GIGA PARK at the Sart-Tilman University Hospital in Liège Buildings intended for biotechnologies



Site of the Sart-Tilman University Hospital (BE)

Complete stability, building engineering services, EPB-responsible, energy design, **BREEAM** certification and civil engineering

Owner NOSHAQ IMMO Architect Bureau d'architecture HGA Cost of the works € 40 M excl. vat of which € 11,7 M for the structure and € 18,76 M for building engineering services

Studies 2022 - 2024













GIGA PARK is a complex of two buildings constructed on the site of the Sart-Tilman University Hospital (Liège). It is intended to accommodate young companies active in the biotechnology and life sciences sector. It was carried out by a bouwteam on behalf of Noshag Immo.

The complex offers 14,400 m² of buildings. It is mainly composed of BL2 laboratories, clean rooms and offices.

The buildings, which have four storeys, are equipped with photovoltaic panels on the roof, developing a total power of 251 kWp.

Motorised sun blinds are fitted to the outer walls to prevent glare and overheating.

The production of heating and cooling in each building is provided by reversible air source heat pumps and a 4-pipe water source heat pump.

Most rooms are equipped with fan coil units that provide heating and cooling. The refectory is heated or cooled using hygienic air. The data rooms are air-conditioned by two direct expansion systems with variable flow (redundancy).

Ventilation and air treatment are provided by dual-flow units with a wheel energy recuperator operating on 100% fresh air. For BL2 zones, fresh air renewal is 2 volumes/h. Additional mixing to reach 8 volumes/h is provided by fan coil units. For clean rooms, fresh air renewal is 4 volumes/h. The total air circulation will ensure a renewal rate of 40 volumes/hour. The units are equipped with frequency variators to adapt the flow rates to actual needs. (The units are equipped with a humidifier to maintain the relative humidity level between 40 and 60% RH.).

All of the facilities listed above are managed and controlled by a Centralised Technical Management system (CTM).

The complex is supplied with medium voltage for a total power of 3,260 kVA. The «backup» power is produced in building A by a 630 kVA generator and in building B by a 900 kVA generator.

Functional, decorative and safety lighting is equipped with LED sources. The offices are equipped with presence detectors and a dimming system with a photoelectric cell using a natural light sensor, allowing the level of lighting to be adjusted. Premises with intermittent occupation also have presence detectors. In the laboratories, low-tech lighting management is provided by switches.

The structured cabling is 6A S/FTP. The electrical installations are complemented by the generalised fire detection, access control, intrusion detection, video surveillance and video door entry systems.

Recharging points are provided for electric bikes and vehicles.

The project is aiming for the « BREEAM EXCELLENT » certification.