



# Elegance 52

Curtain Walls



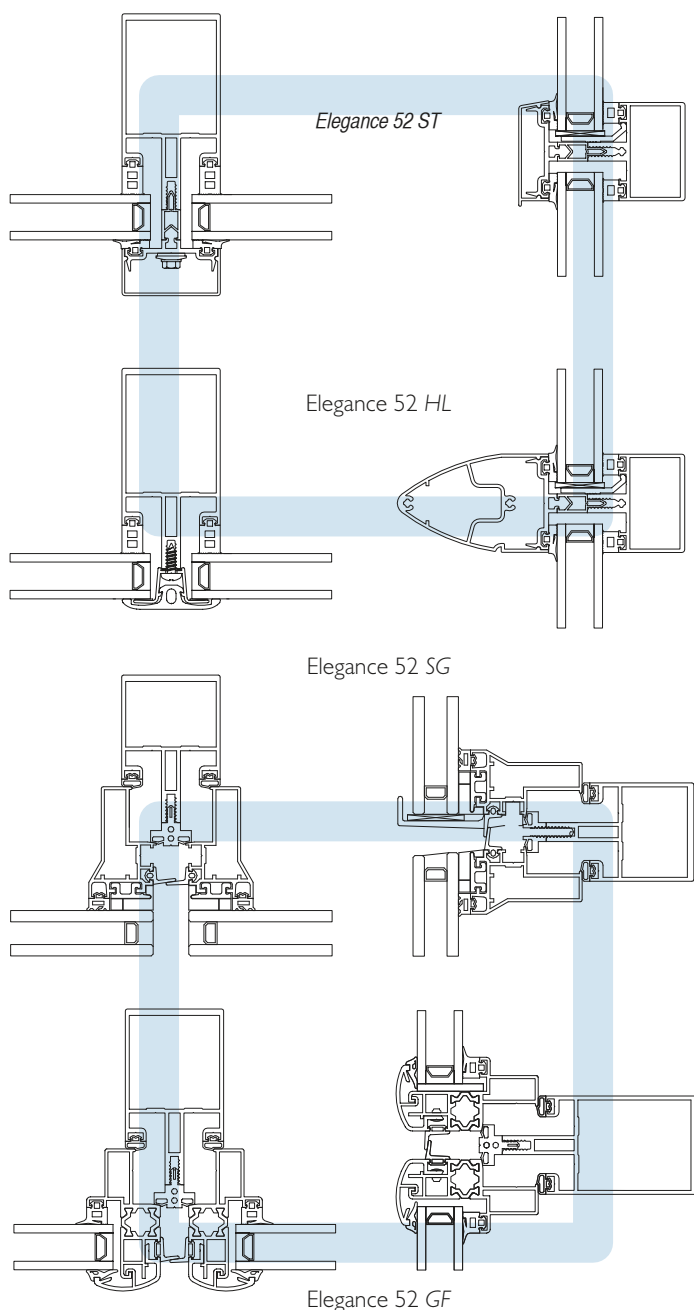
# Elegance 52

## Curtain Walls

Elegance 52 is a comprehensive curtain wall system that combines technology and design with the demands of contemporary building design and construction. All Elegance 52 systems use a common substructure with a width of 52 mm, allowing a slim sightline, whilst maintaining the necessary strength and inertia requirements for most applications. Weather performance, thermal insulation, building connection, ease of fabrication and installation were the key factors that influenced the design of Elegance 52.

Horizontal section

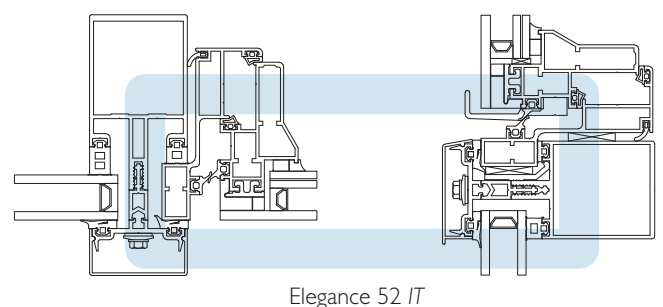
Vertical section



## Extensive range of solutions

ST, HL, SG, GF, IT

- All Elegance 52 applications are made up from a set of durable mullions and transoms with a profile width of 52 mm. A large range of profiles depths is available to suit the structural requirements and to give the most economical solution.
- Elegance 52 is available in 4 versions, each providing unique design features:
  - Elegance 52 ST (standard)
  - Elegance 52 HL (horizontal lining)
  - Elegance 52 SG (structural glazing)
  - Elegance 52 GF (glazed frame)
  - Elegance 52 FSc (Five S clipped: design application)
- Elegance 52 can be used in vertical, sloped or roof applications, it offers several solutions for connections to other levels of curtain walling and building materials, whilst always allowing maximum weather performance and minimal sightlines.
- Elegance 52 system provides integration with existing window and door systems of RC System and incorporates an integrated window system, the Elegance 52 IT (italian window).



