

The application types, installation methods and accessories pages contain recommendations and options for applying Pella products to a wide variety of project applications.

Many installation methods are available to meet new construction or replacement project needs. The installation method must fit in the construction sequence, provide secure attachment and integrate with the building envelope. The installation methods shown below are recommended for single and combination opening applications. Other options or variations may exist.

Single and Combination Openings Installation Method Options

Installation Method	Aluminum-Clad Wood	Wood Exterior	Pella® Impervia®	Pella® 250 Series Vinyl	Encompass by Pella® Vinyl
New Construction					
Pella® Steady Set™ Installation System	Y	—	—	—	—
Nail Fin	Y	—	Y	Y	Y
Factory Applied Exterior Trim for New Construction	Y	—	—	(Select Markets)	—
Clip	Y	Y	Y	Y	—
Anchor Through Frame	Y	Y	Y	Y	Y
L-Receptor	Y	—	Y	—	—
Wood Brickmould	—	Y	—	—	—
Replacement					
Nail Fin For Replacement	Y	—	Y	Y	Y
EnduraClad® Exterior Trim For Replacement	Y	—	—	—	—
Clip or Anchor Through Frame after Complete Removal	Y	Y	Y	Y	Y
Anchor Through Frame in Pocket Replacement from the Exterior	Y	Y	Y	Y	Y
Anchor Through Frame in Pocket Replacement from the Interior	Y	—	Y	Y	Y
Subframe	Y	—	Y	—	—
T-Subframe/T-Receptor	Y	—	Y	—	—



For the most current installation instructions, scan the QR code, or visit: <https://www.pella.com/professionals/installation-instructions/>.

All detail representations in this manual only pertain to the use of Pella products manufactured by Pella Corporation and are strictly limited to the published specifications and to the use of Pella products. Details shown herein illustrate typical general methods of installing Pella products manufactured by Pella Corporation and are to be used as guidelines only. Refer to the appropriate installation instructions and/or installation shop drawings.

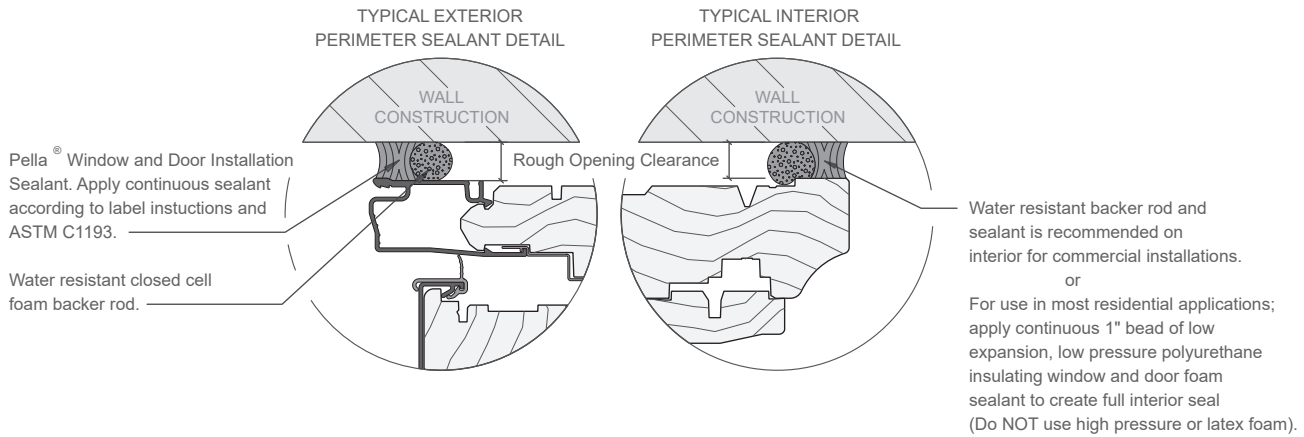
Over time, all window and door or systems may have some water infiltration; it is important that the wall system be designed and constructed to properly manage moisture. Pella Corporation is not responsible for claims or damages caused by unanticipated water infiltration; deficiencies in building design, construction and maintenance; failure to install Pella products in accordance with Pella approved methods; or the use of Pella products in systems which do not allow for proper management of moisture within the wall systems. The determination of the suitability of all building components, including the use of Pella products, as well as the design and installation of flashing and sealing systems are the responsibility of the building owner, architect, contractor, installer and/or consumer.

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, content is subject to change without notice. View available on-line documentation or consult your local Pella Sales Representative for the most current information.

Typical Rough Opening and Sealant Recommendations

Rough opening clearances are required to create adequate space for flashing, construction and manufacturing tolerances, thermal movement and sealants.

Fiberglass and vinyl windows and doors are often sized using nominal frame sizes, which are equivalent to rough opening sizes in inches or feet and inches for single openings. Clad and wood products are typically referred to by actual frame size.



Single and combination window openings rough opening clearance recommendations

	Single Opening	Combinations
Aluminum-Clad Wood	3/8" (3/4" total)	1/2" to 5/8" (1" to 1-1/4" total)
Pella® Impervia® Fiberglass	1/4" (1/2" total) ₁	1/2" (1" total)
Pella® 250 Series Vinyl	1/4" (1/2" total) ₁	3/8" (3/4" total)
Encompass by Pella® Vinyl	1/4" (1/2" total) ₁	3/8" (3/4" total)

(1) Rough opening sizes based on nominal frame sizes may not be sufficient to accommodate the build up of flashing materials. Increase rough opening clearances to accommodate flashing material build-up to maintain the dimensions shown above.

Door rough openings (except multi-panel doors) should be sized as shown above for width and 1/2" to 1" greater than frame in height. Door sill clearance is 0".

Additional clearance may be necessary for combination assemblies, installation accessories or specialty products, consult with your Pella sales representative or Pella Architectural Solutions for details.

Pella® Steady Set™

An Easy-to-Learn Interior Installation System



Head Stabilizer

- Engages with the header of the rough opening to help temporarily stabilize the unit
- Helps eliminate the need for someone to hold the unit from falling inwards prior to fastening
- Frees up a secondary installer to move on to other work

Flashing Fin with Continuous Corners

- Pop-up yellow exterior fin is easily deployed and flashed in a simple-2-step process helping to ensure an exterior water barrier
- Features a flexible hinge that naturally adapts to variation within the wall and an integrated corner seal allowing for a continuous seal
- Bottom fin includes a textured surface to assist with water management



Shim Guide

- Located on the jambs of select units
- Assists the installer by helping to hold shims in the correct location
- Can help ensure consistent frame to sash reveals



Flip & Click Installation Bracket

- Comes pre-attached to the unit and helps enable a reliable, safe and simple install
- Simply needs to be unclipped, flipped and clicked to be install ready
- This structural attachment method securely attaches the window to the rough opening and accommodates most wall construction depths



Sill Shim

- Pre-applied sill shims raise the unit 1/4" off the rough opening sill, ensuring space for foam and/or sealant
- Gap also allows for installers to easily insert tools to manipulate the unit
- Limits pinched fingers and product damage when leveling



Become an Insider

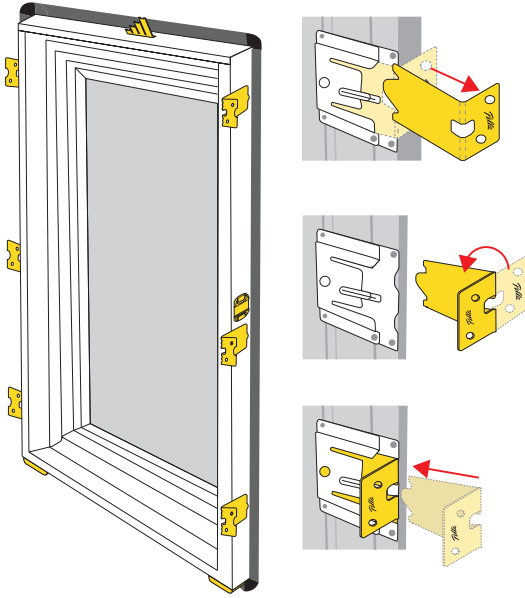
Scan the QR code or visit: <https://www.pella.com/professionals/steady-set/>
to learn how to efficiently install with uncompromising quality.



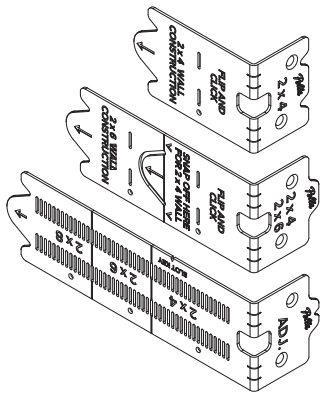
Pella® Steady Set™ Installation System

Details Available for: **Clad**

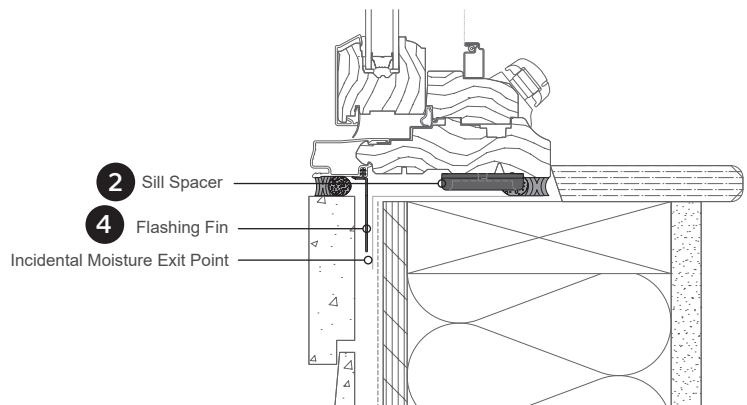
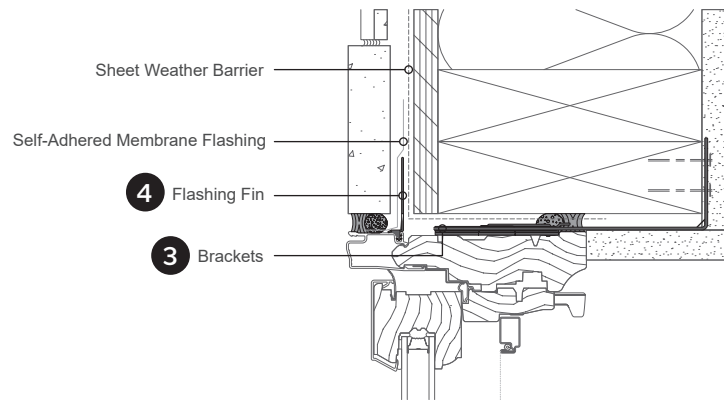
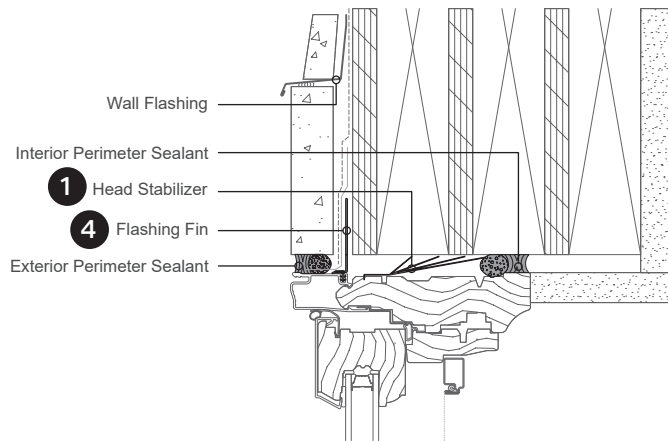
Pella's exclusive Steady Set installation method makes installation faster, safer and requires fewer personnel. Windows are installed, shimmed and fastened from the interior. Flashing and sealants are installed in the same manner as nailing fin according to the type of weather resistant barrier system.



Flip and Click Installation Bracket:
Three options available to accommodate wall thickness specific to your installation.



3-1/2" to 8-3/4" wall thickness.



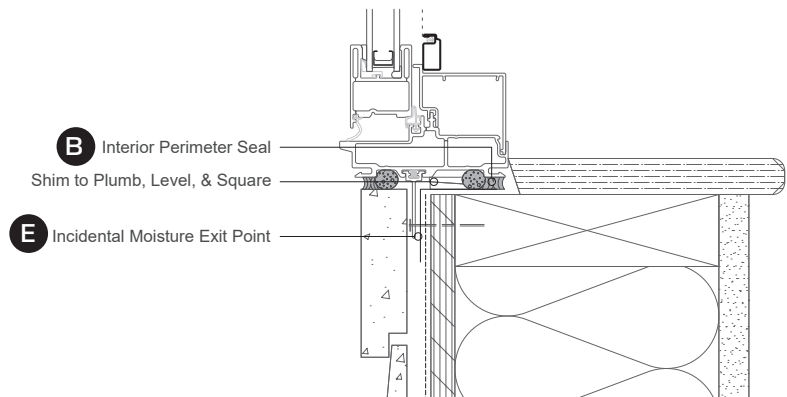
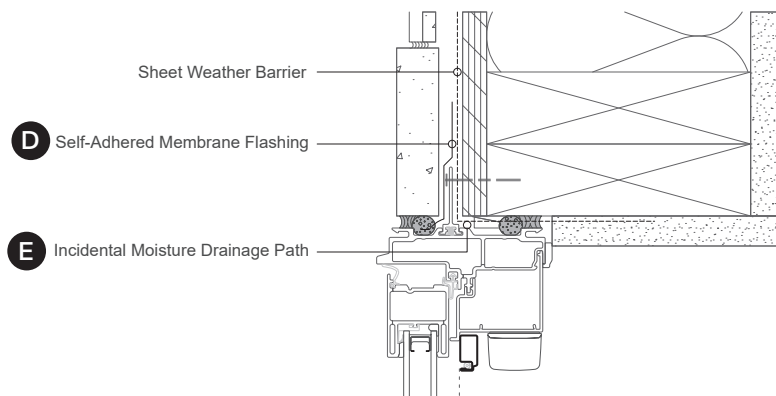
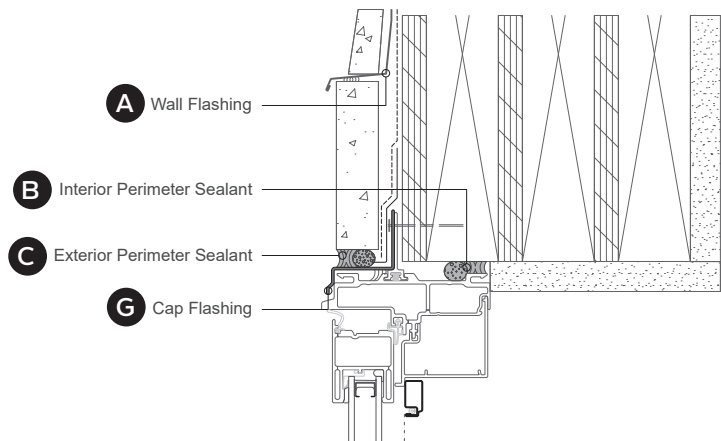
- 1 The head stabilizer is a factory-installed patent pending device that helps hold the window in place after it has been placed in the opening from the interior.
- 2 Sill spacers hold the window above the rough opening sill making shimming and interior sealant installation easier.
- 3 Exclusive, factory-installed Steady-Set brackets secure the window to the wall. After quickly flipping over and clicking factory-installed brackets into place, the window can be installed from the interior at the correct depth. Steady set brackets may also be required at the head and sill of wider windows and multi-wide window combinations.
- 4 After removing fin covers, flashing fins can be folded out and integrated with the weather-resistive barrier using conventional flashing materials and methods.

Nailing Fin with Sheet Weather Barrier

Details Available for: Clad Fiberglass Vinyl

The nailing flange secures the window or door to the opening. In this example, window and door products are installed from the exterior before the wall cladding. Exterior perimeter sealants and wall flashing deflect bulk water away from the installation. Self-adhered flashing deflects incidental moisture. A drainage path and exit point is available for managing water in the installation and an interior perimeter air seal provides a continuation of the building's air barrier.

The following details are intended to show important installation concepts, but may not include all pertinent details. Please review installation instructions or contact your Pella sales representative or Pella Architectural Solutions for recommendations or drawings specific to your project.



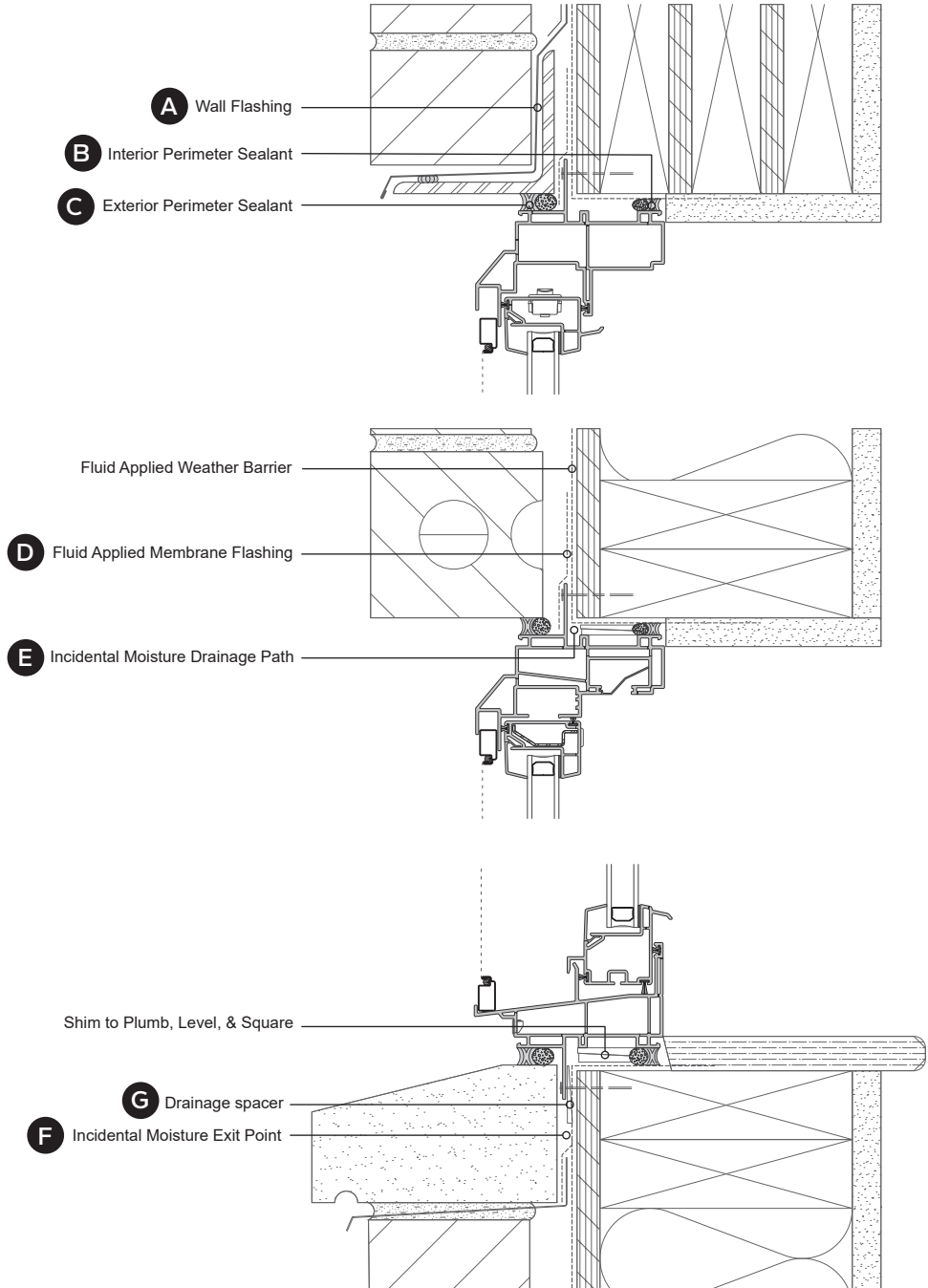
- A** Head and Wall flashing with a drip edge directs water inside the wall's drainage cavity to the exterior.
- B** Interior sealants prevent air flow and the resulting incidental moisture intrusion.
- C** Exterior sealants stop bulk water from entering the wall and window/wall interface.
- D** Installation fins secure the window from the exterior, are integrated with the weather barrier in water-shed fashion and allow the building to be enclosed prior to the installation of cladding.
- E** A drainage path must be maintained in the perimeter shim space to prevent the trapping of incidental moisture.
- F** Do not seal fin to the wall at sill to prevent the trapping of incidental moisture.
- G** Cap flashing may be used to prevent the intrusion of moisture at vertical mullion joints.

Nailing Fin with Fluid Applied Weather Barrier

Details Available for:

- Clad
- Fiberglass
- Vinyl

With most fluid applied WRB systems, the WRB is extended into the opening on all four sides. After the window is placed in the opening, an additional application of the fluid WRB is applied at head and jambs. Spacers behind the sill nail fin can assist with maintaining an exit point for secondary moisture.



- A** Wall flashing with a drip edge directs water inside the wall's drainage cavity to the exterior.
- B** Interior sealants prevent air flow and the resulting incidental moisture intrusion.
- C** Exterior sealants stop bulk water from entering the wall and window/wall interface.
- D** Installation fins secure the window from the exterior, are integrated with the weather barrier in water-shed fashion and allow the building to be enclosed prior to the installation of cladding.
- E** A drainage path must be maintained in the perimeter shim space to prevent the trapping of incidental moisture.
- F** Do not seal fin to the wall at sill to prevent the trapping of incidental moisture.
- G** Add 1/16" to 1/8" drainage spacer between fin and wall to ensure proper drainage.

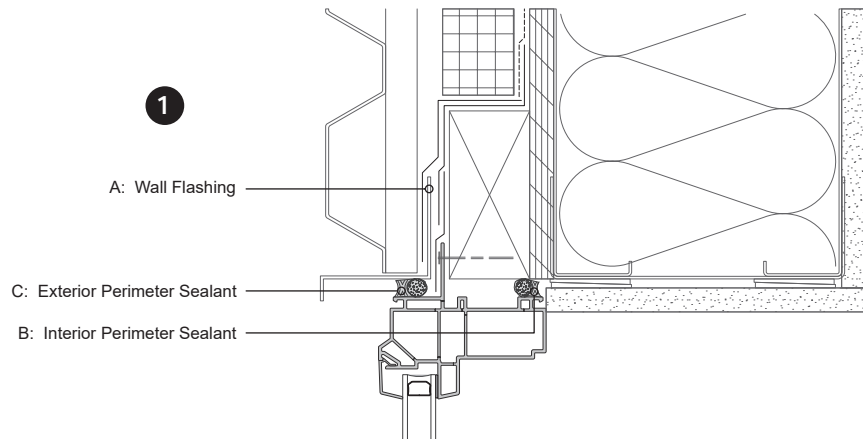
Nailing Fin Over Exterior Insulation

Details Available for:

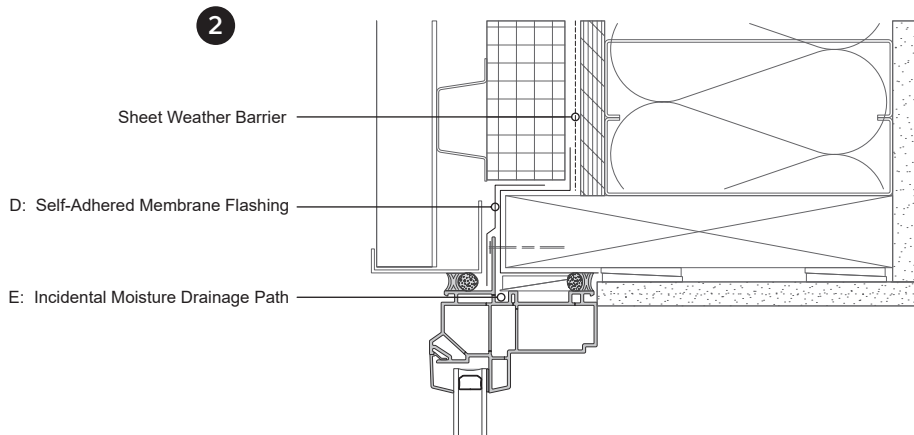
- Clad
- Fiberglass
- Vinyl

When a window is installed over rigid insulation, additional support elements are required to support the window's weight and prevent frame rotation and deflection during wind loading. Pella's patented support clips or supporting materials can provide this support. At doors, structural blocking is required to support hinge and strike anchors.

