

# Four Cedars - The Westbrook House

## Design Goals

Energy Efficiency	Environmental Sensitivity
Low Maintenance	Cost Effective Design / Construction

## Logistics

Construction Time:	6.5 months
Move In:	Sep-96
Size (A/C):	2713 SF of A/C space
Size (gross):	3312 SF under roof

## Electricity Savings (all electric home)

Average Electric Bill:	\$85.00	avg use: 809 kWh/month
Highest Electric Bill:	\$170.71	Aug-06
Westbrook Electric Cost/Yr:	\$1,019.34	809kWh/mo * \$0.105/kWh over 15 year avg
Average Home Elec. Cost/Yr:	\$3,068.00	Avg use south: 10.77 kWh/sf/yr @ .101/kWh
Annual Savings:	\$2,048.66	
Monthly Savings:	\$170.72	

## Payback

Cost for Energy Efficiency Items:	\$ 13,000.00	Total cost of all energy efficiency upgrades
Added to a 15 year mortgage:	\$99 /mo @ 5.5% int + tax deduct on mortgage	
Added to a 30 year mortgage:	\$75 /mo @ 6% int + tax deduct on mortgage	
With a 15 year mortgage, you SAVE:	\$72 /month - but get full savings faster.	
With a 30 year mortgage, you SAVE:	\$96 /month	

First month I paid \$99 more to the mortgage company, but \$171 less to the utility. Net of \$72 in one month.

After the mortgage is paid, you realize the full savings every month.

Note that mortgage interest is tax deductible.

Energy bills are not deductible. In fact, energy use is taxed.

Payback occurred in the first month when we paid more to the mortgage co. but less to the utility.

## Environmental Benefit of Energy Efficiency

Our electricity savings/year:	19,200 kWh
Annual reduction in CO2 emissions:	32,640 lbs/yr
Annual reduction in SO2 emissions:	106 lbs/yr
Annual reduction in NOx emissions:	93 lbs/yr

## Water Use

Rain water storage	3,600 gallons of storage for outdoor use
Our water use is less than 2,900 gal/mo - the average Fairview residence uses over 16,000 gal/mo.	

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Westbrook House web site - [enerjazz.com/house](http://enerjazz.com/house)

General Contractor - Enviro Custom Homes, 972-418-7772