m·pwr™ Smart Doors

Installation Instructions

MASONITE®

STOP

Before starting the installation of the door unit make sure the 120VAC electrical connection for M-Pwr is in the rough opening, and the circuit breaker is turned off (see Power Supply Installation instructions). A 15 amp circuit is sufficient for powering the door.

Use fiberglass batting for insulation around the door unit - **DO NOT USE ANY TYPE OF SPRAY FOAM.**

This power supply is rated:

Input: 100-130VAC, 0.7A, 60 Hz

Output: 12V (DC Symbol) 3.0A LP

LPS - Limited Power Source per UL 62368-1 | CSA C22.2 No. 62368-1-14, 2nd Ed

IMPORTANT SAFETY INSTRUCTIONS:

⚠ **WARNING:** Hazardous Voltage (120V)
Contact may cause electrical shock and injury.
Disconnect all power before servicing.

⚠ **AVERTISSEMENT:** Tension dangereuse (120V)
Le contact peut provoquer un choc électrique et des blessures.
Débranchez toute alimentation avant l'entretien.

For supply connections, use wires suitable for at least 75°C.

Utiliser des fils convenant à une température de _75 °C pour les connexions dalimentation.

Wiring methods used for the connection of the equipment to the mains supply shall be in accordance with the National Electrical Code, NFPA 70, and the Canadian Electrical Code, Part I, CSA C22.1.

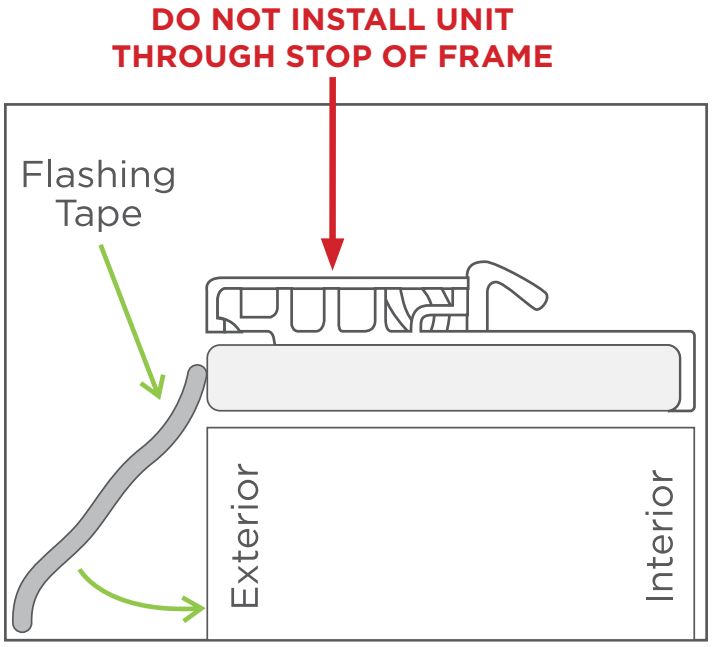
SAVE THESE INSTRUCTIONS.

Power Supply Installation

Critical Point: Although all steps are critical, this symbol identifies procedures requiring extra attention.

Check Your Work: This symbol identifies when the work should be checked for correctness before continuing with installation.

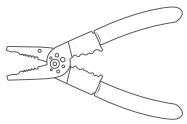
PLEASE NOTE: Failure to install this unit's in accordance with architect, design professional or product manufacturer's instructions will have a direct effect on the unit's performance and/or long-term wear. Installer shall be experienced in performing work required and shall be specialized in installation work similar to that required for this project. Warranty claims are subject to site inspections by a qualified manufacturer's representative to establish root cause and proposed corrective action.



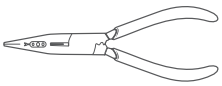
Electrical Installation Instructions

IMPORTANT NOTE: Connected electrical components need to be installed by a qualified electrician with knowledge of wiring codes and practices. Follow all NEC and local building codes when installing the unit.

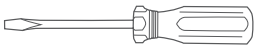
Required Tools and Materials



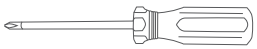
Wire Strippers and Cutters



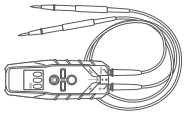
Needle-Nose Pliers



Flat Head Screwdriver



#2 Phillips Head Screwdriver



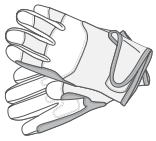
Voltage Tester

Side-Hinged Door Unit Installation Instructions

Some dwelling designs/conditions may require special installation steps, consult your architect, design professional and/or contact Masonite for additional guidance.

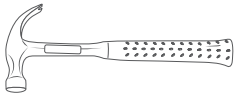
Required Tools and Materials

Safety Glasses

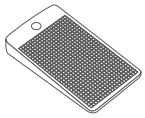


Gloves

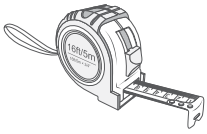
24" to 48" Construction Level



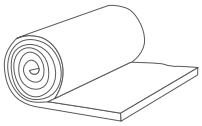
Claw Hammer



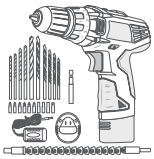
Wedge Shaped Shims



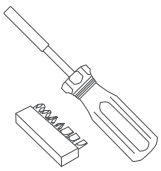
Measuring Tape



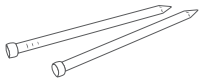
Fiberglass Blanket Insulation



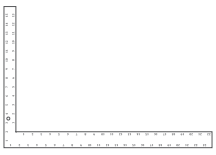
Power Screw Gun with arrangement of screw bits



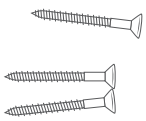
Screwdriver with arrangement of screw bits



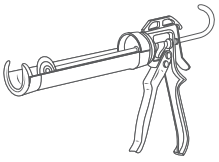
Finish Nails suitable for attaching interior and exterior trim



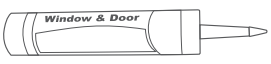
24" Framing Square



2½" Finish Screws



Caulking Gun



Paint Grade Exterior Caulk (Latex, Silicon or Butyl)(Recommend using clear)

1 UNBOX THE DOOR SYSTEM

NOTE: The door units are heavy and should be moved and lifted by two people during the installation.

