

APPENDIX I

FIRE PROTECTION SYSTEMS—NONCOMPLIANT CONDITIONS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance or legislation of the jurisdiction.

User note:

About this appendix: Appendix I, which was developed by the ICC Hazard Abatement in Existing Buildings Committee, is intended to provide the fire code official with a list of conditions that are readily identifiable by the inspector during the course of an inspection utilizing this code. The specific conditions identified in this appendix are primarily derived from applicable NFPA standards and pose a hazard to the proper operation of the respective systems. While these do not represent all of the conditions that pose a hazard or otherwise may impair the proper operation of fire protection systems, their identification in this adoptable appendix will provide a more direct path for enforcement by the fire code official.

SECTION I101 NONCOMPLIANT CONDITIONS

I101.1 General. This appendix is intended to identify conditions that can occur where *fire protection systems* are not properly maintained or components have been damaged. This appendix is not intended to provide comprehensive inspection, testing and maintenance requirements, which are found in NFPA 10, 25 and 72. Rather, it is intended to identify problems that are readily observable during fire inspections.

I101.2 Noncompliant conditions requiring component replacement. The following conditions shall be deemed noncompliant and shall cause the related component(s) to be replaced to comply with the provisions of this code:

1. Sprinkler heads having any of the following conditions:
 - 1.1. Signs of leakage.
 - 1.2. Paint or other ornamentation that is not factory applied.
 - 1.3. Evidence of corrosion including, but not limited to, discoloration or rust.
 - 1.4. Deformation or damage of any part.
 - 1.5. Improper orientation of sprinkler head.
 - 1.6. Empty glass bulb.
 - 1.7. Sprinkler heads manufactured prior to 1920.
 - 1.8. Replacement sprinkler heads that do not match existing sprinkler heads in orifice size, K-factor temperature rating, coating or deflector type.
 - 1.9. Sprinkler heads for the protection of cooking equipment that have not been replaced within one year.
2. Water pressure and air pressure gauges that have been installed for more than 5 years and have not been tested to within 3 percent accuracy.

I101.3 Noncompliant conditions requiring component repair or replacement. The following shall be deemed noncompliant conditions and shall cause the related component(s) to be repaired or replaced to comply with the provisions of this code:

1. Sprinkler and standpipe system piping and fittings having any of the following conditions:
 - 1.1. Signs of leakage.
 - 1.2. Evidence of corrosion.
 - 1.3. Misalignment.
 - 1.4. Mechanical damage.
2. Sprinkler piping support having any of the following conditions:
 - 2.1. Materials resting on or hung from sprinkler piping.
 - 2.2. Damaged or loose hangers or braces.
3. Class II and Class III standpipe systems having any of the following conditions:
 - 3.1. No hose or nozzle, where required.
 - 3.2. Hose threads incompatible with fire department hose threads.
 - 3.3. Hose connection cap missing.

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- 3.4. Mildew, cuts, abrasions and deterioration evident.
- 3.5. Coupling damaged.
- 3.6. Gaskets missing or deteriorated.
- 3.7. Nozzle missing or obstructed.
4. Hose racks and cabinets having any of the following conditions:
 - 4.1. Difficult to operate or damaged.
 - 4.2. Hose improperly racked or rolled.
 - 4.3. Inability of rack to swing 90 degrees (1.57 rad) out of the cabinet.
 - 4.4. Cabinet locked, except as permitted by this code.
 - 4.5. Cabinet door will not fully open.
 - 4.6. Door glazing cracked or broken.
5. Portable fire extinguishers having any of the following conditions:
 - 5.1. Broken seal or tamper indicator.
 - 5.2. Expired maintenance tag.
 - 5.3. Pressure gauge indicator in "red."
 - 5.4. Signs of leakage or corrosion.
 - 5.5. Mechanical damage, denting or abrasion of tank.
 - 5.6. Presence of repairs such as welding, soldering or brazing.
 - 5.7. Damaged threads.
 - 5.8. Damaged hose assembly, couplings or swivel joints.
6. Fire alarm and detection control equipment, initiating devices and notification appliances having any of the following conditions:
 - 6.1. Corroded or leaking batteries or terminals.
 - 6.2. Smoke detectors having paint or other ornamentation that is not factory applied.
 - 6.3. Mechanical damage to heat or smoke detectors.
 - 6.4. Tripped fuses.
7. Fire department connections having any of the following conditions:
 - 7.1. Fire department connections are not visible or able to be accessed from the fire apparatus access road.
 - 7.2. Couplings or swivels are damaged.
 - 7.3. Plugs and caps are missing or damaged.
 - 7.4. Gaskets are deteriorated.
 - 7.5. Check valve is leaking.
 - 7.6. Identification signs are missing.
8. Fire pumps having any of the following conditions:
 - 8.1. Pump room temperature is less than 40°F (4.4°C).
 - 8.2. Ventilating louvers are not freely operable.
 - 8.3. Corroded or leaking system piping.
 - 8.4. Diesel fuel tank is less than two-thirds full.
 - 8.5. Battery readings, lubrication oil or cooling water levels are abnormal.

SECTION I102 REFERENCED STANDARDS

I102.1 General. See Table I102.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, standard title, and the section or sections of this appendix that reference the standard.

**TABLE I102.1
REFERENCED STANDARDS**

STANDARD ACRONYM	STANDARD NAME	SECTIONS HEREIN REFERENCED
NFPA 10—21	<i>Portable Fire Extinguishers</i>	I101.1
NFPA 25—20	<i>Inspection, Testing and Maintenance of Water-based Fire Protection Systems</i>	I101.1
NFPA 72—19	<i>National Fire Alarm and Signaling Code</i>	I101.1

