

## An Example of Existing Standpipe Upgrade Scenarios and Remedies

The following scenarios and recommended remedies are based on the assumptions that:

- a) the responding fire department has the resources and equipment to provide the pressure boost in the standpipe via the Fire Department Connection (FDC),
- b) the fire department has a written Operating Guideline (OG) or directive that they are the sole primary responders in fire scenarios [i.e. the fire department does not wish the occupants to use the fire hoses in the building], and
- c) the fire department's responding time is within code limitations (10 minutes)

The Class II or III fire hoses can be left in place if the standpipe pressures are low, as long as the occupants are clear that they are not expected to perform fire operations using the hoses. Signages and/or the building's fire safety plan can be used to address this matter.

e.g.:

**BUILDING OCCUPANTS NOTE:**  
**DO NOT USE THESE FIRE HOSES**  
UNDER FIRE CONDITIONS  
(LOW PRESSURE SYSTEM)

### Scenarios and remedies:

1. Determine if a standpipe system is required (current Building Code review)
  - if yes, go to #2 or #3
  - if **no**,
    - a) remove system or cap off,
    - b) assess if existing system is beneficial for Fire Department's use if left in place,
    - c) or upgrade in accordance with # 2 or # 3 below to satisfaction of the fire department.
2. If a standpipe system is required and;
  - the FDC is provided in an acceptable location,
  - the system has existing cabinets in acceptable locations for fire fighting operations, and
  - a fire hydrant is located in acceptable proximity,
  - **but** the system is deficient in flow and residual pressures.

### Recommended Remedy:

- back flow preventor valve be installed, and
- pressure test to 200 psi, then
- accept as a reasonable equivalency.

3. If a standpipe system is required and,
- the system has existing cabinet locations acceptable for fire fighting operations,
  - a fire hydrant is located in acceptable proximity,
  - **but** the system has no Fire Department Connection (FDC) or unacceptable location for FDC, and
  - the system is deficient in flow and residual pressures.

**Recommended Remedy:**

- install a FDC in location acceptable to AHJ, and
- install a Back Flow Preventor, and
- perform a system pressure test 200 psi, then
- accept as reasonable equivalency.

4. If a standpipe system is required and,
- a fire hydrant is in acceptable proximity,
  - **but** the system is deficient in flow or residual pressures, and
  - the system has no Fire Department Connection (FDC) or unacceptable location for FDC, and
  - there is inadequate fire hose cabinets for fire fighting operations, (excessive travel distance – unacceptable locations etc.).

**Recommended Remedy:**

- upgrade with new wet 4" risers (in each stair shaft), with 2 ½" connections on intermediate landings, and
- install a Back Flow Preventor, and
- provide a FDC (fire department to supply volume/pressure as required), and
- pressure test to 200 psi and flow test, then
- accept as an alternate solution to the above deficiencies.