Prior to removing the existing door, verify the new M-Pwr door is correct and fits your opening.

Remove the unit from the box and remove strapping.

The unit is supplied with a corrugated door panel protector pad that can remain on the door during installation to protect the panel.

Remove the screws that hold the spacers in place.

Shipping spacers can remain in place. They will help keep the unit square during installation.

Remove the installation bag taped to the door protector shield. Do not remove the door protector shield from the door. This is to ensure the finish is protected during the installation process.

Ensure pre-installed lock hardware is attached firmly and not damaged. The deadbolt should be engaged into the jamb and remain engaged in the jamb until noted.

A green Homeowner Box will be located inside the system. Please remove and give to homeowner.

2 INSPECT THE DOOR

Inspect the door for cosmetic damage (scratches, dents, color blemishes.)

Make sure the door is the correct product you ordered (size, handing, brickmold, glass, energy efficiency.

Verify the door will fit in the existing opening.

3 MEASURE AND CHECK THE OPENING

CHECK TO SEE THAT THE UNIT IS THE CORRECT SIZE

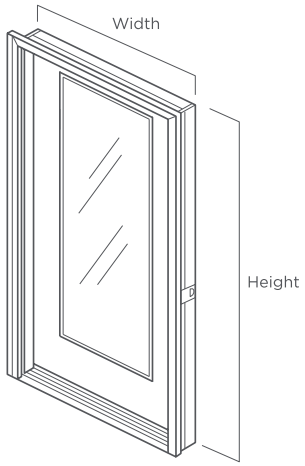
Measure the rough opening – the opening should be ideally ¾" wider and ½" taller than the outside frame dimensions of the door system. If this is a replacement door system, remove the interior casing and measure the rough opening.

ROUGH OPENING SHOULD BE PLUMB, SQUARE AND LEVEL.

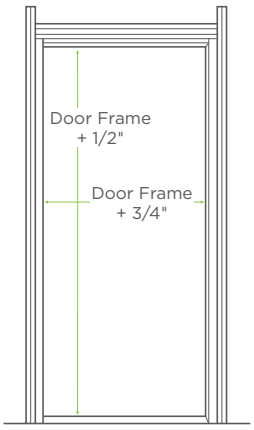
If this is a replacement of a current door system, replace any damaged wood and subfloor.

The subfloor should be clean, dry and level.

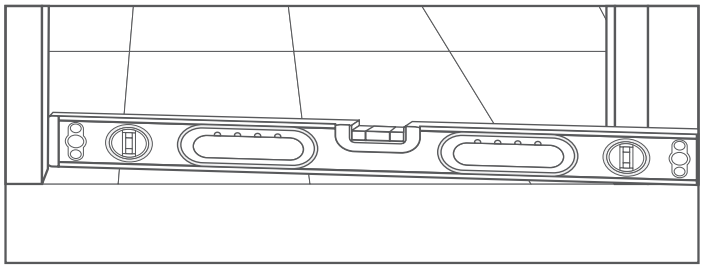
Ensure support underneath sill front edge overhang. If sill front edge is not properly supported, build out structure to support it.



Unit Dimensions



Rough Opening Dimensions



Rough Opening Clearances
Ensure the subfloor is level and uniform

DUST & DAMAGE CONTROL

We recommend using the shipping box as a cushion to prevent damage to the floor and a dust barrier to prevent dust and debris from entering the home.

REMOVE THE CURRENT DOOR

1. Use a utility knife to score along the edges of the trim where it meets the wall on the interior and exterior.
2. Remove Interior Trim around the door frame using a prybar, hammer, or chisel.
3. Remove Exterior trim around the door frame using a prybar, hammer, or chisel.
4. Remove all door pins using a hammer and a punch and lift the door off the hinges.
5. Cut the fasteners between the door frame and the rough opening to remove the door frame.
6. Pry the door frame from the rough opening and set it aside for disposal.

4 ROUGH OPENING PREPARATION

1. Remove all remaining fasteners in the rough opening and clean the area. Remove the old sealant from the subfloor.
2. Inspect and repair the walls of the rough opening and determine if the walls are square and level.
3. Install all cripple or jack studs required to install the door.
4. Level or repair the subfloor as required. Cut back flooring that will interfere with the door frame to allow proper fit.
5. Cut back drywall and exterior wall (stucco or siding) to be flush with the rough opening.
6. Rough opening is now prepped for installation.
7. Dry fit the M-Pwr door in the rough opening aligning the center marks on the floor and door. Determine whether the door will fit properly. Set the door close by for electrical installation.

5 DRY FIT OF DOOR SYSTEM

Remove lift handles from the sides of the door system. Place the unit in the rough opening. Make any adjustments to the opening to ensure a good fit and space for the 120VAC wiring and conduit if required at the top of the unit.

