

# EURBAN



Specialists in CLT Construction





## Introduction

Panelised solid timber construction, often referred to as CLT construction due to the predominate use of cross-laminated timber (CLT) panels, is a modern method of construction. Through off-site manufacture and carbon storage comfortable and sustainable buildings can be delivered quickly, safely and economically.

Eurban are specialists in CLT construction, specialists in the design, manufacture and assembly of flat-pack building structures made from solid timber. Our role within a construction project is therefore that of a specialist – a specialist designer or specialist contractor depending on the timing and scope of our engagement on a projects.





## Specialists in CLT Construction

Our consultancy and construction services are tailored to our client's needs and are designed to manage cost, mitigate risk, and deliver solid timber structures quickly, safely, and sustainably. We use digital engineering and fabrication information modelling to optimise the design, procurement, and construction phases of a project.

### **Design for Excellence (DfX)**

The cost and quality of a solid timber building structure are largely determined during the design stages of a project. Our role during these work stages is therefore to support the lead designer in developing a simple, cost-effective, and robust design solution. We do this by designing for all life-cycle phases of a building asset and with a particular focus on the construction phase in order to deliver buildings quickly.

### **Timber Engineering**

Timber engineering is central to our design service as our product is essentially a pre-manufactured and panelised building structure and enclosure.

### **Design for Manufacture and Assembly (DfMA)**

We design for the construction phase in order to reduce the structure's embodied cost whilst improving its quality. We componentise our building structures in such a way that they can be easily manufactured off-site and quickly assembled on-site.

### **Manufacture and Assembly**

On completion of the design process we arrange for the timber components to be precision made-to-order by our manufacturing partners and then just-in-time delivered to site, complete with component fixings and assembly instructions. Components are then simply craned and fixed into position by the on-site assembly team.





## Our Services

Our services reflect the needs of an integrated project delivery team and cover the pre-design, design, pre-construction, and construction stages of a project.

### Stage 1 - Inception

We review a project's parameters, objectives, and site constraints, then apply our timber-first principles, knowledge, and experience to assess the extent to which the project could be realised using panelised solid timber construction. We establish the need for a project timber engineer or solid timber / CLT specialist on a project.

### Stage 2 - Concept Design

As specialists in solid timber construction, we propose a total design solution based on structural criteria such as safety and serviceability and non-structural criteria such as enclosure and appearance. We also propose an appropriate level of pre-fabrication and standardisation based on our understanding of the project and our knowledge of the marketplace.

### Stage 3 - Developed Design

We support the lead designer in developing a superstructure design that aligns with the architectural design intent and co-ordinates with the fire strategy and the M&E services strategy. We concurrently develop the superstructure design for manufacture and assembly according to the chosen level of pre-fabrication and standardisation. Strategies for ensuring moisture and fire safety during construction are developed and agreed.

### Stage 4 - Technical Design

We co-ordinate the design of the superstructure and develop the 3D superstructure model to a level of detail that adequately describes the design intent, a superstructure design complete with structural openings, service penetrations, and the agreed structural and non-structural attributes. The design is sufficiently complete for the pre-construction stage of the project.

### Stage 4.5 - Construction Information

We produce a fabrication information model for the off-site manufacture phase and a virtual construction model for the on-site assembly phase. This key stage in the DfMA process ensures a seamless transition between the design and construction phases of a project. We also prepare our structural design calculations and temporary works calculations during this stage.

### Stage 5a - Off-site Manufacture

Our bespoke laminated timber components are made to order and digitally tagged using computer-aided manufacturing (CAM) and computer-numeric-controlled (CNC) machinery. Additional fabrication and pre-assembly works may take place depending on the level of pre-fabrication employed on the project.

### Stage 5b - On-site Assembly

We use our virtual construction model to package components and schedule their just-in-time delivery to site. We also provide assembly instructions in order to ensure that our building components can be assembled quickly and safely. Assembly works in the UK are undertaken by our highly trained assembly teams.

### Stage 6 - Completion

On completion of the building structure, we undertake a final quality check and produce the necessary record drawings and other information required for the safe maintenance, alteration and eventual disassembly of the building structure.



**Eurban**

59 Lafone Street  
London SE1 2LX  
UK

+44 (0)20 7378 8476  
[info@eurban.co.uk](mailto:info@eurban.co.uk)

**Eurban Swiss**

Metzgerstrasse 1  
8500 Frauenfeld  
Switzerland

+41 (0)52 725 10 00  
[swiss@eurban.co.uk](mailto:swiss@eurban.co.uk)

The logo consists of a stylized 'E' symbol, which is a horizontal bar with three vertical bars of increasing height to its right, followed by the word 'URBAN' in a bold, uppercase, sans-serif font.

[www.eurban.co.uk](http://www.eurban.co.uk)