

THE FOLLOWING INSTALLATION METHODS ARE INCLUDED IN THIS BOOKLET:

New Construction Installation After Building Wrap for Nail Fin Hinged Doors

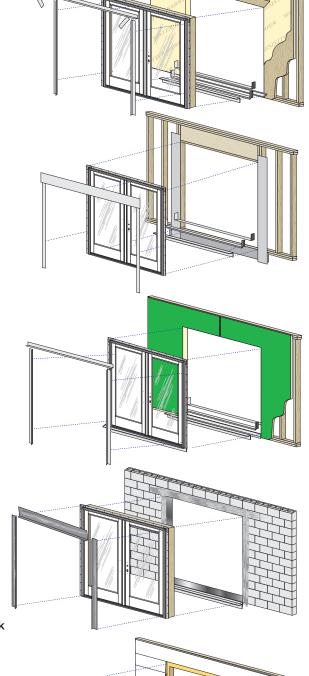
New Construction Installation Before Building Wrap for Nail Fin Hinged Doors

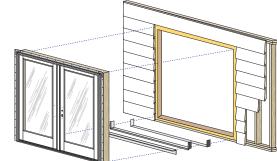
New Construction Installation with Water Resistant Sheathing for Nail Fin Hinged Doors

New Construction Installation in Masonry Construction for Nail Fin Hinged Doors

Full Frame Replacement after Brickmould/trim Removal or Siding cut-back for Nail Fin Hinged 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**. 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.







BY PURCHASING, INSTALLING OR USING PELLA PRODUCTS (INCLUDES PELLA GOODS AND PELLA SERVICES), YOU AGREED TO THE TERMS OF THE LIMITED WARRANTY AND YOU AND PELLA FURTHER AGREE TO ARBITRATE DISPUTES ARISING OUT OF OR RELATING TO PELLA PRODUCTS, AND YOU WAIVE ANY RIGHT TO PARTICIPATE IN A CLASS ACTION RELATED TO PELLA PRODUCTS unless you notify Pella of your decision to opt out of the Arbitration Agreement no later than ninety (90) calendar days from the date you purchased or otherwise took ownership of Your Pella Goods. Opting out of the Arbitration Agreement will not affect the coverage provided by any applicable limited warranty pertaining to Your Pella Products. For opt out information and additional details please read the Limited Warranty and Arbitration Agreement for your Pella Products at **www.Pella.com/arbitration**.

IMPORTANT SAFETY AND PRODUCT INFORMATION – 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.

NOTICE 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.



FULL FRAME REMOVAL WHEN PREPARING TO INSTALL A NEW NAIL FIN DOOR

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.



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 for more information.



REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

EXISTING WOOD BRICKMOULD FRAME DOOR

A. Score paint or varnish between the interior trim and the wall with a sharp utility knife.

Note: This will minimize the damage to the interior wall and trim.

- B. **Remove the interior trim.** Using a pry bar and block of wood, remove the interior trim from all four sides of the door including the stool at the bottom of the door. If the interior trim is being reused, pull the nails out through the back side of the board with nipper pliers.
- C. Cut the exterior sealant line between the exterior brickmould or trim and the exterior siding or wall cladding.
- D. Remove the panels (if necessary) to make the door lighter.
- E. Remove the exterior brickmould or flat trim using a pry bar and block of wood.

CAUTION Some doors may come out of the opening as the exterior trim is removed.

F. Remove the door frame using a pry bar if necessary.

EXISTING NAIL FIN DOOR REMOVAL

PANEL REMOVAL

A. Remove the panels (if necessary) to make the door lighter.

DOOR WITH EXTERIOR TRIM

- B. **Remove the existing exterior trim** (if applicable). Use a block of wood to protect the exterior wall material. Use a pry bar to remove the existing exterior trim.
- C. Remove the nails or screws attaching the door nailing fin to the wall.
- D. Remove the door from the opening.

DOOR WITH NO EXTERIOR TRIM

E. Use a reciprocating saw to cut through sealant line and the nailing fin.

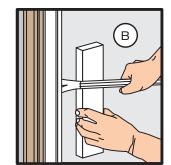
OR

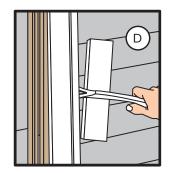
F. Remove siding or cut back the siding a minimum of 3" or far enough to expose the nailing fin. Remove the fasteners attaching the door to the wall.

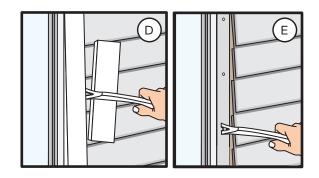
Note: When cutting back the siding, set the saw blade depth 1/8" less than the thickness of the siding. Break the cut ends of the siding off after sawing. DO NOT cut through the existing building wrap.

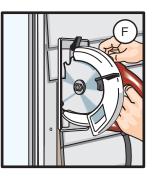
G. Remove the door from the wall.

Consult with local providers and authorities to recycle or properly dispose of old door components.

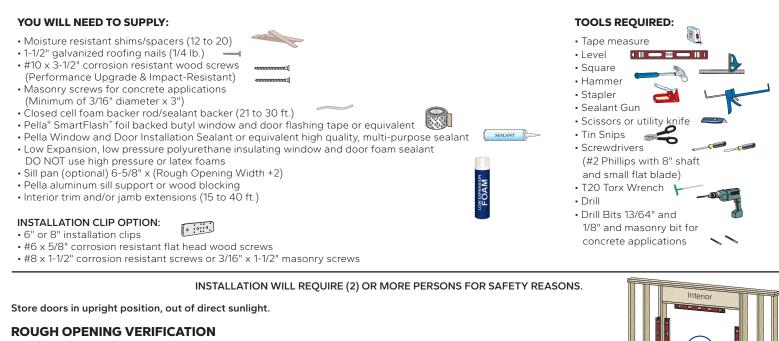












A. Confirm the opening is plumb and level.

NOTICE It is critical the bottom is level and it does not slope to the interior or exterior.

- B. Remove dirt, oil or debris from the opening and surrounding wall surfaces.
- C. **Confirm the door will fit the opening.** Measure all four sides of the opening to make sure it is 1/2" to 3/4" larger than the door in both width and 1/2" larger in height. Measure the width and height in several places to ensure the header or studs are not bowed.

NOTICE

1-1/2" or more of solid wood blocking is required around the perimeter of the opening. Fix any problems with the rough opening before proceeding.

NOTICE It is important to consider the door's exposure to weather, the exterior landing surface type and its proximity to the door sill, and to confirm impervious exterior surfaces properly slope away from the door prior to continuing with installation.

