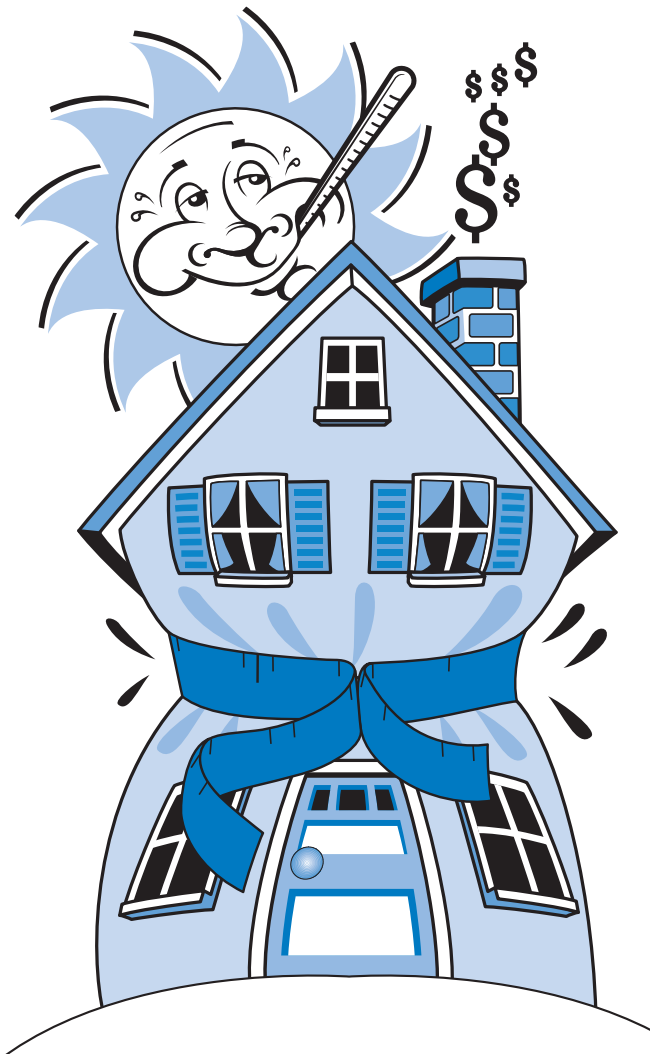


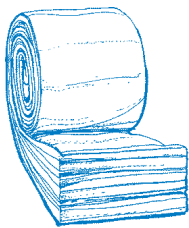
TIPS TO AVOID HIGHER AIR CONDITIONING BILLS



As the weather gets hotter and utilities and the media suggest higher natural gas and electricity costs this summer, homeowners should take steps to ensure the energy efficiency of their homes. In fact, this is the first time since the 70s that costs continue to be on the rise after winter. Natural gas is expected to rise by 15 percent this summer. And tax incentives and rebates for undertaking energy efficiency projects are being explored across the country.

So what should homeowners do? It's simple. M and M. Minimize the amount of air conditioned air leaking from your home and Maximize every last BTU of natural gas or kilowatt of electricity. How? By undertaking these projects:

Upgrading Attic Insulation



Attic insulation is one of the most important things to look for to upgrade the energy-efficiency of your home. A one time investment in insulation can reduce energy use by as much as \$400 a year, according to the Planning and Conservation League. Heat escaping through the attic may be responsible for up to one half of your home's entire cooling loss. Check your attic to make sure there is at least 12" of insulation. If not, upgrade to the latest recommended level of insulation for your geographic area. Proper insulation levels will also keep your home more comfortable. Upgraded fiber glass insulation levels can also help soundproof and weatherize your house for optimum living quality.

Insulating Your Basement

Insulate your basement walls if they are not already insulated. They should be insulated to at least an R-10 if they are more than 50 percent below the grade. If they are more than 50 percent above grade, they should be insulated to the same levels recommended for above grade walls.

Installing an Automatic Setback or Programmable Thermostat

Programmable thermostats raise or lower home temperatures around your living schedule. When you're working, program it to a higher temperature, in the 80s. Before you return, it lowers it to the 70s. These measures can help you save up to 10 percent on your annual cooling bill.



Insulating Your Sidewalls

Properly insulated sidewalls will help save energy and improve the comfort of your home. The amount needed depends on your home's construction.