Elegance 52 IT



## Fabrication & installation ST, HL, SG, GF, IT

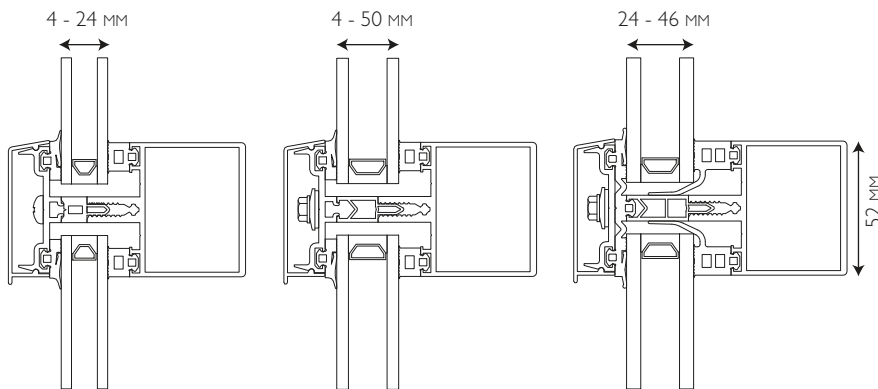
- Drainage can be both field / compartmental or mullion drained.
- Specially developed aluminium profiles or steel can be inserted in the mullions to assure a higher inertia for extremely large spans and to provide a continuous mullion connection and anchorage.
- System of dry glazing by means of EPDM gaskets.
- All window and door systems of the RC System product range have accessories specifically designed to allow easy integration in the curtain wall.
- Depending on the type of application the system can be mullion-mullion or mullion-transom connected. Front mounting of transoms is made possible by spring cleats. A mullion-cut out solution was developed for situations when extra support for the transoms is required.
- Punch tools specifically designed for the Elegance 52 ensure accurate and fast prefabrication of drainage holes and transom cut outs.
- Drilling calibres ease the positioning of fixing pieces when prefabricating the system.





# Elegance 52 ST

*Elegance 52 ST is a standard thermally broken curtain wall system that offers many design options by the use of different designer mullions and cover caps. Elegance 52 ST offers solutions for vertical, slope and roof applications and can solve faceted curtain wall requests. The system belongs to insulation class 1.0 by applying specific gaskets.*



