

Sun-Spaces

By SunSpace, Inc.

Either as an addition to a home or as an integral plan of a new home, sun-spaces have gained considerable popularity.

How Sun-Spaces Work

A sun-space 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 air temperature inside the sun-space to as high as 100 degrees Fahrenheit. As long as the sun shines, this heat can be circulated in to the house by natural air currents or drawn in by a low-horsepower fan.

The Parts of a Sun-Space

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

Collector	Such as a double layer of glass or plastic.
Absorber	Usually the darkened surface of wall, floor, or water-filled containers inside the sun-space.
Storage mass	Normally concrete, brick, or water, which retains heat after it has been absorbed.

- A distribution system, the means of getting the heat into and around the house (by fans or natural air currents).
- A control system (or heat-regulating device), such as movable insulation, to prevent heat loss from sun-space at night. Other controls include roof overhangs that block the summer sun, and a thermostat that activates fans.

