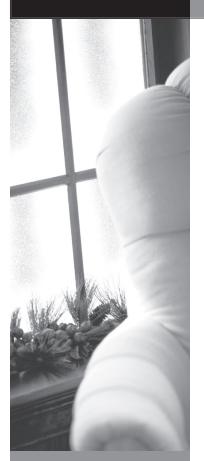
## Insulation

# Warm Up Your New Home



Insulating all areas of your home will not only conserve energy, it will also lower your utility bills roper insulation is probably the single most important step you can take to conserve energy. The

idea behind insulation is to trap heat in the winter and dissipate it during the summer. As you may already know, insulation is rated by R-value. This indicates the material's ability to resist the flow of heat. The higher the R-value, the greater the insulating power.

Since insulation significantly affects ventilation and moisture conditions in the home, it is important that it be installed correctly. While an airtight house will conserve energy, it still needs adequate ventilation in order to let excess heat and moisture out.

Most houses need a free ventilating opening equal to one square foot for every 150 square feet of attic floor area. Adequate ventilation is necessary to keep insulation, paint, and roofing materials free from trapped moisture and heat. It also makes the home easier to cool.

To test for adequate ventilation, put a thermometer in the attic on a warm, windless day. The temperature should be no more than 10 to 15% higher than the outside temperature. If it is, you may want to have a roofer or insulation contractor recommend the proper size and number of ventilators needed for your home.

You can improve the thermal efficiency of your home with a professional energy audit to determine ways to lower your utility bills. Home energy audits are generally available from your local utility company or private contractors. After receiving the audit report, you may want to discuss your insulation needs with a qualified contractor.

#### **Insulation Areas**

You can easily insulate unfinished attic floors with batt, blanket, or loose fill material. Be sure to leave all vents unobstructed.

Add batting or blanket insulation with a vapor barrier to the outside walls when remodeling or finishing a room. For existing walls, a professional can put blown fill between the studs of the wall.

As long as it is well ventilated, you can also insulate the floor above a crawl space. You can eliminate a major source of moisture almost completely by placing a vapor barrier over the soil.

#### Inside

Humidity in the air makes the home feel warmer and more comfortable with less heat required. Humidifiers can be used throughout the heating season.

After heating and cooling, water heating is the largest consumer of energy in the home. A setting of 120° is sufficient unless you have an automatic dishwaster which normally requires a setting of 140°. Insulating the water tank pipes will improve their efficiency.

Automatic setback thermostats allow you complete control of temperature settings throughout the day and night. Be sure the chimney damper fits snugly to prevent fireplace drafts.

### Outside

Caulking and weatherstripping windows and doors efficiently prevents unwanted drafts as well as outside air and moisture infiltration. Wrapping outside faucets with insulation and sealing any other exterior openings prevents cold or moist air from entering the home.

Weatherizing your home with insulation makes the home feel more comfortable, like being wrapped in a cozy comforter.

