

(c) *Tests.* Independent fuel tanks must be tested as described in this paragraph (c) prior to being used to carry fuel.

(1) Prior to installation, tanks vented to the atmosphere must be hydrostatically tested to, and must withstand, a pressure of 35 kPa (5 psig) or 1½ times the maximum pressure head to which they may be subjected in service, whichever is greater. A stand-pipe of 3.5 meters (11.5 feet) in height attached to the tank may be filled with water to accomplish the 35 kPa (5 psig) test. Permanent deformation of the tank will not be cause for rejection unless accompanied by leakage.

(2) After installation of the fuel tank on a vessel, the complete installation must be tested in the presence of a marine inspector, or individual specified by the cognizant OCMI, to a heat not less than that to which the tank may be subjected in service. Fuel may be used as the testing medium.

(3) All tanks not vented to the atmosphere must be constructed and tested in accordance with 46 CFR 182.330.

(d) *Alternative procedures.* A vessel of not more than 19.8 meters (65 feet) in length carrying not more than 12 passengers, with independent gasoline fuel tanks built in accordance with ABYC H-24 (incorporated by reference, see 46 CFR 175.600), or 33 CFR 183, subpart J, or with independent diesel fuel tanks built in accordance with ABYC H-33 (incorporated by reference, see 46 CFR 175.600), will be considered as meeting the requirements of this section. However, tanks must not be fabricated from any material not listed in Table 182.440(a)(1) without approval by the Commandant under paragraph (a)(3) of this section.

[USCG-2003-16630, 73 FR 65207, Oct. 31, 2008]

**§ 182.445 Fill and sounding pipes for fuel tanks.**

(a) Fill pipes for fuel tanks must be not less than 40 millimeters (1.5 inches) nominal pipe size.

(b) There must be a means of accurately determining the amount of fuel in each fuel tank either by sounding, through a separate sounding pipe or a fill pipe, or by an installed marine type fuel gauge.

(c) Where sounding pipes are used, their openings must be at least as high as the opening of the fill pipe and they must be kept closed at all times except during sounding.

(d) Fill pipes and sounding pipes must be so arranged that overflow of liquid or vapor cannot escape to the inside of the vessel.

(e) Fill pipes and sounding pipes must run as directly as possible, preferably in a straight line, from the deck connection to the top of the tank. Such pipes must terminate on the weather deck and must be fitted with shutoff valves, watertight deck plates, or screw caps, suitably marked for identification. Gasoline fill pipes and sounding pipes must extend to within one-half of their diameter from the bottom of the tank. Diesel fill pipes and sounding pipes may terminate at the top of the tank.

(f) A vessel of not more than 19.8 meters (65 feet), carrying not more than 12 passengers, with a gasoline fuel system built in accordance with ABYC H-24 (incorporated by reference; see 46 CFR 175.600), or 33 CFR 183, subpart J, or with a diesel fuel system built in accordance with ABYC H-33 (incorporated by reference; see 46 CFR 175.600), will be considered as meeting the requirements of this section.

(g) Where a flexible fill pipe section is necessary, suitable flexible tubing or hose having high resistance to salt water, petroleum oils, heat and vibration, may be used. Such hose must overlap metallic pipe ends at the least 1½ times the pipe diameter and must be secured at each end by clamps. The flexible section must be accessible and as near the upper end of the fill pipe as practicable. When the flexible section is a nonconductor of electricity, the metallic sections of the fill pipe separated thereby must be joined by a conductor for protection against generation of a static charge when filling with fuel.

[CGD 85-080, 61 FR 986, Jan. 10, 1996, as amended by USCG-2003-16630, 73 FR 65208, Oct. 31, 2008]

**§ 182.450 Vent pipes for fuel tanks.**

(a) Each unpressurized fuel tank must be fitted with a vent pipe connected to the highest point of the tank.