GLASSCON presents new GSD SAFETY DOORS series rated as 3rd generation safety doors and offer high level of quality, safety and energy characteristics. GSD SAFETY DOORS characterized by:

• Flat-minimal look
• Security
• Thermal break

There are two types GSD SAFETY DOORS available, depending on cladding material:

GLASSCON GSD SAFETY ALL GLASS DOORS

GLASSCON GSD SAFETY ALUMINUM DOORS

Both GSD SAFETY DOORS types are available in a variety of designs and colors, while the innovative design of the leaf offers the ability to display only the frame, achieving unique design. A variety of accessories and handles are also available.

TECHNICAL SPECIFICATIONS

• Locks: Availability of mechanic or electric fingerprint lock, with 3 up to 17 locking points!
• Glass: Safety glasses triple and quadruple.
• Profile & plates: Heavy duty (thickness 2mm & 3mm)
• Hinges: Visible or Hidden heavy duty (200kg).
• Polyamides: Anti bi-metal polyamides 24mm & 34mm
• Leaf Insulation: Inner insulation total thickness of 80mm.
• Leaf dimensions: The maximum possible size of the sheet is 1300x2300mm
• Typologies: Available in various typologies of construction
GLASSCON PREMIUM ARCHITECTURAL BUILDING SKINS

GSG STRUCTURAL ALL GLASS SYSTEM

We created an innovative structural glazing system, using only top quality materials and advanced engineering techniques.

Ultimate simplicity - Leading reliability

Minimalism is about expressing the maximum with the minimum of gestures, words or shapes. GSG STRUCTURAL ALL GLASS window system has been developed in a way that every component, every detail and every junction has been reduced to its bare essentials. The function of glazing in GSG STRUCTURAL ALL GLASS window system becomes a structural element that itself supports the window offering thus great stability over intensive use. Two or three 6mm tempered Low-E glass panels offer the enhanced wind resistance and safety required, plus ultimate energy saving requirements, coupled by a perfectly smooth experience.

Toughened Energy Saving Glass (Tempered, Low-E)

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

- Unparallel 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. An automatic two-way valve is installed in each GSG ALL GLASS 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.

Unparalleled flexibility

GSG STRUCTURAL ALL GLASS 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 bulletproof protection of the building are concerned. Our team of experts can advise architects, designers and their clients who may interested in the system on a number of related issues such as:

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

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 GSG STRUCTURAL ALL GLASS structural sliding system. Our sliding system is offered in three colours: anodized black, and white and grey powder-coated.
With the aim of fulfilling the highest quality demands, GSG STRUCTURAL ALL GLASS window system is offering two basic system series:

**S500 Triple tempered Low-E glazing**

**S300 Double tempered Low-E glazing**

GSG STRUCTURAL ALL GLASS window system is engineered with stepped insulated glass that covers the entire exterior and interior panel or sash of a window or door, guaranteeing the highest levels of simplicity, water tightness, durability and performance.

**Dual operative series**

The premium triple tempered Low-E glazing series for discerning building projects stands for the highest quality in design and technology. Glazing totally covers the panel or such resulting a fully waterproof window system, while at the same time minimizes the frame’s evidence.

The standard double tempered Low-E glazing series. Glazing totally covers the panel or such and stands at the same level with the window frame.
Ultimate functionality

GSG STRUCTURAL ALL GLASS window system is weatherproof guaranteed - due to the almost totally glazed outdoor surface, the all-around fitted EPDM gaskets, as well as the peripheral multipoint locking system. All the components join together perfectly to create a coherent unit of transparent architecture.

Excellent energy performance

GSG STRUCTURAL ALL GLASS window system is an exemplary with regard to energy efficiency and complies with the highest requirements of the relevant European Union norm EN 14351-1. The system in dimensions 1.0 x 2.2 m, filled with Argon, was extensively tested by the IFT Rosenheim institute giving unequalled thermal insulation values.

<table>
<thead>
<tr>
<th>GSG STRUCTURAL ALL GLASS</th>
<th>Uw value</th>
<th>Ug value</th>
</tr>
</thead>
<tbody>
<tr>
<td>S 300</td>
<td>1.82 W/m²K</td>
<td>1.3</td>
</tr>
<tr>
<td>S 500</td>
<td>1.26 W/m²K</td>
<td>0.6</td>
</tr>
</tbody>
</table>
Two basic series

With the objective of meeting even the most demanding quality requirements, the GSG STRUCTURAL ALL GLASS SYSTEM structural sliding system has two main series: On the basis of these two sets of sliding system GLASSCON created a wide range of possible variations in a way that responds precisely to the specific needs of each project.

Thermal break systems

Both double and triple glazed GSG STRUCTURAL ALL GLASS SYSTEM 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.

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S 300

The standard double tempered Low-E glazing series. Glazing totally covers the panel or such and stands at the same level with the window frame.

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S 500

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SL 300

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.

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SL 500

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.
SLIDING WINDOWS & DOORS | GSG STRUCTURAL ALL GLASS SYSTEM

Flush design guide rail

Nothing could be more natural for GSG STRUCTURAL ALL GLASS 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 GSG STRUCTURAL ALL GLASS SYSTEM 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.

Large Surfaces – Heavy Duty Lifting

GSG STRUCTURAL ALL GLASS 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.
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