



27 October 2006

Question:

Std: NZS 4541

Fl 060

Interpretation:

Issued by the Fixed Fire Protection Group

Is it the intention of NZS 4541:2003 Clause 511.7 to provide automatic fire sprinkler protection beneath fixed or furling type fabric canopies communicating with the sprinkler protected building and extending out over out-door/pavement cafes and the like?

The requirements for protection or separation in cases such as these need to be considered in terms of clauses 205 or 511.11 with regard to fabric structures constructed externally to the protected building.

Each situation shall have regard to the following:

- a) Could fire spread into the protected building or its cladding, and overwhelm the sprinkler system?
- b) Will heat from a fire reach sprinklers sufficiently early and will the discharge from other sprinklers will satisfactorily control the source of heat?
- c) Is the fabric structure itself a fireload, or are only the goods stored beneath the fireload?
- d) Are there sources of ignition present under the fabric structure?

The Committee has identified two typical fabric structures, and protection or separation shall be provided as follows.

(1) In the case of a "sail" (piece of canvas or other textile material extended on rigging), retractable, or furling type fabric structure attached to the side of a protected building and used to provide shelter, protection or separation shall not be required unless:

- a) the area beneath is used for the storage of combustible commodities, or;
- b) the area beneath contains a significant hazard such as the use of LPG or solid fuel heating appliances.

If separation is then required, it shall comply with 205.

2) In the case of a "lean-to" on the side of a protected building and is used to provide shelter, protection or separation shall not be required unless:

- a) the area beneath the lean-to is used for the storage of combustible commodities, or;
- b) the area contains a significant hazard such as the use of LPG or solid fuel heating appliances.

If separation is provided, it shall comply with 205. External sprinklers shall comply with 517. If protection is provided, it shall be in accordance with the respective hazard classification.

Fabric structures that fall outside the above scope require approval of the SSC, whether installed internal or external to the building envelope.