



Adoption of Unconventional Approaches in Construction: The Case of Cross-Laminated Timber

<https://research.thinkwood.com/en/permalink/catalogue1358>

Author: Jones, Kell
 Stegemann, Julia
 Sykes, Judith
 Winslow, Peter

Publisher: ScienceDirect

Year of Publication: 2016

Format: Journal Article

Material: CLT (Cross-Laminated Timber)

Application: Wood Building Systems

Topic: Market and Adoption

Keywords: United Kingdom
 Construction

Research Status: Complete

Series: Construction and Building Materials

Summary:

Achieving sustainable development requires the decoupling of economic growth from the use of non-renewable resources. This depends on industry adopting unconventional approaches to production. This research explores the root causes of barriers to the adoption of such approaches in the construction industry, and applies a behavioural model to assess whether companies are hindered by capability, opportunity or motivation.

The long history of lowest-cost tendering in construction has led to a path-dependent lock-in to conventional market-driven objectives of cost and risk reduction; it is suggested that locked-in companies lack the commercial opportunity and hence motivation, rather than the capability, to adopt approaches perceived to increase cost or risk. Such companies will therefore tend to resist unconventional approaches, restricting the physical opportunity for other project participants. This theory is explored in a case study of first adoptions of cross-laminated timber (CLT) in UK projects, using a survey and series of semi-structured interviews.

The case study found that project contexts created market niches. This provided designers, who were motivated to use CLT, the opportunity to promote its use in the project. CLT was seen as key to successful resolution of project constraints, thereby providing motivation to other project participants to adopt the material.

Online Access: Free

Resource Link

<https://doi.org/10.1016/j.conbuildmat.2016.08.088>

