



Guardian Low-E1.4 D

Neutrality · Clarity · Durability





Guardian Low-E 1.4 D is a product which combines the superb benefits of off-line magnetron soft coated low-e glass; neutrality, uniformity, clarity and consistency with the benefits of pyrolitic low-e glass; durability, easy processing and no requirement for edge deletion with approved sealants.

Guardian Low-E 1.4 D Energy Saving Glass has been specifically developed to enable window manufacturers and insulating glass suppliers meet the exacting demands of energy saving regulations with a finished product that has the neutral appearance of clear float glass, excellent insulating properties and is easy to process.

GUARDIAN LUXGUARD I S.A.
Route de Luxembourg
L-4940 Bascharage
Tel. (+352) 50 301
Fax (+352) 503 745
<http://www.guardian.com>

Performance Figures

Light transmission:	72 %
External light reflection:	12 %
Internal light reflection:	12 %
Total shading coefficient (EN410):	0.80
U Value 4/16/4 air filled (EN673):	1.7 W/m ² K
U Value 4/16/4 gas filled (EN673):	1.4 W/m ² K
U Value 4/12/4 air filled (EN673):	1.9 W/m ² K
U Value 4/12/4 gas filled (EN673):	1.6 W/m ² K

All values are calculated based on a 4/cavity/4 buildup with the coating on surface #3. The u-value is calculated according EN673 with a ΔT of 15°K and argon gas fill rate of 95%.

Product Benefits

- Colour neutrality in both reflection and transmission – maintaining the natural colours of everything seen through the glass or reflected in it.
- Clarity – crystal clear with no unsightly haze.
- High light and solar heat transmittance – allowing the best use of natural lighting and beneficial solar heat gain.
- Low light reflectance – giving the window a natural appearance.
- Uniformity – no unsightly banding effects within the glass panels.
- Excellent thermal insulation – U values down to 1.4 W/m²K when gas filled allowing energy saving requirements to be easily achieved, reducing heating costs.
- Full range available – laminated and tempered glass available to provide safety and security where needed.

Processing Benefits

- The durable coating allows Guardian Low-E 1.4 D to be transported in the same way as normal float glass with no edge taping or protection lites necessary.
- Guardian Low-E 1.4 D can be processed easily by taking the same precautions recommended for float glass and pyrolitic coated glass. Detailed Processing Instructions are available.
- Guardian Low-E 1.4 DT, can be tempered or heat strengthened at similar furnace settings to pyrolitic low-e glass. The uniformity, consistency and quality of the coating can improve furnace yield and reduce cycle times over pyrolitic coatings. When tempered 1.4 DT has the same visual appearance as the annealed version, 1.4 D and importantly the thermal insulation values are maintained at the same high level.
- No edge deletion is required when fabricating insulating glass units with approved sealants.
- Guardian Low-E 1.4 D has a shelf life of 6 months if stored in the conditions recommended for normal float glass.
- Guardian Low-E 1.4 D is available in a variety of sizes and thickness to suit most processors, including 4mm and 6mm in 6000x3210, 3210x2550 and 3210x2250. Other thicknesses and sizes available on request. Laminated Low-E 1.4 D is also available.
- The product can be combined with the whole range of Guardian products to provide sophisticated products for all types of applications. Backed by the renowned service from Guardian, one of the world's largest and most innovative glass manufacturers, a highly reliable service to the window industry is assured.

This is a general description of the product Guardian Low-E 1.4 D. It is the responsibility of the users of this publication to ensure that the proposed application of the product is appropriate and that such application complies with all relevant local and national legislation, standards codes of practice and other requirements. Guardian Luxguard I SA hereby disclaims all liability howsoever arising from any error in or omission from this publication and all consequences of relying on it.

