



General Information

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



This section presents typical construction details and available for single units.

The objectives of installation systems are to:

- Secure the attachment of the door to the wall
- Limit air and water infiltration
- Allow for expansion and contraction

Important

Determining and meeting the structural load requirements and design of the rough opening is the responsibility of the architect or engineer. Door frame systems are not designed to support additional elements or components of the building wall system.

Installation Methods

Integral Fins, Frame Screws and Flush Flange are the basic attachment methods for the Pella® 250 Series doors. Integral Fin and Flush Flange methods require the frame to be installed from the exterior of the building. Integral Fin units must be installed prior to the application of the exterior wall cladding. Block frame units may be installed (using the frame screw method) from either the exterior or interior.

- **Integral Fin Installation** – Allows the door frame to be integrated into the building's weather resistive barrier (wrap) using the Pella SmartFlash™ Tape installation method. Intended for use with lap siding, brick veneer or other similar cladding material.
- **Frame Screw Installation** – applicable in new construction when installing units into concrete block, poured concrete or pre-cast concrete walls. Also applicable for replacement door situations where it is not practical to use installation fins.
- **Flush Flange Installation** – applicable when replacing existing aluminum sliding doors in stucco. This method requires the removal of the existing door sill; however, the existing frame jambs and head remain in the opening, minimizing damage to the stucco.

Important Installation Procedures

- When rigid insulation or other compressible sheathing is used, on walls where the integral fin installation method will be used, provide solid blocking for fin attachment.
- Shim unit in the opening plumb level and square.
- Provide a primary and secondary air and water seal around the perimeter of the unit.
- **Primary Seal** – Seal the unit to the exterior finish material.
- **Secondary Seal** (Integral fin installations) – Apply Pella SmartFlash™ foil backed butyl window and door flashing tape (or equivalent) at rough opening sill and over installation fins at head and jambs in watershed order. See product installation instructions for step by step instructions.
- **Provide an Interior Air Seal** – Apply around the perimeter of the unit by applying a one inch deep bead of Low expansion, low pressure polyurethane insulating window and door foam sealant - (DO NOT use high pressure or latex foams)

Note: Commercial and/or large complex openings may require additional installation design considerations and attachments.

General Notes

- Details shown are not intended to reflect complete installation procedures, however they do reflect basic installation concepts. Refer to the installation instructions provided with the product for step by step instructions.
- Details show various wall systems. Details with other Pella products in the same wall construction will be similar.
- Figures in brackets following or adjacent to dimensions are International [metric] equivalents in millimeters. For metric equivalents other than those shown, multiply dimensions in inches by 25.4.
- Your local Pella sales representative can assist with other more complex and unique applications.



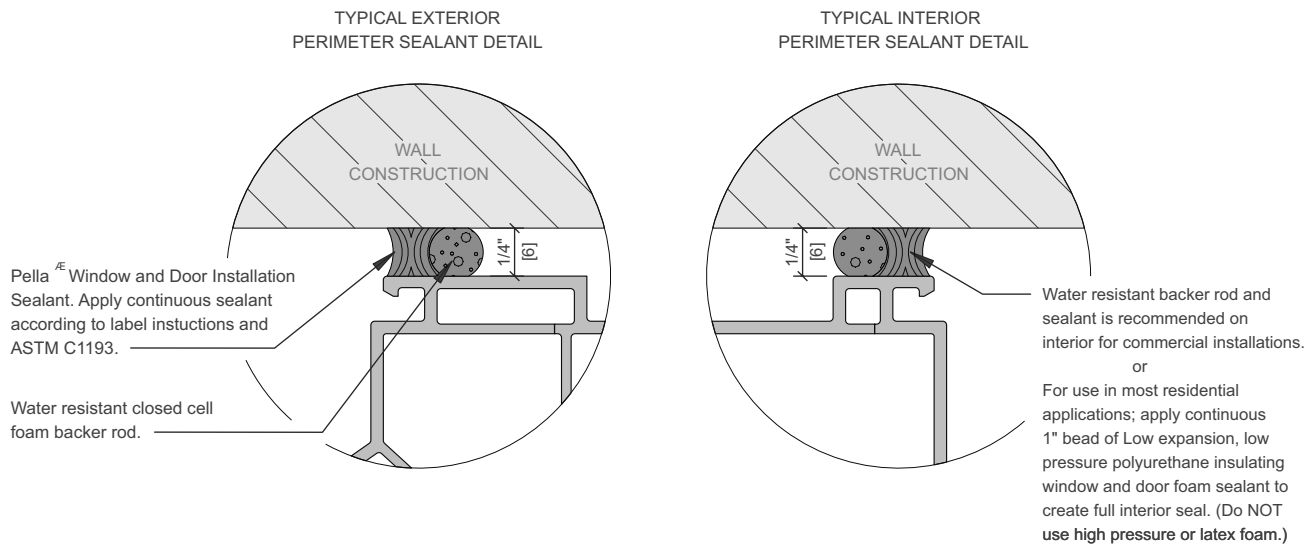
250 Series - Installation Details

Typical Sealant Placement Details

Proper application of perimeter sealant to prevent leakage around windows and doors is the responsibility of the installer.

