



## QUAI DE L'INDUSTRIE [169]

### A HAVEN OF GREENERY FOR SOCIALISING IN A HIGH DENSITY NEIGHBOURHOOD

Apartments, offices – New construction

# 14

kWh/m<sup>2</sup> year  
Brussels average  
150

Quai de l'Industrie 95-97, 1080 Molenbeek-Saint-Jean

Client: **Commune of Molenbeek-Saint-Jean**

Architect: **B612 Associates sprl**

Engineers: **MK engineering, JZF, ASM-acoustics**

Resol, EPS, PIR and  
PUR foam



D system,  $\eta > 85\%$ ,  
heat wheel  
N50/h < 0.6



PV: 32 m<sup>2</sup>,  
cogeneration



Night-cooling, solar  
shadings



Covered bicycle  
shed, shower area  
for the personnel



Diversified  
plantations



Green roof: extensive  
(175m<sup>2</sup>), intensive  
(217m<sup>2</sup>)



Rainwater tank: 8.8  
m<sup>3</sup>, water permeable  
slabs



NIBE < 4b: sand-  
lime, linoleum,  
European larch



Waste management



Acoustic comfort  
verified by engineers



The Quai de l'Industrie project will be a combination of multiple facilities: 16 public housing units, a neighbourhood office, an extra-curricular facility and an office for the port of Brussels. Thanks to its location in a pedestrianized area, the open architecture of the building, the semi-public garden and the diverse activities of the neighbourhood office, it offers the residents unique possibilities for socialising each other.

The energy consumption of the building will be brought down to a minimum, resulting in a series of economic and ecological advantages. This rationalisation is favoured especially by an excellent insulation of the walls in addition to the technologies dedicated to sustainable development such as cogeneration and solar panels. The subsidies obtained will be invested in optimising the use of renewable energies or in HVAC installations that are even more cost-effective. They can also be allocated for the use of materials that are costlier but have smaller ecological footprint.

### IN FIGURES

Gross area	2,222 m <sup>2</sup>
Handover	Dec. 2014
Construction costs, VAT/grants excl.	€1,488 /m <sup>2</sup>
Exemplary building grant	€163,000

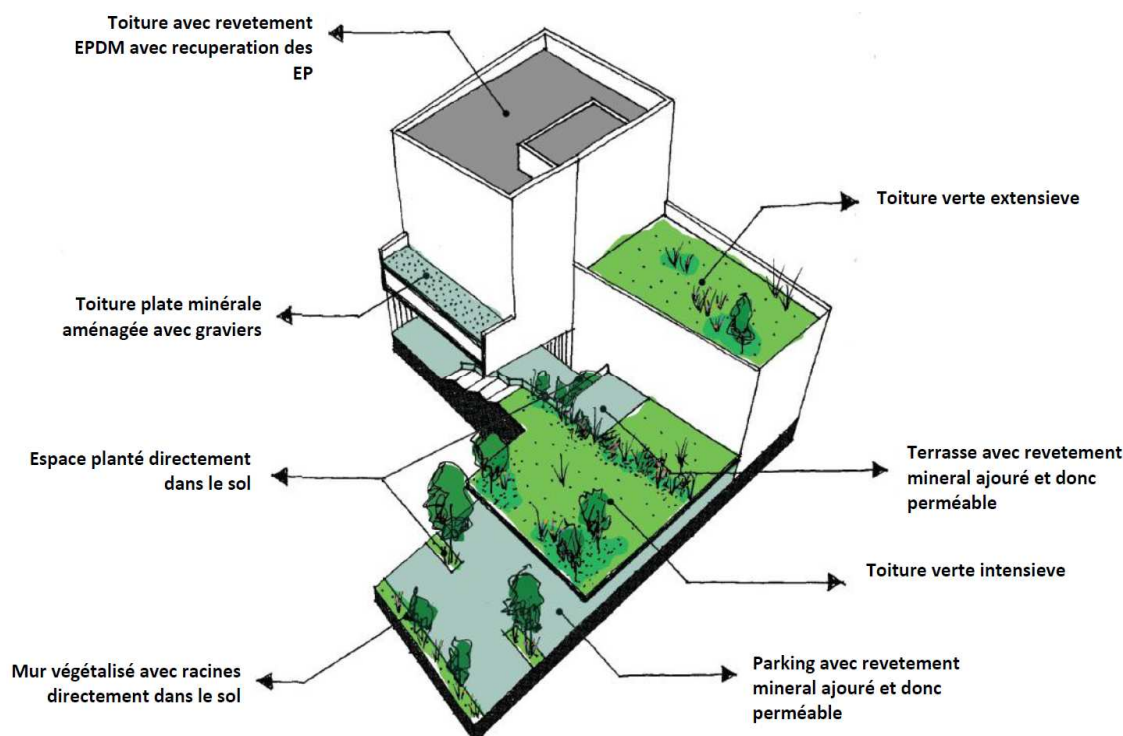


## INNOVATIVE IDEAS FOR A SMALL AREA

With its two goat willows and its dried grass, the uncultivated land where these buildings will be constructed is the only 'green zone' of the neighbourhood. The project therefore intends to provide a significant added value in terms of green spaces. Given that it is necessary to condense the living area, there is little opportunity to obtain a high degree of biodiversity. It was therefore necessary to use the limited space available very innovatively, so as to obtain an optimum combination of better functionality, water permeability, water harvesting and green spaces for the neighbourhood.

## DIVERSIFIED FLORA AND FAUNA

To maximize the ecological added value of this project, various types of green roofs and plantations were selected. The garden of the building will be an intensive green roof, located on the first floor. The children at the after school centre as well as the visitors to the cultural centre will be able to enjoy a collection of flowering plants, sheltering and feeding various kinds of birds and butterflies. This is thanks to a combination of mixed hedges, perennials and shrubs such as hazel, Bodinier beautyberry and lilac.



On the third floor, an extensive green roof will be developed with sedums, i.e. succulents with flowers whose nectar and pollen attracts a variety of insects. As regards the parking area, a green facade with ivy, climbing hydrangea and akebia as well as outdoor trees and shrubs will give the parking area a greener appearance.

## ADDED EXTRA

The Quai de l'industrie project provides an excellent opportunity to inform residents about the possibilities of a lifestyle that is environment friendly and more in line with sustainable development. This is done not only by shining the spotlight on the building's sustainable design but also by providing information on recycling and sorting, flora and fauna, and solutions to reduce energy consumption.

