

# 370 - Insulation Install

## Materials and Tools Needed:

1. Insulation bats. Typically
  1. R19 kraft faced for 16OC 2x6 exterior walls,
  2. R13 kraft faced for 24OC 2x4 exterior walls
  3. R19 12” wide kraft faced rolls for rim joist
2. Slam staplers
3. Utility knives with sharp blades
4. Expanding foam for all wall penetrations by wires and pipes. Consult with the site supervisor if this needs to be fire rated foam
5. Expanding foam for the gaps around all exterior doors and windows. This must be the low expansion type. High expansion type expands strongly enough that it can warp door and window frames.

## Most Common Mistakes:

1. Gaps in insulation – wall cavities must be full with no gaps at top, bottom or in any joints
2. Insulation is compressed – to be effective, insulation must be “fluffy”
3. Insulation not neatly cut around electric boxes and other wall penetrations. Cannot just compress and “shove it in”
4. Where wires cross a wall bay, the bat must be split with some of the insulation on one side of the wires and some on the other.
5. Odd spaces like above and below bench seat bump outs must be filled with insulation.

## Construction:

- a) Use expanding foam to fill any gaps around all wire and pipe penetrations in wall top and bottom plates
- b) Using low expansion foam, fill the gaps around all windows and exterior doors.
- c) As delivered, the bats fit full size 16OC and 24OC walls, with no cutting. The bats are cut to 92 5/8” – the same as our wall stud length. For these full bays, all you do is stuff the bat in, carefully stretching it out so it is fluffy and there are no gaps at top or bottom. Unfold the kraft paper flanges and staple to the studs.
- d) There are many non-standard size wall bays. Some of these odd size bays are because windows and doors go where the architect specified, not on the 16OC or 24OC pattern. For these odd size bays, you must rip a bat to fit. Use a stud or other straight edge as a guide when ripping the bat to the right width. Insert in the bay and staple. You will only have a paper flange on one side.
- e) There are bays that are not full height. For example, above and below windows. Cut the insulation in both directions to fit. Insert and staple.
- f) For a 2 story house, the 2<sup>nd</sup> floor rim joist must be insulated. Cut pieces to fit. Fraction should hold it in place adequately.
- g) After all work is done, take a walk around the whole house and take a critical eye to all the work. Find and fill any gaps. Fix any areas of compressed insulation.

# 370 - Insulation Install

## Safety

33 Hazardous Material    Expanding foam, caulk, etc    Wear Safety Glasses and gloves. This material does not wash off and will only wear-off over an extended period of time.

Check MSDS. Check that workers are not particularly sensitive to this material.

Keep your head (eyes, nose, mouth) well away from these substances. If you get it on your hands, keep your hands well away from your eyes, nose, mouth.

30 Hazardous Material    Insulation dust    Dust masks are available to those who want them

I have heard and understood the briefings on how to use the tools required for this activity. I have heard and understood the methods we use to do this activity

Date \_\_\_\_\_

\_\_\_\_\_ Instructor Name    \_\_\_\_\_ Signature

\_\_\_\_\_ Name    \_\_\_\_\_ Signature