

TAKE YOUR NEW  
HOME COMFORT TO  
ANOTHER LEVEL

*Low E double glazing from  
Metro Performance Glass.*



**METRO**  
PERFORMANCE GLASS

# THE SOLUTION TO A WARMER, DRIER, MORE COMFY HOME.

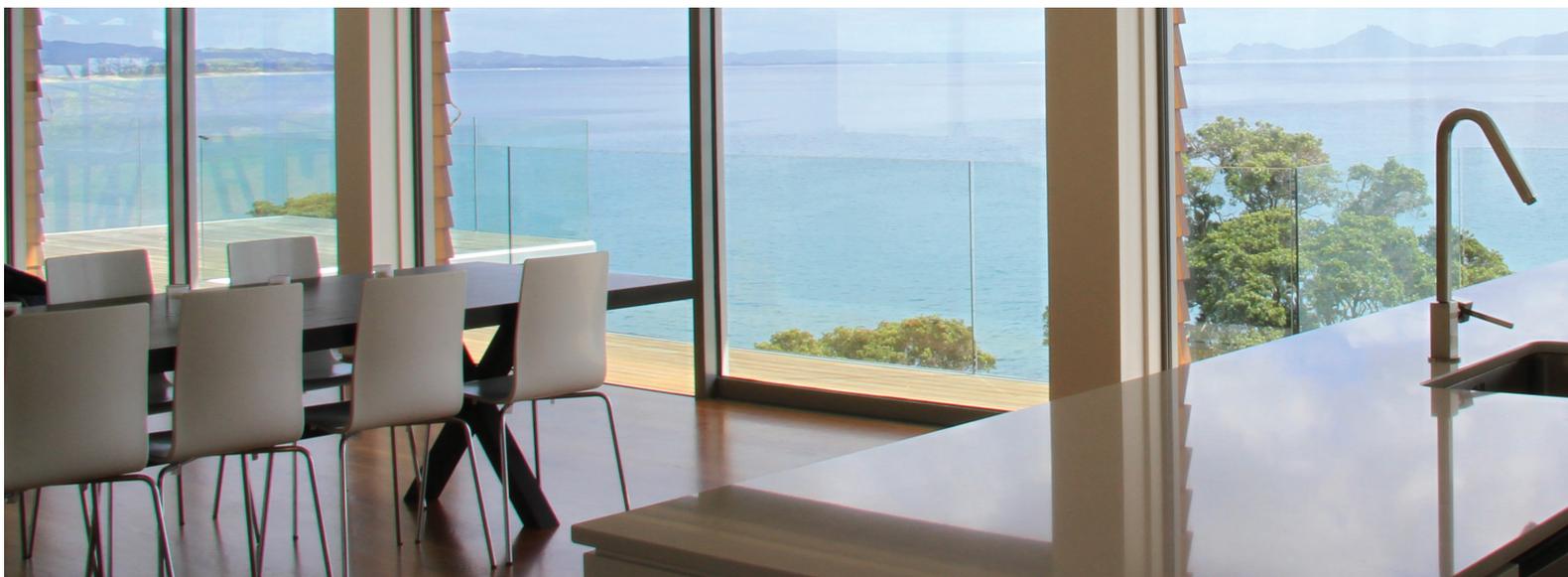


## *Glass technology that's superior.*

The glass you choose can make a huge difference to the comfort of a house and the size of its energy bills.

That's why it pays to choose Low E double glazing from the experts in performance glass.

Because windows are a key design factor for the insulation of houses, Metro offers a range of window glass with high-tech coatings that create the optimum conditions inside. Simply select the Low E double glazing that delivers the right level of performance and enjoy a more comfortable home.





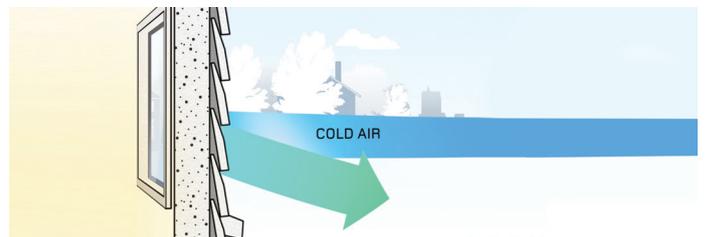
## How Low E works

Low E (an abbreviation of “Low Emissivity”) glass has a unique virtually invisible coating designed to let light in and reflect heat back into your home, reducing heat loss. The same technology can apply in the reduction of solar heat gain.

