THE FOLLOWING INSTALLATION METHODS ARE INCLUDED IN THIS BOOKLET:

New Construction Installation in Masonry Construction for Block Frame Sliding Doors

Full Frame Replacement without Disturbing Brick or Siding for Block Frame Sliding Doors

These instructions were developed and tested for use with wall systems designed to manage water. **These instructions are not to be used with any other construction methods or door frame types.** Installation instructions for use with other construction methods or frame types may be obtained from Pella® Corporation, your local Pella retailer or [www.installpella.com](http://www.installpella.com). Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and/or additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional.
CAUTION: Many doors in older homes are painted with lead-based paint. Removal of old doors may disturb this paint. Proper precautions must be taken to minimize exposure to dust and debris. Consult state or local authorities and/or go to www.epa.gov/lead for more information.

WARNING: To ensure safety and security and help prevent property damage, including possible damage to your window or door, close and lock windows and doors any time they are not being used for venting on a nice day, and particularly during high winds or rain.

IMPORTANT NOTICE

Because all construction must anticipate 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 anticipated and unanticipated water infiltration; deficiencies in building design, construction and maintenance; failure to install Pella products in accordance with Pella's installation instructions; or the use of Pella products in wall 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 Buyer or User, the architect, contractor, installer, or other construction professional and are not the responsibility of Pella.

Pella products should not be used in barrier wall systems which do not allow for proper management of moisture within the wall systems, such as barrier Exterior Insulation and Finish Systems (EIFS) (also known as synthetic stucco) or other non-water managed systems. Except in the states of California, New Mexico, Arizona, Nevada, Utah and Colorado, Pella makes no warranty of any kind on and assumes no responsibility for Pella windows and doors installed in barrier wall systems. In the states listed above, the installation of Pella Products in barrier wall or similar systems must be in accordance with Pella’s installation instructions. Product modifications that are not approved by Pella Corporation will void the warranty.

Care and Maintenance

Care and maintenance information is available by contacting your local Pella retailer. This information is also available at www.pella.com.

Cleaning Instructions

GLASS—Remove any protective film and labels and clean the glass, using a soft, clean, grit-free cloth and mild soap or detergent. Be sure to remove all liquid by wiping dry or use a clean squeegee.

FACTORY FINISHED PRODUCT: Pella Product that has been prefinished with stain or paint from the factory requires no additional finishing. Clean the surface with mild soap and water.

PELLA® ALUMINUM CLAD OR IMPERVIA FRAMES: The interior and exterior frame and panels are protected with a tough factory finish. Clean this surface with mild soap and water. Stubborn stains and deposits may be removed with mineral spirits. DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

ENCOMPASS BY PELLA®/THERMASTAR BY PELLA®, PELLA® 150 SERIES, PELLA® 250 SERIES AND PELLA® 350 SERIES DOOR FRAMES: The vinyl frame may be cleaned using the same method as the glass. For stubborn dirt, a “non-abrasive” cleaner such as Bon-Ami® or Soft Scrub® may be used. Do not use solvents such as mineral spirits, toluene, xylene, naphtha or muriatic acid as they can dull the finish, soften the vinyl and/or cause failure of the insulated unit seal. Keep door tracks clear of dirt and debris. Keep weep holes open and clear of obstructions.

DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

Notice: DO NOT use inappropriate solvents or brickwash or cleaning chemicals. If you do, permanent damage can result and the product failure, loss or damage would not be covered by the Limited Warranty.

Finishing Instructions (Wood Patio Doors and Fiberglass Entry Doors)

Paint or finish immediately after installation.

If products cannot be finished immediately, cover with clear plastic to protect from dirt, damage and moisture. Remove any construction residue before finishing. Sand all wood surfaces lightly with 180 grit or finer sandpaper. DO NOT use steel wool. BE CAREFUL NOT TO SCRATCH THE GLASS. Remove sanding dust. Pella products must be finished according to these instructions; failure to follow these instructions voids the Limited Warranty. Finishing panel edges is optional for Patio Doors.

Note: To maintain proper product performance do not paint, finish or remove the weatherstripping, mohair dust pads, gaskets or vinyl parts. Air and water leakage will result if these parts are removed. After finishing, allow venting Doors and doors to dry completely before closing them. If paint, stain or finish gets on the weatherstripping, wipe it off immediately with a damp cloth.

Panel Cleaning and Prep Instructions for Unfinished or Primed Panels: Dry wipe dust from doors gently. Examine door for possible smudges or fingerprints made from normal handling or construction. To remove smudges, lightly wipe surface with warm water. DO NOT sand surface of fiberglass panel. Scuff sand with light grade sand paper or abrasive pad (220 grit or higher). Rinse surface with mineral spirits for fiberglass panels and warm water for steel panels. Let doors and sidelight surfaces dry completely before applying finish. Finish the door panels as soon as possible after installation.

STAINING FIBERGLASS PANELS OR UNFINISHED INTERIOR FRAME MEMBERS: Fiberglass door and sidelight panels may be stained with a gel stain if a wood look is desired. Pella offers stain kits in a variety of colors. Apply and finish per the stain kit manufacturer’s instruction. Ensure that all exposed panel edges are finished to minimize the chance of damage.

Unprimed interior frame parts may be stained with wood stain and should be finished with a minimum of two coats of a clear polyurethane finish. DO NOT bridge the top coat between the outer edge of the glazing frame and the door panel.

NOTE: The fiberglass base color tone will vary. This variance is normal and will not impact the stain color of the door.

