§ 161.002–3 Materials and workmanship.

(a) Suitability. All materials used in the construction of fire-protective equipment shall be of the quality best suited for the purpose intended.

(b) Materials covered by reference specifications. Where specifications are referred to for a given material, it is intended to require that the quality of material used shall be at least equal to that covered in the reference specifications.

§ 161.002–4 General requirements.

(a) Introduction. The purpose of fire-protective systems is to give warning of the presence of fire in the protected spaces. To meet this end, the basic requirements of the fire-protective systems are reliability, sturdiness, simplicity of design, ease of servicing, and the ability to withstand shipboard shock and vibration and the adverse effects of sea humidity.

(b) Standards. (1) All fire-protective systems must be designed, constructed, tested, marked, and installed according to the applicable standards under § 161.002–1 and subchapter J (Electrical Engineering) of this chapter.

(2) All systems must be listed or certified as meeting these standards by an independent laboratory that is accepted by the Commandant under part 159 of this chapter for the testing and listing or certification of fire detection equipment and systems.

(3) All parts of the system must pass the environmental tests for control and monitoring equipment in either ABS Rules for Building and Classing Steel Vessels Table 4/11.1 or pass the Category ENV3 tests of Lloyd’s Register Type Approval System, Test Specification Number 1, as appropriate.

(4) Those parts of the system that are to be installed in locations requiring exceptional degrees of protection (defined in § 110.15–1 of this chapter) must also pass the salt spray (mist) test in either ABS Rules for Building and Classing Steel Vessels Table 4/11.1; Lloyd’s Register Type Approval System, Test Specification No. 1; or ASTM B 117 (incorporated by reference, see § 161.002–1) with results as described in corrosion-resistant finish in § 110.15–1 of this chapter.

§ 161.002–8 Automatic fire detecting systems, general requirements.

(a) General. An automatic fire detecting system shall consist of a power supply; a control unit on which are located visible and audible fire and trouble signalling devices; and fire detector circuits, as required, originating from the control unit. Power failure alarm devices may be separately housed from the control unit and may be combined with other power failure alarm systems when specifically approved.

(b) [Reserved]

§ 161.002–9 Automatic fire detecting system, power supply.

The power supply for an automatic fire detecting system must meet the requirements of § 113.10–9 of subchapter J (Electrical Engineering Regulations) of this chapter.

§ 161.002–10 Automatic fire detecting system control unit.

(a) General. The fire detecting system control unit shall consist of a dripproof enclosed panel containing visible and audible fire alarm signalling devices, visible and audible trouble alarm signalling devices, visible and audible power failure alarm devices, power supply transfer switch, charging equipment when employed, and overcurrent protection for power supplies.

(b) Fire alarms—(1) General. The operation of a fire detecting and alarm system must cause automatically—

(i) The sounding of a vibrating type fire bell with a gong diameter not smaller than 15 cm (6 inches) or other audible alarm that has an equivalent sound level and that is mounted at the control unit and at the remote annunciator panel, when provided;