

## Weatherproofing

Save on energy bills and add comfort by taking a few simple steps to weatherproof your home. Weatherproofing involves upgrading your ceiling insulation, if necessary, and sealing cracks, gaps and other areas with weatherstripping and caulking. Weatherproofing is one of the most inexpensive and effective ways to make your home more comfortable and your monthly energy bills lower.

### Sources of Home Air Leaks

Stop unwanted air leaks to keep your home more comfortable. Common sources of air leaks include:

- Cracks and gaps around windows and doors.
- Cracks and gaps around duct and pipe penetrations.
- Leaks from the attic through ceiling light fixtures.
- Leaks through electrical outlets and switches.
- Gaps around attic doors and hatches.
- Poorly closing fireplace flue dampers.

### Check Ceiling Insulation

If your home is poorly insulated, adding ceiling insulation is one of the best things you can do to save energy. For homes in Arizona's desert, Payson, Prescott and Douglas areas, we recommend R-30 ceiling insulation (R-38 in mountain areas). For more information, ask for the Energy Answers fact sheet on *Ceiling and Wall Insulation*.

### Sealing Your Home from Drafts

One of the best ways to reduce drafts is to caulk around doors and windows. Places to consider caulking include:

- Where walls and floor/foundation meet.
- Between the exterior window frame and siding.
- Around all penetrations for wiring, plumbing and vents.
- Where door frames meet walls.

There are many different types of caulking material on the market. Be sure to use a type that is best for the surface material where you want to use it. Ask your local home improvement or hardware store and read product labels for the recommended caulk to use.

The most common forms of caulk are solid and semi-liquid. Semi-liquid caulks require a caulking gun to apply. Better quality caulks costs more, but will last longer and work better than inexpensive products. Remember to clean and prepare the surface before you begin caulking.



## Reducing Duct Leakage

Some of the biggest leaks in your home may be hidden from view, in your heating/air conditioning duct system. An APS study of homes in the Phoenix area found that as much as one third of an air conditioning system's air flow could be leaking through ducts, causing a loss of comfort and cooling capacity. For more information, see the Energy Answers fact sheet on *Reducing Duct Leakage*.

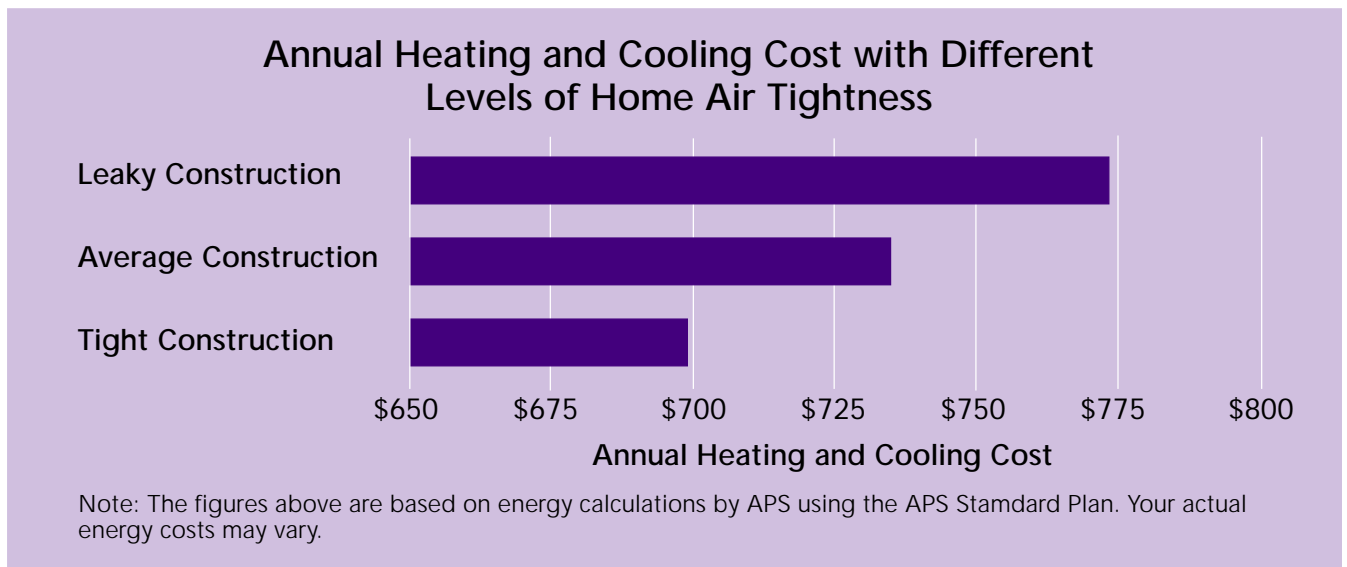
## Stop Air Leaks with Weatherstripping

Weatherstripping can stop the primary sources of air leaks. You should have weatherstripping installed around all exterior doors, movable windows and doors leading to attics and garages.

- Weatherstripping is a narrow piece of metal, vinyl, rubber, felt or foam that seals the gap between the fixed and moveable sections of a joint.
- It can be purchased by the foot or in kits at any hardware or home improvement store.
- To determine the amount you need, measure the sides of all windows and doors to be weatherstripped. Add about 5% to 10% for waste.
- Be sure to clean and prepare the surface area before you begin applying weatherstripping.

## How Much Can You Save by Weatherproofing Your Home?

The chart below compares energy consumption for a typical Phoenix area home with various levels of air leakage. As the chart shows, you could save over a hundred dollars each year by tightening up a leaky home with inexpensive weatherproofing measures.



## For More Information Call the APS Energy Answer Line

For more information on ways to save energy around your home, call the **APS Energy Answer Line in Phoenix at (602) 371-3636 or toll-free 1 (888) 890-9730**. Or visit our web site at [www.apsc.com](http://www.apsc.com).