Pease Doors
The Door Store

INSTALLATION GUIDE

Prehung Exterior Door Installation

A complete, step-by-step guide to installing a prehung single entry door in a prepared rough opening.

APPLIES TO
Fiberglass · Steel · Wood

SKILL LEVEL
Advanced DIY / Pro

TIME
4–8 Hours

What’s Inside

This guide covers the full installation of a Pease prehung single entry door — from removing an old door through waterproofing, shimming, sealing, and finishing. Whether you’re replacing an existing entry or installing in new construction, every step is covered.

A NOTE ON YOUR WARRANTY

Pease exterior steel and fiberglass doors carry a 20-year limited warranty; wood doors are covered for 5 years. Proper finishing of all six sides is required for warranty coverage. See **peasedoors.com/warranty** for full terms.

Before You Start

A prehung door is a complete unit — slab, frame, hinges, threshold, and weatherstripping, all factory-assembled and ready to install as one piece. It's the right choice when the existing frame is damaged, out of square, or when you're working with a raw rough opening in new construction.

ROUGH OPENING REQUIREMENTS

The rough opening should be approximately **3/4" wider and 1/2" taller** than the outside frame dimensions of the prehung unit. This gives you roughly 1/4" of shim space on each side and at the top. As a rule of thumb, that works out to about 2" wider and 2-1/2" taller than the door slab size. Measure width at the top, middle, and bottom; measure height on both sides. Use the smallest dimension.

DOOR SLAB SIZE	APPROX. ROUGH OPENING (W x H)
36" x 80"	38" x 82-1/2"
32" x 80"	34" x 82-1/2"
30" x 80"	32" x 82-1/2"
36" x 96" (8'0")	38" x 98-1/2"

ADDITIONAL CHECKS

- Subfloor / sill plate is clean, dry, and level across the full width of the opening
- Jack studs and header are solid, straight, and securely fastened
- House wrap or WRB (water-resistive barrier) is intact around the opening
- Sill plate provides at least 6" of space for the threshold to sit on (8" for 6-9/16" frames)

INSWING VS. OUTSWING

This guide is written primarily for **inswing** installations — the most common residential configuration. If you're installing an outswing unit, the main differences are: hinge pins are exposed on the exterior (use NRP security hinges to prevent pin removal), and the weatherstrip seal compresses from the outside instead of the inside. The shimming, flashing, and leveling steps are otherwise identical.

Tools & Materials

Gather everything before the old door comes out. A prehung install exposes the opening for several hours — have your waterproofing materials staged and ready.

ESSENTIAL TOOLS

- ☐ Tape measure (25')
- ☐ 4-foot level
- ☐ Combination square / framing square
- ☐ Cordless drill/driver
- ☐ Phillips & flat screwdrivers
- ☐ Hammer & nail set
- ☐ Pry bar / flat bar
- ☐ Reciprocating saw (for removal)
- ☐ Utility knife
- ☐ Caulk gun
- ☐ Safety glasses & gloves
- ☐ Hearing protection

ALSO HELPFUL TO HAVE ON HAND

- ☐ Sawhorses (2)
- ☐ Shop vacuum
- ☐ Painter’s tape
- ☐ Pencil & sharpie

WATERPROOFING & SEALING

- ☐ Sill pan (flexible or rigid)
- ☐ Self-adhesive flashing tape (4"-6" wide)
- ☐ Drip cap flashing (metal or composite)
- ☐ Exterior-grade silicone or polyurethane caulk
- ☐ Fiberglass blanket insulation or low-expansion foam
- ☐ Backer rod (for wide gaps)

FASTENERS & MATERIALS

- ☐ 2-1/2" installation screws (supplied or by others)
- ☐ 3" exterior-grade screws (for top hinge)
- ☐ Wood shims (cedar or composite, tapered pairs)
- ☐ Exterior primer & paint (or stain)
- ☐ Replacement brickmold (if needed)
- ☐ Interior casing / trim

PRO TIP

Before you pull the old door, photograph the full installation from both sides — trim details, weatherstrip routing, threshold position, and any visible flashing. These photos will save you time when you’re putting the new unit together.