PREPARE THE DOOR FOR INSTALLATION

- A. **Remove plastic wrap and cardboard packaging from the door.** DO NOT open the door until it is securely fastened. DO NOT cut the strap that goes from the lock holes to the sill of the door (if applicable).
- B. Inspect the product for any damage such as cracks, dents or scratches. DO NOT install damaged products.
- C. Fold out installation fin to 90° (units with fold up fin only).
- Be careful not to remove or tear the fin corners.

Note: If the fin is not at 90°, the door will not line up correctly on the interior.

D. **Curved Units with Fins:** Install clips on wood with non-structural flex fins or pre-drill holes for frame screws. See nail fin anchor instructions at the end of this booklet.

Units with wide EnduraClad Exterior trim and narrow fins with NO pre-punched holes: Install clips or predrill holes for frame screws.

See nail fin anchor instruction 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 Impact-Resistant anchor schedule.

 E_{\cdot} 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 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.* 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.



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6" from end

Interior

#6 x 5/8" corrosion

resistant screws

Lip

D



Water Resistive Barrier

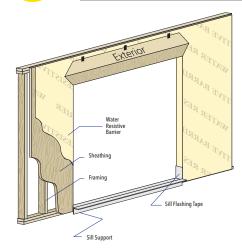
Exterior

1D

1F

IΔ

1E



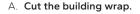
PREPARE THE OPENING

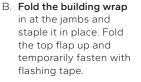
Refer to the nail fin installation preparation section at the beginning of this booklet.

1A

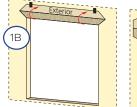
Water Resistive Barrier

3rd cut





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



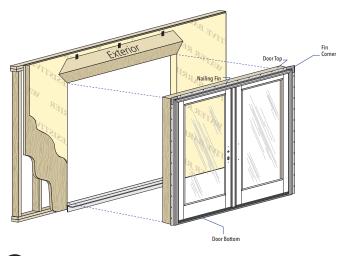
Revised 07/12/2024

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

Note: For In-Swing Doors with frame depth greater than 5", add a third piece of flashing tape so it comes within 1/4" of the interior of the door frame.

Note: Press all tape down firmly.

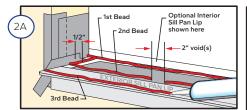
G. Attach a Pella aluminum sill support or wood blocking flush with the opening sill.

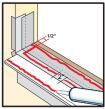


${f 2}$ setting and fastening the door

A. 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 up the sill pan lip, if applicable.

Place a second bead beginning from the interior bead 1/2" from each side, out to the exterior of the framing and along the opening. Leave 2" voids 4" from the corner and at the center. Place a third bead where the exterior of the door sill will remain after installation.





Exterio

2B

20

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

- C. Drive two fasteners, one near each end of the top nailing fin. (See nail fin anchor instructions at the end of this booklet)
- D. Plumb and square the door. Place shims at each hinge 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. See the nail fin anchor instructions at the end of this booklet.

- Check the door placement by measuring from the E. interior surface of the door frame or jamb extension to the interior surface of the wall for consistency. If the dimensions are not equal, confirm the fins are folded fully to 90° (if applicable).
- F. Finish driving fasteners into the nailing fin. Refer to the nail fin anchor instructions at the end of this booklet.

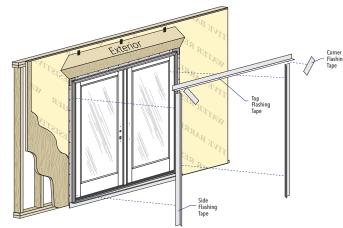
G. Check door operation.

Carefully open the door(s) and remove the shipping spacers (check under the door panel(s)). Use the construction handle to operate the panel(s). To operate flushbolts, see the instruction label on the astragal strike (if applicable).

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

1G



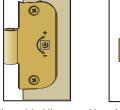


2 SETTING AND FASTENING THE DOOR CONTINUED

- H. Pre-drill and drive screws at hinges, head and sill strikes or jamb strikes, threshold or low-profile sill and frames. See the nail fin anchor instructions at the end of this booklet.
- I. **Open and close the door to check operation.** Make sure the door will latch correctly. If there are problems with operation adjust the shims and hinges (see below) and confirm the door frame is plumb, level and square and the gap between the door panel(s) and frame is consistent.
- J. Adjustable hinges can be used to move the panel(s). Turn the center screw with a T20 Torx wrench clockwise (+) to move the panel away from the frame or counter-clockwise (-) to move the panel toward the frame. A 3/4 turn provides approximately 5/32" adjustment.

Do not adjust the hinges if the top and bottom hinge screws are loose.

K. Doors without adjustable hinges have plastic shims behind the hinges; remove shims to move the panel toward the frame. Additional shims may be added to move the panel away from the frame



Adjustable Hinge

Non-Adjustable Hinge

${f 3}$ integrating with the building wrap

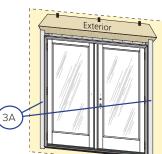
Note: For fold-up or slide-in fins, seal the fin to frame joint by either applying flashing tape 1/2" onto the frame, or sealing the joint with installation sealant after placing flashing tape.



A. Apply straight side flashing tape. Cut two pieces of flashing tape 4" taller than straight sides. Apply tape over the fin and onto weather resistive barrier. Extend tape 2" above and below straight sides.

Doors with angle top transoms or curved tops: On the short side, do not allow the side tape to extend higher than what the top tape will cover.

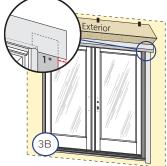




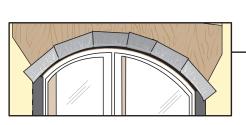


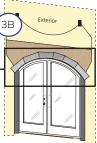
B Apply top flashing tape.

Rectangular Units: Cut one piece of flashing tape to extend 1" past both side flashing tapes.

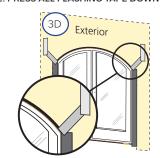


Curved Top Units: Using several short pieces, start taping from the sides of the door working towards the peak. Cut each piece short enough so each piece overlaps the previous piece. Tighter curved frames will require shorter pieces of tape.





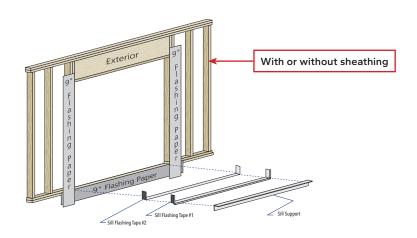
- C. Fold down top flap of weather resistive barrier.
- D. Apply flashing tape to top diagonal cuts. Cut pieces of flashing tape at least 1" longer than each diagonal cut. Lap tape 1" past end of cut onto weather barrier. Overlap multiple pieces of tape by 1" when necessary.
 Note: PRESS ALL FLASHING TAPE DOWN FIRMLY.





