



27 March 2006

FI 048

**Question:**

**Interpretation:**

**Std: NZS 4541**

**Issued by the Fixed Fire Protection Group**

Is it correct:

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| <p>1. That, contrary to Clause 510.1, obstructions may be permitted at the ceiling within 1 m on either side of the head, or within 2.8 m of the wall.</p> <p>2. That the informative note to Clause 510.3 concerning the maximum spacing of residential sprinklers along walls should also apply to the normative requirements of Clause 510.1 concerning obstructions at the ceiling within the no-go rectangle.</p> <p>3. That obstructions within the no-go rectangle described in Clause 510.1 should be permitted provided they remain above the plane of the sprinkler deflector, contrary to the requirements of NFPA 13 Clause 10.4.7 which specifically prohibits obstructions such as light fittings within 2.4 m of residential horizontal side-wall sprinklers.</p> | <p>1. Clause 510.1 applies to vertical or upright sidewalls. For horizontal sidewalls refer to SSC listing approval as per clause 401.1</p> <p>2. NO, for standard upright or pendent heads clause 510.1 applies, otherwise use listing criteria</p> <p>3. NO. As addressed in Q1 and Q2, use listing criteria.</p> |
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Reviewed in 2008 and deemed not applicable to NZS 4541:2007 (applies to 2003 edition)

- Notes:
- a. The NFPA requirement for clear space around horizontal side wall heads is more onerous than that of NZS 4541:2003.
  - b. Major head manufacturers refer to NFPA 13 for obstruction rules for residential horizontal sidewall heads.
  - c. The clear space requirement around residential horizontal sidewall heads is understood to be required to prevent direct obstruction of the spray pattern, and assist with the formation of the discharge pattern which involves interaction of the air barrier at the ceiling.

4. That where the Standard has a prescriptive requirement for the use of a sprinkler system component, then the most conservative of either the Standard's requirement or the listing requirements should be applied.
4. For equipment listed under 401.1 the listing criteria applies. Otherwise this Standard applies.