

SUNSPACES

Whether as an addition to a home or as an integral part of a new home, sunspaces have gained considerable popularity.

How Sunspaces Work

A sunspace should face within 30 degrees of true south. In the winter, sunlight passes through the windows and warms the darkened surface of a concrete floor, brick wall, water-filled drums, or other storage mass. The concrete, brick, or water absorbs and stores some of the heat until after sunset, when the indoor temperature begins to cool.

The heat *not* absorbed by the storage elements can raise the daytime temperature inside the sunspace to as high as 100 degrees Fahrenheit. As long as the sun shines, this heat can be circulated into the house by natural air currents or drawn in by a low-horsepower fan.

The Parts of a Sunspace

In order to be considered a passive solar heating system, any sunspace must consist of these parts:

1. A *collector*, such as a double layer of glass or plastic
2. An *absorber*, usually the darkened surface of the wall, floor, or water-filled containers inside the sunspace.
3. A *storage mass*, normally concrete, brick, or water, which retains heat after it has been absorbed.
4. A *distribution system*, the means of getting the heat into and around the house (by fans or natural air currents).
5. A *control system* (or heat-regulating device), such as movable insulation, to prevent heat loss from the sunspace at night. Other controls include roof overhangs that block the summer sun, and thermostats that activate fans.