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Text & image | Aalborg Portland Belgium (Cementir Holding)

ICONIC BUILDING WITH UHPC SUN SHADING ELEMENTS

The ZASH project in Bézannes near Reims, designed by architect Rudy Ricciotti, is at first sight a simple and traditional office building on three floors. Architecturally the choice was made for an organic design and emphasizing the layered structure. The architect nevertheless managed to incorporate his signature into the design by using ultra high-performance concrete in the slats for sun protection, between the layered concrete bands.



The sun blinds with slats in ultra high-performance concrete have a 3-dimensional effect because they are curved horizontally and because they also contain shifts in the vertical structure that visually create a kind of 'wink' effect. The slats have a maximum dimension of 200mm width, 35mm thickness and a maximum length of 2680mm.

5.780 METER SLATES

A total of 5,780 meters of slats were cast. These elements were poured vertically to have as little as possible of the pouring side visible. Incidentally, it has also been possible to finish the pouring side smoothly. All elements are produced with the ultra high-performance concrete Aalborg Extreme® developed from Cementir's Innovation team, in combination with stainless steel fibers and therefore no traditional reinforcement. Such concrete makes it possible to design very slim with sufficient structural strength.

IN ONE PIECE

The slats were also assembled in the Betsinor factory into elements that could be mounted in one piece and very quickly on the facade. The strength calculation of the whole piece also required specific attention, due to the fixing points and additional tests in connection with the bending tensile strengths. The Aalborg Extreme® material passed all these tests flawlessly with bending tests up to 700 kg.

Striving for a BREEAM "Excellent" certification and providing gardens and relaxation areas on the ground floor and roof terrace, Zash focuses on companies that place the

wellbeing of their employees at the center of their policy. The building is divided into two first floors with covered parking spaces and two floors that are entirely dedicated to offices, each with a lettable area of 2,550 m² that can be divided into floors of at least 300 m². The iconic building, in which Rédeim will establish its future operational headquarters, will be connected to the fastest intermodal transport infrastructures (motorway, high-speed line, tram). At the foot of the TGV station, it is directly connected to the largest French and European cities.

The elements were poured vertically to have as little as possible of the pouring side visible



Architecturally, an organic design was chosen and the layered structure emphasized



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Building info

CLIENT
Societe REDEIM

CONCRETE ELEMENTS PRODUCER
Betsinor/Delmar Group

ARCHITECT
Agence Rudi Ricciotti

CONTRACTOR
SCCV Bezannes RS

CONSTRUCTOR
Cabinet L-Ring

MONITORING
Bureau Veritas