Wood blocking or support brackets keep the window in the proximity of the wall cladding to support the installation of exterior perimeter sealants.



Surface-applied support blocking option:
Weather barrier over or under insulation (shown under).

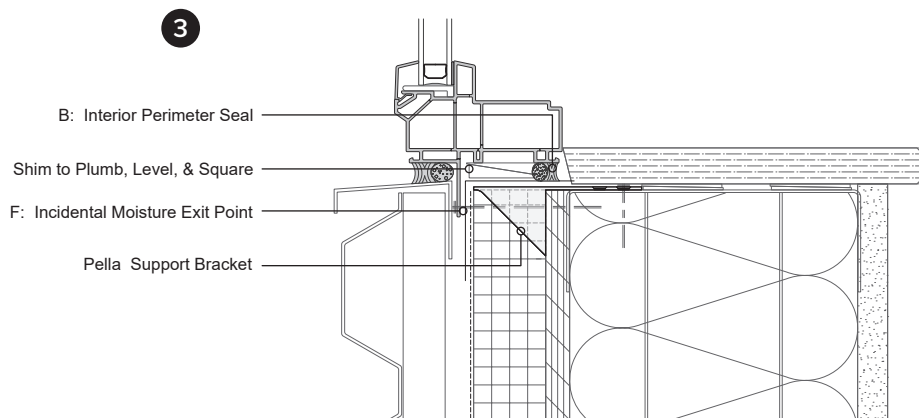


Rough opening support blocking option:
Weather barrier over or under insulation (shown under).

1 1/2" Pella Insulation Support Bracket #51GG0000



2" Pella Insulation Support Bracket #51GH0000



Pella Insulation Support Bracket option:
Weather barrier over insulation.

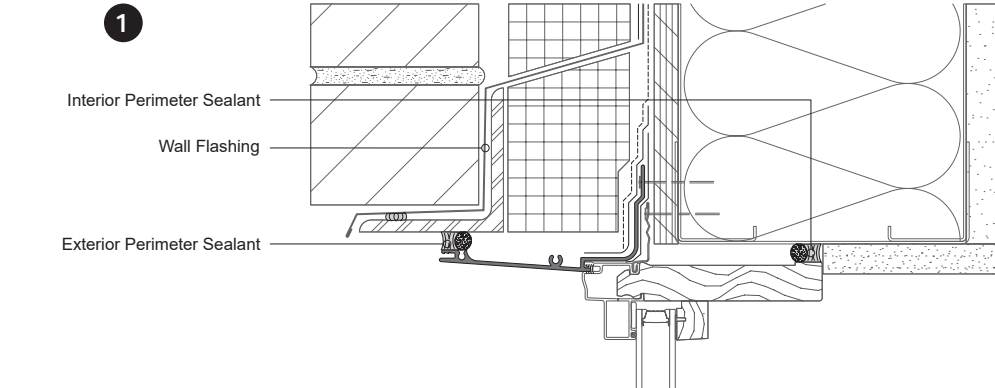
- 1 This option requires less wood blocking; however, decreases the amount of exterior insulation at the perimeter of window openings.
- 2 This option requires more wood blocking; however, increases the amount of exterior insulation at the perimeter of window openings.
- 3 This option eliminates the use of wood blocking and maximizes the amount of exterior insulation at the perimeter of window openings.

Nailing Fin Under Exterior Insulation

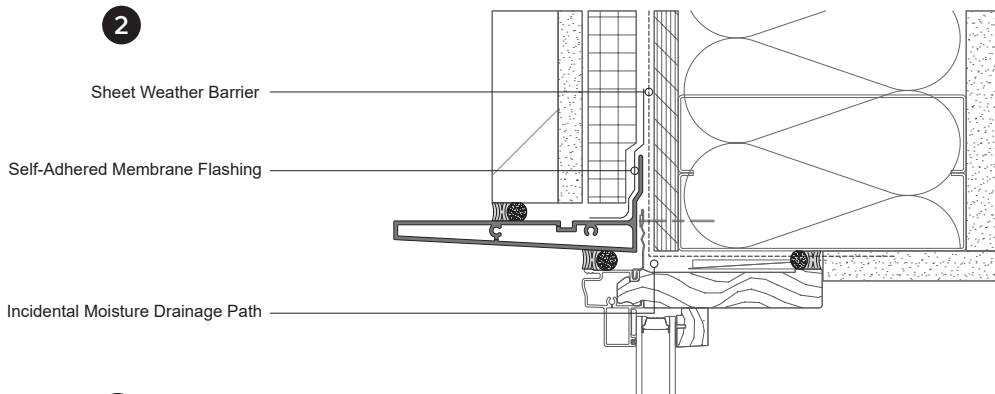
Details Available for:

- Clad
- Fiberglass
- Vinyl

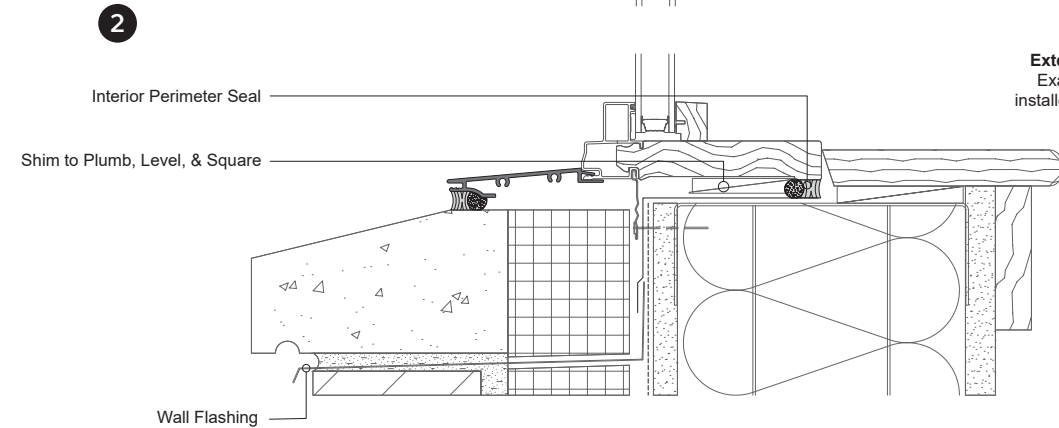
When a window or door is installed with a nailing flange under exterior insulation, the wall cladding must be returned to the frame or customized exterior frame extensions are available to extend the window to the wall cladding for the application of exterior sealants. The design of the customized exterior extensions may vary to account for assembly tolerances on combinations or product weep locations, if applicable.



Exterior Frame Extension:
Example shows extension installed after windows



Exterior Frame Extension:
Example shows extension installed after windows are installed.



Exterior Frame Extension:
Example shows extension installed to windows before they are installed.

- 1 Exterior frame extensions are installed after the window is placed in the opening.
- 2 Exterior frame extensions are secured to the window frame before or after window installation.

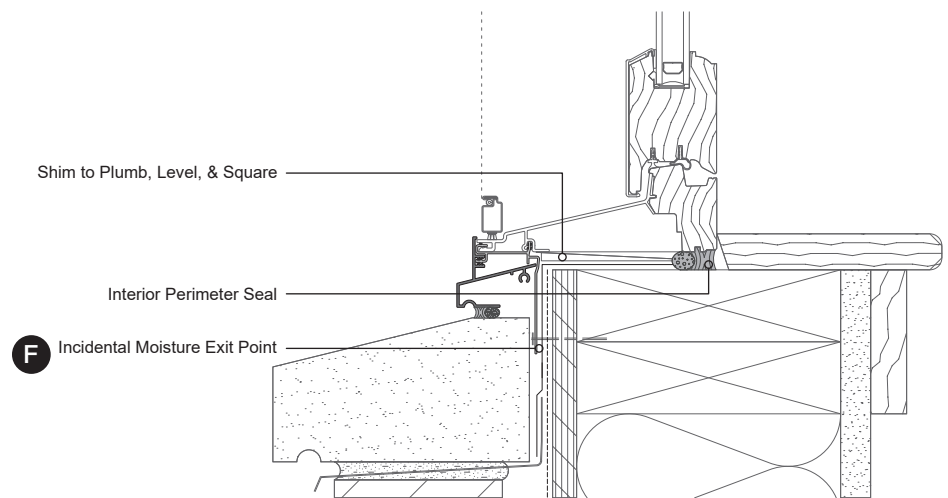
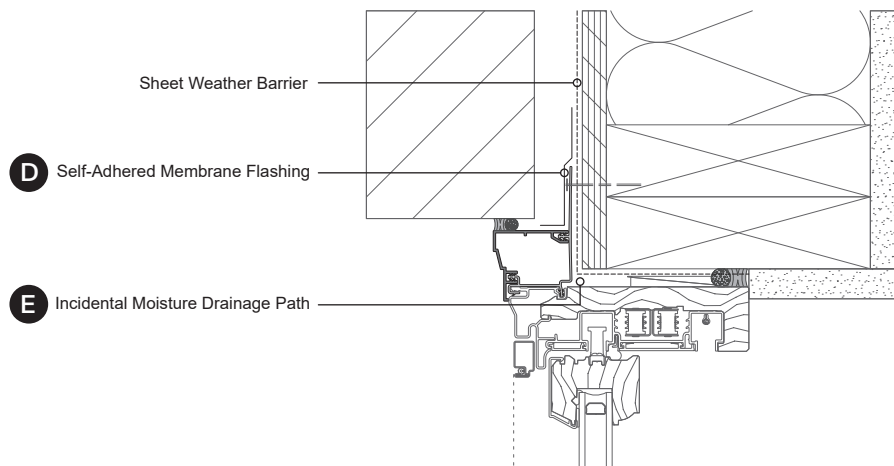
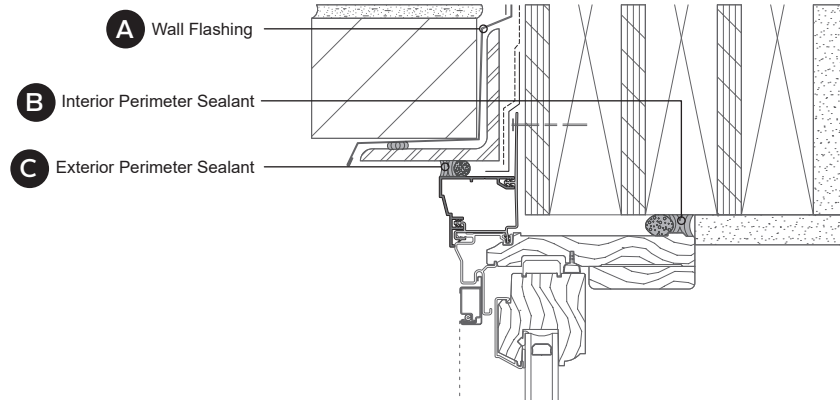
Factory-Applied EnduraClad® Exterior Trim for New Construction

Details Available for:

Clad

Creating a traditional aesthetic with a durable, low maintenance exterior trim is easy with Pella's factory-applied EnduraClad® Exterior Trim.

The following details are intended to show important installation concepts, but may not include all pertinent details. Please review installation instructions or contact your Pella sales representative or Pella Architectural Solutions for recommendations or drawings specific to your project.



- A** Wall flashing with a drip edge directs water inside the wall's drainage cavity to the exterior.
- B** Interior sealants prevent the intrusion of water generated by a differential in air pressure between the interior and exterior.
- C** Exterior sealants reduce elevated pressures caused by the compounding nature of bulk water cascading down the exterior of the building.
- D** Installation fins integrate with the walls weather barrier with flashing tape or membrane in a ship lap fashion.
- E** A drainage path must be maintained in the perimeter shim space to prevent the trapping of incidental moisture.
- F** Do not seal fin to the wall at sill to prevent the trapping of incidental moisture.

Factory-Applied EnduraClad® Exterior Trim for New Construction

Factory-Applied EnduraClad® Exterior Trim is available in five profiles for aluminum-clad windows and doors. Windows are available with four different sill options.

Head and jamb joints are mitered except for the 3-1/2" flat casing option, which is butt jointed.

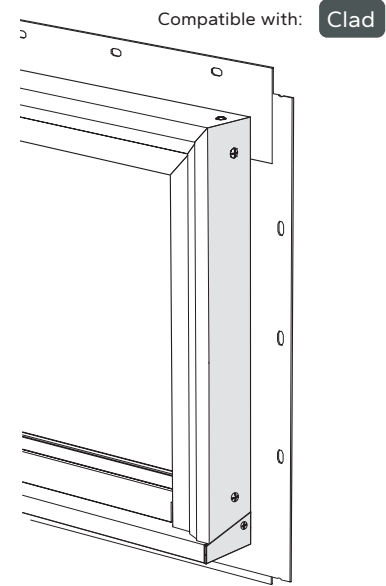
3-1/2" wide trim has a narrow flange for flashing purposes only. Clips or anchors through the frame must be used to secure the window or door.

Jamb pieces are cut to fit on the sloped sill and notched to create a water managed trim system.

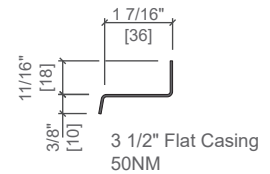
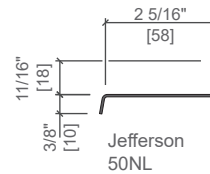
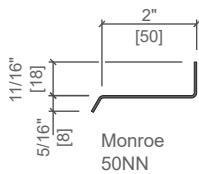
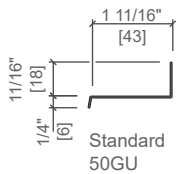
Maximum combination size: 138" x 101".

Not available on all products. Contact your local Pella sales representative for availability.

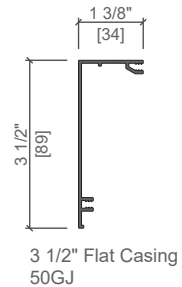
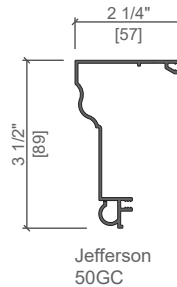
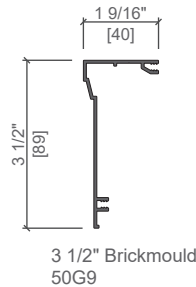
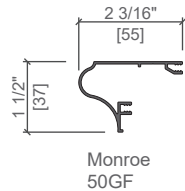
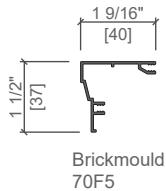
Not intended for field application.



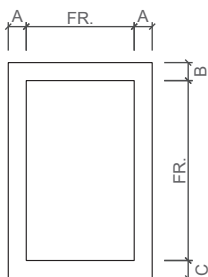
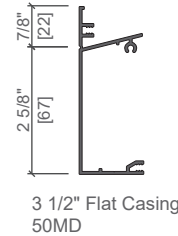
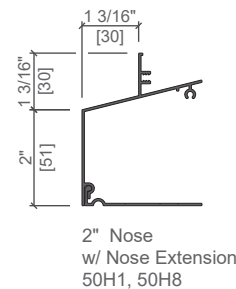
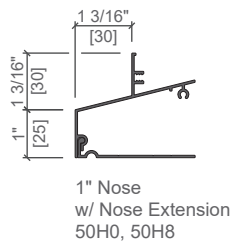
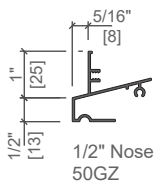
HEAD DRIP CAP



TRIM PROFILES



SILL NOSE



Frame to exterior trim

	A	B	C			
	Jamb (single)	Head	3-1/2" Flat Casing Sill	1/2" Sill Nose	1" Sill Nose	2" Sill Nose
1-1/2" Brickmould	+ 1.18"	+ 1.18"	—	+ 1.18"	+ 1.892"	+ 2.892"
3-1/2" Brickmould	+ 3.21"	+ 3.21"	—	+ 1.18"	+ 1.892"	+ 2.892"
3-1/2" Flat Casing	+ 3.21"	+ 3.21"	+ 3.21"	+ 1.18"	+ 1.892"	+ 2.892"
Jefferson	+ 3.21"	+ 3.21"	—	—	+ 1.892"	+ 2.892"
Monroe	+ 1.18"	+ 1.18"	—	—	+ 1.892"	+ 2.892"

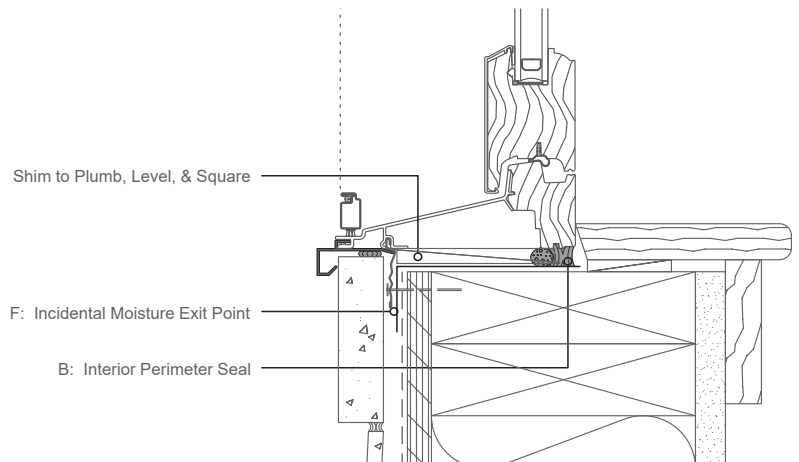
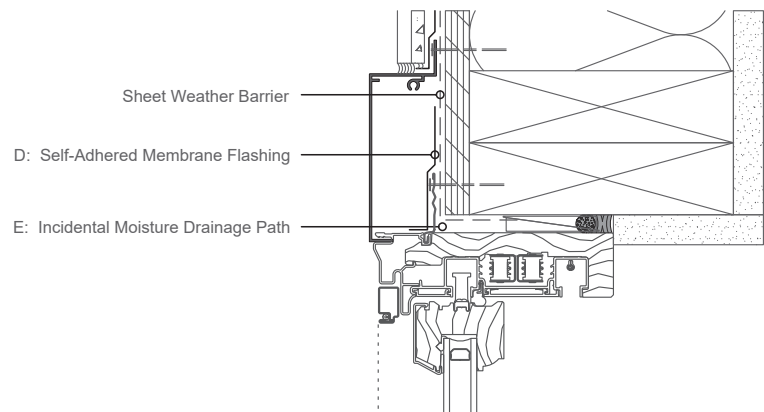
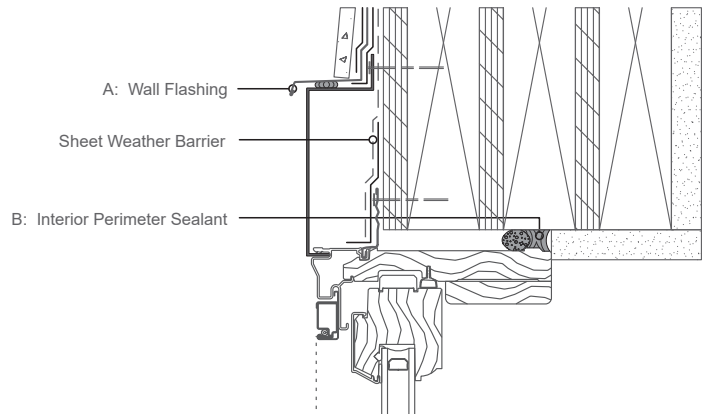
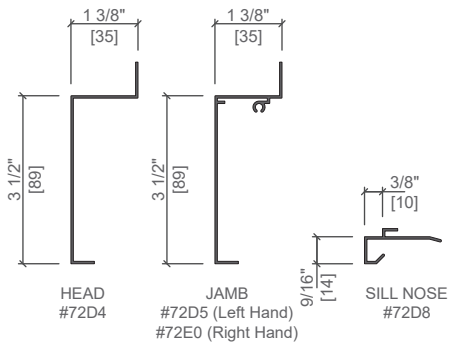
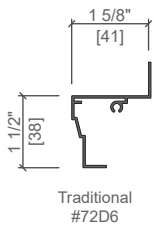
These dimensions do NOT include 3/8" per side for sealant, foam and backer rod, only the dimension of the trim beyond the unit frame.

Field-Applied Traditional Exterior Trim for New Construction

Details Available for:

Clad

Standard and flat aluminum brickmould with sill nose for installation in the field after a nailing fin installation is complete. Available for aluminum-clad products only. Must be applied as a full trim surround, use of individual pieces is not supported.



Custom extruded aluminum trim can be designed to meet aesthetic and installation goals. Limitations may apply depending on product, shape and size. It is available through Pella Architectural Solutions. Contact your Pella representative for assistance.

Field-Applied Custom Exterior Trim for New Construction or Replacement

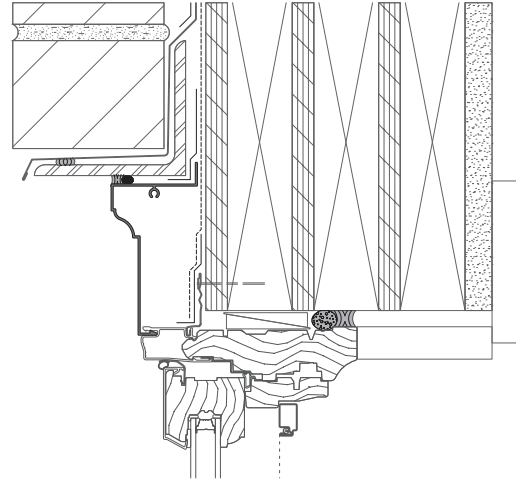
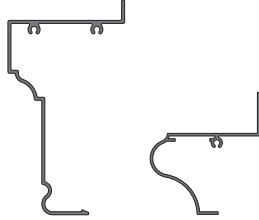
Details Available for:

Clad

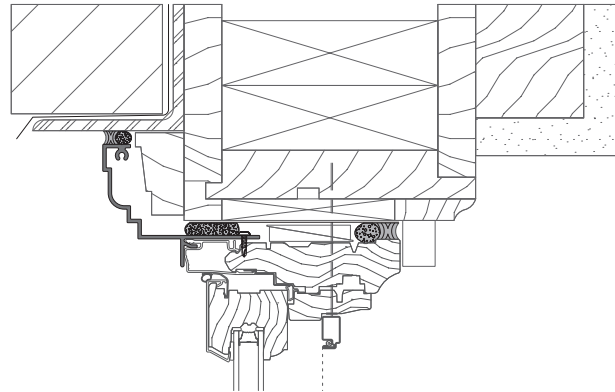
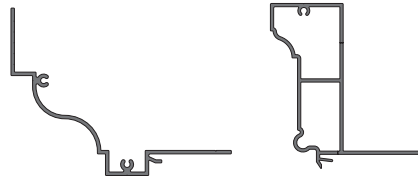
Custom extruded aluminum trim can be designed to meet aesthetic and installation goals. It is available through Pella Architectural Solutions. Contact your Pella representative for assistance.

Limitations may apply depending on product, shape and size.

