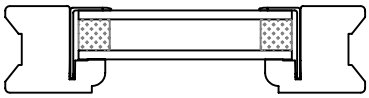
1.10

Classic Double Hung

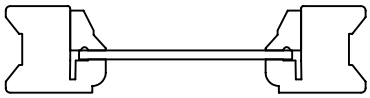
Green Mountain Window

92 Park Street, Rutland, Vermont

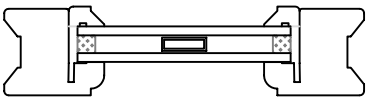
I. G., No Lites
Wood Bead



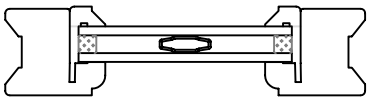
I.G., No Lites
Vinyl Bead



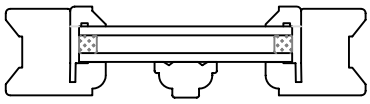
No Lites
Single Glass



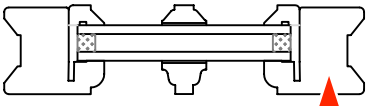
Flat Airspace



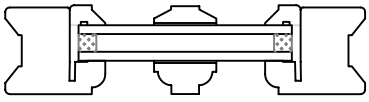
Profile Airspace



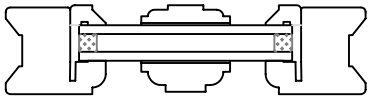
7/8" Grille



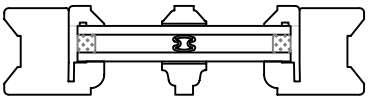
5/8" SDL



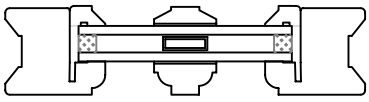
7/8" SDL



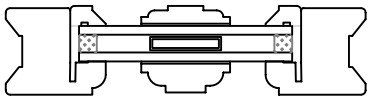
1 1/4" SDL



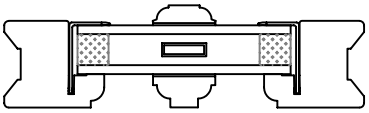
5/8" SDL
with Spacer Bar



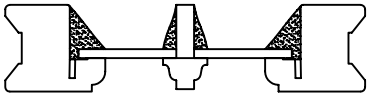
7/8" SDL
with Spacer Bar



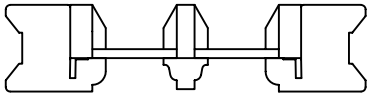
1 1/4" SDL
with Spacer Bar



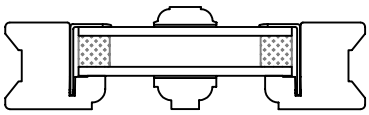
I.G., 7/8" SDL
with Spacer Bar
Vinyl Bead



