

# STOP, CHECK, VERIFY:

## Is your installation earthquake safe?



**This is New Zealand. It's not IF, it's WHEN an earthquake will happen. Every installation of a heat pump and related equipment MUST comply with NZS4219.**

**NZS4219 prevents loss of life and protects property by ensuring engineering systems in buildings are securely restrained in an earthquake.**

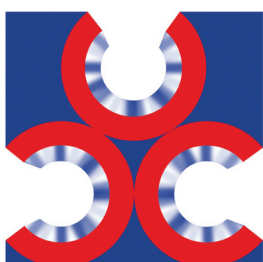
NZS4219 specifies that all systems which are not structural components of the building must have restraints that transfer load to the structure.

Restrain all air conditioning units, heat pumps, water heaters, electrical equipment, piping and ducting, pumps, tanks and fans. Ensure it is safe and continues functioning after an earthquake.

If in doubt, shout out! If it is heavy or suspended, it should be restrained! If you spot any equipment (not just the items you are installing) that looks poorly restrained, shout out.

### WHAT TO LOOK OUT FOR:

- Base units, condensers, fan coils securely bolted to the structure or on approved seismic vibration isolators
- Lateral supports in place at the top or bottom of the unit
- Condensing units are bottom-heavy anchor them at the bottom (be aware of overturning forces)
- Follow proprietary system installation instructions (e.g Monkey Toe, Unistrut, Boardwalk)
- Check for sway restraints on suspended equipment
- Roof mounted equipment? Consider wind loading and weight distribution
- Fan-coils and heat pumps on a wood-framed floor or roof – should be directly anchored through the cabinet on a plywood platform or wooden frame support or on approved seismic vibration isolators
- Check with a structural engineer if in doubt! Especially where lightweight roofing is used or for custom installations
- Do the installations look like they are secure? A visual inspection can be telling.
- Do not install condenser units on top of verandas. This is dangerous and contrary to city bylaws



Climate Control  
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***Do a seismic check now on new and existing installations. Lives depend on it. Check with your boss, architects, or structural engineers.***

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