

20 Minute Fire Rated Entry Door Installation



The following installation instructions are for typical wood frame wall systems and are designed for maximum performance and years of trouble-free operation. Read fully before proceeding with installation.

Please ensure that all local building code requirements are met. Please consult with your builder or architect for additional guidance before carrying out any steps listed herein. **Fire rated products are subject to strict compliance with proper installation and use of the product. Failure to do so may require the product to be removed and replaced at the expense of the owner.**

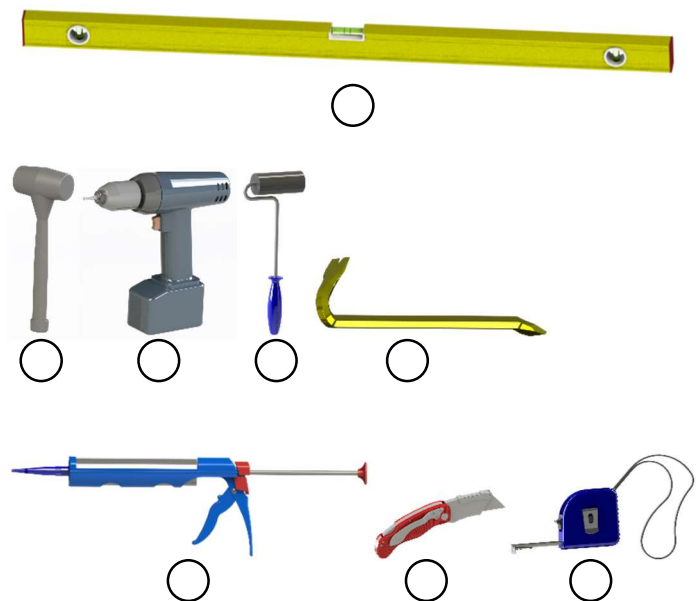
The process should be completed by a person with required competency and experience.

Always read Durabuilt's Original Customer Warranty before purchasing or installing Durabuilt products.

Warranty claims are reliant on proper product care, handling, and use, including conditions before and after installation, and subject to site inspections by a Durabuilt qualified representative to establish probable cause and proposed corrective action.

Required Tools & Materials:

- Appropriate Personal Protective Equipment (PPE)
- Tape measure
- 6ft level
- Multi-driver drill with bits
- Utility knife
- Hammer
- Pry-bar
- Sealant gun
- J-roller
- Gap checker
- Customer supplied FIRE RATED handle set and striker
- Cedar wood/composite shims
- Pins, hex wrench for adjustable hinges (supplied)
- 3 1/2" screws rated for fastening to RO (supplied)
- Closed cell foam backer rod or sealant backer (Not always necessary for single family homes/townhomes)
- Membrane tape or equivalent, compatible to sealants
- Glass mat / fiberglass batt insulation (**DO NOT USE EXPANDABLE FOAM**)
- High quality exterior grade polyurethane sealant, compatible for windows & doors



Installation Checklist:

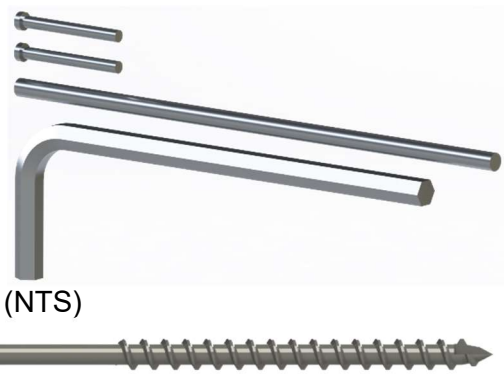
- Clean, dry, level, and solid subfloor.
- Prepare rough opening (RO).
- Three continuous 1/4" beads of caulking under sill.
- Back bead behind nail flange.
- Place door into RO.
- Ensure consistent gaps and door is square and plumb.
- Optional: Place helper screws to keep door upright
- Shim and fasten.
- Check functionality of door.
- Insulate and seal gaps.
- Install corner seal pads.
- Complete adjustments if necessary.
- Finishing and painting.

Provided Materials

Pins
(if applicable)

Hex Key
(if applicable)

Screws x4 (NTS)



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Installation Steps

Step 1: Remove Packing and Inspect the Door

- I. With care, remove all shipping materials such as plastic wrap, sill protectors, hinge and cladding covers, slab shims, bottom stapled wood blocks, etc.
- II. Inspect for product squareness, conformance of correct product specifications, and any cosmetic damage.
- III. (optional) Consider reinserting door plug to keep slab in place until just before inserting door frame into RO.