5/8" TDL
Single Glass
Putty Glaze

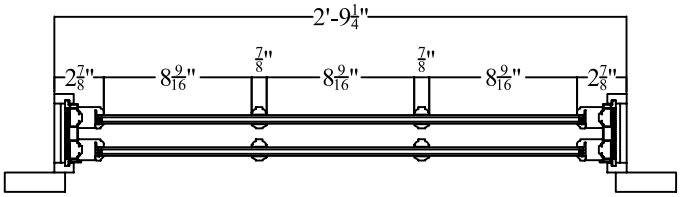


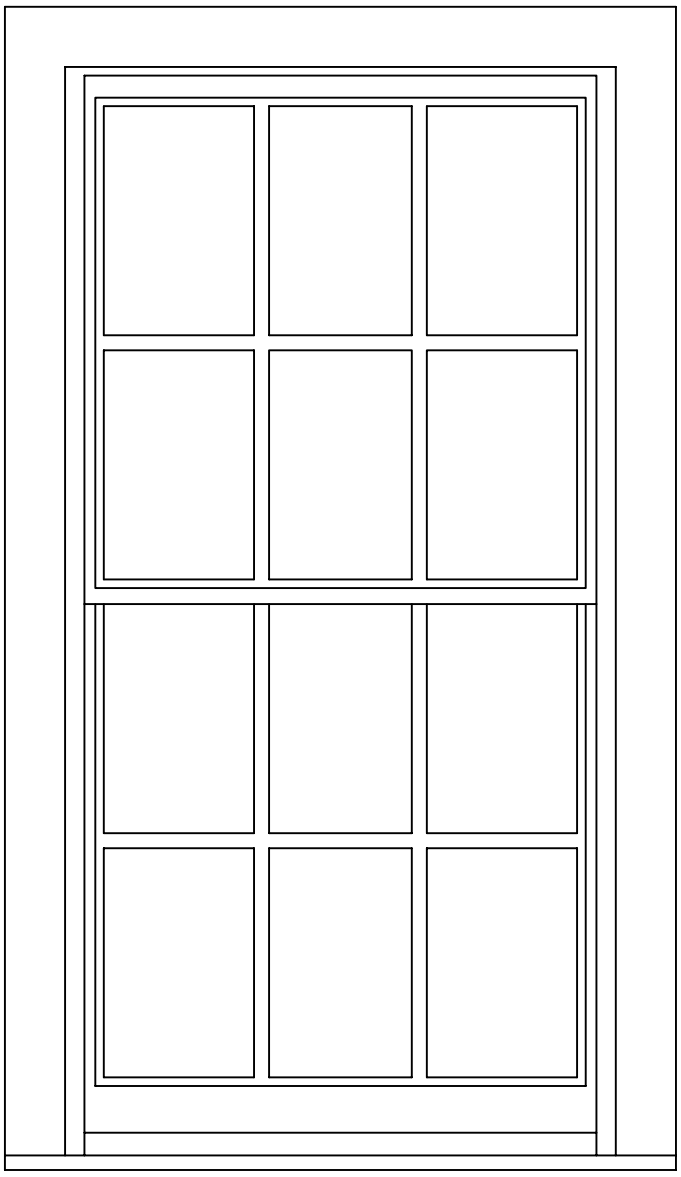
5/8" TDL
Single Glass
Wood Bead

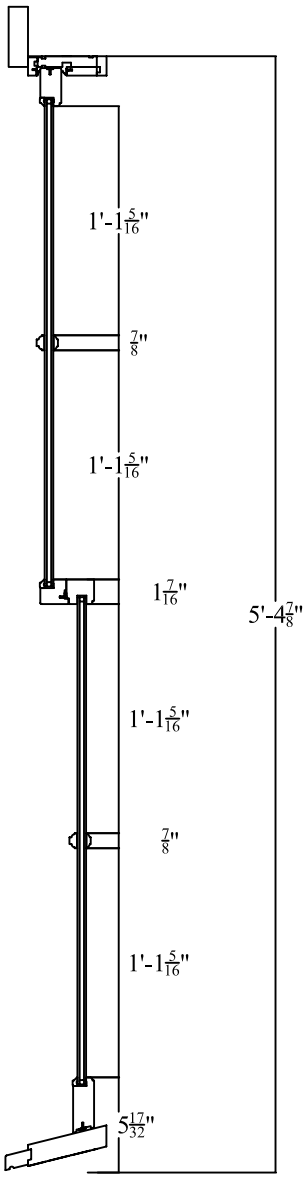


I.G., 7/8" SDL
Vinyl Bead

Daylight Opening Conversions







CDH 2828

Note: the example above only applies to a 28 x 28 with 7/8" muntins in a 6/6 pattern.
For all other sizes and configurations: determine the overall daylight opening of each sash (without lites) with the formulas on 1.5. Then multiply the number of bars by the bar width and deduct that number from that overall daylight. Divide this number by the number of lites for daylight of each lite.

$$\frac{\text{Overall DLO - (sum of all bar widths)}}{\text{Number of Lites}}$$

Lifestyle Series

Wood Windows and Patio Doors

Exceptional performance and solutions for real life

Designed to deliver exceptional performance and create room-by-room solutions with time tested innovations like Integrated Blinds, Shades and Security Sensors.