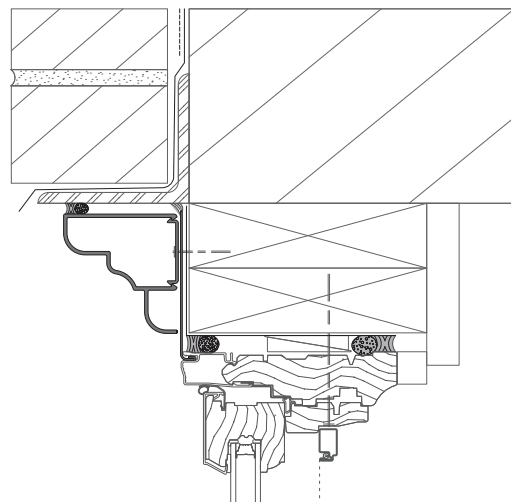
A



B



C

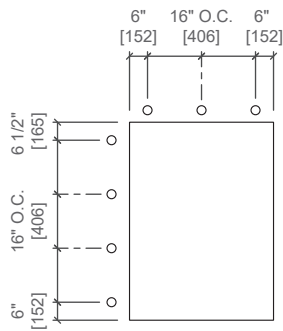


- A** Custom extruded aluminum exterior trim for installation after a nailing fin installation is complete. Typically used in new construction building additions replicating historic profiles.
- B** Custom extruded aluminum exterior trim attached to window frame for installation over an existing window frame left in place or over blocking. Typically used in replacement applications.
- C** Custom extruded aluminum exterior trim installed over frame expander or brake metal and secured using standard clips. Typically used in replacement applications.

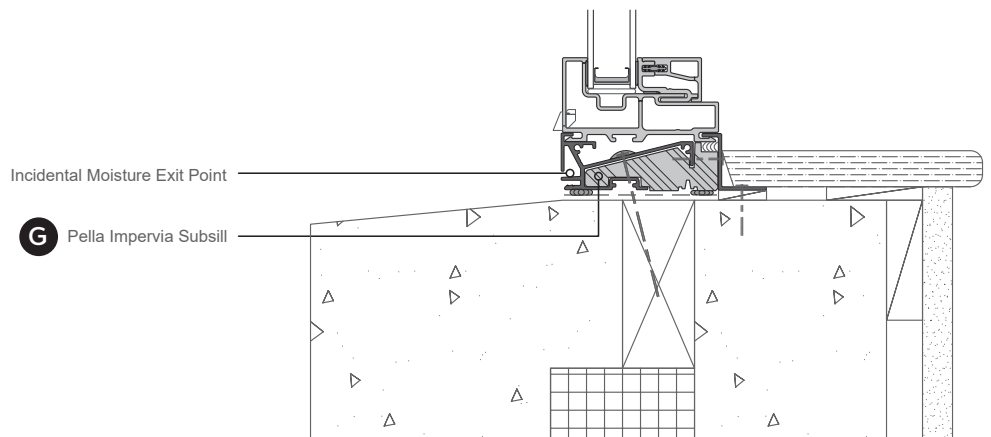
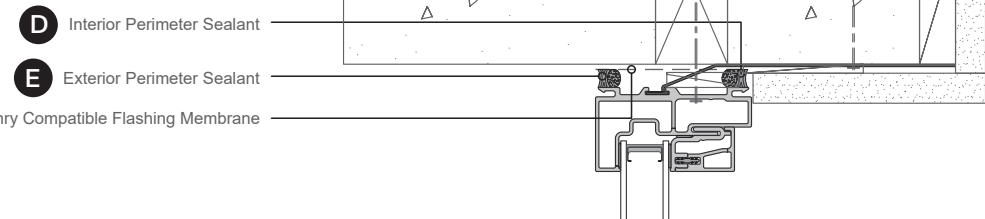
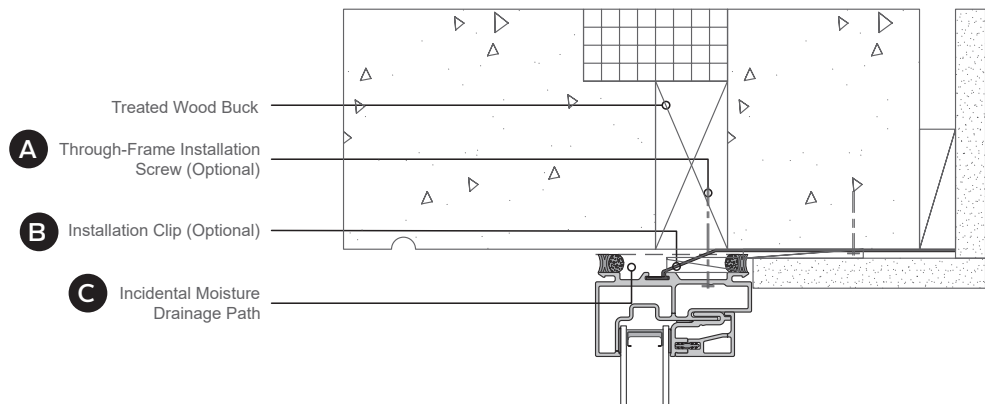
Clip or Anchor Through Frame Installation – New Construction

Details Available for:

- Clad
- Fiberglass
- Vinyl



Typical Clip or frame screw locations (refer to the installation instructions)



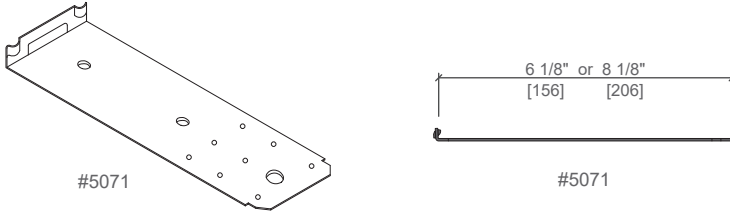
The installation clip or screw secures the window or door to the opening. Window and door products are installed from the exterior or interior after the wall cladding. Exterior perimeter sealants and wall flashing deflect bulk water away from the installation. A drainage path and exit point is available for managing water in the installation and an interior perimeter air seal provides a continuation of the building's air barrier. Subsill flashing systems can be used to provide an exit path for secondary moisture if a through-wall flashing is not available.

- A** Optional installation screws permit the window to be secured from the interior after wall cladding is in place without penetrating the interior seal.
- B** Optional installation clips permit the window to be secured from the interior after the wall cladding.
- C** A drainage path must be maintained in the perimeter shim space to prevent the trapping of incidental moisture.
- D** Interior sealants prevent air flow and the resulting incidental moisture intrusion.
- E** Exterior sealants stop bulk water from entering the wall and window/wall interface.
- F** A masonry compatible membrane will prevent moisture in the wall from entering the shim space.
- G** Optional Pella subsill provides a drainage path for incidental moisture to the exterior.

Installation Clip – Aluminum-Clad Exterior Windows and Doors

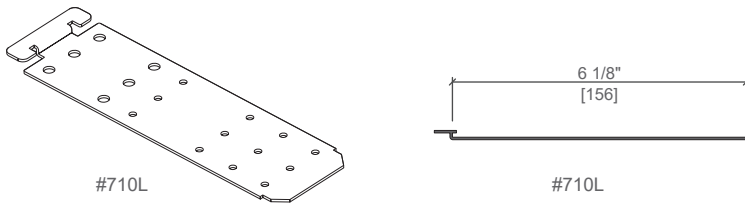
Details Available for: **Clad**

INSTALLATION CLIP



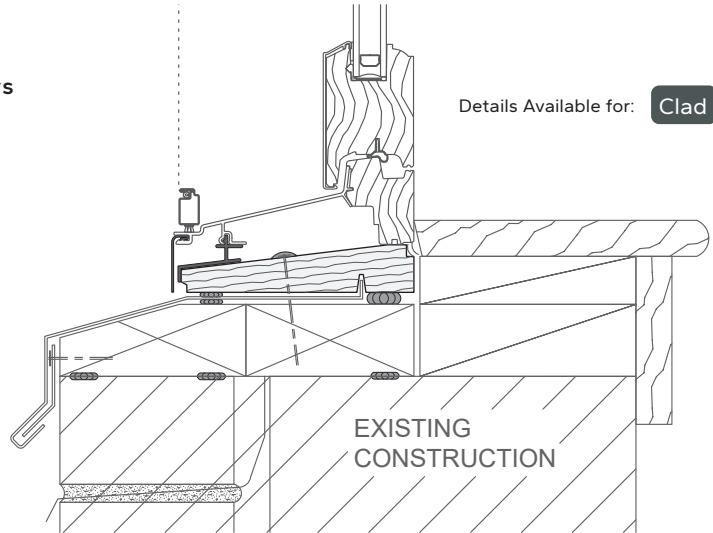
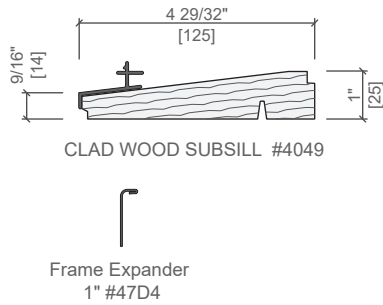
Installation Clip – Pella® Impervia® Fiberglass

Details Available for: **Fiberglass**



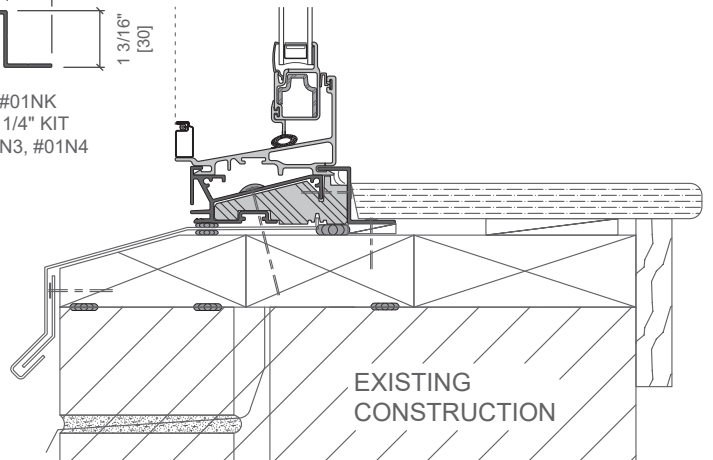
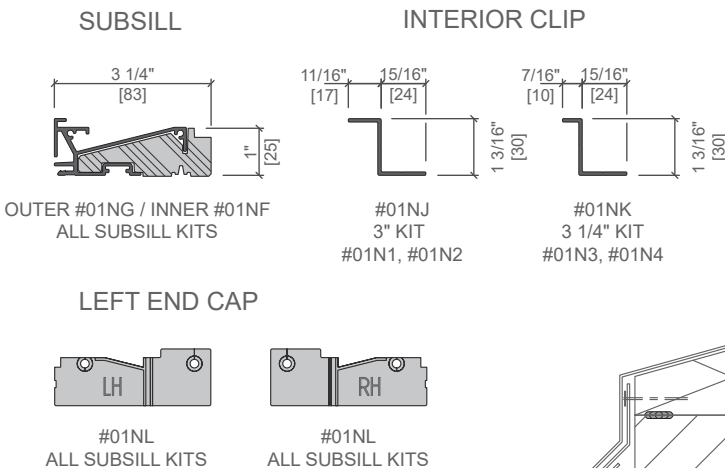
Optional Subsill – Aluminum-Clad Exterior Windows

Details Available for: **Clad**



Optional Subsill – Pella® Impervia® Fiberglass Windows

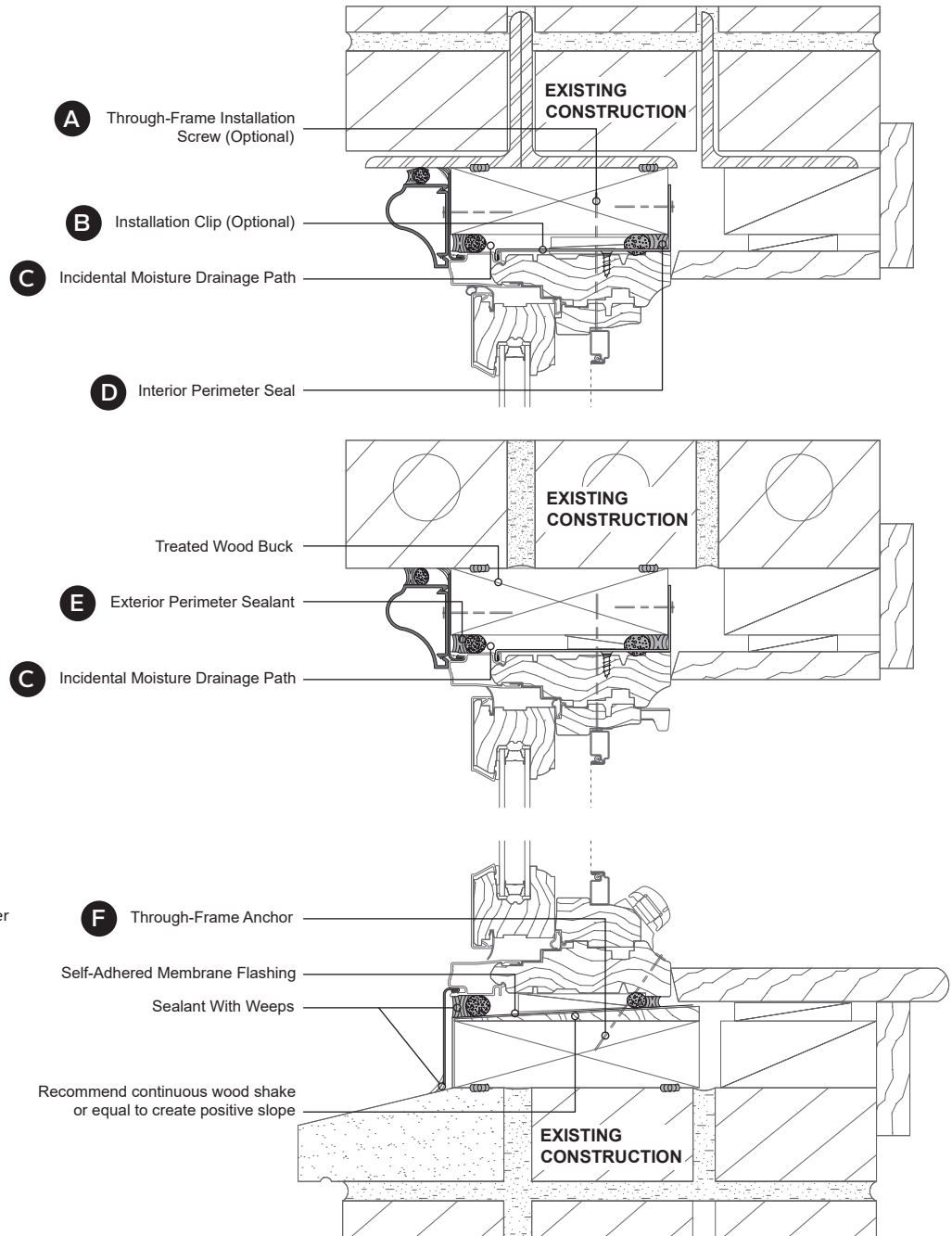
Details Available for: **Fiberglass**



Clip or Anchor Through Frame Installation – Complete Frame Replacement

Details Available for: Clad Fiberglass Vinyl

The installation clip or screw secures the window or door to the opening. Window and door products are installed from the exterior or interior after the existing frame has been removed. Exterior perimeter sealants and trims deflect bulk water away from the installation. An interior perimeter seal prevents air infiltration.



Clip or frame screw locations (refer to the installation instructions)

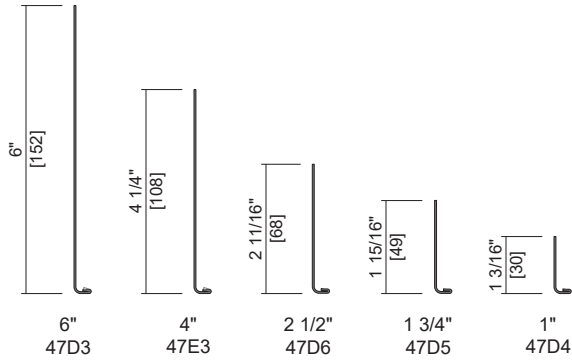
- A** A method for anchoring a replacement window is clip in combination with anchor through frame. The benefit of an installation clip method is the elimination of fastener holes in the interior finish.
- B** A treated wood buck can prevent the absorption of moisture by a window from a solid brick wythe or mass wall, which manages water through absorption and evaporation.
- C** A drainage path must be maintained in the perimeter shim space to prevent the trapping of incidental moisture.
- D** Interior sealants prevent the intrusion of water generated by a differential in air pressure between the interior and exterior.
- E** Exterior sealants reduce elevated pressures caused by the compounding nature of bulk water cascading down the exterior of the building.
- F** An anchor through frame method is recommended to eliminate penetrations in the interior line of sealant at the sill, where the greatest potential for water penetration exists.

Punched Openings

Clip or Anchor Through Frame Install - Exterior Trim

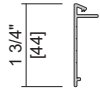
Frame Expander Exterior Trim – Aluminum-Clad and Pella® Impervia® Fiberglass Windows and Doors

Details Available for: Clad Fiberglass



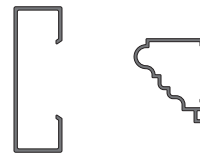
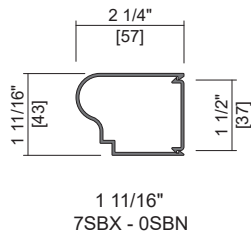
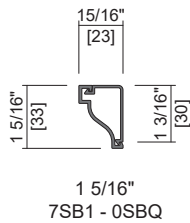
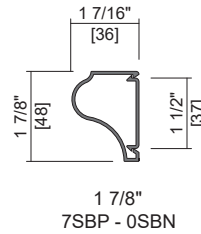
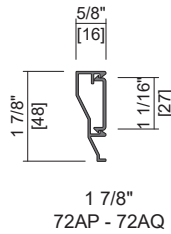
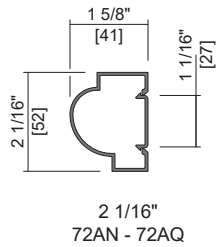
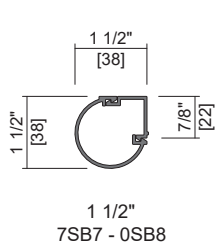
Frame Expander Exterior Trim – Pella® 250 Series and Vinyl Products

Details Available for: Vinyl



Brickmould with Clip Exterior Trim

Details Available for: Clad Fiberglass Vinyl

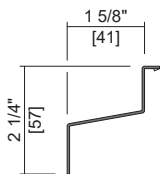
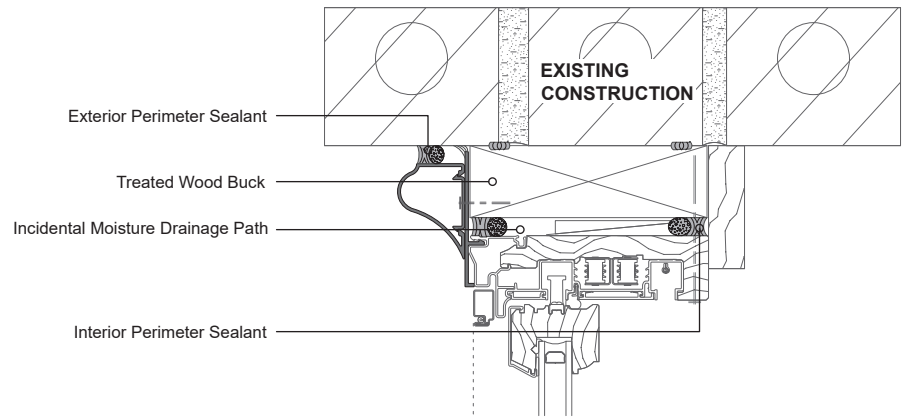
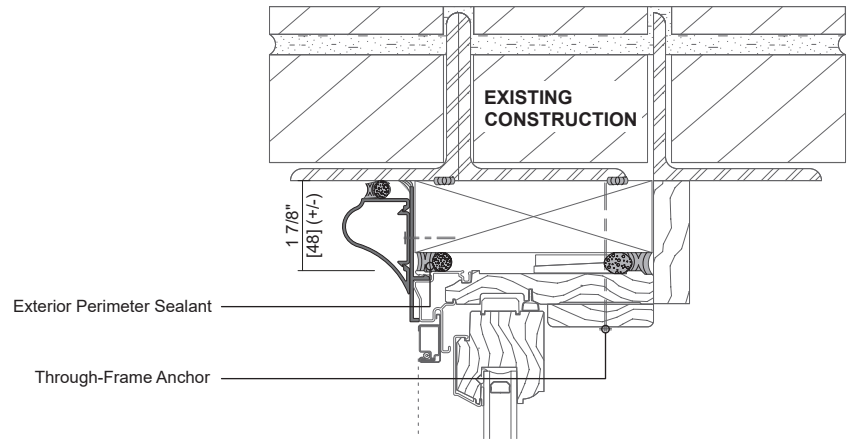


Custom profiles available.
Contact your Pella representative
for assistance.

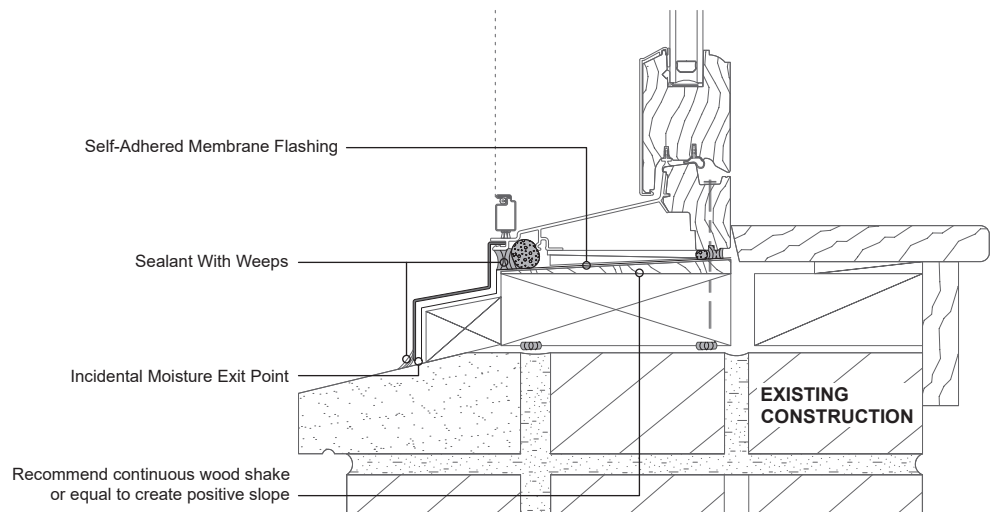
Field-Applied Historic Brickmould (Custom Quoted)

Details Available for: **Clad**

All other clad-wood products including Pella® Reserve™ Monumental Hung



Sill Cover # 49A1 M119
119 brake metal configured as needed to actual project conditions.

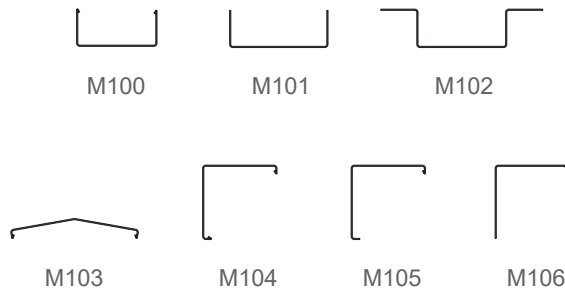


*This configuration of extruded brickmould and brake metal sill cover has previously been approved for use with historic projects. It is available through custom quoting. Please verify approval with local historic review board prior to ordering. Custom variations are available upon request.

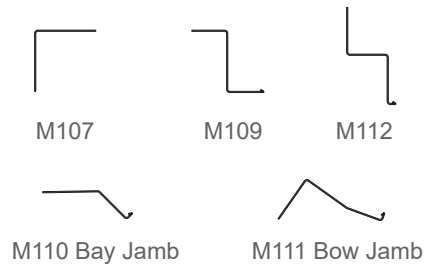
Refer to the product information pages for nail fin types, wall depth and frame project options for each product.
Refer to Pella.com for current installation instructions.

