

FRAGILITY CURVES FOR MID-RISE, HIGH RISE REINFORCED CONCRETE FRAME BUILDING WITH MASONRY INFILL WALL FOR SEISMIC VULNERABILITY ASSESSMENT

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The main objective of the study is to develop the fragility curves for 5 storey (mid-rise) and 10 storey (high-rise) Reinforced Concrete frame building with masonry infill walls. The building design is carried out using Indian seismic design code. Modelling of Masonry infill walls is done as per FEMA 356. For plotting of fragility curves HAZUS MH-MR4 technical manual is used. Pushover analysis: a nonlinear static analysis is carried out in longitudinal X direction and transverse Y direction using commercially available software ETABS. The ground motion parameter taken is spectral displacement. Results show that building model M10Y is more vulnerable when compared to other building models.