Step 2: Rough Opening Preparation

- I. Verify that the RO:
 - a. Is level and plumb (within 1/8") by using the 6ft level.
 - b. Is diagonally square (within 1/4") by using a measuring tape and measuring corner to corner.
 - c. Is at most 1/4" larger in height and 1/2" larger than width from the overall door frame.
 - d. Has additional blocking or is double studded.
 - e. Header is supported by trimmer/jack studs.
 - f. **At the bottom (sill), sub-floor is level and structurally solid.**

II. Fix any concerns with the above items before continuing.

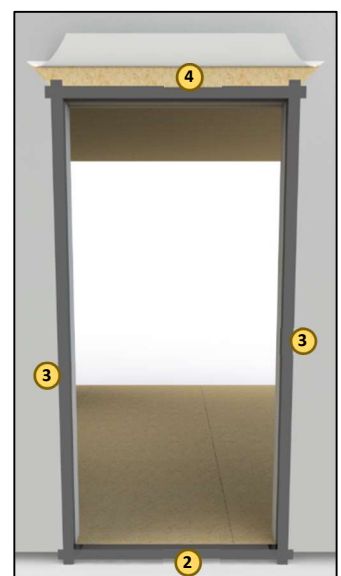
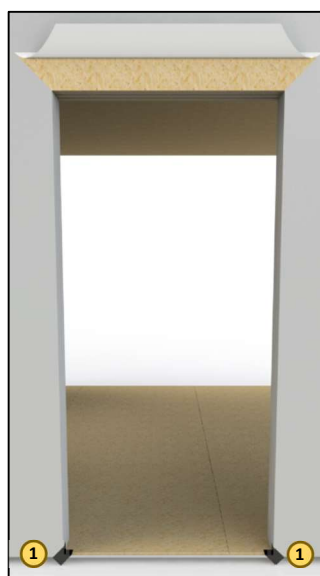
- III. Prepare the RO. Follow flashing manufacturer instructions, CSA A440.4, ASTM E 2112, AAMA 300 or equivalent, along with the steps below. If in any step there is a contradiction, follow the most conservative (best protection) approach. Follow part A below, regardless.
 - a. Cut and wrap the flashing membrane at the bottom corners extending at 45° past the opening. (1)
 - b. Start from the sill (2) and work up. Sill self-adhered membrane should extend 6" up the sides. Cut and wrap flashing membrane along the sill of RO overlapping 3" past the corners by cutting tabs.
 - c. Cut and wrap lengths of flashing tape vertically from sill to header (3), overlapping 3" past the corners of the opening by cutting tabs.
 - d. Do the same for the last length at header (4), extending/overlapping similarly.

TIPS

The sub-floor area must be at least:
6" deep for 4-9/16" frames
8" deep for 6-5/8" frames.

Flashing does not need to extend all the way to the interior.

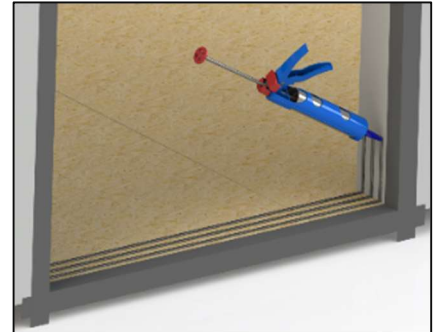
Roll the flashing with a J-roller to assure there are no wrinkles or tenting in the membrane.



20 Minute Fire Rated Entry Door Installation

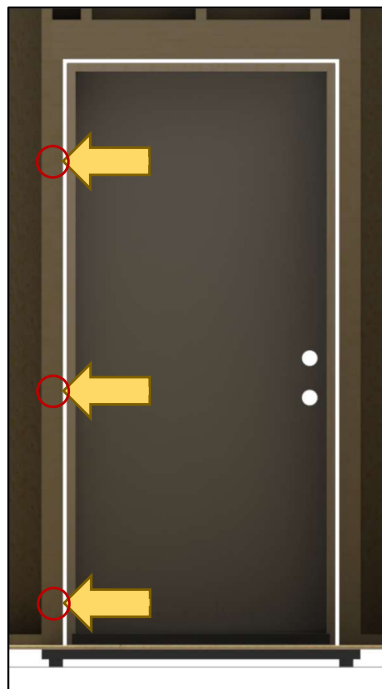
Step 3: Setting the Door

- I. Apply three 1/4" thick continuous beads of sealant along the length of the sub-floor, the first line starting approx. 1" from the inside edge. They should be 1" apart. Extend beads 6" up the jambs on either side.
- II. Apply a generous amount of sealant at bottom corners.
- III. With a helping hand, pivot the door into position from the sill, at bottom-side without wiping or disturbing the caulked sealant.
- IV. Standing from the interior, tilt the door unit toward you up into the opening and ensure it is plumb and square in each direction.
- V. Ensure the inside edge of the door unit maintains proper alignment with interior drywall.
- VI. OPTION: Loosely install screws at slimline fin to set door upright while shimming to aid in ease of installation: max 2 1/4" for 4 9/16" jamb; max 4" for 6 9/16" jamb.
- VII. Place shims at each hinge location between the door and the RO. Insert shims in other locations as needed (at top where t-post meets frame or starting up 6" from the bottom of the door to square it further).



