

**§ 160.077-11 Materials—Recreational Hybrid PFD.**

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(iii) UL 1191 and having a V factor of 89 except that foam with a lower V factor may be used if it provides buoyancy which, after a normal service life, is at least equal to that of a PFD made with material having a V factor of 89 and the required minimum inherent buoyancy when new; or

\* \* \* \* \*

(j) *Kapok pad covering.* \* \* \*

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10. In § 160.077-13, the heading is revised, and paragraph (d) is removed to read as follows:

**§ 160.077-13 Materials—Type I and Commercial Hybrid PFD.**

\* \* \* \* \*

11. In § 160.077-15, the heading is revised, paragraphs (a)(2)(ii), (b)(3), (c)(2)(ii), and (d)(3) are revised; (b) (13) is redesignated as (b)(14) and revised; and a new paragraph (b)(13) and Table 160.077-15(b)(13) are added to read as follows:

**§ 160.077-15 Construction and Performance—Recreational Hybrid PFD.**

\* \* \* \* \*

(a) \* \* \*

(2) \* \* \*

(ii) If it is to be marked as Type II or Type V providing Type I or II performance, not require second stage donning to achieve that performance;

\* \* \* \* \*

(b) \* \* \*

(3) Have at least one automatic inflation mechanism that inflates at least one chamber, if marked as providing Type I or II performance;

\* \* \* \* \*

(13) Provide the minimum buoyancies specified in Table 160.077-15(b)(13).

TABLE 160.077-15(b)(13).—BUOYANCY FOR RECREATIONAL HYBRID PFDs

	Adult	Youth	Small child
Inherent buoyancy (deflated condition):			
Type II .....	45 N (10 lb) .....	40 N (9 lb) .....	30 N (7 lb)
Type III .....	45 N (10 lb) .....	40 N (9 lb) .....	N/A
Type V .....	33 N (7.5 lb) .....	34 N (7.5 lb) .....	N/A
Total buoyancy (inflated condition):			
Type II .....	100 N (22 lb) .....	67 N (15 lb) .....	53 N (12 lb)
Type III .....	100 N (22 lb) .....	67 N (15 lb) .....	N/A
Type V .....	100 N (22 lb) .....	67 N (15 lb) .....	N/A

(14) Meet any additional requirements that the Commandant may prescribe, if necessary, to approve unique or novel designs.

(c) \* \* \*

(2) \* \* \*

(ii) Not be capable of locking in the open or closed position except that, a friction-fit dust cap that only locks in the closed position may be used; and

\* \* \* \* \*

(d) \* \* \*

(3) The deflation mechanism may be the oral inflation mechanism.

\* \* \* \* \*

12. In § 160.077-17, the heading and paragraph (b)(4) are revised, and

paragraphs (b)(8), (b)(9), (b)(10), (b)(11), and Table 160.077-17(b)(11) are added to read as follows:

**§ 160.077-17 Construction and Performance—Type I and Commercial Hybrid PFD.**

\* \* \* \* \*

(b) \* \* \*

(4) Have at least one inflation chamber, except that a hybrid PFD approved as a SOLAS lifejacket must have at least two inflation chambers;

\* \* \* \* \*

(8) If approved for adults, be universally sized as specified in § 160.077-15(b)(7).

(9) Commercial hybrid PFDs employing closures with less than 1600 N (360 lb) strength, must have at least two closures that meet UL 1517, Section 22.1.

(10) Each commercial hybrid PFD must have an attachment for a PFD light securely fastened to the front shoulder area. The location should be such that if the light is attached it will not damage or impair the performance of the PFD.

(11) In the deflated and the inflated condition, provide buoyancies of at least the values in Table 160.077-17(b)(11).

TABLE 160.077-17(b)(11).—MINIMUM BUOYANCY OF TYPE I AND COMMERCIAL HYBRID PFDs

	Adult	Youth	Small child
Inherent buoyancy (deflated condition):			
Type I .....	70 N (15.5 lb) .....	50 N (11 lb) .....	40 N (9 lb)
Type V .....	60 N (13 lb) .....	34 N (7.5 lb) .....	N/A
Total buoyancy (inflated condition):			
Type I .....	130 N (30 lb) .....	80 N (18 lb) .....	67 N (15 lb)
Type V .....	100 N (22 lb) .....	67 N (15 lb) .....	N/A

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13. In § 160.077-19, paragraphs (b)(3)(iii), (b)(6), and (e) are revised to read as follows:

**§ 160.077-19 Approval Testing—Recreational Hybrid PFD.**

\* \* \* \* \*

(b) \* \* \*

(3) \* \* \*

(iii) *Inflated flotation stability*, UL 1517, section 15, for Type II and Type III performance except comparisons are to be made to the appropriate size and

Type reference vest as defined in § 160.077-2(j).

\* \* \* \* \*

(6) *Buoyancy, buoyancy distribution, and inflation medium retention test*, UL 1517, sections 18 and 19, except: