



## *Insulation*

### *Home Insulation*

R-Value specifies insulation levels. R-Value is a measure of insulation’s ability to resist having heat travel through it. The higher the R-Value, the better the thermal performance of the insulation. The table below shows what levels of insulation are cost-effective for different climates and locations in the home.

### *Why is Insulation Important?*

The proper type and level of insulation for your home provides a continuous thermal barrier minimizing heat flow through the walls, ceiling, and floor. The result is a more comfortable home and reduced heating and cooling costs. Installing insulation properly is as important as the type and level of insulation because gaps, voids, compressions, and moisture reduce the effectiveness of insulation and allow unconditioned air to enter your home.

<i>If You Heat With:</i>	<i>Ceiling</i>	<i>Wood-Frame Wall</i>	<i>Floor</i>	<i>Basement/Crawl Space Wall <sup>(a)</sup></i>
<i>Gas or Oil Boiler or Furnace</i>	<i>R-38 to R49</i>	<i>R-11 to R-22 <sup>(b)</sup></i>	<i>R-25</i>	<i>R-11 to R-19</i>
<i>Heat Pump or Electric Resistance</i>	<i>R-49</i>	<i>R-11 to R-28</i>	<i>R-25</i>	<i>R-13 to R-19</i>

*(a) Do not insulate crawl space walls if crawl space is wet or ventilated with outdoor air.*

*(b) R-values can be achieved through using both cavity (interior, between wall studs) insulation (fiberglass batts for example) and exterior rigid board insulation. Values are for insulation only, not the whole wall.*

### *If You “Do It Yourself”*

First educate yourself on the newest insulation techniques. Just installing batt or loose fill insulation may not be the best approach or save you the most in the long term. A professional, using newer installation approaches, not readily available to consumers at their local home supply store, might result in greater savings to you. Federal and State tax incentives and utility rebate programs may lower the cost of hiring a contractor. If you do end-up doing an installation on your own, be sure to protect your eyes with glasses or goggles and wear long sleeves, gloves and long pants. A facemask to protect from inhaling fiberglass particles is highly recommended. The best time of year for this work, especially in attics, is the fall, winter or early spring. Work in attics in warm weather lead to dehydration, heat exhaustion and even heat stroke.

### *Information Sources*

On the web: [www.simplyinsulate.com](http://www.simplyinsulate.com) for insulation manufacturers’ products and installation information, [www.munihelps.org](http://www.munihelps.org) for general information, or call 888 333-7525 for the HELPS line.

