



## Coffee Break Training - Fire Protection Series

### Inspection Techniques: Conducting Thorough Preoccupancy Inspections

No. FP-2014-23 June 10, 2014

**Learning Objective:** The student will be able to identify methods to assure construction and installation projects are completed as required.

**B**uilding sites are busy places, especially as a project winds down from construction and is getting near the time the work is finished. Contractors, tradespersons, vendors, owners, inspectors and even an occasional curious bystander can be seen scrambling through the site putting the finishing touches on the work.

Often, fire and building inspectors are among the last professionals to visit the project to assure all of the life safety, fire protection, sanitation and structural elements are in compliance with the codes to ready the building for public occupancy. Once the inspections have been completed and the officials are satisfied with the work, the model codes authorize the code official to issue a “certificate of occupancy” that allows the public to use the structure.



The fire department connection to this combination sprinkler and standpipe system was never connected to the riser. (Photo/Byron Blake)

The photograph illustrates a significant oversight from a final inspection: The exterior fire department connection was never paired with this check valve at the base of the combined sprinkler/standpipe riser. The horizontal obstruction is the branch line that supplies the sprinkler beneath the stairs. Rather than reroute the fire department connection supply or sprinkler branch line, someone just walked away from the project.

To avoid dangerous, embarrassing and potentially litigious mistakes like this, contractors and inspectors should conduct thorough walk-throughs of their projects to assure all portions of the work have been completed as required.

Fire and building inspectors should carry an approved set of project plans — “as built” that reflect changes made during construction or installation — to compare the work to what was designed to be installed. For some systems, such as fire alarm and detection, sprinkler, and commercial kitchen range hood suppression systems, inspectors might consider developing checklists or punch lists of elements that should be in place.

The model fire codes and standards also require the installer to provide a “certificate of completion” that should serve as the record for responsible project completion.

For more information and techniques to avoid errors such as this, consider enrolling in the National Fire Academy’s two-day class “Commissioning New Occupancies for Code Officials (F/W0215).” Information can be found at <http://apps.usfa.fema.gov/nfacourses/catalog/details/10403>.



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