Compatible with: **Clad** **Fiberglass**

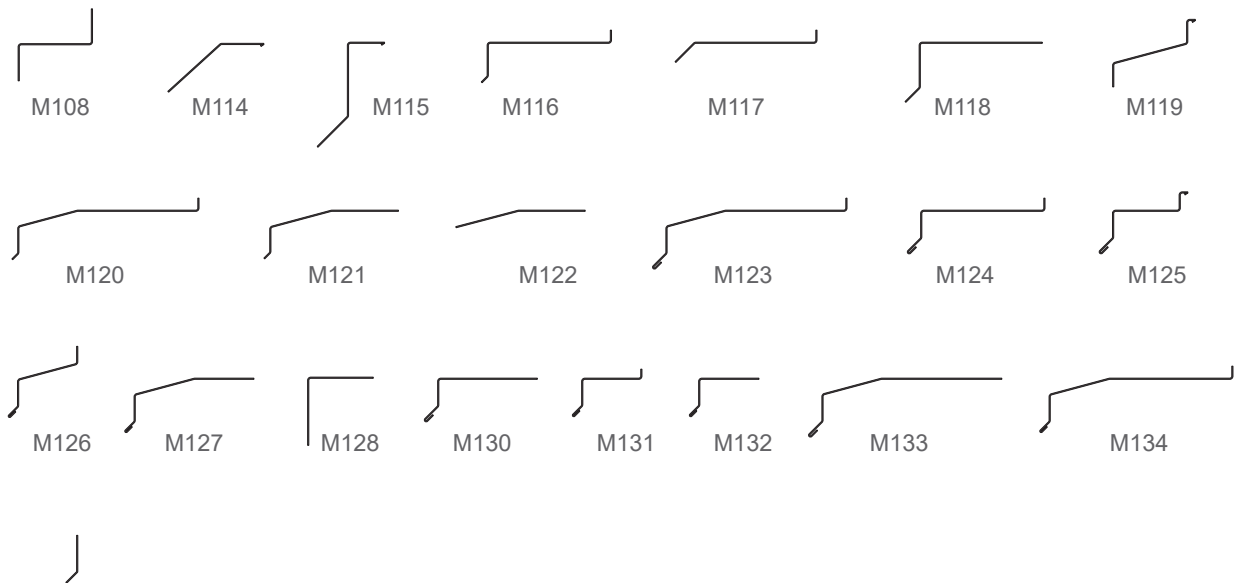
Brake Metal Mullion Trim



Brake Metal Head and Jamb Trim



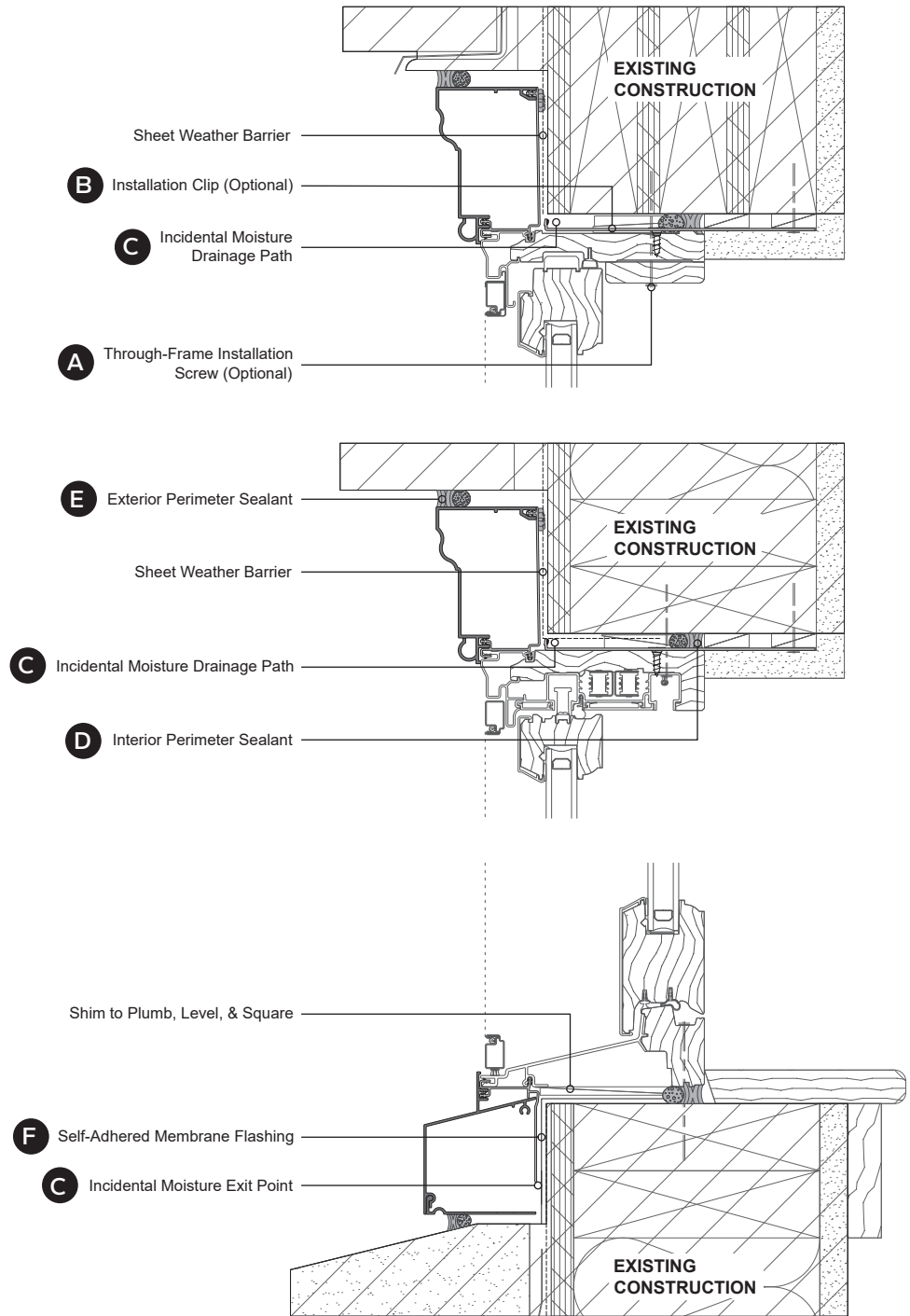
Brake Metal Sill Trim and Flashing



Factory-Applied EnduraClad® Exterior Trim for Complete Frame Replacement

Details Available for: **Clad**

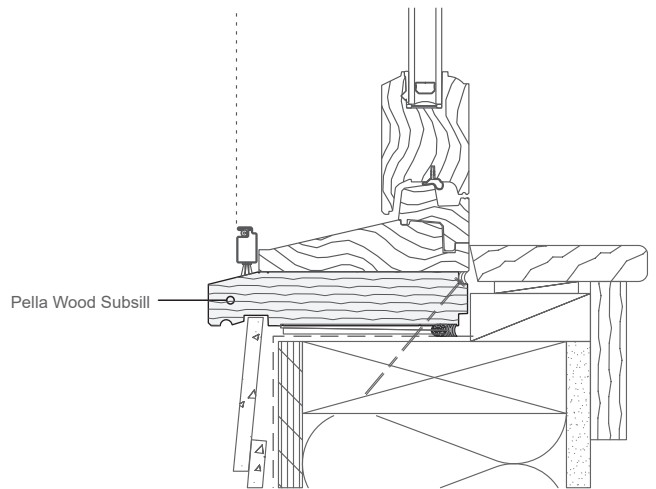
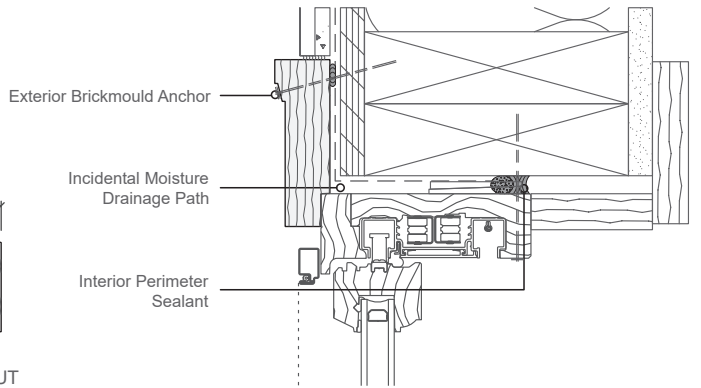
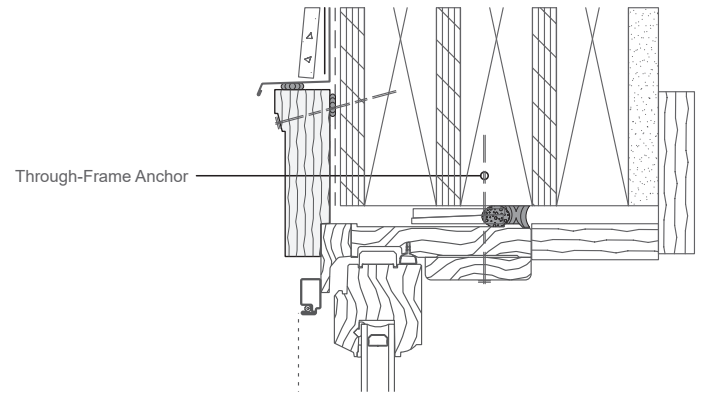
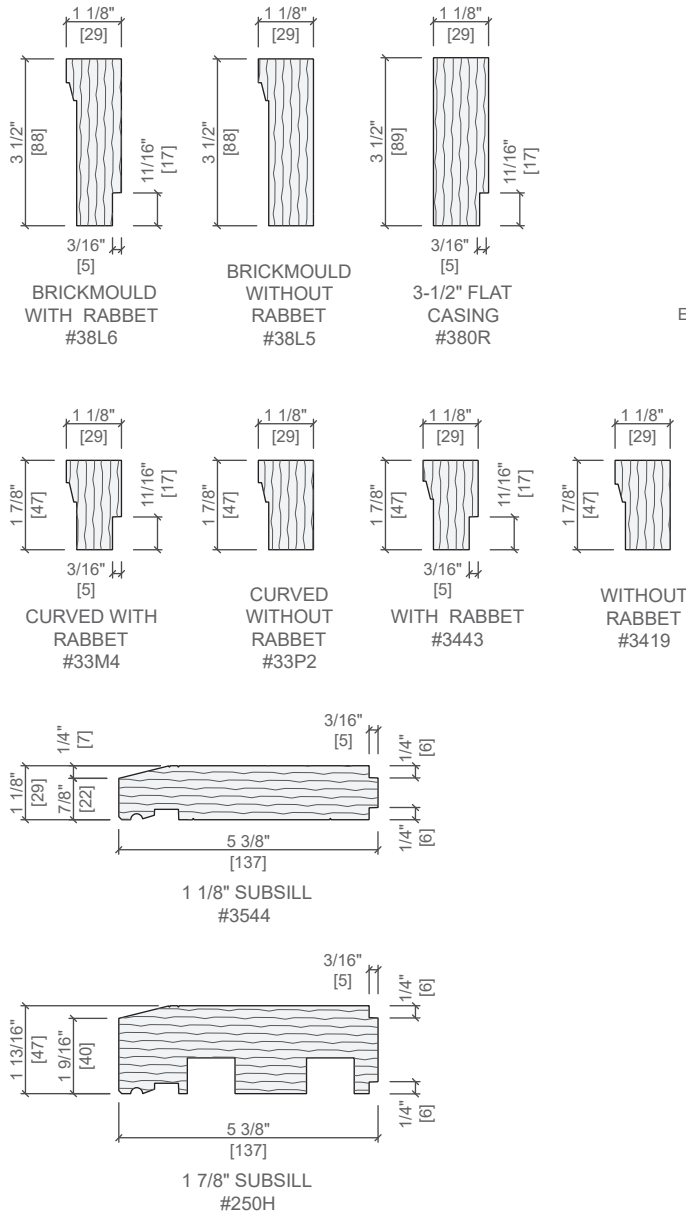
The installation clip or screw secures the window or door to the opening. Window and door products are installed from the exterior after an existing brickmould and frame has been removed. Exterior perimeter sealants and trims deflect bulk water away from the installation. An interior perimeter seal prevents air infiltration. Refer to the EnduraClad® Exterior Trim Options page for trim and head drip flashing options.



- A** Optional installation screws permit the window to be secured from the interior after wall cladding is in place without penetrating the interior seal.
- B** Optional installation clips permit the window to be secured from the interior after the wall cladding.
- C** A drainage path must be maintained in the perimeter shim space to prevent the trapping of incidental moisture.
- D** Interior sealants prevent air flow and the resulting incidental moisture intrusion.
- E** Exterior sealants stop bulk water from entering the wall and window/wall interface.
- F** A masonry compatible membrane will prevent moisture in the wall from entering the shim space.

Wood Brickmould Exterior Trim and Installation

Details Available for: **Wood Exterior**

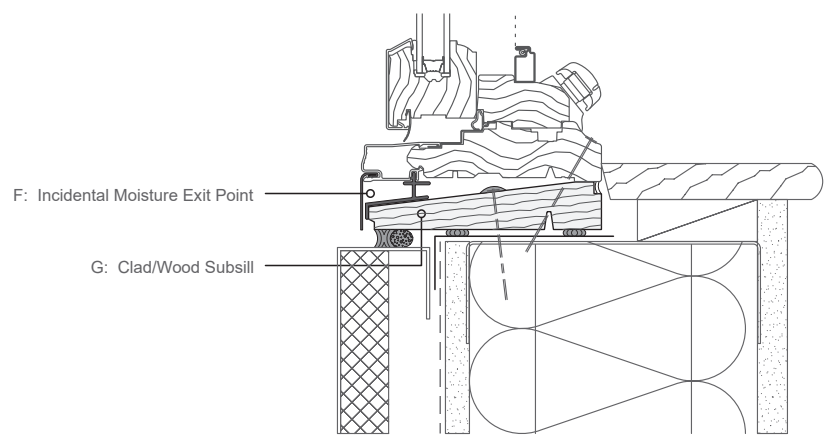
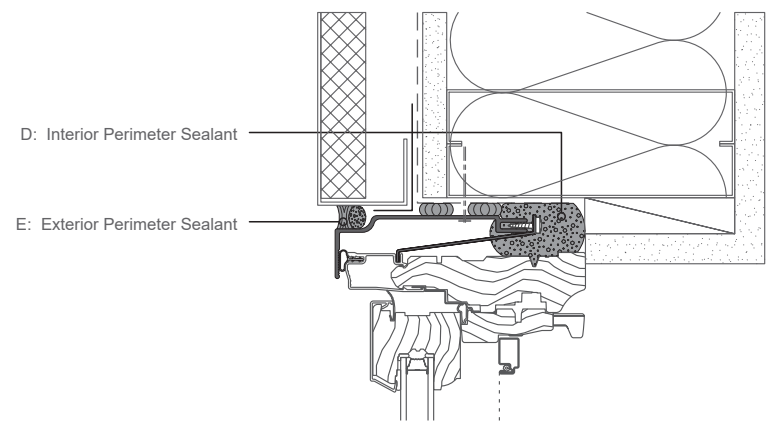
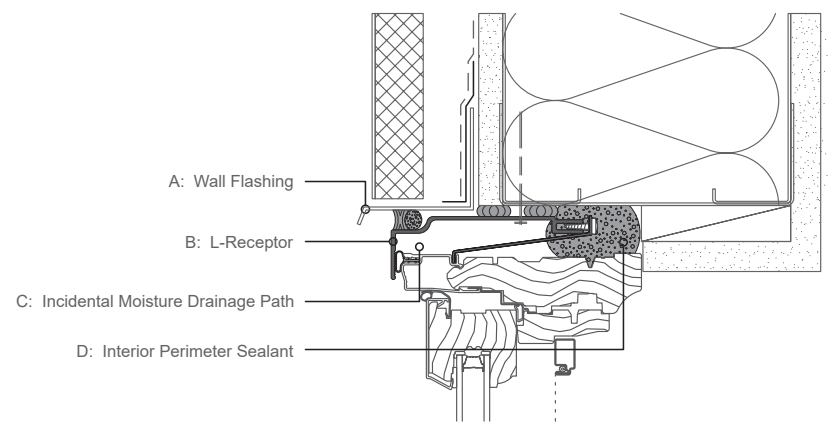
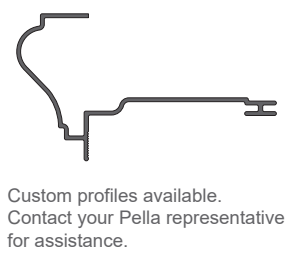
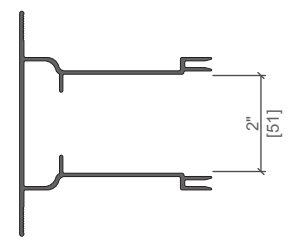
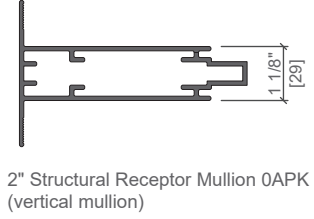
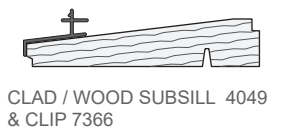
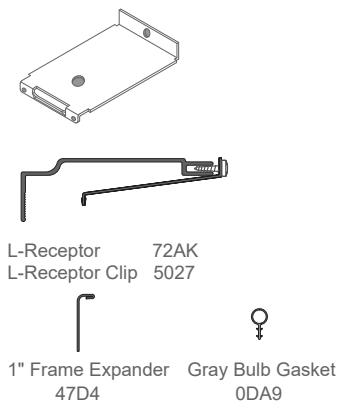


L-Receptor Installation for Aluminum-Clad Products

Details Available for: **Clad**

An L-shaped receptor is secured to the head and jambs of the opening and a subsill flashing system at the sill. A compressible gasket is installed in the accessory groove. Clips attached to the frame at the head and jambs are screwed to the receptors, compressing the gasket.

Windows and doors can be installed from the interior before or after wall cladding materials.



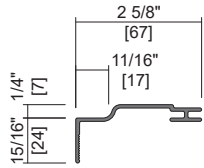
Refer to Pella.com for current installation instructions.

Receptor Installation for Pella® Impervia® Fiberglass Products

Details Available for: **Fiberglass**

An L or T-shaped receptor is secured to the head and jambs of the opening and a subsill flashing system at the sill. A compressible gasket is installed in the accessory groove. Clips attached to the frame at the head and jambs are screwed to the receptors, compressing the gasket.

Windows and doors can be installed from the interior before or after wall cladding materials.



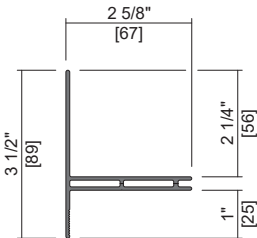
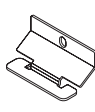
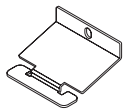
L-RECEPTOR
71YZ

Gray Bulb
Gasket 0DA9

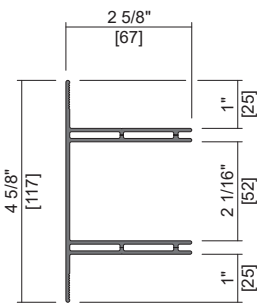


T and L-RECEPTOR CLIP
50EA

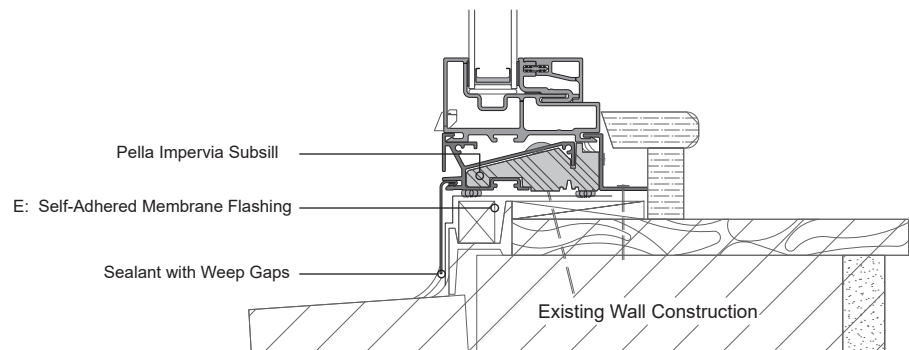
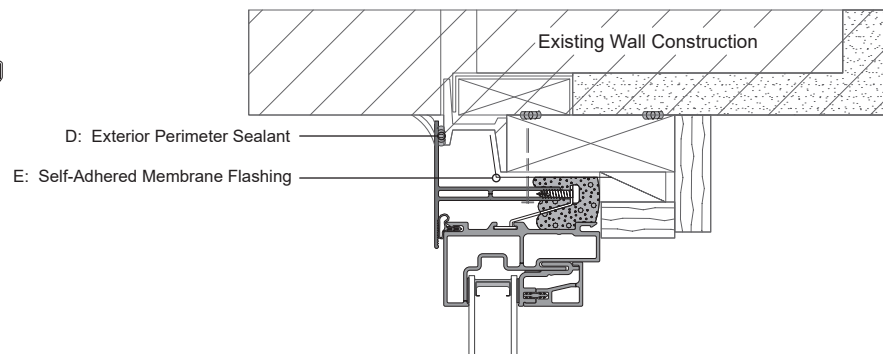
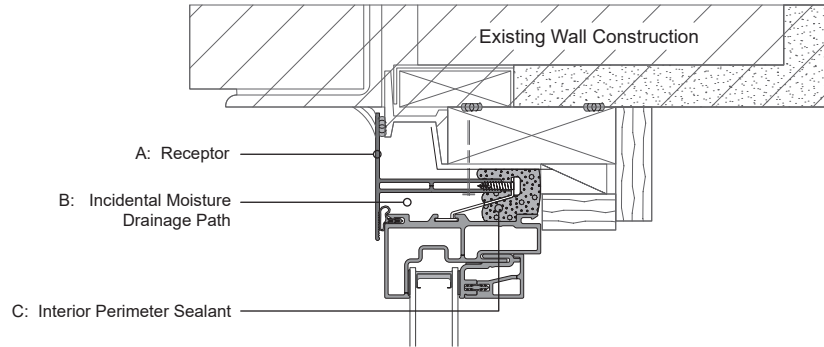
SUB FRAME CLIP
50EB



T-RECEPTOR
0APJ



RECEPTOR for
2" STRUCTURE
0APM

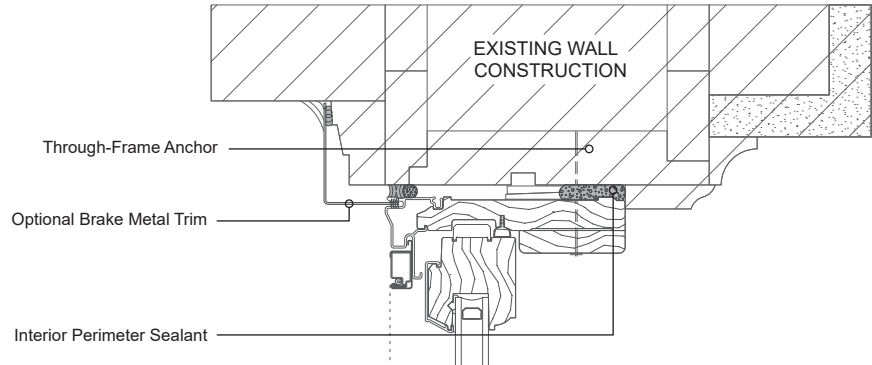


Pocket Replacement from the Exterior

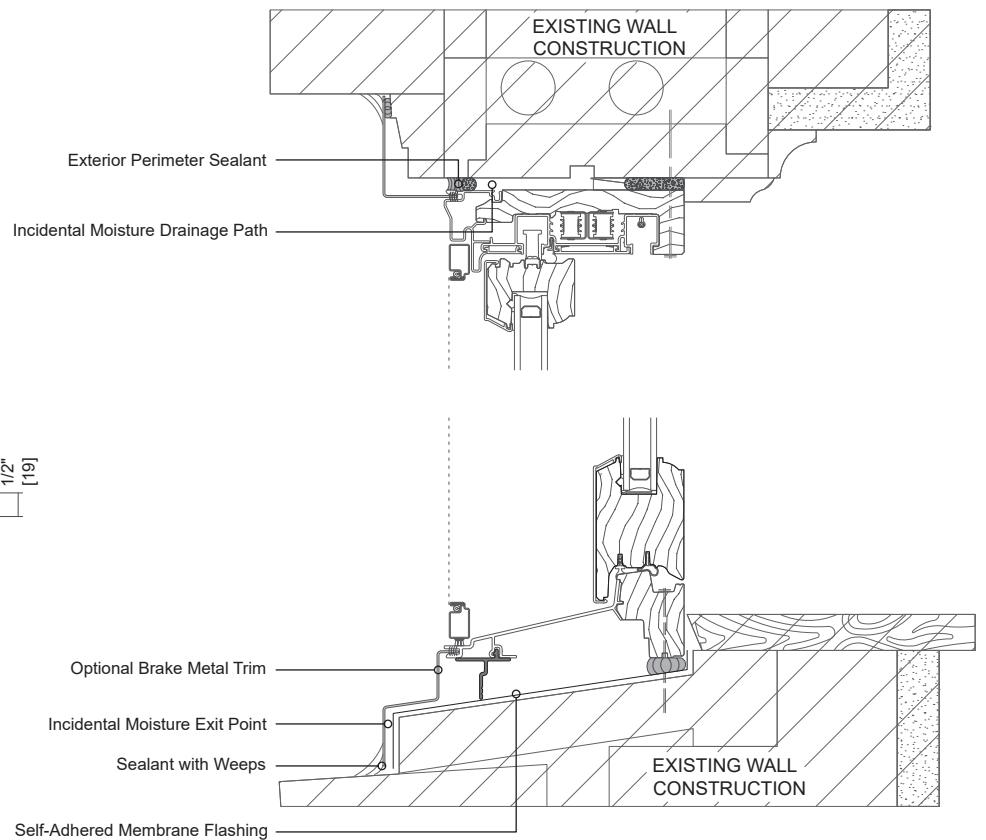
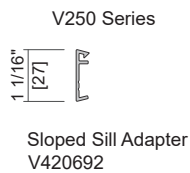
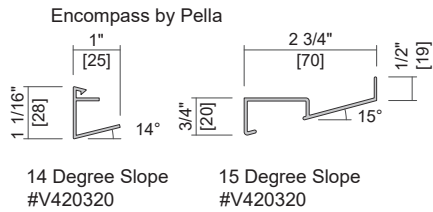
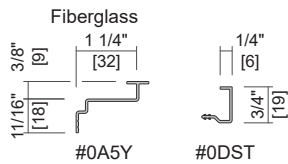
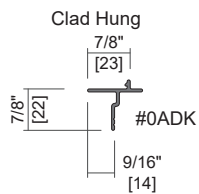
Details Available for: Clad Fiberglass Vinyl

An existing wood hung window frame is left in place while the sashes, exterior stop and parting stop are removed. The new window is placed from the exterior against the interior stop. No interior trim is disturbed.