Set the door close by the rough opening for electrical Installation.

6 POWER SUPPLY CONNECTION

IMPORTANT NOTE: Connected electrical components must be installed by a qualified electrician with knowledge of wiring codes and practices. Follow all NEC and local building codes when installing the door.

1. Identify the junction box that will be used to connect the 120VAC main power from the house wiring to the device. A 15 amp circuit is sufficient for powering the door.

2. Ensure that adequate space and a suitable knock-out are available in the junction box.

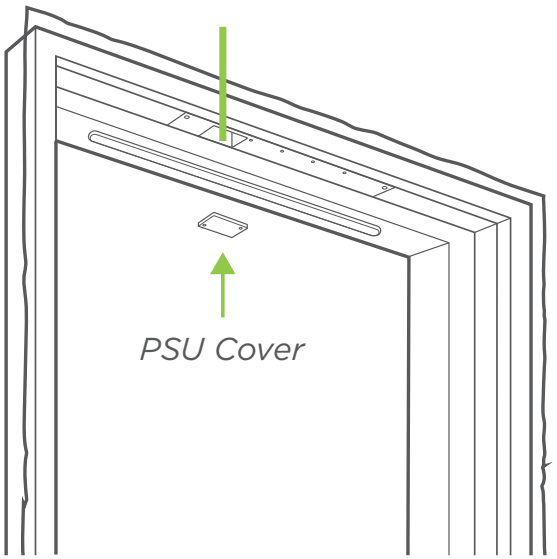
3. Identify the branch circuit that will be used for powering the device and can be controlled by the circuit breaker. It is recommended to not use a switched circuit. Some local codes may require a disconnect device, like a switch, to be provided in the installation site. If a disconnect switch is required, it should be installed per local codes. The supply wires going to the power supply should be UL listed for 300V, 75C or higher. **Note that the circuit should remain powered at all times.**

4. Identify the breaker that provides power to the branch circuit. **Note the breaker rating and turn off the breaker. Clearly label the breaker for the homeowner that the M-Pwr Door will be connected to.**

5. Ensure the branch circuit is unpowered by testing with a suitable voltage tester at the proposed splice location.

6. Run an appropriate cable from the junction box to the door power supply. Check local codes for suitable wire types and gauges based on the branch circuit amperage rating.

7. Remove small cover of the power supply to see the 3/4 inch hole mains for wire connector.

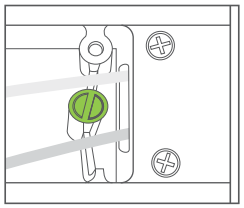


8. Connect the cable to the junction box using an appropriate cable clamp and connect the wires to the branch circuit. Ensure that the cable assembly provides an earth ground to the power supply enclosure.

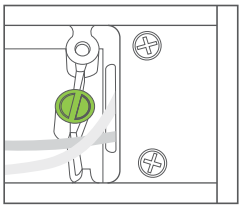
7 BRINGING POWER TO THE DOOR FRAME

1. The circuit will attach to the Power Supply Unit located in the head jamb of the door frame. Once you have determined which side of the door the new circuit will come from, drill a hole large enough for the new circuit line through the rough opening as close to the top framing as possible. This will provide the access to connect the circuit to the Power Supply Unit in the top of the door unit itself. Keep in mind that once the door is installed, the new circuit needs to be free and clear from the jambs of the door unit and shims used to secure the door in place.
2. If not done already, unscrew the two screws holding the small cover on the underside of the Power Supply Unit with a Phillips head screwdriver.
3. Drop the circuit cable into the Power Supply Unit from the top, using an appropriate cable retainer.
4. You can use a voltage tester to determine that power has been shut off to the circuit.
5. Make the connection between the outlet circuit and the Power Supply Unit using wire strippers and appropriately sized wire nuts. Wire nut connection is to remain inside the Power Supply Unit housing.

