

THE GUIDE TO MAKING YOUR HOME MORE COMFORTABLE WITH FIBERGLASS INSULATION



## **R-VALUE IS THE ABILITY TO RESIST HEAT FLOW**

Whether you're a homeowner with a knack for DIY projects, or you are working with an insulation contractor, it's important to understand the R-value of insulation and what it means for the comfort and efficiency of your house.

If your house has cold spots, or you want lower heating and cooling bills, you can enhance your comfort and reduce utility costs by adding fiberglass insulation\*. But first, you'll need to determine the R-value you want to achieve. THE EFFECTIVENESS OF INSULATION IS MEASURED IN R-VALUE. THE HIGHER THE R-VALUE, THE MORE THE FIBERGLASS WILL RESIST HEAT FLOW.

\* Savings vary

# HERE ARE THREE STEPS TO TAKE TO DETERMINE YOUR R-VALUE AND PLAN YOUR NEXT INSULATION PROJECT:

## **1. LOCATE YOUR CLIMATE ZONE**

If you live in the northeastern United States or other colder areas, you might need attic insulation with an R-value as high as R-60. If you live in a southwestern state or other areas with generally warmer temperatures, you might need attic insulation with an R-value of only R-30.



#### To determine the R-value recommended for where you live, check the climate zone map:

ZONE	ATTIC	CATHEDRAL CEILING	WALL CAVITY	FLOOR
1	R30 T0 R49	R22 TO R15	R13 TO R15	R13
2	R30 T0 R60	R22 TO R38	R13 TO R15	R13
				R19 T0 R25
3	R30 T0 R60	R22 T0 R38	R13 TO R15	R25
4	R38 T0 R60	R30 T0 R38	R13 TO R15	R25 TO R30
5	R38 T0 R60	R30 T0 R38	R13 TO R15	D25 T0 D20
		R30 T0 R60	R13 TO R21	R25 10 R30
6	R49 T0 R60	R30 T0 R60	R13 TO R21	R25 T0 R30
7	R49 T0 R60	R30 T0 R60	R13 TO R21	R25 TO R30
8	R49 T0 R60	R30 T0 R60	R13 TO R21	R25 TO R30

	ADD INSULAT		
ZON	UNINSULATED ATTIC	EXISTING 3-4 Inches of Insulation	FLOOR
1	R30 T0 R49	R25 T0 R30	R13
2	R30 T0 R60	R25 T0 R38	R13 TO R19
3	R30 T0 R60	R25 TO R38	R19 TO R25
4	R38 T0 R60	R38	R25 T0 R30
5-8	R49 TO R60	R38 T0 R49	R25 T0 R30

Source: U.S. Department of Energy

Actual R-value requirements for attics, floors and walls might differ in your state or local community. Be sure to check the building code for your location.

## 2. FIND YOUR EXISTING R-VALUE

There are simple ways to determine the R-value of your existing insulation:



Look for an installation card or insulation certificate in the attic or electrical panel. A previous owner or contractor might have left behind information about the R-value of insulation installed.



Check to see if existing insulation has a paper facing. If it does, the R-value will be printed on the paper. If it does not, the R-value will be printed on the fiberglass itself.



In exposed spaces such as the attic or basement, you can measure the thickness of the existing insulation in inches. Then multiply that number by three to estimate the approximate R-value.

### **3. DETERMINE HOW MUCH MORE INSULATION YOU'LL NEED**



- Where you live
- Your home's age
- The condition of your existing insulation

To determine the R-value you need, subtract the R-value you currently have from the R-value you want to achieve.

Learn more about determining how much insulation you'll need by visiting the <u>Insulation Institute website</u>.



## READY TO INSULATE? HERE'S WHAT TO DO NEXT.

Now that you know the basics of R-value, it's time to estimate how many packages of insulation you'll need to purchase to reach recommended insulation levels. Whether you use roll, batt or loose-fill insulation, the packaging will list the R-value of each product.

**Check out our other how-to videos and guides**. You also can discover DIY tips for Knauf EcoBatt<sup>®</sup> or EcoRoll<sup>®</sup> fiberglass insulation. If you have any insulation questions, please contact Knauf Insulation or a professional installer.