In some cases, brake metal or frame expander exterior trim can be used to create a low-maintenance exterior finish over the existing window frame.



REPLACEMENT SILL ADAPTOR



Refer to Pella.com for current installation instructions.

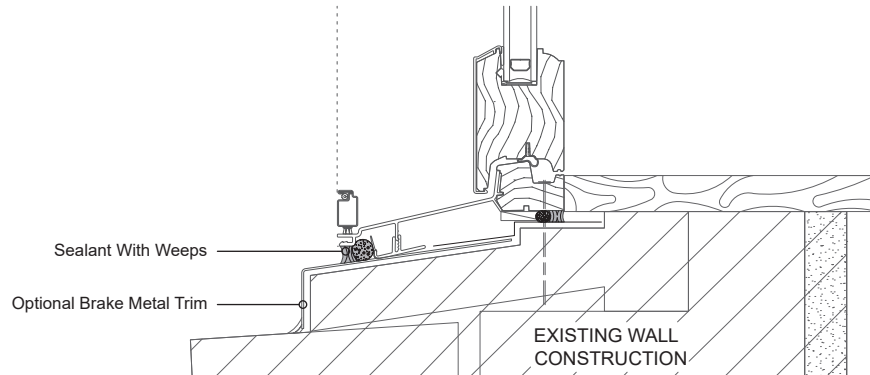
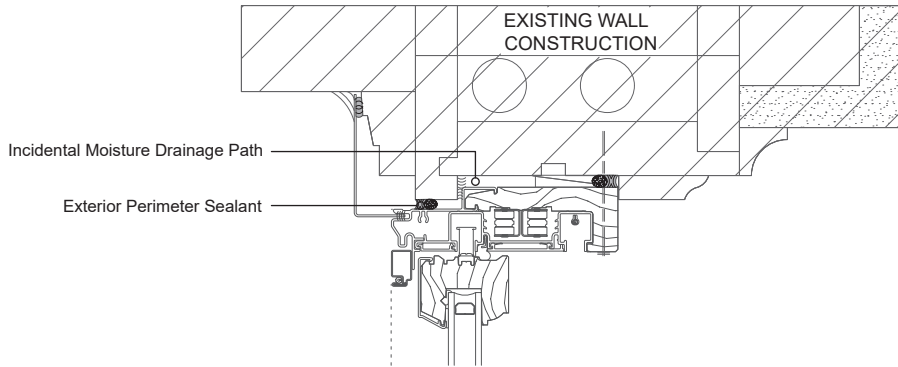
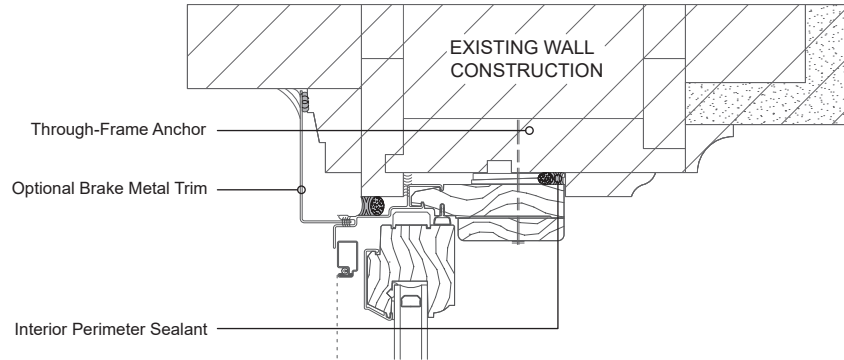
Pocket Replacement from the Interior

Details Available for: **Clad** **Fiberglass** **Vinyl**

An existing wood hung window frame is left in place while the sashes, interior stop and parting stop are removed. The new window is placed from the interior against the exterior stop. No exterior materials are disturbed. The interior stop can sometimes be reused.

Frame depths of approximately 3-1/4", Precision Fit® windows and "replacement windows" are designed for this installation method.

In some cases, brake metal or frame expander exterior trim can be used to create a low-maintenance exterior finish over the existing window frame.



Subframe Installation

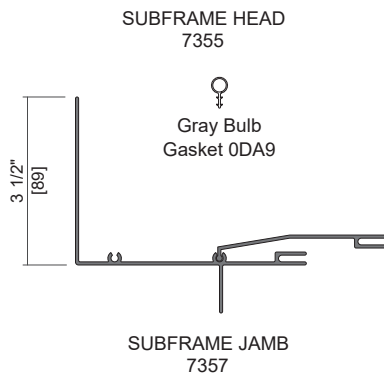
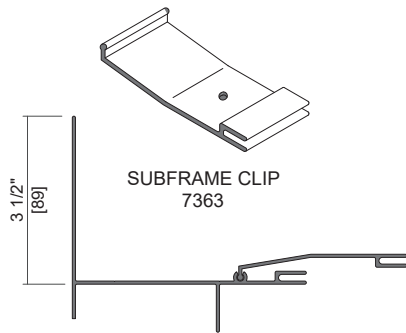
Details Available for: **Clad** **Fiberglass**

An existing wood window frame is left in place while the sashes are removed and a pre-assembled subframe is secured to the opening. The new window is placed from the interior inside the subframe. No exterior materials are disturbed.

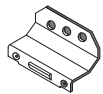
In many cases, all installation steps can be completed from the interior.

The following details are intended to show important installation concepts, but may not include all pertinent details. Please review installation instructions or contact your Pella sales representative or Pella Architectural Solutions for recommendations or drawings specific to your project.

*NOTE: Subframe leg may be field-cut as required.



Clad Wood Clip

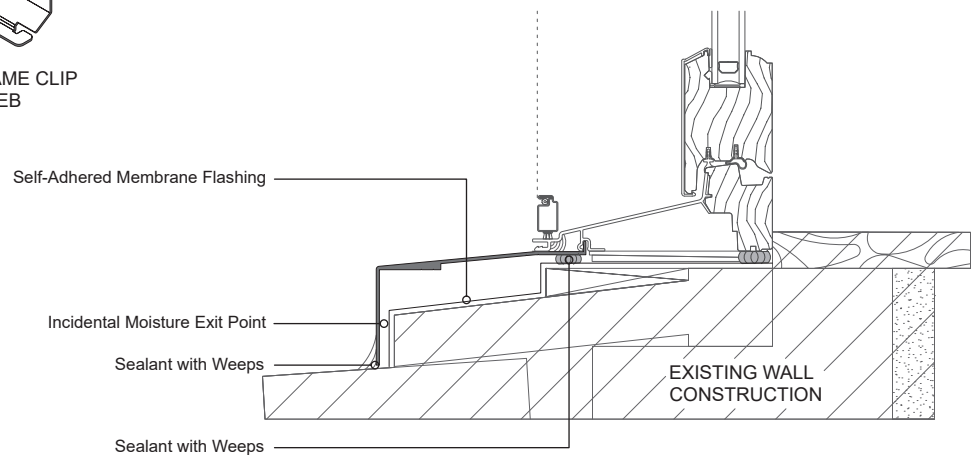
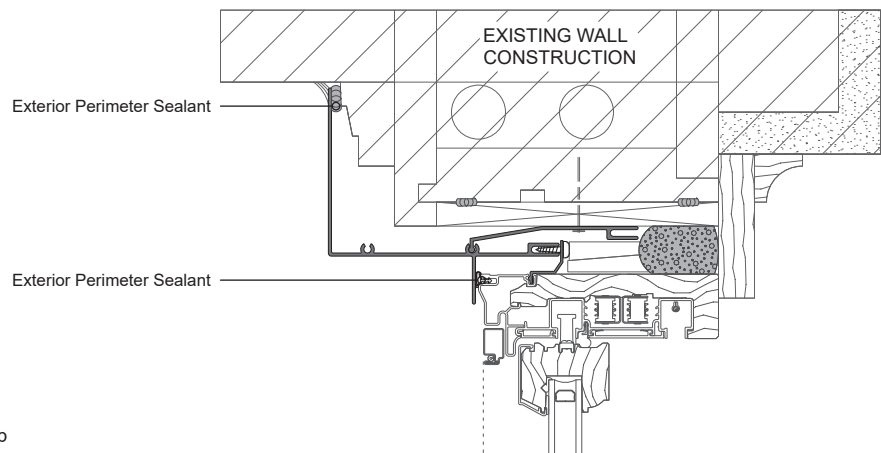
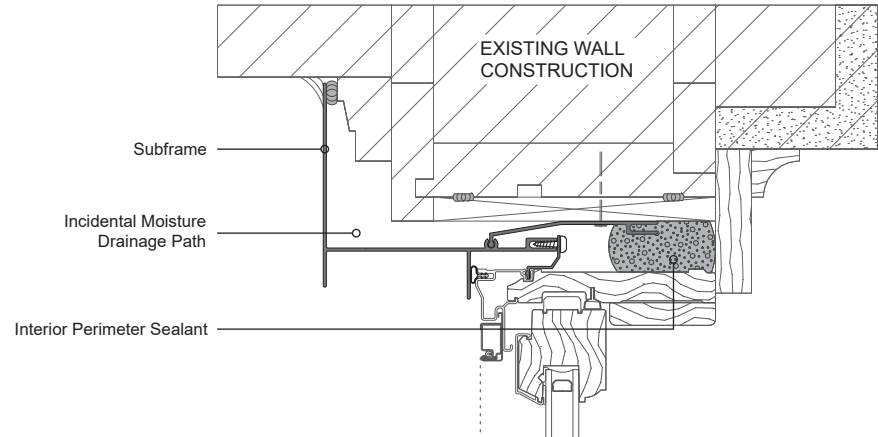
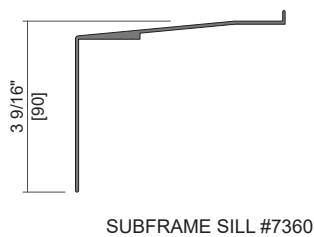


Impervia Clip



PACKAGE #0B050000:
WINDOW CLIP #5087 AND
#8x5/8" PAN HEAD
PHILLIPS SCREW

SUB FRAME CLIP 50EB



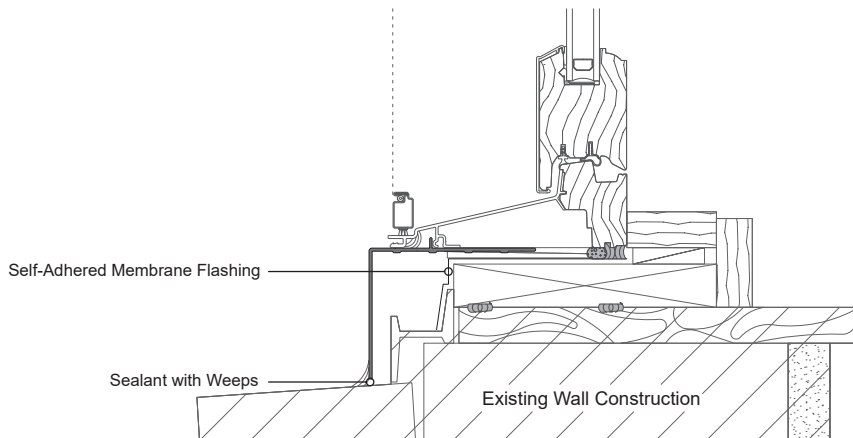
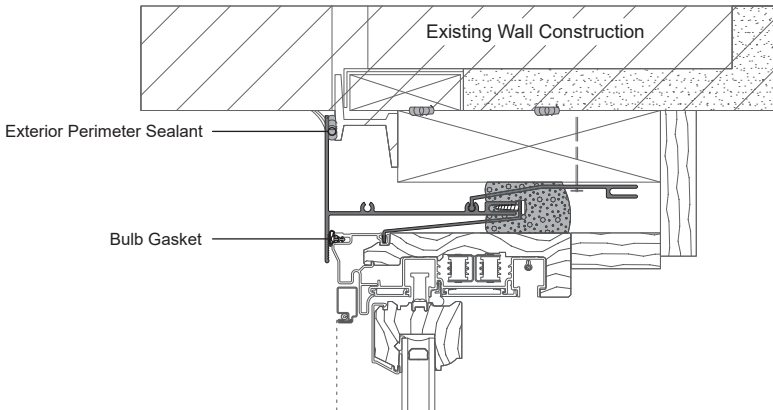
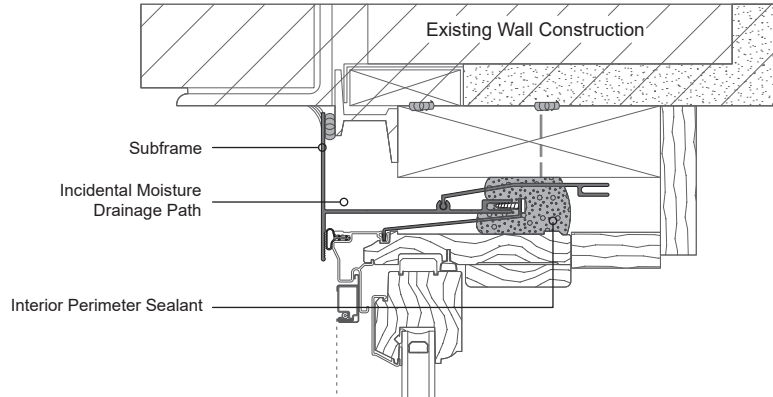
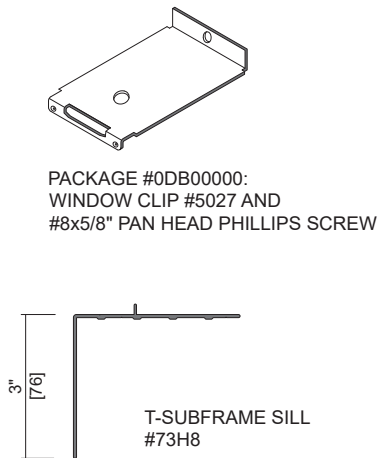
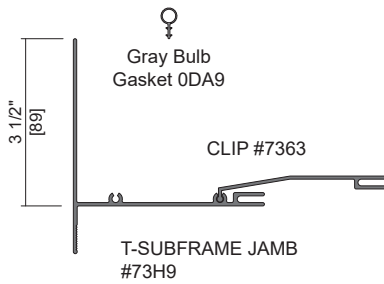
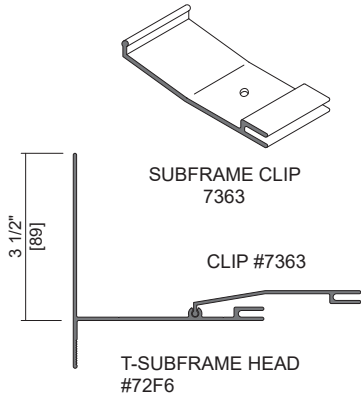
Refer to Pella.com for current installation instructions.

T-Subframe Installation

Details Available for: **Clad**

An existing aluminum or steel window frame is left in place while the sashes are removed and a pre-assembled subframe is secured to the opening. The new window is placed from the interior inside the subframe. No exterior materials are disturbed.

In many cases, all installation steps can be completed from the interior.



*NOTE: Subframe leg may be field-cut as required.

Pella SmartFlash Tape

Compatible with: Clad Fiberglass Vinyl

Pella's exclusive SmartFlash installation tape is overlapped to create a natural drainage path when applied according to Pella's installation instructions. This extra-tough tape stands up to a lifetime of UV exposure and can be applied in temperatures as low as 0° F. Plus, it easily tears to length.

	Pella® Foil Backed (Butyl-Based)	Polyethylene-Backed (Butyl-Based)	Mylar-Backed (Tar-Based)	Polyethylene-Backed (Tar-Based)
Overall Performance	Best	Acceptable	Marginal	Poor
Sunlight Exposure (UV/Xenon)	Excellent No impact on tape.	Fair Shows weathering 120 days maximum exposure.	Excellent No impact on tape.	Poor Material degraded quickly 30 to 120 days maximum exposure.
Hot/Cold Performance (-40° F to 160° F)	Excellent No impact on tape.	Fair Some curling in corners.	Fair Some curling in corners.	Poor Curls quickly in corners.
Cold Adhesion	Excellent Adheres down to 0° F.	Fair Adheres down to 30° F.	Poor No adhesion at temperatures less than 40° F.	Poor No adhesion at temperatures less than 40° F.
Ease of Application	Excellent Foil conforms to shape. Thinness and 3" width improve ease of installation. Can tear by hand.	Fair Hard to conform to shape. Cannot tear by hand. If stretched to apply it comes back to initial dimensions.	Poor If cold, it will not stick. If hot, it sticks too aggressively and is hard to adjust. It is messy and stains.	Poor If cold, it will not stick. If hot, it sticks too aggressively and is hard to adjust. It is messy and stains.
Material Thickness	Excellent (11mm) Thinnest window and door flashing tape. Allows less build-up at corners for improved water performance and makes it easier to apply J-moulds and trim.	Fair to poor (20 – 30mm). At least twice as thick as Pella® tape.	Fair to Poor (25 - 30mm) Significant build-up in corners.	Poor (25 - 50mm) Significant build-up in corners.
Material Flow in Heat	Excellent No impact on tape.	Excellent No impact on tape.	Poor Tar flows significantly at 160° F.	Poor Tar flows significantly at 160° F.
Sealant Compatibility with Adhesive	Excellent No impact on tape.	Excellent No impact on tape.	Poor Incompatible with polyurethane.	Poor Incompatible with polyurethane.
Sealant Compatibility With Backing	Excellent Polyurethane, silicones and other sealants adhere to backing material.	Poor Polyurethane, silicones and other sealants do not adhere to backing.	Excellent Polyurethane, silicones and other sealants adhere to backing material.	Poor Polyurethane, silicones and other sealants do not adhere to backing.

Cold Adhesion (service temp range) is above -40° F.

Minimum 30° F application temperature is recommended.

Material Specifications

Width: Available in 3" or 6" widths

Backing: Aluminum foil, 2 mils thick

Adhesive: Black butyl rubber adhesive without asphalt, 9 mils thick

Overall Thickness: 11.0 mils

Release Paper: Poly-coated natural kraft paper

Tested to meet the following provisions of AAMA 504-20:

Section 8.4 - Thermal Cycling per ASTM E2264, Method A (Level 2)

Tested to meet the following provisions of AAMA 711-22:

Section 5.1 - Break Strength and Elongation

Section 5.3 - Peel Adhesion

Section 5.4 - Accelerated UV Aging

Section 5.5 - Elevated Temperature Exposure

Section 5.6 - Thermal Cycling

Section 5.7 - Cold Temperature Pliability

Section 5.8 - Adhesion After Water Immersion

Section 5.9 - Peeling Resistance



Pella Window and Door Installation Sealant

Pella® Window and Door Installation Sealant* is a one-component, multi-purpose, fast-cure polymer-modified polyurethane sealant that is environmentally friendly and adheres to all Pella window and door frames and common construction materials, including: aluminum, steel, vinyl, painted metals, wood, glass, flashing and underlayment papers. It contains no solvents or isocyanate and requires no primer. Pella Window and Door Installation Sealant has excellent weatherability, resists yellowing, is non-staining, paintable, and has superior elasticity. It extrudes at 0° F and achieves best results when applied above 32° F. Sealant will gain a skin in 30 minutes and exhibit full cure within 24 hours and can be painted within two hours.

Polymer Sealant Specifications

Exceeds the requirements of ASTM C 920, Type S, Grade NS, Class 50, Use NT, M, G and A;
 Federal Specification TT-S-00230C, Type II, Class A; CAN/CGSB-19 13-M87; AAMA 803.3, Type I Narrow Joint Seam Sealing, AAMA 808.3-92 Exterior Perimeter Sealing.

Skin Time: Less than 20 minutes @ 77° F/50% RH
Tack Free Time: 45 minutes @ 77° F/50% RH
Cure Time: 1/4" Bead per 24 Hrs.,
VOC: Chemically curing sealant, less than 30% VOC
 <28 g/L, less water and exempt solvents (EPA Method 24)
Elongation @ Break: 250-350% (per ASTM D412)
Shore A: 45+/-5 (ASTM C661)
Movement Capability: 50% (per ASTM C719)
Tensile Strength: 220-320 psi (ASTM D412)
Staining: None, (ASTM D2203)
Low Temp. Flexibility: Retained to -90° F, Service temperature -40 to 200° F
High Temp. Flexibility: Up to 425° F for short periods
Sag: None
UV Rating: No discoloration or change after 2,500 hrs (ASTM G154)

Features

- Adheres to common building materials
- Superior elasticity
- Environmentally friendly
- No solvents
- Interior or exterior use
- Non-shrinking for use in bedded joints
- Fast cure at wide range of temperatures
- Resists yellowing
- Available in all Pella standard and feature colors
- Paintable
- Bonds to wet surfaces
- Approved for Kynar/EnduraClad+
- 50% joint movement

Neutral Cure Silicone Formula (Translucent)

Exceeds requirements of ASTM C 920, Type S, Grade NS, Class 35, Use NT, M, G and A
 Federal Specification TT-S-00230C, Type II, Class A
 AAMA 802.3, Type II; AAMA 803.3, Type I; AAMA 808.3, Type I

Skin Time: 10 Minutes 1
Tack Free Time: 20 Minutes 1
Cure Rate: 1/4" Bead per 24 hrs 1
VOC: 28.08 g/L
Elongation @ Break: 550%
Shore A: 20+/-5
Movement Capability: 35%
Tensile Strength: 90-140 psi
Staining: None
Service Temperature: -40 F to 350 F

Features

- Adheres to common building materials
- Environmentally friendly
- No Solvents
- Interior or exterior use
- Non-shrinking for use in bedded joints
- Fast cure
- No Solvents
- UV Resistant
- Non-Paintable

(1) Cure rate is temperature and humidity dependent.

