Outfitting the interior

Nail Gun Safety

- Press against nailing surface fully before pulling the trigger.
- Keep fingers away from nails being shot.
- Remove the battery before inspecting a nail jam.

Note

Interior work demands more precision than framing - be exact in your measurements!

Use an Arrow to Mark Measurements
7A. Interior Doors

The barriers between rooms

Tools Needed

- Finish Nail Gun
- 6-Ft Level
- Utility Knife
- Tape Measure
- Pull Saw
- Pencil
- Nail Puller
- Drill & Bits

Hardware Needed

- Finish Nails (Nail Gun)
- Shims
- 3-In. Screws

Note
See floor plan for door locations and door swings.
Single Doors

**Split Jamb Door: Has 2 components (front and back)**

Each single door assembly should come with three cardboard spacers (two on the side and one on top) - **DO NOT REMOVE THESE**.

1. Carefully remove all other wood and staples along the sides and top using a nail puller.

2. Separate the casing into the front and back pieces.
   
   **Do NOT bend the back piece (the piece without the door) - it’s fragile!**

3. If installing a closet door, place the back piece inside the closet. If a bedroom/bathroom door, place outside the room.

4. Level the hinge side of the door opening, adding shims behind hinges if necessary (Image 1).

5. Check the distance of the rough opening (X in Image 1) versus the door (Y in Image 2), and add shims to the hinge side equal to half this difference.

   **Example:** $X = 36”$, $Y = 35 \frac{1}{2}”$
   
   $Difference = \frac{1}{2}”$
   
   $Half of this difference = \frac{1}{4}”$

6. Mark the door and jamb where knob hardware aligns (Image 2).
7. Place a shim on each bottom end of where the door will sit.

8. Put door in place, and push hinge side of the door tight against the wall.

9. If hardware mark does not align, adjust shims under the door frame.

10. Nail into the jamb above and below each hinge (a cluster of 3 nails per hinge).

11. Replace the middle screw from each hinge with a 3” screw.

12. Nail along the edge of the hinge side door trim every 16”.

13. Adjust shims under the frame to align hardware if necessary (top gap should equal the thickness of the cardboard spacer); then, nail the top edge.

14. Nail opposite side, top to bottom, ensuring that the side gap is uniform all the way down.

15. Looking at the back side of the frame now, shim the gap of the opposite side and nail.

16. Nail through front casing into these shims.

17. Trim shims using the pull saw.

18. Attach back casing, nailing top and sides every 16”.

19. Nail through back casing into shims.
Double Doors

Each double door assembly has two cardboard spacers on top and a board on bottom that holds the doors together - **DO NOT REMOVE THESE**.

1. Carefully remove all other wood and staples along the sides and top using a nail puller.
2. Separate the casing into the front and back pieces.
   
   **DO NOT bend the frame - it’s fragile!**
3. Place the back casing inside the closet.
4. Have one brave soul (read: innocent bystander) go inside the closet with a light source.
   
   See Image 1 for Steps 5-11:
5. Place two shims under each side of where the door will sit.
6. Hold the door in place.
7. Level the **top** of the frame by adjusting shims underneath the sides of the door.
8. Once level, the person inside will adjust the frame so that the gap on each side is even.
   
   **Note: Nail along the outside edge of the door trim to make sure you nail into the wood.**
9. Nail along the trim every 16” at top.
10. Nail each side, top to bottom.
11. Have the person in the closet knock out the board on bottom with a hammer and open the doors.

![Image 1. Installing a double door](image1)
12. Remove the middle screws from all six hinges.
   Shim behind each hinge. Replace with 3” screws (Image 1).

13. Adjust shims as needed to make for a fairly even gap in between the two doors from top to bottom.

14. Trim shims using the pull saw.

15. Attach back side of frame. Nail trim every 16”.

16. Nail into split jamb by each hinge (use a cluster of 3 nails per hinge) (Image 1).
7B. **Paint Prep**

Paint will not stick to a surface well unless it is clean!

**Tools Needed**

- **Caulk Gun**
- **Silicone Caulk**
- **Scraper**
- **Sponge**
- **Broom & Dustpan**
- **Shop-Vac**
- **Spackling Paste**
- **Bowl of Water**
- **Rags**
- **Roller Extension Pole**
- **Sanding Pad**
- **Putty Knives**

**Note**

Remember to clean caulk and spackling as you work - it is much harder to remove after it’s hardened.

Hardened caulk must be sanded off.
Paint Prep

Both decorative and protective

1. Remove excess drywall mud from penetrations (electrical boxes, plumbing pipes, HVAC ducts…) (Image 1). A putty knife may do a better job than your hands here.

