

WOOD TILT-TURN

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

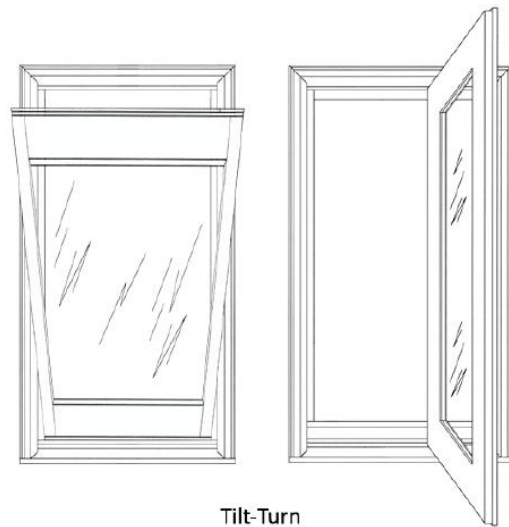
- Using ladders and/or scaffolding and working at elevated levels can be very dangerous. Follow the manufacturer's instructions for all equipment used in order for safe operation. Please use extreme caution when working around window or door openings. Falling from opening may result in injury or death.
- 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

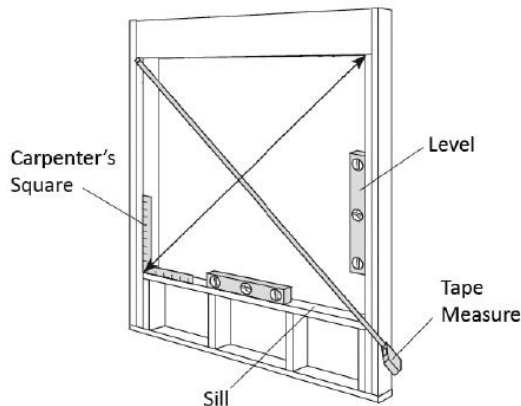
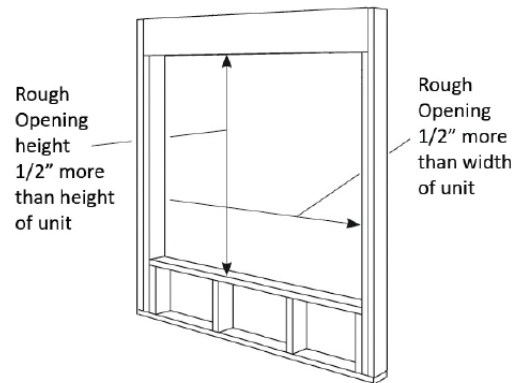
- Remove any diagonal bracing or other packaging from unit exterior only. Place unit exterior side down on a clean flat work surface.
- Remove all remaining bracing and packing from unit making sure to not damage the unit.
- Remove any loose items. Extension jamb will be factory applied unless ordered 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 and any exterior casing applied. 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.



WARNING- DO NOT unlock or open unit until it is secured into the opening. Opening the unit outside uninstalled can twist or otherwise distort the frame resulting in poor performance upon installation.

2. Opening Preparation

- The side and head rough framing should be at least as wide as the supplied jamb frame.
- A proper rough opening should provide $\frac{1}{2}$ " of unobstructed clearance greater than the overall unit dimensions.