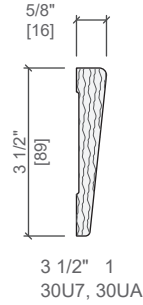
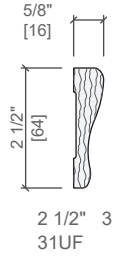
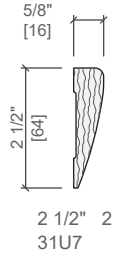
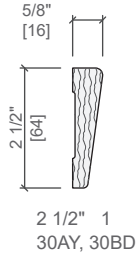
See packaging for all product safety and hazard information, contact your local Pella sales representative for MSDS documentation.



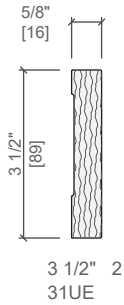
Interior Trim

Compatible with: **Clad** **Fiberglass** **Vinyl**

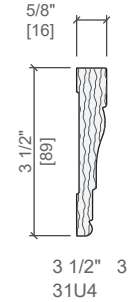
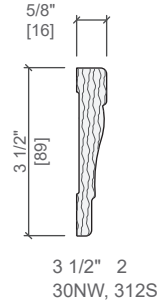
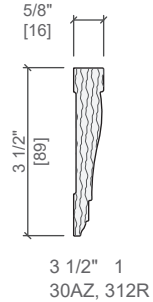
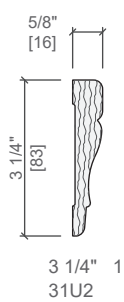
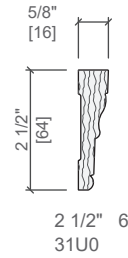
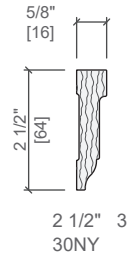
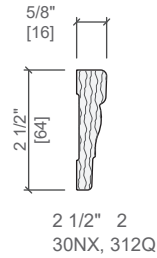
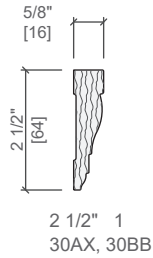
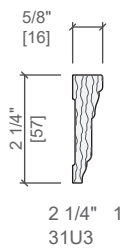
RANCH



CRAFTSMAN

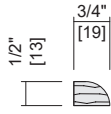


COLONIAL

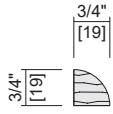


Compatible with: **Clad** **Fiberglass** **Vinyl**

BASE TRIM

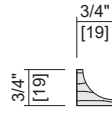


Quarter Round 1
30U5 / 30U8



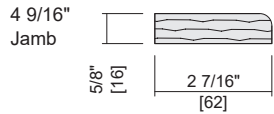
Quarter Round 2
31VQ

COVE MOULD

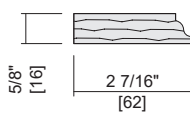


Cove Trim 1
60U6 / 60U9

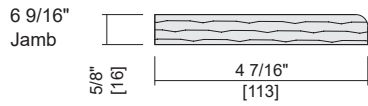
STOOL



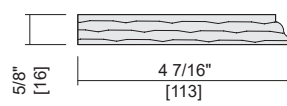
Round 1
3146



Ogee 1
31VR

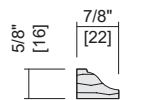


Round 2
3204

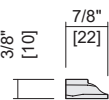


Ogee 2
31VS

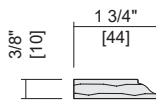
STOP



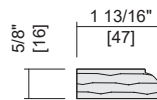
Colonial 1
30VM



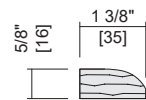
Colonial 2
31VL



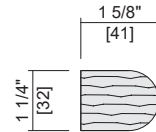
Colonial 3
31VF



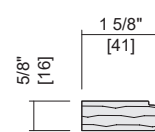
Colonial 4
30VG



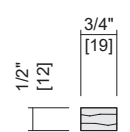
Ranch 1
31VK



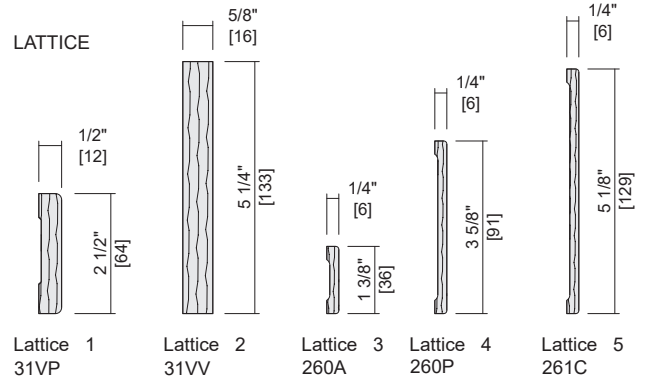
Round 1
30VJ



Round 2
31VH



Square 1
31VN



Lattice 1 31VP
Lattice 2 31VV
Lattice 3 260A
Lattice 4 260P
Lattice 5 261C

Interior Trim Accessories For Vinyl Products



V984999



V982542



V982465

Interior Trim Accessories For Impervia Products



1/4" EXTENSION
#0DTD



WOOD RECEPTOR
#0DTB



CASEMENT/AWNING
WOOD RECEPTOR
#01E0



4-9/16" WOOD
EXTENSION
#0DTA



6-9/16" WOOD
EXTENSION
#0DTA

Wood Exterior and Aluminum-Clad Wood

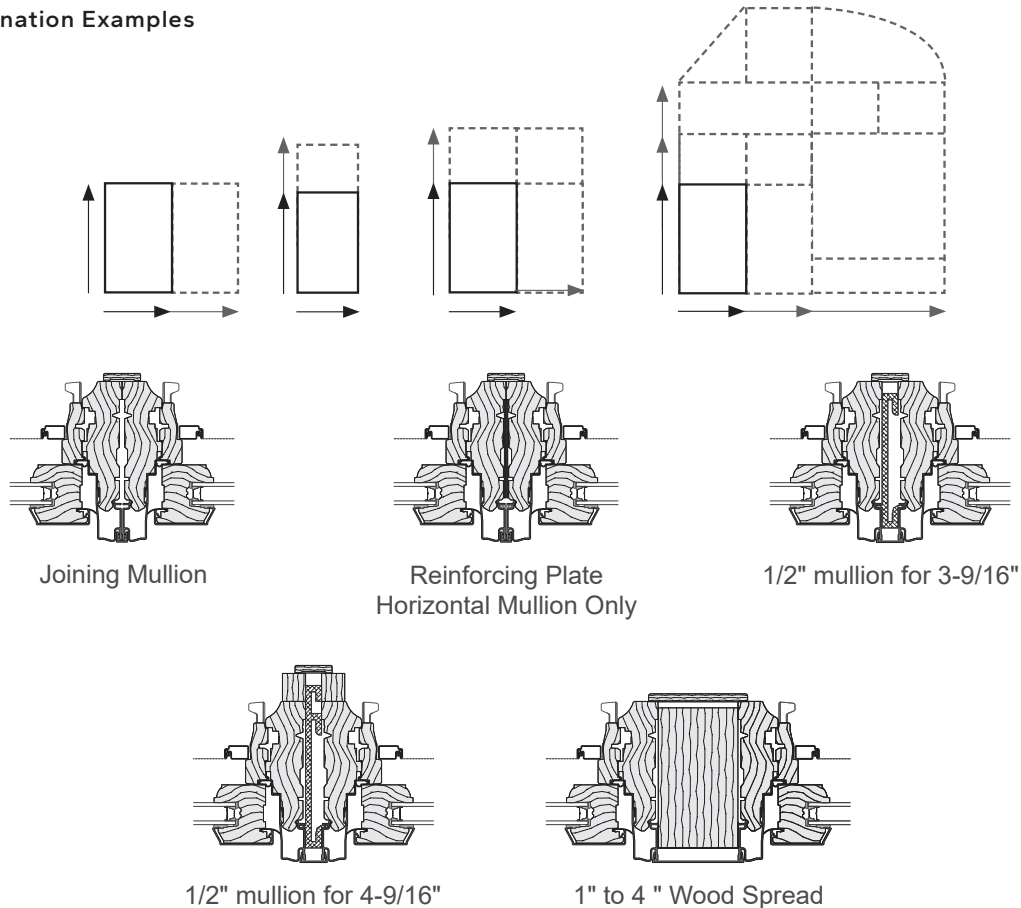
International codes require that window and door products be tested for wind load performance or designed to limit deflection. Pella products are available in composites or combinations that can meet code requirements. Mullion stiffeners, and in some cases, end load anchor brackets, resist wind load and transfer it to the surrounding construction. Building structural elements can also be introduced to separate large combinations into smaller openings and provide wind load resistance.

Pella Architectural Solutions can conduct a design analysis and provide recommendations for combination mullion design and end load transfer requirements.

The following pages summarize Pella's composite and combination options by product type.

Contact your Pella sales representative or Pella Architectural Solutions for recommendations or drawings specific to your project.

Combination Examples



Factory and Site Assembled Combinations - Aluminum-Clad and Wood Exterior

Mullion Type	Max. Design Pressure	Typical Max. Span	Max. Factory Combination Size	Max. Site Assembled Combination Size
Joining Mullion*	Up to 50 psf	Up to 8'	8' x 12'	20'
Reinforcing Plates	Up to 50 psf	Up to 8'	8' x 8' or 8' x 8'	Factory Assembled Only
1/2" Aluminum for 3-9/16" **	Up to 50 psf	Up to 12'	9' x 12' or 12' x 9'	20'
1/2" Aluminum for 4-9/16" **	Up to 50 psf	Up to 12'	9' x 12' or 12' x 9'	20'
1" to 4" Wood Spread Mullion	Up to 50 psf	Up to 12'	9' x 12' or 12' x 9'	Factory Assembled Only

Actual span and combination size availability depends on design pressure requirements. Consider combination size, weight and jobsite handling during design.

The use of factory-applied EnduraClad Exterior Trim reduces the maximum factory assembled combination overall frame size to 138" x 101".

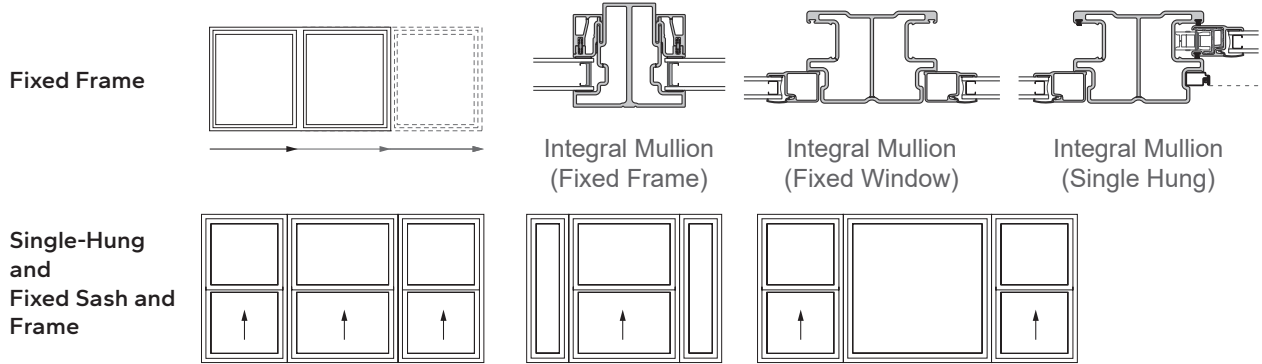
*Not available when at least one window frame is not continuous between structural supports.

** Available with aluminum-clad wood products only.

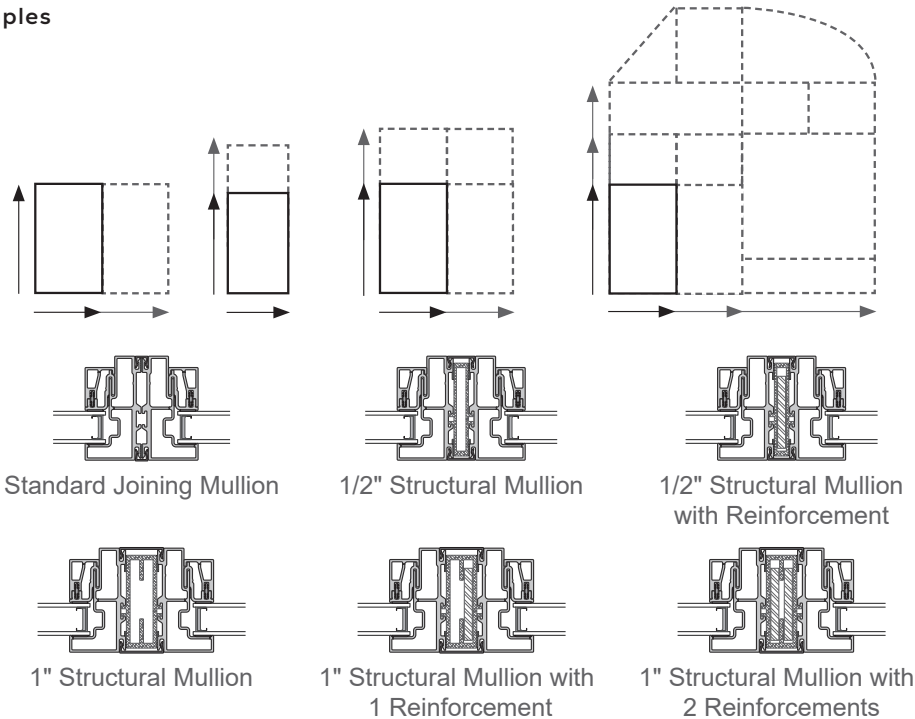
Design pressure shown indicates maximum structural performance of mullion only, air and water performance have been validated by product testing. Combination assemblies are not Hallmark certified.

Pella® Impervia®

Composite Configuration Examples



Combination Examples



Factory and Site Assembled Combinations - Pella® Impervia®

Mullion Type	Max. Design Pressure	Typical Max. Span	Max. Factory Combination Size	Max. Site Assembled Combination Size
Integral Mull (Vertical Only)	Up to 50 psf	7'	12' x 7' Max. Composite	Factory Assembled Only
Standard Joining Mullion	Up to 50 psf	6'	6' x 12' or 12' x 6'	20'
1/2" Structural Mullion	Up to 50 psf	8'	8' x 12' or 12' x 8'	20'
1/2" Structural Mullion with 1 Reinforcement	Up to 50 psf	12'	9' x 12' or 12' x 9'	20'
1" Structural Mullion	Up to 50 psf	12'	9' x 12' or 12' x 9'	20'
1" Structural Mullion with 1 Reinforcement	Up to 50 psf	12'	9' x 12' or 12' x 9'	20'
1" Structural Mullion with 2 Reinforcements	Up to 50 psf	12'	9' x 12' or 12' x 9'	20'

Impervia window factory combinations are limited to 500 lbs and 80 square feet maximum. The use of nailing fins reduces the maximum factory assembled combination overall frame size.

Actual span and combination size availability depends on design pressure requirements. Consider combination size, weight and jobsite handling during design.

For combinations with more than 2 windows, all windows within a row or column must have the same frame depth.

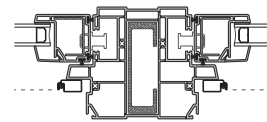
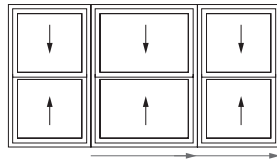
Double-hungs cannot be placed above a 1/2" or 1" structural mullion.

Design pressure shown indicates maximum structural performance of mullion only, air and water performance have been validated by product testing. Not all combination assemblies are Hallmark certified.

Pella® 250 Series Vinyl

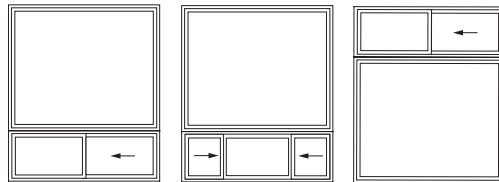
Composite Examples

Single and Double-Hung

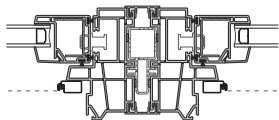
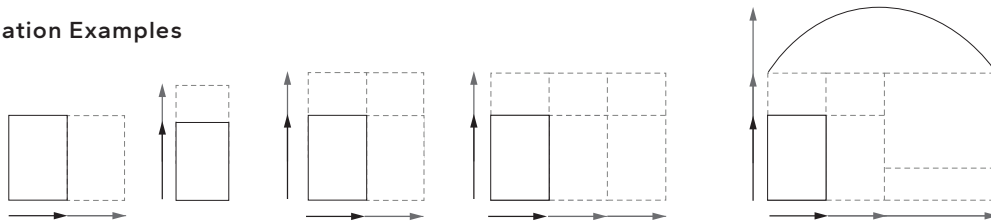


Integral Mullion

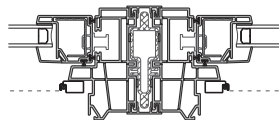
Sliding Window



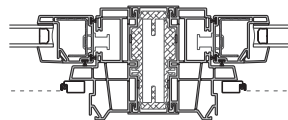
Combination Examples



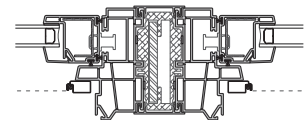
1/2" Joining Mullion



1/2" Structural Mullion



1" Structural Mullion



1" Structural Mullion with Reinforcement(s)

Factory and Site Assembled Combinations - Pella® 250 Series Vinyl

Mullion Type	Max. Design Pressure	Typical Max. Span	Max. Factory Combination Size	Max. Site Assembled Combination Size
Integral Mullion	35 psf	6'- 6"	9' x 6'-6" x or 54 sq ft	Factory Assembled Only
1/2" Joining Mullion	20 psf	53.5"	9' x 53.5" x or 54 sq ft	Factory Assembled Only
1/2" Structural Mullion	50 psf	9'	12' x 8' or 72 sq ft	12' or 72 sq ft
1" Structural Mullion	50 psf	9'	12' x 8' or 72 sq ft	12' or 72 sq ft
1" Structural Mullion with Reinforcement(s)	50 psf	9'	12' x 8' or 72 sq ft	12' or 72 sq ft

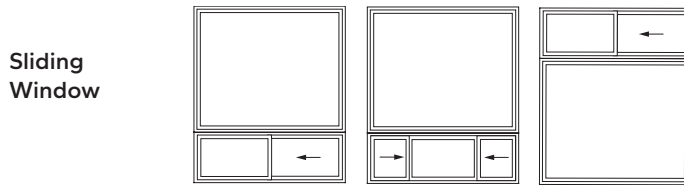
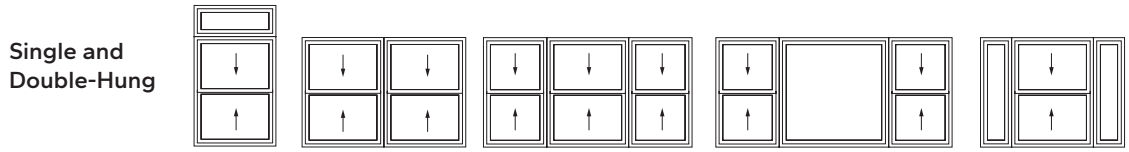
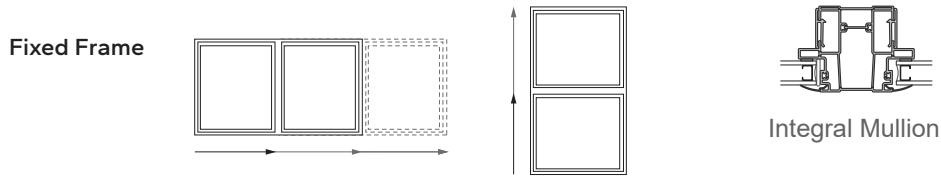
Actual span and combination size availability depends on design pressure requirements. Integral Mullion design pressure may not apply to all products or configurations.

Design pressure shown indicates maximum structural performance of mullion only, air and water performance have been validated by product testing. Combination assemblies are not Hallmark certified.

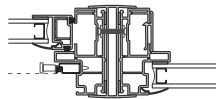
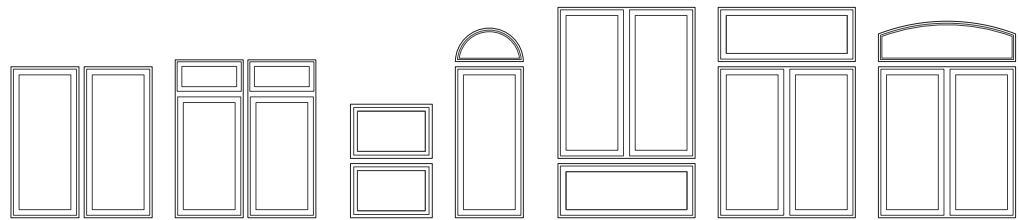
144" x 100" max. Overall frame size for block frame and 5/8" flange frame types.

Encompass by Pella®

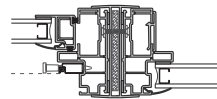
Composite examples



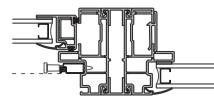
Combination Examples



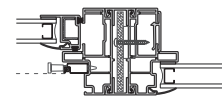
H-Bar Mullion



H-Bar Mullion with Aluminum Flatbar



1/2" Joining Mullion



1/2" Joining Mullion with Aluminum Flatbar

Factory and Site Assembled Combinations - Encompass by Pella® Vinyl

Mullion Type	Max. Design Pressure	Typical Max. Span	Max. Factory Combination Size	Max. Site Assembled Combination Size
Integral Mullion	35 psf	6'-6"	Varies by configuration	Factory Assembled Only
1/2" Joining Mullion*	20 psf	53"	107.5" x 53"	Max. of 3 windows per opening and 50 sq ft.
1/2" Joining Mullion with Aluminum Flatbar*	NA	8'	9' x 8'	Max. of 3 windows per opening and 50 sq ft.
1/2" H-Mullion (H-Bar)	20 psf	6'	9' x 6' or 54 sq ft	Max. of 3 windows per opening and 50 sq ft.