PAINTING INSTRUCTIONS: Wood door frame exteriors, premium steel door panels and sidelights are factory primed. Wood doors require painting immediately after installation. The factory applied primer is not intended for long term exterior exposure. Sand all un-primed interior wood surfaces lightly with 180 grit or finer sandpaper before priming and painting. fiberglass door and sidelight panels do not require priming. Use two coats of a 100% latex paint that has a good blocking resistance. On units with glass, do not bridge paint between the outer edges of the glazing frame and the door panel. On fiberglass products, brush the paint in the same direction as the simulated wood grain. For entry doors, ensure that all exposed panel edges are finished to minimize the chance of panel damage. Finishing panel edges is optional for Patio Doors.

Pella Corporation is not responsible for interior paint and stain finish imperfections for any product that is not factory-applied by Pella Corporation. For additional information on finishing see the Pella Owner’s Manual or go to www.pella.com. The use of unapproved finishes, solvents or cleaning chemicals may cause adverse reactions with door materials. Pella will not be responsible for problems caused by the use of unapproved materials. If in doubt, contact your local retailer or representative.

Exterior Finish of Existing Frame (Pocket Replacement)

It is the responsibility of the homeowner, contractor or installer to ensure any exposed unfinished wood is covered or finished. Possible methods include, however are not limited to, covering with aluminum coil stock or painting.
This method of Full Frame Removal involves removing the sash and entire frame of the existing door from the wall. The resulting opening is the original rough opening. The existing door nailing fins are usually nailed to the studs in frame construction with siding, brick veneer or other exterior material applied over the fin on the outside. The interior may have a drywall return from the wall to the door frame.

**CAUTION:** Many doors in older homes are painted with lead-based paint. Removal of old doors may disturb this paint. Proper precautions must be taken to minimize exposure to dust and debris. Consult state or local authorities for more information and/or go to [www.epa.gov/lead](http://www.epa.gov/lead) for more information.

### TOOLS REQUIRED:
- Utility knife
- Pry bar
- Phillips and Standard screwdrivers
- Reciprocating saw
- Hammer
- Putty knife
- Deglazing wheel
- Angle Grinder with cutting wheel

**REMEmber to use appropriate personal protective equipment.**

**Apply adhesive film or duct tape to the glass to prevent breakage.**

### A. Score the paint or varnish between the interior trim and the wall or between the drywall return and the doorframe to minimize damage.

### B. Remove the interior trim.

To collapse aluminum frames follow steps C-M.

To cut vinyl, clad wood, or aluminum frames out of the opening, see steps M and N.

### C. Score the sealant or paint between the exterior siding or brick and the door frame.

### D. Remove the screen and vent panel from the old door. If it is not removable, see steps G-I.

### E. Remove the division bar or astragal (if applicable) by removing the screws at the ends or cutting it with a reciprocating saw.

### F. Remove the other panel. Remove any screws holding the fixed panel. Slide and lift out of the channel (sliding doors) or remove hinge screws or hinge pins (hinge doors).

### G. Remove any screws securing the frame or strikes to the opening.

If the fixed panel is not removable or the glass is sealed to the frame:

### H. Remove the glazing bead using a putty knife or small pry bar.

### I. For single pane doors with divided lights (grids): Use an angle grinder with a cut-off wheel to cut the end of the bars where they intersect with the sash or frame. This will allow the door glass to be removed more quickly.

### J. Heat the glazing seal using an electric heat gun.

### K. While applying heat, press a de-glazing wheel between the glass and sash or frame. Continue around the perimeter of the sash or panel. Apply light, constant pressure to separate the glass from the sash or frame. Dispose or recycle the glass properly.

**Note:** Wear appropriate personal protective equipment and keep the heat source away from flammable materials.

### L. Pry the frame away from the brick or siding. Use a block of wood under the pry bar to protect interior or exterior finishes.

### M. Cut through the frame using a reciprocating saw. Dispose or recycle the frame materials properly.

Cutting out vinyl, clad wood or aluminum frames:

### N. Temporarily pry any head flashing up to avoid damaging or cutting it.

### O. Cut through the sealant line and nailing fin across the top and sides of the door. Ensure the blade does not penetrate the interior where damage can occur to the drywall.

Consult with local providers and authorities to recycle or properly dispose of old door components.
YOU WILL NEED TO SUPPLY:

- Moisture resistant shims/spacers
- Fasteners (see block frame anchor instructions and tables at the end of this booklet)
- Closed cell foam backer rod/sealant backer
- Pella® SmartFlash™ foil backed butyl window and door flashing tape or equivalent
- Low expansion, low pressure polyurethane insulating window and door foam sealant
  DO NOT use high pressure or latex foams.
- Pella Window and Door Installation Sealant or equivalent high quality, multi-purpose sealant

Installation Clip Option:
- 6" or 8” installation clips
- #6 x 5/8” corrosion resistant flat head wood screws
- #8 x 1-1/2” corrosion resistant screws or 3/16” x 1-1/2” masonry screws

TOOLS REQUIRED:

- Tape measure
- Level
- Square
- Hammer
- Scissors or utility knife
- Small flat blade screwdriver
- Sealant Gun
- Screw Gun with a Phillips Driver bit
- 1/8” Allen wrench

OTHER CONSTRUCTION MATERIALS MAY BE REQUIRED. READ AND UNDERSTAND THE INSTRUCTIONS AND INSPECT THE WALL CONDITIONS BEFORE YOU BEGIN.

INSTALLATION WILL REQUIRE (2) OR MORE PERSONS FOR SAFETY REASONS.

PREPARE THE DOOR FOR INSTALLATION

A. Remove plastic wrap and cardboard packaging from the door.
B. Inspect the product for any damage such as cracks, dents or scratches. DO NOT install damaged products.
C. Architect Series® (850) and Pella® Lifestyle Series Sliding doors: Remove the shipping spacers by sliding the movable panel halfway open and take the spacers off the top and bottom of the panel.
   All Doors: Remove the vent panel prior to installation. You will need to first remove the vent panel retainer near the interlocker on the sill. Then remove the vent panel by opening the panel about 8” then lifting it out of the lower track, tilting the bottom of the panel away from the door frame, and lowering the panel out of the top track. Carefully set the panel aside. Reinstall the vent panel and panel retainer after installation of the door frame.
   For 4 Panel sliding doors shipped in 2 half sections, complete the field assembly instructions before proceeding.