Remove the Existing Door

If you're working with a raw rough opening in new construction, skip this section and go to Section 4.

1

Remove the door slab

Drive out the hinge pins from bottom to top using a nail set and hammer. Set the slab aside. If the pins are seized and won't come out, you can skip this step and remove the slab and frame together as a single unit — it's heavier and bulkier, but saves a fight with stuck pins. Just be sure to have a helper for the lift.

2

Remove interior trim and casing

Score the paint line between casing and wall with a utility knife to prevent drywall tearing. Gently pry the casing off with a flat bar, working from one end. Save trim if you plan to reuse it.

3

Remove exterior brickmold or trim

Pry off any exterior molding. Cut nails between the jamb and framing with a reciprocating saw if they won't pull free. Be careful not to damage the house wrap or sheathing.

4

Pull the old frame and threshold

Remove screws and shims securing the jamb to the framing. If nails were used, cut them with a reciprocating saw. Lift the frame out of the opening. Remove the old threshold and any sealant from the sill.

5

Clean and inspect the rough opening

Remove all old caulk, shims, foam, and debris. Inspect the jack studs, header, and sill plate for rot or damage. Repair any compromised framing before proceeding — the new prehung needs solid wood to fasten into.

> **LEAD PAINT WARNING**
>
> If disturbing existing paint in a pre-1979 home, take proper precautions if lead paint is suspected. See **epa.gov/lead** for guidance.

Prepare the Rough Opening

This guide is written for the typical case: a replacement install behind existing siding and trim. If you're working in new construction or you've stripped siding back to the sheathing, see the callout at the end of this section for the additional flashing work that's possible only with exposed sheathing.

1

Verify the opening is square, plumb, and level

Run four checks before doing anything else: (1) **Diagonals** — measure corner to corner both ways; they should match within 1/8". (2) **Sill plate level** — check across the full width with a 4-foot level. (3) **Jack studs plumb** — each side of the rough opening should be plumb in both directions; matching diagonals alone won't catch studs that lean the same way. (4) **Header level** — check across the top of the opening. If the sill is out of level, shim the low side with a tapered cedar shim and secure it. A solid, level sub-floor is absolutely essential — do not proceed until it's both solid and level.

2

Install the sill pan

The sill pan is the single most important waterproofing detail in an exterior door install — it catches any water that makes it past the threshold and directs it back outside. Two common types: **Prefabricated pans** (Jamsill, SureSill, etc.) come pre-formed with integrated end dams and a back dam — install per the manufacturer's instructions. **Self-formed pans** made from flexible flashing tape need 2" up-legs on each jack stud and a back dam at the interior edge. Either way, set the pan across the full width of the opening and seal it to the sill plate with a continuous bead of sealant.

3

Inspect existing flashing and drip cap

With the old door out, take a look at any flashing or drip cap that was visible at the head of the opening. If the existing drip cap is rusted, bent, or missing, plan to replace it before the new unit goes in. If house wrap is visible at the edges of the opening and looks intact, leave it alone — cutting into it creates more problems than it solves in a retrofit.

DON'T SKIP THE SILL PAN

Without a sill pan, water that gets past the threshold runs directly onto the subfloor and into the framing. Even the best caulk job will eventually fail. In a retrofit where you can't fully integrate flashing with house wrap, the sill pan plus quality exterior caulking around the brickmold is what keeps the wall dry.

IF YOU'VE REMOVED SIDING (NEW CONSTRUCTION OR FULL RETROFIT)

With the sheathing exposed, you can do the full flashing protocol: (1) lap self-adhesive flashing tape across the sill pan and up each jack stud at least 6" above threshold height, lapping over the sill pan's back dam; (2) leave the header un-flashed for now — it goes on last to maintain a shingle-lap water path; (3) if house wrap is present, fold the top flap up and tape it out of the way before setting the door. You'll integrate it with head flashing in Section 7.

Dry-Fit the Unit

Before applying any caulk or driving any screws, set the prehung unit into the opening to confirm it fits.

1

Set the unit into the opening

With a helper, lift the prehung unit and slide it into the rough opening, sill first. The brickmold (or nailing fin) should rest against the exterior sheathing, or slide into the opening of an exterior brick wall.

