Maintenance & Servicing of Earthquake Recording Instrumentation In Buildings

TECHNICAL BULLETIN



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This Technical Bulletin establishes the maintenance and servicing requirements for Earthquake Recording Instrumentation required by Appendix Chapter L of the California Building Code (adopted by Land Development Code Section 145.0107 (e)) or when required as a condition of approval if a non-linear response history procedure is used in the design of a high-rise building.

Installation of a recording system that meets the requirements in <u>California Geological Survey (CGS)</u> <u>System Requirements for structural systems</u> will result in the California Strong Motion Instrumentation Program (CSMIP) agreeing to provide long term monitoring of the recording system to verify correct operation.

Required earthquake recording instrumentation equipment shall be serviced and maintained in proper working condition to provide measurements during seismic events. The installation, servicing or removal of the instrumentation shall be done by a maintenance agency authorized to do so by the manufacturer of the equipment.

I. MAINTENANCE AND SERVICING

- A. The building owner shall maintain on-site a log book documenting on-site maintenance and service.
- B. The maximum service interval shall be not more than one year. If the instrumentation is inoperative at service inspections, then a reinspection and servicing shall be required at least semi-annually until the problem is corrected. The authorized maintenance agency shall determine the shorter period so the instrumentation is continually operative.
- C. Upon completion of the maintenance/ servicing, the building owner shall certify to the Building Official, in writing, that the equipment is in operating order.
- D. For instrumentation systems monitored by CSMIP, CSMIP will monitor and report on the

Documents referenced in this

- California Building Code, (CBC)
- Land Development Code Section 145.0107 (e)

apparent health of the recorder, accelerometers and displacement sensors.

Other sensors will also be monitored and apparent health reported if the building owner or representative provides information on the characteristics of the signal produced by the sensors in their operational and failed states. CSMIP will perform periodic state-ofhealth checks and functionality tests remotely via the provided phone line and notify the building contact person and the Building Official when any repairs are needed.

II. OUT OF SERVICE REPAIRS

Where the instrumentation maintenance agency finds that the instrument must be removed from the building for repair, the instrument shall be returned and made operative as soon as possible but not exceeding 60 days from the removal date.