

TAKE 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 clearly 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.



# Choose the level of Performance you need.

Metro's aim is to increase the performance of windows in housing. That is why Metro has developed a range of Low E double glazing, in addition to our classic and custom range, to suit your requirements and budget.

**The Metro Performance Rating:** To help you select the right glass type, we have introduced a unique Performance Rating across our Low E range. This provides you with good, better and best options.

**Classic**  
Double Glazing



Non-Low E Glass



**Low E Plus**  
Double Glazing



High Clarity, Low Haze  
Low E Glass



**Low E Max**  
Double Glazing



High Clarity, Low Haze Low E  
Glass, includes Argon Gas  
and Thermal Spacer



**Low E Xcel**  
Double Glazing



High Performance and High Clarity,  
Low Haze Low E Glass, includes  
Argon Gas and Thermal Spacer



**ENERGY STAR® Qualified Windows must receive a rating of 3 stars or greater<sup>1</sup>**

Using a standard  
Aluminium Frame



Using a Thermal  
Aluminium, Wood  
or Pvc Frame<sup>2</sup>



- Better Heat Retention** Keep the warmth of your home in whilst keeping the cold out
- Less 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

<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. Energy Star® Qualified windows must achieve a rating of 3 stars or greater and are available from Energy Star® qualified partners.

<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.







## How Low E works

Low E is an abbreviation of “Low Emissivity”, which is the ability to radiate absorbed energy. Low E glass has a unique Low Emissivity coating designed to reflect long wave radiation from the glass itself and from inside or outside the house.



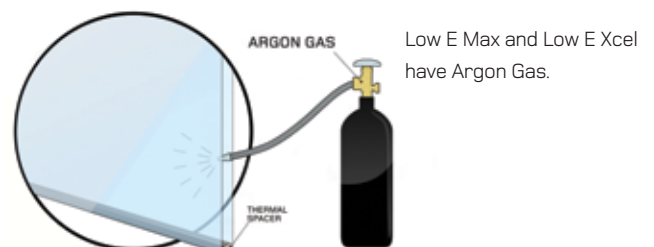
When you're heating your home during winter, less warmth will be lost through the glass.



Conversely when the sun is beating down in summer or it's freezing outside, less heat, cold or solar radiation will enter your home.



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 from 45% to 28% by using a Low E 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 reduce 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, they can sometimes cause the outer panes to dew as the outer pane surface is colder.

### Control the sun and reduce heat gain

- + Solar Low E glass is best at reducing solar heat gain while maintaining insulation and high visibility.

### Control the suns radiation and reduce fading

- + Low E double glazing can help protect furnishings in the home from fading by reducing levels of UV light from the sun.

### 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 works like sunglasses and control the Visible Light Transmission (VLT) and thus glare inside the house.



### Additional Benefits of Low E

The Metro Performance Rating (MPR) does not include sound control, safety and security features in the rating, as the Low E glass does not affect the performance, so these are additional benefits you get when selecting from the Low E double glazing range.

### Control noise for a quieter environment

- + Double glazing reduces the sound transmission compared to single glazing so they make the environment quieter and more comfortable.
- + By using thicker glass and or glass panes of different thickness the acoustics are improved.
- + Special acoustic glasses can be included in the double glazed unit if required.

### 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.



Call 0800 658 945

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

**Metro Direct Whangarei**

28 Porowini Ave, Whangarei  
(09) 438 9399

**Metro Performance Glass Auckland**

5 Lady Fisher Place, East Tamaki, Auckland  
(09) 927 3000

**Metro Direct Hamilton**

32 The Boulevard, Te Rapa Park, Hamilton  
(07) 850 6371

**Metro Performance Glass Bay of Plenty**

88 Portside Drive, Mt Maunganui, Bay of Plenty  
(07) 575 5503

**Metro Direct Napier**

9 Niven Street, Onekawa, Napier  
(06) 843 3777

**Metro Direct Palmerston North**

193 John F Kennedy Drive, Palmerston North  
(06) 354 2071

**Metro Direct Taranaki**

9 Oropuniri Road, New Plymouth  
(06) 758 8366

**Metro Performance Glass Wellington**

18 Jamaica Drive, Grenada North, Wellington  
(04) 232 9920

**Metro Direct Nelson**

146 Tahunanui Drive, Nelson  
(03) 546 5365

**Metro Performance Glass Christchurch**

700 Halswell Junction Road, Hornby, Christchurch  
(03) 348 4184

**Christchurch Glass**

35 Hammersmith Drive, Wigram Park, Christchurch  
(03) 343 5103

**Metro Direct Cromwell**

Ree Crescent, Cromwell, Central Otago  
(03) 445 4530

**Metro Direct Dunedin**

140 Portsmouth Drive, Dunedin  
(03) 477 9485



[www.lowedg.co.nz](http://www.lowedg.co.nz)

