TOPIC: Freeze Protection for Pipes, Fittings and Valves UPC/3/#1


REVISED: March 1, 1999

REFERENCE: Sections 313.6, 605.3 and 605.6 – Plumbing Specialty Code

SUBJECT: Location of Main Water Supply Shut-off Valve and Protection of Water Supply Piping in Unconditioned Space

QUESTION: 1. Where shall the main water supply shut-off valve be located?

RESPONSE: 1. A main water supply valve is required in all circumstances and shall be located as follows:

Outside a building.
The main water supply valve may be located outside a building where:
1. It is installed a minimum of 24 inches below grade, and
2. It is located within an access box or vault. The access vault or box shall be large enough in size to allow easy access to the valve.

Inside a Garage or Warehouse.
The main water supply valve may be located above grade in an unconditioned garage or warehouse when all the water piping, including valves, are protected from freezing. A low point drain at or just above the valve is recommended, but is not required by code.

QUESTION: 2. When water pipes and valves are located in unconditioned spaces, what type of freeze protection is allowed?

RESPONSE: 2. All water pipes, valves, fittings and appurtenances, installed
in unconditioned spaces shall be protected from freezing by using either pipe insulation or a pipe heating cable system.

Where pipe insulation is used, it shall have a minimum wall thickness of ¾ inches, and shall be installed in accordance with the manufacturer’s installation instructions.

Where a pipe heating cable system is used, it shall be a listed system, and shall be installed in accordance with its listing.

Additional alternate methods for freeze protection may be used. The Bureau Director shall approve all alternate methods prior to installation.

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