

# Home Energy Retro-Fit

Madison  
Milwaukee  
Green Bay, WI Wausau

by:  
Home Energy Efficiency  
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800-661-2611

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## Home Energy Retro-Fit

The Home Energy Retro-Fit report lists changes, or retrofits, that you can make to your home to save energy and money. Acting on the energy retrofit recommendations will make your home more comfortable, more valuable, and more affordable.

Wisconsin Energy Audits recommends these retrofits, based on data gathered in a detailed inspection of your home. If you desire more detail on the retrofits or the cost estimates, contact Wisconsin Energy Audits, which provided you this service.

## Energy Retro-Fit Table

The Energy Retro-Fit table shows a package of energy retrofits for you to consider. Both the individual and total annual savings are based on the whole package. You can see how good of a financial choice these measures are by looking at the last column.

Feature to improve	Change from	Change to	Estimated cost	Annual savings	SP*
Infiltration:	3966-5950/3966-5950 CFM5l	2800/2800 As Specified	\$600	\$238	2.52
Rim/Band:	R-0.0 / R-0.0	R-0.0 / R-13.0	\$52	\$19	2.71
Rim/Band:	R-0.0 / R-0.0	R-0.0 / R-13.0	\$5	\$2	2.71
Rim/Band:	R-0.0 / R-0.0	R-0.0 / R-13.0	\$19	\$4	4.53
Fnd Wall:	Un 8" CB	8-12"C R10 F RO	\$602	\$115	5.22
Fnd Wall:	Un 8" CB	8-12"C R10 F RO	\$856	\$106	8.08
Fnd Wall:	Un 8" CB	8-12"C R10 F RO	\$310	\$28	11.17
AG Wall:	R11 (2x4 16oc)G3	R11 (2x4 16oc) R7G3	\$294	\$24	12.37
Ceiling:	R15 Attc (2x6 16oc)	R50 Attic	\$1863	\$141	13.24
<b>Total</b>			\$4600	\$677	
<b>Monthly Finance Cost**, Monthly Savings</b>			\$383	\$56	

\* SP is Simple Payback: the number of years until the retrofit has paid for itself.

\*\* The monthly finance cost is the monthly payment, including interest, that will pay for all the tabulated improvements when financed with a 1-year mortgage at 0.00%.

## Energy Costs by End-Use

The Energy Costs table compares the "before" and "after" annual energy costs to show energy cost savings. It groups retrofits by "end-uses," which are broad categories of how energy is used (or generated) in a home. Note that Photovoltaic panels (PV) generate energy, so as a result this "end-use" shows negative costs, if present.

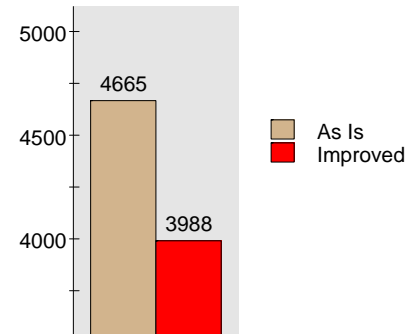
The Total Costs bar chart gives a visual sense of how the annual operating costs of your house could change by incorporating all the listed energy retrofits.

The HERS Index bar chart provides a snapshot of your home's energy efficiency before and after retrofits. The HERS Index shows the energy efficiency rating of your home, similar to the way a miles per gallon rating shows the efficiency for a car.

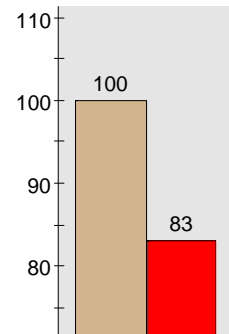
Energy Costs (\$/year)

End-Use	As Is	With All Improvements	Savings
Heating	1909	1199	710
Cooling	318	351	-33
Hot Water	201	201	0
Lights and Appliances	2000	2000	0
Photovoltaics	-0	-0	0
Service Charge	239	239	0
<b>TOTAL</b>	<b>4667</b>	<b>3991</b>	<b>677</b>

Total Costs (\$/year)