1. insulation class 2.2
2. insulation class 2.1
3. insulation class 1.0

## System features

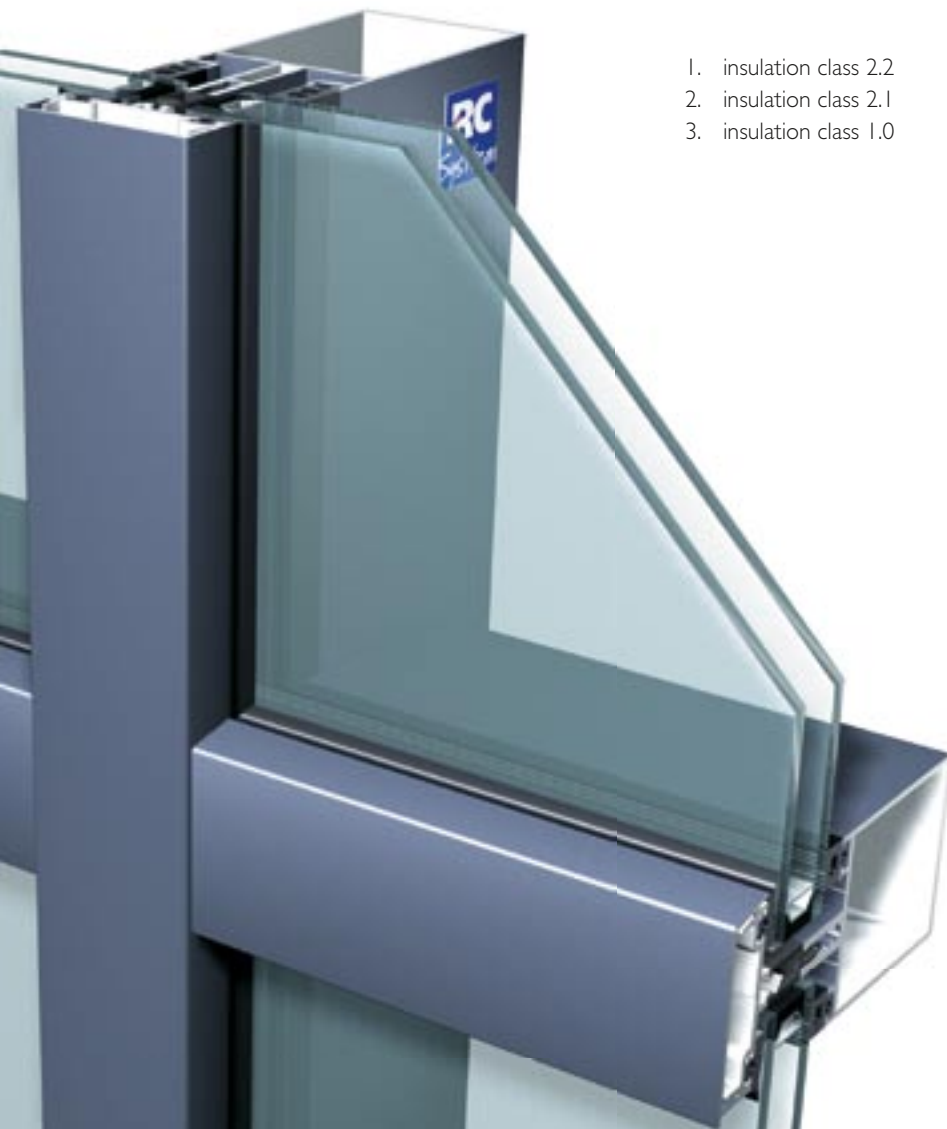
**comprehensive & performing**

- Elegance 52 ST can accept glass and panels depths of 4 to 50 mm.
- The system belongs to insulation class 2.2, 2.1 and even 1.0 depending of the type of gaskets and thermal insulation used, leading to a lower total energy consumption and contribution to the environment.
- The system can be self-supporting or can be used in combination with a supporting structure.
- The ST is able to accept tolerances and movements caused by thermal expansion, without compromising the weather performance.
- Weather resistance: AE 750 (EN 12152); 3000 Pa (EN 13116); RE 750 (EN 12154)

## Design

### interior and exterior

- A wide range of decorative cover caps (bull nose, rectangular, airofoil, etc) gives the freedom to design visually interesting glazing.
- By combining different cover caps for horizontal and vertical applications, a wide diversity of external features is possible.
- Several designer mullions are available for internal design features.
- Mullions and transoms can be flush at the inside or can be specifically different to emphasize the vertical design complementing the total building design.
- Several situations such as 90° angle mullions or variable angles have been designed with a minimal use of material allowing slim sightlines.
- By using the various designer mullions / transoms possibilities, in combination with the extensive colour range, the different options are practically unlimited.





# Specifications

## technical identity

### Dimension:

Sightline	52 mm
Size mullions	41 - 273 mm
inertia (lxx: Wind)	9,57 - 1649,7 cm <sup>4</sup>
Size transoms	22,5 - 200 mm
inertia (lxx: Wind)	3,76 - 923,84 cm <sup>4</sup>
inertia (lyy: Glass)	1,09 - 85,01 cm <sup>4</sup>

More information can be found in graphical charts, please consult Sapa RC System.

### Glazing:

Infill thickness	4 - 50 mm
Glazing method	dry glazed with EPDM gaskets

### Performance:

Thermal break	4 - 36 mm
Thermal insulation	Ins. class 1.0, 2.1 and 2.2
	DIN 4108
	$U_r < 4 \text{ W/m}^2\text{K}$
	EN ISO 10077-2
Air permeability	AE 750
	EN 12152
Wind resistance	3000 Pa
	EN 13116
Water tightness	RE 750
	EN 12154

