

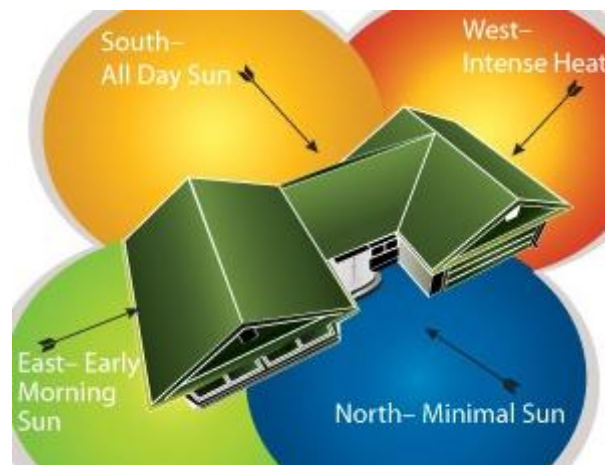
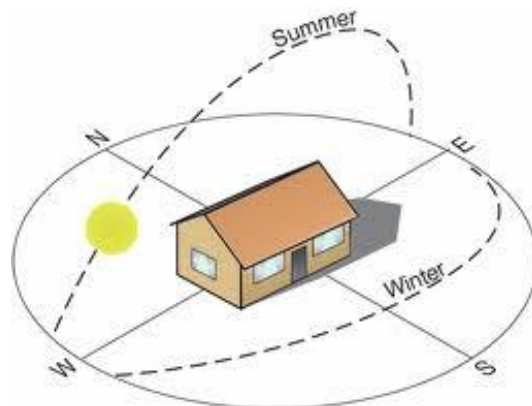
Placement & Orientation of Glazing in Buildings

Passive solar heating is utilized in multiple design approaches and focuses on how combining various building elements in strategic ways can positively contribute to the heating, cooling, and daylighting of a building. Glazing is one of the most critical considerations for effective passive solar heating designs.

Taking into consideration the orientation of a building's windows and picking glazing tuned to the amount of sun exposure and climate can reduce HVAC loads and greatly improve the comfort of indoor occupants. Our glazing products and specialists help architects optimize solar control according to a building's unique orientation.

Benefits of passive solar designed buildings include:

- Increased comfort with windows and glass that are properly chosen to control solar heat create buildings that are bright and sunny without being too cold or hot
- Nearly eliminates temperature swings in areas of the buildings that get more sun than others for a high degree of temperature stability and thermal comfort
- Reduced emissions because properly tuned buildings rely on "free" solar energy to help heat the building in the winter and effectively reflect excess solar gains in the summer – resulting in reduced HVAC load and energy use



Our unique, customized approach for each building identifies Alpen HPP glazing solutions that are:

- Properly oriented with an SHGC that is tuned to the amount of sun exposure and climate, per each building façade
- Properly balanced to optimize solar heat gain, R-value, and visible light