

## Factors affect insulated glass performance



1. The spacer thickness: mainly by controlling the thickness to avoid the formation of turbulent airflow inside the insulated glass, the cold and hot airflow of the control gas interfere with each other, or control the airflow of the rising and falling air to interfere with each other to control the flow of the heat convection.
2. Gas type and humidity inside insulated glass: The inert gas filled in the interior of the insulated glass can reduce the heat insulation and sound insulation of the insulated glass. For example, filled argon gas and sulfur fluoride can improve the heat insulation and sound insulation performance; the moisture content inside the glass will cause internal condensation or even water, which will affect the aesthetic effect of the insulated glass, and will increase the conduction heat transfer coefficient of the insulated glass and reduce the heat insulation effect.
3. Edge sealing: On the one hand, if the edge of the insulated glass is not well sealed, the proportion of water vapor entering the interior of the insulated glass through the sealing layer will increase, and the speed of failure of the insulated glass will also increase. Any product, no matter how good its initial performance, however, its life is very short, such a product can not be said to be a good product; on the other hand, if the edge material of the insulated glass has good thermal conductivity, then pass The heat transfer of the sealant connected to the glass at the edge of the insulated glass is relatively large, and the heat coefficient of the insulated glass is improved, and the heat insulating performance is decreased.
4. Thermal Transmittance of Glass: In the above analysis, we can understand that convection and conduction heat transfer through insulated glass can be basically controlled by reasonable space layer design and construction. The heat transfer of the insulated glass is mainly carried out by means of radiation heat transfer. If clear glass with high transmittance and low reflectivity is used, the insulating performance of the insulated glass is higher than that of the coated glass with high reflection and low transmittance or Low- E glass is much lower.



## QINGDAO MORN BUILDING MATERIALS CO.,LTD

Your turnkey China tempered glass/laminated glass/insulated glass supplier

5. Glass size: Increasing the area of the insulated glass can reduce the heat loss per unit area of the insulated glass and improve the overall heat insulation effect of the insulated glass.

Morn is your turnkey insulated glass supplier, we offer all kinds of insulated glass with high quality meeting ASTM, SGCC, IGCC, EN1279 certificates, welcome contact us for more info.

More articles:

Factors causing glass curtain wall visual distortion

Methods to increase energy efficient performance for windows&doors, curtain wall

The benefits of double glazed units in curtain wall

Materials that affect double glazed units energy efficiency and lifetime

How to select the right energy efficient glass

Factors affect insulated glass performance

The advantage of insulated glass in Glass curtain wall

Warm edge spacer insulated glass production

Tags: aluminium spacer thickness, argon filled insulated glass, china insulated glass, coated glass, glass insulating performance, glass insulation effect, glass thermal transmittance, IGU edge sealing effect, insulated glass, insulated glass performance, insulated glass supplier, low e glass

### About Morn Building Materials:

Morn Building Materials Co., Ltd is trading company offering the right facade materials for a wide range of applications for architectural, design and system requirements. Cooperating with China premium glass fabricators, Morn is able to supply whatever glass products applied in facade, Spandrel, roof, handrail, partition, balustrade, canopy, greenhouse, sun room, interior exterior application.

Other facade materials: Aluminium alloy profiles, aluminium plates, aluminium windows&doors, Assa Abloy hardware, spider fitting, railing systems, shower rooms, polyurethane panels, machines&tools, steel structure, are also available since 2019.

From aesthetics, to strict environmental and energy specifications, to critical budget and delivery requirements, our input can make a difference.

### Contact us:

**Qingdao Morn Building Materials Co., Ltd**

**China HQ:** Room A304, Shengxifu Road, NO.209 Weihai Road, Shibei District, Qingdao, China, 266024

**Sales Email:** [marketing@cnmorn.com](mailto:marketing@cnmorn.com)

**Technical support:** [han@cnmorn.com](mailto:han@cnmorn.com)

**Mobile/Wechat:** 0086-17705464660

**Website:** <https://www.cnmorn.com/>