Final Report for Commercial Building Costing Cases Studies – Traditional Design Versus Timber Project

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Material:	CLT (Cross-Laminated Timber)
	LVL (Laminated Veneer Lumber)
	Glulam (Glue-Laminated Timber)
Application:	Wood Building Systems
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	Design and Systems
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Research Status:	Complete

Summary:

This project developed Cost Plans for the structure of four building types; a 7 storey office building, an 8 storey apartment building, a 2 storey aged care facility and a single storey industrial shed. Each solution was designed and then independently costed for a timber option as well as a more conventional concrete framed or steel framed solution for a reference location in suburban Sydney. The site was assumed to have no significant cost implications concerning site access, ground conditions or neighbouring properties. The investigations considered only the elements of the building for which there were significant difference and ignored the cost of elements that were the same.

The timber structural solutions were found in all cases to be significantly less than the competing non-timber solution. The cost of each of the main components were found to be significantly cheaper in timber for each building.
The next best opportunity for the timber industry is the office and institutional building markets as both building forms are similar. This report shows that this market segment has great potential as this building design showed the significant cost savings particularly if a decorative ceiling is omitted.

Online Access: Free

Resource Link

http://www.fwpa.com.au/images/marketaccess/PNA308-1213-Final_Report_Commecial_Building_Cost_Plan_Final.pdf