

DEPARTMENT OF LICENSES AND INSPECTIONS CODE INTERPRETATION No. F-9901		CODE OF GENERAL ORDINANCES OF THE CITY OF PHILADELPHIA <hr/> TITLE 4 — BUILDING CONSTRUCTION AND OCCUPANCY CODE
SUBJECT OF INTERPRETATION: FIRE DEPARTMENT STANDPIPES		REFERENCE CODE SECTION(S): F-503.5(1)
ISSUED BY		
NAME: David L. Wismer, P.E., C.B.O.	SIGNATURE	ISSUE DATE June 4, 1999
TITLE: Director of Planning and Code Development, Dept. of Licenses and Inspections		PAGE 1 OF 2

QUESTION:

The *Philadelphia Fire Prevention Code* effective on January 1, 1995, contains Section F-503.5(1) which is still current and states:

“All buildings having floors used for human occupancy which are located more than six stories above grade shall have Class I standpipe systems (Fire Department use). Existing buildings, without Class I standpipe systems, which do not exceed 275 feet (84 m) in height, may install a dry, interconnected standpipe system, without a water supply.”

Is it the intent of this section to require existing Fire Department standpipes to be located in the exit stair enclosures?

Is it the intent of this section to not accept conversions of Class II standpipes that have had 2½-inch hose connections installed on them for the attachment of Fire Department hoses?

DISCUSSION:

A joint meeting of the Fire Department and the Department of Licenses and Inspections was held to formulate an interpretation regarding the above stated questions.

Many buildings, especially those built prior to application of the *1949 Philadelphia Building Code*, were equipped with only a Class II standpipe located in the corridor. These standpipes were typically designed to provide 70 gallons per minute (gpm) at a residual pressure of 25 pounds per square inch (psi). Current standpipe requirements, based on today's fire fighting equipment, are for 500 gpm at 100 psi residual pressure.

Fire Department operations require the staging of fire fighting operations from within an exit enclosure. The stairway provides a fire-resistance rated place of refuge for such staging which includes connecting to the standpipe and advancing into the fire area, frequently from the floor below the fire.

INTERPRETATION:

It is the intent of Section F-503.5(1) to require Class I standpipes located in the exit stairways. These are **not** to be the converted Class II type. Existing buildings with open balcony or open vestibule smokeproof enclosures are also subject to this requirement. Buildings less than 275 feet in height, have the option to install a dry standpipe without a permanent water supply in consideration of the unheated stair. Where buildings exceed 275 feet in height, a permanent water supply is required.

An **existing** single Class I standpipe located in an enclosed exit stairway shall be acceptable. Should the building not contain at least one Class I standpipe located in an enclosed exit stairway, a new standpipe system shall be installed to satisfy Section F-503.5(1) of the Fire Prevention Code.

DIRECTION:

Based on the above interpretation, the following actions will be taken by the department.

1. An **existing** single Class I standpipe located in an enclosed exit stairway shall continue to be accepted for compliance with the Building and Fire Prevention Codes.
2. Inspectors shall issue violations to existing buildings that contain floor levels used for human occupancy above six stories, where such buildings do not contain at least one Class I standpipe located in an enclosed exit stairway.
3. When a new standpipe system is installed to satisfy the Fire Prevention Code, plans examiners shall require that the system conform with Section F-503.5(1) of the Fire Prevention Code.