- Pella® Lifestyle Series is the #1 performing wood window and patio door for the combination of energy, sound and value.[1]
- Begin with dual- or triple-pane glass and then select from the most desired features and options. Available performance solutions offer an unbeatable combination of energy efficiency, sound control and value.[1]
- Offering everything you love about wood – including beauty, durability and style flexibility and covered by the industry's best limited lifetime warranty for wood windows and patio doors.[2]
- Packed with purposeful innovations like Integrated blinds and shades that are accessible and located between the glass, protected from dust and damage and optional built-in window and door sensors for added security and convenience*.

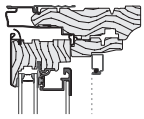
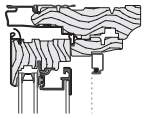
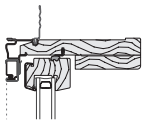
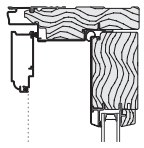
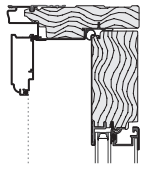
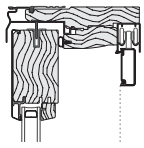
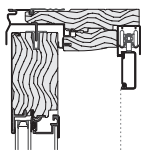
Insynctive

Available with factory-installed integrated security sensors.

1.Performance solutions offering an unbeatable combination of energy efficiency, sound control and value require upgrades to triple-pane, AdvancedComfort Low-E and mixed glass thickness. Based on comparing product quotes and published STC/OITC and U-Factor ratings of leading national wood window and patio doors brands.

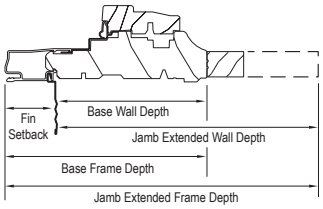
2.Based on comparing written limited warranties of leading national wood window and wood patio door brands.

*Requires the Insynctive App on a smart device, an Insynctive Bridge and a wireless home internet router with internet connection.

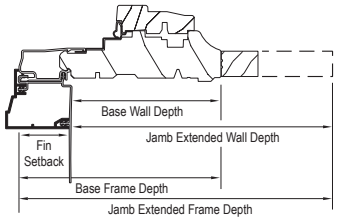
		Cross Section	Frame / Install	Wall Depth Range	Performance Range
Awning Vent and Fixed	Dual-Pane		Standard Fold-out Fin Block Frame EnduraClad Exterior Trim / Brickmould	Base Frame Depth: 5" Std. Fin Setback: 1-5/16" Base Wall Depth: 3-11/16" Jamb Extended Wall Depth: 3-11/16" – 9-3/16"	LC45 – LC50 U: 0.24 – 0.39 SHGC: 0.19 – 0.57 STC: 25 - 32
	Triple-Pane			Base Frame Depth: 5" Std. Fin Setback: 1-5/16" Base Wall Depth: 3-11/16" Jamb Extended Wall Depth: 3-11/16" – 9-3/16"	R20 – CW50 U: 0.19 – 0.27 SHGC: 0.15 – 0.49 STC: Pending
Casement Vent and Fixed	Dual-Pane		Standard Fold-out Fin Block Frame EnduraClad Exterior Trim / Brickmould	Base Frame Depth: 5" Std. Fin Setback: 1-5/16" Base Wall Depth: 3-11/16" Jamb Extended Wall Depth: 3-11/16" – 9-3/16"	LC30 – LC50 U: 0.24 – 0.39 SHGC: 0.19 – 0.57 STC: 25 - 32
	Triple-Pane			Base Frame Depth: 5" Std. Fin Setback: 1-5/16" Base Wall Depth: 3-11/16" Jamb Extended Wall Depth: 3-11/16" – 9-3/16"	R20 – LC50 U: 0.19 – 0.27 SHGC: 0.15 – 0.49 STC: 36 - 37
Double-Hung Vent	Dual-Pane		Standard Fold-out Fin Block Frame EnduraClad Exterior Trim / Brickmould	Base Frame Depth: 5" Std. Fin Setback: 1-5/16" Base Wall Depth: 3-11/16" Jamb Extended Wall Depth: 3-11/16" – 9-3/16"	LC30 – LC50 U: 0.26 – 0.30 SHGC: 0.20 – 0.56 STC: 25 - 31
In-Swing Patio Door	Dual-Pane		Standard Fold-out Fin Block Frame EnduraClad Exterior Trim / Brickmould	Base Frame Depth: 5-7/8" Extended Frame Depth: 5-7/8" - 8-5/8" Std. Fin Setback: 1-5/16" Base Wall Depth: 4-9/16" Extended Wall Depth: 4-9/16" - 7-5/16"	LC50 U: 0.26 – 0.30 SHGC: 0.18 – 0.48 STC: 30 – 32
	Triple-Pane			Base Frame Depth: 5-7/8" Extended Frame Depth: 5-7/8" - 8-5/8" Std. Fin Setback: 1-5/16" Base Wall Depth: 4-9/16" Extended Wall Depth: 4-9/16" - 7-5/16"	LC55 U: 0.22 – 0.26 SHGC: 0.12 – 0.28 STC: 34 – 35
Sliding Patio Door	Dual-Pane	 Model-4	Standard Fold-out Fin Block Frame EnduraClad Exterior Trim / Brickmould	Base Frame Depth: 5-7/8" Std. Fin Setback: 1-5/16" Base Wall Depth: 4-9/16" Jamb Extended Wall Depth: 4-9/16" - 9-3/16"	R20 – LC50 U: 0.26 – 0.31 SHGC: 0.18 – 0.28 STC: 28 – 32
	Triple-Pane			Base Frame Depth: 5-7/8" Std. Fin Setback: 1-5/16" Base Wall Depth: 4-9/16" Jamb Extended Wall Depth: 4-9/16" - 9-3/16"	R25 – CW60 U: 0.21 – 0.33 SHGC: 0.14 – 0.44 STC: 33 – 36

