

Reduce Those Winter Heating Bills

Everyone knows that summer temperatures are cooler in the shade, but trees can help cut winter energy costs, too. The most common approach is to plant evergreen trees and shrubs on the north and northwest sides of your property.

“Wind barriers can channel winds away from your house and cut down on cold drafts getting into your house,” says Tchukki Andersen, staff arborist with the Tree Care Industry Association. “In addition, shrubs, bushes and vines planted next to a house can help insulate the home in winter and summer.”

The ultimate goal of planting a windbreak or living snow fence is weather control. By creating a design that takes into account wind speed and direction, snow accumulation patterns, and areas of high and low usage, spring and summer plantings can offer homeowners benefits ranging from reduced energy costs to more efficient water management.

“To reduce winter heating costs, plant evergreen trees and shrubs as windbreaks,” Andersen recommends. “Most cold winds come from the north or west, so on those sides of the building plant a dense row of evergreens that maintain branches low to the ground. To provide additional insulation for your building, evergreen shrubs should be planted slightly away from the foundation.”

Whether your goal is to reduce the chilling effects of winter winds or control the accumulation of snow, the density of the plantings is key. A rough estimate of density can be determined by estimating the ratio of the “solid” area (branches, trunks, leaves, etc.) to the total area of the barrier. For example, a row of deciduous trees might offer a density of roughly 30 percent, which means that the row consists of 30 percent trees and 70 percent open space in winter. By comparison, a row of conifers might have a density of 50 percent or 60 percent in winter.

Higher density windbreaks are better at slowing wind speed enough to cause snow to drop to the ground and accumulate both on the windward and leeward side of the row (or rows). These types of living snow fences are extremely useful for keeping roads, driveways, and other high-use areas clear of drifts, which means less plowing, less shoveling and less aggravation.

On the other hand, trees should not be planted on the southern sides of homes in cold climates because the branches of these trees will block some winter sun. Open drapes on the south side of your home during winter days and close them at night. Sun angles are low in winter, allowing substantial solar heating through all south windows. You may want to trim branches on this side of your house to allow sunlight in. Call a professional arborist to trim any vegetation that shades south windows.

Remember, every location is different, and there is no perfect design that will be effective in all situations. A professional arborist can conduct the proper research and planning to plant an effective windbreak that will offer homeowners a variety of benefits for years to come.

What can you do?

Find a professional. A professional arborist can assess your landscape and work with you to determine the best trees to plant. Contact the Tree Care Industry Association (TCIA), a 70-year-old public and professional resource on trees and arboriculture. It has more than 2,000 member companies who recognize stringent safety and performance standards and who are required to carry liability insurance. TCIA has the nation’s only Accreditation program that helps consumers identify tree care companies that have been inspected and accredited based on: adherence to industry standards for quality and safety; maintenance of trained, professional staff; and dedication to ethics and quality in business practices. An easy way to find a tree care service provider in your area is to use the “Locate Your Local TCIA Member Companies” program. You can use this service by calling 1-800-733-2622 or by doing a ZIP Code search on www.treecaretips.org.

Editors: If you would like additional information or digital photos, please contact editor@tcia.org.