



INSULCOOL™ DOUBLE GLAZING

InsulCool™ provides architects and designers with the flexibility and high performance of double glazing to meet heating and cooling requirements in commercial and residential applications.

InsulCool™ Double Glazed units (also known as DGU's or IGU's) consist of two layers of glass separated by an air or argon filled gap.

The combination of multiple glass panels and airspace creates an additional barrier that decreases the air-to-air temperature transfer, while reducing direct and radiant temperature transfer from outside or inside the building.

InsulCool units are most effective when combined with Low-E performance glass and argon gas. Where applicable, larger spacer widths are encouraged as this increases the performance of the unit. Comprehensive performance data on available InsulCool glass types and makeups can be downloaded at www.coolingbros.com.au/downloads.



FEATURES

Extensive range of options available using Viridian, Guardian, AGC and St Gobain glass types

Compatible with Low E and performance glass

Excellent solar and thermal control to reduce air-conditioning and heating costs

Air or argon filled which aids in reducing outside noise

APPLICATIONS

Residential and commercial applications where heating and cooling is a high priority

MAXIMUM SIZE

2500 x 4500mm

SPACER THICKNESS

6mm to 32mm

SPACER TYPE

Aluminium, black or silver colour options

SECONDARY SEAL

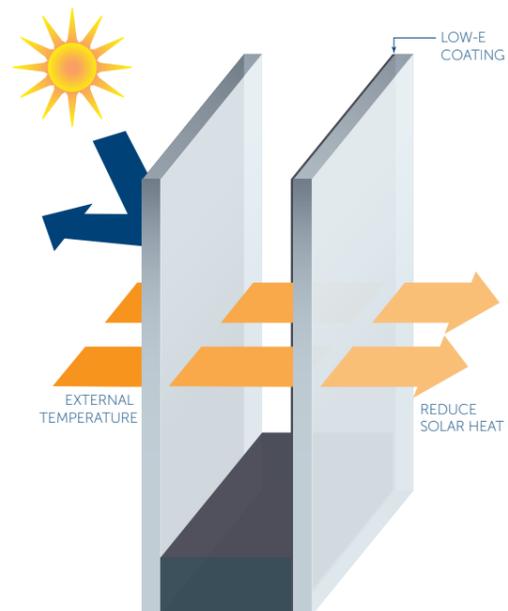
Polysulphide or Structural Silicone

GLASS TYPES

Clear Tinted Low Iron Low E Acoustic



LOW-E DOUBLE GLAZING



The primary characteristic of a low-emissivity coating is to insulate, reducing heat loss or gain. This helps maintain indoor temperature and comfort.

A Low-Emissivity coating can save a considerable amount of energy. The **hard coating** is applied using high temperatures (almost 600 degrees celcius) and adheres to the surface of the glass becoming remarkably durable. It can be stored, manipulated, cut and assembled like ordinary glass. It has excellent light transmission and is highly resistant to chemicals and mechanical stress. It's real strength lies in its remarkable thermal properties as it is designed to insulate the building and can result in substantial reductions in cooling or heating costs.

To improve thermal insulation performance Low-E coated glass assembled into a double glazed unit will further improve energy loss. To increase its impact and resistance to thermal stress it can be heat strengthened or toughened. Lamination will further improve the safety and performance of the glass.

TYPICAL INSULCOOL CONSTRUCTION

PRIMARY SEAL

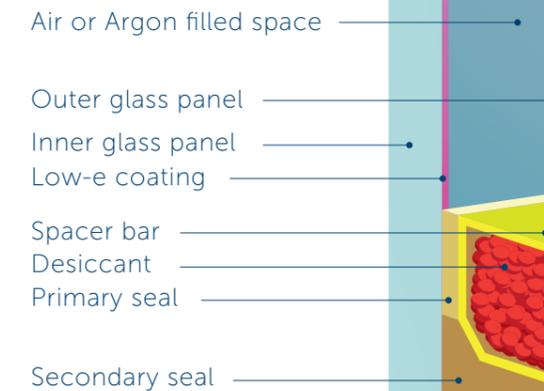
Consists of hot melt butyl or PIB. The primary seal creates the main barrier for preventing moisture penetration.

SPACER

Aluminium InsulCool spacers are filled with moisture absorbing desiccant to prevent condensation.

SECONDARY SEAL

Available in polysulphide or structural silicone, the secondary seal is the structural component of the unit, and holds the panes of glass together.



HOW TO SPECIFY

InsulCool is available in various combinations of glass, thickness, colours and shapes. For a InsulCool solution tailored to suit your requirements, please call us on (08) 6104 1777, and ask to speak with a glass consultant.