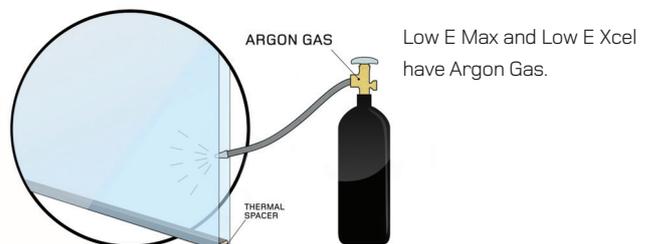
When you're heating your home during winter, less warmth will be lost through the glass.



The better insulation performance of Low E double-glazing keeps you warmer in the winter and cooler in the summer.



Low E double glazing performance is increased even more when adding a thermal spacer plus argon gas.



## Benefits of Low E

### Less heat loss plus more insulation

- + Heat loss can reduce by up to 45% using a Low E Xcel double glazed window.
- + Low E double glazed windows improve on the minimum performance of the window in houses as required by the NZ Building Code.
- + Improving window insulation will save on heating requirements in the winter and cooling requirements in the summer.

### Less condensation with increased comfort

- + Low E double glazing makes the internal glass temperature warmer and therefore reduces the onset of condensation on the inner glass surface.
- + Minimum room temperatures are recommended to be 16°C at night and 18°C during the day.
- + Higher room temperatures around 20°C - 22°C are considered comfortable and help reduce condensation.
- + Low E double glazing is so efficient that, in certain conditions, it can sometimes cause the outside of your window to dew (as the outer pane surface is colder).

### Control the sun and reduce heat gain

- + Solar Low E glass reduces solar heat gain while maintaining insulation and high visibility.

### Allow visibility while reducing glare

- + Large areas of clear glass can let in too much light and create glare. Solar control Low E double glazing blocks more of the sun's heat on hot summer days and reduces glare while maintaining the right level of Visible Light Transmission (VLT) into the house.



### Additional Benefits of Double Glazing

Metro are also able to customise your Low E double-glazing to include sound control, safety and security features. When adding other performance attributes to your double glazing, it is important to rank your priorities as often there are trade-offs; for example, the requirements for sound reduction can run counter to insulation requirements.

### Control noise for a quieter environment

- + Double glazing reduces sound transmission when compared to single glazing to help make the environment quieter and more comfortable.
- + By using thicker glass and/or glass panes of different thickness the acoustics can be improved.
- + Special acoustic glasses can also be included in the double glazed unit if required.
- + For a specific sound solution Metro recommend the use of a sound engineer to address the whole home.

### Be safe and secure in your home

- + Toughened Safety Glass will be used to comply with NZS 4223 Part 3 Human Impact Safety Requirements, where required, either as the Low E outer pane or clear inner pane.
- + Toughened Safety Glass is ideal for safety, strength and temperature resistance.
- + Toughened Safety Glass is ideal for high impact areas such as doors.
- + Laminated Safety Glass can be used for safety and security if required.

# Choose the level of Performance you need.

Metro's aim is to increase the performance of windows in homes. That is why Metro has developed a range of Low E double glazing options, in addition to our classic and custom range, to suit your requirements and budget. While modern Low E Glass has a slight visual tint, Low E Xcel from Metro has a visual light transmission of 81%, which is virtually as clear as clear glass, with a light transmission of 82%.

**The Metro Performance Selection Tool:** To help you select the right glass type for your new joinery, we have introduced a selection tool across our Low E range. This provides you with a comparison to classic double-glazing and a good, better and best Low E options.



-  **Better Heat Retention** Keep the warmth of your home in whilst keeping the cold out
-  **Less Internal Condensation** Virtually eliminates crying damp windows
-  **Reduced Solar Gain** Keep your home cool and comfortable in hot weather
-  **Greater Power Savings** Reduce heat loss and therefore heating and power bills
-  **Visible Light Transmission** The amount of day light that passes through the double glazing

<sup>1</sup>Based on an average new house lot of joinery to determine the average R-value (Rw avg) and Window Energy Efficiency Rating System (WEERS) rating. The average house lot of joinery totals 41m<sup>2</sup> of glazing in a typical frame with 3 doors and 17 windows. The Indicative WEERS star ratings shown are a guide and will vary with different frame types and or window/door sizes. The WEERS scale is out of 6, the higher the star rating the better the windows thermal performance. <sup>2</sup>Timber and uPVC/Fibreglass frames may achieve higher ratings.

Metro Performance Glass Double Glazing units are manufactured in New Zealand for New Zealand conditions and are regularly tested by BRANZ, compliant to EN 1279.



Contact your local Metro representative for more information about our range of Low E Double Glazing.

**Call 0800 658 945**

