

# Making the outside and inside become one

**Vitrocsa** excels in manufacturing a broad range of windows. With more than two decades' experience, the Swiss company has mastered the art of letting in as much light as possible, while maintaining a sleek design.

**T**his impressive, resolutely modern villa (pictured) is the embodiment of technical and aesthetic ingenuity, thus overcoming the architectural challenge posed by its design and proportions. Composed of three building elements arranged in a U-shaped configuration, the villa is built on two levels with fully glazed facades. These immense windows truly arrest the eye thanks to the stunning subtlety of the aluminium frames, and it's all down to products developed by Vitrocsa, a renowned Swiss manufacturer that is known worldwide for its ranges of ultra-minimalist windows.

Since it was founded in 1992, Vitrocsa has diversified its range of construction systems. Among the most recent is the Turnable Corner system that optimises the living space using an original roller principle, which completely frees up the glazed components from the passageway. The panels move laterally and at right angles on invisible rails embedded in the floor. Developed by Vitrocsa's research and development team, the Turnable Corner system provides architects with technology that combines groundbreaking design with unprecedented functionality, resulting in glazed panels that are extremely easy and smooth to handle.

The guillotine window – another brand-new development – is designed to create vertical opening elements that do not impinge on the room



With Vitrocsa, double or triple-glazed windows are strong enough to act as a window frame.

space. It operates using an extremely precise counterweight that ensures easy handling. The product, which can be motorised, features a horizontal metal profile that measures 18mm. As the ultimate in sophistication, the vertically sliding panels can disappear fully into the floor with the incorporation of an underfloor recess.

## Key features

The aesthetics of a Vitrocsa window are genuinely surreal. All the frames can be embedded in the masonry, and invisible sills are created where the sliding panel conveys a profile that covers the lower rail. Right-angled sliding windows with no visible uprights are also possible. Curved slides are also featured as

options in Vitrocsa's catalogue, as well as tall-pivoting doors measuring 6 or 12m<sup>2</sup> per panel. The perfectly balanced large mobile panels can be moved by applying a small amount of pressure. All Vitrocsa products conform to strict standards governing thermal insulation – including the Minergie label – wind resistance, and impermeability to water and air.

The windows and glazed partitions that are designed and manufactured by Vitrocsa defy the imagination. With more than 99% of a clear view, these products currently offer the most light of any on the market.

Conceived more than 25 years ago, the Vitrocsa process is based

on a principle that was verified under real-world conditions. Unlike conventionally designed windows, which use a metal frame to support the glass, Vitrocsa considers double or triple glazing rigid enough to serve as a window and a frame. A simple metal strip on the edge is all that's needed for the finish.

## Meeting strict standards

However, this principle relies on one prerequisite: the aluminium profiles must be machined and assembled to horological standards, and on-site installation must adhere to strict tolerances. With these rigorous requirements met, the results exceed even the wildest expectations. Vitrocsa's products allow the design of sliding windows that cover more than 18m<sup>2</sup>.

The different product ranges – TH+, 3001, Swimms, V32 and V56 – cater to numerous scenarios, depending on the thickness of the glazed panels and the surface area proposed by architects. The thermal insulation of these windows is remarkable because the design uses so little metal, so the effects of conduction are minimised, while the excellent inertia of the huge double and triple-glazed panels substantially lowers energy consumption. ●

## Further information

Vitrocsa  
<http://vitrocsa.ch>