§ 113.25–8 Distribution of general emergency alarm system feeders and branch circuits.

(a) Each system must have a feeder distribution panel to divide the system into the necessary number of zone feeders, except where, because of the arrangement of the vessel, only one zone feeder is necessary; then a branch circuit distribution panel or feeder distribution panel must be used.

(b) The feeder distribution panel must have overcurrent protection for each zone feeder, but there must be no disconnect switches.

(c) The feeder distribution panel must be in an enclosed space next to the general alarm power supply.

(d) Each system must have at least one feeder for each vertical fire zone that has general emergency alarm signal.

(e) Each system must have one or more branch circuit distribution panels for each zone feeder, with at least one fused branch circuit for each deck level. The distribution panel must be above the uppermost continuous deck, in the zone served, and there must be no disconnect switches for the branch circuits.

(f) A branch circuit must not supply emergency alarm signal on more than one deck level, except for a single branch circuit supplying all levels of a single space containing more than one deck level if all other requirements of this section are met.

(g) On a vessel not divided into fire zones by main vertical fire bulkheads, the general emergency alarm system must be arranged into vertical service zones no more than 40 meters (131 feet) long, and there must be a general alarm feeder for each of these zones that has general emergency alarm signal.

(h) General alarm feeders and branch circuit cables must be in passageways and must not be in staterooms, lockers, galleys, machinery spaces, or other enclosed spaces, unless it is necessary to supply general emergency alarm signal in those spaces.


§ 113.25–9 Location of general emergency alarm signal.

General emergency alarm signal must:

(a) Be located in passenger and crew quarters areas where they can alert persons in spaces where those persons may be maintaining, repairing, or operating equipment, stowing or drawing stores or equipment, or transiting, such as public spaces, work spaces, machinery spaces, workshops, galleys, emergency fire pump room, bow thruster rooms, storage areas for paint, rope, and other stores, underdeck passageways in cargo areas, steering gear rooms, windless rooms, holds of roll-on/roll-off vessels, and, except those that are accessible only through bolted manhole covers, duct keels with valve operators; and

(b) Be audible in the spaces identified in paragraph (a) of this section with all normally closed doors and accesses closed; and

(c) Be installed in cabins without loudspeaker installation. Other audible devices, such as electronic alarm transducers, are permitted.


§ 113.25–10 Emergency red-flashing lights.

(a) In a space described in §113.25–9(a), where the general emergency alarm signal cannot be heard over the background noise, there must be a red-flashing light or rotating beacon, in addition to the general emergency alarm signal, that:

(1) Has sufficient intensity above the background lighting that would alert personnel in the space;

(2) Is activated whenever the general emergency alarm signal in the space are activated; and

(3) Is supplied by the general emergency alarm system power supply or the vessel emergency power source
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§ 113.25–20 Marking of equipment.

(a) Each general emergency alarm system fused switch and distribution panel must have a fixed nameplate on the outside of its cover that has a description of its function. The rating of fuses must also be shown on the outside of the cover of a fused switch.

(b) Each general alarm contact maker must be marked “GENERAL ALARM” in red letters on a corrosion-resistant plate or on a sign.

(c) A contact maker that operates only the general emergency alarm signal in crew quarters, machinery spaces, and work spaces must be marked

§ 113.25–20 through a relay that is operated by the general emergency alarm system.

(b) A red-flashing light or rotating beacon must be installed so that it is visible in the cargo pump rooms of vessels that carry combustible liquid cargoes. The installation must be in accordance with the requirements of part 111, subpart 111.105, of this chapter.

§ 113.25–11 Contact makers.

Each contact maker must—

(a) Have normally open contacts and be constructed in accordance with Type 4 or 4X of NEMA 250 or IP 56 of IEC 60529 (both incorporated by reference; see 46 CFR 110.10–1) requirements;

(b) Have a switch handle that can be maintained in the “on” position;

(c) Have the “off” and “on” positions of the operating handle permanently marked; and

(d) Have an inductive load rating not less than the connected load or, on large vessels, have auxiliary devices to interrupt the load current.

§ 113.25–12 Alarm signals.

(a) Each general emergency alarm signal must be an electrically-operated bell, klaxon, or other warning device capable of producing a signal or tone distinct from any other audible signal on the vessel.

(b) Electronic devices used to produce the general emergency alarm signal must meet the requirements of subpart 113.50 of this part.

(c)(1) The minimum sound-pressure levels for the emergency-alarm tone in interior and exterior spaces must be a sound level of not less than 80 dB(A) measured at 10 feet on the axis; and

(2) At least 10 dB(A) measured at 10 feet on the axis, above the background noise level when the vessel is underway in moderate weather unless flashing red lights are used in accordance with 46 CFR 113.25–10(b).

(d) Alarm signals intended for use in sleeping compartments may have a minimum sound level of 75 dB(A) measured 3 feet (1 meter) on axis, and at least 10 dB(A) measured 3 feet (1 meter) on axis, above ambient noise levels with the ship under way in moderate weather.

§ 113.25–14 Electric cable and distribution fittings.

Each cable entrance to an emergency alarm signal or distribution fitting must be made watertight by a terminal or stuffing tube.

§ 113.25–15 Distribution panels.

Each distribution panel must:

(a) Be watertight;

(b) Need a tool to be opened.

§ 113.25–16 Overcurrent protection.

(a) Each fuse in a general emergency alarm system must meet the requirements of part 111, subpart 111.53, of this chapter.

(b) Each overcurrent protection device must cause as wide a differential as possible between the rating of the branch circuit overcurrent protection device and that of the feeder overcurrent protection device.

(c) The capacity of the feeder overcurrent device must be as near practicable to 200 percent of the load supplied. The capacity of a branch circuit overcurrent device must not be higher than 50 percent of the capacity of the feeder overcurrent device.

§ 113.25–20 Marking of equipment.

(a) Each general emergency alarm system fused switch and distribution panel must have a fixed nameplate on the outside of its cover that has a description of its function. The rating of fuses must also be shown on the outside of the cover of a fused switch.

(b) Each general alarm contact maker must be marked “GENERAL ALARM” in red letters on a corrosion-resistant plate or on a sign.

(c) A contact maker that operates only the general emergency alarm signal in crew quarters, machinery spaces, and work spaces must be marked