Case Study



CS 012 004

Accelerating and strengthening CLT installation

Technology Overview

Cross-laminated timber (CLT) solutions are structural two-way spanning timber panels that can be used to form walls, roofs and floors. CLT is produced by laminating and finger jointing softwood timber lamellas at 90 degrees to the layer below. This can encompass up to 30 layers, depending upon the required wall thickness, which are bonded together.

In order to achieve efficient levels of structural performance CLT panels are available in a number of thicknesses ranging from 66mm to 341mm, with the thickness and number of laminations being dependent upon a number of different factors such as loading conditions, span and required fire performance. CLT can be designed to accommodate a range of finishes or be left exposed in-situ to create a wonderfully natural look and feel to the building.

HECO Solution

Our range of Heco Topix Flange Head screws provide high pull out and pull through strength fixings that are perfectly suited to the CLT construction process. The highly engineered nature of CLT requires a highly engineered fixing solution that helps to complement the dramatically reduced movement found inherently in CLT systems. Due to the nature of CLT in combination with our fixing solutions, movement of the timber is dramatically reduced - with longitudinal and transverse movement restricted to 0.01% and 0.025% per percentage change in moisture content respectively.

Using Heco Topix Flange Head fixings with CLT improves the stability of the building and the strength of connection is not affected by thickness of timber being secured. The result is a flush fixing that adds to the aesthetic characteristics of the building.







Client Testimonial

CLT technology is relatively new to the UK but in a very short time we have built up a loyal CLT client base. This is what one of our CLT customers thinks of our product:

'The Heco Topix screws are superb. They allow us to engineer with confidence based on the research and engineering capabilities backed by ETA approvals. The service from Heco and distributor TT Fixings extends to installation guidelines, thread geometry, fastener surface finishes and joint design guidance, helping us to meet the structural design parameters of the many complex buildings that we undertake.' Greg Cooper – X-Lam Alliance



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