

**High Performance
Aluminium Systems**



German Systems



Curtain Wall System W50

Aluminium+Glass=Functionality+Aesthetics.

Light, transparency and reflection are the key features of modern architecture.

The surface of the facade is determined by the combination of innovative material.

In the curtain wall system W50, aluminium profile and glass are combined in order to achieve the static requirements with the less possible weight.

The system, harmonically, combines viewing and structural requirements without compromising its functionality and performance.

The dimensions of the aluminium profiles freely allow the viewing and the sense of volume to emerge both in the interior and the exterior faces.

With 50mm of width and up to 230mm of depth, depending on the static requirements, W50 is used for the construction of curtain walls in office and commercial buildings, schools, sport arenas, banks and hotels.

The W50 system ensures a fine looking. The special aluminium profiles, mullions and transoms for interior and exterior corners, pressure plates, button covers, at the final constructed stage, offer a very symmetrical result (50mm). A large variety of accessories and button covers to choose from.

General Characteristics

- 50mm of width.
- Possibility to achieve different look with the option of a wide variety of pressure plates and button covers.
- Thermal insulation according to DIN V 4108-4.
- Maximum energy conservation.
- Optimum sound insulation.
- Total water-tightness.
- Mullions up to 230mm supporting even the most demanding statical requirements.
- Applying to the technical specifications for the use of glass.
- Joints made of aluminium or stainless steel.



The system

Standard curtain wall - Structural Curtain wall.
For a fine construction and viewing result.

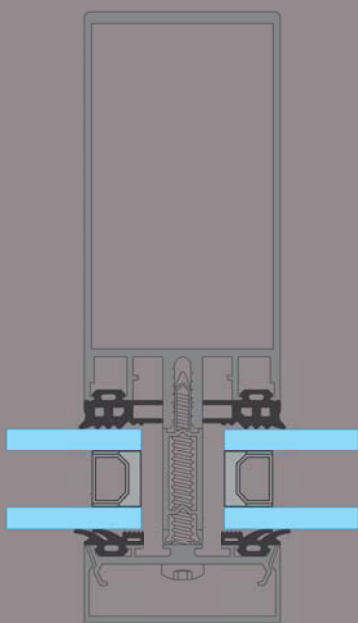
The W50 system is a thermal insulated system operating with mullions and transoms, polyamide spacing bars, pressure plates and button covers. The special characteristic of this system is the resulting thermal insulation through reinforced insulated profile from fiberglass which is adjusted in the interior part of the construction.

Using spacing profiles or watertightness profiles, we can achieve gaps that allow the insertion of glass or panel, with a thickness from 24 up to 38mm.

Ventilation of the glass is ensured through special ventilation channels. Water is drained outside through a covered drainage.

The innovative Brökelmann technology, with the perfect tune of its systems, harmonically combines aesthetics, homogeneity and functionality.

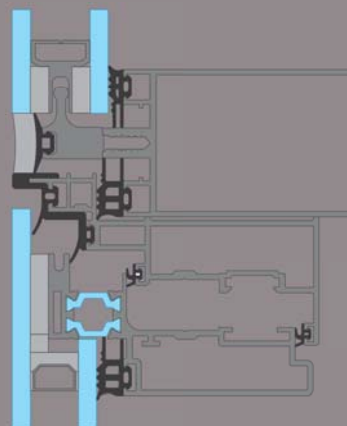
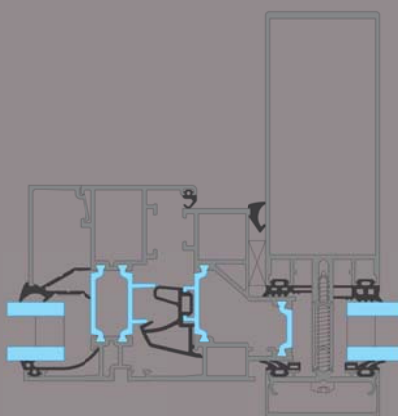
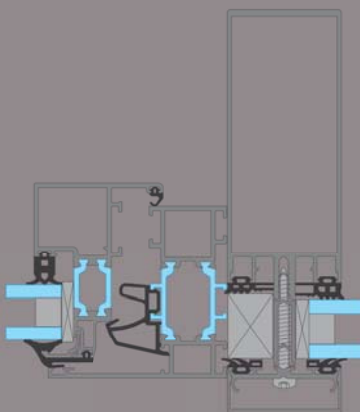
The availability of different subsystems open new horizons to fine results, protection, security and economy.



