§ 160.052–2 Size and model.

(a) A standard buoyant vest is manufactured in accordance with a plan specified in §160.052–1(b) and is a:

(1) Model AP, adult (for persons over 90 pounds);

(2) Model CPM, child, medium (for persons weighing from 50 to 90 pounds);

(3) Model CPS, child, small (for persons weighing less than 50 pounds).

(b) A nonstandard buoyant vest is:

(1) Manufactured in accordance with the manufacturer’s approved plan;

(2) Equivalent in performance to the standard buoyant vest; and

(3) Assigned a model designation by the manufacturer for the following sizes:

(i) Adult (for persons weighing over 90 pounds);

(ii) Child, medium (for persons weighing from 50 to 90 pounds);

(iii) Child, small (for persons weighing less than 50 pounds).


(a) General. All components used in the construction of buoyant vests must meet the applicable requirements of subpart 164.019 of this chapter. The requirements for materials specified in this section are minimum requirements, and consideration will be given to the use of alternate materials in lieu of those specified. Detailed technical data and samples of all proposed alternate materials shall be submitted for approval before those materials are incorporated in the finished product.

(b) Unicellular plastic foam. The unicellular plastic foam shall be all new material complying with the requirements of specification Subpart 164.015 of this subchapter for Type A or B foam.

(c) Envelope. The buoyant vest envelope, or cover, shall be made from 39” 2.85 cotton jeans cloth, with a thread count of approximately 96 × 64. The finished goods shall weigh not less than 4.2 ounces per square yard, shall have thread count of not less than 94 × 60, and shall have a breaking strength of not less than 85 pounds in the warp and 50 pounds in the filling. Other cotton fabrics having a weight and breaking strength not less than the above will be acceptable. There are no restrictions as to color, but the fastness of the color to laundering, water, crocking, and light shall be rated “good” when tested in accordance with Federal Test Method Standard No. 191, Methods 5610, 5630, 5650, and 5660.

(d) Tie tapes and body strap loops. The tie tapes and body strap loops for both adult and child sizes must be ¾-inch cotton webbing meeting the requirements of military specification MIL-W-530 for Type IIa webbing.

(d–1) Body straps. The complete body strap assembly, including hardware, must have a minimum breaking strength of 150 pounds for an adult size and 115 pounds for a child size. The specifications for the webbing are as follows:

(1) For an adult size vest, the webbing must be 1 inch;

(2) For a child size vest, the webbing must be three-quarter inch and meet the requirements of military specification MIL-W-530 for Type IIa webbing.

(e) [Reserved]

(f) Thread. Each thread must meet the requirements of subpart 164.023 of
§ 160.052–3a Materials—Dee ring and snap hook assemblies and other instruments of closure for buoyant vests.

(a) Specifications. Dee ring and snap hook assemblies and other instruments of closure for buoyant vests may have decorative platings in any thickness and must meet the following specifications:

(1) The device must be constructed of inherently corrosion resistant materials. As used in this section the term inherently corrosion resistant materials includes, but is not limited to brass, bronze, and stainless steel.

(2) The size of the opening of the device must be consistent with the webbing which will pass through the opening.

(b) Testing requirements. Dee ring and snap hook assemblies and other instruments of closure for buoyant vests must—

(1) Be tested for weathering. The Coast Guard will determine which one or more of the following tests will be used:

(i) Application of a 20 percent sodium-chloride solution spray at a temperature of 95 °F (35 °C) for a period of 240 hours in accordance with the procedures contained in method 811 of the Federal Test Method Standard No. 151.

(ii) Exposure to a carbon-arc weatherometer for a period of 100 hours.

(iii) Submergence for a period of 100 hours in each of the following:

(a) Lined gasoline.

(b) Gum turpentine.

(iv) Exposure to a temperature of 0° ±5 °F (17.6 ±2.775 °C) for 24 hours; and

(2) Within 5 minutes of completion of the weathering test required by paragraph (b)(1) of this section, the assembly must be attached to a support and bear 150 pounds for an adult size and 115 pounds for a child size for 10 minutes at ambient temperatures without breaking or distorting.

§ 160.052–4 Materials—nonstandard vests.

(a) General. All materials used in nonstandard buoyant vests must be equivalent to those specified in §160.052–3 and be obtained from a supplier who furnishes an affidavit in accordance with the requirement in §160.052–3(a).

(b) Cover. A vinyl-dip coating may be allowed for the covering of the vest instead of a fabric envelope if the coating meets the requirements in §160.055–5(b)(2) of this chapter except there is no color restriction.

(c) Reinforcing tape. When used, the reinforcing tape around the neck shall be ¾″ cotton tape weighing not less than 0.18 ounces per linear yard having a minimum breaking strength of not less than 120 pounds.

§ 160.052–5 Construction—standard vests.

(a) General. This specification covers buoyant vests which essentially consist of a fabric envelope in which are enclosed inserts of buoyant material arranged and distributed so as to provide the flotation characteristics and buoyancy required to hold the wearer in an upright or slightly backward position with head and face out of water. The buoyant vests are also fitted with straps and hardware to provide for proper adjustment and close and comfortable fit to the bodies of various size wearers.

(b) Envelope. The envelope or cover shall be made of three pieces. Two pieces of fabric shall be cut to the pattern shown on Dwg. No. 160.052–1, Sheet 1 for adult size, and Sheets 2 and 3 for child sizes, and joined together with a third piece which forms a 2″ finished gusset strip all around. Reinforcing strips of the same material as the envelope shall be stitched to the inside of the front piece of the envelope in way of the strap attachments as shown by the drawings.