

GLASS | Various Types of Glass Available

Glass is the only building material that not only insulates us from temperature extremes; it can also control the passage of light and heat into and out of our homes.

There are 3 main areas to consider when thinking about windows and glazing for your project: Natural light, solar heat gain, and thermal conductivity.

By choosing the right performance glass, you can enjoy your views and natural light while controlling UV and glare. Benefit from the natural warming effect of solar heat during winter and minimise its impact during summer and insulate your home against excessive heat loss or gain.

By understanding your climate's heating and cooling needs, you can determine your overall glass selection priorities. Performance glass can also help to overcome site limitations so you can still enjoy your views without compromising your home's energy efficiency.

You can combine energy efficient glass with other options, including glass that reduces noise, provides protection from intruders, and creates shelter from extreme weather to create the perfect windows for your building project.

Glass Types

Clear Float Glass

Clear Float Glass is a visually colourless and distortion free glass providing high light transmission (daylight) and clarity. Clear Float Glass is the core base product for most of performance glass products and is commonly used in windows and doors.

Tinted Glass

Tinted glass is produced by adding metal oxides to float glass during manufacture. Tinted glass absorbs and re-radiates solar energy reducing heat and it can provide cost effective climate control. Tinted glass also reduces sun glare and is aesthetically appealing.

Tinted glass is available most commonly in Grey and Bronze.

Reflective Glass

Reflective Glass offers greater solar control than standard tinted float glass and can be used to create a specific visual appearance in a building.

A metallic coating is applied during the manufacturing process and creates a highly reflective appearance.

Reflective Glass is typically available in Clear, Neutral, Grey, Bronze, and Blue colours.



Toughened Glass

Toughened Glass is a safety glass that has increased strength and will usually shatter in small pieces when broken. When broken, particles are small and are relatively harmless compared to the sharp splinters resulting from the breakage of annealed glass. The toughened process also greatly reduces the risk of thermal breakage and increases strength. Most popular glass types can be toughened and toughened glass is available in Clear, Tinted, Reflective, and Low E glass types.

Laminated Glass

Laminated Glass is made up of two or more layers of glass permanently bonded together with an interlayer. The lamination process results in the glass panels holding together in the event of breakage, reducing the risk of harm. Laminated Glass is classified as Grade A safety glass. The interlayer can be selected to deliver special performance characteristics such as improved insulation properties, improved security, and improved sound insulation properties. Most popular glass types can be laminated and laminated glass is available in Clear, Tinted, Reflective, and Low E glass types. Laminated glass is a popular choice for residential and commercial windows and doors. Laminated glass offers improved acoustic insulation over typical annealed glass.

Low E Glass

Low Emissivity Glass has a thin metallic coating on the glass that reflects thermal radiation or inhibits its emission reducing heat transfer through the glass. Low E glass reflects the radiation rather than absorbing it, improving insulation. Low E glass is available in a range of colours including Clear, Neutral, Blue, and Grey. Low E glass provides improved insulation properties and is a good choice in all climate situations.

Double Glazing

Double Glazing or Insulated Glass Units (IGU's) consist of two panes of glass bonded to both sides of a spacer to create one unit. The space between the panes of glass may be filled with Argon gas to increase the insulating properties of the double glazing units. IGU's can be made up of various types of glass including Low E, Laminated, Toughened, Tinted, or Reflective glass. IGU's provide significantly improved insulation properties and are ideal for climates where extremes of heat or cool are experienced.

Glass Thickness

Clear Float	Clearvue	2mm	Laminated	Inrudorprufe	6.38mm NS
		3mm			8.38mm NS
		4mm			12.38mm NS
		5mm			
		6mm			
		8mm			
		10mm			
Float Tinted	Grey & Bronze	4mm	Architectural Laminated Safety	Decorvue Laminated Colour cool tinted/sl25	7.76mm
		6mm			6.38mm NS
Images Mirror	Silver images	3mm		White translucent	6.38mm NS
		4mm		Solarvue Neutral HL	6.38mm NS
		5mm		Solarvue S10 Silver	6.38mm NS
Decorvue	Purvue/non reflective	2mm		Solarvue S10 Tinted	6.38mm NS
		Local Obscure	4mm		