

REScheck Inspection Checklist

2000 IECC

REScheck Software Version 3.5 Release 1b

DATE: 03/07/03

TITLE: Model 123

Bldg.
Dept.
Use

Ceilings:

- [] 1. Ceiling 1: Flat Ceiling or Scissor Truss, R-30.0 cavity insulation
Comments: _____

Above-Grade Walls:

- [] 1. Wall 1: Wood Frame, 16" o.c., R-13.0 cavity insulation
Comments: _____

Windows:

- [] 1. Window 1: Vinyl Frame:Double Pane, U-factor: 0.400
For windows without labeled U-factors, describe features:
Panes____ Frame Type_____ Thermal Break? [] Yes [] No
Comments: _____

Doors:

- [] 1. Door 1: Solid, U-factor: 0.600
Comments: _____

Floors:

- [] 1. Floor 1: All-Wood Joist/Truss:Over Unconditioned Space, R-19.0 cavity insulation
Comments: _____

Air Leakage:

- [] Joints, penetrations, and all other such openings in the building envelope that are sources of air leakage must be sealed.
- [] Recessed lights must be 1) Type IC rated, or 2) installed inside an appropriate air-tight assembly with a 0.5" clearance from combustible materials. If non-IC rated, the fixture must be installed with a 3" clearance from insulation.

Vapor Retarder:

- [] Required on the warm-in-winter side of all non-vented framed ceilings, walls, and floors.

Materials Identification:

- [] Materials and equipment must be installed in accordance with the manufacturer's installation instructions.
- [] Materials and equipment must be identified so that compliance can be determined.
- [] Manufacturer manuals for all installed heating and cooling equipment and service water heating equipment must be provided.
- [] Insulation R-values and glazing U-factors must be clearly marked on the building plans or specifications.

Duct Insulation:

- [] Ducts in unconditioned spaces must be insulated to R-5.
Ducts outside the building must be insulated to R-6.5.

Duct Construction:

- [] All joints, seams, and connections must be securely fastened with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric, or tapes. Duct tape is not permitted.

Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at less than 2 in. w.g. (500 Pa).

- [] Ducts shall be supported every 10 feet or in accordance with the manufacturer's instructions.
- [] Cooling ducts with exterior insulation must be covered with a vapor retarder.
- [] Air filters are required in the return air system.
- [] The HVAC system must provide a means for balancing air and water systems.

Temperature Controls:

- [] Thermostats are required for each separate HVAC system. A manual or automatic means to partially restrict or shut off the heating and/or cooling input to each zone or floor shall be provided.

Service Water Heating:

- [] Water heaters with vertical pipe risers must have a heat trap on both the inlet and outlet unless the water heater has an integral heat trap or is part of a circulating system.
- [] Insulate circulating hot water pipes to the levels in Table 1.

Circulating Hot Water Systems:

- [] Insulate circulating hot water pipes to the levels in Table 1.

Swimming Pools:

- [] All heated swimming pools must have an on/off heater switch and require a cover unless over 20% of the heating energy is from non-depletable sources. Pool pumps require a time clock.

Heating and Cooling Piping Insulation:

- [] HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F must be insulated to the levels in Table 2.

Table 1: Minimum Insulation Thickness for Circulating Hot Water Pipes.

Heated Water Temperature (F)	Insulation Thickness in Inches by Pipe Sizes			
	Non-Circulating Runouts		Circulating Mains and Runouts	
	Up to 1"	Up to 1.25"	1.5" to 2.0"	Over 2"
170-180	0.5	1.0	1.5	2.0
140-160	0.5	0.5	1.0	1.5
100-130	0.5	0.5	0.5	1.0

Table 2: Minimum Insulation Thickness for HVAC Pipes.

Piping System Types	Fluid Temp. Range (F)	Insulation Thickness in Inches by Pipe Sizes			
		2" Runouts	1" and Less	1.25" to 2"	2.5" to 4"
Heating Systems					
Low Pressure/Temperature	201-250	1.0	1.5	1.5	2.0
Low Temperature	120-200	0.5	1.0	1.0	1.5
Steam Condensate (for feed water)	Any	1.0	1.0	1.5	2.0
Cooling Systems					
Chilled Water, Refrigerant, and Brine	40-55	0.5	0.5	0.75	1.0
	Below 40	1.0	1.0	1.5	1.5

NOTES TO FIELD (Building Department Use Only)
