

The Department of Energy (DOE) recently released its new R-value recommendations for new and existing homes. The insulation recommendations for attics, cathedral ceilings, walls and floors have been increased overall and generally exceed those required by most building codes.

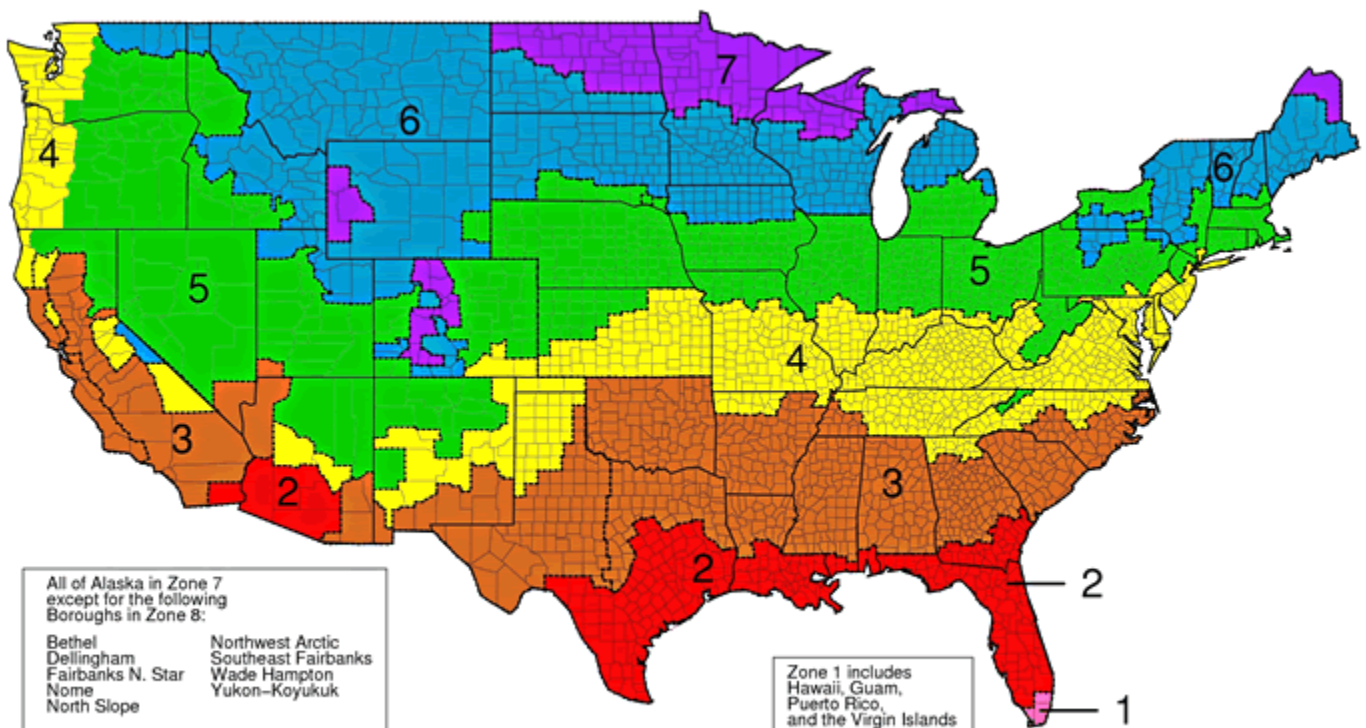
### New vs. Old

DOE's new range recommendations are based on comparing future energy savings to the current cost of installing insulation. The Department of Energy lists the following reasons for providing a range of recommendations:

- Energy costs vary greatly over each zone
- Installed insulation costs vary greatly over each zone
- Heating and cooling equipment efficiency varies from house to house
- Best estimate of future energy costs may not be exact. 1

<http://www.naima.org/naimalert/DOE-Releases-New-R-Value.html#Anchor-References-49575>

### DOE's Recommendations



**New Wood-Framed Houses**

Zone	Heating system	Attic	Cathedral Ceiling	Wall		Floor
				Cavity	Insulation Sheathing	
1	All	R30 to R49	R22 to R38	R13 to R15	None	R13
2	Gas, oil, heat pump	R30 to R60	R22 to R38	R13 to R15	None	R13
	Electric furnace					R19-R25
3	Gas, oil, heat pump	R30 to R60	R22 to R38	R13 to R15	None	R25
	Electric furnace					
4	Gas, oil, heat pump	R38 to R60	R30 to R38	R13 to R15	R2.5 to R6	R25-R30
	Electric furnace					
5	Gas, oil, heat pump	R38 to R60	R30 to R38	R13 to R15	R2.5 to R6	R25-R30
	Electric furnace		R30 to R60	R13 to R21	R5 to R6	
6	All	R49 to R60	R30 to R60	R13 to R21	R5 to R6	R25-R30
7	All	R49 to R60	R30 to R60	R13 to R21	R5 to R6	R25-R30
8	All	R49 to R60	R30 to R60	R13 to R21	R5 to R6	R25-R30

**Existing Wood-Framed Houses**

Zone	Add Insulation to Attic		Floor
	Uninsulated Attic	Existing 3-4 Inches of Insulation	
1	R30 to R49	R25 to R30	R13
2	R30 to R60	R25 to R38	R13 to R19
3	R30 to R60	R25 to R38	R19 to R25
4	R38 to R60	R38	R25 to R30
5 to 8	R49 to R60	R38 to R49	R25 to R30

**Wall Insulation:** *Whenever exterior siding is removed on an*

**Uninsulated wood-frame wall:**

- Drill holes in the sheathing and blow insulation into the empty wall cavity before installing the new siding, and
- Zones 3-4: Add R5 insulative wall sheathing beneath the new siding
- Zones 5-8: Add R5 to R6 insulative wall sheathing beneath the new siding.

**Insulated wood-frame wall:**

- For Zones 4 to 8: Add R5 insulative sheathing before installing the new siding