So the system W50 saves energy with a maximum thermal brake according to DIN V 4108-4.

The construction follows DIN 4113 & DIN 1055 according to static requirements and technical specifications of the glass industry.

All joints are of stainless steel or aluminium.



Combined with windows and doors ensure functionality, performance, homogeneity and constructive simplicity.

- Combination of W50/RG75 or RG60 for doors and windows with a visible frame and sash.
- Combination of W50/RGB for doors and windows with visible frame and hidden sash.
- Combination of W50 with a pivoting window, for exterior openings, with a hidden frame and sash, totally invisible from the outside.

Opening thermal insulated systems RG75 & RG60

For highly demanding constructions.

The RG75 & RG60 are the systems for the optimal thermal insulation.

The high value thermal coefficient combined with the total coverage of the architectural demands, through an emphasis on straight, clear lines, offer high aesthetic in harmony with security, resistance, durability and functionality.

The systems

High performance profile for windows and doors.

The RG75 & RG60 are opening thermal insulation systems, with a three chambers profile, for maximum thermal insulation, ideal for the construction of doors and windows.

The thermal insulation is achieved by the use of polyamide of 34mm for RG75 and 19mm for RG60, reinforced with fiberglass.

The design of the profiles, the accessories and the materials of the systems in general, are based on modern technology and follow the guidelines and the standards that determine the thermal insulation properties of the materials used for the construction of windows.

The value of U_f coefficient of the profiles and their combination, have been determined according to EN ISO 10077 and are designed according to DIN 4108-4:2002.



RG75 & RG60

The air-tightness of the joints and the water-tightness of the windows, under storm conditions, respond to the C category of standard DIN 18055.

The water tightness is based on the German designing principles. Water enters the chamber, is led to the lower part of the window and then is guided outside through specially designed drainage channels.

The sound insulation of the RG75 system has been determined according to DIN 18054 from RW.R31dB up to RW.R45dB.

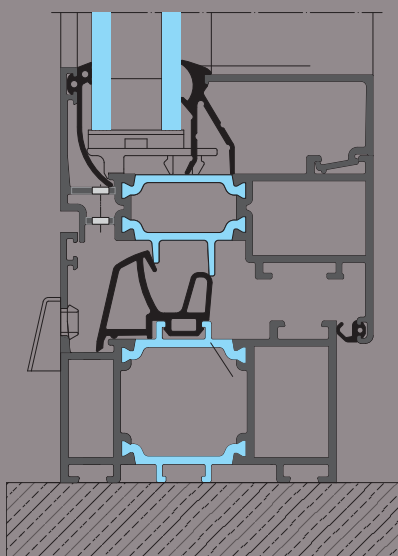
The construction of robust, secure and operational items (windows and doors) is guaranteed.

The systems can support normal and tilting balcony doors and windows with a leaf width from 380 up to 1600mm. The height of the leaf can extend from 600 to 2400mm. The maximum weight can reach up to 130kg.