Use Pella Window and Door Installation Sealant or equivalent high quality, multi-purpose sealant. Typical sealant placement details are shown below. Apply sealants according to their label directions and ASTM C1193.

Special Note—Some manufacturers of sealants recommend or require the use of primers to ensure adequate adhesion to painted porous surfaces.

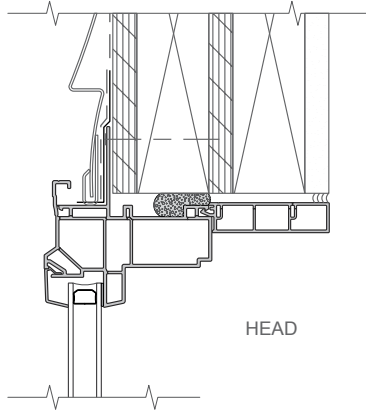




250 Series - Installation Details

Nail Fin

Integral Fin and J-Channel Wood Frame Construction with Vinyl Siding (2-9/16" wall depth)



WATER-RESISTANT BARRIER BY OTHERS

Continuous water-resistive barrier attached to the wall sheathing.

Attach unit to wall construction with nails or screws at every other pre-punched hole in the installation fin.

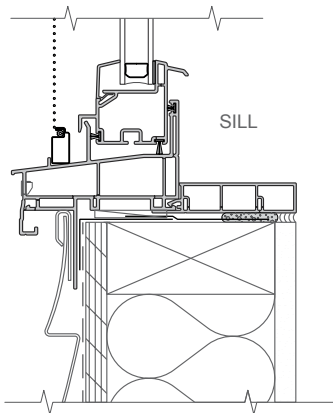
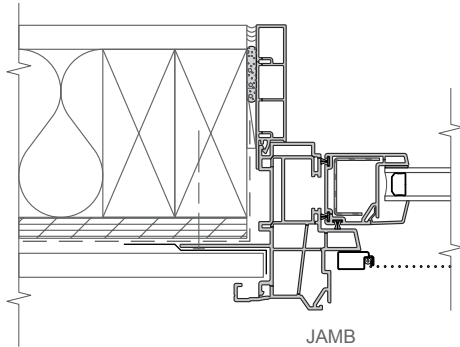
PELLA SMARTFLASH™ FOIL BACKED WINDOW AND DOOR FLASHING TAPE

Integrate the window and door flashing tape into the wall system.

LOW EXPANSION, LOW PRESSURE POLYURETHANE INSULATING WINDOW AND DOOR FOAM SEALANT - (DO NOT USE HIGH PRESSURE OR LATEX FOAMS)

Apply a continuous 1" bead of insulating foam to provide a full interior seal.

FACTORY APPLIED JAMB EXTENSION (OPTIONAL)



Scale 3" = 1' 0"

Items in bold are available from Pella.

These details are for typical single punch openings.

See online ADM for typical sealant details.

Refer to the appropriate Pella Installation Instruction for step-by-step instructions.

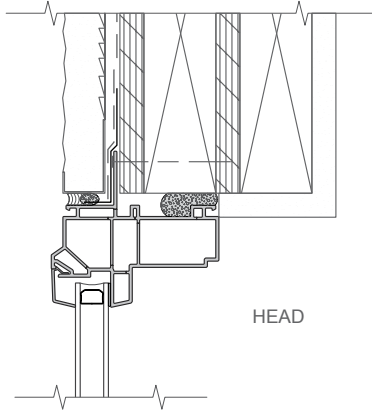


250 Series - Installation Details

Nail Fin

Wood Frame Construction with Stucco

IMPORTANT NOTE: These details reflect general installation concepts for typical construction with water-managed Stucco products. Due to the number of different systems available, no attempt has been made to show specific flashing or drainage details. Consult the Stucco manufacturer for specific detailing required for their water-managed system.



WATER-RESISTANT BARRIER BY OTHERS

Continuous water-resistive barrier applied to the wall sheathing.

Attach unit to wall construction with nails or screws at every other pre-punched hole in the installation fin and with frame screws.

PELLA SMARTFLASH™ FOIL BACKED BUTYL WINDOW AND DOOR FLASHING TAPE

Integrate the window and door flashing tape into the wall system.

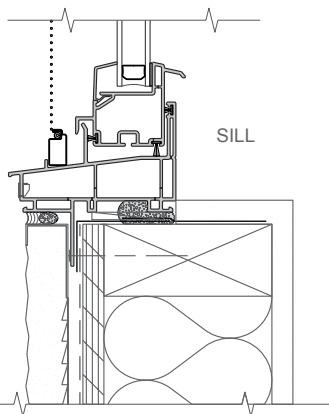
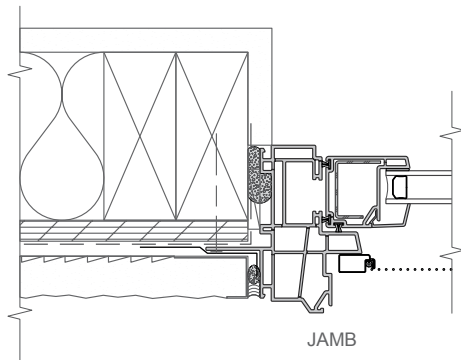
STUCCO J-MOLD BY OTHERS

PELLA WINDOW AND DOOR INSTALLATION SEALANT AND WATER RESISTANT BACKER ROD.

