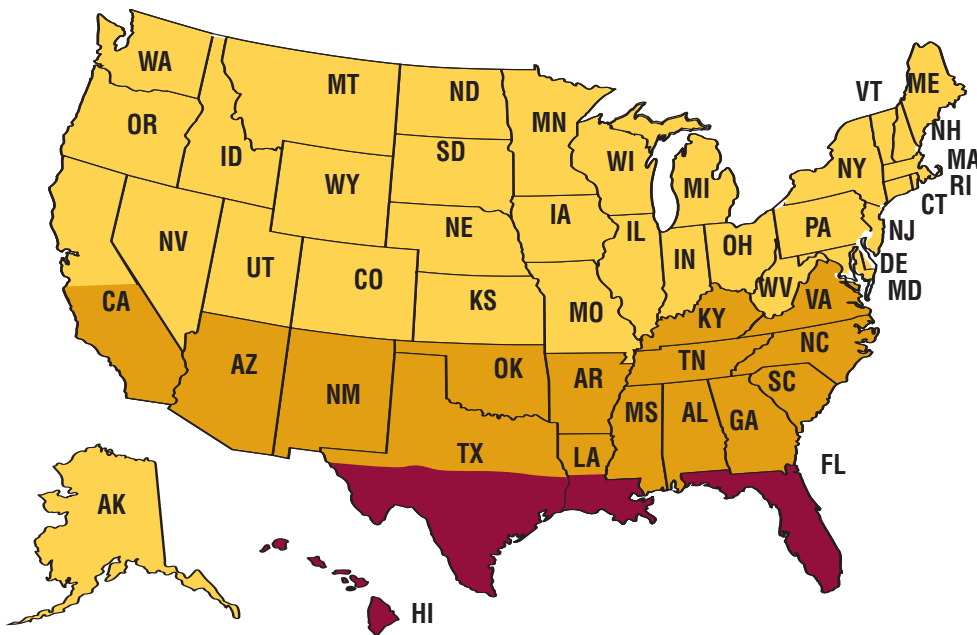


# R-Values for Enhanced Home Energy Savings and Comfort for Existing Homes



**Ceilings: R-49**  
**Walls: R-21**  
**Floors: R-30**  
**Basement Walls: R-13**

**Ceilings: R-49**  
**Walls: R-15**  
**Floors: R-30**  
**Basement Walls: R-13**

**Ceilings: R-38**  
**Walls: R-15**  
**Floors: R-30**  
**Basement Walls: R-13**

## Your Home's Insulation May Be Below Code

The Energy Information Administration estimates that heating costs will increase up to 30% this year. Harvard University School of Public Health estimates that 45 million U.S. homes are under-insulated by the latest minimum codes. Adding fiber glass or mineral wool insulation is one of the fastest, most effective ways to save energy in your home. Inadequate insulation is one of the main reasons the average American home is wasting between 10 and 50% of its energy each year.

## Recommended Areas to Insulate

### Attics

In most areas of the country, you should have an R-49 in the attic. This likely means adding an R-19 to R-30 layer of insulation to what you already have. Make sure you use fiber glass or mineral wool blown-in or batt insulation without a vapor retarder or kraft paper facing when adding to existing insulation. This modest investment of time and money will help you save on your energy usage and improve your family's comfort for years to come. If you don't want to do it yourself, hire a professional insulation contractor to blow in additional fiber glass or mineral wool insulation.

### Basements

If your basement is not heated and the furnace is not located there, insulate between the joists of the basement ceiling, instead of around the perimeter or exterior walls. This keeps conditioned air in the living areas where it belongs and out of the basement. Use unfaced fiber glass or mineral wool batt insulation which can be supported from below with wire or metal rods if necessary. If the basement is heated or contains the furnace, you need to insulate the basement walls instead. The simplest method is to build 2 x 4 frames against the concrete foundation walls, insulate with fiber

glass or mineral wool batt insulation and cover with drywall. If the basement is finished, it is difficult to add insulation without tearing out the walls. Look to other areas of your home for places to add insulation that are easier to access. If the basement walls are damp, consult an expert before insulating.

### Floors

Insulating floors over unconditioned crawl-spaces, basements, garages or other areas not only saves on wasted energy but will make rooms more comfortable. You can use faced or unfaced fiber glass or mineral wool batts. Proper placement of vapor retarders and kraft paper facing is critical. Check with your local building department or insulation contractor for guidance. It's best to fill the space, so measure the depth of the floor cavity before you head to the store. You probably need 10 inch thick, R-30 batts to fill the cavity.

### Walls

Most existing homes have some insulation in the walls. But if your home is 30 years old or older, it might not have any. It's best to hire a professional insulation contractor to blow in insulation. Not only will it help reduce heat loss but it will make your home more quiet and comfortable.

### Other Energy Efficiency Steps

- Seal all accessible ducts to prevent air leakage. Add fiber glass duct wrap to any accessible ducts in unconditioned spaces that lack insulation.
- Conduct a furnace checkup and replace filters monthly.
- Caulk, seal and weatherstrip around windows, doors, outlets, the foundation, and any plumbing or electrical penetration to the outside.

*The map shows NAIMA's recommended thermal insulation levels based on both the U.S. Department of Energy's recommendations and the most recent minimum International Energy Conservation Code levels. These R-values provide enhanced energy savings and comfort. They may not be practical or attainable in all existing homes, but homeowners should come as close as possible for the optimal effect. Savings vary. Find out why in the seller's fact sheet on R-values. Higher R-values mean greater insulating power. Please check with your local building code office for state and local code requirements.*

**You May Be Eligible to Receive a Tax Credit for Installing Insulation in Your Home.**

**Visit [www.SimplelyInsulate.com](http://www.SimplelyInsulate.com) to Find Out More**

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NAIMA does not state or imply that each and every insulation installation job will qualify for a tax credit. NAIMA does not warrant or guarantee a tax benefit will be awarded for each and every addition of insulation. Eligibility may vary by jurisdiction. Please carefully consult the Internal Revenue Service ([www.IRS.gov](http://www.IRS.gov)) guidelines on how to qualify for the energy efficiency tax credit. NAIMA does not provide professional tax counseling.

**Higher R-values Mean Greater Insulating Power**