Bâtiment multifonctionnel Saint Exupéry Yutz, France

Multifunctional building with mass timber structure and rib panel roof

Saint-Exupéry Multifunctional Building - Wood-based public facilities in the heart of the city

In Yutz, in east of France, the municipality is committed to an ambitious policy of responsible construction with the creation of a multifunctional wooden building. Designed by the AJEANCE firm, the project addresses two challenges: adapting public facilities to the changing needs of residents and sustainably reducing the city's environmental footprint.

This new space, designed as an intergenerational living space, will bring together under one roof municipal services, a school canteen, extracurricular and cultural spaces, as well as a library and several meeting rooms.

The architecture favors natural light, open spaces, and a fluid relationship with the green outdoor areas, promoting conviviality and well-being.

A hybrid design that is both understated and welcoming

The project, designed from the outset with a wooden structure, combines a concrete and metal base with a superstructure composed of glued laminated beams, Sylva™ CLT floors, and wood-frame walls. Two-thirds of the upper floor of the ground floor is made of CLT, ribbed CLT, and wooden beams. The Sylva™ ribbed CLT roof covers the entire building, offering a solution that is lightweight, high-performance, and aesthetically pleasing.

Designed with architectural simplicity in mind, the building stands out for its compact shape, central skylight, and the care taken in the use of bio-based materials. Much of the wood will be visible, including the ribs of the ribbed CLT, the undersides of the non-ribbed CLT, and the curtain wall framing, creating a natural and warm atmosphere.

The “visible industrial” quality chosen for the Sylva Stora Enso elements is extremely high quality and valuable for all visible elements.

Pre-assembled and long-span solutions

Sylva™ CLT and ribbed CLT products supplied by Stora Enso were chosen for their machining precision and manufacturing quality.

The ribbed panels in particular were chosen by AJEANCE to provide the long spans required for the mixed use of the building, which will house both the large canteen area and the association offices. These composite elements make it possible to create a single framework regardless of the use of each floor, without adding excessive load and with quick installation.

A total of 650 m³ of solid wood is used to create 1,400 m² of ribbed CLT and 1,200 m² of standard CLT. The wooden framework and assembly are carried out by Girold Construction Bois, a company renowned for its technical expertise and mastery of large volumes. The lifting phase took around two and a half months, ensuring a quick construction process with little impact on the neighborhood.

Technical challenges and high precision in execution

The combination of a wooden structure, metal elements, and a concrete base required great precision in the design and close coordination between the teams.

The ribbed roof elements required millimeter-precise assembly, as some ribs passed directly through the timber frame walls. The quality of the Sylva™ ribbed panels enabled perfect installation from the outset, without any on-site adjustments, demonstrating the technical expertise and reliability of Stora Enso's solutions.

Optimized environmental performance

The Saint-Exupéry building stands out for its energy efficiency and circular approach to materials. Entirely insulated with bio-based materials, the building is equipped with photovoltaic panels on the roof, and meets the requirements of the PassivHaus label.

Prefabrication, combined with the lightness of wood, reduces transport, waste, and construction time.

The multifunctional Saint-Exupéry building embodies a new generation of public facilities made of wood, combining versatility, energy performance, and sustainability.

Designed and built in collaboration with AJEANCE, Act'Bois, Girold Construction Bois, and Stora Enso, this project illustrates how prefabricated wood construction can be used to create modern, understated, and virtuous spaces, while affirming the role of wood as a material of the future for sustainable cities.

The recording of our webinar about the Saint-Exupéry mass timber building is available here: Watch the recording (in French)

General

Delivery year	Area (m²)
Under Construction	2,679
Storeys	**Units**
1	1

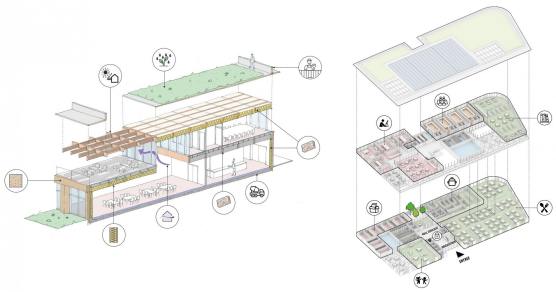


Photo credit: AJEANCE Architectes - Girold Construction Bois

StoraEnso

Products

Products and Services

CLT, End Grain Sealer, Hydrophobic Coating, Rib Panels, Sylva™ CLT Floors and Roofs, Sylva™ CLT Rib Floors, Sylva CLT Rib Roofs, Temporary Membrane

Product quality

IVI

Product volume (m³)

650

Team

Developer

Ville de Yutz

Architect

AJEANCE

Structural Engineer

Dynami(x)

Specialist Timber Subcontractor

GIROLD

Timber Engineer

ACT'BOIS