

ThermalPlus™ | Insulating Glass Units



THERMALPLUS HAS TWO OR MORE PANES OF GLASS WITH A FACTORY SEALED AIR (OR GAS) GAP BETWEEN, AND IS OFTEN KNOWN AS DOUBLE GLAZING (DG).

A single pane of glass has very poor thermal resistance. The addition of an airgap increases the insulation value significantly by eliminating heat transfer since air is a very good insulator.

ThermalPlus works to insulate in both winter and summer conditions and reduce the cost of heating and cooling in buildings. The measurement of thermal performance is known as the U-Value, and this can range from 3 down to 1 W/m²k depending on the air space and glass type.

Common gases used in the sealed gap are air, argon and krypton. Air is the most common as it is cheaper and more widely available. Argon and krypton have better insulating properties than air.

ThermalPlus can be used in conjunction with other Woods Glass products such as Infnit E, Keramo and EnduraLam to create increased performance metrics in solar control and safety.

APPLICATIONS

- Office Buildings
- Hotels
- Commercial Facades
- Institutional Buildings
- Residential Facades

PERFORMANCE/ SPECIFYING

ThermalPlus insulating glass units are designed to increase the thermal insulation of buildings. This is best measured using the U-Value, which is a measure of the rate of heat gain or loss through glazing due to temperature differences of the internal and external environments. ThermalPlus can be combined with other products to increase the performance of the IGU. All glass must be engineered to specific code and design, please contact Woods Glass to find out more information.

CLEANING/ MAINTENANCE

Normally when cleaning glass, a vinegar-based glass cleaner or mild dish soap and water with a soft, lint-free cloth or paper products is recommended. A squeegee or soft cloth may be carefully used to dry the glass and help avoid water spots.

It is not recommended to use petroleum-based cleaners or solvents as they can streak the glass and weaken the seal between the glass and frame. Avoid washing in direct sunlight to reduce streaking on the glass.

Never use razor blades, steel wool, putty knives or abrasive pads as they may damage the glass, particularly on toughened glass.

RANGE

Many different thicknesses, air gap sizes and product combinations are available with ThermalPlus. Different gasses and spacers can be used to further increase the thermal properties of the IGU. Please contact Woods Glass to discuss special requirements.

BUILDING CODES

- NZS 4223.1 'Glazing in buildings - Glass selection and glazing',
- NZS 4223.3 'Glazing in buildings - Human impact safety requirements',
- AS/NZS2208 - Building safety glazing materials

GLASS TYPES

Clear, tinted, Obscured, Ceramic Frit

OPTIONS

Argon air space, coloured bars, stainless steel spacer, composite spacers

Glass Type	Make-up	U Value
4mm Float	4	5.88
4mm Low E	4	3.67
ThermalPlus Clear	4/6as/4	3.14
ThermalPlus Argon	4/8as/4	2.71
ThermalPlus Low E	4/6as/4	2.53
ThermalPlus Low E Argon	4/8as/4	1.83

KEY

- as = airspace
- A = Acoustic
- IGU = Insulating Glass Unit

Please ensure the current data sheet is consulted prior to specification. If in doubt please contact Woods Glass.