

Guardian External Shutter Blinds



Description

Guardian as the name suggests is an extremely robust external tiltable louvre shutter system. It has proven technology combining the greatest flexibility with the high performance figure of our external venetian blind ranges.

Whilst their operating function is the same, unlike conventional external venetian blind systems, they do not have fabric ladder supports and the louvres are driven and supported by a mechanism in the side guides. When closed they have the appearance of a secure shutter and will resist opportunist attempts at entry.

Preventing solar gain from entering the fabric of the building will enable a strategy of natural ventilation without mechanical cooling or significantly reduce the load and running cost of an air conditioning system. Guardian tiltable louvre shutters can reject up to 98% of solar gain and are one of the most efficient in our range for control of light and heat. Actual figures depend on slat colour and detailed properties for each colour can be found on our website



Control

- Solar Gain
- Light Level
- Screen Glare
- Visual Perception
- Proven Technology

Function

- Retractable
- Fully Adjustable
- Auto/ Manual
- Security
- Durable
- Aesthetically pleasing



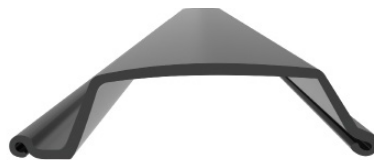
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Our performance figures are calculated from testing in accordance with European standards EN14501 and ISO EN 52022/1 and are validated and approved for inclusion in the European database. Figures in the ES-SO database (www.es-so-database.com) are the properties of the blind and glass combined (Gtot) so that is the figure for how the blind will perform in a window not its properties in the test lab.

The database uses the calculation methods of EN410 that are used for glazing calculations and is the most accurate method of comparing manufacturers figures.

As an example, a RAL 9006 silver louvre with double glazed low-E glass (reference glass 'C' in EN14501) has a Gtot figure of .03 when the blind is closed. As light is as important for comfort as heat rejection a calculation of a blind angled at 45° is more realistic for user comfort. Although it has a lower heat rejection figure it provides an acceptable light level, glare reduction and outward vision whilst still having an impressive Gtot figure of .09 equivalent to 91% reduction in solar gain.



Guardian louvre

Automatic Control

Effective shading can only be assured if the system is controlled to be functional when solar gain occurs rather than when the occupant starts to feel hot. The strategies for automatic control are identified in a separate leaflet "A Guide to control option for motorised shading". As shown, in deciding on the control strategy it is essential to clearly identify the priorities and achieve a balance between the requirements of aesthetics, energy efficiency and the needs of the individual occupant.