Impervia: If the vent panel is installed in the frame, you will need to first remove the panel retainer near the interlocker on the sill. Then remove the vent panel by lifting it out of the lower track and tilting the bottom of the panel away from the door frame. Then lower the panel out of the top track. Carefully set the panel aside.

Pella® 150 Series, ThermaStar and Encompass by Pella: If reversing the door slide, refer to the instructions later in this booklet.
D. Units with wide EnduraClad Exterior trim and narrow fins with NO pre-punched holes: Install clips or pre-drill holes for frame screws.
   Installation clip option: Installation clips can often be used in place of frame screws. Refer to the installation instructions at the end of this booklet.
   Additional preparation may be required for performance upgrade, impact-resistant products or to comply with local building code requirements. See advanced performance or hurricane shield anchor schedule.
E. Read the entire instruction before proceeding.

These instructions were developed and tested for use with wall systems designed to manage water. These instructions are not to be used with any other construction methods or doorframe types. Installation instructions for use with other construction methods or frame types may be obtained from Pella® Corporation, your local Pella retailer or www.installpella.com. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and/or additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional.
PREPARE THE OPENING

REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

A. Clean the opening. Ensure it is dry and free from dirt, oil and debris.

*If using an optional sill pan, refer to the sill pan instruction page at the end of this booklet.*

B. Apply water resistant coating to the masonry. Extend the coating into the opening on all four sides. The water resistant coating may be a self-adhered sheet membrane (SASM) or a liquid applied flashing. Ensure continuity between the water resistant coating in the opening and the rest of the wall surface. SASM’s must be overlapped in a water shed fashion. Apply all water resistant coatings according to the manufacturer’s directions.

C. Measure the width and height of the opening. The new door must be 1/2” to 3/4” smaller in width and 3/8” to 1/2” smaller in height than this measurement.

D. Confirm the opening is plumb, level and square. Dry fit the door and remove it from the opening.

E. Measure and mark the opening where the interior of the new door will be placed. Consider the size of wall cavity (if applicable) and 3/4” minimum overlap onto the brick veneer or finished wall materials for exterior perimeter sealant.

PREPARE THE DOOR

CLIP INSTALLATION ONLY

Follow steps A-B. For frame screws skip to step 2C. Refer to the anchor spacing instructions at the end of this booklet for clip spacing.

Architect Series’ (850) and Pella® Lifestyle Series:

A. Install the clips into the fin grooves. Start one corner of the clip in the fin groove. Tap the corner into the fin groove with a hammer, then continue to tap the other corner until the clip is locked into the groove.

B. Secure the clips to the frame. Drive one #8 x 5/8” screw through the slotted hole in the center of the clip.

Alternatively, it is acceptable to use two #6 x 5/8” screws through the clip with the clip on its back and not engaged in the fin groove.

Pella® Impervia:

Slide clips into the T slot starting at each corner. Use a small piece of flashing tape to prevent the clips from sliding out of place.

C. Attach a Pella aluminum sill support or wood blocking flush with the opening sill if a concrete slab will not provide support for the exterior edge of the frame and the door has no sill nailing fin. If a concrete slab will support the entire depth of the frame, remove any sill nailing fins.

For vinyl doors without sill nail fins, skip to step E.

D. Place three 3/8” beads of sealant across the opening sill. Place the interior-most bead 1/2” from where the interior of the door sill will remain after installation. Continue this bead 6” up each jamb. Place a second bead 1/2” from the exterior of the framing (refer to the illustration). Place a 3rd bead in the groove of the sill support or 1/4” from the exterior edge of the wood blocking.

Proceed to step 2I.

Vinyl Doors without sill nail fins use steps E-I:

E. Remove the sill track by beginning at one end and carefully pulling it up. This will expose the slide panel pocket.

Note: A hooked tool like an Allen wrench will easily get the track started.

F. Drill 3/16” holes through the sill every 18”, starting from each corner and 1-3/16” from the interior. Counter-drill with a 3/8” bit through the first wall of the door frame only. Use a drill guide set 1/4” from the end of the bit to prevent drilling through the second wall.

G. Dry fit the door. Make sure that the door is plumb, square and level. Mark and drill anchor locations. Mark the interior of the door frame at the sill to show a boundary for sealant placement. Carefully remove and set the door aside.
2 PREPARE THE DOOR

H. Apply 2 continuous 1/4" to 3/8" diameter beads of sealant across the sill of the opening and 6" up the jambs, towards the interior side of the door (between the anchor holes and interior edge of door). DO NOT apply sealant between the anchor holes and the exterior side of the sill plate or floor.

Note: Failure to properly seal the sill attachment screws and sill plate may allow water to penetrate the interior of the home.

I. Center the bottom of the door in the opening and tilt the door into position. Do not slide the door into the opening. Sliding will damage the sealant lines.

Check the jambs for plumb and confirm there is room for shimming between the jambs and opening on each side.

J. Check the door placement by measuring from the interior surface of the door frame or jamb extension to the interior surface of the wall for consistency.

K. Pre-drill and drive two screws one near the top of each side of the door through the frame or clip. (See anchor instructions at the end of this booklet for screw or clip spacing.)

L. Plumb and square the door. Place shims at each anchor location and lock strike. Keep shims 1/2" short of door frame depth. Insert additional shims starting 6" from the bottom as needed to keep jambs straight and panel reveals even on all four sides.

Note: Additional shims are required at screw locations for advanced performance, impact-resistant units and combinations and combinations. (See the anchor instructions at the end of this booklet.)

