

Seismic retrofit of RC frame with expanded metal

Phaiboon Panyakapo^{1,*}

¹Sripatum University, Bangkok, Thailand

ABSTRACT

Generally, the damage of the commercial building during an earthquake was due to soft story failure of the ground floor columns because the ground floor columns are more slender and higher than the upper floors. This paper presents the retrofit of the reinforced concrete frame using expanded metal. The rigid frame specimen was chosen from the typical 3-story commercial building. Two specimens included the controlled rigid frame and the strengthened frame using expanded metal sheet. The specimens were subjected to lateral load up to failure. It was found that the effect of strengthening enhanced the lateral strength up to 42

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