

**§ 108.453**

may have one or more cylinders in the space protected by the system if the space has a heat detection system to activate the system automatically in addition to the remote and manual controls required by this subpart.

(c) Each space that contains cylinders of a CO<sub>2</sub> system must be ventilated and designed to prevent an ambient temperature of more than 54° C. (130° F.)

(d) Each cylinder in a CO<sub>2</sub> system must be securely fastened, supported, protected from damage, in an accessible location, and capable of removal from that location.

(e) Each unit must have a means for weighing cylinders of a CO<sub>2</sub> system.

(f) A cylinder in a CO<sub>2</sub> system may not be mounted in a position that is inclined more than 30° from a vertical position, except that a cylinder having flexible or bent siphon tubes may be mounted in a position that is inclined up to 80° from the vertical. The bottom of each cylinder when mounted must be at least 5 centimeters (2 inches) from the deck.

(g) If a cylinder does not have a check valve on its independent cylinder discharge, it must have a plug or cap to close the outlet when the cylinder is moved.

[CGD 73-251, 43 FR 56808, Dec. 4, 1978, as amended by CGD 84-044, 53 FR 7749, Mar. 10, 1988]

**§ 108.453 Discharge outlets.**

Each discharge outlet must be of an approved type.

**§ 108.455 Enclosure openings.**

(a) Mechanical ventilation for spaces protected by a CO<sub>2</sub> system must be designed to shut down automatically when the system is activated.

(b) Each space that is protected by a CO<sub>2</sub> system and that has natural ventilation must have a means for closing that ventilation.

(c) Each space protected by a CO<sub>2</sub> system must have the following means for closing the openings to the space from outside the space:

(1) Doors, shutters, or dampers for closing each opening in the lower portion of the space.

(2) Doors, shutters, dampers or temporary means such as canvas or other

**46 CFR Ch. I (10-1-06 Edition)**

material normally on board a unit may be used for closing each opening in the upper portion of the space.

**§ 108.457 Pressure release.**

Each air tight or vapor tight space, such as a paint locker, that is protected by a CO<sub>2</sub> system must have a means for releasing pressure that accumulates within the space if CO<sub>2</sub> is discharged into the space.

**HALOGENATED GAS EXTINGUISHING SYSTEMS**

**§ 108.458 General.**

Halogenated gas extinguishing systems may be installed if approved by the Commandant.

**FOAM EXTINGUISHING SYSTEMS**

**§ 108.459 Number and location of outlets.**

(a) A foam extinguishing system in a space must have enough outlets to spread a layer of foam of uniform thickness over the deck or bilge areas of the space.

(b) A foam extinguishing system in a space that has a boiler on a flat that is open to or can drain into a lower portion of the space must have enough outlets to spread a layer of foam of uniform thickness over the—

(1) Flat; and

(2) Deck or bilge areas of the space.

(c) A foam extinguishing system for a tank must have enough outlets to spread a layer of foam of uniform thickness over the surface of the liquid in the tank.

**§ 108.461 Coamings.**

Each machinery flat in a space that has a foam extinguishing system must have coamings that are high enough to retain spilled oil and foam on the flat on all openings except deck drains.

**§ 108.463 Foam rate: Protein.**

(a) If the outlets of a protein foam extinguishing system are in a space, the foam rate at each outlet must be at least 6.52 liters per minute for each square meter (.16 gallons per minute for each square foot) of area covered by the systems.