2

Check clearances

You should have roughly 1/4" to 3/8" of shim space between each jamb and the jack studs, and between the head jamb and the header. If the opening is too tight, trim the jack studs. If it’s too wide (more than 1/2" per side), add a furring strip to the framing.

3

Verify the threshold sits flat

The threshold should rest evenly on the sill pan and sill plate with no rocking. If the sill is uneven, shim under the threshold to eliminate any gaps.

4

Remove the unit and prepare for final set

Once you’ve confirmed fit, lift the unit back out. Apply **three separated 3/8" beads of sealant** running across the sill where the threshold will rest — spaced about an inch apart, not a single continuous seal. The separated beads bed the threshold down for air sealing while still allowing any water that gets past the threshold to drain through the sill pan to the exterior. Some threshold designs may call for caulk applied directly to the bottom of the unit instead — inspect the underside and caulk accordingly. If the unit has brickmold, also apply a bead of sealant along its backside.

30-DEGREE CAUTION

Once the prehung is placed in the opening, **do not swing the door panel more than 30 degrees** until the installation screws have been driven. The unsecured unit can shift, fall, or damage the threshold seal.

Set & Secure the Prehung

This is the critical step. Shim in the sequence shown below — it centers the unit first, then locks in the hinge side, then the lock side. Check level, plumb, and the 1/8" reveal after every adjustment.