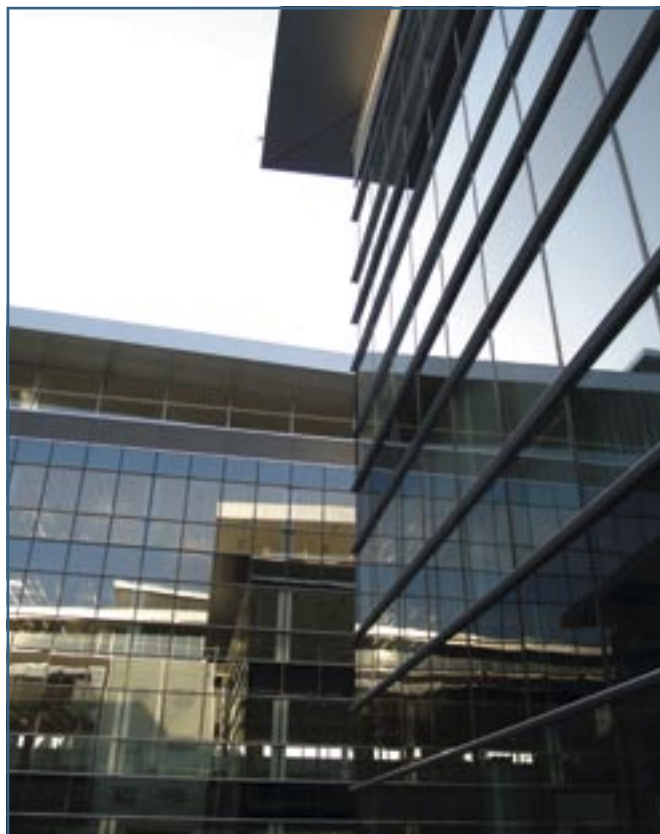
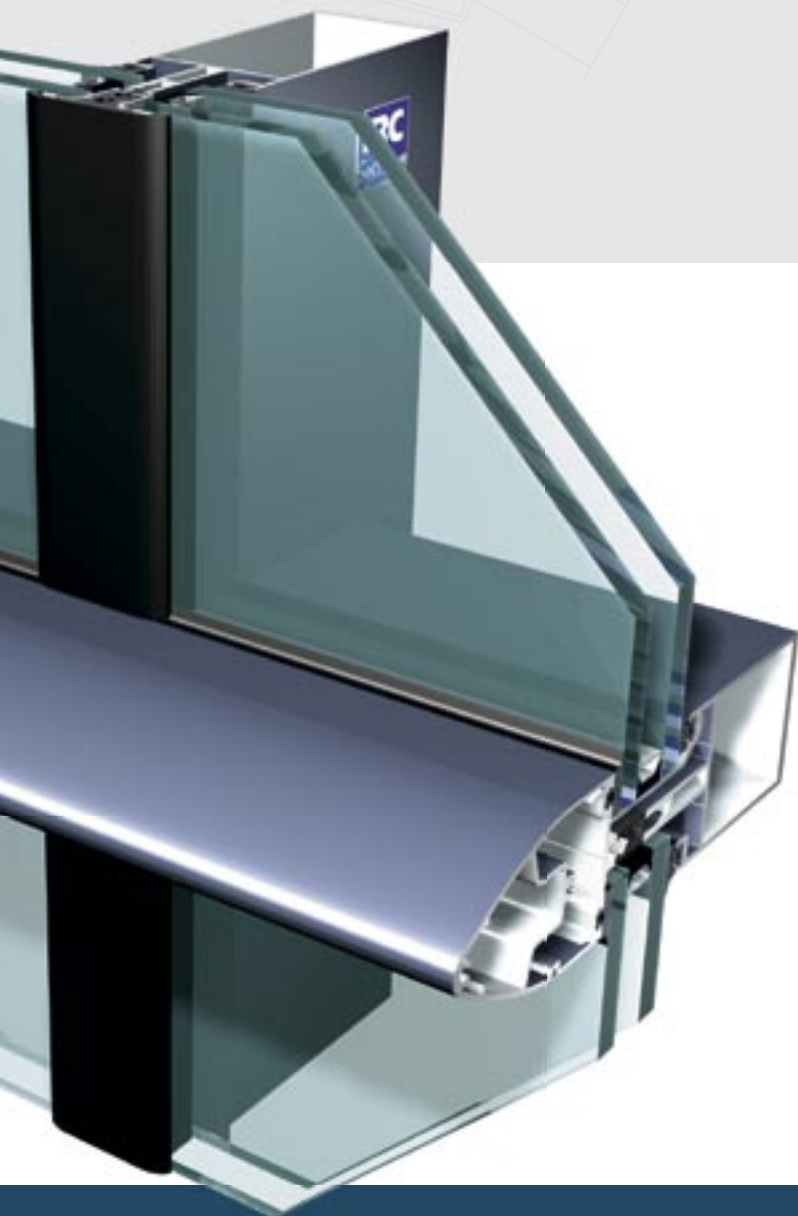
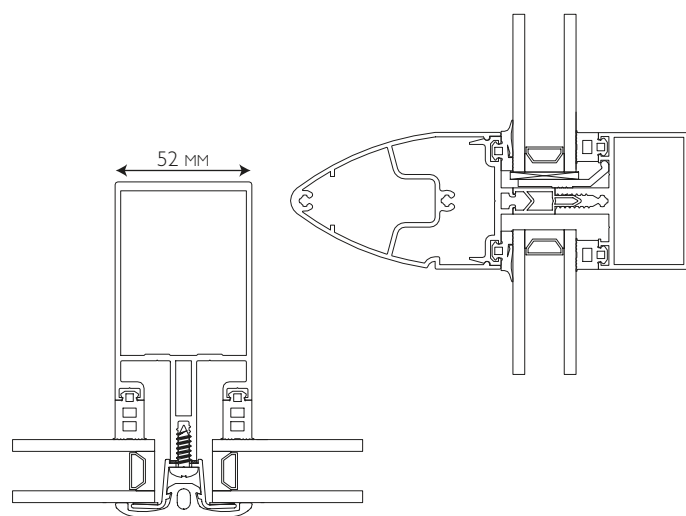