M. Finish pre-drilling and driving screws through the door frame or clip.

N. Drive screw(s) into the keeper strike on the vent side of 2-panel doors. Refer to the anchoring instructions at the end of this booklet.

Install Panel retainers. Refer to the anchoring instructions at the end of this booklet.

O. Drive additional anchor screws through the frame. Shim as required at each location. Refer to anchoring instructions at the end of this booklet.

3 SET AND FASTEN THE DOOR

A. Install the sliding panel. From the exterior, tilt the top of the panel and insert it into the top track. Move the bottom of the panel toward the door frame and set it on the bottom track. Be careful not to pinch your fingers between the two panels. DO NOT close the sliding panel until the hardware is installed. The door may lock when closed.

B. Check door operation.

Note: Adjust shims to correct any issues with plumb, square, operation or reveal.

C. Install panel retainers (if applicable) or re-install if the vent panel was removed during installation. Refer to the instructions included in the panel retainer hardware package.

WARNING: If the panel retainer is not installed, the door panel can fall from the product, possibly causing death or serious injury. Follow directions closely when installing and servicing the product.

Install bumpers (if applicable). Refer to the anchor instructions at the end of this booklet.

D. Install the handles. Refer to the instruction in the hardware box.

E. Adjust the panel height to ~1/8" clearance to head of unit by removing the hole cover and using a #2 Phillips screwdriver to turn the roller adjustment screw clockwise (raise) or counterclockwise (lower).

Note: For doors with heavy impact-resistant or triple pane glass use a small pry bar to raise the panel while turning the adjustment screw. This will prevent the threads from being stripped (Applies to all methods).

F. Adjust the footbolt (if applicable) refer to the anchor instructions at the end of this booklet.

G. Pella® 150 Series, ThermaStar by Pella®, Encompass by Pella®, and Pella® 350 Series doors: Install the keeper and adjust the lock hook (if necessary). Refer to the anchor instructions at the end of this booklet.

H. Check door operation by opening and closing the door.

I. Pella 350 Series Only: Install weep hoods at door frame sills.

J. Install interior sealant. Refer to the interior sealant instructions at the end of this booklet. Use additional sealant around clips to prevent air and water infiltration.

K. Attach wood blocking to the exterior of the opening to support the edge of the door sill (doors that are not fully supported by a concrete slab with sill nail fins only).

L. Install exterior sealant (after wall cladding and head flashing is installed) between the door frame and the finished wall material. Refer to the exterior sealant instructions at the end of this booklet.
1 PREPARE THE OPENING

A. Clean the opening. Ensure it is dry and free from dirt, oil and debris.
B. Measure the width and height of the opening. The new door must be 1/2” to 3/4” smaller in width and 3/8” to 1/2” smaller in height than this measurement.
C. Confirm the opening is plumb, level and square.
D. Measure and mark the opening where the interior of the new door will be placed. Consider the size of wall cavity (if applicable) and 3/4” minimum overlap onto the brick veneer or finished wall materials for exterior perimeter sealant.

If using an optional sill pan, refer to the sill pan instruction page at the end of this booklet.

If using an optional sill pan or if the door will be installed on a concrete slab, refer to the instruction page at the end of this booklet.

E. Cut 2 pieces of flashing tape 12” longer than opening width.
F. Apply sill flashing tape #1 at the sill extending 1” to the exterior and 6” up each jamb.
G. Cut 1” wide tabs at each corner by tearing the foil 1/2” each way from corner.
H. Apply sill flashing tape #2 overlapping tape #1 by 1” minimum.

Note: Press all tape down firmly.

2 FLASH THE OPENING

Note: If there is an existing, functioning head flashing or if the opening is directly below a soffit or overhang, skip to step 3.

If building wrap exists at the head of the opening follow steps 2A-2C. If no building wrap exists, skip to step 2D.

A. Prepare a head flashing with upturned leg by cutting it the same width as the brick/siding opening.
B. Pry the top (head) j-channel/siding away from the sheathing enough so the head flashing can be slid under the house wrap.
C. Insert the head flashing behind the brick/siding and behind the house wrap.

2 FLASH THE OPENING (CONTINUED)

No Building Wrap

D. Prepare head flashing with no up-turned leg by cutting it the same width as the brick/siding opening. The head flashing should not extend past the interior of the doorframe.
E. Apply (2) 3/16” beads of sealant. One at the interior edge of the flashing and one along the exterior edge of the sheathing.
F. Apply a 3/16” bead of sealant at each corner connecting the two beads from step 2E.
G. Secure the flashing to the opening over the sealant using roofing nails or corrosion resistant pan head screws at 12” max. spacing.

Important: The flashing must slope to the exterior.

3 SEAL THE OPENING

A. Clean the siding J-channel/trim or brick and rough opening thoroughly.
B. Apply a 3/8” bead of sealant (or enough to cover the area) between the j-channel/trim and the sheathing at jambs (siding only). If a head flashing with upturned leg was used, seal between the back of the flashing and the sheathing at the head. Tool the sealant at head and/or jambs with a putty knife to press the sealant into the opening.
C. Place a 3/8” bead of sealant at each corner of the opening.
D. Apply flashing tape over the sealant at the head if a flashing with upturned leg was used. Extend the flashing tape 6” down each jamb. Cover the exterior surface of the drywall (if applicable).
E. For brick, apply low expansion foam at the jamb to seal between the back of the brick and the sheathing.
F. For siding, apply flashing tape at each jamb extending 3” onto the head and sill. Cover the exterior edge of the drywall (if applicable) and extend the tape over the sealant onto the side of the trim or j-trim.

Note: The jamb flashing tape may also be used on brick. Apply sealant to the brick before application.
### 4 PREPARE THE DOOR

#### CLIP INSTALLATION ONLY

Follow steps A-B. For frame screws skip to step 5A.

Refer to the anchor spacing instructions at the end of this booklet for clip spacing.

