

## **CASE STUDY**

## HOME PERFORMANCE WITH ENERGY STAR®

## Breathing Easy Again in Fresno

Fresno, California

When Fresno homeowners Matt and Lisa Nutting and their family were battling asthma, respiratory problems, mold, and high energy bills, they called local contractor Gary Richardson of Rare Service in nearby Clovis. Richardson was trained to diagnose and fix homes using the "house as a system" approach by the California Building Performance Contractors Association (CBPCA), a sponsor of Home Performance with ENERGY STAR in California.

The Nuttings' respiratory problems started right after they installed a fireplace to help heat their large home in the winter. Matt and his daughter both began experiencing coughing and breathing problems, often waking 3 to 4 times during the night. They were also burdened with extremely high heating and cooling bills and comfort issues.

Home Performance with ENERGY STAR is an innovative whole house approach to improving the comfort and energy efficiency of existing homes. Qualified contractors provide a complete home assessment and recommend ways to improve its energy efficiency. They can install insulation, do air-sealing, and verify that heating and cooling equipment and ductwork are operating safely and efficiently. They can even replace equipment, if needed.

During the diagnosis, Richardson used a blower door, duct blaster, and infrared camera which helped him discover leaky ducts, poor attic insulation, and unsealed can lights in the ceiling. Because the fireplace insert was cutting off the only source of relatively fresh air in the home, insulation particles were being drawn down through the unsealed can lights, causing the family's breathing problems. Without these sophisticated tools and techniques, the source of the Nuttings' health problems may never have been discovered.

The leakage of attic air helped cause the family's comfort problems and high energy bills. After repairing and replacing the ducts, upgrading the attic insulation, sealing the can lights, and replacing the HVAC unit, the family saw its health issues disappear immediately.

The energy savings were impressive. The Nuttings' utility bills decreased by half from about \$900 per month to less than \$450 per month. But the energy savings are only part of the story. "I killed three birds with one stone—our comfort level dramatically increased, our utility bills dramatically decreased, and our health problems were solved," Matt Nutting said. "Even if I didn't save money on my utility bills, I still would have been happy just solving the health problems."

The Home Performance with ENERGY STAR program is currently available in 12 states. Benefits of the program include:

- ► Up to 30% Savings on Energy Bills
- ➤ A Quieter, More Comfortable Living Environment
- Improved Air Quality
- Greater Home Durability with Lower Maintenance

To learn more about the Home Performance with ENERGY STAR program, visit: www.energystar.gov/homeperformance

