

10. Study on Noise of Demolition Method with Seismic Isolation Retrofit

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Recently, methods that involves repair of building frames have been implemented for improving the durability and seismic performances of buildings. Seismic isolation retrofit is one of such methods for improving seismic performance. Since it involves cutting the frame for installing dampers, the work may produce large noises depending on the method used to cut the frame. To investigate the noise produced during various dismantling methods, an experiment was conducted using a full-scale model. The experiment showed that cutting the frames using wire saws or wall saws produced less noise than hammering the frames using breakers, etc., and thus was more applicable for buildings in service. The effects of temporary enclosure on noise control were also tested to identify points of noise control.

Key words : building repair, seismic isolation retrofit, demolition method, noise, noise control