Performance ranges shown are for single-units and do not account for composite units (integral mullion) or combinations (multiple units mulled together). Drawings are not to scale.

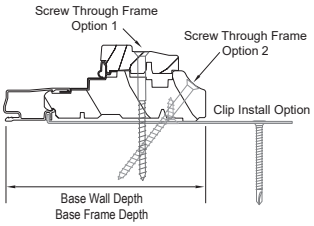
Window Frame Dimensions



Standard Fold-Out Fin

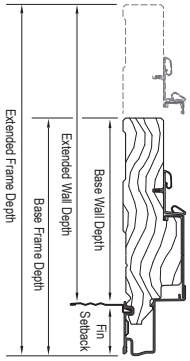


EnduraClad Exterior Trim / Brickmould

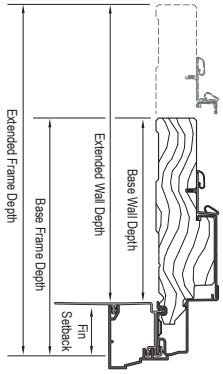


Block Frame / Installation Clip

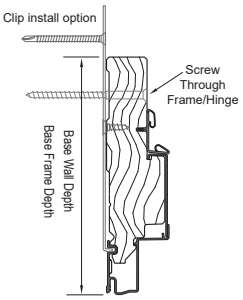
In-Swing Door Frame Dimensions



Standard Fold-Out Fin



EnduraClad Exterior Trim / Brickmould



Block Frame / Installation Clip

For Trim and Install accessories, see the first section of the Architectural Design Manual.

For Installation instructions visit InstallPella.com.

Use this Quick-Read (QR) code with your mobile device for quick access.

You may need to first install a QR code reading App, an Internet connection is required.

Rolscreen® Retractable Screens

Optional Rolscreen retractable screen rolls out of sight when you're not using it, so the screen stays protected

Soft-closing retractable screens are available for casement windows and sliding patio doors.

WARNING: Screen will not stop child or pet from falling out of window or door. Keep child or pet away from open window or door.