RIGHT

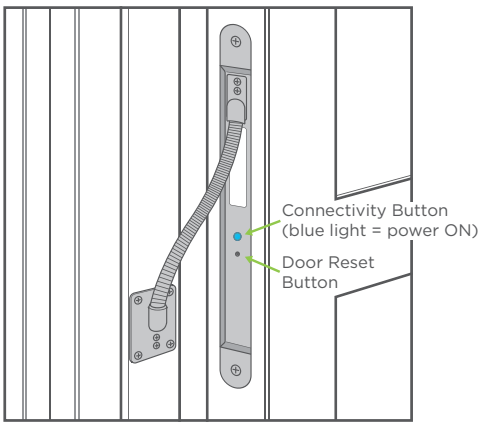


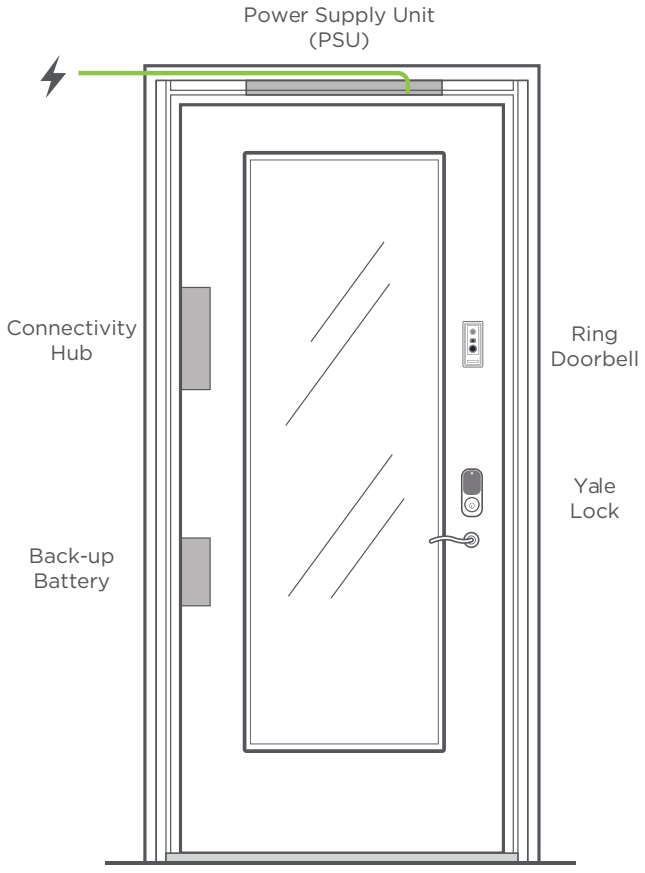
WRONG



NOTE: For some units, the cables must be routed around green ground screw to ensure plate can be closed correctly. If the green ground screw is located in the center as shown here, DO NOT route both cables on the same side or over the top of ground screw.

6. Connect the mains grounding conductor to the power supply green protective earth grounding screw.
7. Turn power back on and observe to see if the blue light indicator, located on the control board cover on the hinge stile is illuminated.

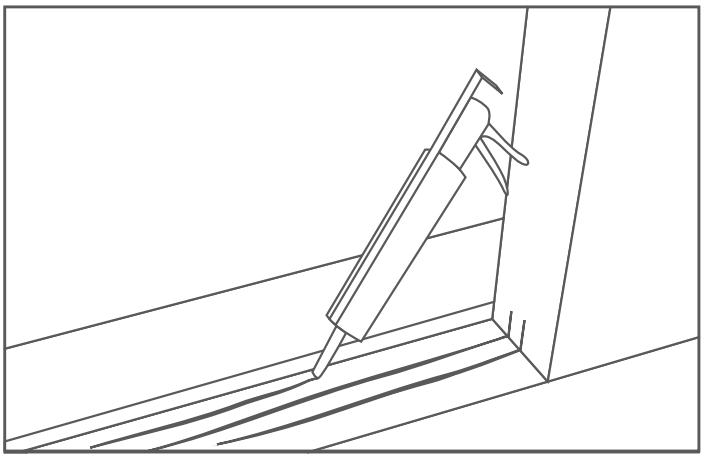




8 PREP OPENING WITH CAULK

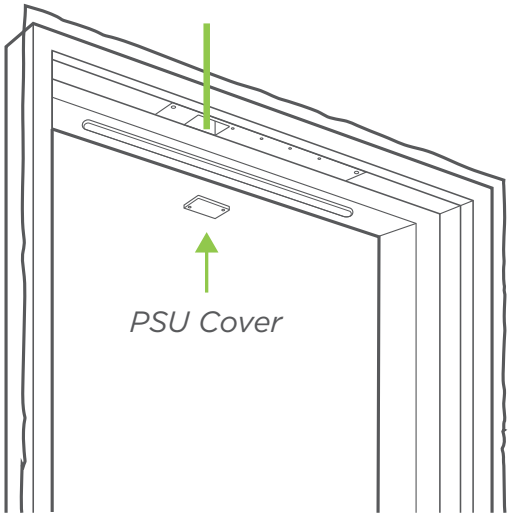
NOTE: Where caulking is required a polyurethane, 100% silicone, or polymer-based exterior grade sealant may be used (no construction adhesives).

Never apply sealant on top of a sill pan. However, if a sill pan cannot be used, place three heavy beads (1/2" wide) of sealant on the subfloor or height plate as shown. Extend the beads up the sides of the opening approximately 1". Put enough caulk at the ends to completely cover the bottom of the side jamb. The first bead needs to be 1" from the interior edge of the opening and the others spaced 1" apart.

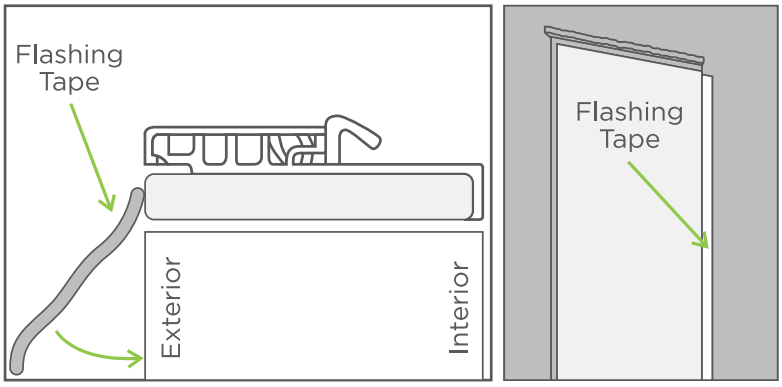


NOTE: Before flashing and installing the brickmold make sure to drop the wire into the PSU so the top of the unit is accessible.

Install flashing tape from the wood edge of the jamb, away from the door opening.



NOTE REGARDING FLASHING: The electrical is already installed. Flashing tape is typically used where caulking is not used. If the unit extends beyond the exterior of the home, you may need to use a drip cap across the header to prevent water ingress.



