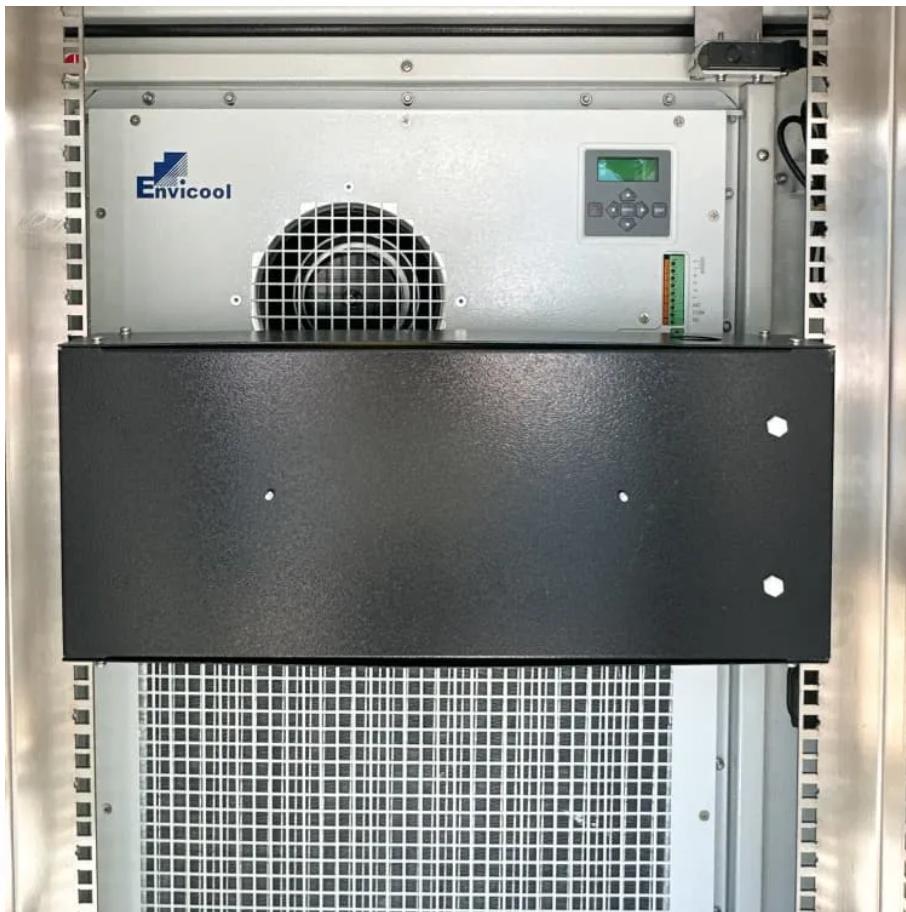




LLSE CONTAINERS

# Passive Solar Systems





## Overview

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### What is passive solar design?

Passive solar design takes advantage of a building's site, climate, and materials to minimize energy use. A well-designed passive solar home first reduces heating and cooling loads through energy-efficiency strategies and then meets those reduced loads in whole or part with solar energy.

### What is passive solar energy?

Passive solar energy refers to techniques that allow solar energy to be harnessed directly without having to process it. For example, depending on the design of the building construction, the amount of natural energy that is harnessed can be significantly improved. Passive solar uses components to control the heat generated by the sun.

### What is a passive solar home?

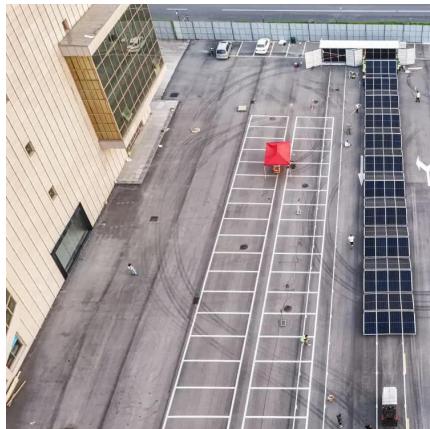
In simple terms, a passive solar home collects heat as the sun shines through south-facing windows and retains it in materials that store heat, known as thermal mass. The share of the home's heating load that the passive solar design can meet is called the passive solar fraction, and depends on the area of glazing and the amount of thermal mass.

### What is a passive solar cooling system?

Passive solar cooling systems use shading, thermal mass, and natural ventilation to reduce unwanted daytime heat and store cool night air to moderate temperatures. For more information about passive solar design, visit the following resources from the U.S. Department of Energy:



## Passive Solar Systems



### [Passive solar energy: 4 examples in architecture](#)

Key Elements in Passive Solar Design  
4 Examples of Passive Solar Energy  
Passive Solar Architecture  
What Is The Difference Between Active and Passive Solar Energy?  
Techniques For Passive Solar Use  
Advantages and Benefits  
Passive solar architecture is a design approach that harnesses the sun's natural resources to optimize the energy efficiency of buildings, without resorting to mechanical or electrical systems. This type of architecture focuses on integrating elements such as building orientation, window size and placement, thermal insulation and the use of high efficiency materials. See more on [solar-energy.technology](#) [renovablesverdes](#)

### **Passive solar systems: characteristics, advantages and disadvantages**

Discover how passive solar systems improve the energy efficiency of your home. Learn about their features, ...

## Passive Solar Homes

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