

The Structural Window



The advanced triple tempered Low-E glazing sliding series.

The basic double tempered Low-E glazing sliding series.

An innovation in aesthetics

We were inspired by the Cycladic figurines - the famous marble figurines of the Cycladic civilization which flourished in the Aegean between 3300 and 2000 BC - and by the application in recent times of the architectural style of the renowned architect **Ludwig Mies van der Rohe**, expressed through his now famous aphorism:

"Less is more"

We brought together a team of Greek designers specializing in the development of aluminum systems for architectural applications, and secured the full cooperation and support of Greek manufacturers specializing in modern glass processing technologies. After months of intensive work we have created a modern and minimalist yet extremely functional and versatile system:

The **Siccóna** double-face structural sliding system.

The concept behind the system clearly stands out for its intense passion for modern architectural style and its response to modern demands for energy saving, personal comfort and a high safety factor.

Superior aesthetics

Minimalism is expression to the maximum, using the slightest movement, few words, or in design, minimal complexity of shape and form. The **Siccóna** structural sliding system was developed in such a way that every component part, every connection or joint, and every detail was minimized to the absolutely necessary.

Leading reliability

In the **Siccona** sliding system the glazing forms a standalone component that extends over the entire outer and inner surface of the sheet glass and frame. Thus the system acquires a fully integrated compact structure, instead of the usual loose-fitting installation where the glazing simply slides into the aluminum frame. This ensures not only aesthetic perfection, but also unparalleled functionality, extremely high durability and complete waterproofing.

Unique flexibility

The double-faced **Siccóna** structural sliding system offers the architect or end user the ability to make individual choices and select the ideal combination of specialized features for each opening or project as desired, and to create their own custom-designed **Siccóna** system, depending on needs and preferences.





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The objective:

To create a minimalist sliding system with a restrained appearance and minimal embellishment, that seamlessly complements the opening system, taking into account modern demands for energy efficiency and high safety coefficients, as well as the modern trend towards installation of large openings in buildings.

The result:

The **Siccona** brand.

The development of the **Siccóna** system was **based on the innovations in what is known** "**Structural**" **technology**, which has been widely used worldwide with great success for years now in curtain wall applications internationally.

And indeed in the **Siccóna** sliding system too this technology is **applied to both sides** - exterior and interior - thus creating a **double-face structural sliding system**.

The functional aspect of the glazing is enhancedd so as to constitute a structural element which decisively strengthens the compact structure of the system, instead of the usual system where the glazing simply fills an aluminum frame. The result was is unparalleled functionality, and an extremely simple and unencumbered appearance from the exterior as well as the interior side. The Sicc na structural sliding system is fully compliant with the most demanding requirements of architects and building contractors for large apertures, high wind load resistance, good thermal insulation, high transparency, soundproofing, and high safety from thermal impact.

The structural system Sicc na is a registered trademark of the company Center-Al which exclusively manufacture products designed to meet the highest levels of quality, without compromise.



The **Siccóna** Structural sliding system: Timeless design and cutting edge technology.

Siccóna double glazed sliding balcony doors with tempered 6mm Low-E glass panels and HAUTAU operating mechanisms.

Simplicity without compromise to meet the highest architectural expectations

Two basic series

With the objective of meeting even the most demanding quality requirements, the **Siccóna** structural sliding system has two main series:

Siccóna SL 500:

The advanced triple glazing series with tempered Low-E glass for high standard building complexes. Cutting edge design, state-of-the-art technology and customization options to meet individual project requirements.

Siccóna SL 300:

The basic range of double glazing options, with tempered Low-E glass.

On the basis of these two sets of sliding systems **Siccóna** created a wide range of possible variations in a way that responds precisely to the specific needs of each project.



Siccóna SL 500 (exterior view):

The advanced triple glazing series tempered Low-E glass for high standard building complexes. Top quality design, technology and customization options.

The glazing of 6-5-6mm tempered Low-E glass overlaps, end to end, the entire inner surface of the sheet, thereby ensuring both: the simplicity of the surface, high strength and minimize visual presence the aluminum profile.



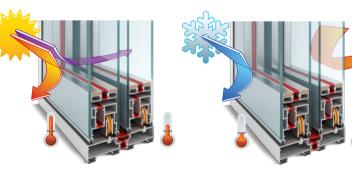
Siccóna SL 300 (exterior view):

The basic range of double glazing options, with tempered Low-E glass. The 6-6 mm glazing extends from edge to edge of almost the entire outer surface of the panel. As a result of the structural integration of the glass panels with their aluminum frames, this thus ensures absolute watertightness, high durability and uninterrupted trouble free operation.

Toughened Energy Saving Glass (Tempered, Low-E)

The glazing in **Siccóna** systems is composed of fully toughened energy efficient glass (Low-E) 5 & 6mm, which gives the following results:

- Unparalleled flat smooth surface.
- Top quality transparency and clarity.
- Top standard energy saving coating.
- Increased mechanical resistance 5 times more durable than plain glass.
- Effective durability under extreme temperature fluctuations minimal risk of thermal impact damage.
- Safe shatter in the unlikely case that the glass should shatter, it will break into very small harmless pieces smaller than 0.5cm2 each.



