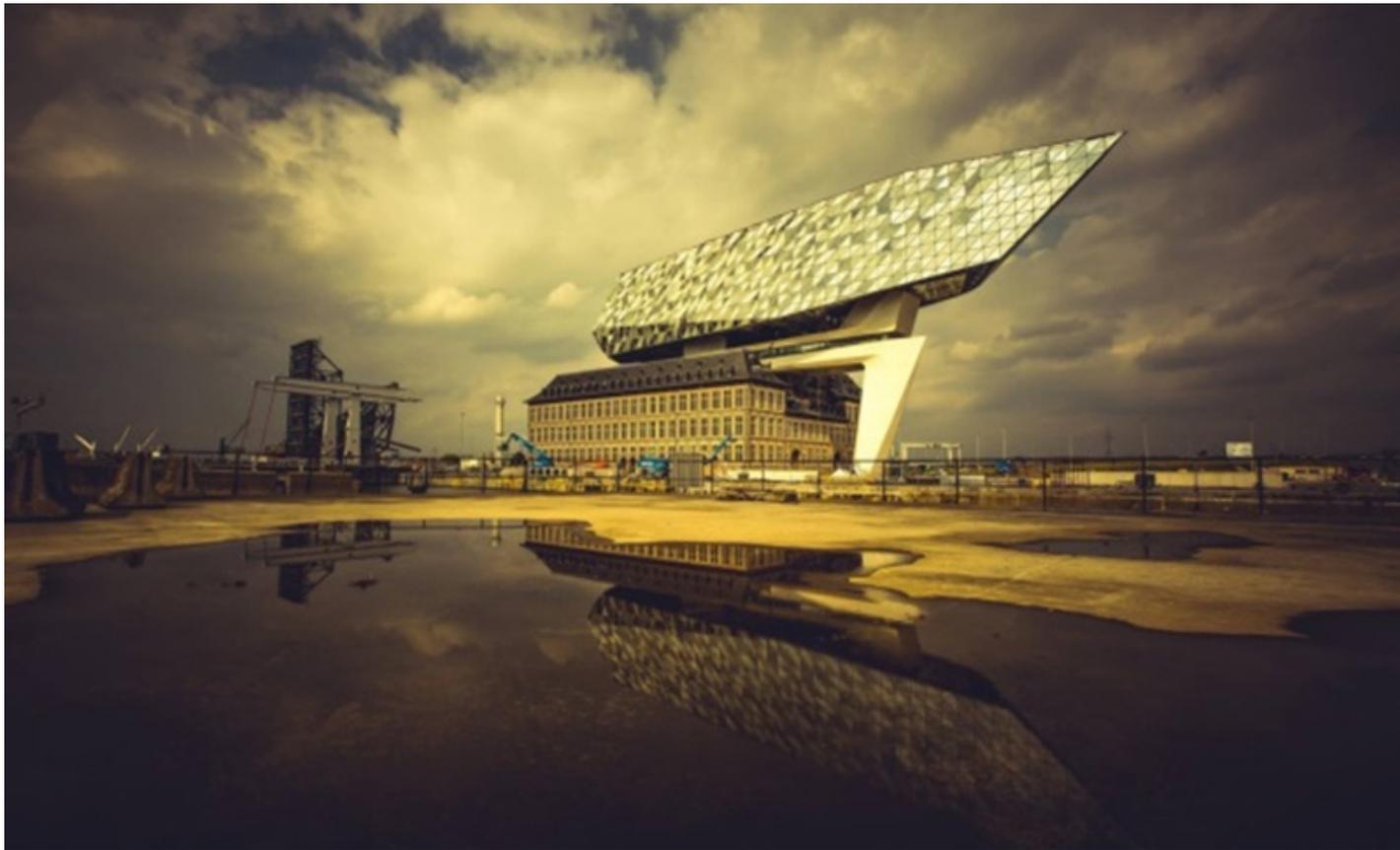


New Antwerp Port House

A spectacular new landmark for Antwerp



Designed by Zaha Hadid Architects, the new headquarters of the Antwerp Port Authority is a spectacular new landmark on the city skyline combining old and new architectural features. The new Port House accommodates 500 members of staff and provides a prestigious space for the international community to meet with the Port Authority.

The beam-shaped upper structure stands

on three pillars containing the lifts and stairs. Two of the pillars stand in the covered inner courtyard of the Hansa House, while the third stands outside and houses a panoramic lift shaft. The outer skin of the suspended structure is all in glass, while the four outer walls of the listed historic building underneath have been perfectly preserved.

The project developed in three stages: phase one was the underground car park; in phase

two the existing building was stripped of its technical installations, interior and roof and during phase three the new office was built.

Interbuild is responsible for the restoration of the historic Hansa House and the construction of the new suspended modern glass structure.

Client:
Antwerp Port Authority

Contractor:
Interbuild

Design team:
Zaha Hadid Architects Ltd
Bureau Bouwtechniek nv

Value: €59m

Completion: Summer 2016

Area: 27,250m²

BREEAM/LEED rating: Very good

Key Features:

- 3D design and coordination of the geometrical complex concrete and steel structures
- 3D complex formwork for bridge and support created based on models instead of plans with perfect fit on site as result
- Interference management of architecture, concrete, steel, masonries, finishings and MEP
- Quantity take-off

BIM stage and approach

The complex geometry of the concrete in the bridge and the front pillar created a high risk of making mistakes in the formwork during construction. The use of 3D models made the design understandable and they were used to control the machines making the formwork.

During preparation stage 3D models were used to coordinate issues between different trades – architecture, structure, MEP and to design steel nodes with a lot more insight than would have been possible in 2D.

