



Blast-Resistant Testing for Loaded Mass Timber Structures

<https://research.thinkwood.com/en/permalink/catalogue843>

Organization:	Forest Products Laboratory
Country of Publication:	United States
Format:	Report
Material:	CLT (Cross-Laminated Timber)
Application:	Walls
Topic:	Mechanical Properties
Keywords:	Exterior Walls Blast Loads Protection
Research Status:	In Progress

Summary:

Opening new markets for the use of CLT that can capitalize on the strength and speed of construction allowed by the technology creates the best opportunity for wood product market growth. One such market is the Department of Defense (DoD), representing an estimated 148 million board feet of additional lumber production. Wood products have been significantly under-represented in the DoD construction market because of their perceived performance in blast conditions. The objectives of this project are to develop a design methodology and to demonstrate performance for exterior bearing CLT walls used in buildings subject to force protection requirements. This methodology should be published by U.S. Army Corp of Engineers – Protective Design Center to be used by engineers for designing CLT elements to withstand blast loads as determined by code requirements and specific project conditions.

Resource Link

<https://www.apawood.org/data/sites/1/documents/technicalresearch/rip/fplrip-4714-033-WoodWorks-Senalik-Podesto.pdf>