

Benefits of the double-glass solar curtain wall in Gomel Belarus





Overview

A new type of glass curtain wall system based on transmission solar concentrator is proposed. The device effectively improves the incidence of solar radiation on the unit area of the battery and maximizes the use of solar radiation.

What are the thermal characteristics of the new glass curtain wall system?

The experimental results of the thermal characteristics of the new glass curtain wall system show that the heat gain of air and water first increases and then decreases, while the maximum value usually appears at noon. Exergy analysis was carried out for the new glass curtain wall testing system.

Why are glass curtain walls a popular design in modern high-rise buildings?

At the same time, glass curtain walls are a popular design in modern high-rise buildings, because they are not only beautiful but also use natural lighting to reduce lighting energy consumption.

What is a glass curtain wall system based on transmission solar concentrator?

A new type of glass curtain wall system based on transmission solar concentrator is proposed. The device effectively improves the incidence of solar radiation on the unit area of the battery and maximizes the use of excess solar radiation to generate electricity and heat while continuing to ensure indoor lighting.

What is the thermal efficiency of glass curtain walls?

The comparison test was carried out using ordinary double-layer vacuum glass. The results show that the new glass curtain wall system's thermal efficiency is generally the highest at noon, while the maximum heat gain per unit area of air per day can reach 149 W/m² in spring and autumn, 237 W/m² in summer, and 52.6 W/m² in winter.



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Glass curtain wall system

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The Role of Glass Curtain Walls in Energy Efficiency and ...

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Double Glass Curtain Wall_Industry News_News_Prima ...

In the world of modern architecture, curtain walls have become an essential element in creating visually stunning and energy-efficient buildings. Among the various types of curtain walls ...



An experimental study on the performance of new glass curtain wall

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