

عنوان مقاله:

Usage Special Truss Moment Frames For Lightweight in Building

محل انتشار:

اولین همایش زلزله و سبک سازی (سال: 1384)

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خلاصه مقاله:

In this paper special truss moment frames for light weighting in construction was evaluated. STMF are intended to dissipate energy through flexural yielding of the chord members and axial yielding and buckling of the diagonal web members in the special segment. It is desirable to provide certain minimum shear strength in the special segment through flexural yielding of the chords members and limiting the axial force to a certain maximum value. Plastic analysis can be used to determine the required shear strength of the truss special segments under the factored earthquake load combination. Truss-girder moment frames have often been designed with littler regard for ductility. Research has shown that such truss moment frames have very poor hysteretic behavior with large, sudden reductions in strength and stiffness due to buckling and fracture of web members prior to early in the dissipation f energy through inelastic deformations. The resulting hysteretic degradation as illustrated results in excessively large story drifts in building frames subjected to earthquake ground motions with peak accelerations n the order of 0.4 g to 0.5g. This system recommend for using in region with earthquake hazard. The research work led to the development of special truss girders that limit inelastic deformations to a special segment of the truss. Extensive testing of full-scale subassemblies with story-high columns and full-span special truss girders has validated special Truss Moment Frames (STMF).

کلمات کلیدی:

Special Truss Moment Frames (STMF), lightweight

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