- E. Install interior sealant. Refer to the interior sealant instructions at the end of this booklet.
- F. **Install head flashing,** properly incorporating it with the siding and building wrap according to applicable code requirements.
- G. Install exterior sealant. (After wall cladding is installed) Refer to the exterior sealant instructions at the end of this booklet.



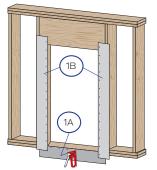


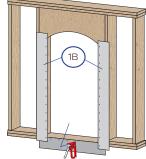
Refer to the nail fin installation preparation section at the beginning of this booklet.

A. **Apply flashing paper at the bottom.** Cut one piece of 9" minimum width flashing paper 18" longer than the width of the opening. Staple it flush with the top of the sill plate.

Note: bottom flashing paper is not required on concrete floors.

B. Apply flashing paper to the sides. Cut 2 pieces of 9" minimum width flashing paper 18" longer than the longest straight side of the opening. Center the flashing paper with the opening height and staple one piece flush with the inside edge on both sides.



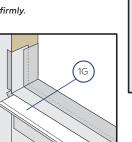


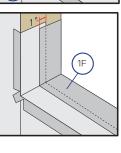
If using an optional sill pan, refer to the sill pan instruction page at the end of this booklet.

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

Note: Press all tape down firmly.

G. Attach a Pella aluminum sill support or wood blocking flush with the opening sill.

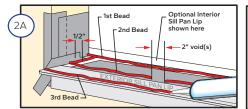


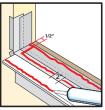


${f 2}$ setting and fastening the door

A. **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 up the sill pan lip, if applicable.

Place a second bead beginning from the interior bead 1/2" from each side, out to the exterior of the framing and along the opening. Leave 2" voids 4" from the corner and at the center. Place a third bead where the exterior of the door sill will remain after installation.





Exterio

2B

2D

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

- C. **Drive two fasteners,** one near each end of the top nailing fin. (See nail fin anchor instructions at the end of this booklet)
- D. Plumb and square the door. Place shims at each hinge 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. See the nail fin anchor instructions at the end of this booklet.

E. Check the door placement by measuring from the

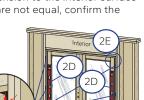
interior surface of the door frame or jamb extension to the interior surface of the wall for consistency. If the dimensions are not equal, confirm the fins are folded fully to 90° (if applicable).

- F. **Finish driving fasteners** into the nailing fin. Refer to the nail fin anchor instructions at the end of this booklet.
- G. Check door operation.

Carefully open the door(s) and remove the shipping spacers (check under the door panel(s)) Use the construction handle to operate the panel(s).

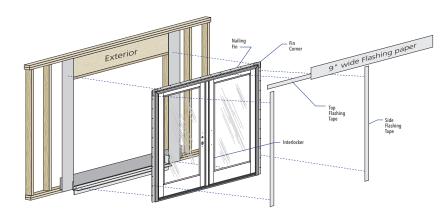
To operate flushbolts, see the instruction label on the astragal strike (if applicable).

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









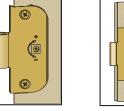


SETTING AND FASTENING THE DOOR (CONTINUED)

- H. Pre-drill and drive screws at hinges, head and sill strikes or jamb strikes, threshold or low-profile sill and frames. See the nail fin anchor instructions at the end of this booklet.
- I. **Open and close the door to check operation.** Make sure the door will latch correctly. If there are problems with operation adjust the shims and hinges (see below) and confirm the door frame is plumb, level and square and the gap between the door panel(s) and frame is consistent.
- J. Adjustable hinges can be used to move the panel(s). Turn the center screw with a T20 Torx wrench clockwise (+) to move the panel away from the frame or counter-clockwise (-) to move the panel toward the frame. A 3/4 turn provides approximately 5/32" adjustment.

Do not adjust the hinges if the top and bottom hinge screws are loose.

K. Doors without adjustable hinges have plastic shims behind the hinges; remove shims to move the panel toward the frame. Additional shims may be added to move the panel away from the frame.



Adjustable Hinge

Non-Adjustable Hinge

INTEGRATING WITH THE BUILDING WRAP

Note: For fold-up or slide-in fins, seal the fin to frame joint by either applying flashing tape 1/2" onto the frame, or sealing the joint with installation sealant after placing flashing tape.

or slide-in Flashing Tape Option to frame oplying "onto the Flashing Tape the joint sealant after tape.

A. Apply straight side flashing tape. Cut

two pieces of flashing tape 4" taller than straight sides. Apply tape over the fin and onto weather resistive barrier. Extend tape 2" above and below straight sides.

Doors with angle top transoms or curved tops: On the short side, do not allow the side tape to extend higher than (what the top tape will cover.





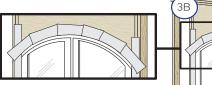
B. Apply top flashing tape.

Rectangular Units: Cut one piece of flashing tape to extend 1" past both side flashing tapes.

Curved Top Units: Using several short pieces, start taping from the sides of the door working towards the peak. Cut each piece short enough so each piece overlaps the previous piece. Tighter curved frames

will require shorter pieces of tape.

NOTE: PRESS ALL FLASHING TAPE DOWN FIRMLY.



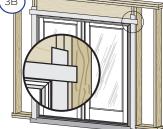
C. Apply top flashing paper.

Rectangular doors: Cut one piece of 9" minimum width flashing paper 21" longer than the door width. Center it above the door and flush with the top. Staple it to the header.

Shaped Doors: Cut one piece of flashing paper long enough to overlap the side flashing paper by 2" on each side. Cut the bottom of the paper to match the shape of the door (curved only). Center it above the door and flush with the top. Staple it to the header. Ensure the top of the side flashing paper is completely covered by the top flashing paper on each side. Apply multiple pieces of top flashing paper if necessary overlapping them 6" in watershed fashion.

NOTE: When apply building paper to the wall, ensure the sill flashing paper overlaps the building paper to create a watershed effect.

- D. **Install interior sealant.** Refer to the interior sealant instructions at the end of this booklet.
- H. **Install head flashing,** properly incorporating it with the siding and building wrap according to applicable code requirements.
- Install exterior sealant (after wall cladding is installed). Refer to the exterior sealant instructions at the end of this booklet.