Exterior Enduraclad® Protective Finish Standard Colors

Dual- and Triple-Pane

White
Tan
Putty
Brown
Poplar White
Portobello
Hartford Green
Morning Sky Gray
Brick Red
Black

Triple-Pane Only

Almond
Fossil
Iron Ore

Interior Finishes

Dual- and Triple-Pane

White
Bright White
Linen White
Natural
Golden Oak Stain
Early American Stain
Provincial Stain
Red Mahogany Stain
Dark Mahogany Stain
Black Stain
Prime

Screens

Vivid View® Screen

Provides the sharpest view, available as an upgrade on Pella wood windows and patio doors. Allows in 29% more light and is 21% more open to airflow compared to conventional screen.

PVDF 21/17 mesh, 78% light transmissive.

InView™ Screen

Standard screen on Pella wood windows and patio doors, as well as Rolscreen® retractable screens on wood casement windows.

More transparent than conventional fiberglass, allows 14% more light and is 8% more open to airflow than conventional screen.

Vinyl coated 18/18 mesh fiberglass, Complies with performance requirements of SMA 1201.

Conventional Screen

Standard on Pella Rolscreen® retractable screens on patio doors.

Black vinyl coated 18/14 mesh fiberglass, Complies with ASTM D 3656 and SMA 1201.

Improved airflow is based on calculated screen cloth openness. Screen cloth transmittance was measured using an integrated sphere spectrophotometer.

Because of printing and display limitations, actual colors may vary from those shown.

Hardware

Essential Collection

Casement/Awning Window

Double-Hung Window

Hinged Patio Door

Sliding Patio Door

Finishes

White

Champagne

Brown

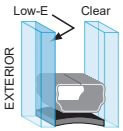
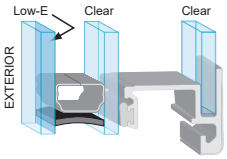
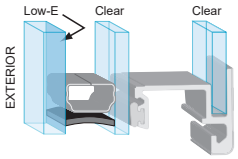
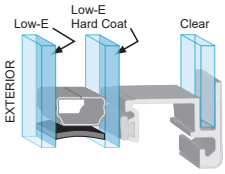
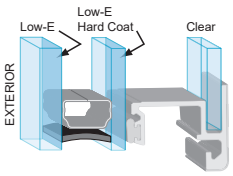
Oil-Rubbed Bronze

Satin Nickel

Matte Black

Performance Packages

Available performance solutions offer an unbeatable combination of energy efficiency, sound control and value.*

Base	Performance	Sound Control	Energy Efficiency	Ultimate Performance
				
Advanced Low-E	**Advanced Low-E SunDefense Low-E or NaturalSun Low-E**	**Advanced Low-E Sound-reduction glazing**	**AdvancedComfort**	**AdvancedComfort Sound-reduction glazing**
Two panes of insulating, energy-efficient glass and our most popular features and options.	A triple-pane glass design for a combination of both improved energy efficiency and sound performance.	Triple-pane glass design featuring mixed glass thicknesses for enhanced sound dampening.	A triple-pane glass design with upgraded AdvancedComfort Low-E glass for enhanced energy efficiency.	A triple-pane glass design featuring mixed glass thicknesses with upgraded AdvancedComfort Low-E glass for enhanced energy efficiency.

*Performance solutions require upgrades to triple-pane, AdvancedComfort Low-E and mixed glass thickness. Based on comparing product quotes and published STC/OITC and U-Factor ratings of leading national wood window and patio door brands.

Because of printing limitations, actual colors may vary slightly from those shown.

