

U.S. Fire Administration / National Fire Academy



Topic: Standpipe Types

Learning objective: The student shall be able to describe the five categories of standpipe types described in the national fire protection standards.

Dtandpipe systems for fire protection service are categorized into five types. These types differ from the three standpipe classes with which fire protection professionals are familiar, and are descriptions of the operating modes.

The standpipe types:

- **Automatic--Dry.** This standpipe type is connected to a permanent water supply capable of meeting flow and pressure requirements. It is filled with air under pressure. It uses a valve (similar to a dry pipe sprinkler valve) that releases water into the standpipe system when a hose station outlet is opened.
- Automatic--Wet. This standpipe type is connected to a permanent water supply capable of meeting flow and pressure requirements. It is filled with water at all times.
- Semi-automatic--Dry. This standpipe type is connected to a permanent water supply capable of meeting flow and pressure requirements. It employs a valve (similar to a deluge valve) that releases water into the standpipe system when a remote operating device is operated.
- Manual--Dry. This standpipe type is not connected to a permanent water supply. The fire department connects to a hydrant and supplies the system.
- **Manual--Wet.** This standpipe type is not connected to a permanent water



supply. The fire department connects to a hydrant and supplies the system. The standpipe is filled with "priming water" to reduce the time it takes to get water to the hose station outlets.

For additional information, refer to NFPA 14, Standard for the Installation of Standpipe and Hose Systems.