



# WEATHERIZATION



Energy Efficient



Comfort



Cost Effective



## ADDING VALUE TO YOUR ELECTRIC SERVICE



# AIRTIGHT

### INSULATE

Adding insulation to your home can cut heating and cooling costs significantly, depending on factors such as the original amount of insulation in your home, house size, air leaks, personal energy use and living habits.

### R-Value of Home Insulation

The table below may help you determine the R-Value of existing insulation in your home if unknown. Multiply the insulation thickness by the appropriate R-Value per inch.

INSULATION R-VALUE REFERENCE TABLE*		
Insulation Type	R-Value/inch	
	Old	New
<b>Flexible Batts</b>		
Fiberglass	2.6	3.2
Rockwool	3.1	3.8
<b>Loose-Fill</b>		
Cellulose	3.2	3.5
Fiberglass	2.0	2.4
Rockwool	2.4	2.9
Perlite	2.3	2.7
Vermiculite	2.0	2.4
<b>Rigid Foam Boards</b>		
Polystyrene, molded	4.0	
Polystyrene, extruded	5.0	
Polyurethane	6.0	
Polyisocyanurate	8.0	
<b>Spray Foam Insulation</b>		
Urethane	6.0	
Foam Roofing	8.0	

\*www.energysavers.gov

### Spray Foam: Closed-Cell or Open-Cell?

Closed-cell foam are high-density cells closed and filled with a gas that helps the foam expand to fill the spaces around it. It has an insulation value of around R-6.2 per inch of thickness. Open-cell foam cells are less dense and are filled with air, which gives the insulation a spongy texture. This has an insulation value around R-3.7 per inch of thickness. Both are typically made with polyurethane.

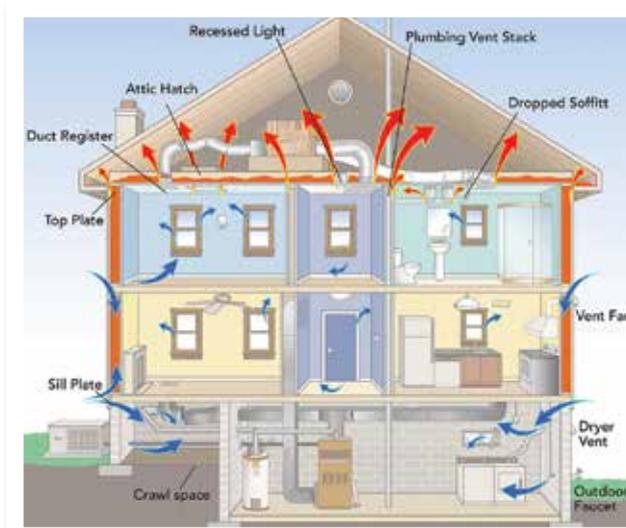
The average Iowa family spends more than half its annual household energy bill on heating and cooling. That's a significant number, but you can dramatically reduce these costs – up to 20 percent, according to ENERGY STAR® – by making some simple energy-saving weatherization and insulation improvements to your home.

The U.S. Environmental Protection Agency (EPA) highly recommends air sealing before adding more insulation.

### ENERGY STAR TIP

#### Question: Where are the biggest air leaks in my home?

**Answer:** Many air leaks are easy to find because they are easy to feel – like those around windows, doors, and through electrical outlets. But hidden air leaks in attics, basements, and around chimneys are often more significant sources of energy loss. Consider addressing these big leaks first because they will have a greater impact on improving your comfort and reducing your utility bills. ENERGY STAR's "Do-It-Yourself Guide to Sealing and Insulating with ENERGY STAR" has great pictures and suggests places to look for these leaks.



FOR MORE INFORMATION VISIT

ENERGY STAR®  
www.energystar.gov

Iowa Energy Center  
www.iowaenergycenter.org

U.S. Department of Energy (DOE)  
Energy Efficiency and Renewable Energy  
www.energysavers.gov



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# CONTACT YOUR COOPERATIVE



Contact your cooperative for the complete list of incentive programs and qualifications.

Products purchased or services received by residential members may qualify for the Weatherization Program incentives up to \$2,200 per home. Incentive amounts vary by type of heating and cooling system.

All programs subject to change at any time, without prior notice.

