

U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Checking Fire Department Connections

Learning objective: The student shall be able to list common impairments to fire department connections for water-based fire protection systems.

The fire department connection is an essential adjunct to many water-based fire protection systems. It may serve as a secondary water source for automatic sprinklers, and may be the sole connection point of a fire standpipe system.

The fire inspector should closely check the fire department connection when conducting regular protective inspections. Here are just a few things to examine:



- Protective caps or plugs should be in place to prevent obstructions being placed inside the fire department connection.
- The female swivel connections should be free to spin. They should be lubricated with powdered graphite or some other lubricant that will not leave a gummy residue.
- The threads should be smooth and undamaged. The female swivel should be round. Consider using a male adapter to check all the fittings for correct thread cuts.
- Visually inspect the interior for obstructions.
- Inspect the swing check devices or clappers. Use a spanner wrench or other tool to operate them.
- Verify that there is no water accumulation in the fire department connection. This may indicate a leaky check valve or faulty automatic drain.
- Verify that the identification sign (cast plate) correctly labels the connection for sprinklers, standpipes, combination systems, or other protection systems.