

TABLE 76.25–15(a)—Continued

| Maximum number of heads on one deck in one zone | Number of heads automatic pump to supply | Number of heads additional pumps to supply |
|---|--|--|
| 250 | 20 | 100 |

(b) [Reserved]

§ 76.25–20 Pressure tank.

(a) A pressure tank or other suitable means shall be installed to permit early action of the system pending the starting of the pump. Sufficient fresh water shall be carried in the tank to fill the piping of the largest zone, and in addition, force out at least 200 gallons at the least effective head in the zone at a Pitot tube pressure of at least 15 p.s.i. Suitable check valves shall be installed to prevent salt water from entering the pressure tank, and low water and low pressure alarms shall be fitted.

(b) [Reserved]

§ 76.25–25 Controls.

(a) The controls for the system shall be outside the spaces protected, and shall not be located in such space as might be cut off or made inaccessible in the event of fire in any of the spaces protected. The control space shall be marked as required by § 78.47–17 of this subchapter.

(b) Each supply line to the various zones shall be fitted with a stop valve which shall be marked as required by § 78.47–15 of this subchapter. These valves shall be normally open, and shall indicate by an alarm if they are closed.

§ 76.25–30 Piping.

(a) All piping, valves, and fittings of ferrous materials shall be protected inside and outside against corrosion unless specifically approved by the Commandant.

(b) All piping, valves, fittings, and sprinkler heads shall be securely supported, and, where necessary, protected against injury.

(c) Drains and dirt traps shall be fitted where necessary to prevent the accumulation of dirt or moisture.

(d) Piping shall be used for no other purpose.

§ 76.25–35 Operation and installation.

(a) The system shall be so arranged and installed that a fire in any of the protected spaces will open the affected sprinkler heads. Water from the pressure tank shall be immediately available to the affected sprinkler head and before the supply from the pressure tank is exhausted, the sprinkler pump shall be automatically started and shall supply the system until manually shut off. Suitable test stations shall be installed in each zone to test the operation of the system.

(b) The system shall be so arranged and installed that the presence of a fire in any of the protected spaces will automatically be registered visibly and audibly in the pilothouse or fire control station. The visible notice shall automatically indicate the zone in which the alarm originated. On vessels over 150 feet in length, there shall also be an audible alarm in the engine room.

(c) There shall be not less than two sources of power supply for the sea water pumps, air compressors and automatic alarms. Where the sources of power are electrical, these shall be a main generator and an emergency source of power. One supply shall be taken from the main switchboard, by separate feeders reserved solely for that purpose. Such feeders shall be run to a change-over switch situated near to the sprinkler unit and the switch shall normally be kept closed to the feeder from the emergency switchboard. The change-over switch shall be clearly labeled and no other switch shall be permitted in these feeders.

(d) Where subject to freezing, sprinkler systems shall be of the dry pipe type.

(e) The sprinkler heads, the cabinet, alarms, dry valves and actuating mechanisms shall be of an approved type.

(f) In general, the sprinkler heads shall be rated not lower than 135 degrees F. nor higher than 165 degrees F. However, in spaces where a high ambient temperature may be expected, sprinkler heads rated at 212 degrees F. shall be used.

(g) The automatic sprinkling system and all its components shall be used for no other purpose.

§ 76.25–90

(h) All wiring and electrical circuits and equipment shall meet the applicable requirements of subchapter J (Electrical Engineering) of this chapter.

(i) All piping, valves, fittings, pressure tanks, etc., must meet the applicable requirements of subchapter F (Marine Engineering) of this chapter.

(j) A framed chart or diagram shall be installed in the wheelhouse or control station adjacent to the detecting cabinet indicating the location of the various detecting zones and giving instructions for the operation, maintenance, and testing of the system. This chart, or a separate card or booklet to be kept near the chart, shall have tabulated spaces for the date and signature of the licensed officer of the vessel who shall witness or conduct the periodic tests.

(k) The audible alarms shall be identified as required by § 78.47–13 of this subchapter.

[CGFR 65–50, 30 FR 16940, Dec. 30, 1965, as amended by CGD 74–125A, 47 FR 15231, Apr. 8, 1982]

§ 76.25–90 Installations contracted for prior to September 30, 1997.

(a) Existing arrangements, materials, and facilities previously approved shall be considered satisfactory so long as they meet the minimum requirements of this paragraph, and they are maintained in good condition to the satisfaction of the Officer in Charge, Marine Inspection. Minor repairs and replacements may be made to the same standards as the original installation.

(b) The details of the system must be in general agreement with NFPA 13 (incorporated by reference, see 46 CFR 76.01–2) insofar as is reasonable and practicable. Existing piping, pumping facilities, sprinkler heads, and operating devices may be retained provided a reasonable coverage of the spaces protected is assured.

[CGD 95–028, 62 FR 51204, Sept. 30, 1997, as amended by USCG–2003–16630, 73 FR 65192, Oct. 31, 2008]

46 CFR Ch. I (10–1–10 Edition)

Subpart 76.27—Electric Fire Detecting System, Details

§ 76.27–1 Application.

(a) Where an electric fire detecting system is installed, the provisions of this subpart, with the exception of § 76.27–90, shall apply to all installations contracted for on or after November 19, 1952. Installations contracted for prior to November 19, 1952, shall meet the requirements of § 76.27–90.

(b) [Reserved]

§ 76.27–5 Zoning.

(a) The fire detecting system shall be divided into separate zones to restrict the area covered by any particular alarm signal.

(b) All spaces in a fire detecting zone shall be accessible from one to another without leaving the deck involved. All doors in watertight subdivision bulkheads and main vertical zone bulkheads shall be assumed closed for the purpose of this requirement.

(c) The fire detecting zone shall not include spaces on more than one deck, except:

(1) Adjacent and communicating spaces on different decks in the ends of the vessel having a combined ceiling area of not more than 3,000 square feet.

(2) Isolated rooms or lockers in such spaces as mast houses, wheelhouse top, etc., which are easily communicable with the area of the fire-detecting circuit to which they are connected.

(3) Systems with indicators for individual spaces.

(d) The fire detecting zone shall not contain more than 50 protected rooms or spaces.

§ 76.27–10 Location and spacing of detectors.

(a) The detectors shall be located close to the overhead in the space protected. Where liable to physical damage, the detector shall be suitably protected.

(b) Unless specifically approved otherwise, no spot on the overhead of a protected space shall be more than 10 feet from a detector. Where beams or girders extend below the ceiling, or where the ceiling is installed at more than one level, the detectors shall be so located as to be most effective.