

§ 163.002-25

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placed on one end of the step so that the block is in contact with the stepping surface. The metal block must weigh between 1.5 kg (3.3 lb.) and 3.0 kg (6.6 lb.) and must not be more than 100 mm (4 in.) wide by 135 mm (5 $\frac{3}{8}$ in.) long. The surface of the block in contact with the step must have leather or composition shoe sole material attached to it.

(iii) The end of the step that has the metal block on it must be slowly raised until the block starts to slide. The angle of the step in this position must be measured and recorded. The step and block must then be placed under water and the procedure repeated.

(iv) The procedure in paragraph (c)(12)(iii) of this section must be repeated using a rigid ladder rung in place of the standard step.

(v) The ladder rung must then be secured in a horizontal position with a block resting on its stepping surface. The block must be of a size similar to the one used in the previous tests and have the same shoe sole surface used in the previous tests. The block must be arranged to apply a vertical load of 40 kg (88 lb.) to the rung. The block must be then moved back and forth in the same line from one end of the stepping surface to the other. This must be done for a total of 1,500 cycles.

(vi) The rung must again be tested as described in paragraph (c)(12)(iii) of this section, except that the initial position of the block must be on a part of the stepping surface that was subjected to the 1,500 cycles of rubbing.

(vii) The angles at which the block starts to slide on a wet and dry ladder rung when tested under paragraphs (c)(12)(iv) and (c)(12)(vi) of this section must be equal to or greater than the corresponding angles measured for the standard step when tested under paragraph (c)(12)(iii) of this section.

§ 163.002-25 Marking.

(a) Each pilot hoist manufactured under Coast Guard approval must have a corrosion-resistant nameplate. The nameplate must contain the—

- (1) Name of the manufacturer;
- (2) Manufacturer's brand or model designation;
- (3) Working load;
- (4) Lift height;

- (5) Maximum persons capacity;
 - (6) Hoist serial number;
 - (7) Date of manufacture; and
 - (8) Coast Guard approval number.
- (b) The hoist must be permanently and legibly marked with the name of the laboratory that conducted the production tests.

§ 163.002-27 Production tests and examination.

Each pilot hoist manufactured under Coast Guard approval must be tested as prescribed in §163.002-21(c)(9) and subpart 159.007 of this chapter. The tests must be conducted by an independent laboratory. If the hoist fails the tests its defects must be corrected and retested until it passes. The laboratory must also conduct the visual examination described in §163.002-21(b). The hoist may not be sold as Coast Guard approved unless it passes testing and unless each defect discovered in the visual examination is corrected

Subpart 163.003—Pilot Ladder

SOURCE: CGD 74-140, 46 FR 63291, Dec. 31, 1981, unless otherwise noted.

§ 163.003-1 Scope.

(a) This subpart contains standards and approval and production tests for a pilot ladder used on a merchant vessel to embark and disembark pilots and other persons when away from the dock.

(b) The requirements in this subpart apply to a pilot ladder designed for use along a vertical portion of a vessel's hull.

§ 163.003-3 ASTM standard.

The following standard of the American Society for Testing and Materials (ASTM) is incorporated by reference into this subpart: ASTM D 1435-94, Standard Practice for Outdoor Weathering of Plastics. You may obtain this standard from the Society at 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

[USCG-1999-5151, 64 FR 67185, Dec. 1, 1999]

§ 163.003-7 Independent laboratory.

The approval and production tests in this subpart must be conducted by or

under the supervision of an independent laboratory accepted by the Coast Guard under subpart 159.010 of this chapter.

§ 163.003-9 Approval procedure.

(a) *General.* A pilot ladder is approved by the Coast Guard under the procedures in subpart 159.005 of this chapter.

(b) *Approval testing.* Each approval test must be conducted in accordance with § 163.003-21.

(c) *Approval of alternatives.* A pilot ladder that does not meet the materials, construction, or performance requirements of this subpart may be approved if the application and any approval tests prescribed by the Commandant in place of or in addition to the approval tests required by this subpart, show that the alternative materials, construction, or performance is at least as effective as that specified by the requirements of this subpart. The Commandant may also prescribe different production tests if the tests required by this subpart are not appropriate for the alternative ladder configuration.

§ 163.003-11 Materials.

(a) *Suspension members.* Each suspension member must be mildew-resistant manila rope or a dacron polyester rope with a polypropylene core of a color that contrasts with the dacron. Each suspension member must have a breaking strength of not less than 24 kN (5,400 lb.) and a nominal circumference of not less than 60 mm (2¼ in.).

(b) *Wooden parts.* Each wooden part of a pilot ladder must be hardwood that is free from knots and any other defects affecting its strength or durability.

(c) *Wood preservative.* After each wooden part is formed and finished, it must be treated with water-repellant wood preservative that is properly applied.

(d) *Molded steps.* Each step made of molded construction must be rubber or resilient plastic.

(e) *Metal parts.* Each metal fastener must be made of a corrosion resistant metal. Each other metal part must be made of corrosion-resistant metal or of steel galvanized by the hot dip process after the part is formed.

(f) *Plastics.* Each plastic material must be of a type that retains at least 30 percent of its original tensile strength and at least 80 percent of its original impact strength when subjected to the one year outdoor weathering test described in ASTM D 1435.

§ 163.003-13 Construction.

(a) *General.* Each pilot ladder must have two suspension members on each side. Each step in the ladder must be supported by each suspension member.

(b) *Suspension member.* The suspension members of a pilot ladder must meet the following requirements:

(1) Each suspension member must be continuous from the top of the ladder to the bottom and must not be painted or otherwise coated or covered.

(2) Except as provided in paragraph (g) of this section—

(i) The top end of one suspension member on each side of the ladder must extend at least 3 m (10 ft.) beyond the top ladder step; and

(ii) The top ends of the other suspension members must be just above the top step and must have an eye splice or thimble large enough to fit two passes of a suspension member.

(3) The top end of each suspension member that does not have an eye splice or thimble must be served or treated to prevent fraying.

(4) Each pair of suspension members must be clamped together both above and below each step. Marline seizing may not be used.

(5) The clear space between the suspension members on one side of a ladder and those on the other side must be at least 400 mm (16 in.), but not more than 480 mm (19 in.).

(6) The suspension members must not have fittings at the bottom of the ladder that can be used for attaching additional ladder sections.

(c) *Steps.* Pilot ladder steps must meet the following requirements:

(1) The four lowest steps must be molded steps and the rest of the steps must be either wooden or molded steps.

(2) The top face of each step must have a rectangular surface that is at least 115 mm (4½ in.) wide with a non-skid surface that does not retain water. Adhesive non-skid sheets may not be used. (For example, a suitable surface