EXHIBITION CENTRE FOR BUILDING MATERIALS



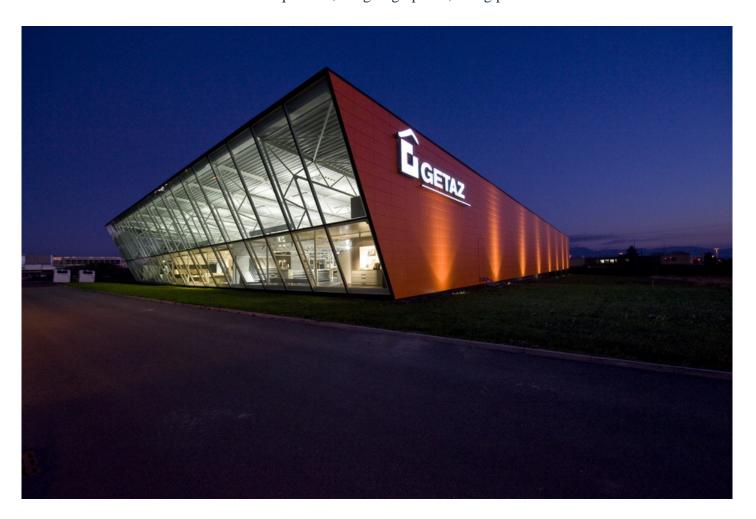
Etoy, Switzerland

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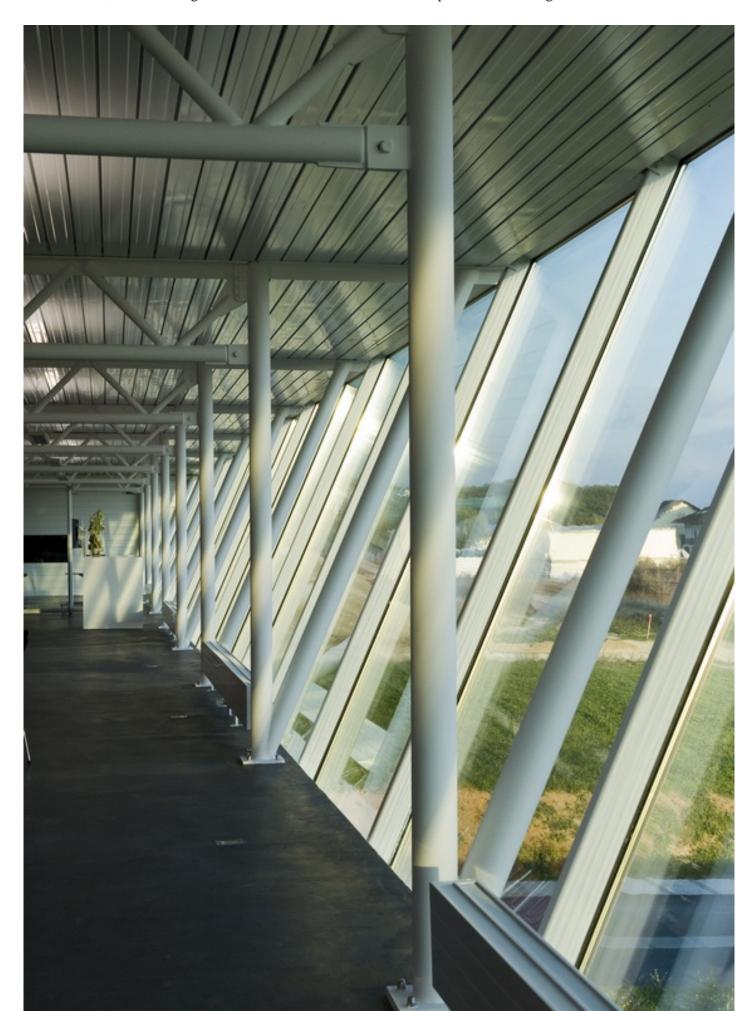
At first glance, the strictly formal structure covering a floor space of 93 x 43m with windowless longitudinal fronts appears somewhat closed off and almost introverted. But the glass façades on the north and south sides, as well as the courtyard, which is also completely transparent, create a bright interior offering constantly changing views of the outside. Conversely, in darkness, the exhibition centre appears to viewers on the outside as a weightless, seemingly floating light sculpture.

Following the geometrically minimalist structure of the entire building, deliberately large glass panes with dimensions of up to $2,781 \times 5,474$ mm have been used, which allow a greater light incidence thanks to fewer profiles and, at the same time, emphasise the clear lines of the architecture. In total, there are 2,200m² of glass

with different solar and thermal control qualities, weighing up to 1,200kg per element.



These large sizes and heavy loads on the main façades tilting outwards by 23° posed a particular challenge and, technically speaking, constitute overhead glass. As well as being an architectural idea, the tilting is part of the sophisticated climate concept: direct sunlight is avoided on the south side because the building casts its own shadow, thus reducing both heat loads and the need for sun protection coating.



The courtyard façades are shaded by horizontal slats in the upper sections of the windows. At the same time, there is a special cooling system: During the summer, jets on the doors and under the trees spray a cooling veil of water vapour. The conditioned air can be routed through the building and discharged via motorized roof openings.

Detailed Description of the Project

Completion & location

2009, Etoy, Switzerland

Architects

Alain Porta, Lausanne + Wurlod Architects, Pully

Building contractor

Gétaz-Miauton, Baustoffhandel

Special features of the glass

CLIMAPLUS COOL-LITE SKN 165 II or SKN 174 II solar control glass from ESG-H up to 2.80 × 5.50 mm

Metalwork

R. Morand & Fils SA, La Tour-de-Trême, Switzerland

Glass manufacturer

Saint-Gobain Building Glass

Glass finisher

Thiele Glas