

Sprinkler systems



NZI Risk Solutions™

'Helping our customers stay
in business by reducing risk'



About NZI Risk Solutions

NZI has extensive experience in providing expert risk management advice to help our commercial customers remain in business. We have used this industry knowledge and developed a suite of fact sheets covering risk management issues to help you take control of your business risks.

Why install an automatic sprinkler system?

‘Sprinkler systems have become the most widely used and most reliable automatic means of fire protection. Fire sprinkler systems automatically detect a fire, transmit an alarm as a result of water flow and control or extinguish the fire. They are located in places where people cannot always be present and operate only as needed in the immediate vicinity of the fire. They have important life safety connotations, and can prevent fires from reaching destructive proportions which may mean the difference between a minor interruption and a prolonged or permanent shutdown’ – ‘Sprinklers Simplified’, Standards Australia.

The facts about sprinkler systems

- ▶ Automatic fire sprinklers provide significant protection for the occupants of a building, as well as the environment by minimising the effects that a major structural fire could have.
- ▶ Only the sprinkler heads within the vicinity of a fire will activate – all the sprinkler heads do not go off at once.
- ▶ 80% of fires are controlled by 10 or fewer heads.
- ▶ Sprinklers rarely cause false alarms.
- ▶ Sprinkler head failures are rare.
- ▶ Sprinklers discharge far less water than fire hoses.



Benefits of sprinkler system protection

There are many benefits from installing an approved automatic sprinkler system, including protecting people and your assets. These systems can prevent costly 'downtime', assuring continuity of business operations and safeguarding both jobs and business income. By installing this type of fire protection, you can help prevent your business from losing customers, who may go elsewhere during periods of non-supply.

Other benefits include:

- ✓ 24 hour automatic fire detection.
- ✓ Fire Service response-to-system activation.
- ✓ Early fire detection and automatic extinguishment in many cases.
- ✓ Water damage is generally minimal, less than would be caused by using hoses at high pressure.
- ✓ Most fires are controlled by operating 2 or 3 sprinkler heads in the immediate vicinity of the fire; it is a fallacy that all sprinkler heads will operate in the event of a fire.
- ✓ Early fire extinguishment reduces the potential for smoke damage.
- ✓ Sprinklers reduce the risk of serious business interruption caused by fire. Many businesses that suffer a serious fire never fully recover, as a result of losing customers and continuity.
- ✓ Insurance underwriters recognise the reduction in risk attributable to sprinklers and significant premium discounts may be obtained by their installation.
- ✓ Some businesses, which would not otherwise qualify for insurance, may obtain cover by installing sprinklers.
- ✓ When constructing new premises or altering existing ones, sprinkler protection can reduce building costs as Building Code dispensations are available.
- ✓ Reinstatement costs following fires in sprinkler protected buildings tend to cost 80% less than equivalent fires in non-sprinkler protected buildings. *'Sprinkler System Facts'*
– NZ Fire Service.

"These systems can prevent costly 'downtime', assuring continuity of business operations and safeguarding both jobs and business income."



New Zealand standards

If you're considering installing automatic fire sprinkler systems on your premises, you should read the information provided by the New Zealand Building Code and the Fire Safety Evacuation of Buildings Regulations, in addition to the New Zealand Standard. A summary is given below.

The New Zealand Standard NZS 4541:2013 – Automatic Fire Sprinkler Systems: *'Provides for the design, installation and maintenance of sprinkler systems so that the systems readily achieve their fire control function. That function is twofold: firstly the fire should be controlled within a specified area and secondly, control should be achieved before levels of toxic by-products of combustion become life-threatening.'*

It is intended that the Compliance Documents to the New Zealand Building Code and the Fire Safety Evacuation of Buildings Regulations will reference this addition of the Standard, NZS 4541:2013 as the means of compliance.'

Take control

We hope you find this information useful and we encourage you to manage your business risks by implementing these risk control measures.

For additional fire safety information visit the New Zealand Fire Service at www.fire.org.nz

To find out more about how you can protect your business, WorkSafe NZ offer free information, tools and resources. Alternatively, your business could subscribe to Standards NZ for more detailed information.

www.nzi.co.nz

These guidelines are of a general nature only. They are not intended to be a comprehensive list of all the steps you should consider taking to reduce the risk of damage and financial loss resulting from fires, nor is it intended to be legal advice.

NZI, a business division of IAG New Zealand Limited. NZI Risk Solutions™ is a registered trademark of IAG New Zealand Limited.