

Object name

**Port Authorities Ghent, office building****Belgium**

Object photo



Object description

The Port Authority Ghent is responsible for the exploitation and growth of the port of Ghent. Over the years, their existing office building had become too small, resulting in a large fraction of their personnel being housed in container offices. Comfort in summer and winter was very bad.

When the decision was made to build an extension to the existing building, the choice for a passive office building was made, based upon the plans of the architect evr-architecten and the energy consultancy office Cenergie.

The office building was constructed as a standard concrete construction, with a timber frame façade, incorporating high levels of insulation with an excellent air tightness.

For summer comfort, the thermal mass of the concrete construction is accessible through the ceilings. Night ventilation and a controllable and semi-automatic shading system complete the summer strategy.

Fact sheet

**Visitor centre in 9000 / Ghent**

Treated Floor Area	1.086 m <sup>2</sup>
Number of apartments	---
Completion date	2006

**Energy standard [PHPP]**

Heat requirement / year	11 kWh/m <sup>2</sup> a
Heat load	11,2 W/m <sup>2</sup>
Primary energy requ.	98 kWh/m <sup>2</sup> a
Air-tightness (n <sub>50</sub> -value)	0,56 1/h
Building type	Timber frame walls

**U-value**

Exterior wall	0,15 W/m <sup>2</sup> K
Roof	0,11 W/m <sup>2</sup> K
Basement floor /	0,14 W/m <sup>2</sup> K
Floor slab	
Windows / average	0,89 W/m <sup>2</sup> K

**Specification ventilation system**

Central System

**Heating installation**

Condensing gas boiler, model designed for a single family house

Construction costs 1350 Euro/m<sup>2</sup>

**Building owner**

Port authorities, Ghent

**Architect/Planner**

Evr-architecten

**Photo credits**

Evr-architecten