

Argon Gas for Glass Insulation Technology



Argon gas safely improves the thermal and sound-insulating performance of modern, double glazed windows. Argon is a naturally occurring, colorless, odorless, non-toxic, non-corrosive, non-flammable and non-reactive inert gas. Argon is approximately 1% of the earth's atmosphere and is the most abundant of all the rare, inert gases. Argon has 30% lower thermal conductivity than atmospheric air and gives the window even greater resistance to the transfer of heat and sound through the panes than atmospheric air. The lower conductance of argon is due to the fact that its molecular mass is greater than that of air. With a larger mass, argon moves more slowly than air and there are fewer collisions per unit time. Fewer collisions result in less heat and sound transfer between the window panes than air.

The benefits of an argon gas-filled double glazed window are a quiet, comfortable environment with reduced heating and cooling costs by keeping heat inside in winter and outside in summer.