

# CHECKLIST FOR ENERGY EFFICIENT CONSTRUCTION

*Tear off and review these items with your builder*

## 2 X 4 IN. STUD WALLS

### SHEATHING BOARDS:

#### For brick exterior:

- 1 1/2 in. expanded polystyrene, i.e. "white bead board," (R-6.00) with foil on one side [queen-size bricks required with this board]  
or
- 1 in. iso board (R-7.2) [foil on both sides]

*NOTE: Brightest side of foil should face bricks. If house wrap is used, install directly to the studs/plywood, before sheathing boards.*

#### For vinyl or wood siding:

- 1 in. extruded polystyrene, i.e. "blue board" (R-5.0)  
or
- 1/2 in. blue board (R-3.0) over 1/2 in. O.S.B./plywood (R-0.5)

### INSULATION:

- Walls: R-15 (batts or blown rockwool, foam, fiberglass or cellulose)
- Attic: R-38 (batt or blown)
- Floor: R-19 (if on piers)

### HEATING/COOLING AND WATER HEATING:

- Minimum 14 SEER heat pump for heating/cooling
- Seal air return/chase and all ductwork with mastic tape or sealant
- Minimum R-6 duct insulation
- Seal around sheetrock openings for supply vents with caulking or sealant

- Minimum .92 energy factor water heater

- WINDOWS:** double pane vinyl frame with low-E glass (a solar heat gain coefficient of .40 or less preferred)

- DOORS:** metal/fiberglass insulated preferred (wood doors are allowed)

### AIR INFILTRATION CONTROL:

- Airtight recessed lighting cans
- Apply bead of caulking (35+ year) or sealant (Sill-Seal) between bottom plate and slab
- Apply housewrap to studs (before sheathing boards) or tape sheathing board seams with foil tape (not duct tape)
- Caulk or foam seal all electrical and plumbing holes penetrating top plates and exterior sheathing boards
- Caulk or foam seal (non-expanding) between studs and finished window or doorframes

### ATTIC VENTILATION:

- Gable roofs: continuous ridge vents  
*NOTE: Need minimum 13 linear feet per 1,000 square feet under roof. Ridge vents are not recommended for hip roofs.*
- Hip roofs: wind-driven turbine vents (two per 1,500 sq. ft. under roof)
- Soffit vents: continuous perforated vinyl or 8 in. x 16 in. vents spaced 4 foot on center