

# Remodeling a home or building an addition?

Now is a critical time to make energy saving investments

## COMMON SIGNS YOUR HOME IS WASTING ENERGY AND MONEY:

- High utility bills
- Inconsistent temperatures between rooms
- Interior doors close upon AC start-up
- Excessive AC noise
- Old AC and/or non EnergyStar® appliances
- Warm interior walls and hot exterior walls
- Seeing light around window and exterior door frames
- Severe heat/cold near doors and windows
- Dust around AC heating/cooling registers, outlet plates, door frames or on carpet in doorways
- Multiple ceiling fan lights

Money may already be flying out your window. **Based on the improvements you choose, you may be able to save 20% or more on your annual utility bill. By using less energy you will also be doing your part to conserve resources.** What can you do? If you are considering making changes to your home, now is an easy and one of the best times to get a home energy check-up. Go to [azhomeperformance.com](http://azhomeperformance.com) to find an approved contractor, and learn common energy loss issues and solutions in Arizona homes.

## WAYS THAT REMODEL PROJECTS CAN AFFECT HOME ENERGY PERFORMANCE:

- Insulation integrity can be negatively impacted or, alternatively, can be improved
- AC air distribution can easily become imbalanced
- New wall and ceiling penetrations can degrade thermal performance
- Existing AC units may be sized incorrectly for new space and, thus, run inefficiently
- Using existing structures for a purpose not originally intended may result in unnecessary energy waste (such as enclosing a porch or an Arizona room).

# MYTH BUSTERS

## Powered attic fans (including solar) reduce your cooling bill

Power attic ventilators if not installed properly, can actually increase utility consumption by pulling conditioned air out of the house and into the attic space.

## Fans always reduce one's energy costs

Yes, fans blow air across your skin and you feel cooler. This allows you to ratchet up the thermostat. Just remember the adage "Fans cool people, not rooms." Turn off ceiling fans and floor fans in unoccupied spaces but also remember to turn up the thermostat.

## Weather-stripping my doors and windows will significantly reduce my energy bills

Although windows, doors, and outside walls contribute to air leakage, the biggest holes are usually hidden from view and connect the house to the attic, crawlspace, or basement.

## ● ● ● BEHAVIORS ● ● ●

### Recycle your old refrigerator or freezer instead of using it in the garage.

Turning off an old refrigerator or freezer can save about \$100 a year – savings will vary depending on the type of refrigerator.

### Reduce phantom loads

This refers to the electric power consumed by electronic and electrical appliances while they are switched off (but are designed to draw some power) or in a standby mode.

### Set thermostat based on occupancy schedule.

Raising your set point by 1 degree in the summer saves 3%. The US Dept. of Energy states that programmable thermostats can save up to \$150 a year on energy costs when used properly.

## ENERGY INVESTMENTS

- **Replace incandescent light bulbs with more efficient bulbs.** CFLs use 75% less energy than incandescent lamps and last 10 times longer.
- **Purchase a watt-meter to measure the energy use of common household devices that consume energy.** Cost is \$20 to \$35. Homeowners can see the direct impact the device is having on their energy bill and take action to reduce costs.
- **Install an Energy Dashboard:** Cost is \$150 - \$300. Studies have repeatedly shown that homeowners do a better job of conserving energy if they get real-time energy-use feedback.
- **Install shade trees.** Planting shade trees in the right location can save up to \$50/year.
- **Convert to energy-efficient variable speed pool pumps.** Savings between \$175 and \$400 annually based on size of motor, operating hours and utility rate schedule.
- **Beware of FREE energy audits.** Frequently these are product sales companies that do NOT have personnel qualified to conduct a true home energy check up. Go to [azhomeperformance.com](http://azhomeperformance.com) for a list of utility-approved contractors