



MILESTONE IN BUILDING SUSTAINABLE HOSPITALS

Project: CHAL (Centre Hospitalier Alpes Léman),
Contamine sur Arvre, Frankreich

Building developer: CHAL Hôpital Annemasse,
Contamine sur Arvre, France

Architect: GROUPE-6 Architectes, Paris, France

Products: noraplan® signa, noraplan® signa
acoustic, noraplan® uni, installed area 30,000 m²

Date of installation: 2011

Installation areas: Patients' rooms, corridors,
canteen, administration areas

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Milestone in building sustainable hospitals

Ecological and beneficial to patients – that is the CHAL (Centre Hospitalier Alpes Léman) in Contaminesur-Arve, near Annemasse, a new hospital in the French Alps that recently went into operation.

The building complex with a total area of approximately 50,000 square metres was built in less than three years by the Eiffage Group as a public-private partnership (PPP) project. With its 445 beds and various departments – from surgery, pediatrics and neonatology through to oncology – the hospital offers comprehensive and high quality medical care for the around 200,000 people who live in its catchment area.



The new hospital was designed by the French architects' agency GROUP-6. The planners pursued ambitious goals, both with regard to ecological, energy-efficient construction methods, as well as where the use of healthy building materials was concerned. For instance, the hospital complex's energy supply is guaranteed through the combustion of biomass and by using solar panels. Around 75 percent of the required heating energy can be derived in this way. During the summer months, an innovative cooling system and triple-glazed windows with integrated sun screens ensure pleasant temperatures in the buildings.

Before construction started, the architects and building developers were given tips by an environment adviser. They also took a look at various hospitals in Switzerland that had been built by incorporating cutting-edge environmental technologies.

Usage of ecological building materials

The planners were also assisted by Professor Karine Guillot, who concerns herself with the building of environmentally compatible and healthy buildings. „Building materials should be ecologically safe and contribute to the health welfare of building users,“ emphasises Guillot. Consequently, only building materials with low emission levels and devoid of toxic or allergyinducing substances were used to construct the hospital. For the floors, the planners chose ecologically sound rubber floor coverings from nora systems. These are totally free of phthalate plasticisers and formaldehyde and only contain extremely small quantities of volatile organic compounds (VOC). The very first resilient floor coverings to be awarded the „Blue Angel... for low emissions“ eco-label, the rubber floors contribute to good interior air quality, which is not only crucial to the patients' recovery process, but also contributes to creating a healthy working environment for hospital staff.

No coatings for perfect hygiene

Another focal aspect for the hospital's technical director, Etienne Mauget, in choosing the floor



covering was this: „nora floor coverings are rubber through and through, and their extremely dense surface means that they do not require a coating.“ This has several advantages. On the one hand, in contrast to coated floor coverings there is no formation of unsightly pathways on nora floor coverings, even in highly frequented areas. What is even more crucial, however, is that the coatings of other resilient floor coverings have to be renewed at short intervals because they quickly wear out. This is not only expensive, but also causes considerable operational disruptions during refurbishment.

No joints required

nora floor coverings can also be installed without joints. Rubber floor coverings remain dimensionally stable and do not shrink even after decades. Because they obviate the need for time-consuming and cost-intensive refurbishment of the joints, which always involves disruptions to work routines in hospitals, in the long term

nora floor coverings are the most economic solution for hospitals. And last, but not least, an installation without joint-sealing gives the laid floor a uniform look.

Mauget is also extremely satisfied with how easy it is to clean the rubber floor coverings. On account of their material and dense surface, nora rubber floor coverings are less susceptible to dirt and are also resistant to surface disinfectants.

Not only that, but nora has developed an innovative floor care system: nora pads. These are cleaning disks that are impregnated with countless, microscopically small diamonds. The floor covering can be cleaned and polished mechanically – using just water and without any chemicals at all. This is not only much cheaper, but it is good for the environment as well. CHAL also utilises nora pads. „Cleaning the floors with pads works exceptionally well,“ confirms the technical director. Mauget also appreciated the extensive counselling given during the installation: „nora’s



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application engineers regularly came to the hospital to advise us and make sure that all the conditions for a flawless installation of the floors were met.”

Another factor that qualifies rubber floor coverings for being installed in sustainable buildings is their long life span. They are practically indestructible and

look almost like new even after decades of intensive use. Quality and customer service: These are the two pillars on which the success of the nora brand has been built. That is why they are the number one choice for countless planners worldwide – and not just in hospitals.

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