

Object report: MontLégia Clinic in Liège



RELIABLE PIPE INSULATION IN NEW CLINIC BUILDING

35 km of cold water pipes insulated with Kaiflex ST at MontLégia Hospital

In Belgium, the Centre Hospitalier Chrétien bundled the activities of three hospitals at one location. Building materials that meet high hygienic requirements were used in the newly created clinic.

In March 2020, the MontLégia Clinic, part of the Centre Hospitalier Chrétien, opened in Glain near Liège. The approximately 113,000 square metre new building brings together three hospitals at one location: the Clinique Saint-Joseph (Liège), the Clinique Saint-Vincent (originally Rocourt) and the Clinique de l'Espérance (originally Montegnée). The modern hospital complex provides space for over 700 beds and around 2,300 employees.

Modern hospital building in Belgium

The architecture was adapted to the requirements of the new hospital. It was particularly important to the operators of MontLégia to divide the building into different wings in order to create sufficient quiet zones and space for the different departments. For example, they separated the mother-child department and all related areas from the regular hospital operations and positioned them in one block with the medical care and the department for the technical equipment needed in the clinic. Thanks to this arrangement, a medical street was created that connects the technical and medical departments with the treatment units. This clearly separates the medical hospital traffic.

In addition to this wing structure, it was important that as much daylight as possible enter the building. That is why the façades are generously open. A five-storey atrium floods the entrance of the clinic with light, and glass domes above the consulting rooms let in brightness. In addition, the entire clinic is equipped with exceptionally large windows. These are also very impressive from the outside, as are the white façade and the imposing oriels that protrude at regular intervals from the main building, which is rectangular in its basic shape. The medical-technical part of the building stands out from the rest of the building with a black ceramic façade, which also reflects the region's coal-mining past in the design of the clinic.

Ideal insulation for the clinic

The installation and insulation of the heating, ventilation and air-conditioning systems was carried out by three of Belgium's largest installation companies. Kaimann's Kaiflex ST insulation material was used for the technical insulation of cold water and sanitary pipelines in the form of tubes and sheets. In total, about 35 km of pipelines were insulated with Kaiflex ST in the MontLégia clinic.

While pathogens such as legionella in drinking water already pose a threat to healthy people, they can have serious consequences for patients who are already immunocompromised. In order to actively counteract this, structural measures must be taken in addition to limiting water stagnation and regular drinking water tests. In order to maintain drinking water quality, the temperature in cold water pipes must not rise above +25 °C, and in hot water pipes it must not drop below +60 °C. With a thermal conductivity of





$\lambda \leq 0.034 \text{ W/(m}\cdot\text{K)}$, the temperatures defined above for hot and cold water can be reliably maintained and legionella formation prevented.

A healthy indoor climate is important for the well-being of patients. With its closed-cell, fibre-free and antimicrobial structure, Kaiflex ST is particularly suitable for areas where high hygienic standards must be implemented. Thanks to sound-reducing properties, disruptive noises are also attenuated, contributing to a quiet, positive atmosphere.

Set up in this way, the high-performance Kaimann insulation material was ideally able to meet the high requirements of the new Mont-Légia super-clinic.

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Source: <https://www.chc.be/Etablissements/Clinique-CHC-MontLegia>

Property

MontLégia Clinic in Liège, Belgium

Area

approx. 113000 m²

Building time (new construction)

2014 to 2020

Products

Kaiflex ST sheets & tubes (ca. 35000 m pipes)

