

NEW
Technology

Low E
Double Glazing



SUN SMART GLASS FOR YOUR HOME COMFORT



Cooler in Summer



Warmer in Winter



Reduced Glare



Reduced Fading



SUN SMART GLASS TECHNOLOGY COMBINING '3 INTO 1'

SunX™ Grey is a new innovation, that's not only smart but also sophisticated, it combines three key advantages in a single pane of glass (unlike traditional solutions that would require two panes of glass to achieve similar performance).

1. Uses solar control technology which helps reduce heat build-up, plus protects from glare and sun damage.
2. Provides excellent thermal insulation using Low-E technology.
3. Incorporates the latest in colour trends, with a subtle grey tint that enhances the overall aesthetic of any home or building.

This new technology also means that specialist glass can be added into the double glazing, eg obscure glass, frosted bathroom glass or sound control glass without the expense of triple glazing.

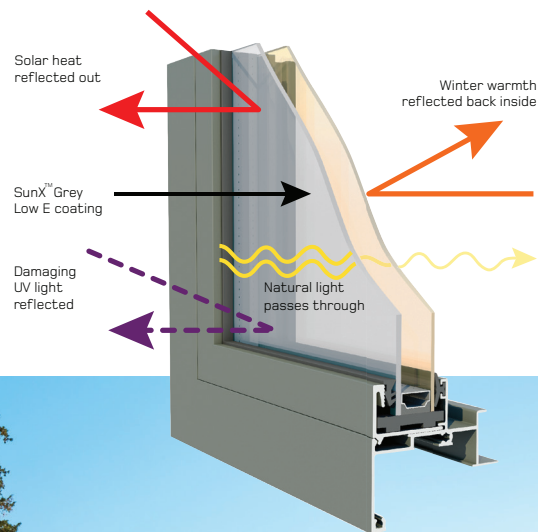
WHAT IS SOLAR CONTROL?

SunX™ Grey has a special solar control coating which prevents excess heat from building up inside during summer months. It's ideal for windows and facades exposed to a lot of sunshine. In colder months it retains warmth, while still letting in natural light, making it the perfect choice for all seasons, plus helping to reduce your heating and cooling costs.

SunX™ GREY LOW E - BENEFITS

- **Solar control** – new technology filters direct heat from the sun, meaning a cooler home in summer and lower cooling costs.
- **Thermal insulation** – SunX™ Grey retains 50% more warmth than standard double glazing, providing a warmer home in winter.
- **Versatile** – easy to combine with laminates for sound control, safety or obscure/frosted glass for bathrooms or privacy.
- **Reduces glare** – while protecting furnishings from fading and letting in natural light.
- **Consistent colour** – because the grey tint is part of the Low E coating it provides a consistent colour even when used across different glass thicknesses, meaning your home will look great from all angles. Unlike other tinted glass, which get darker as the glass gets thicker.
- **Stylish design** – grey tones are the latest trend in window colour. SunX™ Grey has a subtle, neutral tint to enhance the aesthetic of any home.

HOW SunX™ GREY LOW E WORKS



What to consider when choosing glass?

CHOOSE THE RIGHT GLASS FOR YOUR HOME AND CLIMATE

(After H1 requirements have been met)

Deciding which glass is best for your home can often mean choosing between the performance features most important to you, e.g. solar control, thermal insulation, visual comfort, noise control, privacy or design aesthetic.

The advantage of SunX™ Grey is that you can include more of these features into a double-glazed unit, without the expense of triple glazing. It's suitable for a wide range of commercial and residential applications and can be used with all types of joinery including aluminium, UPVC and timber.

IS SunX™ GREY SUITABLE FOR MY HOME?