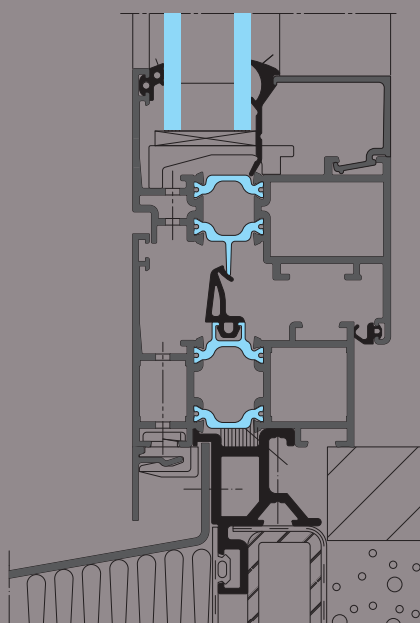
The systems can support sliding-tilting doors and windows with a maximum size of 1680 x 2200mm. The maximum weight in this case can reach up to 150kg.

System RG75 & RG60 General Characteristics

- Thermal insulation according to DIN 4108-4.
- Thermal transfer coefficient up to
RG75: $U_f=1.5W/m^2K$.
RG60: $U_f=2.1W/m^2K$.
- Maximum energy conservation.
- Optimal sound insulation.
- Total water-tightness.
- Burglar resistance
WK 2/3 DIN V ENV 1627.
- Perfect match with curtain wall W50, with the use of special frame profile.



RG75



RG60



Opening thermal insulated system RGB

For constructions with special aesthetics.

The Brökelmann RGB System encloses the special aesthetics and functionality of the Brökelmann philosophy.

With the design of hidden sash, the visible surface of the aluminium profile is limited to the minimum.

The system

Thermal insulated windows of high aesthetics.

RGB is a thermal insulated opening system with three chamber profiles for the maximum thermal insulation.

The design of the profiles, the accessories and the materials of the system in general, are based on modern technology and follow the guidelines and the standards that determine the thermal insulation properties of the materials used for the construction of windows.

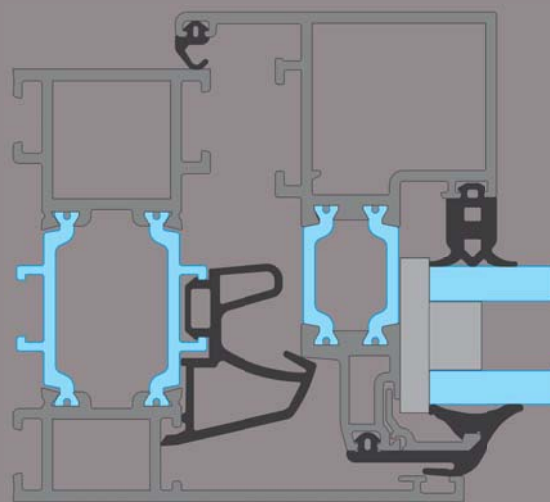
The value of U_f coefficient of the profiles and their combination, have been determined according to EN ISO 10077 and are designed according to DIN 4108-4:2002.

The air-tightness of the joints and the water-tightness of the windows, under storm conditions, respond to the C category of standard DIN 18055.

System RGB

General Characteristics

- Thermal insulation according to DIN 4108-4.
- Maximum energy conservation.
- Perfect sound insulation.
- Total water-tightness.
- Perfect match with curtain wall system W50, with the use of special frame profile.





Opening System TF 45

Doors with special security requirements.

Safe exit accessibility is a priority for the design of buildings with high public indoor traffic. Corridors, exits and escape gates must be easily accessible in case of emergency.

The system

The safest choice for doors.

The TF45 system uses profiles of 45mm width, and EPDM gaskets ensuring the required stability and functionality that is needed for normal and high demanded doors.

TF45 system meets all the requirements of DIN 18095.

Test certificate for single sash door No 28111586.

Test certificate for double sash door No 28111126.



System TF45

General Characteristics

- Width 45mm.
- Safe accessibility according to DIN 18095.
- Option for the construction of large dimension single sash and double sash doors.
- Easy combination with the other Brökelmann systems.