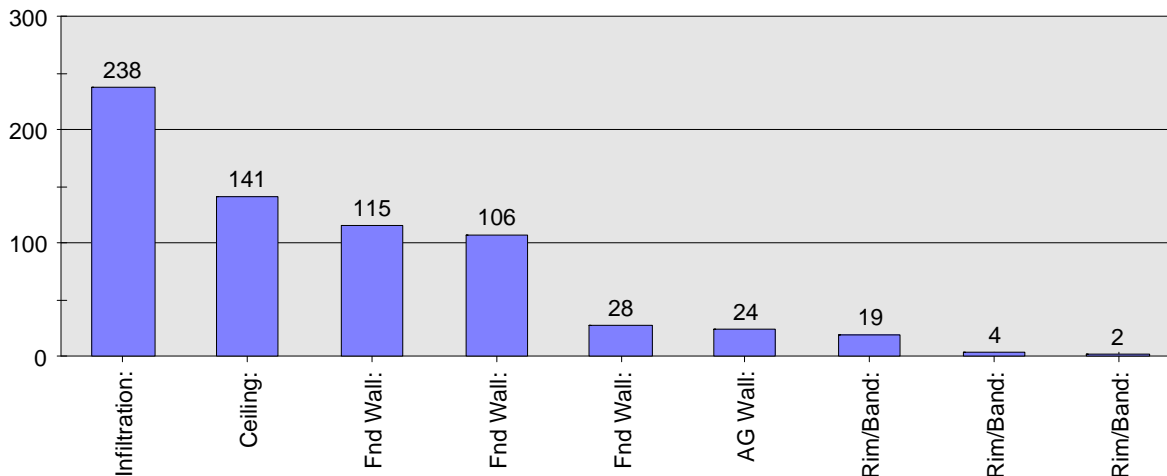


HERS Index



The bar chart below displays the annual energy cost savings (\$ per year) associated with the energy retrofits you choose. Some retrofits interact with one another, and the total savings offered by each can change if the package of combined retrofits changes. For example, if you increase the insulation of your home, the energy savings you can gain from installing a more efficient furnace will be less than if you only install the furnace. However, the total savings will be greater if you choose both retrofits.

Annual Savings for Retrofits (\$/year)



## WX WORK ORDER

Building Name:		Date:	February 27, 2011
Occupant:	Madison	Cond Area (sq ft):	5388
Property:	Milwaukee	Cond Volume (cu ft):	43821
Address:	Green Bay, WI Wausau	Number of Stories:	2
Phone:		Surface Area (sq ft):	8431

### General Information

This section of the report can be customized by opening up the wx.def file with an editing program and adding whatever text is appropriate. The wx.def files resides in the same directory as the program executable. The default is: C:\Program Files\Architectural Energy Corporation\REM Rate 12\.

MEASURE	MEASURE DESCRIPTION	AFFECTED AREA	QUANTITY
Reduce 1000+ CFM50	Seal air leaks and bypasses	Infiltration:	5388 sq ft
Add R11/13 Batt	Install R11/13 batt insulation in rim joist area	Rim/Band 1: bsmnt_air	69 sq ft
Add R11/13 Batt	Install R11/13 batt insulation in rim joist area	Rim/Band 3: bsmnt_crw	6 sq ft
Add R11/13 Batt	Install R11/13 batt insulation in rim joist area	Rim/Band 2: bsmnt_grg	25 sq ft
Add R10 Rgd (Int.)	Install R10 faom board on interior foundation walls	Fnd Wall 3: amb_crw	354 sq ft
Add R10 Rgd (Int.)	Install R10 faom board on interior foundation walls	Fnd Wall 2: amb_bsmnt	504 sq ft
Add R10 Rgd (Int.)	Install R10 faom board on interior foundation walls	Fnd Wall 1: grg	183 sq ft
Add R11/13 Batt	Install R11/13 batt insulation	AG Wall 3: kneewalls	490 sq ft
Blow R 51-60 Open	Blow R51-60 into open attic	Ceiling 1:	1620 sq ft

### Health, Safety, Comfort, and House Durability Recommendations

These measures do not impact the energy rating, but are highly recommended for your home.

A:	Home energy efficiency improvements wisconsin
B:	madison eau claire milwaukee green bay oshkosh madison wausau la crosse janesville racine
C:	stevens point appleton marshfield
D:	energy audit wisconsin
E:	