Triple-Pane Glazing

Air, Water, & Structural Performance

Performance Class & Grade Rating	Water Penetration Resistance	Air Infiltration	Design Pressure	Forced Entry
R20 – CW50	7.5 psf	0.05	20 – 50 psf	40

Thermal Performance

Vent Units

11/16" overall glazing thickness
All glass thickness combinations

Type of Glazing (Argon fill)	U-Factor	SHGC	VLT %	CR	Energy Star® Capable
Advanced Low-E IG	0.23 – 0.27	0.20 – 0.23	0.36 – 0.41	67 – 73	N, NC, SC, S
SunDefense™ Low-E IG	0.23 – 0.27	0.15 – 0.17	0.33 – 0.38	67 – 73	N, NC, SC, S
AdvancedComfort Low-E IG	0.20 – 0.24	0.19 – 0.22	0.35 – 0.40	71 – 74	N, NC, SC, S
NaturalSun Low-E IG	0.23 – 0.27	0.34 – 0.41	0.41 – 0.47	66 – 72	N, NC

Sound Performance

Frame Size Tested	Type of Glazing	STC	OITC
Vent; 59" x 23" Fixed; 47" x 59"	11/16" with 2.5mm / 2.5mm / 2.5mm (ML) glass 11/16" with 3mm / 3mm / 3mm (ML) glass	Pending	Pending

Code Approvals: Hallmark Certified; **FPAS#:** Vent=11883, Fixed=11877; **TDI#:** Vent=WIN–675, Fixed=WIN-619

Dual-Pane Glazing

Air, Water, & Structural Performance

Performance Class & Grade Rating	Water Penetration Resistance	Air Infiltration	Design Pressure	Forced Entry
LC45 – LC50	7.52 – 14.62 psf	0.05	45 – 50 psf	40

Thermal Performance

Vent Units

11/16" overall glazing thickness
All glass thickness combinations

Type of Glazing (Argon fill)	U-Factor	SHGC	VLT %	CR	Energy Star® Capable
Advanced LowE IG	0.29 – 0.35	0.25 – 0.28	0.46 – 0.51	50 – 57	NC, SC, S
SunDefense™ Low-E IG	0.29 – 0.34	0.19 – 0.21	0.42 – 0.48	50 – 57	NC, SC, S
AdvancedComfort Low-E IG	0.26 – 0.30	0.24 – 0.27	0.45 – 0.50	38 – 45	N, NC, SC, S
NaturalSun LowE IG	0.30 – 0.35	0.44 – 0.51	0.52 – 0.58	50 – 57	N

Sound Performance

Frame Size Tested	Type of Glazing	STC	OITC
Vent; 59" x 23"	11/16" with 2.5mm / 2.5mm glass	25	23
Fixed; 47" x 59"	11/16" with 3mm / 3mm glass	28	25

Code Approvals: Hallmark Certified; **FPAS#:** Vent = 20532; Fixed = 11012; **TDI#:** Vent = WIN-2172; Fixed = WIN-827

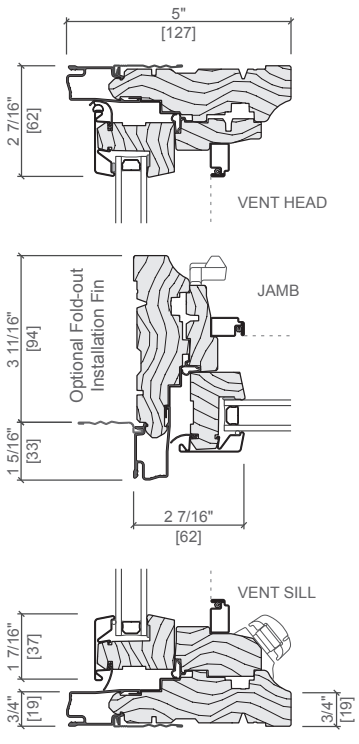
See the Performance section earlier in this manual to learn more about performance standards and ratings.

Performance varies based on actual product attributes.

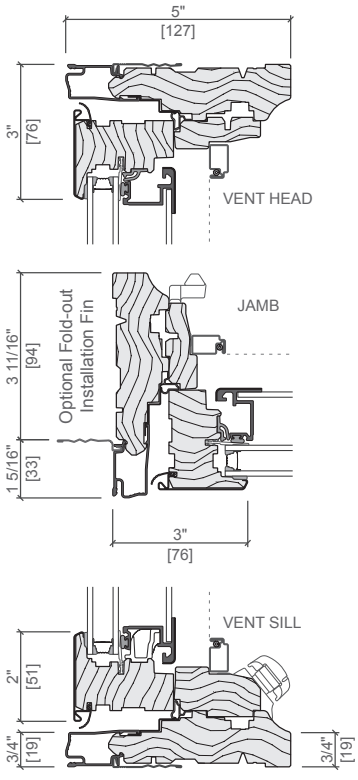
Lifestyle Series

Casement

Dual-Pane



Triple-Pane



Other frame types are available. Not to scale. All dimensions are approximate.