**Architect Series** (850) and Pella Lifestyle Series:

A. Install the clips into the fin grooves. Start one corner of the clip in the fin groove. Tap the corner into the fin groove with a hammer, then continue to tap the other corner until the clip is locked into the groove.

B. Secure the clips to the frame. Drive one #8 x 5/8” screw through the slotted hole in the center of the clip. Alternatively, it is acceptable to use two #6 x 5/8” screws through the clip with the clip on its back and not engaged in the fin groove.

**Pella Impervia:** Slide clips into the T slot starting at each corner. Use a small piece of flashing tape to prevent the clips from sliding out of place.

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### 5 SET AND FASTEN THE DOOR (CONTINUED)

**Note:** Failure to properly seal the sill attachment screws and sill plate may allow water to penetrate the interior of the home.

A. Attach a Pella aluminum sill support or wood blocking flush with the opening sill to support the exterior edge of the door frame. If existing materials will not provide support, skip this step for doors with sill nailing fins.

B. Dry fit the door. Make sure that the door is plumb, square and level. Mark and drill anchor locations. Mark the interior of the door frame at the sill to show a boundary for sealant placement. Carefully remove and set the door aside.

C. Place three 3/8” beads of sealant across the opening sill. Place the interior-most bead 1/2” from where the interior of the door sill will remain after installation. Continue this bead 6” up each jamb. Place a second bead 1/2” from the exterior of the framing. Place a 3rd bead in the groove of the sill support or 1/4” from the exterior edge of the wood blocking.

Proceed to step 2F.

**Vinyl Doors without sill nail fins, skip to step D.**

D. Remove the sill track by beginning at one end and carefully pulling it up. This will expose the slide panel pocket.

**Note:** A hooked tool like an Allen wrench will easily get the track started.

E. Drill 3/16” holes through the sill every 18”, starting from each corner and 1-3/16” from the interior. Counter-drill with a 3/8” bit through the first wall of the door frame only. Use a drill guide set 1/4” from the end of the bit to prevent drilling through the second wall.

F. Apply 2 continuous 1/4” to 3/8” diameter beads of sealant across the sill of the opening and 12” up the jams, towards the interior side of the door (between the anchor holes and interior edge of door). DO NOT apply sealant between the anchor holes and the exterior side of the sill plate or floor.

G. Center the bottom of the door in the opening and tilt the door into position. Do not slide the door into the opening. Sliding will damage the sealant lines. Check the jambs for plumb and confirm there is room for shimming between the jambs and opening on each side.

H. Pre-drill and drive two screws one near the top of each side of the door through the frame or clip. (See anchor instructions at the end of this booklet for screw or clip spacing.)

I. Plumb and square the door. Place shims at each anchor location and lock strike. Keep shims 1/2” short of door frame depth. Insert additional shims starting 6” from the bottom as needed to keep jambs straight and panel reveals even on all four sides.

**Note:** Additional shims are required at screw locations for advanced performance, impact-resistant units and combinations and combinations. (See the anchor instructions at the end of this booklet.)

J. Drive screw(s) into the keeper strike on the vent side of 2-panel doors. Refer to the anchoring instructions at the end of this booklet.

K. Position and secure the roller retainer (if applicable) by drilling holes through the remaining holes and insert a screw in each hole. (Refer to the anchor instructions at the end of this booklet or in the hardware package.)

L. Install the sliding panel. From the exterior, tilt the top of the panel and insert it into the top track. Move the bottom of the panel toward the door frame and set it on the bottom track. Be careful not to pinch your fingers between the two panels. DO NOT close the sliding panel until the hardware is installed. The door may lock when closed.

M. Check door operation.

**Note:** Adjust shims to correct any issues with plumb, square, operation or reveal.

N. Install panel retainers (if applicable) or re-install if the vent panel was removed during installation. Refer to the instructions included in the panel retainer hardware package.

Install bumpers (if applicable). Refer to the anchor instructions at the end of this booklet.

**WARNING:** If the panel retainer is not installed, the door panel can fall from the product, possibly causing death or serious injury. Follow directions closely when installing and servicing the product.

O. Install the handles. Refer to the instruction in the hardware box.

P. Adjust the panel height to ~ 1/8” clearance to head of unit by removing the hole cover and using a #2 Phillips screwdriver to turn the roller adjustment screw clockwise (raise) or counterclockwise (lower).

**Note:** For doors with heavy impact-resistant or triple pane glass use a small pry bar to raise the panel while turning the adjustment screw. This will prevent the threads from being stripped (Applies to all methods).

Q. Adjust the footbolt (if applicable) refer to the anchor instructions at the end of this booklet.

R. Pella® 150 Series, ThermaStar by Pella®, Encompass by Pella®, and Pella® 350 Series doors: Install the keeper and adjust the lock hook (if necessary). Refer to the anchor instructions at the end of this booklet.

S. Check door operation by opening and closing the door.

T. Pella 350 Series Only: Install weep hoods at the door sill.

U. Install interior sealant. Refer to the interior sealant instructions at the end of this booklet. Use additional sealant around clips to prevent air and water infiltration.

V. Attach wood blocking to the exterior of the opening to support the edge of the door sill (doors with sill nail fins only).

W. Install exterior sealant between the door frame and the finished wall material. Refer to the exterior sealant instructions at the end of this booklet.
Pella® impact-resistant Products have been tested in accordance with the large missile impact testing requirements of ASTM E 1886 and ASTM E 1996. Pella impact-resistant Products are neither hurricane proof nor are they shatter proof. Severe wind and rain may produce temporary conditions which exceed product performance standards. When these units are subjected to intense storms or extreme conditions, which exceed the intended design pressures, air, water and flying debris infiltration may occur. Advanced performance and impact-resistant require the use of installation clips or screws through the frame. The use of fins or brickmould is optional and will not affect anchorage requirements. Local building codes may have additional anchoring requirements.