TIPS

A properly shimmed door should not move or twist when screws are being tightened & reveals are maintained.



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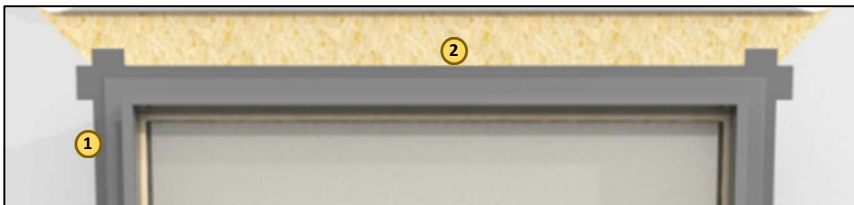
Step 4: Complete Installation

- I. Using the provided long screws, drill and fasten them through the open hinge screw holes and into the RO.
 - a. Additional (2) long screws supplied to be used with customer supplied FIRE RATED striker. **Do not use short screws.**
 - b. DO NOT bow the door frame.
- II. Remove or bend weatherstripping to screw #8 x 3" long wood screws at 18" on center along jambs, with a #8 x 2 1/2 " wood screw located within 3" to 4" from top and from bottom.
 - a. DO NOT rely on any screws in slimline fin for securing the door. **Failure to follow the fastening at the hinges and jambs will void any and all fire ratings for this door.**
- III. Starting from the exterior in, apply FIRE RATED insulation (e.g., fiberglass insulation) into the open void between the door and RO.
- IV. Verify squareness and check the door for its operation and reveal.
 - a. **CRITICAL: Gaps cannot be more than 1/8" MAX for top and sides; Gap 3/4" MAX for door sweep.**
- V. **Fix any concerns with the above items before continuing.**
- VI. Add a final bead of sealant between the edges of the sill and exterior wall finishing (Not always necessary for single family homes/townhomes)
- VII. Apply drip flashing where required and/or interior trim, as needed.
- VIII. Add flashing tape along vertical sides (1) of the exterior, then at the header (2) to seal door. **Do not put tape along sill.**

TIPS

For step down landings (side doors), install support trim underneath the sill where it extends past the landing.

Sealant joints should be inspected annually and repaired where deemed necessary.



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Step 5: Possible Adjustments

- I. Self-closing hinge hardware are provided with instructions in case of the need to increase or reduce closing force.
- II. Sill height can be adjusted to close the gap tightly against the door sweep.

Step 6: Finishing and Painting

- I. Remove weatherstripping; mask any hardware or exterior trim.
- II. Remove any excess debris, dirt, sealant, etc. using a hard cloth then clean with mild detergent and water. Allow to dry completely before continuing.
- III. Paint a minimum of two coats of high-quality exterior grade paint onto exposed surfaces.
Note: Ensure all 6 sides of the door slab are painted upon completion in accordance with warranty requirements.

IMPORTANT:

- Stripped screws will void the fire rating of the product. Ensure screws are installed properly and do not tamper with them after installation.
- The fire rated certification marks cannot be removed, covered or otherwise tampered with.
- No holes, cuts or any other modification to the product unless authorized by Durabuilt Windows & Doors.

Care & Cleaning:

Regularly inspect for signs of wear and tear, such as loose screws, damaged weatherstripping, slab damage, loose/worn hardware, sticking or binding, drafts or air leaks, noisy operation, deterioration of finish, etc. and replace as needed to maintain door integrity and functionality.

Avoid:

- highly porous cleaning chemicals on laminate films.
- sharp or abrasive objects (i.e. razor blades) to clean glass or door slab/jamb surfaces as they may induce scratching to surfaces. Instead, use a microfiber cloth.
- leaving protective tape on for longer than 3 months.

TIPS

Lubricate hinges, locks and other moving parts routinely, with suitable lubricants, to prevent degradation and ensure smooth operation.

TIPS

Weatherstripping can be adjusted to improve contact at corners. These are precisely cut to allow water to run down & out the sill drain. Features allow for easy replacement of worn material. Consult Durabuilt Windows and Doors to verify the need to replace the weatherstripping and to determine the FIRE RATED weatherstripping to replace it with.

TIPS

Touch up paint or finish on doors as needed to repair scratches, chips, or other surface damage.

Work in temps between 5 °C to 35 °C and do not finish in direct sunlight.

Use of solvents, brickwash or cleaning chemicals may cause chemical damage and should be verified as compatible for use.

Exterior finishing should be inspected once per year for natural degradation.

TIPS

Prevent damage and reduce occurrence of maintenance issues by avoiding the slamming of doors and by using door stops/wedges in high traffic exit/entries.

Product subject to audits to verify it is correctly installed and unmodified.

Should you have any concerns regarding your Durabuilt product, please contact us.

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or visit www.durabuiltwindows.com for more information.