



Appendix B Insulation Handout

Fasteners Used

- Install staples on the vapor barrier every 16” to 24”.
- Install staples on the baffles along the outside and center flanges approximately every 8”.

Words to Know

- **Baffle** - (Vent Baffle / Insulation Baffle) This thin spacer is installed between rafters to maintain a ventilation space between the insulation and roof deck.
- **Batt (bat)** – A unit of flat-wrapped insulation designed to be installed between framing members.
- **Vapor Barrier / Visqueen** – Material used to retard the flow of vapor or moisture into walls and thus prevent condensation within them. The vapor barrier must be a part of the warm side of the wall.

Additional Notes:

- Fill all holes in the top plate, bottom plate, around windows, around exterior doors and exterior walls with either caulk or tightly packed insulation. Caulk the outside perimeter of both floors where the walls meet the floor. Also be sure to caulk the outside perimeter of the 2nd floor rim joists.
- Install any missing roof baffles; cut pieces of insulation and stuff between the top plate and the baffle. The baffles should extend about 2” beyond the outside wall. You will also need to cut pieces of insulation to fit into the joist spaces at the ceiling of the first floor on the outside wall.
- Only the exterior walls receive insulation; the batts that fit between the studs come pre-cut the proper length. When installing the batts be sure that there are not any gaps at the top or bottom also be sure not to compress the batts into the openings. Tuck and pluck, be sure the batts are fluffed out.
- Using small strips of insulation and a 1” putty knife, shim, etc., carefully fill the gaps around windows and door jambs.

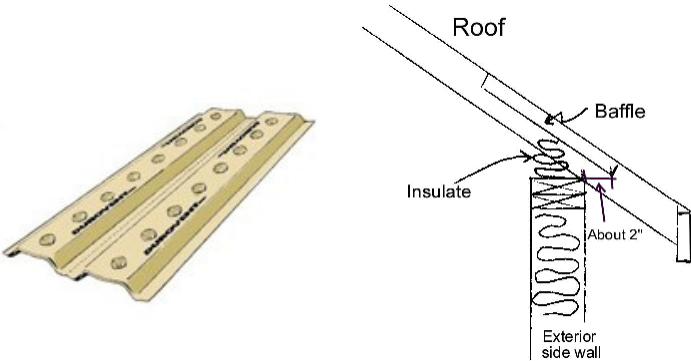
- Do not insulate any ceilings; the 2nd floor ceilings will receive blown in insulation at a later day by a professional. Also don't worry about insulating the basement expanding foam will be applied to the joist cavities by a professional.
- Where electrical wires run through between studs, separate the batt into two halves and place one half behind the wire and one half in front of the wire. Where blocking occurs, try to pull the batt from the top down behind the blocking. If that does not work splice the batt behind the blocking. Cut a pocket for outlets so that a portion of the insulation is behind the outlet box with no gaps.
- The vapor barrier is supplied in two sizes 8'-4" and 10' rolls and is to be used on the exterior walls and the second floor ceiling only. The 10' rolls are for the second floor ceilings and the 8'-4" rolls are for the exterior walls.
- Using 3/8" staples and a staple gun apply staples every 16" to 24", apply the vapor barrier to the upstairs ceiling first and allow an overlap of 10" on the down wall. Overlap pieces on the ceiling by at least one truss space. Be sure that the vapor barrier is taught and tucked into the corners and not rounded, this causes problems when installing the vapor drywall.
- When applying the vapor barrier to the walls, push it up to the ceiling with no overlap at the ceiling; allow all the overlap to extend onto the floor, this will be cut off after drywall is installed. Make sure the wall vapor barrier overlaps by at least 2 studs. Staple the vapor barrier across the top plate and down the studs every 16" to 24".
- Use a utility knife to X out the vapor barrier at the window and exterior door openings. The window and door openings can be cut flush with the opening. When you get to the scuttle hole cut an X into the scuttle hole, fold back the vapor barrier and staple it. Also be sure to cut an X in all outlets, heat register openings, etc.

Safety:

- Observe all rules and precautions specified under general, tools and ladders (see safety manual handout).
- Utility knives are very sharp - keep your hands out of the path of the blades. Always retract the blade or install guard when not in immediate use.
- Fiberglass particles can be particularly harmful. When handling insulation, wear sturdy, loose, long sleeved clothing, gloves and goggles (even glasses are inadequate protection), face mask, a respirator or dust mask and a hat.
- If particles get on your skin, do not scratch. Shower with cold water as soon as possible.

Various Types of Insulation

Roof Vent Baffle System



Pipe Insulation



Vapor Barrier (Visqueen)



Unfaced Batt Insulation



Rigid Foam Insulation