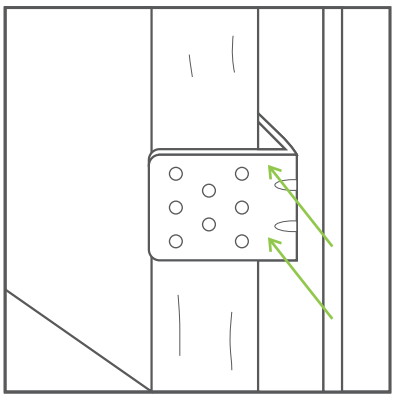
After the unit has been shimmed and adjusted.

Tru-Lok brackets have been pre-installed to the backsides of the door jambs. Some brackets may be located on top of the unit as well.

To fasten unit in opening, install Tru-Lok angles into the Tru-Lok brackets on the backside of the jamb from the interior side.

Insert the Tru-Lok angle into the slot created between the Tru-Lok bracket and the jamb.

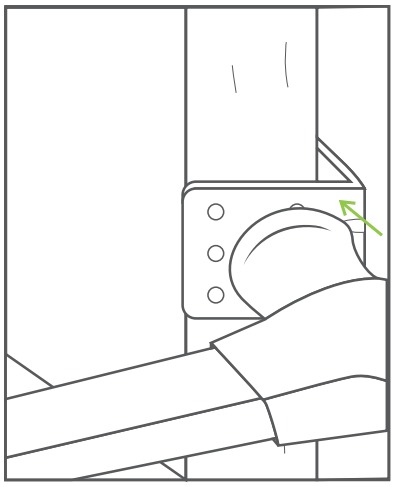
The ribs on the face of both parts will interlock as the Tru-Lok angle engages the Tru-Lok bracket.



Use screws or nails to secure Tru-Lok angles to the wall.

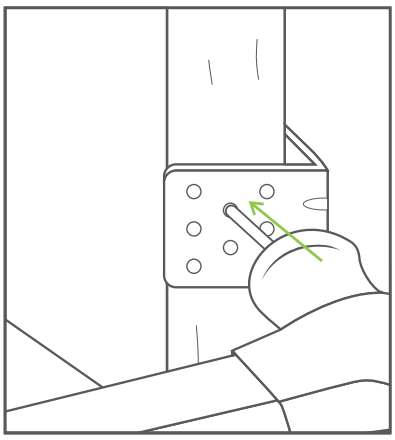
Remove shipping spacers and check for good fit.

Door should make good contact with the weatherstripping.



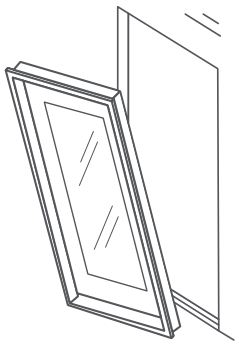
Insert all Tru-Lok angles into Tru-Lok brackets and recheck that the door is plumb and square.

Drive in Tru-Lok angle until flush with rough opening wall.



10 PREP OPENING WITH CAULK

Remove the weatherstrip and install unit in the rough opening bottom first. Installing the Tru-Loc brackets for all units with sidelites.



NOTE: Units intended for installation in hurricane prone regions may require additional points of attachment. See local retailer for installation sheet supplement.

Make sure the electrical wire is not trapped and is free above the unit to connect after door installation.

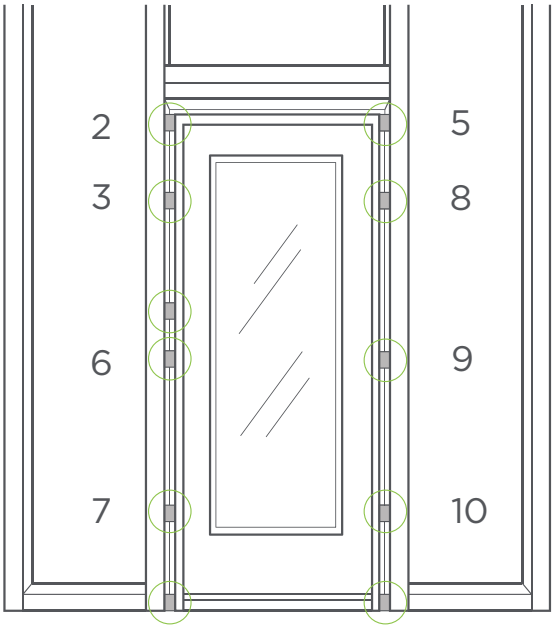


Figure 1

For non sidelite units, determine where you will predrill holes to install shims and fasteners required for installation. All holes should be drilled just outside of the weather stripping kerf.

With the unit centered in the opening, install shims at Positions 1, 4 to keep the unit centered in the opening.

Install additional shims on the hinge side at the top of each hinge between the frame and the rough opening (Position 8, 9). For the lock side install shims at the same heights as the hinge-side shims (Position 3, 6, 7 - Figure 1 and 4, 5, 6 - Figure 2).

The shims should be adjusted so that you have an even gap between the door and the jamb on the top (1/8") and the lock side of the unit (3/16"). The jambs should be plumb and square.

Install shims at the top of the unit (Position 2, 5 - Figure 1 and 3,7 - Figure 2) to help to lock the unit in the opening.

NOTE: It is recommended to shim in the order shown, and to check shims in the order shown to verify unit is level, plumb, and true after each shim is added.