Self-installers should attain the necessary expertise to ensure the resulting work does not compromise the integrity and/or safety of your home.

If a contractor is used, be sure to review all requirements and specifications on the rebate forms with them prior to the installation. Contractor invoices must be itemized with costs shown for each qualifying installation and provided along with the rebate forms.



## WEATHERIZATION INCENTIVES - BASIC REQUIREMENTS

- Residential home must be built prior to 1996.
- Must have electric heat and/or central air conditioning (homes with natural gas heat do not qualify).
- Project must be an upgrade to existing home (new additions do not qualify).
- Cost of project must be \$150 or more (labor costs for self-installed projects cannot be included).

## Primary Heating/Cooling Requirements

- Electric heat system must heat 75 percent of the home and operate prior to any non-electric backup. Portable space heaters do not qualify as part of the primary heating system. Air conditioning is not required.
- Central air conditioning system must provide cooling to the entire home (except basement). Heating system is not natural gas and does not qualify as electric heat.

## Qualifying Installations

- Insulation levels must be below the pre-existing maximum in the home prior to install and above the post-install minimum (see table below) to qualify for the program.
- Infiltration control includes the installation of house wraps (such as Tyvek®), vapor barriers, permanent weatherstripping, caulking and foam sealing. Temporary sealing such as removable strip caulking and plastic window covers do not qualify.
- Professional installation is required for duct insulation/sealing. Only ducts located in an unconditioned space such as the attic or crawlspace will qualify. Sealing of ducts located in the basement with the heating system does not qualify. Sealing with duct tape does not qualify.

Members heating their homes with natural gas should contact their gas utility for applicable incentives.

## ENERGY EFFICIENCY WEATHERIZATION PROGRAM INCENTIVES

Insulation Type	Electric Heat		Central AC Only	
	Incentive	Maximum Incentive	Incentive	Maximum Incentive
Attic / Ceiling Insulation	60% of total costs	\$600	15% of total costs	\$150
Wall Insulation	60% of total costs	\$600	15% of total costs	\$150
Foundation Insulation	60% of total costs	\$600	Not Available	N/A
Infiltration Control	60% of total costs	\$600	Not Available	N/A
Duct Insulation / Sealing	60% of total costs	\$600	Not Available	N/A
<b>MAXIMUM PER HOME</b>	<b>\$2,200</b>		<b>\$300</b>	

## REQUIRED INSULATION LEVELS

Insulation Type	Pre-Existing Maximum	Post-Install Minimum
Attic Insulation	R-20	R-38
Wall Insulation	R-13	R-13 (min. install R-5)
Foundation Insulation	R-8	R-5 (min. install R-5)
Duct Insulation / Sealing	R-3	R-8

## ENERGY STAR TIP

**Question: How do I know if I have enough insulation in my attic?**

**Answer:** A quick way to see if you need more insulation is to look across your attic. If your insulation is level with or below the joists, you probably need to add more insulation. If you can't see the joists because the insulation is above them, then you probably have enough and adding more will likely not be cost effective. No matter your level of insulation, take the time to ensure air leaks are adequately sealed. Visit [www.energystar.gov](http://www.energystar.gov) to download the free "Do-It-Yourself Guide to Sealing and Insulating with ENERGY STAR®" for more information.



## LIHEAP Weatherization Incentives

Members who qualify for Iowa's Low-Income Home Energy Assistance Program (LIHEAP) may be eligible to receive additional incentives for their weatherization efforts. They must meet all requirements of the standard Weatherization Program. Materials or labor provided and paid for by an outside agency do not qualify.

## ENERGY EFFICIENCY WEATHERIZATION PROGRAM INCENTIVES Low-Income Home Energy Assistance Program (LIHEAP)

Insulation Type	Electric Heat		Central AC Only	
	Incentive	Max. Incentive	Incentive	Max. Incentive
Attic/Ceiling Insulation	80% total costs	\$800	20% total costs	\$150
Wall Insulation	80% total costs	\$800	20% total costs	\$150
Foundation Insulation	80% total costs	\$800	Not Available	N/A
Infiltration Control	80% total costs	\$200	Not Available	N/A
Duct Insulation/Sealing	80% total costs	\$200	Not Available	N/A
<b>MAXIMUM PER HOME</b>	<b>\$2,800</b>		<b>\$300</b>	