

TECHNICAL FOLDER

acristalia

SLIDING ROOF SLIDING SERIES

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1 INTRODUCTION. SLIDING SERIES

Our Sliding Roof has been the result of a needs study for the customers willing to close an outdoor space without obstructing the panoramic views. This document is a technical tool aiming to present the characteristics of the product.

This technical folder is composed of a synthesis of the tests to which the Sliding Series has been subjected as well as the corresponding results, a guide of installation possibilities with an overview of the design and the functionality of the product and the technical features such as the glass dimensions, the panels and rows, the different ypes of aluminium profiles used.



2 TESTS

We have several certificates of quality for our Sliding Roof Sliding Series following the tests and essays realized. This document of specifications of consutruction gathers the different controls of quality to which this enclosure system has been submitted according to the different materials used. On the other hand, the document details the glass classification and the requirements that meets Acristalia. Finally, we present the result of the resistance essays to wind load, air tightness and water tightness. For any further information regarding these essays, you can visit our website (www.acristalia.com) where you will find the "Downloads" file with the corresponding documents.

ACRISTALIA. QUALITY BRAND

Acristalia manufactures all its products under strict quality controls that are regularized and specified under the quality management system according to the standard **UNE-EN ISO 9001:2008** and guarantees that all the materials used in the manufacture of its products are of first quality complying with the following regulations: Aluminium with **CE marking** according to the new European Construction Products Regulation (EU) 305/2011 and the harmonized standard UNE-EN 15088:2006: Aluminium products and aluminium alloys for structural applications. In addition, it complies with quality standards for surface treatment of profiles (**Qualicoat, Qualand and Qualideco**).

RESISTANCE TEST TO AIR AND RESISTANCE TO WIND LOAD ACCORDING TO UNE-EN 1026:2000 / UNE-EN 1221:2000.

Sliding roof enclosure composed of four sliding panels and two fixed panels with a total dimension of 3000x2000 mm (height x width).

Test result:

Class C4

Class C = Arrow minor than1/300 Class 4 = Safety shock 2400Pa

Air tightness Class 1 WATER TIGHTNESS TEST ACCORDING TO UNE - EN 1027:2000

Sliding roof enclosure composed of four sliding panels and two fixed panels with a total dimension of 3000x2000 mm (height x width).

Test results: Class 7A.

GLASS CLASSIFICATION

All the glasses are manufactured according to the UNE-EN 12150-1:2016 standards with a 1C1-classification of resistance and safety for the tempered glass.

Laminated glasses and double glazing compositions meets the fabrication control standard and bears the CE marking according to the UNE-EN 14449:2006/1279-1:2006 standard in accordance with the Guardian Select's warranty.

3 INSTALLATION POSSIBILITIES

The Sliding Series allows many possibilities in terms of design and distribution. The opening of the roof will depend on its dimensions. The more panels and rows there are in the roof, the more the opening degree will be. The drawings below shows that the opening surface can vary from 50% (S2 roof) to 80% (S5 roof). The Sliding Roof matches perfectly with the needs of each project. Other possibilities of installation are exposed below such as the waterfall effect roof when the project requires a depth greater than 7 metres, the double slope roof and the irregular roof.



* The profiles of the system are made to include glass panels or panels of other composition (sandwich panels or polycarbonate, for example).

4 DESIGN

The Acristalia Sliding roof reflects our committment to the design. This is why aesthetics and functionality goes hand in hand. The motorisation system is fully integrated and invisible. On the other hand, the design of the panels has been realized so that it avoids the water stagnancy. The design of this series has been thought in terms of comfort and safety since the installation of the structure is made entirely from the inside. In addition, the design of the Sliding Series makes possible the integration of accessories completing the product. The rafters of the roof are designed to install awnings without additional profiles or pergola fabrics with thin profiles put on top of the roof. Automatic systems such as rain and wind sensors can be added. Finally, it is possible to add LED lightning inside the structure.



- 1 Motorization fully integrated in the system.
- **2** The design of the rafters allows to integrate awnings in the system without additional profiles.
- 3 Panels designed to avoid the water stagnancy.
- **4** The installation of the system is made from the inside, which makes it is safer and easier.
- **5** Automatic systems can be integrated such as rain and wind sensors allowing to activitate automatically the structure.
- 6 The integration of LED lightning is possible.





5 TECHNICAL FEATURES

This part deals with the different technical characteristics of the Sliding Series. The first infography shows the following: the more the glass is thick, the more the row has to be wide. It also demonstrates that the maximal load allowed is directly proportional to the metres of row. The second infography relates to the slope of the roof as the Acristalia model allows a slope up to 22°, even if the

height < 0.8

width

standard manufacturing measure is 6°. In addition, the Sliding Series includes the possibility to install a reinforced part in the lintel to increase the distance between the pillars.



Panels dimensions

SLOPE OPTIONS

factured longer than wider, even if, exceptionally, the width can be 20% greater than the length.

The Sliding roof allows a slope up to 22°.

lickness (mm) 6+6 5+5 4+4 3+3 Row width (mm) 1000 1100 1200 1300

Glass thickness/width ratio

* Orientative values. Submit each project to study.





* Orientative dimensions for a row width of 866 mm.

REINFORCEMENT





* Standard fabrication dimensions 6°, possibility up to 22°.

5 PROFILES SECTION

Version: March 2018 **Dénomination:** Parts Sliding Roof - Sliding Series



RAFTER S5



WALL PROFILE \$5







RAFTER S3



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