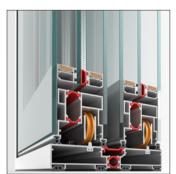


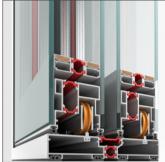
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Thermal break systems

Both double and triple glazed **Siccóna** double-face structural window systems provide thermal break insulation

Thermal break insulation is achieved by use of two types of 19mm high quality Ensinger polyamide.





(Н) НАШТАШ

Siccóna SL 500

Siccóna SL 300

Large Surfaces - Heavy Duty Lifting

Siccóna sliding systems use a HAUTAU mechanism which is capable of supporting loads with a total weight of up to 400kg. This means that maximum glass panel dimensions for double glazing are 10m² and for triple glazing 7.5m².

The structural form in combination with the high quality of the tempered energy efficient Low-E 5 & 6mm glass panels, besides offering a surprisingly smooth surface, and **unique mechanical resistance** (5 times more durable than plain glass) to **wind load and impact, high resistance to large changes in temperature** (no risk of thermal shock damage) **and safe shatter**.

Flush design guide rail

Nothing could be more natural for **Siccóna** sliding systems!

In practice, the sliding system guide rail can be fully recessed in the floor leaving only the inox roller guide protruding (5mm). To facilitate recessing of the guide rail and ensure efficient drainage into the waste water system, the **Siccóna Accessories** range offers a special set of guide rail housings fitted with special channels which permit proper drainage of water into the waste water disposal system.

The housing set consists of **2mm galvanized sheet profile**, height 9.2cm, which is installed in the floor and another **1.5mm stainless profile section**, which is fitted between the galvanized profile and the guide rail and is intended to protect the guide rail system from corrosion.



Cross section of the **Siccóna** sliding system concealed guide

Flexible and versatile, designed to facilitate complete customization to meet any personal specifications

Exceptional adaptability to external conditions

An automatic two-way valve is installed in each **Siccóna SL 300** sliding system, which equalizes the air pressure inside * between the two panes of glass and external atmospheric pressure when the pressure difference between them exceeds 80millibar level.

Excessive pressure differences may occur at a very high altitudes or in very hot climates.



Unparalleled flexibility

The **Siccóna** double-face structural system is an extremely flexible system designed to fully meet the most demanding requirements or needs of architects and builders as far as the size of the opening, wind pressure, thermal insulation, window glass transparency, soundproofing, safety and even bullet-proof protection of the building are concerned.

Our team of experts can advise architects, designers and their clients who may interested in the system **Siccóna** on a number of related issues such as:

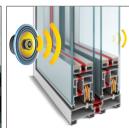
- Increased energy efficiency (U-value) by filling the glazing chambers with argon.
- The right level of soundproofing.
- The desired visibility: transparent, semi-transparent (one-way mirror), opaque (milky).
- Burglar or bulletproof protection with multi-panel windows.

At the same time, we have developed a series of vertical and horizontal galvanized guide rails for the **Siccóna Acceessories** range, which facilitate recessed installation for the architect or building contractor of both the exterior and interior sides of the **Siccóna** sliding system's outer frame.









Beautiful style down to the last detail

Handles are distinguished by their outstanding design; created by well-known designers, ergonomically designed for easy operation, they add a distinctive touch to the unique appearance of **Siccóna**'s structural sliding system.

The **Siccóna** sliding system is offered in three colours: anodized black, and white and grey powder-coated.







Outstanding handle design

^{*} When Argon is not used

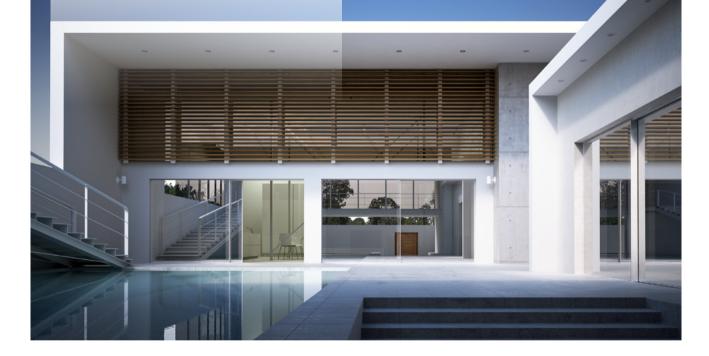
Personalized customer service

If you are designing a building with demanding construction requirements, or have begun construction on a building with high level quality specifications, please do not hesitate to contact us. We can offer you the high level of specialized information and the technical design and construction support you are looking for.

Our technical support covers the entire spectrum from initial design drawings using CAD to the quality- controlled installation of **Siccóna** systems.

We are also able to offer tailor-made solutions to fully meet your design needs.

We are ready to hear about all the design issues which may concern you.





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