§ 160.010–4 General requirements for buoyant apparatus.

(a) Each buoyant apparatus must be capable of passing the tests in 160.010–7.

(b) Materials not covered in this subpart must be of good quality and suitable for the purpose intended.

(c) Buoyant apparatus must be effective and stable, floating either side up.

(d) Each buoyant apparatus must be of such size and strength that it can be handled without the use of mechanical
appliances, and its weight must not exceed 185 kg (400 lb.).

(e) The buoyant material must be as near as possible to the sides of the apparatus.

(f) Each buoyant apparatus must have a life line securely attached around the outside, festooned in bights no longer than 1 m (3 ft.), with a seine float in each bight, unless the line is of an inherently buoyant material and absorbs little or no water. The life line must be at least 10 mm (% in.) diameter and have a breaking strength of at least 5400 N (1215 lb.).

(g) Pendants must be fitted approximately 450 mm (18 in.) apart around the outside of each buoyant apparatus. Each pendant must be at least 6 mm (% in.) diameter, at least 3.5 m (12 ft.) long, secured in the middle, and have a breaking strength of at least 2400 N (540 lb.). Each pendant must be made up in a hank, and the hank secured by not more than two turns of light twine.

(h) Each peripheral body type buoyant apparatus without a net or platform on the inside must also have a life line and pendants around the inside.

(i) Synthetic line or webbing must not be used unless it is of a type represented by its manufacturer as ultraviolet light resistant, or it is pigmented in a dark color. A typical method of securing lifelines and pendants to straps of webbing is shown in Figure 160.010-3(i). If webbing is used to secure life lines and pendants, it must be at least 50 mm (2 in.) wide and must have a breaking strength of at least 3.4 kN (750 lb.) for apparatus of under 25 persons capacity, and 6.7 kN (1,500 lb.) for apparatus of 25 persons capacity and higher.
(j) Buoyant apparatus must have a fitting with an inside diameter of at least 50 mm (2 in.) for the attachment of a painter.

(k) Each edge and exposed corner must be well rounded. Buoyant apparatus with a rectangular cross-section must have corners rounded to a radius of at least 75 mm (3 in.).
§ 160.010–5 Buoyant apparatus must not have any evident defects in workmanship.

(m) Each metal part of a buoyant apparatus must be—

(1) 410 stainless steel or have salt water and salt air corrosion characteristics equal or superior to 410 stainless steel; and

(2) Galvanically compatible with each other metal part in contact with it.

(n) The color of the buoyant apparatus must be primarily vivid reddish orange as defined by sections 13 and 14 of FED–STD–595C (incorporated by reference, see §160.010–1 of this subpart).

(o) When fibrous-glass-reinforced plastic is used in the construction of a buoyant apparatus, each cut edge of laminate must be protected from entry of moisture by resin putty or an equivalent method.

(p) Each buoyant apparatus must have Type II retroreflective material meeting subpart 164.018 of this chapter on each side and end. The material must be at least 50 mm (2 in.) wide extending from top to bottom over the side or end and continuing over the top and bottom surfaces of the apparatus. For peripheral body apparatus, each strip must extend completely over the top and bottom surface of the body. For box type apparatus, the strip must extend at least 300 mm (12 in.) inboard from the edge over the top and bottom surface. Each strip must be positioned near the center of the side or end, but so that it is not obscured by any strap. A typical arrangement is shown in Figure 160.010–3(p).

§ 160.010–5 Buoyant apparatus with plastic foam buoyancy.

(a) Buoyant apparatus with plastic foam buoyancy must have a plastic foam body with an external protective covering. The body may be reinforced as necessary to meet the tests in §160.010–7.

(b) Plastic foam used in the construction of buoyant apparatus must be a unicellular type accepted by the Commandant (CG–ENG–4) as meeting one of the following:

(1) Subpart 164.015 of this chapter.

(2) MIL–P–19644C (incorporated by reference, see §160.010–1 of this subpart).

(3) MIL–P–21929B (incorporated by reference, see §160.010–1 of this subpart).

(4) MIL–P–40619A (incorporated by reference, see §160.010–1 of this subpart).

(c) The external protective covering must be—

(1) Fibrous-glass-reinforced plastic, constructed of a polyester resin listed on the current Qualified Products List for MIL–P–21607E(SH) (incorporated by reference, see §160.010–1 of this subpart), or accepted by the Commandant (CG–ENG–4) as meeting MIL–P–21607;

(2) Elastomeric vinyl accepted by the Commandant (CG–ENG–4) as meeting §160.055–3(j) of this chapter; or