§ 194.10–5 Type and location.

(a) Integral magazines. (1) Magazines shall be of permanent construction located below the freeboard deck and where practicable below the waterline.

(2) Magazines shall not be located in horizontal proximity to or below accommodation spaces.

(3) Magazines shall not be located adjacent to the collision bulkhead, nor in bearing with a bulkhead forming the boilerroom, engine room, gallery, or other high fire hazard area boundary. If it is necessary to construct the magazine in proximity to these areas, a cofferdam space of at least 2 feet shall be provided between the bulkhead or deck involved and the magazine. Such a cofferdam shall be provided with suitable ventilation and shall not be used for storage purposes.

(b) Magazine vans. (1) Magazine vans may be installed on deck in a location protected from boarding seas. The location selected shall not impair access to accommodations or other spaces necessary to the safe working and navigation of the vessel and shall not be within 15 feet of ventilation terminals emitting warm air or hazardous vapors, such as from galleys and pumprooms.

(2) Magazine vans may be installed below decks in holds provided the hold location meets the location requirements for integral magazines. The cofferdam requirement of paragraph (a)(3) of this section is considered as fulfilled if the van is of steel construction. Holds so utilized shall not be used for stowage of other hazardous materials covered by 49 CFR parts 171–179. The stowage of other explosives or oxidizing materials in the same hold is permitted in accordance with the requirements of 49 CFR part 176.

(c) Magazine chests. (1) Magazine chests shall be located on the weather decks in a position suitable for jettisoning the contents.

(2) Magazine chests shall be set off at least 4 inches from decks and deckhouse.

(3) Magazine chests shall not be located within 15 feet of ventilation terminals emitting warm air or hazardous vapors, such as from galleys and pumprooms.

(4) Magazine chests intended for the stowage of blasting caps, detonators, or boosters, in addition to the requirements in this paragraph, shall not be stowed within 10 feet of any unshielded radio apparatus or antenna leads.

$\text{§ 194.10–10 Integral magazine construction.}$

(a) Magazines shall be of permanent watertight construction. Bulkheads and decks, including the deck overhead, which are common with storerooms or workshops shall be of A–15 construction as defined by §72.05–10 of Subchapter H (Passenger Vessels) of this chapter. Flush construction shall be employed where practicable.

(b) Where the shell or unsheathed weather decks form boundaries of the magazine spaces suitable approved combustible thermal insulation shall be provided to prevent condensation of moisture.

(c) Where a tank top forms the magazine deck it shall be insulated with an approved deck covering to prevent condensation of moisture. Tank top manholes shall not be installed in magazines.

(d) Light fixtures shall be of an approved type equipped with globes and guards. Control of the lighting system shall be from a location external to the magazine. An indicator light shall be provided at the switch location to indicate when the lighting circuits are energized. Other electrical equipment and wiring shall not be installed within or pass through the magazine. Electrical cables enclosed in a watertight trunk are permitted.

(e) Piping, other than fresh or salt water service and drainage system, shall not be routed through magazines except as required for the magazines.
§ 194.10–15 Magazine van construction.

(a) Vans shall be of substantial metal construction. Their interior shall be insulated with an approved incombustible insulation to the standards required for A–15 divisional bulkheads as prescribed in part 72 of Subchapter H (Passenger Vessels) of this chapter. The interior shall be lined flush with incombustible materials. 

(b) Lighting fixtures, if installed, shall be of an approved type equipped with globes and guards. All electrical installations shall meet the applicable requirements of Subchapter J (Electrical Engineering) of this chapter. The electrical terminals for connections to the ship’s electrical system shall be of watertight construction and bear a label plate denoting the power requirement of the van. 

(c) Access doors and ventilation closures shall be of watertight construction. Doors shall be provided with means whereby they may be securely locked. 

(d) Vans shall be provided with suitable pads and clips for securing to the deck and for installation of wire rope sway braces. 

(e) Vans shall bear a label plate stating light weight, gross weight and weight of explosives. Gross weight shall not exceed 250 pounds per square foot of deck area. 

§ 194.10–20 Magazine chest construction.

(a) Magazine chests shall be of watertight metal construction with flush interior. The body and lid shall have a minimum thickness of ½ inch. 

(b) Permanent sun shields shall be provided for sides and top including the lid. These shall have a minimum thickness of ⅛-inch aluminum or 16-gage steel. Side shields shall be offset from the body a distance of 1 inch. The top shield shall be offset a distance of ⅜ inches. Sun shields may be omitted when chests are installed “on deck protected,” shielded from direct exposure to the sun. 

(c) Chests shall be limited to a gross capacity of 100 cubic feet. 

(d) Chests shall be secured to the vessel’s structure by means of permanently installed foundation clips or bolts or a combination thereof. Lashings will not be acceptable. 

(e) Chests shall be provided with substantial hasps and staples for locking purposes. 

§ 194.10–25 Ventilation.

(a) Integral magazines. (1) All integral magazines shall be provided with natural or mechanical ventilation. Design calculations shall be submitted demonstrating that the system has sufficient capacity to maintain the magazine temperature below 100 °F. with 88 °F. weather air. Mechanical cooling may be used where ventilation requirements exceed 1,500 cubic feet per minute. 

(2) ventilation systems shall be of watertight construction and shall serve no other space. Weather cowls shall be provided with a double layer of wire screen of not less than ¾-inch mesh. Metal watertight closures shall be provided for use when the ventilation system is not in operation. A 2-inch IPS bypass with check valve shall be provided in parallel with at least one of the ventilation closures to prevent pressure buildup. 

(b) Magazine vans. (1) All magazine vans shall be provided with natural ventilation sufficient to maintain the inside air temperature below 130 °F. with an assumed outside temperature of 115 °F. 

(2) Ventilation supply weather openings shall be located at least 6 feet above the deck. Exhaust terminals shall be located in the van overhead. Louvers or weather cowls with a double layer of wire screen of not less than ¾-