

CUT YOUR UTILITY BILLS

A Guide to Seal Air Leaks

Q: What can I do to reduce drafts in my older home that won't cost an arm and a leg?

A: This is a common problem, particularly in older homes. In many homes, about half of the conditioned air leaks to the outside every hour.

The good news—especially if you don't want to spend a lot of money or you're hesitant to invite contractors into your home right now—is that you can seal air leaks on your own with a little time and effort.

Here are three steps to get you started. There's more to learn about sealing your home than we can cover in this article, so consider researching trusted websites for additional tips and tutorials.

Step 1: Find the Leaks

The first step is a thorough visual search of the home's interior and exterior. Look for gaps and holes in exterior walls, flooring and the ceiling. These often occur where different building materials meet, such as the top of cement foundation walls or around windows and doors. Another common source of air leaks is where pipes or wiring penetrate a wall, floor or ceiling. Ductwork in unheated crawl spaces or attics can also contain air leaks.

This column was co-written by Pat Keegan and Brad Thiessen of Collaborative Efficiency. For more energy tips, go to www.collaborativeefficiency.com/energytips.



Use caulk to seal gaps around non-moving parts of doors and windows. PHOTO BY SCOTT VAN OSDOL

Exterior doors and windows that open deserve your attention. Open each door or window and place a dollar bill between the door or window sash and the frame. If you can pull the bill out easily when the door or window is closed again, the seal is not tight enough. Also, a window that rattles when it's closed or when it's windy probably isn't sealed sufficiently.

The best way to find all air leaks is to hire an energy auditor to do a blower door test. The blower door is a large fan mounted in a doorway to depressurize the house. The auditor can find the leaks and may be able to recommend ways to seal them.

It's also possible to conduct your own whole-home pressure

test. The Department of Energy provides detailed instructions at www.energy.gov/energysaver/weatherize/air-sealing-your-home/detecting-air-leaks.

Step 2: Gather Supplies

Here's a quick list of materials to get you started:

- **Caulk.** You will need a caulk gun and caulk, about \$4 and \$10, respectively. We recommend indoor/outdoor waterproof silicone or latex caulk that is water-soluble until it cures and paintable when dry.
- **Expanding spray foam.** One can typically costs \$4 to \$6. This is an effective way to plug leaks, but it's a messy job.
- **Weatherstripping.** Prices vary depending on type and length of materials, but there's a variety of weatherstripping options made of vinyl, metal and felt, or open-cell foam that works for most situations.
- **Pre-cut foam socket sealers.** A pack of 24 sealers

typically costs about \$3.

- **Chimney plug balloon.** Prices range from \$50 to \$90. You may need a chimney plug balloon if your chimney flue doesn't seal well. Buy a square or round one to match the shape of your chimney flue.
- **Adhesive plastic window insulation sheets.** Prices range from \$2 to \$14 depending on size. You may need insulation sheets later in the year for windows that can't be sealed and don't have storm windows.

Step 3: Do It!

If you are unfamiliar with how to apply any of these materials, we recommend watching online tutorial videos.

Sealing air leaks is one of the best ways to boost your home's energy efficiency. Whether you're a do-it-yourself pro or novice, with a few simple steps and low-cost materials, you will be well on your way to a sealed, more efficient home. ■



Fall is an ideal time to shop for and plant trees. ADOBE STOCK PHOTO BY PASKO MAKSIM

Welcome Fall With Fiery Foliage

When trees get dressed in fall colors, it's time to go shopping.

"If you're specifically interested in fall color, it will soon be the time to start looking," says Neil Bell, a horticulturist with Oregon State University's Extension Service. "There are already some trees starting to display color."

First, though, Neil recommends doing some research. Walk around neighborhoods, parks and public gardens to get ideas. If you can't identify the trees you like, snap good photos, pick up several leaves or ask the owner for a cutting. Take them to a nursery or local extension office for identification. You can also cut out pictures from magazines and flip through gardening books to find possibilities.

After filtering down your favorites, be absolutely sure about size, soil and sun requirements. You don't want to be stuck with a 60-foot tree where a 30-foot tree should be.

"The biggest problem people have," Neil says, "is that a tree gets too large, and then they are forced to prune just to reduce the size of the tree, which can look horrible."

Topping—or cutting off the tips of trees—is especially undesirable. The practice increases the possibility of disease and gives pests more access. Topping also encourages weaker growth and alters the shape.

Before buying, find out if the tree needs sun or some shade, and if it requires irrigation in summer.

Fall is an ideal time for planting. Soil is warmer than in spring, so roots get a good head start. The weather is cool so trees are under less stress. Rains will start soon and reduce the need for watering.

"All in all, fall is the perfect time to select and plant a tree," Neil says. "Wait for the leaves to start changing color and go for it." ■

What to Plant

Here are several of horticulturist Neil Bell's recommendations for trees with excellent fall color:

▶ **Red maple (*Acer rubrum*).** Not much beats the vibrant scarlet color this maple displays in autumn. Make sure you have room for it, though; red maples grow quickly and eventually reach 60 feet tall and 25 to 35 feet wide. Hardy to Zone 4.

▶ **Vine maple (*Acer circinatum*).** Native to the Northwest, vine maple really comes into its own in fall when the foliage lights up in lively shades of red and orange. It is a useful small tree up to 15 feet that often grows with multiple trunks. It is not suitable for full sun. Hardy to Zone 6.

▶ **Paperbark maple (*Acer griseum*).** Unmistakable cinnamon-colored peeling bark and glowing orange-red fall color make this slow-growing, small tree (25 feet eventually) a much-loved specimen in any size garden. Prefers a partially shady exposure. Hardy to Zone 4.

▶ **Katsura (*Cercidiphyllum japonicum*).** The unmistakable heart-shaped leaves emerge purple in spring and seem to turn buttery yellow overnight in autumn. Falling leaves smell wonderfully like burnt sugar. The form is tall—up to 60 feet—and rounded. Hardy to Zone 4.

▶ **Sourwood (*Oxydendrum arboreum*).** A little-known but deserving tree that has the unusual feature of sending out long streamers of fragrant, white flowers in fall just as the foliage turns to heady shades of red, orange and purple. At 25 to 30 feet tall, sourwood fits nicely into a small garden. Hardy to Zone 5.

▶ **'Eddie's White Wonder' dogwood (*Cornus kousa*).** A spectacular cultivar of Korean dogwood that is blanketed in large, white star-shaped flowers in spring and strawberry red color in fall. Its 20-foot stature makes it ideal for small spaces. Hardy to Zone 5.

▶ **'Wild Fire' black gum (*Nyssa sylvatica*).** Glossy green leaves emerge a deep red in spring and end the season with a spectacular show of orange, yellow, scarlet and purple. Has a nice pyramidal shape and grows up to 20 feet. Hardy to Zone 6.



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