

Flagship project by **SWISSPACER** a beacon of sustainable refurbishment

With state-of-the-art insulating glazing fitted with warm edge spacer bars from SWISSPACER that meet the high requirements for energy efficiency, the iconic high-rise building 'Cité Administrative' in the Belgian city of Liège just underwent extensive refurbishment - seeing transformation into an almost carbon-neutral structure.



A^N ARCHITECTURAL SYMBOL FOR THE FUTURE

The construction of the 'Cité Administrative' administrative building dates from the 1960s, originally designed by the architects Jean Poskin and Henri Bonhomme, had the ambitious aim of centralising the urban services of Liège all in one place - and the 18-storey tower has been a symbol of the city's skyline ever since. Funded by (among other players) the European Union and the province of Wallonia, the 67-metre-tall building -situated between the district of Feronstrée and Quai de la Batte, directly on the Maas River- was extensively refurbished and transformed into an urban flagship project in terms of sustainability. The idea was to turn the iconic high-rise into a 'lowest energy building' (almost zero energy building) in accordance with the EU's Energy Performance of Buildings Directive. To this end, the city of Liège organised a competition for the project. The architectural firms Canevas and Baumans-Deffet as well as the construction company Groven+ Portal SA -which put together a team of specialists for concrete, façades, specialised technology and interior fittings- took part



in the competition and ultimately emerged as the winner with an integrated and holistic renovation concept.

PLEASANT WORK AND COMPREHENSIVE SERVICE

Talking about the refurbishment concept Stéphane Marville, architect of Canevas, explains: "Apart from the sustainability objectives, the project was mainly about optimising the use of space and creat-

ing an environment for workers and citizens that is fit for the future." To this end, the office tower was refurbished from the ground up, while the existing plinth structure was demolished and replaced by a new, four-storey volume on the south side of the building. Inside, the 'Cité Administrative' and new annex now bring all the city's social and other services together in one place - from rooms for social administration to areas for the administrative police and public safe-

ty, cafeteria and meeting rooms to the classic citizens' services on the ground floor. There's also the large panoramic terrace on the 18th floor with a view of the city - a highlight in every sense.

REFURBISHMENT MEASURES WITH CARBON NEUTRALITY

Energy-efficient refurbishment and modernisation of the 'Cité Administrative' included numerous measures. Photovoltaic panels covering 1,600 square metres were installed on two façades to generate energy and the entire building envelope was upgraded and optimised in terms of energy efficiency. The planners also developed a holistic concept for the building's automated ventilation, cooling, heating and lighting - which extends to façade design. Says Marville: "We had to find the right balance between natural lighting and limiting overheating in summer. We therefore proposed projecting bonnets on the vertical façade and horizontal valances on the south façade. This made it possible to work with glazing with a relatively low solar factor on the north façade, allowing plenty of sunlight into the interior and achieving a high level of transparency. This in turn reduces the need for artificial lighting."

ENERGY-EFFICIENT INSULATING GLAZING WITH WARM EDGE SPACER BARS

Curtain walling façades manufactured specifically for the project by Groven + Portal SA (Herstal/Belgium) are used on a total of 4,600 square metres on the south-east and north-east sides of the building. To meet the high requirements for thermal insulation and energy efficiency, the aluminium façade elements were realised with Ultraone NG double



glazing and SprimoLight 70/37 solar protection glazing from Sprimoglass (Sprimont/Belgium).

Integrated into the glazing edge of all glazing units is the innovative warm edge spacer bar Swisspacer Ultimate. Camille Trachet, Sales Manager at Sprimoglass, explains: "All Swisspacer spacer bars come with an Environmental Product Declaration (EPD) containing all the information needed for a sustainable building assessment. That was an important factor in awarding the order for this prestigious project." The spacer

bars installed in the glazing edge increase the temperature at the glass edge by up to 2° C, which ensures much lower thermal conductivity and very good Psi values. The warm edge also avoids the formation of condensation and reduces the risk of mould.

Miguel Crispin, Sales Manager at Groven+ Portal SA, sums it up well: "The goal was to sustainably improve the energy scorecard of the building envelope. With the glazing units used, we achieve very good U values of 1.0 W/m²K - with the spacer

bars from Swisspacer also contributing an important part of this."

Following completion of the €31,000,000 refurbishment programme, the 'Cité Administrative' in Liège is now fit for the future and almost fully carbon-neutral.

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