§ 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);

or

(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-T-43566 (Class I) for Type I 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 this chapter. Only one kind of thread may be used in each seam.

§ 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
§ 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.

(c) Buoyant inserts. The unicellular plastic foam buoyant inserts shall be cut and formed as shown on Dwg. 160.052–1, Sheet 4. (d) Tie tapes, body straps, and hardware. The tie tapes, body straps, and hardware shall be arranged as shown on the drawings and attached to the envelope with the seams and stitching indicated.

(e) Stitching. All stitching shall be short lock stitch conforming to Stitch Type 301 of Federal Standard No. 751, and there shall be not less than 7 nor more than 9 stitches to the inch.

(f) Workmanship. Buoyant vests shall be of first-class workmanship and shall be...