FOLDING DOOR - FOR FACTORY ASSEMBLED JAMBS WITH APPLIED SILL

READ SPECIFIC INSTALLATION INSTRUCTIONS COMPLETELY BEFORE STARTING ANY INSTALLATION

Failure to install and maintain our product according to these instructions will VOID any warranty, written or implied. The installer is responsible for consulting the contractor, structural engineer, architect, or consumer, for proper installation according to local codes and/or ordinances.

WARNING Every assembly and installation is different from Parrett Windows & Doors. Parrett strongly recommends consultation with a Parrett supplier or an experienced contractor, architect, or structural engineer prior to the assembly and installation of any Parrett product. PARRETT HAS NO RESPONSIBILITY IN REGARD TO POST-MANUFACTURED ASSEMBLY AND INSTALLATION OF PARRETT PRODUCTS.

CAUTION Factory applied exterior Brickmould and casing DO NOT take the place of standard window flashing. Each unit must be properly flashed and sealed with silicone for protection against water and air infiltration.

WARNING TO INSTALLER

• Using ladders and/or scaffolding and working at elevated levels can be very dangerous. Follow the manufacturer’s instructions for all equipment used in order for safe operation. Please use extreme caution when working around window or door openings. Falling from opening may result in injury or death.
• Improper use of hand/power tools could result in injury and/or product damage. Again, follow manufacturer’s instructions for safe operation of equipment.

ALWAYS WEAR SAFETY GLASSES.

• Windows and doors can be very heavy and improper lifting techniques can result in serious injury. Use safe lifting techniques and a reasonable number of people with enough strength to lift, carry, and install any Parrett window and door products to avoid injury and/or damage to any product.

ITEMS REQUIRED BY INSTALLER

• Safety Glasses
• Tape Measure
• Level
• Hammer
• Putty Knife
• Carpenter’s Square
• Caulk Gun
• Phillips Screwdriver
• Power Drill
• 3/16” Drill Bit
• Foam Backer Rod
• UV Resistant Exterior Sealant
• Shims
• 9” Adhesive Backed Rubber Membrane
1. Jamb Preparation

- Remove any diagonal bracing or other packaging from unit exterior only. Place unit exterior side down on a clean flat work surface.
- Remove all remaining bracing and packing from unit making sure to not damage the unit.
- Remove any loose items. Extension jamb will be factory applied unless ordered loose.
- Identifying the exterior of the jamb can vary depending on your configuration. Standard units will have a sloping edge on only one side of the sill. This side is your exterior. On designs without the sloping sill other identifiers should be used such as; exterior color/finish, operation direction/configuration, metal cladding, or wood species when species differs from interior to exterior.
- Install clips on side jambs. Proceed as follows:
  - Apply the clips with the short leg towards the center of the jamb and protruding towards it. Approximately 3 ½” of the flat end of the clip should be sticking out from the exterior of the jamb. Fasten using a #10 x 1” pan head screw. When installed properly the end with the small leg will be slightly bent to stop the clip from spinning.
  - Space these clips 12” on center along the side and a maximum of 4” from the top and the bottom.
  - Clips should be installed on both the left and right side jamb.

**UNITS WITHOUT FACTORY WEEP HOLES**

A drainage system must be used with the bottom channels to allow water entering the channel to flow out. We recommend two methods of accomplishing this;

- **OPTION 1** - Drill several 5/16” holes in the front of the sill angled slightly upward in such a way that the holes enter the channel near the bottom. The walls of the holes must be sealed with either a liquid sealant or the insertion of a stainless steel, aluminum, or plastic tube.

- **OPTION 2** - Drill large 1 5/8” hole through the side jamb into each end of the channel in a slightly downward angle. Insert flexible tubing into the hole and between the jamb and side studs with the end of the tubing protruding out the exterior wall. Seal around the ends to prevent water infiltration.
2. Panel Storage

• Due to the nature and size of many of these units, panels are often shipped separately from the frame. Panels must be stored laying fully supported on a clean surface, or standing completely vertical.

WARNING - DO NOT store panels in a standing/leaning position, or laying flat on saw bucks or blocks of any fashion. Improper storage can diminish the performance and life of the units.

