



*Love what you*  
**look through**





# Choose glass that's right for your home

**Windows aren't just part of your home's framework. They can add light and life, warmth and beauty. That's why choosing the right glass is so important.**

The right glazing options for your home and the costs involved will depend on a number of things. You'll need to consider factors like lifestyle, climate, noise levels and where your windows are positioned.

Fairview window and door solutions work to make your home more comfortable. When you combine our exceptional windows and doors with the optimum insulated glass selection you'll have a living environment that feels 'just right', all year round.

Your local Fairview team can help you make the best glass choices for your home. This brochure takes you through many of the benefits that the right glass can bring to your windows and doors. If you need more help, just ask us.



# Energy efficiency

Having energy efficient windows and doors means your home will always feel 'just right' without overspending on heating or cooling.

To help keep a happy medium all year round, take a look through our insulated glass units and low-e glass options.



## Low-e

Take the efficiency of insulated glass a step further with a high performance glass solution like low-e combined with argon gas.

A combination like this will make sure your home always feels perfect.

Low emissivity (low-e) glass cuts down heat loss through your windows by about 20-30% compared to insulated glass alone.\*\*

How does this help? One benefit is that you can live closer to your windows and doors, maximising your living space.

Low-e has an almost invisible coating that covers the inside pane of glass. This coating lets the sun's light and energy into your home and reflects the heat back indoors, creating a shield against the cold. Add an insulating gas like argon and you'll keep in even more warmth.

In warmer climates low-e glass can be used to keep the heat out too.

\*\* EECA Energywise website. *Double glazing.*



## A more energy efficient home

### R-values and thermal ratings.

While it is tricky to quantify exactly how much money can be saved, as part of a total window system quality aluminium frames with insulated glazing can definitely help boost the energy efficiency of your home. When combined with a high performance glass solution, like low-e, the benefits are even greater.

The thermal efficiency of windows and doors is measured by R-value. This is the thermal resistance of the entire window system (including glass, thermal spacer and joinery), not the glass on its own. This gives you a more complete view of the performance of your Fairview window and door solution.

The higher the R-value, the less heat is lost through the system, and the better the insulation will be.

Your Fairview manufacturer can show you exactly what R-value rating each of your windows and doors can achieve, as well as the combined value across your home.

With every Fairview window system quoted, we provide a BRANZ-verified WEERS rating. It's easy to make the best choice for your home. Just ask us how.



## Insulated glass unit (IGU)

Windows with an IGU can help you save on heating bills, halving your heat loss compared to single-glazed windows of the same size and shape.\*

They can add value to your property and help by reducing noise, glare, fading of furnishings and increasing your security and comfort.

An IGU is made of two or more glass panes with sealed air spaces in between.

The sealed air spaces can be filled with an insulating gas like argon.

This allows just as much sunlight to filter through as in a single-glazed window, but the heat will be held in much more effectively.

Spacers separate the glass panes, to reduce condensation and can create a 'warmer edge' to your windows and doors, allowing you to make the most of your living space and live closer to the view you love.



Tip:

If you're renovating, you can begin to make your home warmer and drier by starting with priority doors and windows. Think about the size of the windows, the direction they face and the amount of time you spend in a room.

# Making you feel warm inside

# Safety

You can reduce the likelihood of serious injury by making sure that safety glass has been used in any area where there is a risk of impact with your glass.



Safety glass has extra features that make it less likely to break, or help it to break in a less dangerous way, keeping your family safe and sound.

There are two types of safety glass to choose from: toughened and laminated. You'll want to think about where and how your glass is being used before you decide which type is best.

## Toughened glass

Toughened safety glass has undergone heat treatment to make it stronger overall. If this glass does break, it breaks into small pieces, reducing the risk of injury.

## Laminated glass

Laminated safety glass is made by applying a plastic interlayer between two (or more) panes of glass. It's much harder to break through and won't shatter like normal glass. Instead it 'spiderwebs' from the centre because the interlayer holds it all in place.

This kind of glass offers better security as there's no actual opening created by glass breakage, so someone can't reach in and access your home.



**Tip:**

To keep little ones safer, consider safety glass in high risk areas.



# UV and glare protection



## Tinted glass

The sun brings light and warmth to a home, but it can also fade furnishings, carpets, curtains and artwork. Tinted glass decreases the amount of UV, visible light and heat that passes through your window, to reduce fading of your precious things.

Tinted glass is made by adding metal oxides during manufacturing, reducing glare from outside and decreasing the amount of solar heat that reaches through the glass.



**Tip:**

Grey tints have low light transmission, reduce solar heat and glare. Bronze tints reduce solar heat and glare and offer more visible light. Green tints offer better solar performance and superior light transmission.

# Noise control



Whether it's from traffic or neighbours, noise can be stressful and irritating. Acoustic laminated glass (sound reducing glass) is an excellent solution for homes that are close to busy roads, or anywhere that noise might be an issue.

Acoustic laminated glass reflects sound waves back to where they came from and also absorbs the noise energy within the glass.