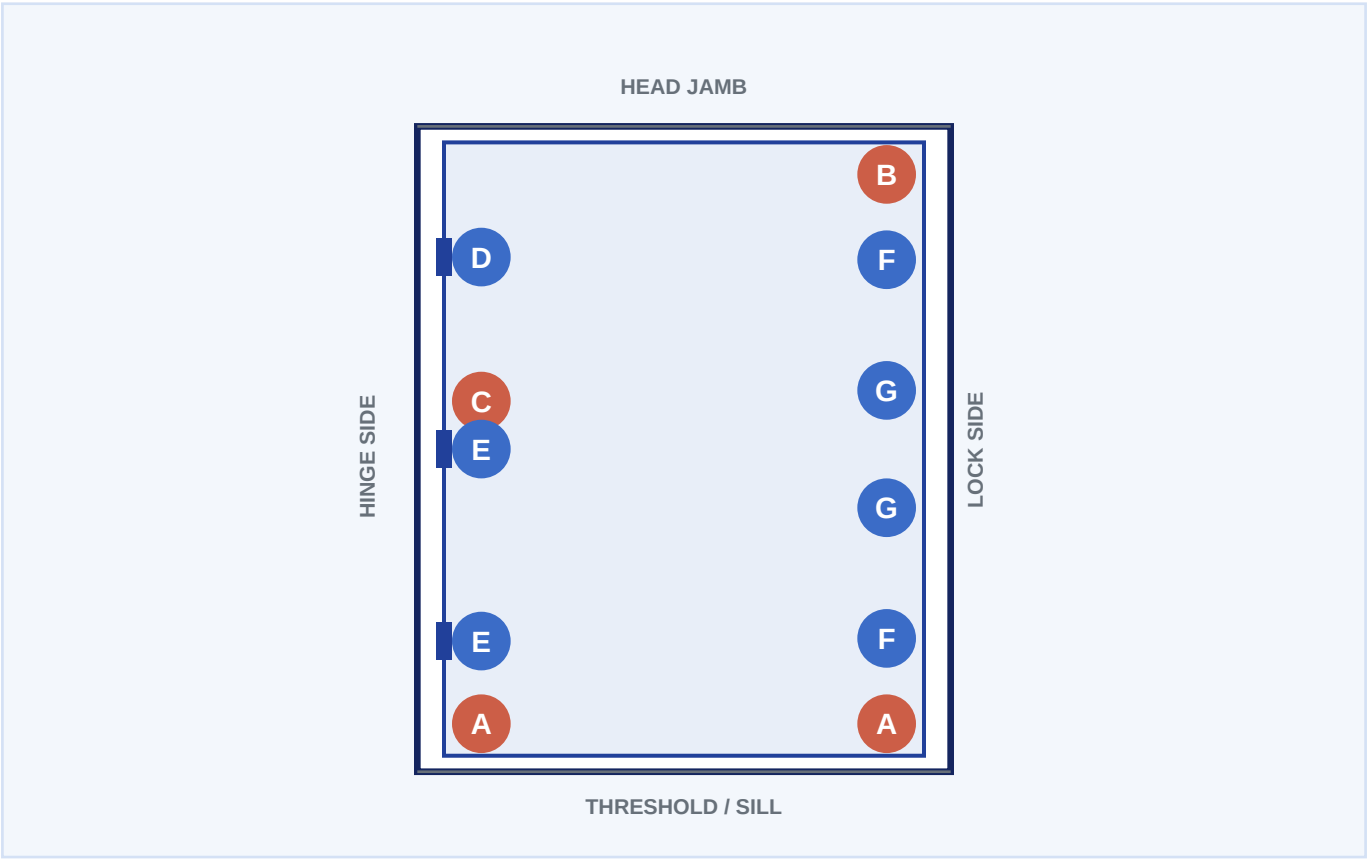

Fig. 1 — Shim locations and sequence (viewed from inside)

A	Bottom corners — center the unit and hold it tight to the sill. **Shim first.**
B	Top of door, lock side — set the 1/8" head gap.
C	Hinge side, mid-height — hold the door in position.
D	Top hinge vacant screw hole — shim, then drive 2-1/2" screw through hinge into stud.
E	Middle & bottom hinge vacant screw holes — shim and screw to maintain 1/8" hinge-side gap.
F	Lock-side jamb, ~8" from top and bottom — shim to maintain 1/8" lock-side gap.
G	Lock-side jamb, above and below deadbolt — shim and drive screws. **Remove weatherstripping before driving screws on the lock side.**

Set & Secure — Step by Step

1

Set the unit into the sealant beds

With your helper, lift the unit and press the threshold into the sealant beads on the sill. Push the brickmold or nailing fin snug against the sheathing. **Do not open the door more than 30 degrees at this point.**

2

Shim the bottom corners (A)

Standing inside, center the unit in the opening. Shim tightly at both bottom corners to keep the unit centered and the frame tight against the sill.

3

Shim top lock side (B) and hinge side (C)

Shim the top of the door on the lock side (B) until there's a consistent 1/8" gap between the top of the slab and the head jamb. Then shim the hinge side at mid-height (C) to hold the door in position. The door should operate freely with nothing but shims holding it in place.

4

Check plumb — the weatherstrip method

With the door closed, look at the weatherstripping on the lock-side jamb where it meets the slab face. (On an inswing door the weatherstrip is visible from the interior side; on outswing, from the exterior.) The compression should be **even along the entire height** of the slab without pinching or gaps. Even compression confirms the frame is in a straight vertical plane and isn't twisted. Adjust shims until the compression is even.

5

Secure the hinge side (D, E)

Shim behind the vacant hinge screw hole in each hinge until there's a consistent 1/8" gap between the hinge-side jamb and the slab edge. Drive the supplied 2-1/2" screw through each vacant hinge screw hole, through the jamb, shims, and into the stud.

6

Secure the lock side (F, G)

Remove the weatherstripping from the lock-side jamb first to avoid puncturing it with screws. Shim at F (approximately 8" from top and bottom) and G (just above and below the deadbolt hole) until there's an even 1/8" gap. Drive 2-1/2" installation screws through the jamb and shims into the studs. Re-install the weatherstripping.

7

Test operation and secure the threshold

Open and close the door several times — it should swing freely. Reveals should be 1/8" on all three sides. Fasten the threshold per the manufacturer's instructions; do not over-tighten.

IF THE FRAME MOVES WHEN YOU TIGHTEN SCREWS

When shims are properly installed, the frame should not move or twist at all when screws are tightened. If there is any movement, loosen the screws, shim tighter to maintain the 1/8" gap, then re-tighten.

