Carbon Fiber and Structural Timber Composites for Engineering and Construction

https://research.thinkwood.com/en/permalink/catalogue1224

Author: Anastasia Globa
Mahbube Subhani
Jules Moloney
Riyadh Al-Ameri

Publisher: American Society of Civil Engineers

Year of Publication: 2018
Country of Publication: United States

Resource Type: Journal Article

Material: LVL (Laminated Veneer Lumber)
Application: Beams
Columns

Topic: Mechanical Properties

Keywords: CFRP
Load Carrying Capacity
Ductility
Stiffness
Failure Mode
Beam-Column Joint

Language: English
Series: Journal of Architectural Engineering

Abstract:

There are environmental and potential economic advantages in using laminated veneer lumber (LVL) for building structures, but load-carrying capacity constrains uptake. Building on previous work in the field, the authors test the strategic placement of carbon fiber–reinforced polymer (CFRP) to improve the flexural strength of timber beams, investigating both...

Online Access: Payment Required

Resource Link

https://doi.org/10.1061/(ASCE)AE.1943-5568.0000318