If you check two or more of the factors below, SunX™ Grey could be right for you:

- There is high window to wall ratio
- A stylish aesthetic is required
- Located in high solar gain regions
- Windows are north or west facing
- Glare may be an issue and limited shade is available
- Rising energy costs are a consideration
- Ventilation is not optimal
- Interior overheating is a risk

To find out more please talk to our team or ask your window supplier for details



CHOOSE THE LEVEL OF PERFORMANCE YOU NEED



Standard clear double glazing -std spacer need to add argon**



Entry level soft coat Low E, argon gas, thermal spacer



Extra clear soft coat Low E argon gas, thermal spacer



Grey tone soft coat Low E, argon gas, thermal spacer + solar control



High performance soft coat Low E, argon gas, thermal spacer + solar control

HEAT RETENTION – keeping warmth in and the cold out



VISIBLE LIGHT TRANSMISSION – maintaining natural light levels inside your home



SOLAR HEAT CONTROL – keeping your home cool and comfortable in hot weather



FADING PROTECTION – protects from fading damage through window glass.



SunX™ GREY – PERFORMANCE DATA BY SPACER WIDTH

Based on DGU make up: SunX™ Grey – Argon – Clear – Thermal Spacer

Make-up mm ¹	Building Code Acceptable Solution H1/AS1 Schedule (see schedule notes)				EN 673	EN410						
					Heat Loss & Condensation	Visibility			Heat Gain			Fading
	Window System Material Type by Climate Zone				Ug*	VLT*	VLR-E*	VLR-I*	SF*	SC*	LSG*	Tdw-ISO*
	Standard Aluminium	Thermal Break Aluminium	uPVC	Timber	U Value	Visible Light Transmission	External Reflectance	Internal Reflectance	Solar Factor (g)	Shading co-efficient	Selectivity	Damaged Weighted Transmission
4-8-4		Zones 1-6 Stage One	Zones 5-6 Stage Two	Zones 5-6 Stage Two	1.8	42%	8%	12%	33%	0.38	1.27	0.45
4-10-4		Zones 1-6 Stage One	Zones 5-6 Stage Two	Zones 5-6 Stage Two	1.6	42%	8%	12%	33%	0.38	1.27	0.45
4-12-4		Zones 1-6 Stage One	Zones 5-6 Stage Two	Zones 5-6 Stage Two	1.4	42%	8%	12%	33%	0.38	1.33	0.45
4-14-4		Zones 3-4 Stage Two	Zones 5-6 Stage Two	Zones 5-6 Stage Two	1.3	42%	8%	12%	33%	0.38	1.33	0.45
4-16-4		Zones 3-4 Stage Two	Zones 5-6 Stage Two	Zones 5-6 Stage Two	1.3	42%	8%	12%	33%	0.38	1.33	0.45
4-18-4		Zones 3-4 Stage Two	Zones 5-6 Stage Two	Zones 5-6 Stage Two	1.3	42%	8%	12%	33%	0.38	1.33	0.45

The schedule method provides the simplest R-window compliance method when the glazing area is 30% or less of the total wall area. Calculation can be used for 0-40% or Modelling > 40% for these it may be possible to use a lower performing glass or frame on the margins.

* Ug is centre of glass (in W/m².K) calculated for glass oriented vertically, with proprietary software using CEN boundary conditions.

For other data refer to the Metro Glass website or Low E technical brochure notes.

**Classic requires Argon in 14, 16 or 18mm unit to achieve U value 2.6. Will no longer comply with step change to R0.46 2nd of Nov 2023 for Climate Zones 1 & 2.

TERMINOLOGY

- UG:** The lower the U Value the lower the heat transfer, the better the insulation.
- VLT:** The higher the percentage the more daylight transmitted and the greater the glare.
- VLR-E:** The higher the percentage the more the light reflection looking into the building.
- VLR-I:** The higher the percentage the more the light reflection looking out of the building.
- SF/SHGC:** The lower the solar factor or total energy transmittance coefficient the lesser the solar heat transmitted. SF is designated g value in Europe. Also known as SHGC Solar Heat Gain Coefficient.
- SC:** The lower the shading coefficient the less heat gain and thus more shading is provided by the glass.
- LSG:** If the LSG is greater than 1.0, then the glass transmits more light than solar heat, also termed as selectivity.
- Tdw:** The lower the Tdw - ISO the greater the reduction in fading damage through the glass.

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