

# Energy Comparisons

## Case study #1

**Sacramento, CA**  
**Comparable single story 2,400 square foot homes**  
**Several addresses apart on same side of street**  
**Gas and electric bills Feb to Dec, 2003**

Traditionally insulated home:

- Utility bills  
 \$2,239 electric  
\$477 gas  
 \$2,716 total
- Monthly average utilities  
 - \$247
- Average utility prices  
 - Gas \$0.95 per therm  
 - Electric \$0.17 per kWh

Closed-cell spray foam insulated:

- Total gas and electric  
 \$1,107 electric  
\$306 gas  
 \$1,413 total
- Monthly average utilities  
 - \$128
- Average utility prices  
 - Gas \$0.93 per therm  
 - Electric \$0.13 per kWh

Closed-cell spray foam energy savings:

- 48% reduction in utility bills  
 - \$118 per month average savings  
 - \$1,422 per year; \$42,645 over 30 years
- How much extra financing could you afford on a 30 year mortgage with an extra \$118 per month?  
 - \$19,758 at 6%  
 - \$17,805 at 8%

## Case study #2

**Roanoke, VA**  
**2,240 square foot ranch**  
**Liquid propane gas heat**  
**Low fuel consumption got supplier's attention**  
**Monitored propane usage Aug '00 to Jul '01**

Ten similar homes with traditional insulation:

- Total propane consumption  
 - Average was 769 gallons

Closed-cell spray foam insulated:

- Total propane consumption  
 - 321 gallons

Closed-cell spray foam energy savings:

- 58% reduction in propane usage vs. average of ten comparable homes  
 - 30% savings vs. next best home  
 - 74% savings vs. worst home
- Estimated savings  
 - \$896/yr with propane at \$2 per gal  
 - Mortgage value of \$12,444 at 6%

## Case study #3

**Atlanta, GA**  
**Comparable residences 1,800 sq. ft.**  
**Less than two miles apart**  
**Similar occupancy**

Traditionally insulated home:

- Monthly average utilities \$143.76
- Cost of insulation \$2,350

Closed-cell spray foam insulated:

- Monthly average utilities \$89.64
- Cost of insulation \$5,200

Closed-cell spray foam energy savings:

- 38% reduction in utilities  
 - \$54.12 per month average saving
- Added mortgage cost \$2,850  
 - \$17.10 per month added mortgage payment at 6% interest
- Extra cash in homeowner's pocket \$37.02 per month