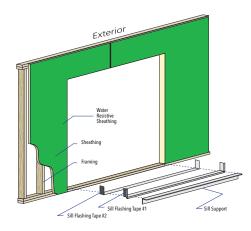


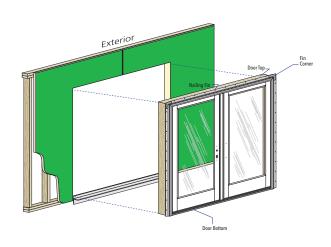




3A







Refer to the nail fin installation preparation section at the beginning of this booklet.

A. **Inspect the joints of the water resistant sheathing.** Joints must be sealed according to the sheathing manufacturer's instructions. Pella Corporation assumes no responsibility for the design, quality or durability of the sheathing system or its joints. Taped joints intersecting with the bottom or sides of the opening must have tape installed before beginning installation.

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

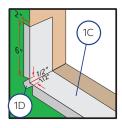
- B. Cut 2 pieces of flashing tape 12" longer than opening width.
- C. Apply sill flashing tape #1 at the sill extending 2" to the exterior and 6" up each jamb.
- D. Cut 1" wide tabs at each corner by tearing the foil 1/2" each way from corner.
- E. Apply sill flashing tape #2 overlapping tape #1 by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

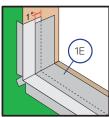
Note: For In-Swing Doors with frame depth greater than 5", add a third piece of flashing tape so it comes within 1/4" of the interior of the door frame.

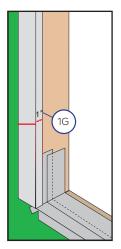
- F. **Cut 2 pieces of flashing tape** equal to the height of each side of the opening.
- G. Apply one piece on each jamb starting 1" from the exterior of the framing, over the edge of the sheathing and onto the surface of the sheathing.

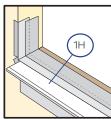
IMPORTANT: Use a roller to firmly press all flashing tape down until the texture of the sheathing can be seen through the tape.

H. Attach a Pella aluminum sill support or wood blocking flush with the opening sill.



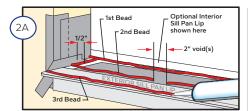


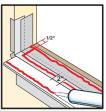




- **2** SETTING AND FASTENING THE DOOR
- A. **Place three 3/8" beads of sealant across the opening sill.** Place the interior-most bead 1/2" from where the interior of the door sill will remain after installation. Continue this bead up the sill pan lip, if applicable.

Place a second bead beginning from the interior bead 1/2" from each side, out to the exterior of the framing and along the opening. Leave 2" voids 4" from the corner and at the center. Place a third bead where the exterior of the door sill will remain after installation.





Exterior

2B

2D

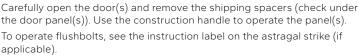
B. **Center the bottom of the door in the opening** and tilt the door into position. Do not slide the door into the opening. Sliding will damage the sealant lines.

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

- C. **Drive two fasteners,** one near each end of the top nailing fin. (See nail fin anchor instructions at the end of this booklet)
- D. Plumb and square the door. Place shims at each hinge 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. See the nail fin anchor instructions at the end of this booklet.

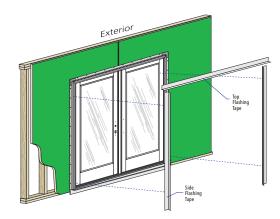
- E. Check the door placement by measuring from the interior surface of the door frame or jamb extension to the interior surface of the wall for consistency. If the dimensions are not equal, confirm the fins are folded fully to 90° (if applicable).
- F. **Finish driving fasteners** into the nailing fin. Refer to the nail fin anchor instructions at the end of this booklet.
- G. Check door operation.



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



NEW CONSTRUCTION INSTALLATION WITH NAIL FIN OVER WATER RESISTANT SHEATHING (CONTINUED)



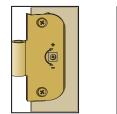


2 SETTING AND FASTENING THE DOOR (CONTINUED)

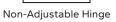
- H. Pre-drill and drive screws at hinges, head and sill strikes or jamb strikes, threshold or low-profile sill and frames. See the nail fin anchor instructions at the end of this booklet.
- I. **Open and close the door to check operation.** Make sure the door will latch correctly. If there are problems with operation adjust the shims and hinges (see below) and confirm the door frame is plumb, level and square and the gap between the door panel(s) and frame is consistent.
- J. Adjustable hinges can be used to move the panel(s). Turn the center screw with a T20 Torx wrench clockwise (+) to move the panel away from the frame or counter-clockwise (-) to move the panel toward the frame. A 3/4 turn provides approximately 5/32" adjustment.

Do not adjust the hinges if the top and bottom hinge screws are loose.

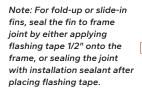
K. Doors without adjustable hinges have plastic shims behind the hinges; remove shims to move the panel toward the frame. Additional shims may be added to move the panel away from the frame.

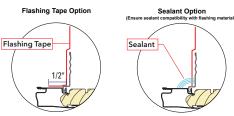






3 INTEGRATING WITH THE BUILDING WRAP



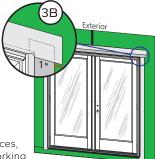


A. **Apply straight side flashing tape.** Cut two pieces of flashing tape 4" taller than straight sides. Apply tape over the fin and onto weather resistive barrier. Extend tape 2" above and below straight sides.

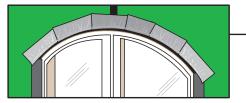
Doors with angle top transoms or curved tops: On the short side, do not allow the side tape to extend higher than what the top tape will cover.

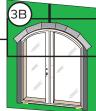
B. Apply top flashing tape.

Rectangular Units: Cut one piece of flashing tape to extend 1" past both side flashing tapes.



Curved Top Units: Using several short pieces, start taping from the sides of the door working towards the peak. Cut each piece short enough so each piece overlaps the previous piece. Tighter curved frames will require shorter pieces of tape.





- C. Apply a second layer of sheathing manufacturer's joint sealant tape. Cut one piece so it will extend 1" past the first layer of flashing tape on each side. Overlap the first layer of tape by 1" to create a water shed effect.
- D. **Apply sheathing manufacturer's joint sealant tape** to any joints intersecting with the top of the opening, overlapping the head sealant tape in accordance with the manufacturer's instructions.

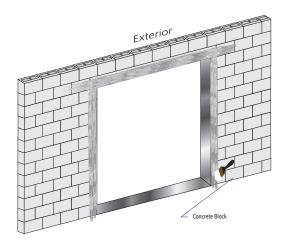




IMPORTANT: Use a roller to firmly press all flashing tape down until the texture of the sheathing can be seen through the tape.

