

FAQs

1. What is Isolated gains for passive heating?

- An isolated gain system has its integral parts separate from the main living area of a house. Examples are a sunroom and a convective loop through an air collector to a storage system in the house. The ability to isolate the system from the primary living areas is the point of distinction for this type of system.

2. Define sunrooms.

- Sunrooms can feature sloped and/or overhead glass; a sunroom will function adequately without overhead or sloped glazing. It is important to use adequate ventilation to let the heat out.
- The sunroom has some advantages as an isolated gain approach in that it can provide additional usable space to the house and plants can be grown in it quite effectively.

3. What are the thumb rules for designing a sunroom?

- Use a dark color for the thermal wall in a sunspace.
- The thickness of the thermal wall should be 8-12 inches for adobe or earth materials, 10-14 inches for brick, 12-18 inches for (dense) concrete.
- Withdraw excess heat in the sunroom (if not used for warm weather plants) until the room reaches 45 degrees and put the excess heat into thermal mass materials in other parts of the house.
- For a sunroom with a masonry thermal wall, use 0.30 square feet of south glazing for each square foot of living space floor area. If a water wall is used between the sunroom and living space instead of masonry, use 0.20 square feet of south facing glass for each square foot of living area.
- Have a ventilation system for summer months.

- If overhead glass is used in a sunroom, use heat reflecting glass and or shading systems in the overhead areas.

4. Explain Solarium and list few advantages and dis-advantages.

- A **Solarium** features a “modern” style of architecture, and is comprised of a glass roof and walls. Solariums are frequently completely enclosed by glass and are sometimes referred to as a conservatory. .

ADVANTAGES & DISADVANTAGES

- A Solarium’s advantage is a complete enclosure of glass, an impressive structure, with a lot of glass. It’s main advantage and selling features is an unobstructed view of your outdoor space and sky through a glass roof.
- Solariums have some drawbacks though. The glass roof demands constant maintenance and cleaning due to the glass roof. Often, custom blinds are also needed for relief from the sun coming through the roof. The glass roof is also subject to seal failure and very energy inefficient compared to thermally insulated roof

5. What are the maintenance and up keep required for sunroom spaces?

- Are virtually maintenance free.
- Easy to clean glass as needed.
- Four season sunrooms (also known as year round sunrooms) usually are built of vinyl, which insulates much better than other sunroom materials such as aluminum.