Units with Pella Enduraclad exterior trim with narrow fins and NO pre-punched holes must be anchored using frame screws or installation clips.

An "X" in the chart below indicates the fastener (row) to be used, under a specific installation method column. All fasteners marked with an "X" in an installation method column are necessary to meet documented performance values.

<table>
<thead>
<tr>
<th>FASTENER LETTER</th>
<th>INSTALLATION METHOD</th>
<th>OPENING SUBSTRATE TYPE</th>
<th>ILLUSTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Character</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nail Fin &amp; Screws</td>
<td>Screws Through Frame</td>
<td>Clip &amp; Screws</td>
<td>Wood</td>
</tr>
<tr>
<td><strong>A</strong></td>
<td>X</td>
<td>2&quot; 11 Ga. Roof Nail</td>
<td>I, II, IV</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>X</td>
<td>X</td>
<td>3/16&quot; x 2-1/2&quot; Masonry Screw</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>X</td>
<td>#10 x 3-1/2&quot;</td>
<td>1/4&quot; x 3-1/2&quot; Masonry Screw</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>X</td>
<td>X</td>
<td>#8 x 3&quot;</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td>X</td>
<td>#6 x 1-1/4&quot;**</td>
<td>3/16&quot; x 1-1/4&quot; Masonry Screw</td>
</tr>
</tbody>
</table>

* Architect Series impact-resistant must be installed with either Screw Through Frame or Clip & Screw method, but may also have nail fins.

** For light gauge steel framing, use #10 self-tapping screws.

---

Anchor Spacing Illustration

- **A** = Fastener Letter listed in the chart with corresponding locations shown on illustrations. i.e. **A**
- Multiple installation methods may be shown in each illustration.
- See chart for fastener descriptions and if fastener is used per installation method.
ANCHOR INSTRUCTIONS - BLOCK FRAME INSTALLATION METHODS FOR CLAD EXTERIOR ARCHITECT SERIES® AND PELLA® LIFESTYLE SERIES SLIDING PATIO DOORS (INCLUDING ARCHITECT SERIES IMPACT-RESISTANT)

**Clip and Screw Installation Method**

- **Lip**
  - #6 x 5/8" corrosion resistant screws
  - 6" from end

- **Shim**
  - 3/16"

- **Fixed Head Stop**
  - 3/16"

- **Screen Track**
  - (At Mullion or At Seam)
  - See Illustration I

- **Nail Fin, Jambs**
  - Optional / Alternate
  - Clips may be bent 90˚ outward
  - Add sealant to exterior holes before installing screws.

- **Clip and Screw, Jambs**
  - Optional / Alternate
  - Add sealant to exterior holes before installing screws.

- **Exterior sill edge must be supported to meet performance values. Apply Pella aluminum sill support or wood blocking as required to support the exterior edge of the door frame.**

- **Reapply the vent panel retainer after all anchoring is complete and vent panel is installed.**

- **Jamb with lock strikes (1 or 2 strikes may be present)**

- **Note: Strikes Factory installed for 4-Panel and 3-Panel with mulled lock jambs.**
## ANCHOR INSTRUCTIONS - BLOCK FRAME INSTALLATION METHODS FOR PELLA® 250 SERIES, PELLA® 150 SERIES, THERMASTAR® AND ENCOMPASS BY PELLA® SLIDING PATIO DOORS

Note: Standard performance only. Additional anchoring may be required for performance upgrade, impact-resistant products or to comply with local building code requirements.

<table>
<thead>
<tr>
<th>Product</th>
<th>Location</th>
<th>Anchor Type</th>
<th>Instructions</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pella® 150 Series, ThermaStar/Encompass by Pella</td>
<td>Head / Jamb / Sill Frame Screws</td>
<td>#10 x 2” Corrosion Resistant (provided)</td>
<td>Pre-drill through both walls with 5/32” pilot hole. Drill through the first wall only with a 3/8” bit. Then drive screws. Refer to the illustrations for location and spacing. Screws through the sill require sealant and self-sealing washer.</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>Head and Sill - Interlockers only</td>
<td>#10 x 2” Corrosion Resistant (provided)</td>
<td>Pre-drill through both walls with 5/32” pilot hole. Drill through the first wall only with a 3/8” bit. Then drive screws. Refer to the illustrations for location and spacing. Screws through the sill require sealant and self-sealing washer.</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>Jamb Strike / Lock / Keeper</td>
<td>#6 x 1/2” starter screw and 3” screws (provided) 1/4” x 3-1/2” Masonry Screw</td>
<td>Refer to installing the keeper instructions on page BFSD - 14 and illustrations below.</td>
<td>C</td>
</tr>
<tr>
<td>Pella 250 Series</td>
<td>Head / Jamb / Sill Frame Screws</td>
<td>#10 x 2” Corrosion Resistant (provided)</td>
<td>Drive screws at each pre-drilled installation hole. Apply sealant prior to driving screws in the sill.</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>Head and Sill - Interlockers and Mullions</td>
<td>#10 x 2” Corrosion Resistant (provided) 3/16” x 1-1/2” Masonry Screw</td>
<td>Drive screws at each pre-drilled installation hole at interlockers. Pre-drill and drive screws on each side of mullions. Refer to the illustrations for location and spacing. Apply sealant prior to driving screws through the sill.</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>Jamb Strike / Lock</td>
<td>#8 x 2” (provided)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Astragal Strike / Lock</td>
<td>#8 x 3/4” (provided)</td>
<td>N/A</td>
<td>OXO / OXO: Drive screws at each hole in the lock strike (4 total).</td>
</tr>
</tbody>
</table>

### Diagrams

- **A**
  - Pella® 150 Series
  - ThermaStar / Encompass
- **B**
  - 250 Series
- **C**
  - Pella® 150 Series
  - ThermaStar / Encompass
  - 250 Series

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Note: Standard performance only. Additional anchoring may be required for performance upgrade, impact-resistant products or to comply with local building code requirements.