- E. Install interior sealant. Refer to the interior sealant instructions at the end of this booklet.
- F. **Install head flashing,** properly incorporating it with the siding and sheathing according to applicable code requirements.
- G. Install exterior sealant. (After wall cladding is installed) Refer to the exterior sealant instructions at the end of this booklet.





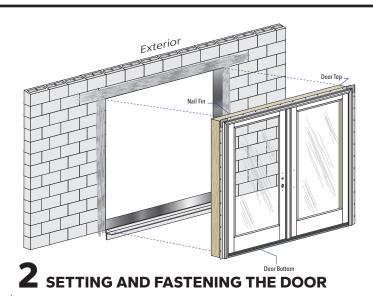
Refer to the nail fin installation preparation section at the beginning of this booklet.

A. Apply water resistant coating. Extend the coating into the opening on all four sides and onto the wall surface at least 9". 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.

Note: Allow liquid flashing to dry according to the manufacturer's recommendations.

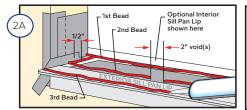
 B. Apply 2 beads of sealant to the masonry opening where the wood buck will be attached.
Note: Ensure the sealant is compatible with the water resistant coating.

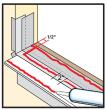
- C. **Pre-drill and fasten the treated** wood buck to the masonry opening using code-approved fasteners and spacing.
- D. Apply water resistant coating (optional) over the wood buck and onto the masonry opening. If using liquid applied flashing, allow it to dry according to the manufacturer's recommendations before proceeding.
- E. Attach a Pella aluminum sill support or wood blocking flush with the opening sill.



A. **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 up the sill pan lip, if applicable.

Place a second bead beginning from the interior bead 1/2" from each side, out to the exterior of the framing and along the opening. Leave 2" voids 4" from the corner and at the center. Place a third bead where the exterior of the door sill will remain after installation.





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

- C. Drive two fasteners, one near each end of the top nailing fin. (See nail fin anchor instructions at the end of this booklet)
- D. Plumb and square the door. Place shims at each hinge 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.

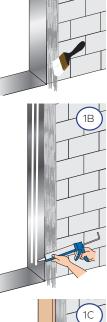
Note: Additional shims are required at screw locations for advanced performance, impact resistant units and combinations. See the nail fin anchor instructions at the end of this booklet.

- E. 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. If the dimensions are not equal, confirm the fins are folded fully to 90° (if applicable).
- F. **Finish driving fasteners** into the nailing fin. Refer to the nail fin anchor instructions at the end of this booklet.

G. Check door operation.

Carefully open the door(s) and remove the shipping spacers (check under the door panel(s)). Use the construction handle to operate the panel(s). To operate flushbolts, see the instruction label on the astragal strike (if applicable).

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



1Δ



NFHD - 11

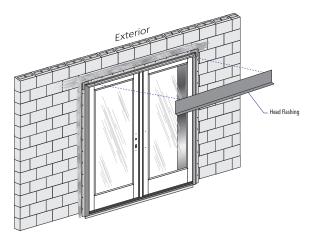
9

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NEW CONSTRUCTION INSTALLATION INTO MASONRY CONSTRUCTION (CONTINUED)

FOR THE INSTALLATION OF NEW NAIL FIN DOORS INTO MASONRY OPENINGS WITH WOOD BUCKS





SETTING AND FASTENING THE DOOR (CONTINUED)

- H. Pre-drill and drive screws at hinges, head and sill strikes or jamb strikes, threshold or low-profile sill and frames. See the nail fin anchor instructions at the end of this booklet.
- Open and close the door to check operation. Make sure the door will latch correctly. If there are problems with operation adjust the shims and hinges (see below) and confirm the door frame is plumb, level and square and the gap between the door panel(s) and frame is consistent.
- J. Adjustable hinges can be used to move the panel(s). Turn the center screw with a T20 Torx wrench clockwise (+) to move the panel away from the frame or counterclockwise (-) to move the panel toward the frame. A 3/4 turn provides approximately 5/32" adjustment.

Adjustable Hinge Non-Adjustable Hinge

Do not adjust the hinges if the top and bottom hinge screws are loose.

K. Doors without adjustable hinges have plastic shims behind the hinges; remove shims to move the panel toward the frame. Additional shims may be added to move the panel away from the frame.

5 INTEGRATING WITH THE BUILDING WRAP

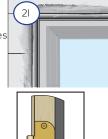
Note: For fold-up or slide-in fins, seal the fin to frame joint by

either applying flashing tape 1/2" onto the frame, or sealing the joint with installation sealant after placing flashing tape.

If liquid applied flashing was used to prepare the opening, apply it over the nail fin at jambs and head at this time according to

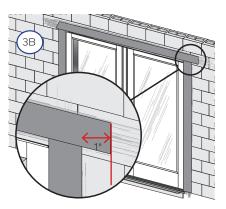
the manufacturer's instructions. Leave the sill nailing fir uncovered. If the opening was prepared using SASM, follow steps C-D.

A. Apply straight side flashing tape. Cut two pieces of flashing tape 4" taller than straight sides. Apply tape over the fin and onto weather resistive barrier. Extend tape 2" above and below straight sides. Doors with angle top transoms or curved tops: On the short side, do not allow the side tape to extend higher than what the top tape will cover.



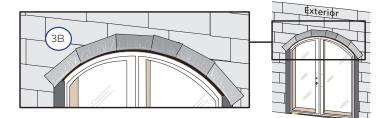
Rectangular Units: Cut one piece of flashing tape to extend 1" past both side flashing tapes.

B. Apply top flashing tape.



Curved Top Units: Using several short pieces, start taping from the sides of the door working towards the peak. Cut each piece short enough so each piece overlaps the previous piece. Tighter curved frames will require shorter pieces of tape.

Exterior

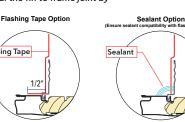


Note: PRESS ALL FLASHING TAPE DOWN FIRMLY.

Apply SASM or liquid applied water management system in watershed fashion with head flashing and in accordance with manufacturer's recommendations.

- C. Install interior sealant. Refer to the interior sealant instructions at the end of this booklet.
- D. **Install head flashing**, properly incorporating it with the siding and water management system according to applicable code requirements.
- E. **Install exterior sealant.** (After wall cladding is installed) Refer to the exterior sealant instructions at the end of this booklet.

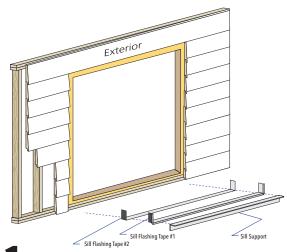
Note: Frame curved portions of rough opening to support door and wind loads (if applicable).