Insulated glass units can also improve sound absorption and reduce the noise coming into your home.

Using thicker insulated glass or combining insulated and acoustic laminated glass will give you the best noise protection and the most comfort in your home.



**Tip:**

*The type of glass you need will depend on the type of noise. Traffic noise requires a thicker single pane of glass, but acoustic laminates are better for other types of noise.*

# Home is where your story begins

# What type of glass is right for you?



To make the choice even easier, we've developed this handy checklist - simply compare the benefits to select the perfect glass solution for your home.

We understand that everyone's home and lifestyle is unique. Talk to our Fairview experts about the best solution for your project.



WISH LIST	Low-e	Toughened	Laminated	Tinted
A warmer drier home	✓			
A cooler home in summer	✓			✓
Minimise condensation	✓			
Maximise light**	✓			
Reduce fading of furnishings and artwork	✓		✓	✓
Less noise			✓	
A more secure home		✓	✓	
Keep your family safer		✓	✓	
More privacy				✓*

\* Tinted windows only provide privacy during the day, not at night when internal lights are switched on.

\*\* To maximise light, visible light transmission should be at least 80% (equivalent to clear glass).

# See the difference inside out



## Tip:

Your Fairview manufacturer can show you exactly what R-value rating each of your windows and doors can achieve, as well as the combined value across your home.

With every Fairview window system quoted, we provide a BRANZ-verified WEERS rating. It's easy to make the best choice for your home. Just ask us how.



**There's a lot more to glass than most people think. And we know how hard it is to make sense of all the technical jargon that comes with it.**

To simplify things we've created these easy to understand graphics, to show you how the various glass types perform.

U-value is the measure of the rate of heat gain or heat loss through the glass. The lower the U-value, the less heat is transferred, resulting in better insulation.

### How is this different to R-value?

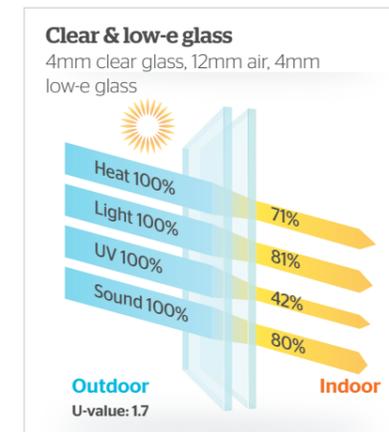
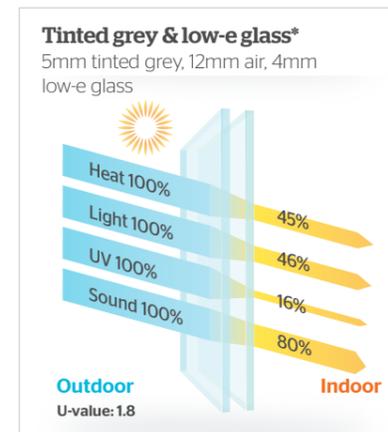
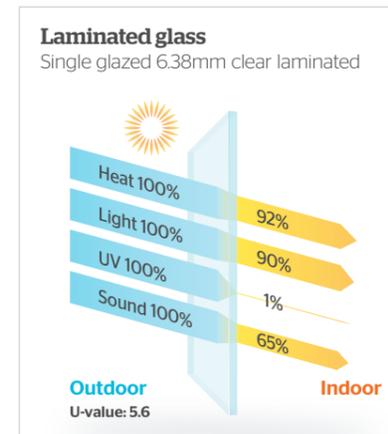
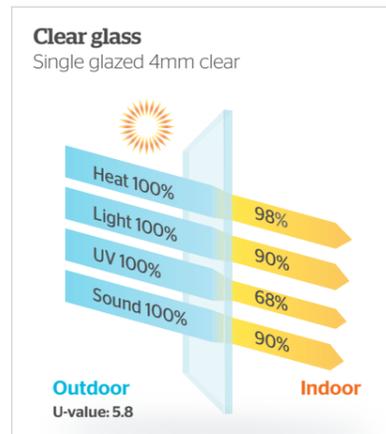
R-value measures the thermal resistance of the total window system (including the joinery, spacer and glass type). The higher the R-value, the less heat that is lost through the system and the better the insulation.

Your Fairview manufacturer can show you how to get optimum thermal results for your project.



Sound reduction is measured in decibels and refers to the perceived difference in noise reduction by the human ear.

\* The use of tinted or reflective glass leads to higher absorption of solar radiant heat, this results in higher thermal stress which may lead to fracturing of the glass pane. Heat strengthened or toughened glass may be required. Talk to your Fairview manufacturer for more information.





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As part of the Fairview group of companies, Fairview Systems and Glass Relate offer total window solutions unmatched in the window and door industry. Our combined expertise delivers optimum solutions through our national manufacturer network.

For ideas, advice and further information about our windows and doors, speak to your Fairview manufacturer, or visit us online at [fairviewwindows.co.nz](http://fairviewwindows.co.nz).

**Your local Fairview manufacturer:**

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FS045/August 2017

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