# Elegance 52 HL

*Elegance 52 HL is a specific solution when horizontal lining is required. The system is based on the Elegance 52 ST basic structure and creates a horizontal continuity effect by changing the vertical cover caps for a hidden profile sealed by a gasket. The hidden profile still allows the tight sealing of the glass against the structure, the gasket masks the vertical detail putting more emphasis on the horizontal cover cap.*

*The horizontal cover caps can be chosen out of a wide range of profiles to integrate in the total building design.*





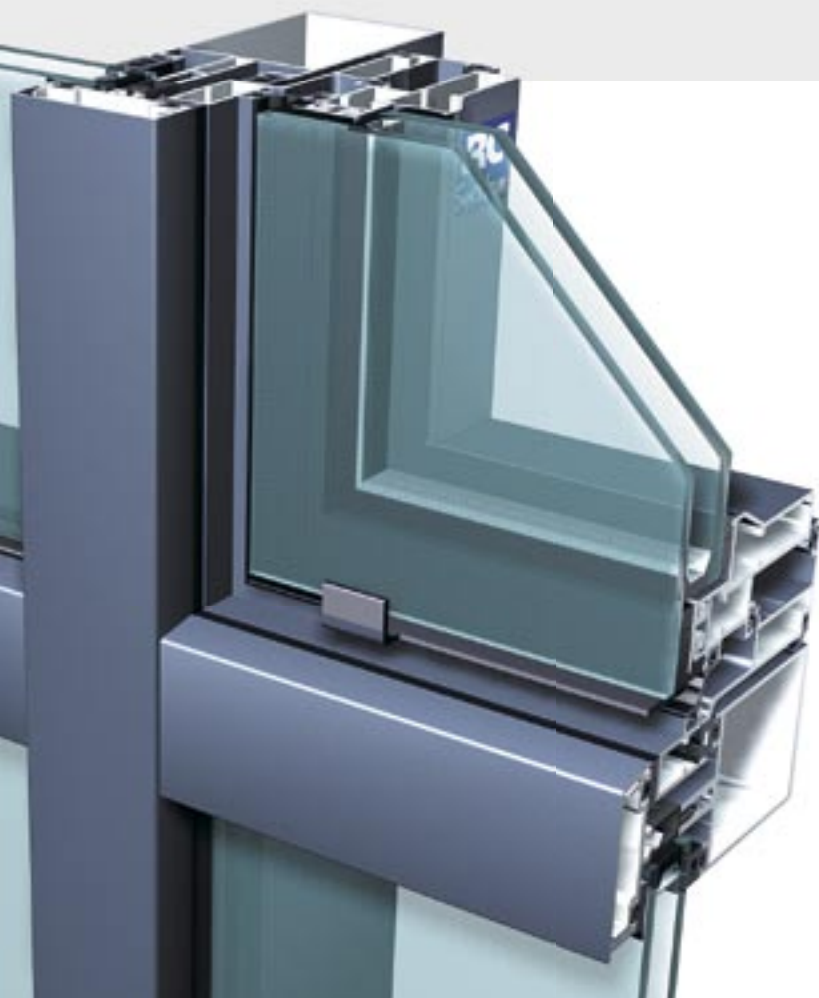
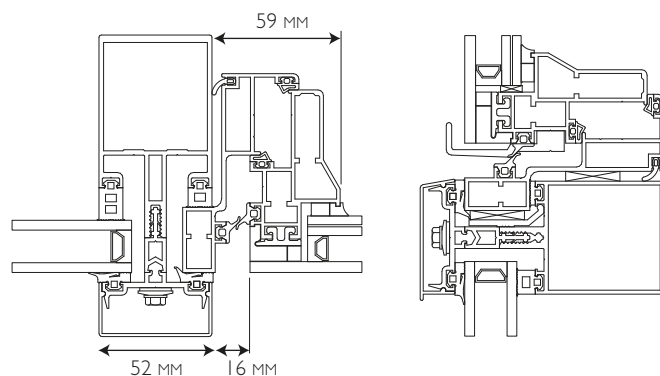
# Elegance 52 IT

*Elegance 52 IT is an outward opening window-system, specifically designed to allow a vent with a minimal visual aspect to be integrated into the Elegance 52 ST and Elegance 52 HL. The vents can hardly be recognised from the fixed panels.*

## System features

### minimal visual aspect

- The Elegance 52 IT (italian) is available in top-hung or side-hung applications.
- The glass is structurally bonded to the vent frame. Glass of 20 to 30 mm can be used.
- Glass retainer clips ensure total safety.
- Drainage is compartmental or field-drained.
- Several gaskets ensure a perfect weather and acoustic performance.
- Maximum height of the vent is 2000 mm.



## Alternative

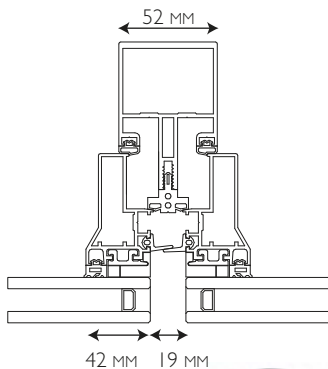
### integration of standard windows

- It is possible to integrate all standard window and door systems in the Elegance 52 ST and HL by using special frame profiles or accessories.