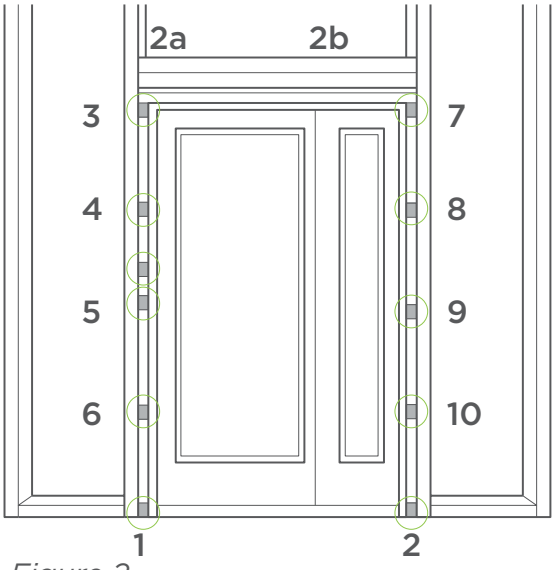
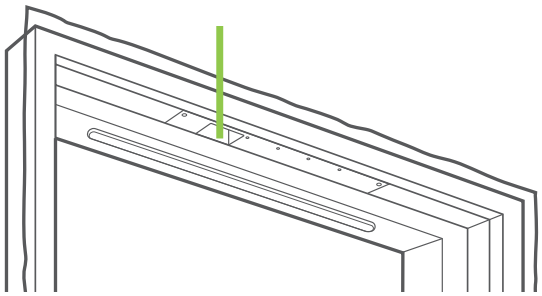


Figure 2

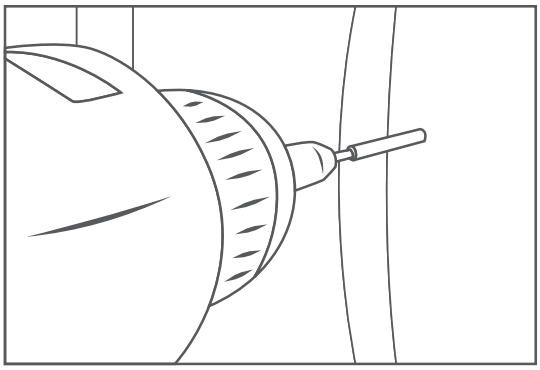


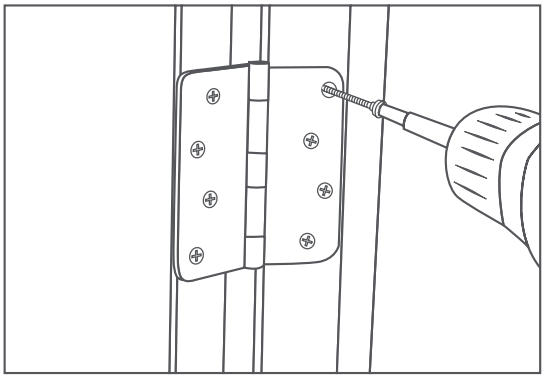
FASTEN UNIT INTO OPENING

For single and double units mounting screws should be located under the frame weatherstrip.

For Side-Lite units Tru-Lok mounting clips are used (Step 6A).

Retract the deadbolt and carefully open door while supporting the weight of the door so it does not move the frame. With the door in the open position, a block can be placed under the lock side to support the weight of the door. Check that the hinge jamb has remained plumb in both directions and install long hinge screws in the open holes in the top and bottom hinge (the shims should be above the screws).





Remove any shipping spacers and close the door checking that the door operates smoothly and the gap around the door has remained consistent. Make any adjustments needed. Additional shims can be added to even the margins. Install the long screw in the middle hinge(s). **NOTE:** See the How to Plumb the Door Section

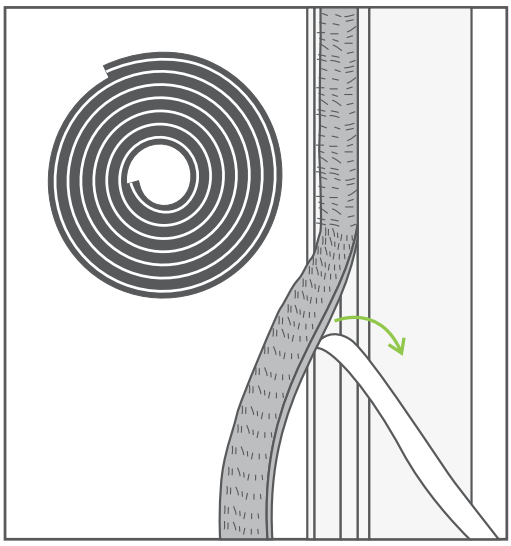
From the exterior side make sure the door is making uniform contact with the weatherstrip. Fasten the lock jamb by installing 2-1/2" wood screws at each shim location behind the weatherstrip. Remove the weatherstrip to avoid damage while installing the screws. **NOTE:** 3/16" Dia. pilot holes are recommended so the screw heads are flush with the jamb to avoid interference with door operation.

11 INSULATION

Insulate around the door unit with fiberglass batting – **DO NOT USE ANY TYPE OF SPRAY FOAM.**

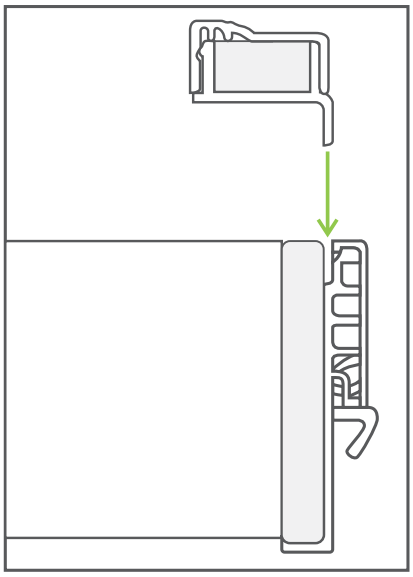
TRIM OUT THE UNIT

Note areas to avoid with fasteners on the jambs.