2. Vacuum out the dust from these penetrations.

3. Vacuum and sweep the floors. Use the scraper to remove dried mud off the floors (Images 2 & 3).

4. Wipe down window sills with a wet rag. Attach rag to a sanding pad on a roller extension pole to wipe down the walls and the ceiling (Image 4).

Note: Keep bowls of water with you to refresh your rags (Image 5).

Note: Change out water as needed. (You will need to!)
Paint Prep, Cont.

4. Caulk anywhere trim meets drywall (door trim, baseboard, shoe moulding, window sills...) (Image 1).

5. Caulk around penetrations—electrical outlets, showerheads, and plumbing pipes—but NOT HVAC penetrations (Image 2).

6. Apply spackling paste to fill in nail holes in door trim, baseboard, and shoe moulding (Image 3).

**Applying Caulk**

- To achieve a clean bead of caulk at a seam, apply slow and steady pressure to the caulk gun. Try to finish a seam in one run.

- **To wipe off excess product, do NOT use your finger. Instead, use the corner of a damp sponge to run along the seam.**

- Wash the caulk off of the sponge in a bowl of water.

  *Wipe off excess spackling paste in the same way—with a damp sponge.*
7C. **BASEBOARD**

A board that covers the joint between interior walls and the floor

**Tools Needed**

- Finish Nail Gun
- Tape Measure
- Shims
- Miter (Chop) Saw
- Pencil
- Scrap Wood

**Hardware Needed**

- Finish Nails (Nail Gun)

**Notes:**

- Be **exact** with measurements!
- Small gaps are ok (that’s what caulk is for).
Baseboard

Both decorative and protective

1. If working on a whole room, draw a layout of your room on a scrap piece of wood, cardboard, etc.

2. Get your measurements, and record on the layout.

3. Draw what the baseboard will look like at each corner of the room (Image 1):
   - Interior corners - elongates from front to back
   - Exterior corners - elongates from back to front
   - Intersection with door trim - straight

4. Make cuts, ensuring that corners are cut at 45°.
   
   **Note:** Make sure you are flat against the saw fence when cutting.

5. Place shims along the wall (fat part up against the wall) to keep the baseboard ¼” off the ground.

6. Attach the baseboard using a nail gun. Place a nail at each stud along the top edge (reference paint marks for stud locations) (Image 2).

7. Remove shims so they do not get stuck.

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**Staff/QAT Note:**
- Split into teams of two or three.
- Have each team work on their own room and do their own measuring and cutting (more mistakes seem to happen when dimensions are given to a designated cut person/group).

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Image 1. Example Room Layout

Image 2. Paint Marks Denoting Studs
7D. **Window Sills**

The bottom section of window trim

### Tools Needed

- **Finish Nail Gun**
- **Tape Measure**
- **Shims**
- **Pencil**
- **Finish Nails (Nail Gun)**
- **Miter (Chop) Saw**
- **1 Jigsaw**
- **Utility Knife**
- **Caulk Gun**
- **Silicone Caulk**
- **Sponge**
- **Bowl of Water**

**Notes**
Window Sills

1. Measure the width of the window opening (X in Image 1).
   - Add 2” to this dimension, and cut your sill piece.
   - Add 1” to this dimension, and cut your trim piece.

2. Measure the depth of the opening on each side (Y₁ and Y₂ in Image 1).

3. Use the jigsaw to cut a notch into each side of the sill. (The curved edge of the sill faces the front and thus stays uncut.) The sill in Image 1 is a finished piece.

4. Using the miter saw, cut a 22.5° angle on each end of the trim piece (the thicker part will be the longer dimension) (Image 2).

5. Trim any protruding drywall in the window opening with a utility knife, and sweep out dust before fitting the sill piece.
Window Sills, Cont.

6. Fit the sill piece, and check for level. Add shims as needed (Image 1).

7. Use the nail gun to put three nails along the edge close to the window (Image 2).

8. Rotate the level to be perpendicular to the window. Fit the trim piece underneath, and slide up or down until sill is level front to back. Nail the trim every 12” into the wall (Images 3 & 4).

9. Finish nailing the sill with three more nails along the front edge (Image 2).

Caulk any gaps (see note below).

Applying Caulk

- To achieve a clean bead of caulk at a seam, apply slow and steady pressure to the caulk gun. Try to finish a seam in one run.
- To wipe off excess product, do NOT use your finger. Instead, use the corner of a damp sponge to run along the seam.
- Wash the caulk off of the sponge in a bowl of water.