§ 161.002–2 Types of fire-protective systems.

(a) General. Fire-protective systems covered by this subpart shall include, but not be limited to, automatic fire and smoke detecting systems, manual fire alarm systems, sample extraction smoke detection systems, watchman’s supervisory systems, and combinations of these systems.

(b) Automatic fire detecting systems. For the purpose of this subpart, automatic fire and smoke detecting systems will be considered to consist of normal and emergency power supplies, a fire detecting control unit, fire detectors, smoke detectors, and audible and visual alarms distinct in both respects from the alarms of any other system not indicating fire.

(c) Manual fire alarm systems. For the purpose of this subpart, manual fire alarm systems will be considered to consist of normal and emergency power supplies, a fire alarm control unit, manual fire alarm boxes, and audible and visual alarms distinct in both respects from the alarms of any other system not indicating fire. Manual fire
alarm systems are usually combined with automatic fire detecting systems.
(d) Sample extraction smoke detection systems. For the purpose of this subpart, sample extraction smoke detection systems will be considered to consist of a control unit, a blower box, and a piping system to conduct air samples from the protected spaces to the control unit.
(e) Watchman’s supervisory systems. For the purpose of this subpart, a watchman’s supervisory equipment will be considered to be apparatus, either electrical or mechanical, used to verify the presence of watchmen and the regular performance of their assigned duties.

§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.