

BELFORT - PROXIMUS SITE

Roeselare

In the Belfort project (Proximus site Roeselare), the 62 units were equipped with the latest energy-efficient technologies through a connection to the district heating network of the intermunicipal company MIROM.

Status
2019 - 2022

Services:
Building Services, Structural

Sectors:
Residential: Residential buildings

Client:
BVBA Ladero Immo Projects

Architect:
BVBA CAAN ARCHITECTEN

Area:
19102 m²

BM ENGINEERING GROUP







General

The redevelopment of the former Proximus site into the residential project Bel-Ford represents an important piece of urban renewal in the heart of Roeselare. The site is enclosed on three sides by Wortelstraat, Hendrik Consciencestraat, and Sint-Amandsstraat, resulting in an exceptionally central location between the station and the shopping streets of the city center. The development comprises three residential buildings (71 units in total) and one office building (+/- 3,500 m²). This creates a mix of living and working on the site, organized around a green courtyard that serves as a resting point and is connected to a continuous walking and cycling corridor through the center.

Technical Systems

BM Engineering is increasingly succeeding in convincing property developers to resolutely choose sustainable, fossil-free energy systems for residential projects. The traditional individual heating systems per residential unit are being replaced by centrally generated heat. This can be achieved through a local heat system on the project site itself, but in this project, a connection was also made to the district heating network of waste intercommunal MIROM. This heating network, fed by residual heat from the incineration plant on the outskirts of the city, will be extended further toward the station area in the coming years.

The advantages of this approach are considerable. Because heat is continuously available, energy costs decrease and the technical rooms in Bel-Ford can be designed more compactly. Moreover, the EPB rating drops below E-20. The smart energy vision is continued in the automated monitoring and billing of consumption. Because the continuity of the district heating network cannot be fully guaranteed, a redundant installation is provided that operates in parallel and automatically switches over during maintenance or interruptions. This switchover is entirely controlled by the building management system.

Efficiency is also central within the building itself. Heat distribution is carried out via highly insulated pipes, keeping heat losses limited to less than 5%. The application of apartment substations ensures a high system efficiency combined with optimal domestic hot water comfort. Thanks to these measures, developed in close collaboration with MIROM, a particularly favorable energy tariff was obtained and energy costs for residents remain both low and predictable, even during higher peak consumption for domestic hot water. The chosen technologies also result in a completely fossil-free installation and an exceptionally low E-level (E20). Furthermore, the buildings were equipped with system D balanced ventilation, centralized PV installations, and green roofs, further optimizing both energy consumption and indoor comfort. Finally, the external screens contribute to controlled summer comfort, which aligns with the requirements regarding indoor climate and overheating limitation in contemporary residential projects.

Structural Engineering

Still to be written!

Construction Partners

- Client: Lafaut Invest - frederik@lafaut.estate
- Main Contractor: Jan De Nul

Dates

Design start date: 2019
Date of urban planning permit: 30/04/2018
Date of start of works: 2020

Surface Areas

Office: 3,954 m²
Apartments: 7,642 m²
Basement: 7,506 m²

BM ENGINEERING GROUP