

## **1**

Convective heat transfer refers to the phenomenon of heat transfer between the fluid and the solid surface when the fluid flows through the solid. Convective heat transfer depends on the movement of fluid particles, which is closely related to the fluid flow.

The characteristics are: complex heat transfer process of heat conduction and convection at the same time. In addition, there must be direct contact (fluid to wall) and macroscopic movement; there must also be a temperature difference.

The indoor and outdoor heat transfer of glass window is independent of the thickness of glass

## **2**

Sometimes the calculation result is wrong because the unit of each parameter is not noticed.

## **3**

It is proved by experiments that 12mm is the best distance of the air-gap. If it is small, it will affect the heat preservation effect. If it is large, the air will form convection in the glass after preheating, which will affect the heat preservation effect of the glass even more.