A professional insulation contractor can help you determine how much insulation you have in your walls and suggest ways to upgrade to today's Department of Energy (DOE) standards with unique blown-in fiber glass insulation materials.



Checking Your Cooling System

To improve the efficiency of your cooling system, change the filters monthly. Also clean air registers. Have your unit serviced.

Weatherstripping, Caulking and Sealing



Check to see that all cracks around windows and doors, electrical box openings and plumbing penetrations, the joints of corner trim and siding and the joints of roof eaves are caulked and weather-

stripped to avoid cooling loss.

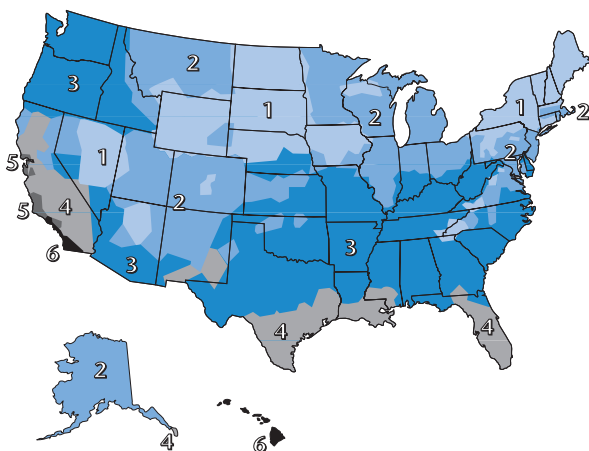
Insulating Your Floors and Crawlspace

Check for adequate levels of insulation under floors over basements and in crawlspaces.



Make sure floors are insulated with at least 6-1/4" thick R-19 fiber glass insulation. If the floor above feels too warm to bare feet in the summer, adding insulation can help improve the comfort and energy efficiency of the room. Also, look for proper insulation levels in garages and crawlspaces.

Department of Energy Thermal Recommendations for Homes



- (A) R-18, R-22 and R-28 exterior wall systems can be achieved by either cavity insulation or cavity insulation with insulating sheathing. For 2" x 4" walls, use either 3-½" thick R-15 or 3-½" R-13 fiber glass insulation with insulating sheathing. For 2" x 6" walls, use either 5-½" thick R-21 or 6-¼" thick R-19 fiber glass insulation.
- (B) Insulate crawl space walls only if the crawl space is dry all year, the floor above is not insulated, and all ventilation to the crawl space is blocked. A vapor retarder (e.g., 4- or 6-mil polyethylene film) should be installed on the ground to reduce moisture migration into the crawl space.
- (C) No slab edge insulation is recommended.

Zone	Gas	Heat Pump	Fuel Oil	Ceiling		Wall (A)	Floor	Crawl Space (B)	Slab Edge	Basement	
				Attic	Cathedral					Interior	Exterior
1	✓	✓	✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10
2	✓	✓	✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10
3	✓	✓	✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10
4	✓	✓	✓	R-38	R-38	R-13	R-13	R-19	R-4	R-11	R-4
5	✓			R-38	R-30	R-13	R-11	R-13	R-4	R-11	R-4
5		✓	✓	R-38	R-38	R-13	R-13	R-19	R-4	R-11	R-4
6	✓			R-22	R-22	R-11	R-11	R-11	(C)	R-11	R-4
6		✓	✓	R-38	R-30	R-13	R-11	R-13	R-4	R-11	R-4

For information regarding other fuel sources, visit the DOE website at: http://www.eren.doe.gov/consumerinfo/energy_savers/r-value_map.html

Planting Trees and Shrubs

Strategically planted landscaping in your yard can help reduce your energy costs. Hardy, low-lying evergreens and shrubs planted close to the foundation of a house help slow the loss of conditioned air during the summer.



Leafy deciduous trees are best planted in front of sunny windows, which will minimize sunlight and warmth in your living area to help maintain cool air conditioned temperatures.

Installing Drapes on Windows

Drawn drapes can help keep warm air out and cool air in your home. They protect from solar gain, too.

To conduct an audit of your home on your own, visit the Department of Energy's website at www.homeenergysaver.lbl.gov.

For more energy efficiency tips, call the CertainTeed Home Institute at 1-800-782-8777 or visit the web site at www.certainteed.com.

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