

Article Abstract

Title:	Revision of constitutive models for repairing bridge columns with fiber polymers
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Abstract:	Federal Highway Network in Mexico has 7,230 bridges. More than two third parts were built in the period of 1960 to 1970 without considering in their design seismic loads or using design spectra with small amplitudes. The use of Fiber Reinforced Polymers (FRP) is a plausible alternative for retrofitting columns that have suffered some type of damage during a seismic event. In this paper, models of confinement with purpose of application in repairing damage of circular columns of bridges are analyzed. When evaluating different expressions for the confinement thickness of FRP in columns, a great dispersion exists. Each author of the revised models endorses analytically and experimentally its results, but for practical applications it is difficult to determine the appropriate model to be used.
Keywords:	Repair, Bridges, Columns, Fiber Polymers.