

## Object report: Administration building for the province of Antwerp



## HIGHEST DEMANDS ON APPEARANCE AND FUNCTIONALITY

**In the new administration building for the province of Antwerp, well thought-out solutions come into their own - also in the design of the suspended ceilings.**

Since the beginning of 2019, Antwerp's cityscape has been characterised by another architectural highlight: the new provincial administration. The 58 meter high building is almost energy neutral and the largest passive house in Belgium. 33,000 m<sup>2</sup> of working space are distributed over generously designed offices, auditoriums, conference and meeting rooms. With an investment volume of over 90 million euros, the owner of the property, the Province of Antwerp, has set new standards in terms of appearance and functionality in the area of building construction.

### Particularly environmentally friendly building concept

As early as 2011, the province of Antwerp had initiated a competition to replace the outdated office tower with a new, contemporary building. The winner was the design by Brussels architects Xaveer De Geyter (XDGA architecten). The plan was to almost completely remove the tower, which was built in 1969, with the exception of a horizontal pavilion beam with two auditoriums, which would serve as the foundation stone for the design of the new 15-storey administration building. Further starting points for the design were sustainability and the lowest possible energy consumption. The building, which was completed between October 2014 and early 2019, guarantees an optimal balance between maximum daylight and a limited glass surface thanks to its particularly compact design. Contrary to the trend of recent years, only 40% of the façade is made of glass, which consistently supports energy efficiency. The energy generation of the new provincial headquarters is based on geothermal probe storage and PV panels. Today, the property is one of the most self-sufficient buildings in Belgium and has been awarded an "excellent" rating according to the international BREEAM certification system.

### Overall concept for esthetic ceilings



The new administrative centre of the province of Antwerp also impresses with its particularly high-quality interior fittings. In addition to modern exposed concrete architecture throughout the building, this also includes suspended ceilings with an open structure. The air ducts and pipes under the construction ceilings remain visible through the openings of the suspended ceilings, which made the architectural integration of the insulated ducts necessary. For this, Kaiflex ST insulation sheets for the rectangular airducts have been cut to size including V-grooves to avoid visible corner seams and thus enhancing the visual effect.

Kaiflex ST was also used for the technical insulation in order to achieve high-quality energy and visual results. The insulation material reliably prevents the formation of condensation and minimises energy losses thanks to its low thermal conductivity of  $\lambda_{90} \leq 0.034$ . Its closed-cell structure serves as a permanent vapour barrier that prevents the passage of vapour and ensures very good insulation



performance. A total of approx. 5,825 m of cold and cooling pipes and 1,100 m<sup>2</sup> of air ducts were insulated with the unlaminated, elastomeric insulating materials. With its standard antimicrobial resistance and Class 0 fire resistant closed cell rubber that is completely dust and fibre free, Kaiflex ST can be used in all types of public, commercial or industrial buildings with high hygienic requirements without compromising health or air quality.

With the Kaiflex Special Adhesive 414, the Belgian company D&D Isoltechnics, the tradesman who carried out the work, opted for an adhesive that is matched to the insulating material in every respect.

In order to match the colour of the suspended and the structural ceilings, the technical insulation of the air ducts was painted (approx. 480 m<sup>2</sup>). For this paint layers, Kaifinish Color (RAL 9010, white) was used, a non-drip water-based paint with excellent flexibility, fast drying and excellent adhesion.

*Picture image rights page 1, 2 and 3 (top): XDGA, Matthias Van Rossen.*

#### Property

Administration building for the province of Antwerp, Belgium

#### Area:

approx. 33,000 m<sup>2</sup>

#### Building time (new construction)

October 2014 until beginning of 2019

#### Products

Kaiflex ST Platten (approx. 1,100 m<sup>2</sup> air ducts)

Kaiflex ST Schläuchen (approx. 5,825 m cold and cooling pipes)

Kaiflex special adhesive 414

Kaifinish Color (approx. 480 m<sup>2</sup>)

