



Seismic Base Shear Modification Factors for Timber-Steel Hybrid Structure: Steel Moment Resisting Frames with CLT Infill Walls

<https://research.thinkwood.com/en/permalink/catalogue1723>

Author: Bezabeh, Matiyas
Tesfamariam, Solomon
Popovski, Marjan

Year of Publication: 2016

Country of Publication: Austria

Format: Conference Paper

Material: CLT (Cross-Laminated Timber)

Application: Hybrid Building Systems

Topic: Seismic
Mechanical Properties

Keywords: Timber-Steel Hybrid
Overstrength
Ductility
Force Modification Factors
Nonlinear Pushover Analysis
Adjusted Collapse Margin Ratios

Language: English

Conference: World Conference on Timber Engineering

Research Status: Complete

Notes: August 22-25, 2016, Vienna, Austria
p. 4647-4654

Summary:

In this paper, over-strength and ductility-related force modification factors are developed and validated using a collapse risk assessment approach for a timber-steel hybrid structure. The hybrid structure incorporates Cross Laminated Timber (CLT) infill walls within steel moment resisting frames. Following the FEMA P695 procedure...

Online Access: Free

Resource Link

<http://hdl.handle.net/20.500.12708/172> ↗