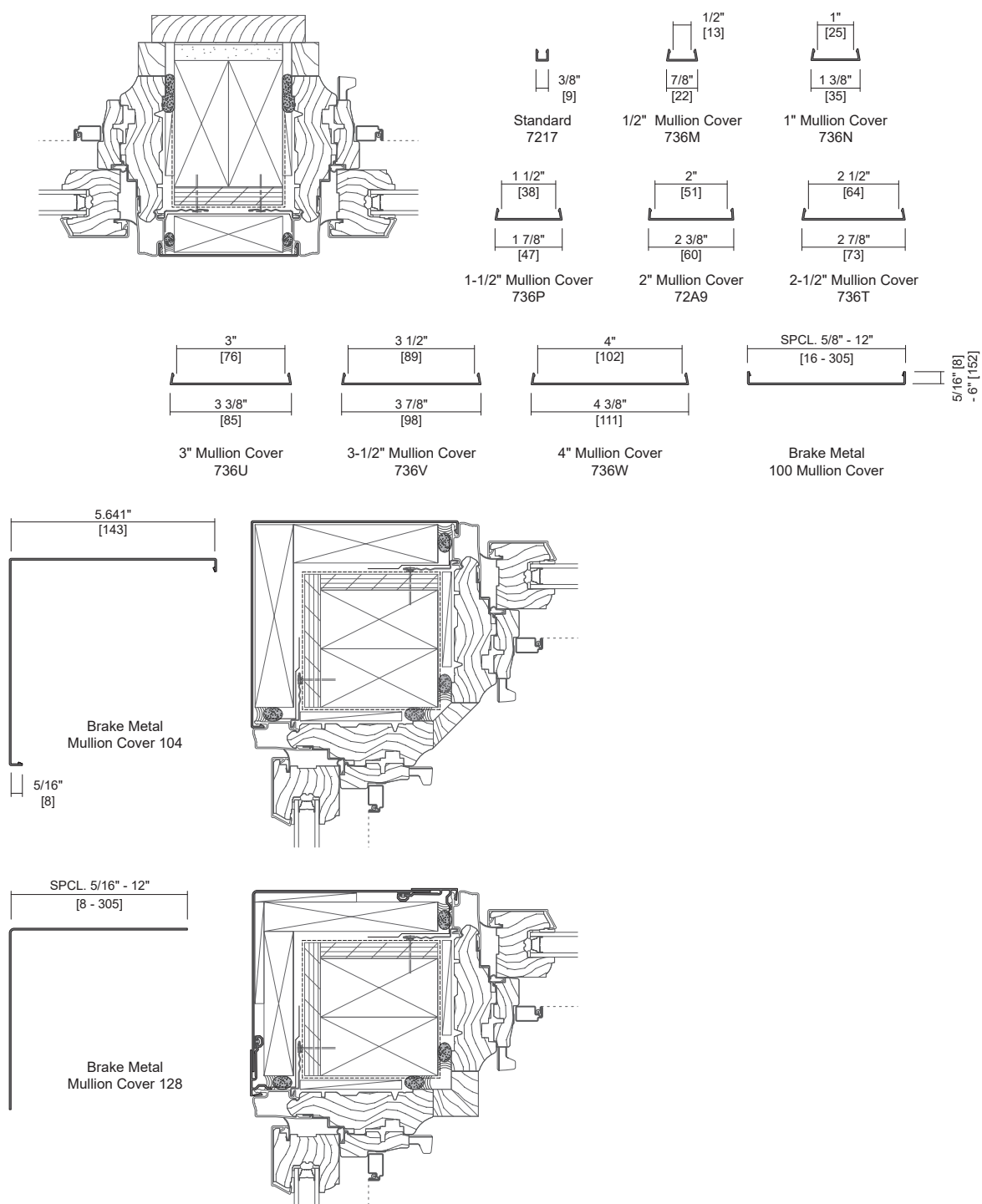
Actual span and combination size availability depends on design pressure requirements. Integral Mullion design pressure may not apply to all products or configurations.

Design pressure shown indicates maximum structural performance of mullion only, air and water performance have been validated by product testing. Combination assemblies are not Hallmark certified.

*Interior and exterior accessory grooves are required.

Large combinations can be created by framing windows into separate openings and using Pella-supplied mullion trim or trim by others. The mullion structure must be designed to resist wind loads and any other building loads (if applicable).

Aluminum-Clad and Pella® Impervia® Fiberglass Mullion Covers



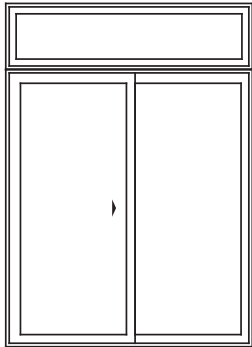
All detail representations in this manual only pertain to the use of Pella products manufactured by Pella Corporation and are strictly limited to the published specifications and to the use of Pella products. Details shown herein illustrate typical general methods of installing Pella products manufactured by Pella Corporation and are to be used as guidelines only. Refer to the appropriate installation instructions and/or installation shop drawings.

Over time, all window and door or systems may have some water infiltration; it is important that the wall system be designed and constructed to properly manage moisture. Pella Corporation is not responsible for claims or damages caused by unanticipated water infiltration; deficiencies in building design, construction and maintenance; failure to install Pella products in accordance with Pella approved methods; or the use of Pella products in systems which do not allow for proper management of moisture within the wall systems. The determination of the suitability of all building components, including the use of Pella products, as well as the design and installation of flashing and sealing systems are the responsibility of the building owner, architect, contractor, installer and/or consumer.

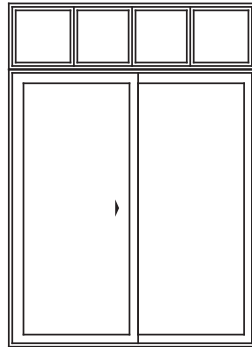


Photograph(s): © Brandon Stengel - www.farmkidstudios.com

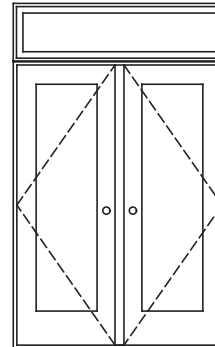
Transoms Over Doors



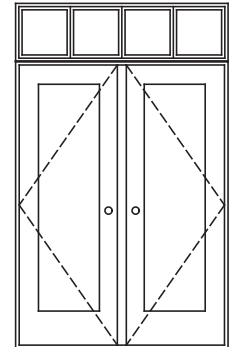
Single Unit
Transom Condition



Multiple Unit
Transom Condition
(Two or more units)



Single Unit
Transom Condition



Multiple Unit
Transom Condition
(Two or more units)

Minimum Horizontal Mullion Recommendations

Product Type		Single-Wide Window Above	Multi-Wide Window Above
Aluminum-Clad Exterior	2 or 3 panel sliding	A, B, C, D	C, D
	4 panel OXXO sliding	C, D	D
	Hinged*	A, B, C, D	B, C, D
Pella® Impervia® Fiberglass	2 panel sliding	D, E**, F**	D
Pella® 250 Series Vinyl	2 panel classic sliding door	D, G	D
	3 or 4 panel classic sliding door	D	D
Encompass by Pella® Vinyl	2 panel sliding	D, G	D

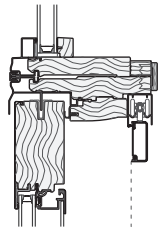
Details for mulling options using the new Aluminum-Clad sliding patio door design were not available at the time of printing, please consult with your Pella representative or Pella Architectural Solutions for current options and availability.

*Any time closer hardware is used, a minimum 1-1/2" solid wood factory or field assembled spread mull is required between the door and transom(s).

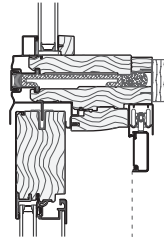
** Transom frame depth of 3-1/4" required.

Mullion options may not be available with all products or may be affected by wind loads and actual combination size. Consult with your Pella representative or Pella Architectural Solutions for current availability and project specific requirements.

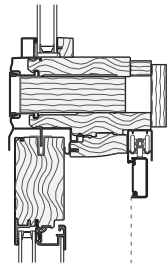
Details for mulling options using the new Aluminum-Clad sliding patio door design were not available at the time of printing, please consult with your Pella representative or Pella Architectural Solutions for current options and availability.



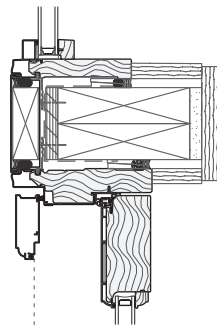
A - Joining Mullion



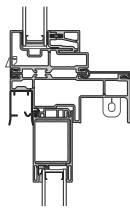
B - 1/2" Aluminum Mullion



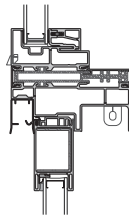
C - 1 1/2" Spread Mullion



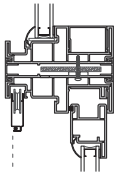
D - Framed Header



E - Joining Mullion

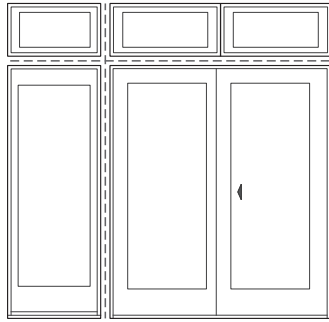


F - 1/2" Structural Mullion

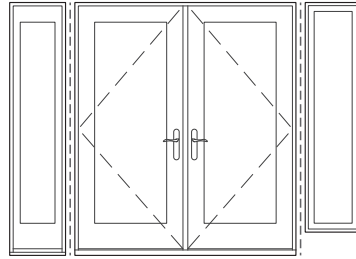


G - 1/2" Flat Bar Mullion

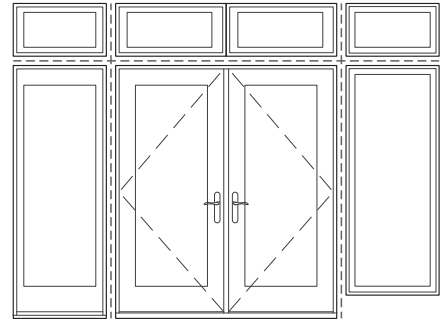
Mullion options may not be available with all products or may be affected by wind loads and actual combination size. Consult with your Pella representative or Pella Architectural Solutions for current availability and project specific requirements.



Sliding Next to Fixed Panel w/ Transoms



Hinged Next to Fixed Door or Window



Hinged Next to Fixed Door or Window w/ Transoms

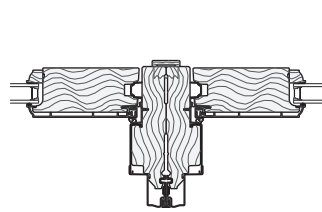
Minimum Mullion Recommendations

Brand	Product Type	Patio/Balcony Condition	High Traffic Entrance	Any Application with Sidelights and Transoms
Aluminum-Clad Exterior	Sliding next to fixed door panel	A, B, C	NA	B, C
	Hinged next to fixed door panel	A, B, C	C	C
	Door next to window	C	C	C
Pella® Impervia® Fiberglass	Sliding next to fixed door panel	C, D	NA	C
	Door next to window	C	NA	C
Pella® 250 Series Vinyl	Classic Sliding Door next to fixed door panel	C*, E**	NA	C
	Classic Sliding Door next to window	C	NA	C
Encompass by Pella® Vinyl	Sliding next to fixed door panel	C*, E**	NA	C
	Door next to window	C	NA	C

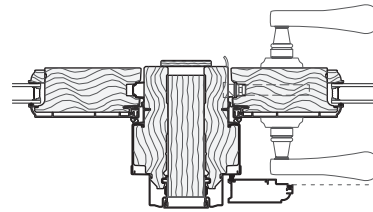
* Use C type mullion on lock side of sliding doors.

**E type mullion available only on fixed panel side.

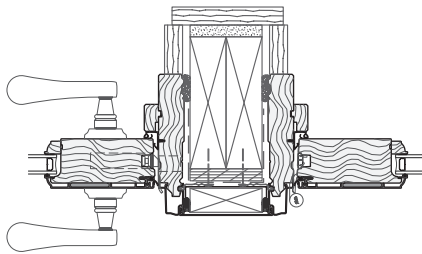
Mullion options may not be available with all products or may be affected by wind loads and actual combination size. Consult with your Pella representative or Pella Architectural Solutions for current availability and project specific requirements.



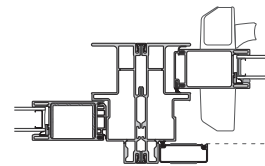
A - Joining Mullion



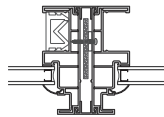
B - 1 1/2" Spread Mullion



C - Framed Mullion

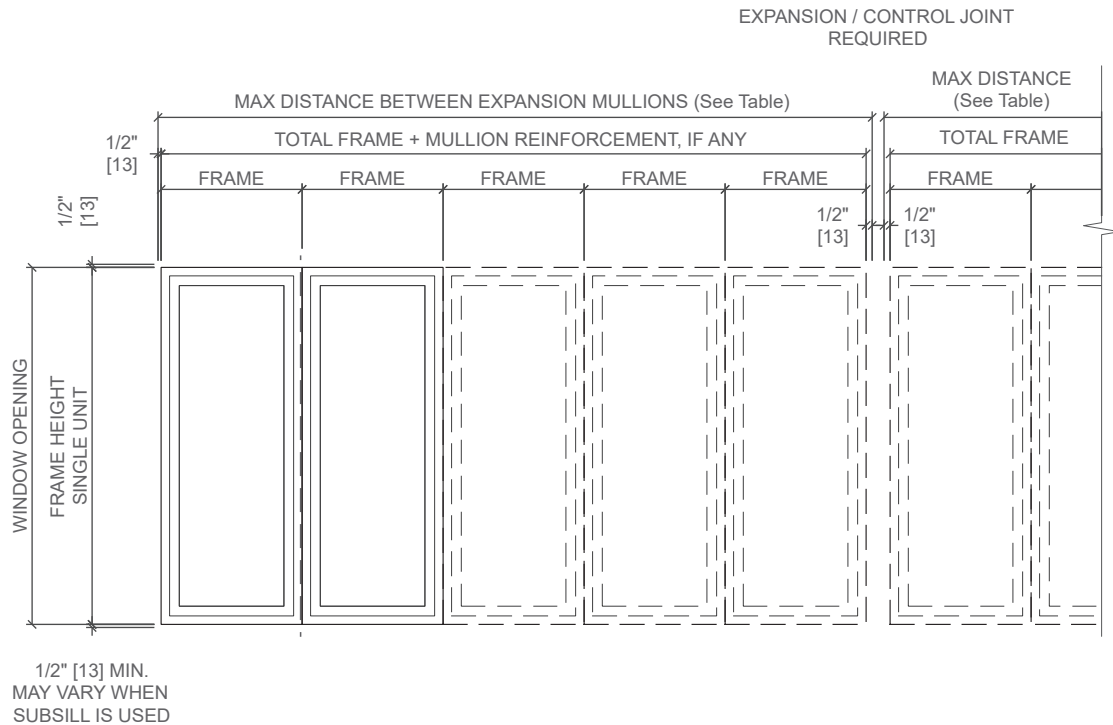


D - Joining Mullion
(Impervia)



E - 1/2" Flat Bar Mullion

Minimum mullion recommendations shown, view available on-line documentation for a complete list of options or consult with your Pella representative or Pella Architectural Solutions for project specific requirements.



Due to the thermal expansion and contraction of window frame and cladding materials, as well as frame and construction tolerances, ribbon windows must have expansion trim at the intervals shown below.

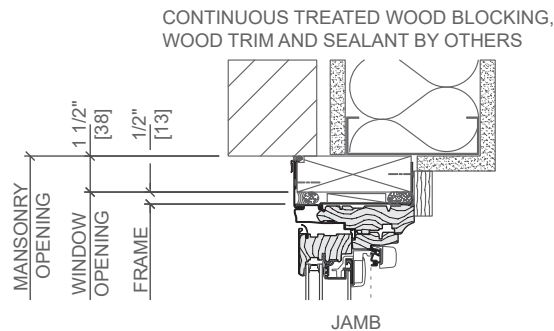
Head flashing and sill flashing and/or subsill systems should be used to ensure water is managed properly.

Header deflection can often be accommodated using a clip or L-Receptor installation method.

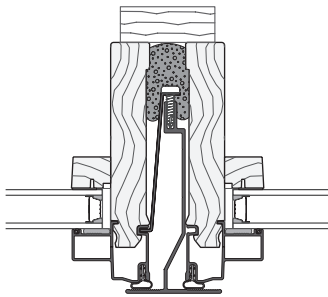
Frame Expanders can be used at opening jambs to accommodate combined frame size and construction tolerances. See detail below.

Actual span and combination size availability depends on design pressure requirements.

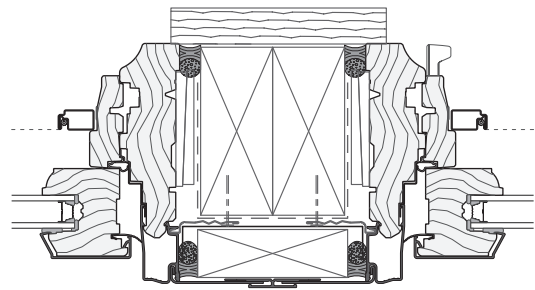
Product Type	Max. Distance Between Expansion Trim	72AL Expansion Mullion	Window Wall Mullion Channel	72HF Expansion Trim	49A1M101 Expansion Trim	1AAF Expansion Trim	Solid Trim by Others
Aluminum-Clad Exterior	20'	Y	Y	Y	Y	Y	Y
Pella® Impervia® Fiberglass	20'	N	Y	Y	Y	Y	Y
Pella® 250 Series and Encompass by Pella® Vinyl	12'	N	N	N	N	N	Y



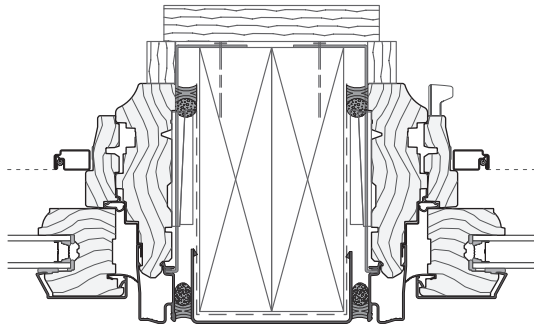
NOTE: APPLY CONTINUOUS BEAD OF SEALANT TO INSIDE CORNER OF FRAME EXPANDER BEFORE INSTALLING TO UNIT



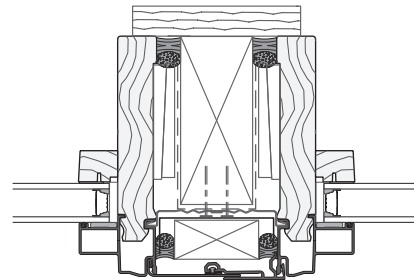
72AL or 0APK T Expansion Mullion for L-Receptor Installation



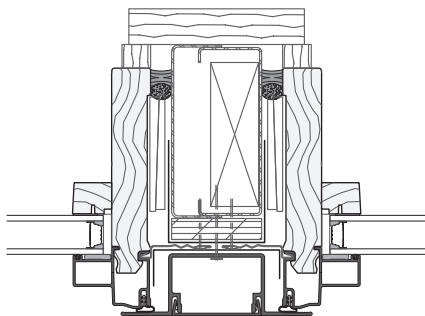
72HF Expansion Trim for clip/anchor through frame or fin installation



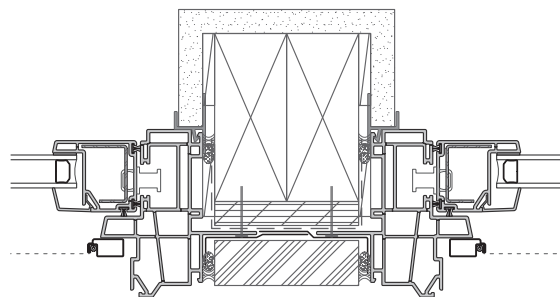
49A1M101 Expansion Trim for clip or anchor through frame installation



1AAF Expansion Trim for clip/anchor through frame or fin installation



50E4 Window Wall Mullion Channel for 2" Structure
0DA9 Bulb Gasket and 736P 1 1/2" Mullion Cover for fin installation.



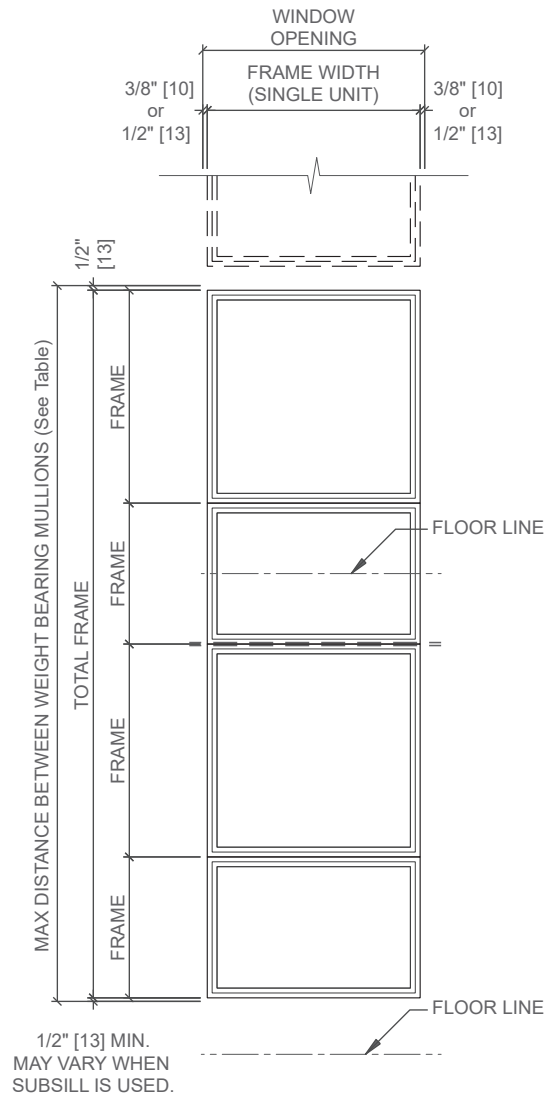
Solid trim material by others

Actual span and combination size availability depends on design pressure requirements.



Photograph(s) © 2017 Foster Design Build SPD Corp.

Aluminum-Clad Exterior Ribbon



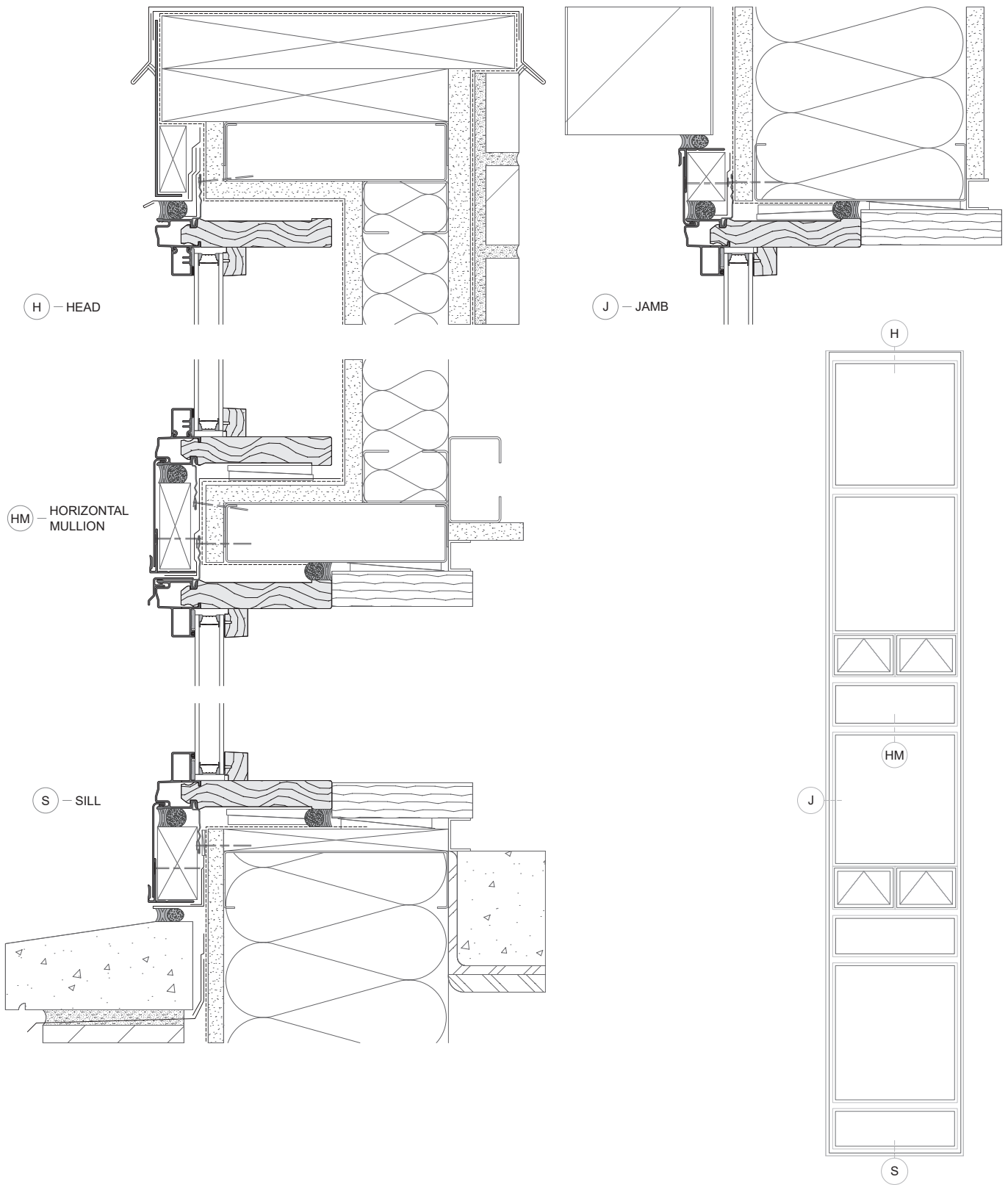
Due to the thermal expansion and contraction of window frame and cladding materials, frame and construction tolerances, as well as weight, stacked windows must have expansion trim and weight-bearing mullion structure at the intervals shown. Certain venting windows may require additional weight-bearing support above. Head flashing and sill flashing and/or subsill systems should be used to ensure water is managed properly.

