

Pushover Analysis of Beam Retrofitted Multi Storey RCC Building using CFRP

Abstract— In this study seismic response of two storey reinforced concrete building is analysed by pushover analysis. Building frame is structurally analysed by using software SAP 2000 (version 14). Nonlinear pushover analysis is performed to check the performance point. Effect of external wrapping of carbon fiber reinforcement polymer (CFRP) on failed beam investigate the improvement on performance of beam. CFRP is used as retrofitting technique. It has been concluded that after the use of CFRP for retrofitting of beam, the structure were found to be within the targeted performance level.

Keywords— CFRP, Capacity Curve, Performance Point, Seismic retrofitting, Pushover analysis