

Chapter 17 - Rough-in Mechanicals

Things to Consider

Components

Electrical Systems
Water Lines
Radon Systems

Plumbing Systems
Sewer Line

HVAC Systems
Gas Lines

Timing & Prerequisites

- This phase of the project will begin when the framing and roofing is complete.
- This phase is complete when the rough mechanical and Aware inspections are complete.
- The Habitat Superintendent and the House/Project Lead will coordinate these contractor and volunteer activities.

Materials Needed

Marking

Green Spray Paint
Orange Spray Paint
Black Spray Paint
Expandable Foam

Activities

The mechanical contractors will complete their rough in work. This work must be completed and inspected before the insulation can be installed.

HVAC Rough-In (Contractor)

The HVAC contractor will install:

All of the boots and the ductwork.

The siding blocks for the furnace intake / exhaust & the passive air intake.

Plumbing Top-out (Contractor)

The plumber will install:

All of the rough plumbing in the house.

The siding block for the hose bibs & gas line.

The water, gas, and sewer lines.

Radon Passive System (Contractor)

1. The plumber will install 4" PVC pipe from the sump pump up through the roof.
2. The electrician will install an outlet near the radon piping with a dedicated circuit.

Seal the Sewer (Volunteers)

Once the sewer line is installed, the hole in the foundation where the line enters the house will be sealed with expandable foam.

Basement Floor Sealing (Volunteers)

The seam around the perimeter of the basement will be sealed with a bead of caulk.

The seam around the perimeter of the sump pump and any other penetration will be sealed with a bead of caulk.

Electrical Rough-In (Contractor)

The electrician will install all of the electrical boxes and the service panel. He will also pull all of the wiring into the boxes.

Phone Jack (Contractor)

Install a plaster ring and phone jack with the bottom of the ring no lower than 18" above the finished floor line, wired to the phone service.

Cable Connection (Contractor)

Install a plaster ring and cable TV circuit with the bottom of the ring no lower than 18" above the finished floor line. Run from the point of service delivery to a wall jack with a cover plate sized for the coaxial cable and a minimum of 5' of cable available outside of the wall jack.

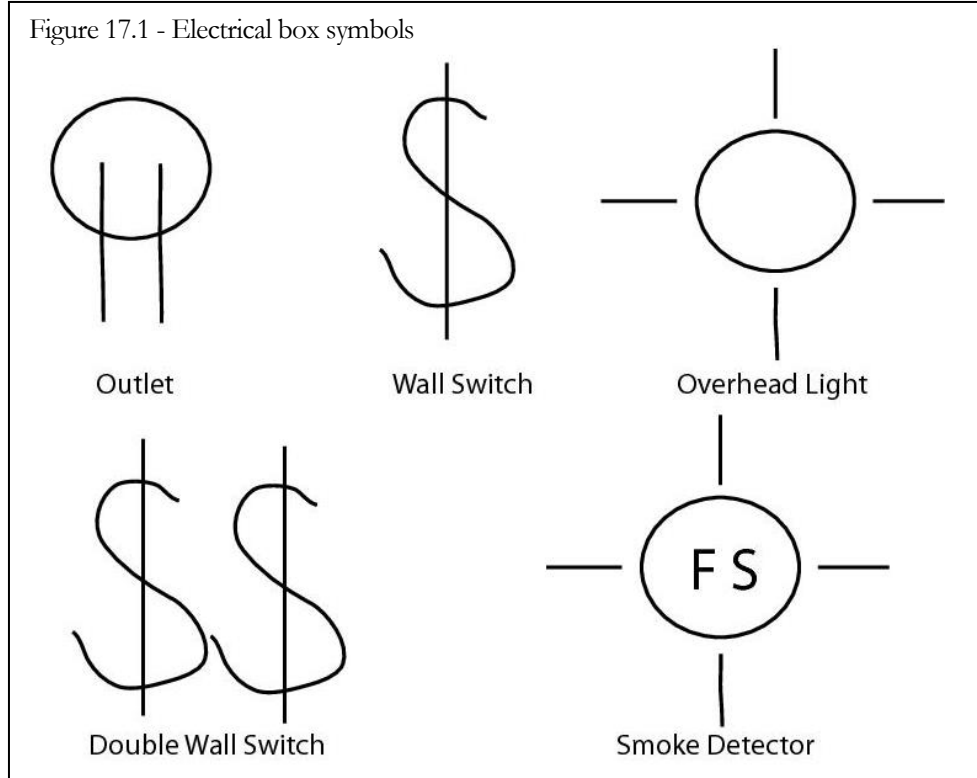
Coax: Install coaxial cable to the living room, dining room and all bedrooms

CAT5: Install category 5 cable to the living room

Mark the Electric Boxes (Volunteers)

You will need to mark the location of these boxes before the drywall installation. (See Figure 17.1)

You will also need to mark the location of the studs to assist with hanging the drywall. It is best to use a different color. **Do not spray paint on the steps.**



Mark the Plumbing Pipes (Volunteers)

It is critical to know where the plumbing is when installing the things like towel bars and shelving; therefore, it is important to mark the location of the plumbing before it is covered. On the floor next to the pipes mark the location of the center of the plumbing pipes and what size they are.

These marks must be transferred to the top of the finished flooring once it is installed. Use a two step process to ensure the marks are not lost.

- 1) After the drywall is painted, transfer the marks to the bottom of the walls using a Sharpee. The marks should be low enough to be covered by the base boards.
- 2) After the flooring is installed and before the baseboards are installed, transfer the marks to the flooring using blue painters tape.

Spray Paint the Cold Air Return (Volunteers)

Use black spray paint to paint the interior of the cold air return shafts.