Insulate & Seal

Sealing the unit controls both air infiltration and water penetration. For a typical retrofit behind existing siding, this is mostly insulation in the shim space plus quality exterior caulking. If you removed siding back to the sheathing, see the callout at the end of this section for the additional flashing work.

1 Insulate the shim space

Score the shims with a utility knife and snap off the excess. Fill the cavity between the jamb and wall studs on all three sides. **Option A:** Use fiberglass blanket insulation loosely packed into the gap — this is the method recommended by most door manufacturers because it cannot bow the jamb. **Option B:** Use low-expansion spray foam labeled "doors and windows" (never standard expanding foam). If using foam, fill no more than 50% of the cavity and let it cure before trimming.

2 Inspect or install a drip cap

Look at the existing drip cap above the head casing (the bent metal flashing that sheds water away from the door). If it's rusted, bent, or missing, replace it. The drip cap should extend at least 1" past the casing on each side and tuck up behind the siding above. Do not caulk the top edge — it needs to breathe. Caulk only the sides where it meets the trim.

3 Caulk the exterior perimeter

This is your primary water management in a retrofit. Use exterior-grade silicone or polyurethane caulk and work in this sequence: (1) sill corners where the sill crown meets the jamb or brickmold, (2) the front edge of the sill where it meets the sub-floor, (3) the top corners where the head meets the jambs, (4) the full perimeter where the brickmold or exterior trim meets the siding. Do **not** caulk the bottom of the threshold or the front face where it would block weep paths — the threshold must remain open at the bottom so any water that gets past it can drain out.

STANDARD EXPANDING FOAM WILL BOW YOUR JAMB

Many door manufacturers explicitly warn against standard expanding foam — it can warp jambs, making the door inoperable or pushing the brickmold away from the frame. If you use foam at all, it must be the low-expansion "doors and windows" formula. When in doubt, use fiberglass blanket insulation.

IF YOU REMOVED SIDING (FULL FLASHING PROTOCOL)

With sheathing exposed, you can build a full shingle-lap flashing system: (1) **Flash the jamb sides** first — apply self-adhesive flashing tape from the sill up each side of the jamb, lapping over the brickmold or nailing fin and onto the sheathing, overlapping the sill flashing by at least 2". (2) **Install the drip cap** over the head casing, extending 1" past the casing on each side. (3) **Flash the head** with flashing tape over the drip cap, lapping over the top of the side flashing by at least 2" on each end. (4) Finally, **fold the house wrap top flap back down** over the head flashing tape and tape it in place. The water path runs: house wrap → head flashing → side flashing → sill pan → outside.

Install Hardware & Adjust

Most Pease prehung units ship with the lockset and deadbolt pre-bored. If your unit came without bore holes, refer to the lockset manufacturer’s template.

1

Install the lockset

Drop the latch into the 1" edge bore — beveled side facing the jamb — and screw the faceplate flush. Assemble the lockset through the 2-1/8" face bore per the manufacturer’s instructions.

2

Install the deadbolt

Install the deadbolt in the upper bore. Test that the bolt extends fully into the strike plate pocket in the jamb. Small misalignments (1/32"–1/16") can be corrected by shifting the plate within its screw holes.

3

Add long screws to the top hinge and deadbolt strike

Replace one screw in the top hinge (jamb side) with a 3" screw that reaches into the framing. Do the same for the deadbolt strike plate. These two screws are your primary security and sag prevention.

4

Check weatherstripping and test the threshold seal

Close the door and check for daylight around the perimeter. The weatherstrip should compress evenly on all three sides. For the threshold, use the **paper test**: close the door on a piece of paper placed over the threshold, then pull. You should feel tension, but the paper shouldn’t tear. If the paper tears, the seal is too tight — turn the sill cap adjustment screws counterclockwise a half-turn to lower the cap. If there’s no tension, the seal is too loose — turn the screws clockwise a half-turn to raise the cap. Don’t raise the cap more than 1/4" total.

5

Install interior casing

Apply interior trim around the jamb, covering the shim space and insulation. If the wall thickness doesn’t match the jamb width, add jamb extensions before casing. Nail the casing to the jamb and wall framing, then fill nail holes and caulk any gaps.