Lifestyle Series

Double-Hung

Air, Water, & Structural Performance

Performance Class & Grade Rating	Water Penetration Resistance	Air Infiltration$_1$	Design Pressure	Forced Entry
LC30 – LC50	7.5 psf	0.17	30 – 50 psf	10

Thermal Performance

Vent Units

(11/16" glass)

Type of Glazing (Argon fill)	U-Factor	SHGC	VLT %	CR	Energy Star® Capable
Advanced LowE IG	0.25 – 0.26	0.25	0.46 – 0.47	58 – 60	N, NC, SC, S
SunDefense™ Low-E IG	0.25 – 0.26	0.19	0.43	58 – 60	N, NC, SC, S
AdvancedComfort Low-E IG	0.22 – 0.24	0.24 – 0.25	0.45 – 0.46	58 – 61	N, NC, SC, S
NaturalSun LowE IG	0.25 – 0.27	0.45 – 0.46	0.52 – 0.53	57 – 60	N

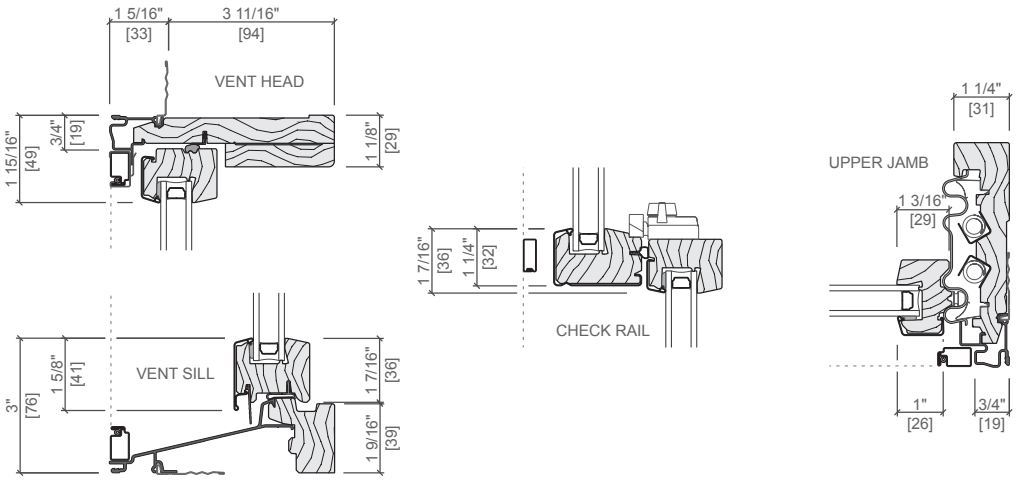
Sound Performance

Frame Size Tested	Type of Glazing	STC	OITC
37" x 59"	11/16" with 2.5mm / 2.5mm	27	23
37" x 59"	11/16" with 5mm / 3mm	31	27

Code Approvals: Hallmark Certified; **FPAS#:** Vent=12448; **TDI#:** Vent=WIN-739

See the Performance section earlier in this manual to learn more about performance standards and ratings.

Performance varies based on actual product attributes.