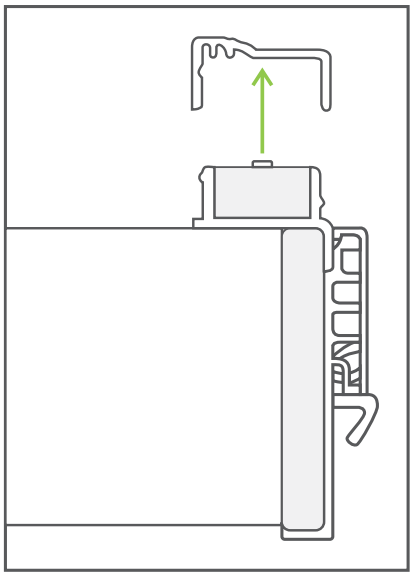


12 INSTALLATION OF BRICKMOLD

Install brickmold in groove and then remove cover. Fasten to the exterior wall and reinstall the brickmold cover.



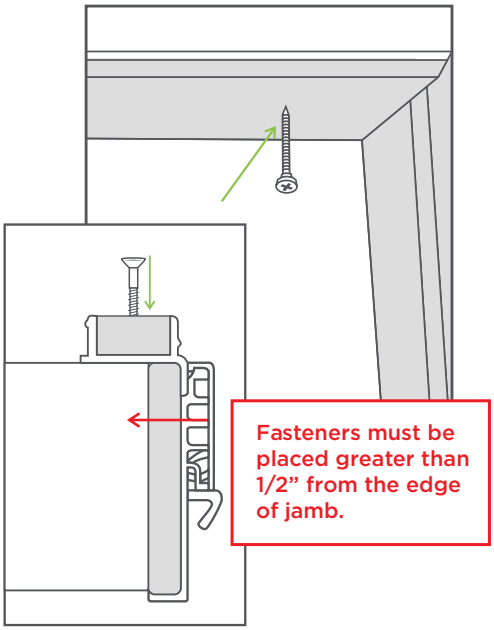
a. Insert the leg of the brickmold into the groove of the jamb



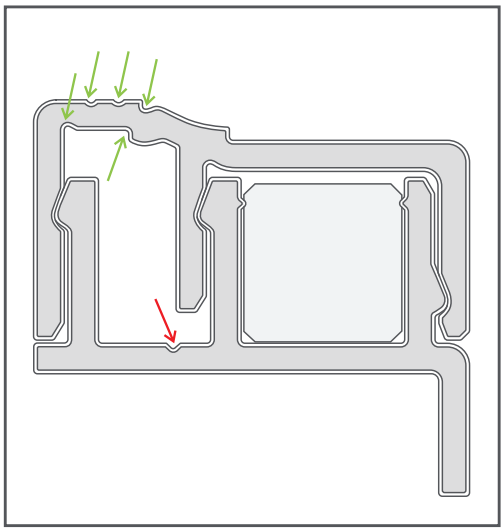
b. Remove cover on brickmold

If the brickmold cannot be installed due to limited space between the door jamb and exterior, the Fusion Frame brickmold can be ripped in field down to 1-3/8". There are score lines indicated by the green arrows in 1/16" increments for ease of adjustment (see image *d*. below). If there is a field adjustment made, we recommend that the base is trimmed back to the point indicated with the red arrow to not interfere with anything during the assembly process.

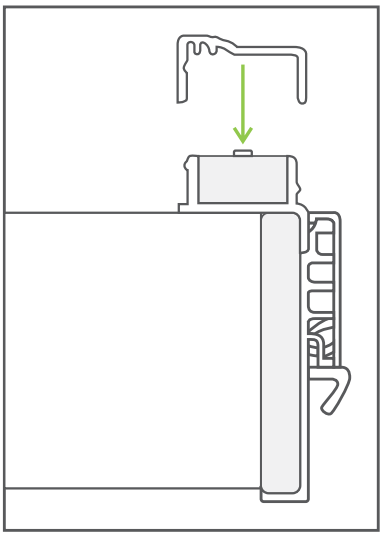
If brickmold cannot be installed due to excess space between the door jamb and exterior, or requires a dimension less than 1-3/8" apply custom ripped brickmold to fit the space.



c. Install 4-5 fasteners, evenly spaced, through the wood core of the brickmold into the sheathing.



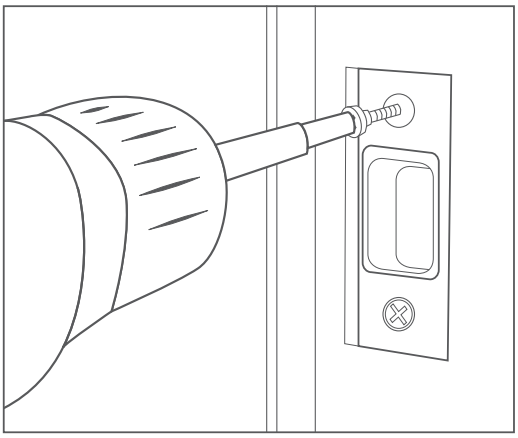
d. Score lines indicated by the green arrow in 1/16" increments for ease of adjustment.



e. Reinstall the brickmold cover.

