StoraEnso

Partner of Stora Enso

WIEHAG TIMBER CONSTRUCTION

Freemen's School Swimming Pool Ashtead, Surrey

Swimming amongst the trees: RIBA award-winning pool made with Sylva kit of parts

The building from the outside looks modest and unassuming, with a simple, low-lying form partially dug into the sloping earth. But once you step inside, you are flooded with all the lightness and brightness.

The frame is made with Wiehag Timber Construction's glued laminated timber (GLT/glulam) portal frame, braced with Sylva™ CLT Walls and Floors, manufactured off-site and precoated with insecticide.

The entire frame, took only three weeks to assemble, which was a massive accelerator in completing the detailed design construction in under a year. A complex geometrical layout was achieved with the assistance of 3D BIM tools to model these forms throughout the close coordination process with the design team. The contractors later used this BIM model for developing construction information. The design involved the development of an envelope of cross-laminated timber, with minimal structural steel inserts, supported by long-spanning portal frames in glulam timber, which are gradually skewed along the length of the building.

Finished to a very high standard, the Sylva™ CLT Walls and Roofs were left exposed internally and treated with a white stain coating, leaving the grain visible. This natural finish allows the building to complement its natural setting and provides thermal insulation and corrosion resistance. The roof is clad in standing-seam zinc and has a diagonal ridge supported on the interior by the shifting GLT portal frames and Sylva CLT walls.

Although the pool was constructed in 2017, the wood still looks new and fresh because of the coating that was applied to it that slows down discolouration from the natural sunlight. Wood naturally darkens in colour over time because it contains lignin, which is sensitive to UV radiation. When the lignin degrades, it doesn't affect the structural performance of wood, but it can affect the visual appearance which is not a problem if you are covering up walls anyway or if you like the darker look. But if you would like the soft light wood effect it is possible to order CLT precoated with UV protection from Stora Enso's mills. There are several side advantages of precoating including accelerated installation times as there is no downtime while local onsite contractors hand paint the coating on.

Learn more about protective coatings.

Awards:

RIBA South East Awards 2018 Client of the Year and Sustainability - Winner

RIBA Awards 2018 National Award - Winner

Structural Timber Awards 2018 Education Project of the Year - Winner

RIBA South East Awards 2018 Regional Award - Winner

BREEAM certified

Learn more about the advantages with mass timber download whitepaper

StoraEnso

RIBA National Award 2018



Photo credit: ©Jack Hobhouse

General

Delivery year

2017

Building type

Education

Area (m²)

1,750

Storeys

1

Products

Products and Services

Sylva™ CLT Floors and Roofs, Sylva™ CLT Walls, Sylva™ GLT Beams and Columns, Insecticide , LVL Cover Boards

Product quality

Non Visible Quality, and Industrial Visual Quality

Product volume (m³)

154

StoraEnso

Team

Partner of Stora Enso

WIEHAG Timber Construction

Developer

Freemen's School
City of London Corporation

Architect

Hawkins\Brown

Structural Engineer

Eckersley O'Callaghan

MEP Designer

Skelly and Couch

Main contractor

Gilbert Ash

Others

Construction cost (€)

23,458,271