

I 01.02b



OPAK-PC

DOUBLE ALUMINIUM SLAT



ALUMINIUM RANGE

PRODUCT DATA SHEET



OPAK - PC
DOUBLE ALUMINIUM SLAT
 95 x 15,5 thickness 1,5 mm
 INTERIOR WITH 12 mm POLYCARBONATE

- Technical data -

The feasibility of the maximum width and height dimensions depends on the **accessories** and the **automation system**. Technical specifications — such as weight, wind resistance and opening speed — also vary depending on the type of **slat selected**.

Under standard conditions, the doors can reach approximately **10 metres**, and wind resistance can be classified as Class 3, 4 or 5.



| - Manufacturing and materials

The single slat is manufactured through a high-quality aluminium extrusion process. Its structure complies with the international standards UNE-EN 755-9 and 12020-2, as well as UNE-EN 515 and UNE-EN 516, ensuring durability and safety in its application.

| - Alloy

The element is manufactured from EN AW-6060 or EN AW-6063 aluminium alloys, known for their strength and versatility in architectural and construction applications.

| - SIDE GUIDES - |

ALUMINIUM

Single | 70x33,4

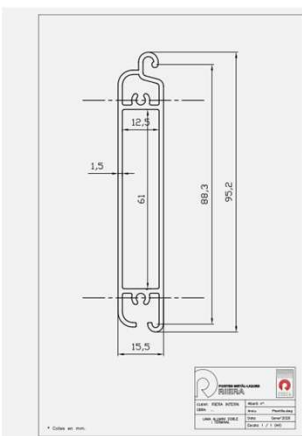
Reinforced guide



80x76,9



double
116,90x80



| END CAPS

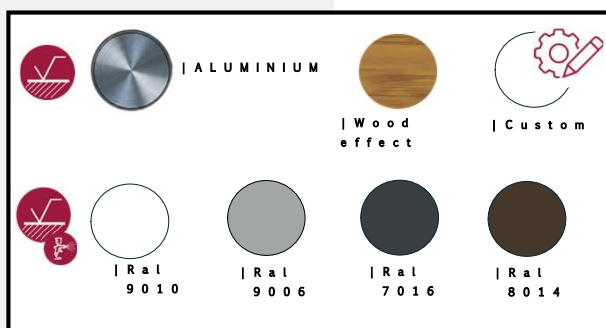
85,4x17,8 thickness 1
 Our curtain is closed with a **stainless steel** end cap made from 304 & 316 alloy.



| ALUMINIUM BOTTOM RAIL

138,3x15,5 thickness 1,7
 The lower part of the bottom rail includes a rubber seal that improves weather tightness, as well as a bearing that facilitates sliding along the guides.

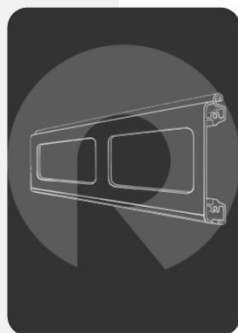
- Finishes and models -



The anodised finish carries the **QUALANOD** quality seal, ensuring superior protection against corrosion and a uniform aesthetic finish. The powder coating process also carries the **QUALICOAT** quality seal, guaranteeing an even coating resistant to adverse environmental conditions.

For a “wood effect”, the powder coating is carried out under the **QUALIDECO** quality seal, offering a natural and elegant appearance that integrates perfectly into different architectural environments.





exolon
GROUP

Exolon® AR

Solid polycarbonate sheet
resistant to abrasion

Exolon® AR is a polycarbonate sheet with **abrasion resistance and enhanced UV protection**, offering glass-like hardness combined with the impact resistance of standard polycarbonate. In addition, **Exolon® AR 8099** provides, on **both sides**, superior resistance to **glare, yellowing and fogging**, ensuring a long service life in high-performance architectural glazing applications. **Exolon® AR 7099** is a **sheet with a hard coating on one side**, suitable for **lamination and printing** on the uncoated side. **Exolon® AR** comes with a **10-year warranty against breakage** and a **7-year warranty against delamination and ageing due to weathering**.

Applications:

Typical applications for **Exolon® AR** sheet include **transparent acoustic barriers, glazing for shelters in schools and hospitals**. **Exolon® AR** is also widely used in **correctional facilities and psychiatric facilities**. In addition, the product performs very well in **viewing windows and machine guards** in aggressive chemical environments. Due to its **scratch-resistant coating**, **Exolon® AR cannot be thermoformed** like other Exolon® sheets

ADVANTAGES

- STRUCTURAL RIGIDITY
- IMPROVED SECURITY
- COMPLETELY OPAQUE AND RIGID

	Test Conditions	Typical values ⁽¹⁾	Unit	Standard
PHYSICAL				
Density	water at 23 °C	1200	kg/m ³	ISO 1183-1
Water absorption saturation	23 °C, 50% relative humidity	0.30	%	ISO 62
Water absorption equilibrium	Procedure A	0.12	%	ISO 62
Refractive index		1.587	–	ISO 489
MECHANICAL				
Tensile modulus	1 mm/min	2350	MPa	ISO 527-1,-2
Yield stress	50 mm/min	> 60	MPa	ISO 527-1,-2
Yield strain	50 mm/min	6	%	ISO 527-1,-2
Strain at break	50 mm/min	120	%	ISO 527-1,-2
Flexural modulus	2 mm/min	2350	MPa	ISO 178
Flexural strength	2 mm/min	90	MPa	ISO 178
Taber abrasion resistance	Δ haze after 100 cycles (500 g CS 10F) after 500 cycles	1 – 4 4 – 9	%	ASTM D1044 & ANSI Z26.1
THERMAL				
Vicat softening temperature	50 N, 50°C/h	148	°C	ISO 306
Thermal conductivity	23°C	0.20	W/(m.K)	ISO 8302
Coefficient of linear thermal expansion	23 to 55°C	0.65	10 ⁻⁶ /K	ISO 11359-1,-2
Temperature of deflection under load	1.80 Mpa	128	°C	ISO 75-1,-2
Temperature of deflection under load	0.45 Mpa	140	°C	ISO 75-1,-2

⁽¹⁾ These values are measured on injection molded samples, and are not intended for specification purposes.