NFHD - 12





Refer to the existing frame removal instruction and nail fin installation preparation sections at the beginning of this booklet.

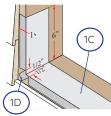
- A. Repair the wall surface around the opening (if necessary) by installing new blocking flush with the surface of the existing sheathing and/or repairing the existing building wrap with flashing tape.
- B. Cut 2 pieces of flashing tape 12" longer than opening width.
- C. **Apply sill flashing tape #1** extending far enough onto the wall surface to overlap the building wrap 1" or onto the top edge of the siding and 6" up each jamb.
- D. Cut 1" wide tabs at each corner by tearing the foil 1/2" each way from corner.
- E. Apply sill flashing tape #2 overlapping tape #1 by 1" minimum.If existing building wrap is folded into the

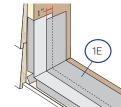
opening at the jambs, skip to step 1H.

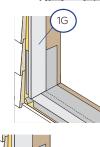
- F. **Cut 2 pieces of flashing tape.** Make one equal to the height of each side of the opening.
- G. Apply one piece on each jamb starting 1" from the exterior of the framing, over the edge of the sheathing and onto the surface of the sheathing.

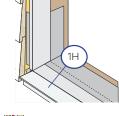
Note: PRESS ALL FLASHING TAPE DOWN FIRMLY.

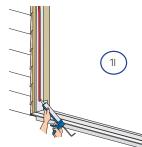
- H. Attach a Pella aluminum sill support or wood blocking flush with the opening sill.
- Apply a continuous, 3/8" tall bead of sealant 1/2" from the edge of the opening at the sides and top only. Do NOT apply sealant at the sill. This step may be omitted if there will be at least 3" of wall surface between the edge of the door frame and the siding after installation.

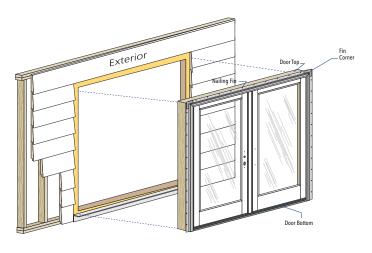








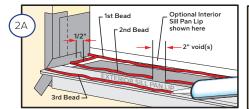


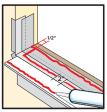


2 SETTING AND FASTENING THE DOOR

A. **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 up the sill pan lip, if applicable.

Place a second bead beginning from the interior bead 1/2" from each side, out to the exterior of the framing and along the opening. Leave 2" voids 4" from the corner and at the center. Place a third bead where the exterior of the door sill will remain after installation.





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

- C. **Drive two fasteners,** one near each end of the top nailing fin. (See nail fin anchor instructions at the end of this booklet)
- D. Plumb and square the door. Place shims at each hinge 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.

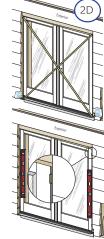
Note: Additional shims are required at screw locations for advanced performance, impact resistant units and combinations. See the nail fin anchor instructions at the end of this booklet.

- E. 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. If the dimensions are not equal, confirm the fins are folded fully to 90° (if applicable).
- F. Finish driving fasteners into the nailing fin. Refer to the nail fin anchor instructions at the end of this booklet.
- G. Check door operation.

Carefully open the door(s) and remove the shipping spacers (check under the door panel(s)). Use the construction handle to operate the panel(s).

To operate flushbolts, see the instruction label on the astragal strike (if applicable).





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



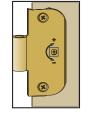


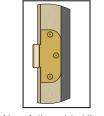


- H. **Pre-drill and drive screws at hinges,** head and sill strikes or jamb strikes, threshold or low-profile sill and frames. See the nail fin anchor instructions at the end of this booklet.
- I. **Open and close the door to check operation.** Make sure the door will latch correctly. If there are problems with operation adjust the shims and hinges (see below) and confirm the door frame is plumb, level and square and the gap between the door panel(s) and frame is consistent.
- J. Adjustable hinges can be used to move the panel(s). Turn the center screw with a T20 Torx wrench clockwise (+) to move the panel away from the frame or counter-clockwise (-) to move the panel toward the frame. A 3/4 turn provides approximately 5/32" adjustment.

Do not adjust the hinges if the top and bottom hinge screws are loose.

K. Doors without adjustable hinges have plastic shims behind the hinges; remove shims to move the panel toward the frame. Additional shims may be added to move the panel away from the frame.





Adjustable Hinge

e Non-Adjustable Hinge

INTEGRATING WITH THE BUILDING WRAP

Note: For fold-up or slide-in fins, seal the fin to frame joint by either applying flashing tape 1/2" onto the frame, or sealing the joint with installation sealant after placing flashing tape.



A. Apply straight side

flashing tape. Cut two pieces of flashing tape 4" taller than straight sides. Apply tape over the fin and onto weather resistive barrier. Extend tape 2" above and below straight sides.

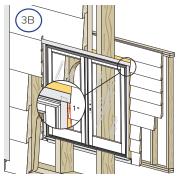
Doors with angle top transoms or curved tops: On the short side, do not allow the side tape to extend higher than what the top tape will cover.



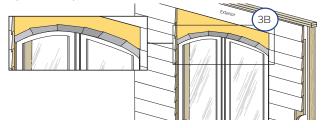
Sealant Option

B. Apply top flashing tape.

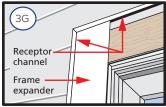
Rectangular Units: Cut one piece of flashing tape to extend 1" past both side flashing tapes.



Curved Top Units: Using several short pieces, start taping from the sides of the door working towards the peak. Cut each piece short enough so each piece overlaps the previous piece. Tighter curved frames will require shorter pieces of tape.



- C. Install interior sealant. Refer to the interior sealant instructions at the end of this booklet.
- D. **Install head flashing,** properly incorporating it with the siding and building wrap according to applicable code requirements.
- E. **Install exterior sealant.** (After wall cladding is installed) Refer to the exterior sealant instructions at the end of this booklet.
- F. Install blocking for frame expander support or solid trim at this time, if applicable.
- G. Install frame expander and receptor (if applicable). See separate instructions.



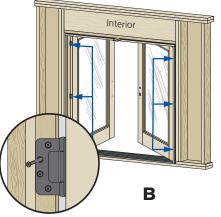


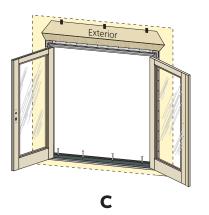
ANCHOR INSTRUCTIONS - NAIL FIN INSTALLATION METHODS FOR CLAD EXTERIOR PELLA° RESERVE AND PELLA° LIFESTYLE SERIES DOORS

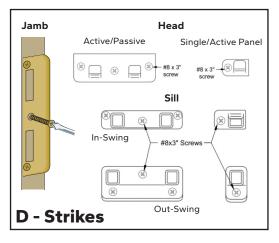
Note: Standard performance only. Additional anchoring may be required for performance upgrade, impact resistant products or to comply with local building code requirements.

