AON SPRINKLER CERTIFICATION



Aon New Zealand Aon Sprinkler Certification Aon Building, 1st Floor, 4 Fred Thomas Drive, Takapuna, North Shore City Telephone: 09 – 486 9761 Fax: 09 – 486 0112

Aon Sprinkler Certification Technical Note		
Note Number: TN-16-29	Issue: One	Date: 1 December 2016
Subject	Compliance with Standards	
Notice: Aon Sprinkler Certification Technical Notes provide guidance notes which may be used in certification of sprinkler installations by Aon New Zealand. If sprinkler installations are being certified by any other sprinkler system certifier, these Technical Notes may not apply.		

1. Building Consent Requirements

As Aon Sprinkler Certification's Sprinkler System Certificate of Compliance is relied on by many stakeholders, Aon needs to identify as to what standard the system will be installed too. Aon will audit (but not review in detail) the Fire Safety Design Report and the System Specification to ascertain if these documents have any significant requirements which exceed the minimum requirements of the installation standard, and will highlight this in the review letter.

In some cases, Aon is informed that the requirements of the Fire Design exceed the requirements of the Standard and have been excluded from the contractor's tender. As Building Consent Authorities rely on Aon's certification as part of the evidence for the building's Code Compliance Certificate, we are unable to issue a certificate if the installed installation differs from that detailed in the fire report the requirements of the Building Consent may not have been met.

• An example we have seen on occasion is the specification of quick response heads in an office environment. While not required by the Standard, the Fire Engineer's design for smoke control may be based on the use of quick response sprinklers.

2. Dispensations

On occasion, Aon is asked to provide a dispensation from the requirements of the standard. A dispensation is a term that was used by the Insurance Council of New Zealand, who used to certify sprinkler systems to satisfy the needs of the insurers. Their certificates were not intended to be largely relied on by other stakeholders, which include Territorial Authorities, Building Owners, Fire Service and the like.

As Aon's certificates are relied on by a variety of stakeholders, it is not possible to provide dispensations. The Standard does provide the SSC areas where discretion and engineering judgement can be used to allow reliable fire protection when balanced against cost. These areas include:

- Clause 102 Interpretation judgement is accepting hard or soft metric conversions.
- Clause 117.1 alternative designs based on full scale fire testing, or as published in other standards.
- Clause 205 and 206 judgement may be used in some cases in establishing if exposure hazards exist.

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- Clause 401 application of new technology.
- Clause 511.13 other situations.
- Clause 512.5 sprinklers below suspended ceilings.

What were previously termed "dispensations" must now be justified using these clauses. Care must be taken that the design approach is holistic and considers all aspects.

For example, NFPA13-2016 clause 8.5.2.2 provides guidance on when privacy curtains used in hospitals and the like can be ignored. No equivalent clause exists in NZS4541, and hence, this approach has been applied under the auspices of NZS4541 clause 117.1. However, if being used, ASC would expect to see NFPA13 design criteria – namely a design density of 4.1mm/min over 139m², as against NZS4541's requirement of 6 K8 sprinklers at 50kPa.

Aon notes that in cases where Fire Engineers have been able to demonstrate that there is sound reason for not complying with the Standard but that the departure cannot be justified under the above referenced clauses, Aon has suggested that the Sprinkler System be specifically consented as one deviating from the normative requirements of the Standard.

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