

Efficient Moment Frame Structure

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Abstract : A different concept for designing and detailing of reinforced concrete precast frame structures is analyzed in this paper. The new detailing of the joints derives from the special hybrid moment frame joints. The special reinforcements of this alternative detailing, named modified special hybrid joint, are bondless with respect to both column and beams. Full scale tests were performed on a plan model, which represents a part of 5 story structure, cropped in the middle of the beams and columns spans. Theoretical approach was developed, based on testing results on twice repaired model, subjected to lateral seismic type loading. Discussion regarding the modified special hybrid joint behavior and further on widening research needed concludes the presentation.

Keywords : modified hybrid joint, repair, seismic loading type, acceptance criteria

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