



TEXAS CO-OP POWER HOME ENERGY MAKEOVER

Contest Winner: The Deskin Family in Granbury

Members of United Cooperative Services

Joe and Beth Deskin and their four children live in Granbury in a 1,700-square-foot home built in 1988. Joe is an electrical engineer who works in Fort Worth. The family knew their 23-year-old heat pump needed replacing. Beth entered the Home Energy Makeover contest because she wanted to be more comfortable in their home and lower their monthly utility bills.

Comprehensive Energy Analysis

United Cooperative Services (UCS) conducted a comprehensive home-energy analysis that included a blower door test using diagnostic equipment. As part of the Energy Innovations program, UCS has conducted more than 5,100 residential energy audits on member homes since 2007. “The energy audit was very thorough and really showed us where we had some significant problems in energy efficiency,” said Beth Deskin. “We knew some of them existed, but there were other areas that we never considered.”



Heating and Cooling System

Lennox Industries provided a Model XP14 3-ton-capacity heat pump with SEER 15 efficiency to replace the existing 23-year-old system and included a programmable touch-screen thermostat that allows for temperature and dehumidification settings. Daffan Mechanical installed the new heat pump and replaced the old thermostat. In addition, more than 20 percent of the air that moved through the old heat pump’s duct system was lost due to leaks, holes and poorly connected ducts. This created higher energy costs and decreased comfort. Daffan carefully sealed the exposed ducts with a mastic sealant, replaced the air distribution box and added a second return duct. The new system, with its better efficiency rating, combined with the duct-system enhancements, will greatly improve the home’s comfort and lower utility bills. Plus, using a programmable thermostat, the heat pump can be adjusted to a preset schedule. As a result, the system won’t operate as much when the Deskins are asleep or away from home.

Unvented Attic System

AirTight SprayFoam Insulation of Texas applied closed-cell SprayFoam insulation to the roof deck, gables and soffit areas over all living spaces. All gable and soffit vents were sealed to create an unvented attic space that will stay within 10 to 15 degrees of the thermostat year-round. Any air that moves from the living space to the attic will not be lost because it remains within the home’s “envelope.” This improvement will allow the heat pump to better cool the house during the hottest parts of the summer and heat it during the cold winter months.

Water Heater

P&P Plumbing provided the labor to upgrade the eight-year-old water heater with an 85-gallon Rheem Marathon high-efficiency electric water heater provided by Texas Electric Cooperatives. It is more energy efficient and guaranteed for life not to rust or leak.

Lighting and Water Efficiency

Niagara Conservation donated energy-efficient compact fluorescent lightbulbs (CFLs) as well as water-efficient, low-flow faucet aerators and showerheads that were installed by UCS staff. CFLs use 75 percent less energy and radiate less heat than incandescent bulbs. The low-flow devices have the added benefit of helping reduce the amount of energy needed to heat water, creating an energy-saving opportunity as well. In addition, Niagara Conservation provided do-it-yourself Home Energy Efficiency Kits to each of the contest runners-up to help them begin their own home energy makeover.



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Makeover Package Included:

Energy Audit	\$ 300
Heat Pump with Duct Sealing	\$ 8,700
Unvented Attic System Using SprayFoam	\$ 7,100
Water Heater Upgrade	\$ 1,000
Lighting, Faucet & Showerhead Upgrade	\$ 300
Total Value	\$ 17,400

Makeover Team:

Contest Host: Texas Co-op Power, TexasCoopPower.com

Participating Electric Cooperative: United Cooperative Services, www.united-cs.com

Comprehensive Home Energy Analysis Provided By: United Cooperative Services, www.united-cs.com

Heating and Cooling System Provided By: Lennox Industries, www.lennox.com, and installed by Daffan Mechanical, www.daffanmechanical.com, (817) 279-0582

Unvented Attic System Provided By: BASF, www.spf.basf.com with SprayFoam Distributing, www.sprayfoamdistributing.net, (817) 946-5692, and installed by AirTight SprayFoam Insulation of Texas, www.sprayfoamtexas.com, 1-866-909-FOAM (3626)

Water Heater Provided By: Rheem Marathon, www.marathonheaters.com, and Texas Electric Cooperatives, www.texas-ec.org, and installed by P&P Plumbing, www.pandpplumbing.com, (817) 558-0404

Compact Fluorescent Lightbulbs and Low-Flow Showerheads as well as Home Energy-Efficiency Kits Provided By: Niagara Conservation, www.niagaraconservation.com, 1-800-831-8383, and installed by United Cooperative Services, www.united-cs.com

Contest Administration By: Electric & Gas Industries Association, www.egia.org, (970) 209-8347



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Texas Co-op Power would like to thank the participants and sponsors:



Lennox HVAC systems, air conditioners and generators provide a balance of comfort and protection. Lennox products include high-efficiency furnaces and air conditioners that save energy and money, and air filtration systems, humidifiers and dehumidifiers that keep indoor air quality healthy and clean. Lennox offers customizable solutions to match your family's lifestyle and comfort level. Learn more at www.lennox.com.



Daffan Mechanical is a locally owned and operated company in Granbury that has been in business since 1999. The company specializes in residential air conditioning, heating, solar, geothermal and indoor air quality. Daffan Mechanical was voted "Best AC Company in Hood County" by a Hood County News Poll as well as being Angie's List Approved and having an A+ Better Business Bureau rating. Visit www.daffanmechanical.com.



AirTight SprayFoam Insulation of Texas is a Texas spray-foam insulation and injection-foam insulation company as well as a fiberglass insulation company. It services foam and fiberglass insulation for new home insulation customers and existing home insulation customers in Stephenville, Waco, Texas, Fort Worth and most of Central and North Texas as well as parts of Oklahoma and Louisiana. Visit www.sprayfoamtexas.com. Text the word "insulation" to 90210 for info and special pricing.



Water heating can account for up to 20 percent of a home's energy usage. However, **Marathon water heaters by Rheem** offers ultra-durable, long-life, high-efficiency electric water heaters that are built to perform and are backed by a lifetime warranty. Learn more by watching the Marathon factory tour on the Marathon website at www.marathonheaters.com, or call 1-866-390-4832.



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P & P Plumbing has been a family-owned and operated business since 1974, starting in Amarillo as Patton Plumbing. The Pattons take pride in their company's work and VALUE their customers. The bitterness of poor quality remains long after the sweetness of low prices is forgotten. The company warrants all work whether it is residential or commercial, new or repair. P & P Plumbing is insured and licensed: M38709.



Niagara Conservation Corporation's mission is to provide customers with the highest quality of water and energy conservation products and solutions. It couples the delivery of innovative and cutting-edge products with unsurpassed customer service to ensure that consumers receive the greatest level of benefit from the use of Niagara products with the least amount of impact on the environment. Visit www.niagaraconservation.com.



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Cooperatives**