• Panels supplied unfinished should have the finish applied as soon as possible, and within 24 hours of installation into jamb frame.
• Panels should be placed in an area completely protected from the elements or other damage until needed.
• DO NOT install hardware or handles on panels at this point. Damage can occur to these parts during installation or storage.
• DO NOT actuate the hardware mechanisms. The hardware is shipped in the correct position for installation from the factory. Actuating the hardware prior to install can lead to improper installation and hardware damage.

3. Opening Preparation

• The head, sill, and side rough framing should be at least as wide as the supplied jamb frame.
• A proper rough opening should provide ½” of unobstructed clearance on both sides and top of the unit.
• The head track of a folding unit is the most critical part of the system. This track supports ALL of the weight of the panels. Contact your architect or structural engineer to verify the header framing will support the weight of the unit with NO MORE THAN 1/8” DEFLECTION at any point along the track.
• Installation of this unit requires the head to be secured to a fully supported surface. Plywood or other sturdy filler material may be needed to be applied to header to fill the gap. Incrementally spaced shims are not an acceptable means of filling space between the head jamb and header of opening. Be sure to seal between layers and at seams when installing shim board.
• The sill of these units does not support the weight of the panels, but serves as a guide to keep panels in proper alignment. Great care should be taken to make sure the subfloor or masonry opening is completely smooth, flat, and level. The removal or addition of material or shimming may be required to obtain the proper surface for installation.

4. Jamb Installation

WARNING - UV resistant exterior sealant must be used and be compatible with all materials it comes in contact with. Follow sealant manufacturer’s instructions regarding surface cleaning, preparation, application, and temperature requirements when applying sealant. Failure to do so may result in water infiltration, property or product damage.

Metal fasteners and other hardware components may corrode when exposed to preservative tressed or fire retardant lumber. Failure to use appropriate materials for installation may cause component failure resulting in injury, property or product damage.

DO NOT install wood products directly in contact with masonry or concrete openings. Apply a proper finish or barrier (i.e. tar paper or ice/water membrane) between all wood and masonry/concrete surfaces. Failure to do so may result in water infiltration, property or product damage.

HEAD AND SILL
• The head track of a folding unit is the most critical part of the system. This track supports ALL of the weight of the panels. Contact your architect or structural engineer to verify the header framing will support the weight of the unit with NO MORE THAN 1/8” DEFLECTION at any point along the track.
• Use a level and string line to check the level and straightness of the head jamb. DO NOT allow for any deflection greater than 1/8” in any direction; forward, back, up, or down. Deflection greater than 1/8” will result in poor operation of the unit.
• Apply 3 heavy beads of caulk (1/2” is sufficient) along the length of the top of the jamb. With one bead near the interior edge, one bead on the exterior edge, and one bead down the center.
• At the ends of the jamb, apply a patch of caulk the entire depth of the jamb at least 2 inches wide.
• Apply the adhesive backed rubber membrane to the sill opening allowing approximately 4” to wrap around and down onto the exterior sheeting to prevent water infiltration. The rubber membrane should also extend approximately 4” up the side of the opening and wrap to the exterior just as the bottom.
*If a Sill Pan is desired, one can be fabricated from sheet metal and installed as necessary.
• Lift jamb into opening. Center the unit in opening side to side. Secure temporarily with clamps to prevent from falling out of opening.
• Secure the head track to the top of the opening with the supplied fasteners or other fasteners suitable for your particular installation.

- E2 System Fastening
- E3 & E4 System Fastening

• Space fasteners as depicted below as a minimum guide. Fasteners may be placed more frequently as needed. It is critical to space fasteners closer together and more frequently near the side of the jamb to support the weight when panels are in the open position.
• Double check head track level and straightness. A string line can be used to verify.
• Check the unit for square and plumb. The square can be checked by measuring from the lower left jamb corner to the upper right then measuring from the upper left corner to the lower right. When compared these measurements should vary by no more than 1/8”. Adjustment can be made by moving the jamb bottom either left or right.

