



22 August 2006

FI 059

**Question:**

Std: NZS 4541

**Interpretation:**

Issued by the Fixed Fire Protection Group

Is it the intent of the standard that:

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| <p>a) the pump supply pipe velocity in a pipe between a tank and a pump can exceed 1.8 m/s (as defined in 606.3.9 (a)) if the provisions of 607.1.1 (b) are met?</p> <p>b) the provisions of 403.10.2 require that the pump supply pipe velocity in a pipe between a towns main connection and a pump be limited to a maximum of 1.8m/s in accordance with 606.3.9(a)?</p> | <p>a) No. The requirements of 606.3.9(a) and 607.1.1(b) are not mutually exclusive – both requirements must be met.</p> <p>b) No. 606.3 applies to tanks. The reference to 606.3.9(a) in 403.10.2 is intended to remind the user of the Standard that the suction supply pipe between a tank and pump has limitations on minimum size.</p> |
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**Notes:**

(1) The interpretations committee considers that clause 403.10.2 should be interpreted to more correctly read "Pipe sizes for pump suction from tanks are specified in 606.3.9."

(2) Although 606.3.9 applies to suction from tanks, it is prudent design to ensure that any reducers, butterfly valves or bends are not installed within 10 pipe diameters of the suction flange and the pipe be arranged to avoid the possibility of trapping air in the suction pipe.

(3) Although NZS4541 does not provide limitations on velocities in the towns' main connection, in terms of good engineering practice, the minimum suction pipe nominal diameter shall be not less than that of the pump suction inlet connection for at least 10 pipe diameters from the suction inlet.

Reviewed in 2008 and deemed not applicable to NZS 4541:2007  
(applies to 2003 edition)