> **SECURITY NOTE**
> For maximum security, use 3" screws in both your top hinge *and* deadbolt strike plate — both should reach through the jamb and shims into the wall framing. Short screws that only bite into the jamb can be kicked through.

Finishing Your New Door

Finish is not optional on an exterior door. Pease's warranty requires proper finishing of **all six sides** — front, back, top, bottom, and both edges — on every product line.

Smooth Fiberglass

Clean all surfaces to remove dust, oils, and handling residue, then let the surface fully dry. Apply a high-quality bonding primer such as **Sherwin-Williams Extreme Bond Primer**, followed by a premium exterior-grade acrylic latex paint. For doors in direct sun, choose lighter to medium shades — very dark colors raise surface temperatures and reduce long-term finish performance. Finish as soon as practical after receipt and before prolonged weather exposure.

Woodgrain Fiberglass

Woodgrain fiberglass has an embossed surface that replicates natural wood. Finish with a **gel stain** or an **opaque, heavily pigmented oil-based stain** suitable for fiberglass — these sit on the surface rather than soaking in, letting the grain texture show through. After staining, apply a **polyurethane topcoat with UV inhibitor**. Traditional penetrating wood stains are *not* recommended. Woodgrain fiberglass can also be painted; use a bonding primer first. Apply stain in this order: (1) panels and sticking, (2) vertical mullions, (3) horizontal rails, (4) outside stiles, (5) edges.

Steel

Steel doors ship with a factory-applied primer. Lightly clean the primed surface, then apply a high-quality exterior-grade paint suitable for metal surfaces. **Steel doors are not intended to be stained.** For doors in direct sun, choose lighter to medium shades. Finish as soon as practical after installation.

Wood

Exterior wood doors are natural hardwood and must be fully sealed. Clean, dry, and lightly sand before finishing. Stain or paint — **if you stain, always topcoat with a clear exterior-grade polyurethane or spar varnish with UV protection.** Seal *all* surfaces including cutouts (lock bores, hinge mortises, hardware prep) to prevent swelling, warping, or checking. Inspect and reapply topcoats periodically.

OVERHANG REQUIRED FOR WOOD DOORS

Exterior wood doors require protective overhang coverage. The overhang depth must be equal to or greater than the distance from the bottom of the threshold to the underside of the overhang. Doors without adequate overhead protection may experience accelerated finish failure and may not be covered under warranty.

Troubleshooting

If something isn’t working right, the first thing to check is that the 1/8" gap across the top of the slab holds true for the full width, and that weatherstripping is evenly compressed the full height of the door. If yours isn’t listed below, call us.

- **Door won’t latch or deadbolt won’t engage**

  The strike plate isn’t aligned with the bolt. Small misalignments (1/32"–1/16") can be corrected by loosening the strike screws and shifting the plate. Larger misalignments mean the jamb has shifted — re-check plumb on both jambs and adjust shims.

- **Reveals are uneven**

  Usually means one jamb isn’t plumb or the head isn’t level. Re-check with a 4-foot level. Also check that incorrect shimming hasn’t twisted the jambs — from outside, verify the weatherstrip compression is even the full height of the door.

- **Door sticks or binds in warm weather**

  Wood and fiberglass can expand slightly in heat. Check that reveals are at least 1/8" on all three sides. If rubbing at a specific point, plane or sand that area and refinish.

- **Daylight visible under the closed door**

  Use the paper test: close the door on a piece of paper over the threshold and pull. If there’s no tension, raise the sill cap by turning the adjustment screws clockwise a half-turn at a time (do not increase height by more than 1/4" total). If paper tears, the seal is too tight — turn screws counterclockwise.

- **Water leaking at the threshold**

  Check that the sill pan is intact, the threshold sealant hasn’t cracked, and the bottom of the threshold is not caulked (it should weep freely). If water is coming from the sides, the flashing tape may not be lapping correctly — water should always drain down and out, never behind.

Need help? We’re here.

Call us at 1-513-871-8907, Monday–Friday, 8am–5pm ET. Our team ships prehung entry doors, hardware, and accessories nationwide — and we’ll happily walk you through any step of this install over the phone.

peasedoors.com