عنوان فارسی مقاله:
اثر شاخص‌های سازه‌ای و سطح خطر بر روی برآورد تلفات لرزه ای سازه‌های دارای قاب چوبی سبک

عنوان انگلیسی مقاله:
Influence of structural properties and hazard level on seismic loss estimation for light-frame wood structures

توجه!
این فایل تنها قسمتی از ترجمه می‌باشد. برای تهیه مقاله ترجمه شده کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک کنید.
6. Summary and conclusions

Based on detailed nonlinear dynamic model responses, vulnerability analysis and long term loss simulation were combined for a typical North American style residential building with variants. These included structural properties, construction quality, and the level of seismic hazard. Both the event and long term loss were assumed to be random variables whose distribution was controlled by the structural and hazard environment inputs. Through the examination of the results, the following conclusions related to the effect of structural properties and seismic hazard on the predicted loss for a typical wood frame building can be made:

There is an Intensity Sensitive Region associated with the modification of structural strength and stiffness. As a direct result, the mitigation of loss due to changes in structural properties or construction quality is limited for very small or very large earthquakes; the expected loss to the example buildings with different configurations used in this study was not affected significantly by structural properties for earthquakes under 0.3g spectral acceleration or the ones greater than 2.6g. Within the Intensity Sensitive Region, the impact of construction quality on event loss is more significant in stronger configurations than in weaker configurations.

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