Anchor Location Head and Jamb Nail Fin		Venting Any	Anchor Type			
			Wood	Masonry	Instructions	Illustration
			1-1/2" 11 Ga. Roofing Nail	NA	Every pre-punched hole	
Head	Frame	Vent	#8 x 3" corrosion resistant (provided)		For Doors ordered with no lock/no bore, place 1 screw in each pre-drilled hole (if present).	
	Strike	Active/Fixed 1-Panel Vent	(1) #8 x 3" stainless steel (provided)		Remove temporary strike screw(s) before installing the new screws.	A, D
		Active/Passive	(3) #8 x 3" stainless steel (provided)		Remove temporary strike screw(s) before installing the new screws.	A, D
	Frame	Door/Sidelight Combinations	#10 x 3" corrosion resistant	3/16" Masonry Screw	Pre-drill and install screws 3" and 6" on each side of the mullion end.	E, I
Jambs	Hinges	Out-Swing	#12 x 2-1/2" corrosion resistant (provided)		Pre-drill and drive screws into rough opening or sidelight.	В
		In-Swing	#8 x 3" corrosion resistant (provided)		Pre-drill and drive screws into rough opening or sidelight.	В
	Strike	Vent	#8 x 3" (provided)		Shim between the frame and rough opening at the strike.	D
Sill	Threshold	Vent	#8 x 3" stainless steel (provided)	3/16" Masonry Screw	Remove temporary strike screw(s) and place a dab of sealant in each hole before installing the new screws.	C, E
	Strike	Active/Fixed 1-Panel Vent	(1) #8 x 3" stainless steel (provided)		Remove temporary strike screw(s) and place a dab of sealant in each hole before installing the new screws.	A, D
		Active/Passive	(3) #8 x 3" stainless steel (provided)		Remove temporary strike screw(s) and place a dab of sealant in each hole before installing the new screws.	A, D
	Low Profile	Vent	#8 x 3" corrosion resistant(provided)	3/16" x 2" Masonry Screw	For doors with standard locks, install tubs per instruction included with sill strike package	С
	Threshold	Door/Sidelight Combinations	#10 x 3" corrosion resistant	3/16" x 3" Masonry Screw	Pre-drill and install screws 3" and 6" on each side of the mullion end.	E







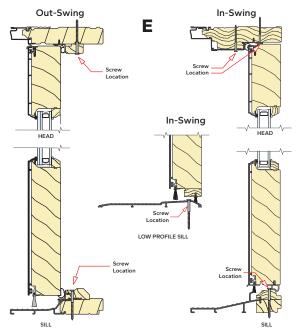






Single/Active Panel



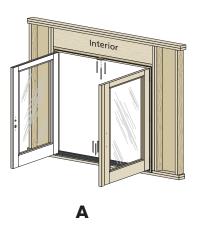


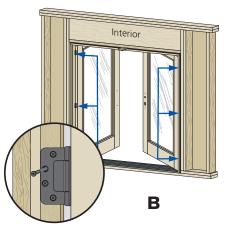


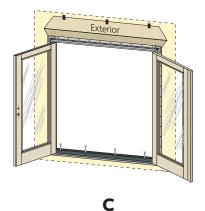
ANCHOR INSTRUCTIONS — PELLA® RESERVE AND PELLA® LIFESTYLE SERIES PATIO DOORS WITH WIDE ENDURACLAD® EXTERIOR TRIM, NARROW FINS AND NO PRE-PUNCHED HOLES

Note: Standard performance only. Additional anchoring may be required for performance upgrade, impact resistant products or to comply with local building code requirements. Units with narrow fins and NO pre-punched holes must be anchored using frame screws or installation clips. These fins are for flashing purposes only.

Anchor Location		Venting	Anchor Type			
			Wood	Masonry	Instructions	Illustration
Head	Strike	Active/Fixed 1-Panel Vent	(1) #8 x 3" stainless steel (provided)		Remove temporary strike screw(s) and place a dab of sealant in each hole before installing the new screws.	А
		Active/Passive	(3) #8 x 3" stainless steel (provided)		Remove temporary strike screw(s) and place a dab of sealant in each hole before installing the new screws.	А
	Frame	Vent	#8 x 3" corrosion resistant (provided)		For Doors ordered with no lock/no bore, Place 1 screw in each pre-drilled hole (if present).	I, H
	Frame-Screws	Fixed or Vent	#10 x 3-1/2" corrosion resistant	3/16" x 3" Masonry Screw	See Illustrations	Н
	Frame-Clips	Fixed or Vent	(2) #8 x 1-1/4" corrosion resistant	3/16" x 1-1/2" Masonry Screw	See illustrations for spacing, secure clip to frame using (2) #6 x 5/8" corrosion resistant screws	I, K
	Frame	Door/Sidelight Combinations	#10 x 3" corrosion resistant	3/16" Masonry Screw	Pre-drill and install screws 3" and 6" on each side of each mullion end.	I, H
Jambs	Strike	Vent	#8 x 3" (provided)		Shim between the frame and rough opening at the strike.	D
	Hinges	Out-Swing	#12 x 2-1/2" corrosion resistant (provided)		Pre-drill and drive screws into rough opening or sidelight.	В
		In-Swing	#8 x 3" corrosion resistant (provided)		Pre-drill and drive screws into rough opening or sidelight.	В
	Frame-Screws	Fixed or Vent	#10 x 3-1/2" corrosion resistant	3/16" x 3" Masonry Screw	See Illustrations. The weatherstrip may be temporarily moved to reveal the frame screw	H, I, J
	Frame-Clips	Fixed or Vent	(2) #8 x 1-1/4" corrosion resistant	3/16" x 1-1/2" Masonry Screw	See illustrations for spacing, secure clip to frame using (2) #6 x 5/8" corrosion resistant screws	I, K
	1-Panel Frame	Vent	#8 x 3" (provided)		Pre-drill and install screw 8" below the top of the lock jamb	G
Sill	Threshold	Vent	#10 x 3-1/2" corrosion resistant	3/16" x 3" Masonry Screw	Remove temporary screws before installing new screws	С, Н
	Strike	Active/Fixed 1-Panel Vent	(1) #8 x 3" stainless steel (provided)		Remove temporary strike screw(s) and place a dab of sealant in each hole before installing the new screws.	A
		Active/Passive	(3) #8 x 3" stainless steel (provided)		Remove temporary strike screw(s) and place a dab of sealant in each hole before installing the new screws.	А
	Low Profile	Vent	#8 x 3" corrosion resistant (provided)	3/16" x 2" Masonry Screw	For doors with standard locks, install tubs per instruction included with sill strike package	C, H, I
	Threshold	Door/Sidelight Combinations	#10 x 3" corrosion resistant	3/16" Masonry Screw	Pre-drill and install screws 3" and 6" on each side of each mullion end.	C, H, I