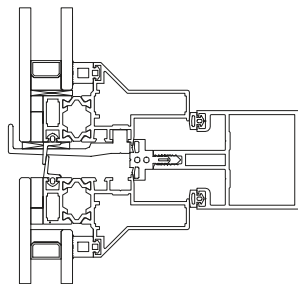
# Elegance 52 SG

*Elegance 52 SG is a structurally glazed curtain wall system using the basic substructure of Elegance 52 and offering a solution for combinations of fixed or opening panels in both straight or faceted applications. The structurally glazed curtain wall offers a minimal sightline without having a visual difference between fixed and opening panels. Elegance 52 SG exists in a thermal and a non-thermal version.*

Elegance 52 SG



Elegance 52 SG-TH



## System features

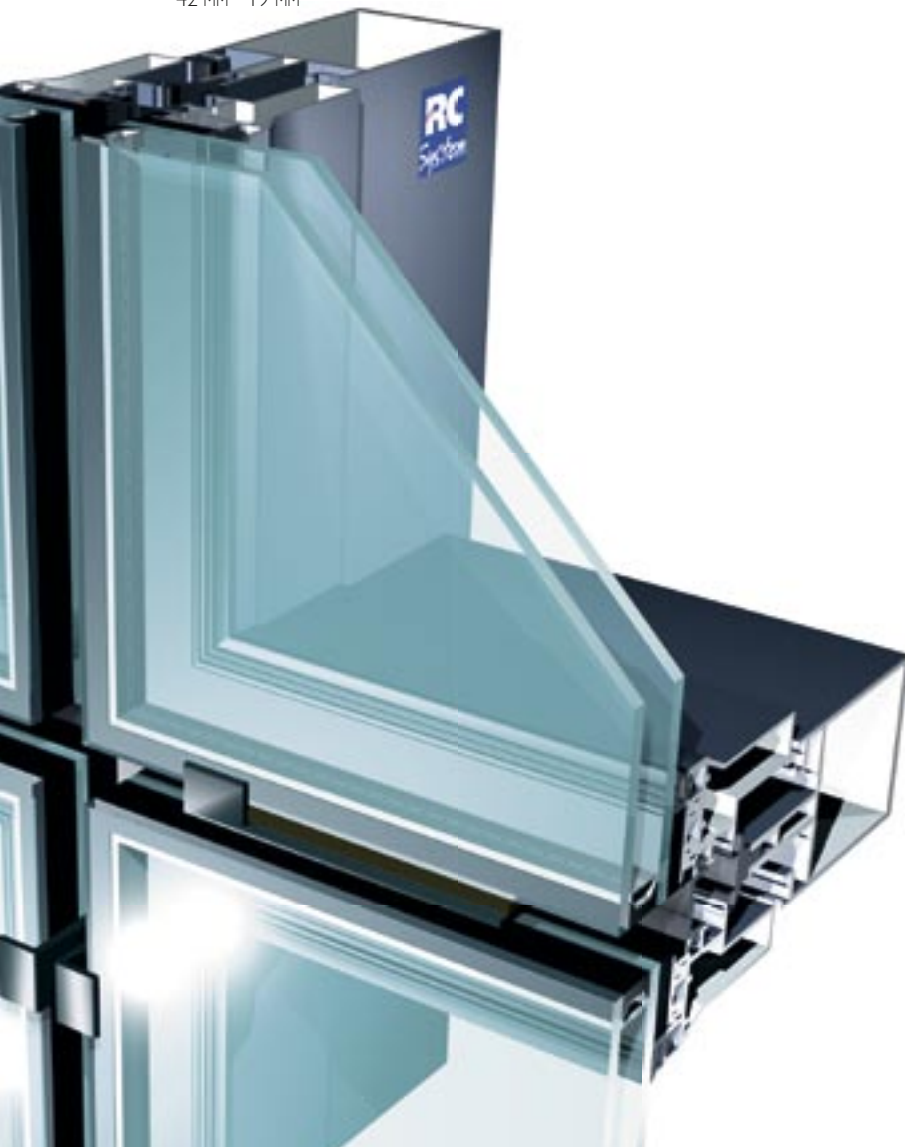
### minimal sightline

- The use of a structurally glazed curtain wall avoids the use of cover caps resulting in a flush surface with minimal sightlines.
- The Elegance 52 SG can accept glazing of 24 to 26 mm.
- The maximum dimension of a panel is 1500 x 870 mm (height x width).
- The SG includes an integrated outward opening window system that does not show a visual difference with the identical fixed panels. The telescopic friction stays are concealed in the system.
- Besides glazed panels, it is also possible to use other types of panels.
- Several gaskets in EPDM offer maximum weather and acoustic performance.
- Safety clips ensure total security.
- The wide range of mullion profiles offers an answer to both inertia and design requirements. Mullion and transom profiles can be flush or stepped at the inside.

