Low-E Glass

Insulation

Solar control

There is more than the eye can see!

Ever-evolving glass manufacturing technology continues to raise the bar in glass performance, giving you a huge variety of options to meet your needs.

As Australia moves forward with the new NCC (National Construction Code) and its increased energy efficiency requirements, you can be prepared with our Low-E glass options.

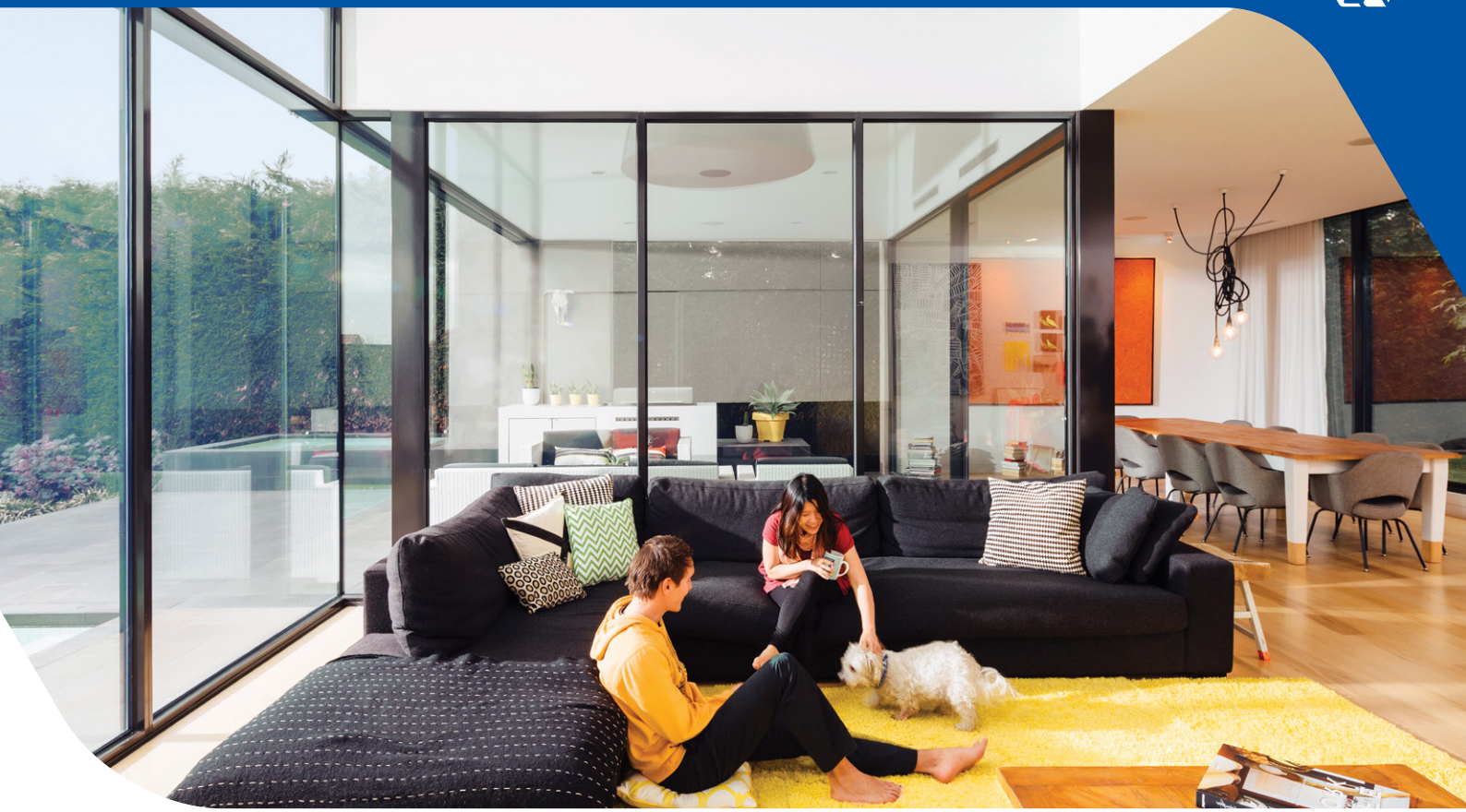
Walshs Low-E Glass is designed to meet the highest performance and quality standards and will exceed all your expectations.

What is Low-E glass?

Low-E stands for low emissivity, which refers to its effectiveness in reducing the transfer of energy as thermal radiation or heat. Low-E glass is specifically designed to reduce solar heat gain and improve thermal insulation.

Low-E glass comes in two key types: hard coat, which is versatile and can be applied in a wide range of applications, or generally higher-performing soft coat – for use only in double glazed units. See over for more details.

- **Exceptional quality**
  Leading design, using state of the art technology.
- **Outstanding performance**
  Offers reduced solar heat gain (SHGC) and improved thermal insulation (UValue).
- **Reduced ecological footprint**
  Minimises energy consumption and costs.



Hard coat or soft coat?

What's the difference? Which one do I need?

Hard coat Low-E glass

Hard coat glass uses a metallic coating that's applied to float glass during the manufacturing process while the glass is still hot. The indium tin oxide coating is fused onto the glass, becoming part of the glass material. One of the significant benefits of hard coat Low-E glass is that it can be used in single glazing, with the coating exposed on the inside of the building and protected from outside elements.

Hard coated glass can be cleaned just like standard glass without a coating, however it may need slightly more regular cleaning in high-traffic areas. You'll find cleaning instructions and advice on our website.

In certain daylight conditions, a haze may be visible on hard coat Low-E glass. This is a characteristic of the coating's interaction with light and not an issue with the glass itself.

Product options using hard coat Low-E glass include Planibel G, Guardian SunGuard Solar Prime and Walshs Performance Low-E. Hard coat Low-E can also be combined into a cost-efficient double glazed unit such as Walshs TwinSeal™ Performance.

Overall, hard coat Low-E glass is a durable and cost-effective solution, providing improved energy efficiency, reducing glare and maintaining transparency.

Soft coat Low-E glass

Soft coat Low-E glass has a metallic coating that's applied after the glass has cooled down. The process involves depositing atomic particles of metals and metal oxides onto the float glass surface. The primary metal used is silver (Ag), which offers better performance than hard coat Low-E. However, the silver coating needs protection from the environment and must be enclosed within a double glazed unit. Soft coat Low-E glass cannot be used as a single glazed product or have its coating exposed.

Advances in soft coat technology have seen the introduction of single, double and triple silver coatings, with each additional layer offering further enhancements in insulation and performance while maximising light transmission.

The benefits of soft coat Low-E glass include improved energy efficiency, larger window sizes, and reduced haze. Available only in double glazed units, they're easy to clean and offer superior performance.

Double glazed product options using soft coat Low-E glass include ThermaPlus™ Double Glazing, Walshs TwinSeal™ Performance Plus, Walshs TwinSeal™ Performance Optima and Walshs TwinSeal™ Performance Platinum. They're among the highest performing products available in the market.

Take a look at our product range to find the right product and options for you.

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