

ISOLATING FIRE SYSTEMS

Fire Systems with smoke detectors can be a problem when using smoke machines, fogging, creating dust or using cooking appliances, so can these just be isolated to avoid false alarms?

This is a common question, but the answer is normally no. Fire alarm systems are required to be installed to protect life safety in a building. The building code requires buildings when occupied by large numbers of people or where long egress routes are present to have smoke detectors installed to automatically raise the alarm and alert occupants to evacuate. If the detectors are turned off during an event, then this defeats the purpose of the system.

Smoke detectors are unable to tell between smoke from a real fire against pretend smoke, cooking fumes or dust which will cause them to activate and evacuate the building. Unfortunately where smoke detectors are fitted, smoke machines and other causes of smoke will activate the system.



Some buildings are allowed a facility to isolate some smoke detectors while they have an event, but these would normally have a backup system such as sprinklers or thermal detectors in the same space. Occasionally permission is granted for a system to be isolated while a 'fire watch' is in place – dedicated people who monitor for a fire and operate the alarms manually in an emergency. All of these situations require permission from both the Territorial Authority (the local council) through a building consent and Fire & Emergency NZ through an application to amend your Emergency Evacuation Scheme. Such systems are a control which automatically de-isolates these systems after a set period of time.



Fire alarms are an important part of the life safety features of buildings. It is an offence under the Building Act to use or knowingly allow others to use a building without the necessary fire safety features of the building fully operational, and it is an offence under the Fire Service Act to knowingly interfere with a fire alarm. These include substantial fines and prison sentences for those who are convicted.



An inappropriate fire system can cause false alarms and lead to complacency of occupants who eventually do not evacuate. If you wish to change your system, you should speak to FFP or your fire engineer to discuss the possibilities, and understand the process of having this approved by both the Territorial Authority and Fire & Emergency NZ.