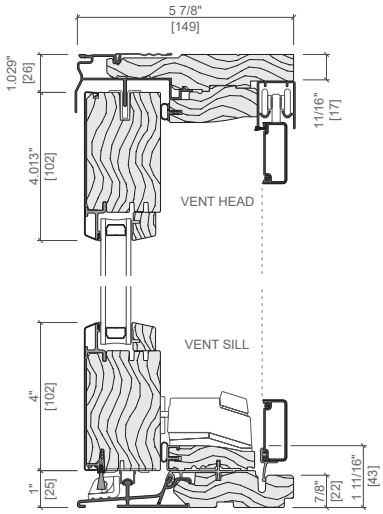


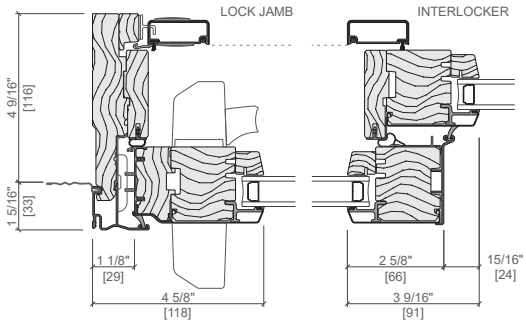
Other frame types are available. Not to scale. All dimensions are approximate.

Lifestyle Series

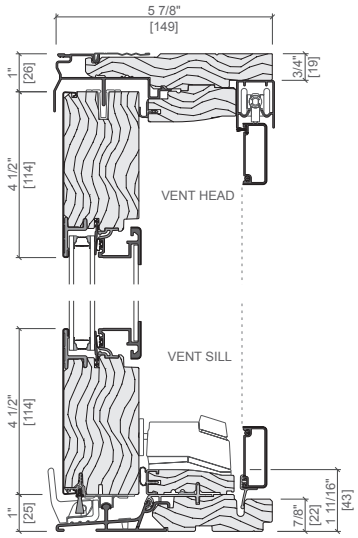
Sliding Door

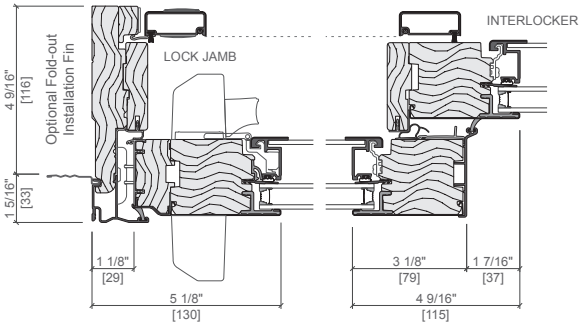
Dual-Pane
Model 4





Triple-Pane





Three panel (OXO) and four panel (OXXO) configurations are also available.

LANDMARK®

COLORVIEW

GET AN ESTIMATE

Ask an Expert

HUBBARDTON FORGE

PRODUCT SPECIFICATIONS

*Image shown may not reflect your configured options

Mason Outdoor Sconce

HUBBARDTON FORGE

Base Item #303003
Configured Item #303003-1007
303003-SKT-75-ZM0448

FINISH
Coastal Bronze - 75

GLASS
Clear Glass (ZM)

LAMPING
Incandescent

OPTIONS

FINISH

Coastal Black - 10
Coastal Natural Iron - 20
Coastal Mahogany - 73
Coastal Bronze - 75
Coastal Dark Smoke - 77
Coastal Burnished Steel - 78

GLASS

Clear Glass (ZM)

LAMPING

Incandescent

SPECIFICATIONS

Mason Outdoor Sconce
Base Item #: 303003
Configured Item #: 303003-1007
303003-SKT-75-ZM0448

Outdoor sconce with thick blown glass bell; aluminum, medium.

- Handcrafted to order by skilled artisans in Vermont, USA
- Lifetime Limited Warranty when installed in residential setting
- Features our robust Coastal Outdoor finish specifically formulated to resist some of the harshest environmental conditions.
- US Patent D726,952

Dimensions

Height	11.50″
Width	8.20″
Projection	9.00″
Product Weight	6.20 lbs
Backplate	5.50″ x 4.90″
Vertical Mounting Height	5.90″
Packed Weight	10.00 lbs
Shipping (DIM) Weight	25.00 lbs

Incandescent Lamping
Socket: G-9 Halogen
Bulb: G-9, 60W Max
Number of Bulbs: 1 (included)
IES Files Available: N

Location Rating
Outdoor Wet

Safety Rating
UL, CUL listed