1/8" Max

• Tack or clamp this position only temporarily at this time.
• Use a plumb line to correctly position the sill front to back in the opening. The center of the sill channel should be positioned 23/32” inward of the center of the top track.
In most installations, because the head is tightly secured to the top of the opening, a gap will exist between the jamb sill and the bottom of the opening. A fully supporting shim plank must be installed to properly shim and support the jamb sill. **DO NOT** use standard shims spaced apart along the bottom. Make sure to caulk between shim plank, opening, and jamb to prevent water penetration. The shim plank can be left ½” narrower of the jamb width to leave a void for the application of the final perimeter sealant.

![Diagram of shim placement](image)

**Double check sill channel level and straightness. A string line can be used to verify.**

**Space fasteners as depicted below through the center of the bottom channel. Be sure to use a UV resistant exterior sealant to seal the holes of all screws placed in the channel. Fastener spacing from ends of jamb is needed regardless of operation direction for strength when unit is open.**

![Diagram of fastener spacing](image)

**WARNING - DO NOT** fasten the jamb through any factory applied finish that will have contact with the elements. Installing fasteners through a factory finish will **VOID** any warranty written or implied on the finish and life of the unit.

**SIDE JAMB**

- Starting on one side, plumb and shim the side jamb. Plumb should be checked both side to side and front to back on the side jamb.
- Place shims above or below positions where the installation clips extend out.
- Once the entire side is plumb, Bend the straight clips to lay flat on the exterior framing or masonry. Fasten using a minimum of a #10 x 1 screw.
- Repeat on opposite side.
WARNING - DO NOT fasten the jamb through any factory applied finish that will have contact with the elements. Installing fasteners through a factory finish will VOID any warranty written or implied on the finish and life of the unit.

SEALING- SIDES AND HEAD
• Seal the voids between the jamb and opening on the sides by inserting backer rod or other insulation. DO NOT use expanding foam.
• On the exterior side, cover the void against the backer with silicone to seal the jamb to the opening. Also caulk the shim void on the sill and the seams at the head.

5. Panel Installation

• Panels will arrive numbered from the factory to assist in proper installation. Numbering order should be interoperated from the interior starting on the left side. Most hardware will be factory applied. The Roller carriers will already be installed into the top track and mounting hole locations for carriers will be predrilled on the panels.

• Identify the interior from the exterior of the panels. On standard panels this can be identified by locating the glass or panel stops. The stop on the exterior side of the panel will NOT be a separate part from the styles and rails of the panel. The interior stop will be a separate part. On custom configurations
other means of identification may be necessary such as; exterior color/finish, operation direction/configuration, metal cladding, or wood species when species differs from interior to exterior.

• Be sure when installing panels that exterior is oriented properly to avoid backward installation.
• The first panel to be installed will not necessarily be panel number 1. Locate the roller carrier in either end of the track that is fixed and will not slide. This will be your starting side.
  • If a fixed roller carrier is on both ends of the rack, begin with panel 1 on the left.
  • If the fixed roller is on the left end, begin with panel 1 on the left.
  • If the fixed roller carrier is on the right end. Begin with the last numbered panel in your series on the right.
• Remove the pivot block from the bottom channel by removing the small vertical screw. Set these aside, being sure not to misplace hardware.

• On some assemblies the hinge plate on the panel may need to be removed and assembled into the jamb as follows.
• Place support blocking near opening level with the top of the sill.
• Double check that any center positioned hinges are installed on the pivot shafts on the side jamb. These hinges are reversible for left or right sides. Be sure to match the bend direction to the carrier plate on the top.
• With the panel perpendicular to the jamb opening, place the roller on the bottom of the starting panel into the bottom channel near the pivot block mount. The pivot block may need to be placed onto the roller before inserting into the track on some assemblies. Do not fully assemble pivot block at this point.
• Align the top carrier holes with the predrilled holes in the side of the panel. Make sure when the panel swings the exterior will be oriented correctly. Secure with supplied fasteners.
• Fasten the center hinge plates with the supplied fasteners and assemble the pivot block as needed.
• Close the panel to align parallel with the track.
• Check to make sure the panel is straight, level, and evenly spaced in the opening. Place a level on the edge of the panel to check the level. The bottom gap between the panel and the sill should be consistent across the bottom. The gap at the bottom of the panel and at the top should be of equal
distance. The hardware is allows for complete adjustment, but panels have been factory pre-fit and adjusted. If major adjustments seem evident, double check for proper installation to this point.

