

Fail Safe Requirements For Earthquake Protective Devices (EPD)

Elevator code requires that earthquake protective devices (EPD) be “Fail-Safe”. This means that if power is lost to the EPD or if it fails, it will signal the elevator controller that it is in the “tripped” state.

The Load Tech seismic switch (Earthquake Protective Device) is Fail-Safe. If there is a power loss or a failure of the device, it will default to the tripped state.

Code also requires that if the EPD is volatile (Doesn't remember its state after losing power) the elevator controller shall be non-volatile (Remembers its state after losing power).

Most modern elevator controllers are non-volatile and will remain in “seismic” mode after the EPD is reset, and after losing power. Some older elevator controllers are volatile. They won't remember their seismic state after a power cycle.

The Load Tech seismic switch can be configured for volatile mode or non-volatile mode. In the default volatile mode, the device must be reset manually or with a power cycle. This is acceptable with modern non-volatile controllers. For use with older volatile controllers the device should be configured for non-volatile mode. In this mode the device remembers its state even after a power cycle and can only be reset with the manual reset button or with a CAN reset command.

See the Load Tech SS04 installation instructions for easy steps to change the device from volatile to non-volatile.