<table>
<thead>
<tr>
<th>Product</th>
<th>Anchor Type</th>
<th>Instructions</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>Frame</td>
<td>• #10 x 2” corrosion resistant (provided)</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1/4” x 2” Masonry Screw</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frame</td>
<td>• Place 1 screw at each pre-drilled installation hole.</td>
<td></td>
</tr>
<tr>
<td>Jams</td>
<td>Frame</td>
<td>• #10 x 2” corrosion resistant (provided)</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1/4” x 2” Masonry Screw</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Place 1 screw at each pre-drilled installation hole.</td>
<td></td>
</tr>
<tr>
<td>Strike/Lock Keeper</td>
<td>(3) #10 x 3” screws (provided)</td>
<td>• Position the strike/lock keeper over the pre-drilled holes. Insert a shim between the frame and opening.</td>
<td>B</td>
</tr>
<tr>
<td>Pocket Cover</td>
<td></td>
<td>• Install 1 jamb pocket cover in the jamb above the bumper and a second pocket cover on the lock jamb.</td>
<td>C</td>
</tr>
<tr>
<td>Sill</td>
<td>Frame</td>
<td>• #10 x 2” stainless steel (provided)</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1/4” x 2” Masonry Screw</td>
<td></td>
</tr>
<tr>
<td>Panel Bumpers</td>
<td></td>
<td>• Place sealant in each pre-drilled installation screw hole and place a rubber washer on each screw before driving it.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Press the bumper onto the sill panel track cap against the jamb of the fixed panel.</td>
<td>E</td>
</tr>
</tbody>
</table>
### ANCHOR INSTRUCTIONS - BLOCK FRAME INSTALLATION METHODS
FOR PELLA® IMPERVIA SLIDING PATIO DOORS

**Note:** Standard performance only. Additional anchoring may be required for performance upgrade, impact-resistant products or to comply with local building code requirements.

<table>
<thead>
<tr>
<th>Product</th>
<th>Anchor Type</th>
<th>Instructions</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>Head and Sill - Vertical Mullions Only</td>
<td>#10 x 1-1/2&quot; 3/16&quot; x 1-3/4&quot; Masonry Screw Place screws through frame or use clips 3&quot; and 6&quot; each side of mullion (multi-wide door combinations only).</td>
<td>A, B</td>
</tr>
<tr>
<td></td>
<td>Frame Screws</td>
<td>#8 x 3&quot; screws 3/16&quot; x 2-1/2&quot; Use factory-drilled installation holes if present. When necessary, drill holes through both walls using a 5/32&quot; bit then drill a 3/8&quot; hole through the first wall only. Refer to the illustrations for spacing and location.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Clips</td>
<td>#8 x 1-1/4&quot; screws 3/16&quot; x 1-1/2&quot; Use factory-drilled installation holes if present. When necessary, drill holes through both walls using a 5/32&quot; bit then drill a 3/8&quot; hole through the first wall only. Refer to the illustrations for spacing and location.</td>
<td>A</td>
</tr>
<tr>
<td>Jambs</td>
<td>Frame Screws</td>
<td>#8 x 3&quot; screws 3/16&quot; x 2-1/2&quot; Use factory-drilled installation holes if present. When necessary, drill holes through both walls using a 5/32&quot; bit then drill a 3/8&quot; hole through the first wall only. Refer to the illustrations for spacing and location.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Clips</td>
<td>#8 x 1-1/4&quot; screws 3/16&quot; x 1-1/2&quot; Refer to the illustrations for spacing and location.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Keeper/Strike</td>
<td>#10 x 3&quot; Pan Head Stainless Steel Screws NA For Grade 40 Security - Replace the keeper screws with Installation screws 1 at a time. For Grade 10 Security - No additional installation steps are required.</td>
<td>E</td>
</tr>
<tr>
<td>Sill</td>
<td>Foot Bolt</td>
<td>Use screws included with foot bolt package Refer to instructions and illustrations below</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Near Interlocker and Lock Jamb</td>
<td>#10 x 3&quot; 3/16&quot; x 1-3/4&quot; Pre-drill and apply sealant in each hole before driving screws. Align with roller retainer fasteners.</td>
<td>B</td>
</tr>
</tbody>
</table>

**Diagram Notes:**
- **Clip Option:** slide clips into slot from frame ends.
- **Factory installed roller retainers**
- **Pre-drill and apply sealant in each hole before driving screws. Align with roller retainer fasteners.**
- **Replace the keeper/strike screws with Installation screws 1 at a time. For Grade 10 Security - No additional installation steps are required.**

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\[ BFSD - 13 \]

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Block Frame Booklet SPD

Revised 02/07/2020
**KEEPER INSTALLATION FOR PELLA® 150 SERIES, THERMASTAR® AND ENCOMPASS BY PELLA®:**

D. **Identify the keeper** in the hardware package and perform the keeper attachment steps based on which keeper is in the package. Determine the keeper location by opening the panel a few inches and extending the lock hook. With a pencil, mark the location on the jamb directly across from the top of the shank.

E. **Place the keeper with 4 screw holes** on the jamb so the top of the slot is aligned with the pencil mark. Attach by inserting a #6 x 1/2” starter screw into one of the slotted keeper holes.

F. **Place the keeper with 2 screw holes** on the jamb by “snapping” it into the frame jamb at the desired location. The keeper may be moved up or down to align with the pencil mark. The keeper will stay in position until attached with screws.

G. **Insert a shim** between the frame jamb and the rough opening at the keeper location.

H. **Adjust the lock hook** by turning the door lock adjustment screw clockwise to loosen or counter-clockwise to tighten until the mortise lock is aligned properly, the door locks easily, and there is less than 1/16” movement when the door is locked.