• Open the panel back to the perpendicular position. The interior side of the panel should be facing towards the jamb opening.
• Locate the next panel in the number sequence.
• Insert the rollers of the panel into the channel. The interior of this panel should be facing the interior of the last panel.
• Rotate the top into the opening until the hardware on the opposite side of the panel aligns with the predrilled holes.

**NOTE**- Some configurations may be easier to install by modifying the last two steps. First remove the bottom roller from the panel and place it into the bottom channel. Fasten the top carrier to the panel, and then finish by re-fastening the bottom roller to the panel.
• Place proper support blocking under the panel to aid in installing hardware.
• There should be a minimum of 3 hinge points to fasten. Make sure all pull handles are to the interior if applicable.
• Slide the next available roller carrier in the upper track over and fasten at the top of the other end of the panel through the predrilled holes.
• Fasten any center hinges at this time.
• At this point the panels should slide to the side and operate smoothly to align with the track. To open, push near the meeting of the two panels.
• Make any necessary adjustments and put the panels back to the perpendicular/ open position.
• The next panel in the sequence will be installed with the exterior surfaces of the panels facing towards each other. This installation pattern will alternate until all of the panels are installed.
• Place the bottom rollers into the bottom channel.
• Fasten the top and center carriers through the predrilled holes.
• Continue installing the panels in this manner until all panels are installed or you reach an end carrier. An end carrier can be identified as a carrier that only possesses a single mounting plate. It is not like a hinge carrier with a means to attach another panel. If you reach an end carrier and still have panels left,
this means you need to start installing panels from the other side of the jamb until you no longer have panels left. The first panel on the other jamb side will be the last numbered panel in the sequence. Continuing panels will count down in order working to the right.

• Upon installation of all panels make any final adjustments to ensure proper performance. The heights of the panels should be adjusted to be even across the entire configuration. This can be accomplished by using a screwdriver to turn the adjuster at each top carrier. The metal locking lever must be pulled and held down to turn the adjuster if the plastic installation clips are removed.
• Some larger units may have an Allen type adjuster.

• Operate the units several times to ensure proper operation.
• Install all loose parts and hardware.
• When finished panels should operate similar to this;

6. Finishing Installation

• When applying trim and casing make sure all fasteners are of proper length to prevent interference with the track, rollers, or seals.
• All exterior trim, casing, wall, sheeting, or other finishing materials should be properly caulked with a UV safe sealant exterior sealant.

**WARNING** - UV resistant exterior sealant must be used and be compatible with all materials it comes in contact with. Follow sealant manufacturer’s instructions regarding surface cleaning, preparation, application, and temperature requirements when applying sealant. Failure to do so may result in water infiltration, property or product damage.

• Refer to Parrett’s Care and Maintenance Instructions for all cleaning and maintenance. For finishing instructions refer to Parrett’s Homeowner’s Manual at www.parrettwindows.com or contact customer service at *(800) 541-9527*.

Parrett will not under any circumstances be responsible for installation, repainting, refinishing, or other similar activities necessary to completing any replacement. It is the customer’s responsibility for installation, finishing, cleaning, maintenance, re-painting, refinishing, or other similar activities necessary to maintain the performance of each product.

**Troubleshooting**

**NOTE** - All units have panels factory pre-fitted and adjusted. The hardware does not provide for any major adjustment. Poor operation conditions are a result of improper jamb or panel installation. Double check installed jambs for plumb, level, flat, and straightness. Extra shimming may be needed to keep jambs within tolerance. Also misalignment of panel rollers onto track or dirt and debris can cause improper operation.

If after verification of these key points you still find the unit operation unsatisfactory please call for assistance at *(800) 541-9527* from 8:00 a.m. to 5:00 p.m. Central time or e-mail info@parrettwindows.com