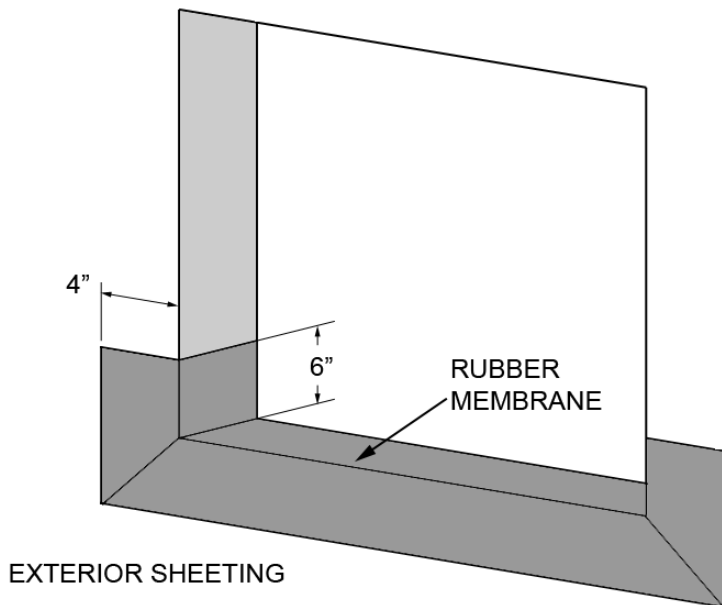


- The square of the rough opening should be checked before starting to install the unit. Check the square by cross measuring from the lower left corner to the upper right corner then from the upper left corner to the lower right corner. These measurements must be within $\frac{1}{8}$ " tolerance of each other. Adjustments to the opening should be made at this point to correct any problems.
- Check to make sure the opening is plumb and level. The sill **MUST** be level before starting the installation.

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- 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.

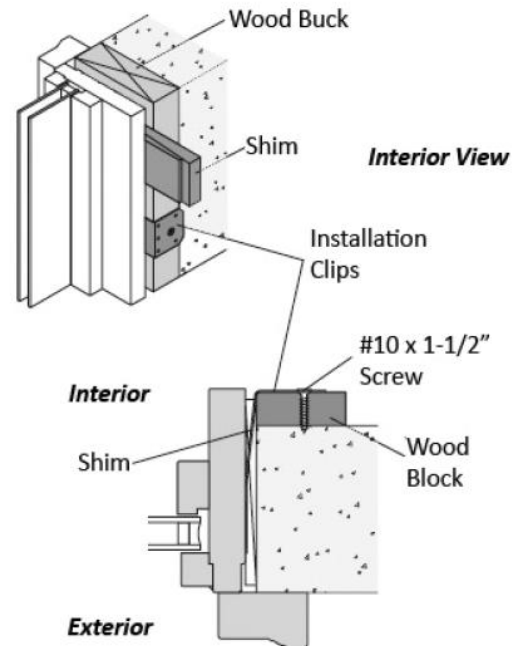
- Cut rubber membrane 12" longer than the width of the opening.
- Starting 6" from the bottom of the opening at one side, apply the membrane onto the frame face so that at least 4" of the membrane just out to the exterior. Continue along the bottom of the opening until you reach the other side. Then continue 6" up the other side of the opening. Be sure to keep a minimum of 4" sticking to the exterior the entire distance.
- Starting in the center, fold the membrane down onto the exterior sheeting. Continue to smooth the membrane down as you work towards the sides.
- Depending on the type of membrane, you may or may not need to make relief cuts or use roofing nails to transition from the bottom to the side. Make sure to fold the membrane on the side to the exterior sheeting as on the bottom.



- ** A sheet metal sill pan may be used in place of the rubber membrane. Follow local code or instruction provided by the manufacturer. Be sure metal is properly treated/ coated to withstand weather exposure.
- Apply 3 heavy beads of caulk ($\frac{1}{2}$ " is sufficient) along the length of the bottom opening. With one bead near the interior edge, one bead on the exterior edge, and one bead down the center.
- At the ends of the bottom opening, apply a patch of caulk the entire depth of the sill at least wide enough to cover the ends of the side jamb, or approximately 2" depending on design.
- On units with factory applied casing, apply a heavy bead of caulk ($\frac{1}{2}$ " is sufficient) on the exterior sheeting of the opening approximately $\frac{1}{2}$ " from the opening.

MASONRY OPENINGS

- Special opening preparation is needed for masonry openings. Secure a wood buck frame into the opening at least the same depth as the jamb. The buck thickness should be thick enough to be used in the securing of the unit into the frame (standard 2x treated framing is sufficient) and still provide sufficient clearance to install the unit.
- The framing must be sealed between the framing and the opening and a cap bead of sealant applied to the seam on the exterior.
- Once this buck framing is installed, continue with installation as instructed here.