I. **Install the keeper** by inserting 3” long screws (provided) through the keeper holes, the shim and into the rough opening frame members. Remove the starter screw from the 4 screw hole keeper and replace it with a 3” long screw.

**Note:** Doors with Blinds-Between-the-Glass are not reversible.

**REVERSING DOOR SLIDE FOR PELLA® 150 SERIES, THERMASTAR® AND ENCOMPASS BY PELLA®:**

A. **Remove the sill and screen tracks** from the door. (Use an Allen wrench or small hook to begin removal.)

B. **Rotate the main frame 180°** (so the sill becomes the head). Snap the sill and screen tracks into place at the bottom of the door. Carefully lay the panel on saw horses or a clean surface.

C. **Extend the lock hook** and clamp the lock hook with the vise grip.

**NOTE:** Use of the vise grip on the lock hook will prevent the mortise lock from falling when the lock mounting screws are removed.

D. **Remove the door handle** by removing the two attachment screws.

E. **Remove the mortise lock**. Remove the two screws that attach the lock assembly to the door panel. Work the lock down, then tilt it out and pull up.

F. **Rotate 180° and reinstall the lock.** Insert the mortise lock into the door panel with the lock adjusting screw positioned at the bottom, then tilt the top in and lift the lock into position. Insert the two mounting screws into the lock mounting holes.

G. **Rotate the handle 180° and install the door handle** by inserting the two backplate screws through the door panel and into the exterior handle.

**NOTE:** Rotating the handle will result in “Pella” script being upside down. A new handle must be ordered for “Pella” to be in correct orientation.

**NOTE:** The latch lever must engage the slot in the side of the mortise lock assembly.

H. **Remove the bottom rollers** from the slide panel by removing the upper screw. Reinstall the rollers in the opposite end of the door panel.

I. **High Performance Doors only**; Remove the blocks from the top rail of the door panel and reinstall them at the opposite end of the panel.

J. **High Performance Doors only**; Move the frame exterior vent plugs (white foam rods) from the head of the frame to the opposite side of the frame. A soap solution may be needed as a lubricant for re-installing the plugs.
Interior Sealant Instructions

CAUTION: Use low pressure polyurethane door and door insulating foams. Follow the directions on the can. Do not use high pressure or latex foams.

A. Insert the nozzle or straw between the rough opening and door frame from the interior. Use a pliers (if necessary) to compress the end of a straw tube to allow it to fit in tight openings.

B. Place a 1" deep bead of foam approximately 1" from the interior of the frame to allow for expansion. DO NOT fill the entire depth of the rough opening cavity.

Note: Apply foam between the frame and rough opening, NOT between jamb extensions and the rough opening.

C. To ensure a continuous interior seal, apply sealant over the interior surface of any shims or clips interrupting the foam seal. Backer rod (as necessary) and sealant can be used in place of the low expansion foam to create the interior seal. However, foam has greater insulating properties. Fiberglass batt or similar insulation is not recommended as it can absorb water and does not act as an air seal.

D. Place a continuous bead of sealant across the inner sill at the intersection of the door sill and subfloor. Continue the sealant 6" up each jamb.

Note: Use a low odor, paintable sealant such as Pella Door and Door Installation Sealant.

Re-check door operation after foam installation. Excess foam may be removed with a serrated knife after it cures.

Exterior Sealant Instructions

CAUTION: Use a high quality, multi-purpose exterior sealant such as Pella Door and Door Installation Sealant. Follow the directions on the cartridge.

When applying siding, brick veneer, flashing, or other exterior finish materials, leave adequate space between the door frame and the material for sealant application of sealant.

A. Insert backer rod 3/8" deep in the space around the door. Backer rod adds shape and controls the depth of the sealant line.

B. Apply a continuous bead of sealant to the entire perimeter of the door.

C. Shape, tool and clean excess sealant. When finished, the sealant should be the shape of an hourglass.
A. Cut the sill pan to the width of the rough opening plus 2".  
*Note: The 2" added onto the rough opening width is for a 1" bend on each end.*

B. Make a 1" cut in each fold at both end of the sill pan.  
*Note: These cuts will allow the edges of the sill pan to be bent.*

C. Cut 1" off each end of the interior sill pan lip.

D. Bend each end of the center panel up.

E. Install the sill pan by sliding into place until the exterior sill pan lip is flush with the exterior of the rough opening.

F. Apply sill flashing tape. Cut a piece of flashing tape 2" longer than the opening width. Apply at the bottom of the opening, covering the exterior sill pan lip as shown.  
*Note: If applicable, apply spray adhesive to building felt prior to applying the flashing tape.*

G. Cut a piece of flashing tape to the width of the opening. Install tape to the sill pan and overlap the flashing tape from step 1F by 1". If needed add a second or third piece of flashing tape until the sill pan is covered to the interior sill pan lip.  
*Note: The purpose of this tape is to seal the sill screws when installing the door.*

H. Cut two 9" pieces of flashing tape with a 1" x 3" tab at the bottom, on opposite corners as shown.

I. Apply the tabbed 9" pieces of flashing tape. The tape is applied so 2" will cover the inside of the rough opening and lap over the side flange of the sill pan. The 1" x 3" tab laps over the bottom flashing tape as shown.

J. Cut two 6" pieces of flashing tape and apply to each side of the rough opening, overlapping the first piece by 1" and lapping the bottom over the side flange of the sill pan as shown.

K. Cut two pieces of flashing tape 1-1/2" x 6" and apply to the bottom corners of the opening by beginning in the corner of the sill pan, with 3/4" of the tape applied to the sill pan and 3/4" of the tape applied to the side flange. The remainder of the tape is to be at a 45 degree angle onto the exterior.

L. Attach the aluminum sill support or wood blocking to the exterior of the box plate to support the edge of the door sill. Place the sill support flush with the subfloor.