



StoraEnso

OPZ

Geel, Belgium

Partner of Stora
Enso



OPZ is a public child psychiatric care centre with residential facilities, an outpatient clinic, and a gymnasium designed in the style of a small forest village.

The OPZ Youth Psychiatric Centre in Geel, at the time of construction, was the largest cross-laminated timber (CLT) project in Belgium with a net useful area of 3,054 m². Our partners, CLT-S NV, made the project possible and demonstrated how engineered wood products lend well to healthcare facilities.

The architects

OSAR Architects NV, a prominent architectural firm based in Belgium, has a strong reputation for healthcare architecture. With offices in Antwerp and Ghent, OSAR Architects is a key player in the healthcare sector. Their extensive experience and expertise have been demonstrated in a variety of projects, including hospitals, psychiatric facilities, educational buildings, and collective senior housing.

Therapeutic design

The OPZ Youth Psychiatric Centre in Geel was designed to provide a therapeutic environment supporting young patients' mental health and recovery. The aim was to create a space that feels more like a home than a hospital, thereby reducing the institutional atmosphere often associated with psychiatric facilities.

Rather than concentrating large groups of vulnerable young people under extreme circumstances in one large institutional space, they have created separate buildings for smaller groups of residents with solid wood in a sensitive, simple and intimate way.

By designing the project in the style of a small village of little forest buildings, organized into 34 units used as patient rooms and office spaces a quiet, familiar environment was created for the patients and staff.

Each unit provides privacy and comfort, with large windows that allow natural light to flood the interiors. The use of natural light was also very intentional as it has been shown to improve mood and reduce stress. ([Download the free whitepaper for more on this](#)).

Material specifications

PEFC-certified [Sylva™ CLT Floors and Roofs](#), [Sylva™ CLT Walls](#) was chosen for this project for several good reasons. The natural aesthetic of wood creates a warm and inviting atmosphere, which can have a positive impact on the mental well-being of the building's residents and staff.

Prefabrication meant the structure could be set up quickly and at the same time offer good insulation value and airtightness. The building could be made wind- and watertight very quickly, which left more time for the finishing of the interior.

The use of Sylva™ elements also contributes to healthy indoor air quality. Wood has natural insulating properties, helps maintain a comfortable indoor temperature, and reduces the dependence on artificial heating and cooling.

[ThermoWood](#) was used for the façade finish of the building, which is a thermo-treated wood produced using completely natural methods-heat and steam. The thermal treatment improves the wood's properties, making it a high performer in any weather.

Construction

The renewable materials company



StoraEnso

Our partners, the mass timber specialists, [CLT-S](#) completed the project in 12 months. The prefabricated elements were manufactured off-site and then assembled on-site, significantly reducing construction time and minimizing disruption to the surrounding area.

Digital tools

The sensitivity that health spaces require necessitates careful thought and planning by the design team. Osar needed quality materials that would work with their digital renders and 3D models. For the psychiatric hospital project, a 3D model was used as a sort of living as-built document, with a consultant incorporating changes as construction progressed without the need for Osar to rework their drawing set.

Since then, digital mass timber efficiencies have come a long way. Today, Sylva kits by Stora Enso can come with several digital tools that work with this approach. For example, the Stora Enso [BIM Library](#) has build-ups of wall and floor components, and wall and floor structures based on CLT or LVL are available as digital objects in the ProLib and WebLib digital libraries, which help to smooth the gaps with communications between the architects, building engineers and other designers on the project.

[Sylva360™](#) is an element installation assistant that provides a link between 3D models and installation by allowing you to easily identify construction elements delivered to the site and view their location by scanning QR codes. Sylva360™ is a web app that works on all devices with web browsers, mobile phones or computers. Everyone working on the project, from the mill to the architectural studio to the construction site, has the same information in real time.

Read more about

[Hygienic Perspectives of Wood in Healthcare Buildings](#)

[How replacing concrete with timber can save costs, reduce carbon and make for better buildings](#)

[Health and wellness benefits with wood.](#)

View more health care facilities built with Sylva™

[Alder Hey Children's Hospital: Catkin Centre and Sunflower House](#)

[Cranleigh Health Centre](#)

[Klinik Hollenburg](#)

[OPZ](#)

General

Delivery year

2015

Building type

Health

Area (m²)

3,054

Storeys

2

Units

34



Photo credit: OPZ Geel

The renewable materials company



StoraEnso

Products

Products and Services

GLT, Sylva™ CLT Floors and Roofs, Sylva™ CLT Walls, ThermoWood®

Product quality

Visible quality (VI) | Glue-lam beam whitewood GL24H | special cladding with sound insulation

Product volume (m³)

1,400

Team

Partner of Stora Enso

CLT-S NV

Developer

OPZ Public Psychiatric Care Centre Geel

Architect

OSAR Architects NV

Main contractor

Vanhout

Specialist Timber Subcontractor

CLT-S

Others

Construction duration (months)

12