

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