INSTALL SECURITY SCREWS

Locate security screws in installation bag, then replace the 3/4" screws in the deadbolt strike with 2-1/2" security screws.



13 INTERIOR TRIM INSTALLATION

Install interior trim to cover the gap between the wall and door jamb.

NOTE: Glue the interior trim across the head jamb, only use fasteners where detailed on the warning labels to avoid damaging the PSU and wiring.

Fill the interior nail holes with a spackle to prep for painting. Fill the exterior nail holes with the provided color-match crayon/paint.

14 WEATHERPROOFING

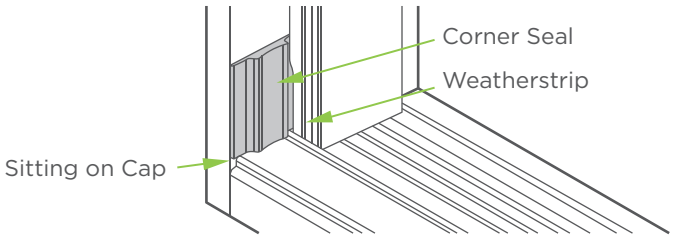
Apply blue painters tape around the edges where the brickmold and door jamb meet.

Apply caulk around the entire unit where the brickmold and siding or sheathing meet and make watertight.

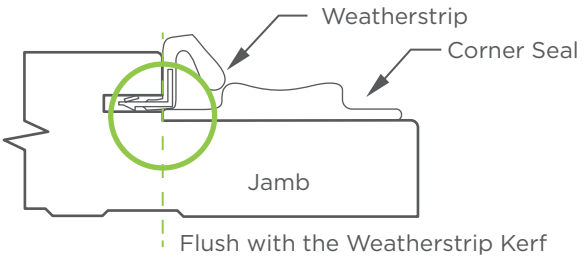
Remove the blue painters tape and apply caulk between the brickmold and the door jamb.

15 REMOVE PROTECTIVE SILL COVER AND INSTALL CORNER SEALS

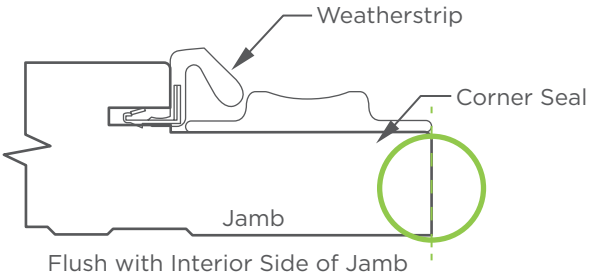
From the exterior side, lift off the white protective cover on the threshold with a putty knife and install corner seals.



For margins less than 5/32"



For margins greater than 5/32"



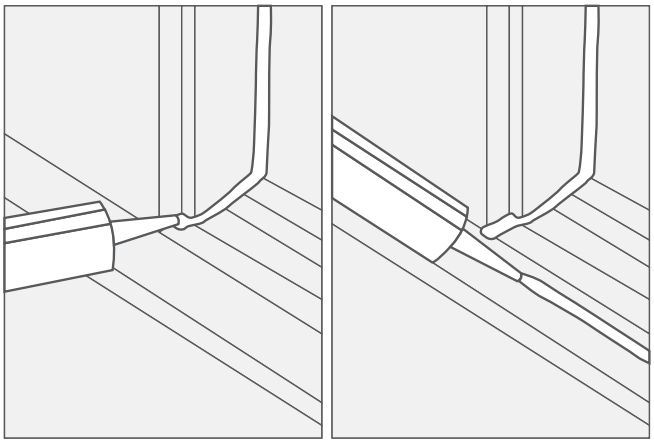
16 MAKE ADJUSTMENTS AND FINISH CAULKING

Check unit for proper operation before caulking.

Seal front bottom edge of sill.

Caulk around the entire unit on weather-exposed side between brickmold and wall for a watertight seal.

Additional or alternate flashing methods may be required according to local code requirements or building practices.



17 TESTING

Install the Masonite M-Pwr Pro app for Apple iOS users (App Store) or Google Android users (Google Play). If you have any questions please reach out to our installation support team at **866-996-2031** or email **installers@masonite.com**.

NOTICE: This device complies with part 15 of the FCC rules and Innovation, Science and Economic Development Canada licence-exempt RSSs. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device must be installed to ensure a minimum 20 cm (8 in.) distance is maintained between users/bystanders and device.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules and Industry Canada ICES standard. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

AVIS : Cet appareil est conforme à la partie 15 des règles de la FCC et aux flux RSS exempts de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférences nuisibles et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences susceptibles de provoquer un fonctionnement indésirable. Tout changement ou modification non expressément approuvé par la partie responsable de la conformité pourrait annuler l'autorité de l'utilisateur à faire fonctionner l'équipement.

Cet appareil doit être installé de manière à garantir qu'une distance minimale de 20 cm (8 po) est maintenue entre les utilisateurs/personnes présentes et l'appareil.

Cet appareil a été testé et déclaré conforme aux limites d'un appareil numérique de classe B, conformément à la partie 15 des règles de la FCC et à la norme ICES d'Industrie Canada. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie de fréquence radio et, s'il n'est pas installé et utilisé conformément aux instructions, peut causer des interférences nuisibles aux communications radio.

CONGRATULATIONS
INSTALLATION COMPLETE

Be sure to give your homeowner the green Homeowner Box, so they can register their new M-Pwr door and connect it to other smart devices.

MASONITE

m·pwr™ Smart Doors

Always Connected. Always Protected.