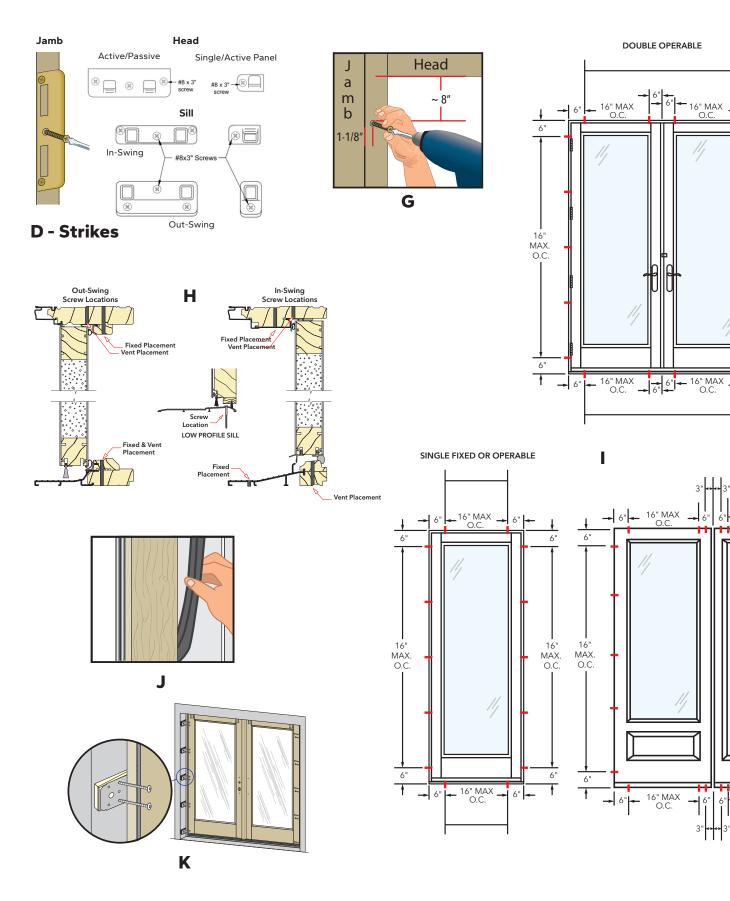


ILLUSTRATIONS CONTINUED ON NEXT PAGE



ANCHOR INSTRUCTIONS — PELLA® RESERVE AND PELLA® LIFESTYLE SERIES PATIO DOORS WITH WIDE ENDURACLAD® EXTERIOR TRIM, NARROW FINS AND NO PRE-PUNCHED HOLES

Note: Standard performance only. Additional anchoring may be required for performance upgrade, impact resistant products or to comply with local building code requirements. Units with narrow fins and NO pre-punched holes must be anchored using frame screws or installation clips. These fins are for flashing purposes only.



6'

6

6'

16" MAX

O.C.

6"

ł

6"

16" MAX

O.C.

6"

ł

6"

6"



Interior Sealant Instructions

CAUTION: Continuous backer rod (as necessary) and a high quality, low-odor interior sealant such as Pella Window and Door Installation Sealant (or equivalent) is recommended for commercial or high performance installations to create the continuous interior seal. Follow the directions on the cartridge. For standard performance or products with factory applied jamb extensions, use low pressure polyurethane insulating foams. Follow the directions on the can. Do not use high pressure or latex foams. Fiberglass batt or similar insulation is not recommended as it can absorb water and does not act as an air seal.

- 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.

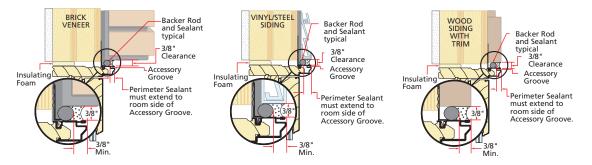
- C. **Re-Check door operation** and remove remaining shipping spacers after foam installation. Excess foam may be removed with a serrated knife after it cures.
- D. To ensure a continuous interior seal, apply sealant over or around any shims or clips interrupting the foam seal.
- E. **Place a continuous bead of sealant across the inner sill at the intersection of the door sill and subfloor.** Continue the sealant 6" up each jamb and connect with the foam seal.



CAUTION: Use a high quality, multi-purpose exterior sealant such as Pella Window 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.
- **NOTICE** For sill pans designed to drain moisture directly to the exterior, voids in the exterior seal may be required.
- C. Shape, tool and clean excess sealant. When finished, the sealant should be the shape of an hourglass.



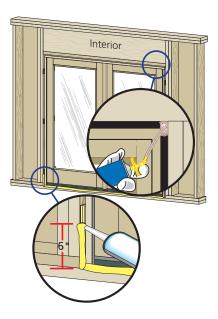
TROUBLESHOOTING - Adjustable Strike Latching Issues

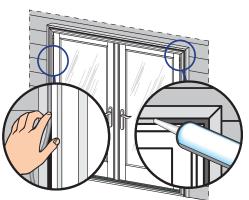


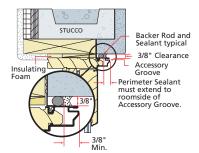


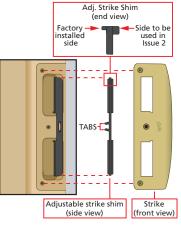
Door needs to close more tightly against the weather-strip. Remove the strike and adjustable strike shim. Remove the tabs from the adjustable strike shim and install so that the thicker side is visible at the strike edge. Reinstall the strike.











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Nail Fin Booklet HPD



NOTICE

The method of pan construction, flashing, and sealant application may vary depending on the design of the opening sill and exterior landing surface conditions. It is important to consider the exposure to weather, the exterior landing surface's proximity to the door sill, and to confirm impervious exterior surfaces properly slope away from the door.

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.

Note: 4-5/8" wide for Out-Swing and In-Swing for 4-9/16" wall condition. For other wall conditions, measure wall depth and add 1/16".

- 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.

