

ALL-GLASS BALUSTRADES

AGC

GLASS UNLIMITED

BALUSTRA

Balustra

All-glass balustrade systems

All-glass balustrade systems, without rail posts or any load-bearing structure, are a significant architectural trend. For safety reasons, these elements need to be designed and sized according to strict rules which must be applied at all stages.

To meet this requirement, AGC Flat Glass Europe has created the Balustra range of systems, which have received a Technical Approval from the CSTB (France).

Balustrade is a floor-mounted balustrade system, i.e. it is either embedded in the floor or slab-fitted or fixed to stair treads.

Balustra L is floor-mounted using a system of floor-mounted plates.



Balustrade L

Balustra P is floor-mounted using a system of fitting points giving a similar look to point-fixed glazings.

Applications

Balustrade L and P can be used in public and private spaces (both indoors and outdoors) such as: entrance halls, airports, museums, offices, stations, squares, performance facilities and more. They can even be used as external windbreaks.



Balustrada P

Well-defined systems for complete safety ...

Balustra L and P advantages:

Rather than assembling glazings and fitting accessories designed and sized to order, Balustra offers ready-to-use pre-made systems.

Balustra L and P can be installed internally or externally and either horizontally or at an angle. The system is compatible with all types of fixed-shape support: tiles, slab-fittings or stairs made of concrete or metal.

The Balustra L and P systems have undergone tests as to mechanical resistance, which guarantees that they can be used safely under even the most severe conditions.

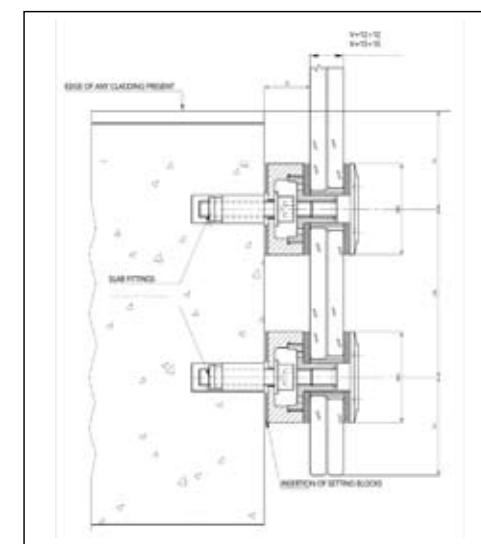
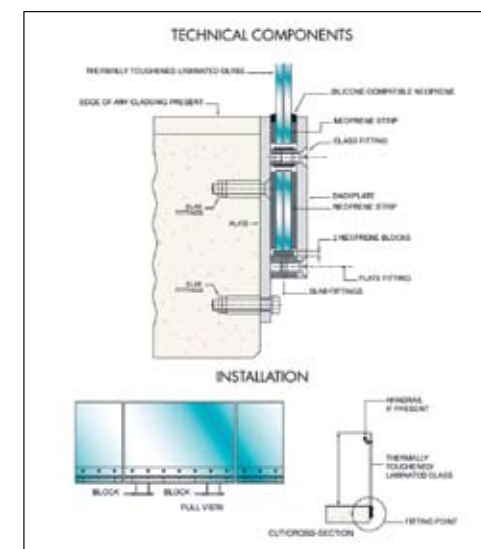
Their transparency provides complete vision and the natural elegance of the glass can be increased by using the appropriate handrails in either metal or wood.

Description of systems

Balustra L

The principles of the system are set out in the the diagrams oposite. AGC wil provide the tempered laminated glazings, the side setting block strips and steel spacers. Other system components – plate, backplate, steel flat and setting blocks, all of which need to be made to measure for each project – are detailed by AGC in accordance with the Technical Approval. They are supplied by the company.

The system is tested as to its mechanical strength and resistance to warping in accordance with CSTB 3034 and is subject to Technical Approval No. 2/05-1154



Balustrada P

The principles of the system are detailed in the diagram opposite. AGC will provide the Structaflex glazings and special temporary fitting points, arranged vertically in twos every 300-400 mm along the base of the glass. These pieces, in stainless steel, can be fitted quickly and easily to the concrete or steel slab fitting. Complete system ready to install.

The system is tested as to its mechanical strength and resistance to warping in accordance with CSTB 3034 and is subject to Technical Approval No. 2/06-1197



Features

Structaflex glazings, which are highly resistant to warping, are unique to the Balustra L and P ranges. They are thermally toughened as well as heat-soak treated; these are laminated glasses with neutral or coloured PVB interlayers. The thickness of the glass will depend on how it is to be used. The glass products used are usually clear but are also available in tinted, reflective or silk-screen printed versions.

Thicknesses

Balustra L: 88-4, 1010-4, 1212-4, 1515-4, depending on the products used and their purpose.

Balustra P: 12121-4, 1515-4, depending on the products used and their purpose.

Sizes

- Height in balustrades: depending on regulations, system embedded at a height of 180 mm for Balustra L, fitting using points at a height of 260 mm for Balustra P
- Height and thickness in windbreaks: depends on purpose and wind load
- Standard width of elements: up to 2 meters (for ease of fitting) or more upon request; minimum depending on the Technical Approval.

Edges

of glass products: flat or polished.