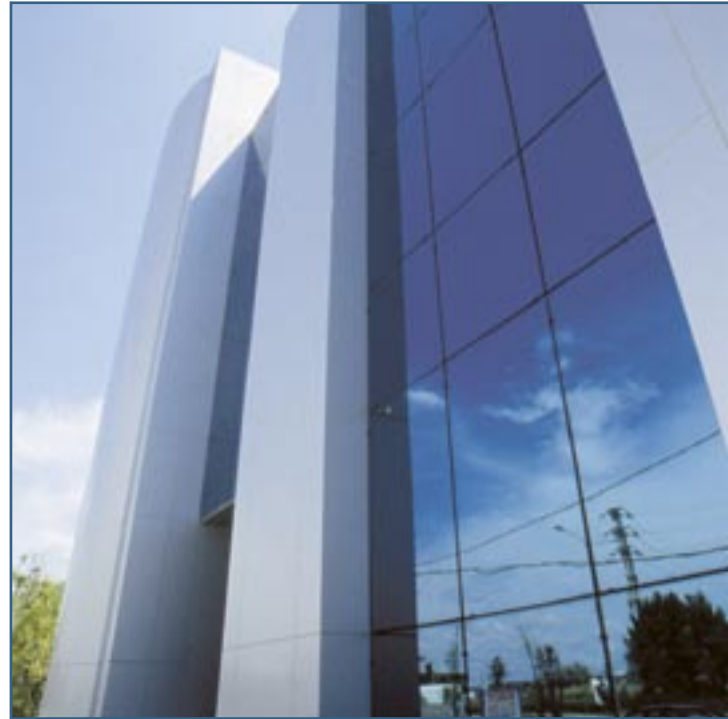
## Fabrication

### standard substructure

- The transoms and mullions are mullion-mullion connected. A cut-out mullion version is available when the transom requires extra support. System-designed connectors make an easy installation.
- The glass is structurally bonded to an anodised profile in the vent, bonding of the glass to the profile is carried out by specialised, certified companies.
- Vent profiles are assembled using crimped or eccentric corners.
- After assembly of the basic mullion structure, the different panels are positioned and tightened by use of connectors on all sides. It is possible to dismantle the panels if replacement is necessary.







# Specifications

## technical identity

### Dimension:

Sightline inside	52 mm
Sightline outside	19 mm
Size mullions	41 - 200 mm
inertia (lxx: Wind)	9,57 - 923,84 cm <sup>4</sup>
Size transoms	22,5 - 200 mm
inertia (lxx: Wind)	3,76 - 923,84 cm <sup>4</sup>
inertia (lyy: Glass)	1,09 - 85,01 cm <sup>4</sup>

More information can be found in graphical charts, please consult Sapa RC System.

