

in paragraphs (a) (1) and (3) on March 24, 1978.

[CGD 76-082, 44 FR 73027, Dec. 17, 1979, as amended by CGD 82-010, 48 FR 8273, Feb. 28, 1983; USCG-2000-7223, 65 FR 40059, June 29, 2000; 69 FR 18803, Apr. 9, 2004]

§ 183.610 Powered ventilation system.

(a) Each compartment in a boat that has a permanently installed gasoline engine with a cranking motor must:

- (1) Be open to the atmosphere, or
- (2) Be ventilated by an exhaust blower system.

(b) Each exhaust blower or combination of blowers must be rated at an air flow capacity not less than that computed by the formulas given in Table 183.610, Column 2. Blower rating must be determined according to AMCA Standard 210-74, Figure 12, or UL Standard 1128.

TABLE 183.610

Col. 1 ¹	Col. 2 ²	Col. 3 ³
Below 34	Fr=50	Fo=20
34 to 100	Fr=1.5V	Fo=0.6V
Over 100	Fr=V/2+100	Fo=0.2V+40

¹Net compartment volume of engine compartment and compartments open thereto (V) cubic feet.
²Rated blower capacity (Fr) cubic feet per minute.
³Blower system output (Fo) cubic feet per minute.

(c) Each exhaust blower system required by paragraph (a)(2) of this section must exhaust air from the boat at a rate which meets the requirements of Table 183.610, Column 3 when the engine is not operating.

(d) Each intake duct for an exhaust blower must be in the lower one-third of the compartment and above the normal level of accumulated bilge water.

(e) More than one exhaust blower may be used in combination to meet the requirements of this section.

(f) Each boat that is required to have an exhaust blower must have a label that:

- (1) Is located as close as practicable to each ignition switch;
- (2) Is in plain view of the operator; and
- (3) Has at least the following information:

WARNING—GASOLINE VAPORS CAN EXPLODE. BEFORE STARTING ENGINE OPERATE BLOWER FOR 4 MINUTES AND CHECK ENGINE COMPARTMENT BILGE FOR GASOLINE VAPORS.

§ 183.620 Natural ventilation system.

(a) Except for compartments open to the atmosphere, a natural ventilation system that meets the requirements of § 183.630 must be provided for each compartment in a boat that:

- (1) Contains a permanently installed gasoline engine;
- (2) Has openings between it and a compartment that requires ventilation, where the aggregate area of those openings exceeds 2 percent of the area between the compartments, except as provided in paragraph (c) of this section;
- (3) Contains a permanently installed fuel tank and an electrical component that is not ignition protected in accordance with §183.410(a);
- (4) Contains a fuel tank that vents into that compartment; or
- (5) Contains a non-metallic fuel tank:
 - (i) With an aggregate permeability rate exceeding 1.2 grams of fuel loss in 24 hours per cubic foot of net compartment volume, or
 - (ii) If the net compartment volume is less than one cubic foot, having a permeability rate exceeding 1.2 grams of fuel loss in 24 hours.

(b) Each supply opening required in § 183.630 must be located on the exterior surface of the boat.

(c) An accommodation compartment above a compartment requiring ventilation that is separated from the compartment requiring ventilation by a deck or other structure is excepted from paragraph (a)(2) of this section.

NOTE: Reference fuel “C” at 40 degrees Celsius plus or minus 2 degrees Celsius from ASTM standard D 471 (incorporated by reference, see §183.5) is to be used in determining the permeability rate.

(b) Each supply opening required in § 183.630 must be located on the exterior surface of the boat.

(c) An accommodation compartment above a compartment requiring ventilation that is separated from the compartment requiring ventilation by a deck or other structure is excepted from paragraph (a)(2) of this section.

[CGD 76-082, 44 FR 73027, Dec. 17, 1979, as amended by CGD 76-082(a), 46 FR 27645, May 21, 1981; CGD 85-059, 51 FR 37577, Oct. 23, 1986; USCG-1999-5832, 64 FR 34716, June 29, 1999; USCG-1999-5151, 64 FR 67176, Dec. 1, 1999]

§ 183.630 Standards for natural ventilation.

(a) For the purpose of §183.620, “natural ventilation” means an airflow in a compartment in a boat achieved by having: