

# AON SPRINKLER CERTIFICATION



## Aon New Zealand

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<b>Aon Sprinkler Certification Technical Note</b>		
<b>Note Number:</b> <b>TN-21-56</b>	<b>Issue: 1</b>	<b>Date: 24 August 2021</b>
<b>Subject</b>	<b>Alternative Design Criteria</b>	
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.		

NZS4541:2013 clause 117 and NZS4541:2020 clause 1.19.1 allows the Sprinkler System Certifier to accept alternative design criteria, when judged against “recognised” standards and codes of practice,

This Technical Note is a reminder that when proposing the use of alternative design criteria, that the codes or standards need to be applied holistically.

For example, FM Data Sheet 8-9 now provides design criteria for roof level only sprinkler protection of storage facilities under ceilings up to 16.8m high. The Interim Revision to this Data Sheet dated October 2020 introduced a requirement that flue spaces for multiple row racking need to be a minimum of 150mm in width. Previously, the requirement for flue spaces were that ideally, they needed to be 150mm wide, but were allowed to have a minimum net clear width of 75mm.

This change to the FM Data Sheet followed full scale fire testing.

Chris Mak

## MANAGER – AON FIRE PROTECTION

Multiple-row racks void of any solid shelving can be considered open-frame when they are provided with minimum 6 in. (150 mm) wide vertically aligned longitudinal and transverse flue spaces roughly every 5 ft (1.5 m).

When multiple-row racks void of solid shelving are not provided with minimum 6 in. (150 mm) wide vertically aligned longitudinal flue spaces, they can still be considered as open-frame when:

- A. Minimum 6 in. (150 mm) wide vertically aligned transverse flue spaces are provided roughly every 5 ft (1.5 m), and
- B. The rack depth does not exceed 20 ft (6.1 m), and
- C. Minimum 8 ft (2.4 m) wide aisles define the depth of the multiple-row rack.