



Chris Christie
Governor

Kim Guadagno
Lt. Governor

State of New Jersey
Department of Community Affairs
Division of Codes and Standards
PO Box 802
Trenton, New Jersey 08625-0802



Richard E. Constable III
Commissioner

BULLETIN NO.

14-2

Date: **June 2014**
Code Ref. Update:
February 2016

Subject: **Use of NFPA 14 Manual Wet Fire Standpipes** (*applicable to projects using editions that predate the IBC/2015*)

Reference: **N.J.A.C. 5:23-3.14, Building Subcode, Sections 905.2.1, 905.2.2 & 905.3.1**

This Bulletin provides guidance on allowing the installation of a NFPA 14, Class I, manual wet standpipe system or other listed type standpipe systems in buildings that have either a NFPA 13 or 13R sprinkler system installed. Currently, through modifications that were made in the 2000 edition of the International Building Code (IBC), Section 905, there are unintended consequences of the amendments that affect the requirements for the residual water pressure at the topmost outlet when a Class I standpipe is allowed to be installed. The amendments carried forward the requirements for automatic water supplies from the 1996 BOCA National Building Code. Section 905.2.2.1 requires an automatic water supply to the standpipe that complies with 905.2.1 when the building is not equipped with a NFPA 13 fire sprinkler system. A 65 psi residual pressure is required at the topmost outlet while flowing the required gpm for the specific occupancy, ranging from 750 gpm to 1250 gpm. Only buildings with NFPA 13 fire sprinkler systems installed are exempt from the 65 psi residual requirement due to the modification made in the 2000 IBC. This modification has been brought forward in both the 2006 and 2009 IBC.

IBC Section 905.3.1 requires a Class III system to be installed when a building has a floor located 30 feet or more above or below the level of fire department vehicle access. When either a NFPA 13 or 13R fire sprinkler system is installed, a Class I fire standpipe system may be installed. When a Class I system is installed, there is no requirement for fire hose to be installed; there is only a requirement for 2½ inch hose valves for fire department use.

BULLETIN

The unamended IBC has a requirement to install standpipe systems in accordance with IBC Section 905 and NFPA 14. NFPA 14/2007, Section 3.3.12, defines six types of standpipes, as follows: automatic; combined; automatic and manual dry; manual; semiautomatic; and wet. The unamended code allows the use of these systems. Section 3.3.15.1 defines Class I standpipes as providing 2 ½ inch valves for fire department use. Section 5.4.1.1 allows a Class I standpipe to be any one of the five listed in Section 5.2 and these systems are as follows: automatic dry; automatic wet; semiautomatic dry; manual dry; and manual wet. Section 5.2.5, manual wet standpipes, is similar to the UCC requirement in Section 905.2.1, which applies only when a NFPA 13 system is installed. Manual wet standpipes are required to have the water supply available for the sprinkler system and are not required to supply the automatic flowing demand of the standpipe. In any case, the standpipe must be properly sized to meet the flow demand required at the hose valve connections. Simply put, once the fire department arrives, it can tie into the fire department connection and supply the standpipe with the required pressure to meet the demand of the hose it will bring to connect to the 2½ inch standpipe hose valves.

As such, the Department recommends that the use of a NFPA 14 Class I manual wet standpipe be allowed when a NFPA 13R fire sprinkler system is installed without having to maintain the automatic residual pressure of 65 psi at the top most outlet. A variation is required for this type of standpipe system. The Department will be proposing modifications to N.J.A.C. 5:23-3.14 to correct this issue.