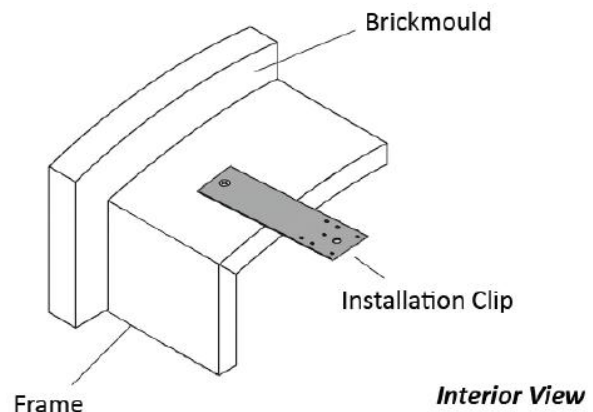
3. Jamb Installation

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.

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

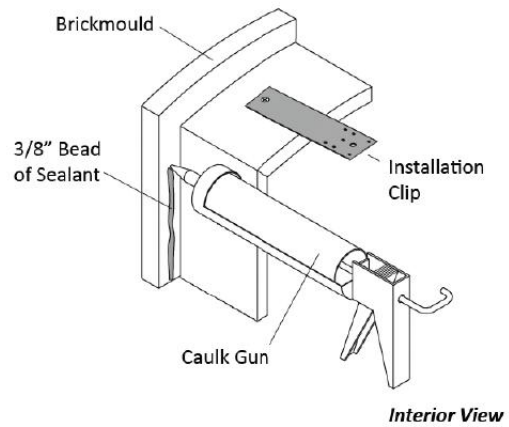
DO NOT install wood products directly in contact with masonry or concrete openings. Apply a proper finish or barrier (i.e. tar paper or ice/ water membrane) between all wood and masonry/ concrete surfaces. Failure to do so may result in water infiltration, property or product damage.

- Rotate installation clips into position before placing unit into opening. If clips are not applied install clips 4" from jamb ends and 12" on center.





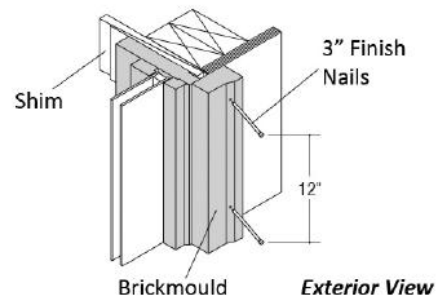
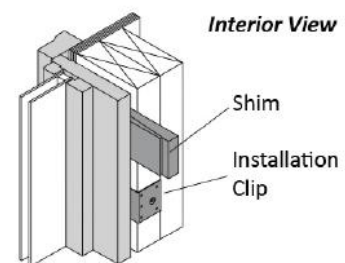
- On units with factory applied casing or brickmould apply a heavy bead of caulk (3/8" is sufficient) to the back side of the casing near the outer edge.
- Place 1/4" shims at the bottom of the opening near the sides.
- Units with installation clips should have shims placed as near the clips as possible.
- Lift jamb into opening. Center the unit in opening side to side. Secure temporarily with clamps to prevent from falling out of opening.
- Shim along the bottom of the unit as needed to keep the jamb level.
- 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.
- **DO NOT** fully secure the side jamb until the unit is checked for square.
- Check for square by measuring diagonally from the upper left corner to the lower right corner. Then measure from the lower left corner to the upper right corner. When compared, these two measurements should vary by no more than 1/16". Shim the top over left or right will adjust if out of square.
- Once the entire side is plumb and the unit is square, shim into place to hold the position.
- Shim the head as necessary to keep the head straight and level.



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. When fastener must be placed through a factory finish, the holes must be sealed with a compatible weatherproof sealant.

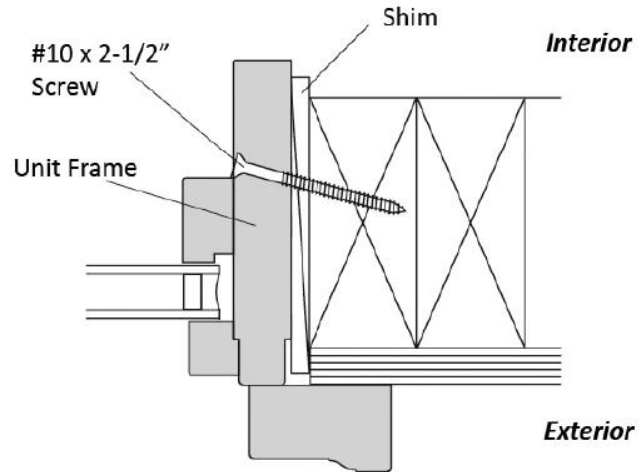
4. Securing Unit into Opening

- On units with installation clips, bend the clips around to the interior and fasten with a minimum of a #10 x 1" fastener.
- On units with factory applied casing or brickmould, use a minimum of 3" finishing nails to fasten the unit through the casing to the exterior framing every 12".
- Recheck unit for square and plumb.