Product Type	Max. Distance Between Supporting Mullions
Aluminum-Clad Exterior	20'
Pella® Impervia® Fiberglass	20'
Pella® 250 Series and Encompass by Pella®	12' *

Frame Expanders can be used at opening Heads and Sills to accommodate combined frame size and construction tolerances.

Actual span and combination size availability depends on design pressure requirements.

* Vinyl combinations cannot be stacked. Separate each combination with a weight-bearing horizontal mullion. Refer to the factory and site assembled combinations recommendations for limitations.

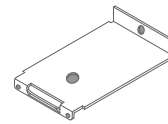


The following details are intended to show important installation concepts, but may not include all pertinent details. Please review installation instructions or contact your Pella sales representative or Pella Architectural Solutions for recommendations or drawings specific to your project.



Aluminum-Clad Exterior Storefront

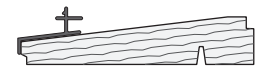
- Performance up to AW 90.
- Air infiltration as low as .05 cfm/ft².
- U-Factors as low as .17.
- Single windows up to 12' and 76 ft².
- Factory assembled combinations up to 12' x 9'.
- Incorporate vent, fixed, grille patterns, etc. for virtually limitless configuration options.



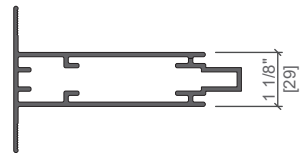
L-Receptor 72AK
L-Receptor Clip 5027



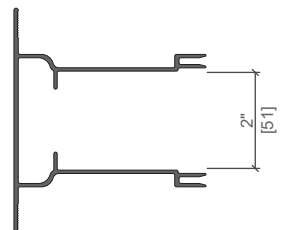
1" Frame Expander 47D4
Gray Bulb Gasket 0DA9



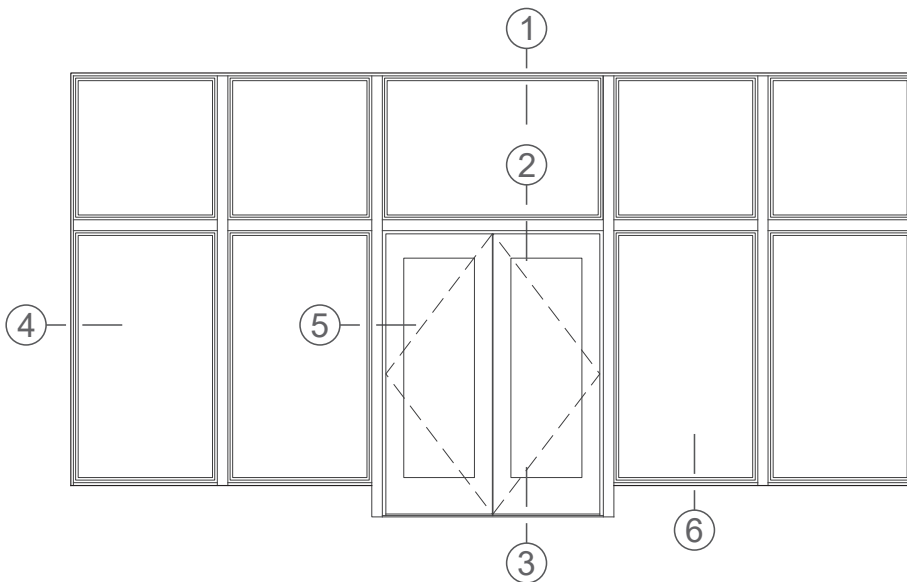
CLAD / WOOD SUBSILL 4049
& CLIP 7366

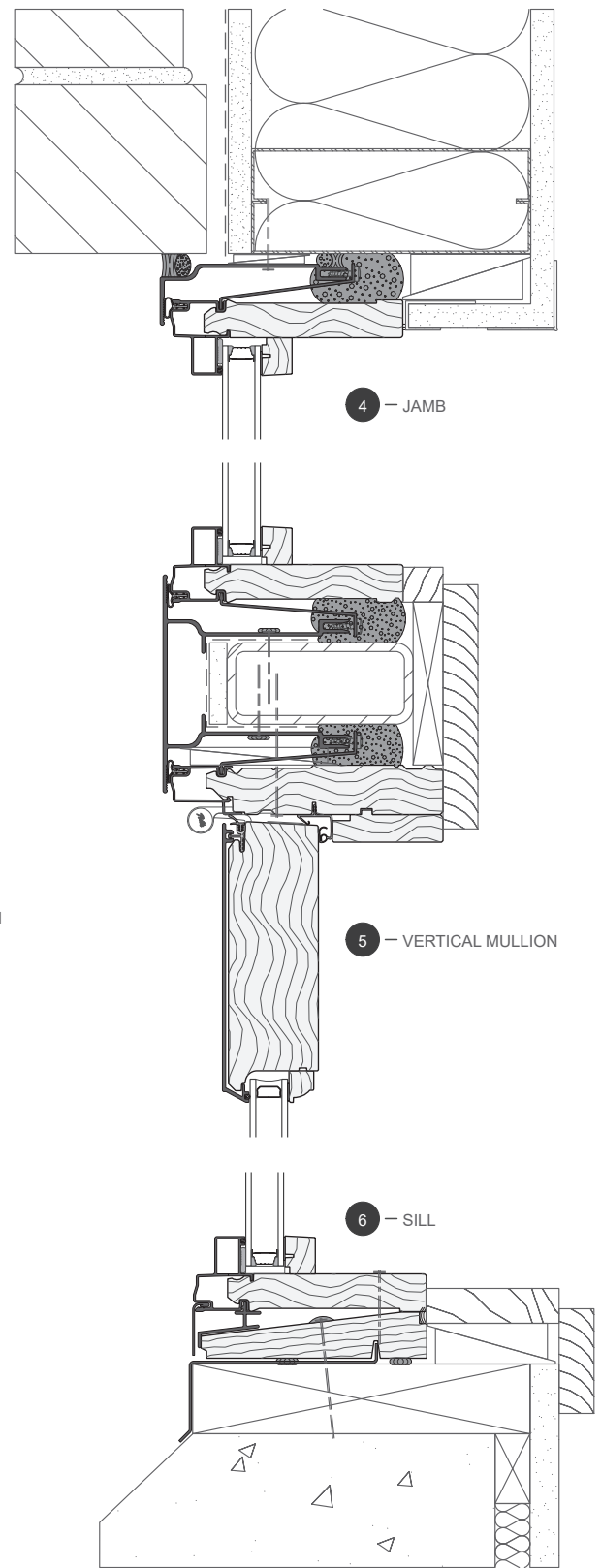
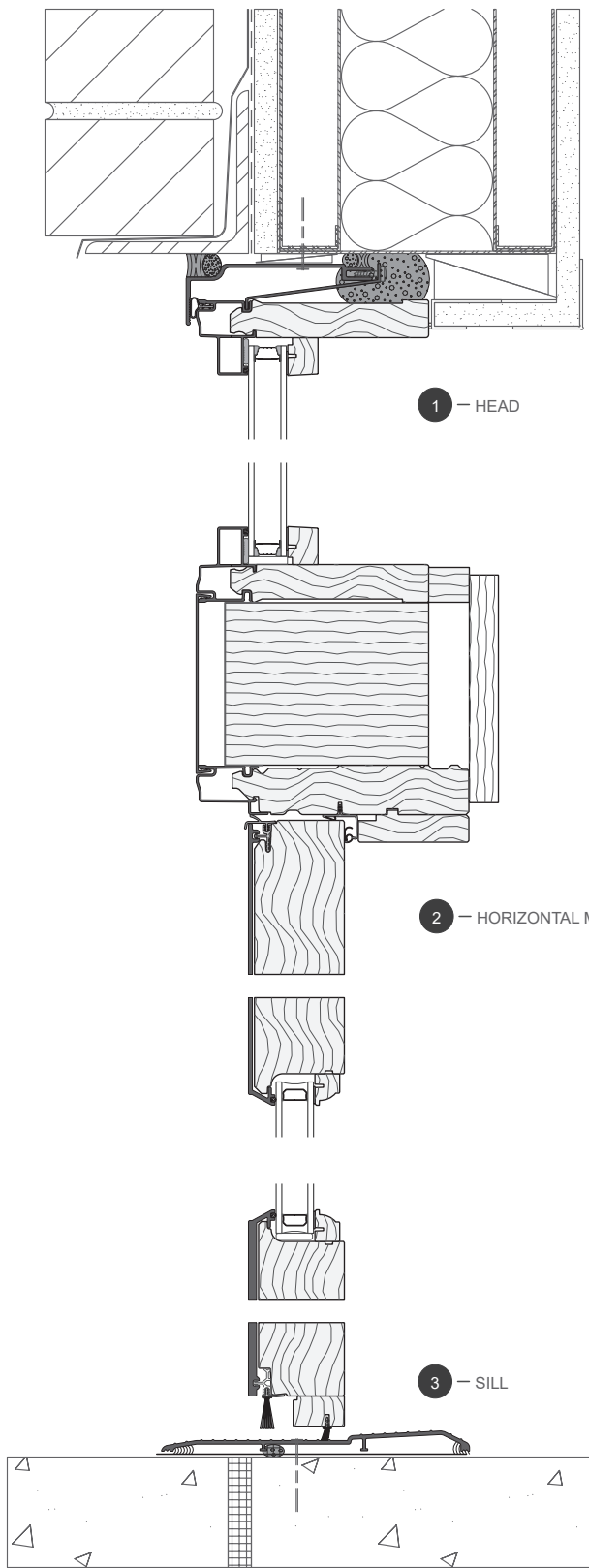


2" Structural Receptor Mullion 0APK
(vertical mullion)



Vertical Receptor Mullion for over
2" Structure 50E5



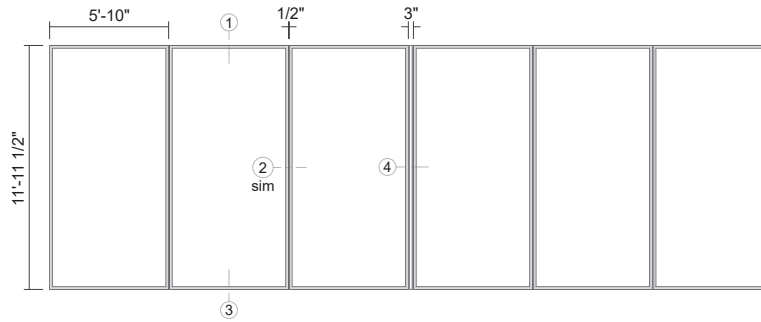


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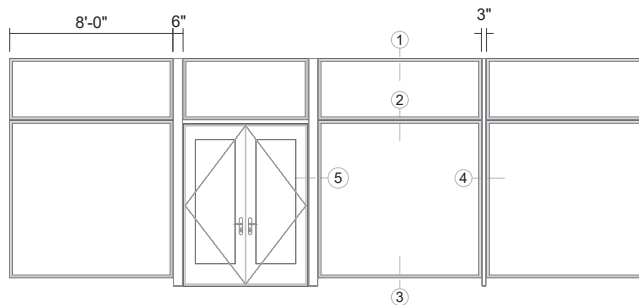


Aluminum-Clad Exterior and Impervia Storefront

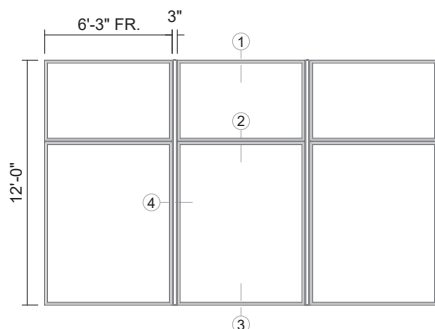
- Performance up to CW50.
- Air infiltration as low as .03 cfm/ft².
- U-Factors as low as .15.
- Single windows up to 12' in one direction and 70 ft².
- Factory assembled combinations up to 12' x 8' up to 80 ft² total.
- Incorporate grille patterns for virtually limitless configuration options.



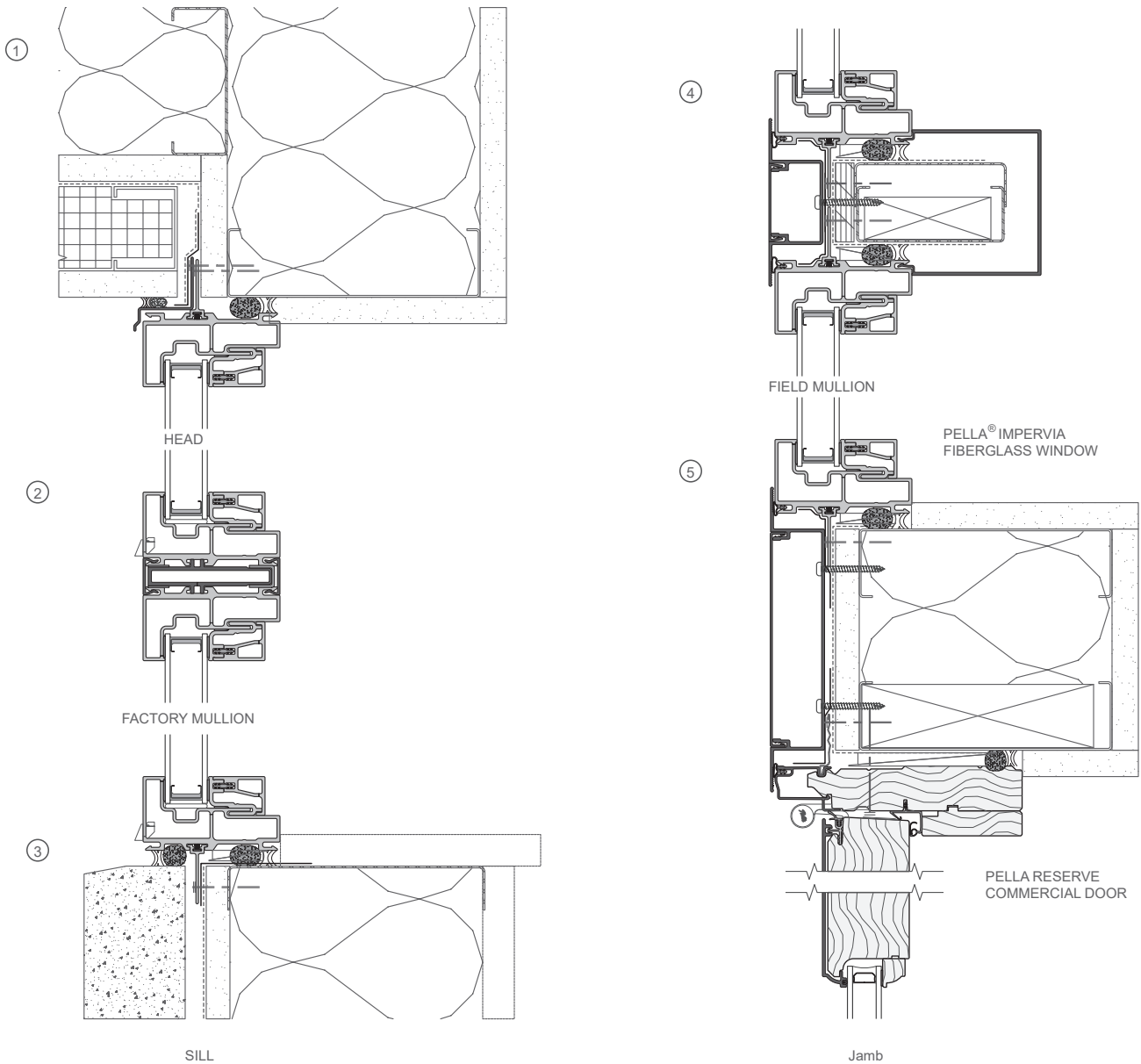
Example Configuration 1:
Maximum single window height.



Example Configuration 2:
8' wide windows to align with door.



Example Configuration 3:
Maximum factory assembled combination height.



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The Rose | Meyer, Scherer and Rockcastle | Minneapolis, MN

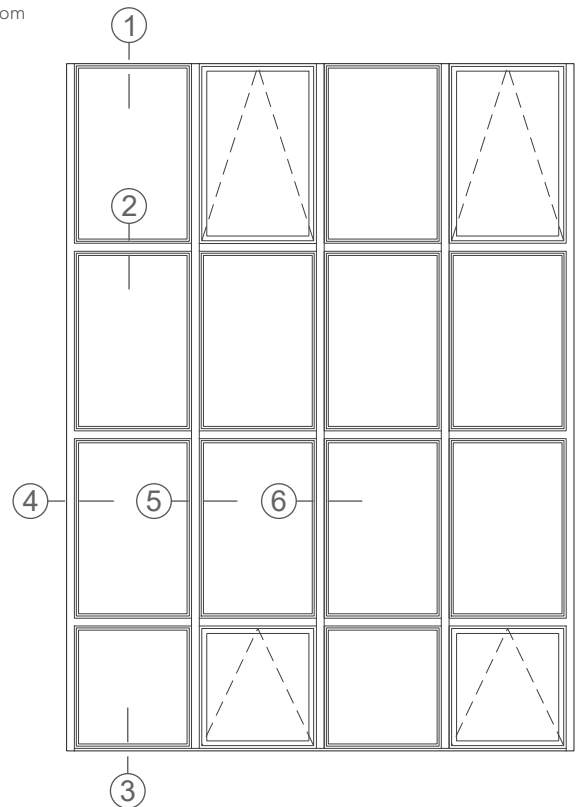


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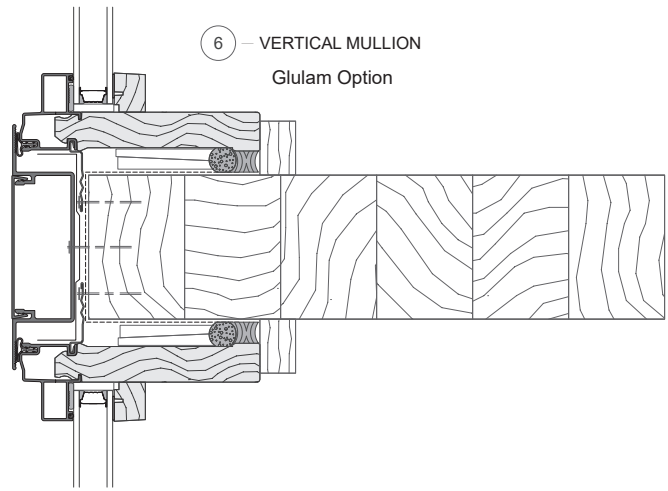
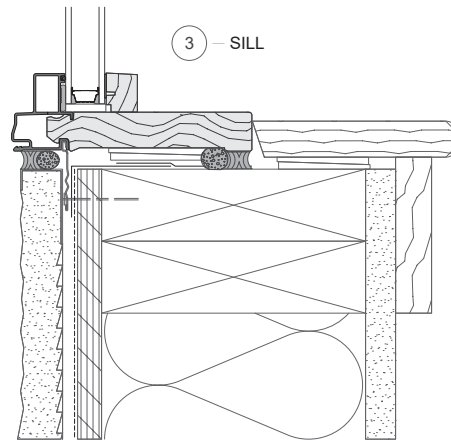
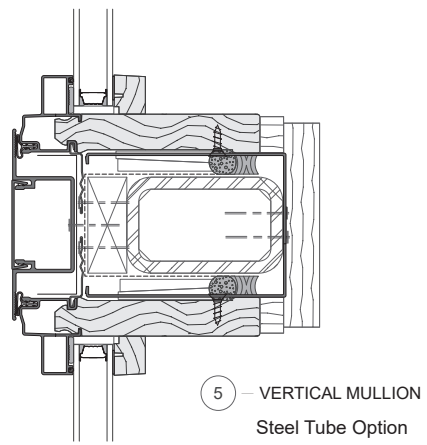
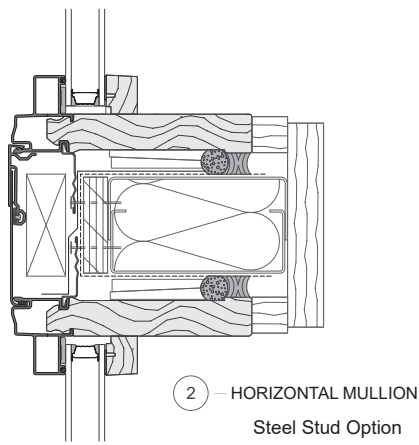
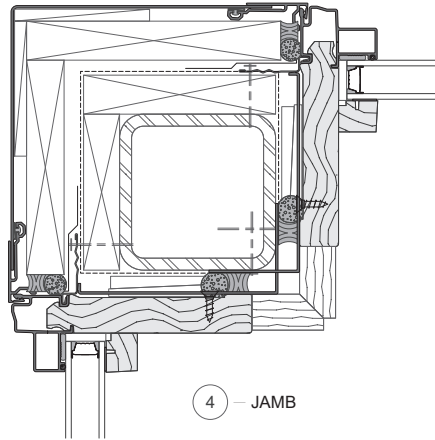
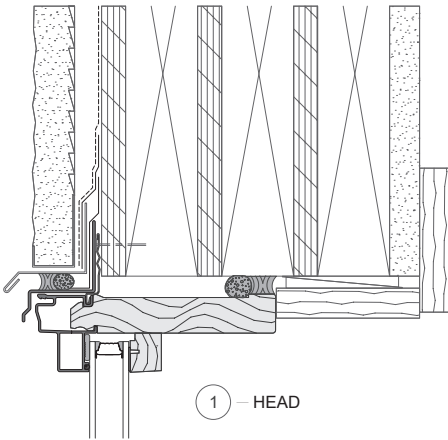
Hyland Ski Chalet
 Partners & Simy Architects
 Bloomington, MN

Aluminum-Clad Exterior Window Wall

- Performance up to AW 90.
- Air infiltration as low as .05 cfm/ft².
- U-Factors as low as .17.
- Single windows up to 12' and 76 ft².
- Factory assembled combinations up to 12' x 9'.
- Incorporate vent, fixed, grille patterns, etc. for virtually limitless configuration options.



Actual span and combination size availability depends on design pressure requirements.



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