Light Transmission:

Test Method according to DIN 5036.

The stated thicknesses are not all available as standard. Please ask us for more information.

The stated values are typical values only.

Light transmission in %	3	4	5	6	8	10	12	15
Exolon® AR clear 8099/ 7099	88	87	87	86	85	83	82	80
Exolon® AR bronze 8850	50	50	50	50	50			

Available sizes:

Exolon® AR is available in thicknesses of 3 – 15 mm and in the following sizes; other sizes, colors and sheet thicknesses on request.

Colors:

Exolon® AR clear 8099/ 7099
Exolon® AR bronze 8850

Sizes:

3,000 x 2,000 mm
3,000 x 2,000 mm

Permanent Service Temperature:

The permanent service temperature without load is approx. 120°C.

Fire Rating^(*):

Country	Standard	Rating	Thickness	Colour
Europe	EN13501-1	C s3 d0	2-6 mm	clear 8099
France	NFP 92-501&505 NFF 16-101&102	M2 F2	2 - 12 mm 2 - 12 mm	clear 8099 clear 8099
USA	UL 94	V2 HB V0	0.75 - 1.4 mm ≥ 1.5 mm ≥ 10 mm	all colours all colours clear 8099

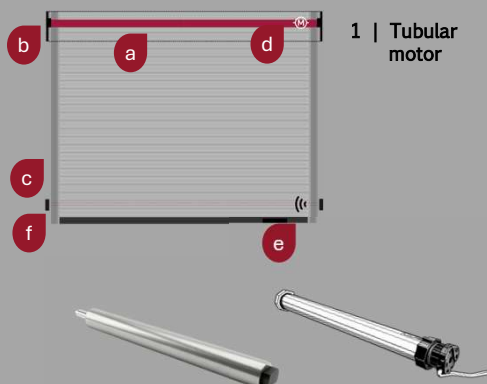
^(*) Fire certificates are limited in time and scope, always check if the mentioned certificate is valid for the purchased Polycarbonate sheet type at the date of delivery. Polycarbonate sheets may change their fire behavior due to ageing and weathering. The indicated fire rating was tested on new / unweathered Product in accordance with the indicated fire classification standards.

Impact Resistance:

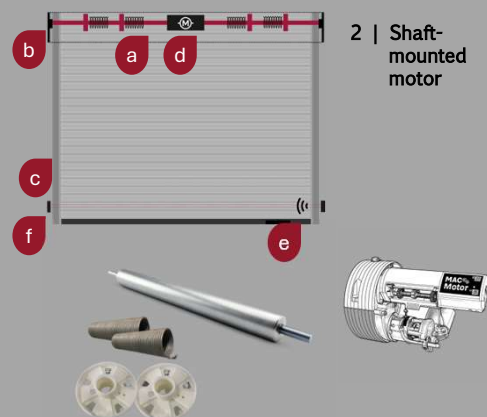
Country	Standard	Rating	Thickness	Colour
Europa	DIN EN ISO 23125 DIN EN 12417	A2 - C2 86 - 149 m/s	4 - 12 mm 4 - 12 mm	clear 8099 clear 8099

TECHNICAL SPECIFICATIONS

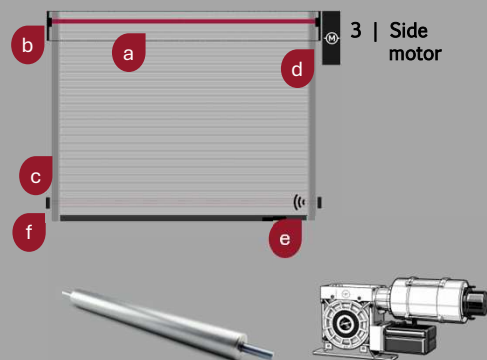
1 | Tubular motor



2 | Shaft-mounted motor



3 | Side motor



a Cover box

Aluminium box with a range of designs to suit different aesthetic requirements, from a front cover to a box that fully integrates and encloses the entire assembly.



b Brackets and shafts

Support components for securing the roller shutter shaft, available in different configurations to suit the geometry of the installation. The mobile support is particularly recommended for heights above 4 metres.



c Guides

We offer three types of guides to adapt to different installation geometries, increase the overall strength of the assembly or incorporate unlocking boxes.

d Automation: Motors

Motors technically adapted to each use and size.

1|**Tubular motor** with a compact cylindrical body available in different sizes.

2|**Shaft-mounted motor** with helical springs for greater durability, with two options: DC for intensive use and AC power.

3|**Side motor** with a customizable location depending on the project. Can be three-phase or with a frequency inverter (single-phase).

e Safety and control

Safety edge, controls and photocells.



f Base rail and end fittings

Bottom slat with rubber guide to ensure proper closure with the floor.



COILING

CHECK MAXIMUM SIZE ACCORDING TO THE MOTOR



ACCESSORIES

TO BE DEFINED ACCORDING TO THE DOOR'S USE

(warning light, unlocking box location, mailbox, letter slot, AppRiera app, etc.)



PRODUCT APPLICATIONS

