PROJECT REPORT

Extension and refurbishment of the Elisabethinen Hospital

Data and facts

Company	PORR Bau GmbH
Type	Healthcare facilities, Timber construction, Concrete slab construction, General contractor services, General planning
Runtime	12.2023 - 10.2026
Principal	Krankenhaus der Elisabethinen GmbH

Project report online

www.porr.at

Innovative timber-hybrid construction

whilst the hospital remains in operation

The combination of solid reinforced concrete structures and prefabricated timber elements combines structural performance and durability with sustainable construction and a high quality of environment. The centrepiece of the project is the extension of the geriatric psychiatry ward. In the first construction phase, a six-storey extension was built; in the second phase, an existing building will be raised by several storeys. Both construction phases are being carried out as timber-hybrid structures. The structural system combines reinforced concrete with structural timber elements. Wall panels made of cross-laminated timber, as well as joists, columns and solid timber floors, transfer the loads to the underlying reinforced concrete storeys. The external walls are constructed as timber-frame structures.

The high degree of prefabrication of the timber elements enables particularly efficient assembly. Thanks to just-in-time delivery, the limited space available in the city centre could be utilised optimally, and assembly and storage areas on site were reduced. At the same time, the rapid assembly of the prefabricated components significantly shortens the construction period. Carrying out the project within an existing hospital complex places the highest demands on the construction process, logistics and coordination between different disciplines. All work is being carried out whilst **the hospital remains in operation**. Detailed planning and close coordination between all project stakeholders, in accordance with the **LEAN methods** of the Last Planner System, ensure a smooth construction process with the least possible disruption to patients and staff.

A key component of the project is the **sustainable redevelopment** of the existing buildings. In the third construction phase, existing building spaces will be modernised and adapted to the requirements of the contemporary healthcare sector. The reuse of the existing building fabric reduces the volume of demolition waste, conserves resources and avoids unnecessary new construction.

The Elisabethinen project exemplifies PORR's expertise in complex construction projects within the healthcare sector. The combination of timber-hybrid construction, a high degree of prefabrication, challenging inner-city logistics, refurbishment of existing buildings and construction whilst the hospital remains in operation requires comprehensive technical know-how and precise project management. The result: a forward-looking hospital building that combines functionality, sustainability and a high quality of stay.

Impressions

Image notes

1

New timber-hybrid building (construction phase 1)

Six-storey extension/new build, approx. 12,000 m² gross floor area

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New timber-hybrid building and extension (Phase 1)

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Extension of existing building (construction phase 2)

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Comprehensive refurbishment of an existing building whilst it remains in operation (construction phase 3)

The construction work was carried out whilst the building remained in use.

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Do you have questions about the project or would you like to learn more? Feel free to contact us for further information.

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