

## The new Antwerp Porthouse

The Antwerp Port Authority seeks to centralize its presently dispersed offices in a new building in the vicinity of the existing (and protected) buildings at 'Het Eilandje' ("The Island"), close to the Antwerp Port.

Zaha Hadid Architects is designing a fantastic new office building that floats above the existing buildings.

Ingenium is challenged with the design of the technical systems in this spectacular project. Durability and energy efficiency are the two key concepts and will amongst others be realised using underground thermal energy storage and heat pumps for cooling and heating the building through chilled beams and ceilings. The technical systems will also be developed in a modular way, to allow maximum flexibility for occupation of the office floors. Water is maximally economised by using waterless urinals and sensing devices. The light is fully operated by KNX, with maximum daylight control.

This results in an energy performance level of 75 and an insulation performance level of 45 for the new building area. The entire project also received a 'very good' score by Breeam.

For this project, Ingenium won the audience price in the 2020Challenge 2011. This is a competition for innovative engineering offices which are highly committed to sustainability.



Reference: 09006.001

### Developer

The Antwerp Port Authority

### Designer / Architect

Zaha Hadid Architects -  
Bureau Bouwtechniek

### Location

Antwerp

### Budget technics

approx. 8.600.000 EUR  
(excl. tax)

### Surface

14.000 m<sup>2</sup>

### Period

Study:

2009 - 2011

Execution:

2012 - 2016

### Sectors

[Smart Office buildings](#)

### Services

[Sustainability & Certifications](#)  
[Feasibility studies & audits](#)  
[Building services engineering](#)