§ 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 \( \frac{1}{8} \) inch.

(b) Permanent sun shields shall be provided for sides and top including the lid. These shall have a minimum thickness of \( \frac{1}{8} \)-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 1\( \frac{1}{2} \) 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 \( \frac{1}{8} \)-inch mesh. Metal watertight closures shall be provided for use when the ventilation system is not in operation. A 2-inch IFS 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 \( \frac{1}{8} \)-inch mesh shall be provided for protection of weather openings.

§ 194.10–30 Magazine sprinklers.

(a) Sprinkler system required. (1) A manual control, hydraulic control, or automatic sprinkler system shall be installed in each magazine or magazine group. The control valve shall generally be in accordance with Specification MIL-V-17501 insofar as materials and test fittings are concerned. All systems shall be remotely operable from a control station on the freeboard deck and manually operable at the control valve location.

(2) Where automatic systems are installed sprinkler heads shall be of the open head design so as to permit either manual or automatic operation.

(3) Sprinkler systems shall be designed in accordance with the requirements of part 76 of Subchapter H (Passenger Vessels) of this chapter. Minimum total system capacity shall be based on 0.8 gallon per minute per square foot of overhead area.

(4) The normally required fire pumps may be used for magazine sprinkling purposes. However, the use of the magazine sprinkling system shall not interfere with the simultaneous use of the fire main system.

(b) Magazine vans. (1) A manual control sprinkler system shall be installed in each magazine van. The system shall be connected to the nearest fire main outlet by jumper hose. The hose shall be protected from physical damage by a grating or similar arrangement. The fire station valve shall serve as the sprinkler control valve.