Apply continuous sealant according to label directions and ASTM C1193.

LOW EXPANSION, LOW PRESSURE POLYURETHANE INSULATING WINDOW AND DOOR FOAM SEALANT - (DO NOT USE HIGH PRESSURE OR LATEX FOAMS)

Apply a continuous 1" bead of insulating foam to provide a full interior seal.



Scale 3" = 1' 0"

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See online ADM for typical sealant details.

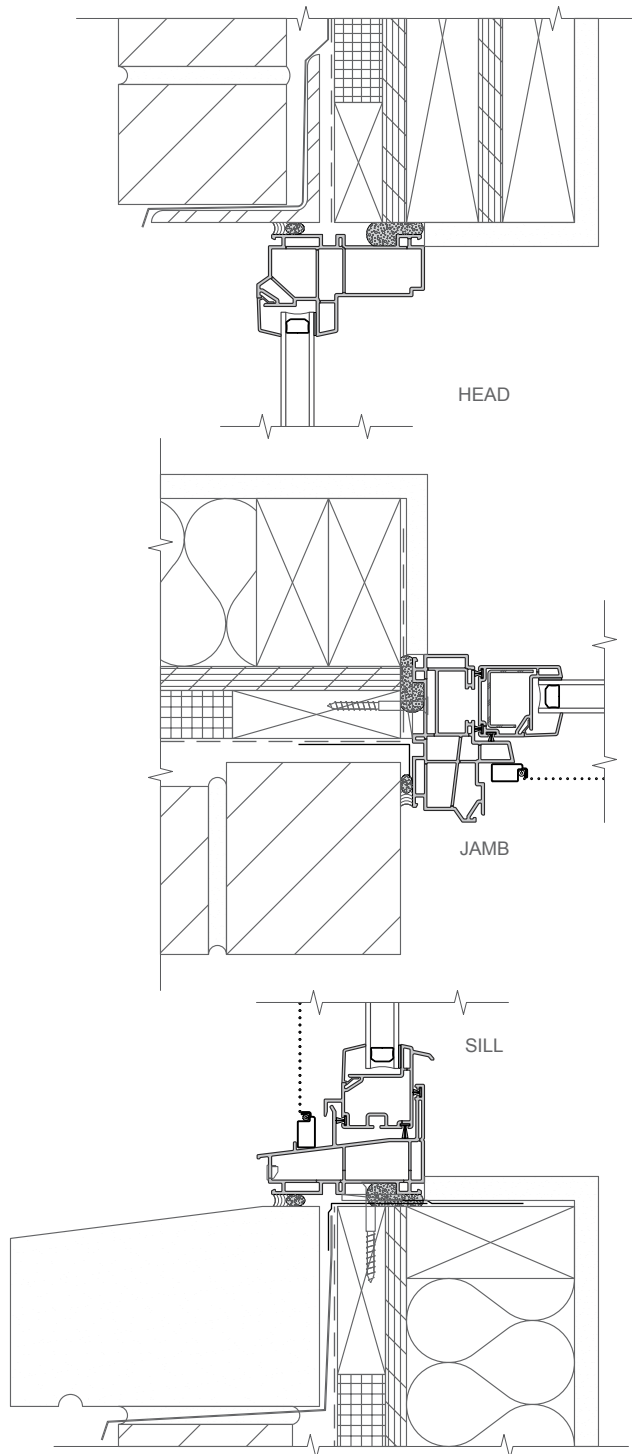
Refer to the appropriate Pella® Installation Instruction for step-by-step instructions.



250 Series - Installation Details

Block Frame

Block / Replacement Frame Wood Frame Construction with Brick Veneer



WATER-RESISTANT BARRIER BY OTHERS

Continuous water-resistive barrier attached to the wall sheathing.

THROUGH-WALL CAVITY FLASHING WITH WEEPS AT HEAD AND SILL BY OTHERS

Attach unit to wall construction with screws at every pre-punched hole in the frame

PELLA SMARTFLASH™ FOIL BACKED BUTYL WINDOW AND DOOR FLASHING TAPE

Integrate the window and door flashing tape into the wall system.

Brick return at jamb to close cavity and provide backing for backer rod and sealant.

PELLA WINDOW AND DOOR INSTALLATION SEALANT AND WATER RESISTANT BACKER ROD.

Apply continuous sealant according to label directions and ASTM C1193.

LOW EXPANSION, LOW PRESSURE POLYURETHANE INSULATING WINDOW AND DOOR SEALANT - (DO NOT USE HIGH PRESSURE OR LATEX FOAMS)

Apply a continuous 1" bead of insulating foam to provide a full interior seal.

Scale 3" = 1' 0"

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Refer to the appropriate Pella Installation Instruction for step-by-step instructions.