

# South Korean office building solar curtain wall

How many buildings are in South Korea?

South Korea has over 6.8 million buildings aged 15 years or more. As an effort to improve energy efficiency [1,2] for existing buildings as well as new ones, the South Korean government is promoting the green remodeling project.

Which city is promoting building retrofit in South Korea?

Seoul City, which has the largest number of buildings in South Korea, is separately promoting the building retrofit project. Among the energy efficiency improvement projects for old buildings in South Korea, the most active project is building envelope performance improvement.

How to determine the U-values of old curtainwall?

The U-values of the frame and edge parts of the existing old curtainwall were obtained by establishing a model using LBNL's Therm 7.4 program; the model was then analyzed according to an indoor temperature of 20°C and an outdoor temperature of 0°C based on the Korean Industrial Standard (KS).

What is the heat transmission rate of a curtain wall?

Table 8 outlines the heat transmission rates of the frame parts of the existing curtain wall. Because no thermal bridging insulation material was applied to the frame, the heat transmission rate was 8.570–10.602 W/m<sup>2</sup>·K in the frame part and 2.561–2.685 W/m<sup>2</sup>·K in the edge part, indicating a very low insulation performance.

The South Korea Solar Control Spandrel Curtain Wall Market was valued at 6.28 billion in 2025 and is projected to grow at a CAGR of 9.06% from 2026 to 2033, reaching an estimated 12.57 ...

Summary: South Korean manufacturers are leading the charge in low-carbon photovoltaic curtain walls, blending cutting-edge solar technology with modern building design. This article explores their ...

Discover how solar photovoltaic curtain walls are transforming modern architecture by merging sustainable energy generation with sleek building design. This article explores their applications, ...

Globally, energy standards for new buildings are being reinforced to improve energy efficiency, and remodeling policies are being promoted for old buildings. The South Korean ...

Evaluation of Energy and Daylight Performance of Old Office Buildings in South Korea with Curtain Walls Remodeled Using Polymer Dispersed Liquid Crystal (PDLC) Films Myunghwan ...

Thus, it was confirmed that the solar radiation introduced through a glass curtain wall building has a direct impact on the indoor thermal environment and occupant comfort according to ...

As the thermal sensitivity of building occupants varies with building features, situational factors, and the

human body's thermal balance, it is necessary to derive the comfort temperature ...

AE Interests: Building embodies the company's logo, first mullionless curtain wall applied to a skyscraper, sunshades to control solar power, open lab, 2018 best laboratory award, central atrium, ...

Does solar radiation affect curtain wall structure? In particular, since the curtain wall structure is highly influenced by solar radiation, an analysis was conducted in consideration of this. Unlike previous ...

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