### Glazing:

Glazing thickness	24 - 26 mm
Glazing method	structural glazing

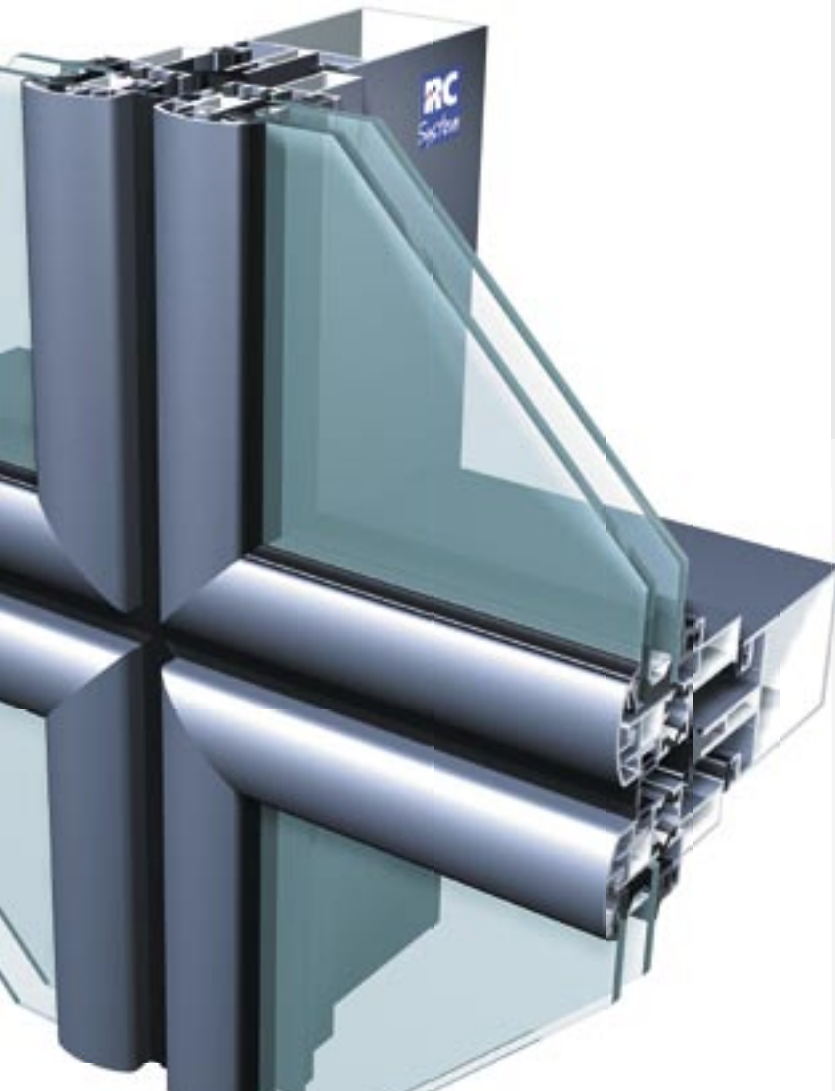
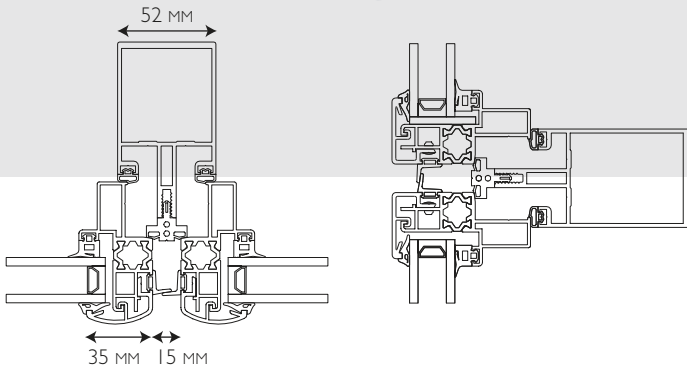
### Performance:

Thermal break		14,8 mm
Air permeability	A3 / AE	EN42 / EN 12152
Wind resistance	V3 / 1200 Pa	EN77 / EN 13116
Water tightness	E4 / RE600	EN86 / EN 12154



# Elegance 52 GF

*Elegance 52 GF is a curtain wall system based on the structure of the Elegance 52 SG using a glazing bead instead of structurally glazing the glass to the panel. The design team developed this solution to offer a version where the glass is held in position with aluminium as in a picture frame. This approach offers each panel to be independent but still be integrated in the full curtain wall.*



## System features

**minimal sightline**

- Solutions for both fixed panels as outward opening panels are available.
- Two designs of glazing beads were developed.
- Glazing of 20 to 30 mm.
- Maximum panel size of 1500 x 900 mm (height x width).
- The panels are thermally broken, so improving the total energy performance of the building.
- Panels are completely assembled in the workshop and positioned on to the locating lugs on the structure.





# Finishes

## **infinite choice**

- Over 400 powder coated paint colours are available in matt, gloss or satin.
- Profiles and accessories are available in anodised finishes.
- With Elegance 52 it is possible to have bi-colour finishes, so that the external finish does not dictate the internal colour.
- Our surface finishes meet the highest standards of Qualicoat or Qualanod.



# Maintenance

## **user-friendly & ecological**

- All RC System profiles are easily cleaned with water; whilst cleaning your windows.
- Aluminium does not rust, rot or tear and the shape does not deform.
- Aluminium is a green product, which can be recycled infinitely without quality loss.

# Project support

## **from concept to completion**

- Sapa RC System's experienced Project Team will advise you on the best product solutions.
- We can help you with pricing, strength calculations, building connections, thermal simulations, etc.
- Specific project solutions can be developed.
- Samples, catalogues, technical specifications and digital drawings are available.



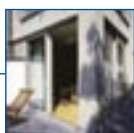




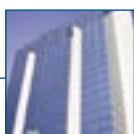
## System Architectural Aluminium



windows & doors



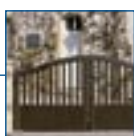
sliding systems



curtain walls



conservatories



balustrades, fences & others

Your local RC System fabricator

**Head office**  
**Sapa RC System nv**  
Industrielaan 17  
BE-8810 Lichtervelde  
Tel. +32 51 72 96 66  
Fax +32 51 72 96 89

**Sapa RC System nv**  
Industriezone Roosveld 11  
BE-3400 Landen  
Tel. +32 11 69 03 11  
Fax +32 11 83 20 04

**sapa:**

E-mail: [rcsystem@sapagroup.com](mailto:rcsystem@sapagroup.com)  
Website: [www.sapabuildingsystem.com](http://www.sapabuildingsystem.com)