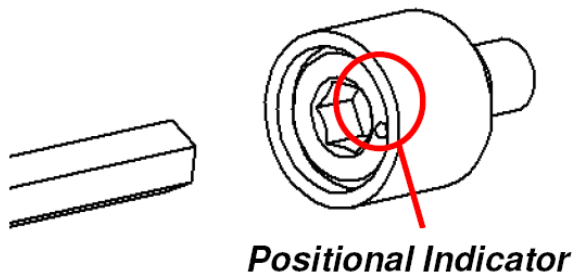
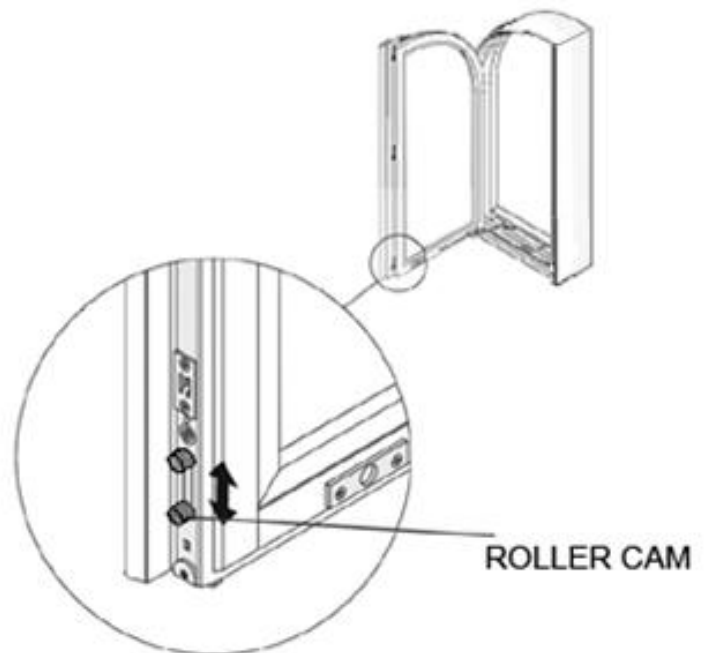


NOTE- Parrett recommends the use of both installation clips and exterior casing as a means to secure the unit into the opening. If both are not able to be used, placing fasteners through the jamb is required. Use fasteners long enough to protrude through the jamb and shims with a minimum of 1 ¼" of penetration into the opening framing. Pre-drill holes 3/16" holes into jamb and place shims at the hole positions so fasteners will go through and hold them in place.



5. Check Operation

- Operate unit to verify smooth performance.
- To operate the unit in the Tilt position, turn the handle to 90 degrees. The top will open tilting inward.
- To operate the unit in the turn position, close the unit and rotate the handle upward 180 degrees from the locked position. The unit will swing inward like a door.
- Only make adjustments if the unit is not operating correctly or not sealing. The hardware has been factory adjusted and should not need major modification.
- Adjustments can be made to modify the sealing pressure if the locking mechanism seems to operate too tightly or does not seem to pull unit into the jamb far enough.



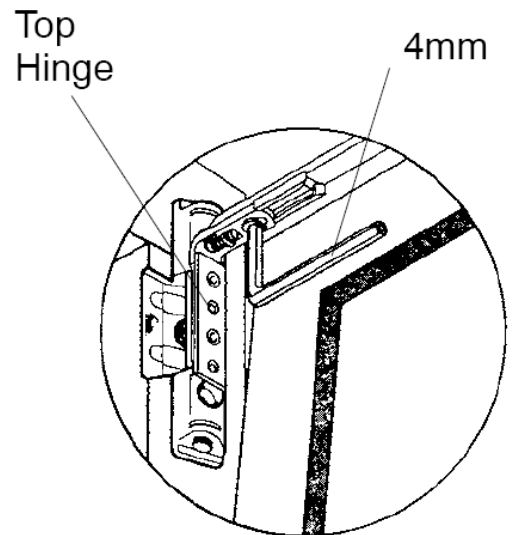
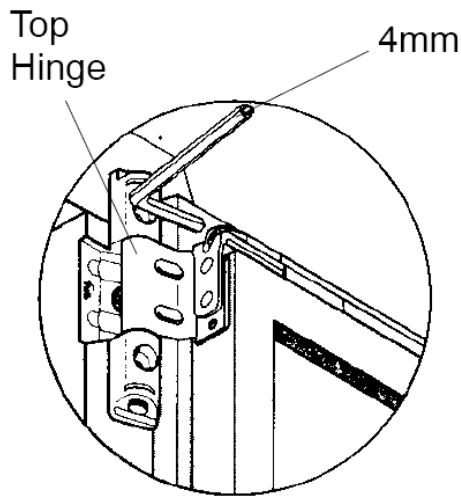
- Using a wrench on the roller cams. Turn the cam to make adjustment. Adjust the cam with the position indicator to the exterior to increase sealing pressure. Adjust the cam with the position indicator to the interior to decrease sealing pressure.

WARNING- Any adjustments or modifications not covered in this instruction will **VOID** any and all warranty on the operation and performance of the unit.



- The tilt-turn hinge provides for adjustment in all directions.

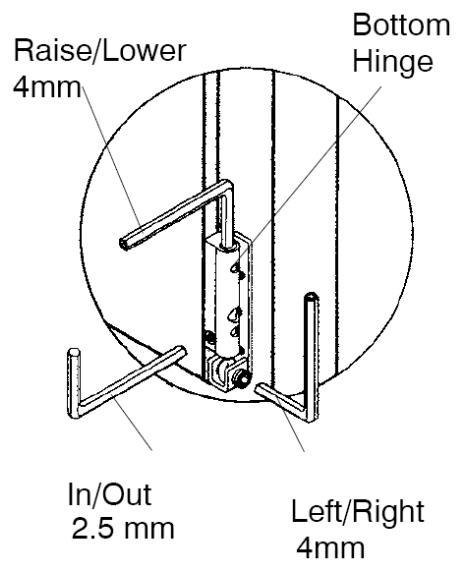
- The top hinge provides adjustment left and right to adjust the square of the sash in relation to the jamb.



- The top hinge also provides adjustment in and out to adjust the sealing pressure on the weatherstrip.

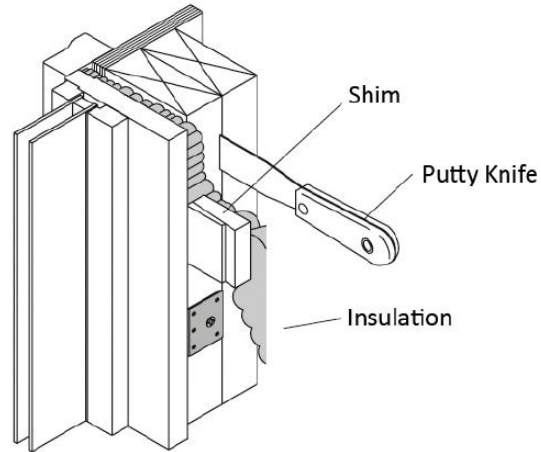
- The bottom hinge provides the same type of adjustment along with a height adjustment.

- Use appropriate Allen wrenches to make minor adjustments as needed.



6. Finishing Installation

- Seal the voids between the jamb and opening on the head and sides by inserting backer rod or other insulation. **DO NOT** use standard expanding foam. Only use LOW expanding foam. Over packing of insulation or the use of standard expanding foam can distort the jamb enough to hamper operation performance.
- On the exterior side where no casing has been applied, cover the void against the backer with silicone to seal the jamb to the opening.
- When applying trim and casing make sure all fasteners are of proper length to prevent interference with the unit's operation.
- All exterior trim, casing, wall, sheeting, or other finishing materials should be properly caulked with a UV safe sealant exterior sealant.



Interior View

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 sash factory pre-fitted and adjusted. The hinge hardware provides for some adjustment in the field or during installation. If major adjustment seems to be needed, double check installed jambs for plumb, level, flat, and straightness. Extra shimming may be needed to keep jambs within tolerance.

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