

(d) The density and percentage of moisture and volatile matter of each component of the material.

(e) The address of the factory manufacturing the material.

(f) A sample representative of the material that is 305 mm long and 305 mm wide and that has a height equal to the largest thickness of the material as manufactured.

(g) If the applicant intends to observe the test and measurements of the sample, a statement to that effect.

(h) A commitment by the applicant to pay for the cost of the test and measurements when billed by the designated laboratory.

#### § 164.009-9 Procedure for approval.

(a) An application for approval of a material under this subpart must be sent to the Commandant (CG-ENG), Attn: Office of Design and Engineering Systems, U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE., Washington, DC 20593-7509.

(b) The application is examined by the Coast Guard to determine the probability that the material meets the requirements for approval. The Coast Guard notifies the applicant of the results of the examination and of the sample size necessary for submission to the designated laboratory.

(c) The designated laboratory notifies the applicant of the time and place for submission and testing of the sample.

(d) The designated laboratory conducts the tests and measurements of the sample in accordance with the procedures in this subpart, prepares a test report, and sends four copies of the report to the Commandant (CG-ENG). The applicant may observe the test and measurements.

(e) The Commandant sends a copy of the test report to the applicant and advises him whether the material is approved. If the material is approved, an approval certificate is sent to the applicant.

[CGD 74-129, 41 FR 41701, Sept. 23, 1976, as amended by CGD 82-063b, 48 FR 4783, Feb. 3, 1983; CGD 88-070, 53 FR 34537, Sept. 7, 1988; CGD 95-072, 60 FR 50467, Sept. 29, 1995; CGD 96-041, 61 FR 50734, Sept. 27, 1996; USCG-2009-0702, 74 FR 49238, Sept. 25, 2009; USCG-2013-0671, 78 FR 60162, Sept. 30, 2013]

#### § 164.009-11 Furnace apparatus.

(a) The test furnace apparatus consists of a furnace tube, stabilizer, draft shield, furnace stand, temperature coil controls with a voltage stabilizer, specimen holder, specimen insertion device, and three thermocouples (a furnace thermocouple to measure furnace temperature, a surface thermocouple to measure temperature at the surface of a specimen, and a specimen thermocouple to measure temperature at the center of a specimen). A detailed plan of the construction and arrangement of the furnace apparatus may be obtained from the Commandant (CG-521).

(b) Temperatures measured by the thermocouples are recorded by the instrument having a measuring range that corresponds to the temperature changes that occur during a furnace calibration or test. The temperature recording equipment is accurate to within at least 0.5 percent of temperatures recorded during a test.

[CGD 74-129, 41 FR 41701, Sept. 23, 1976, as amended by CGD 82-063b, 48 FR 4783, Feb. 3, 1983; CGD 95-072, 60 FR 50467, Sept. 29, 1995; CGD 96-041, 61 FR 50734, Sept. 27, 1996; USCG-2009-0702, 74 FR 49238, Sept. 25, 2009]

#### § 164.009-13 Furnace calibration.

A calibration is performed on each new furnace and on each existing furnace as often as necessary to ensure that the furnace is in good working order. In each calibration the energy input to the furnace is adjusted so that the furnace thermocouple gives a steady reading of  $750 \pm 10$  °C. The wall temperature of the furnace tube is then measured by an optical micro-pyrometer at intervals of 10mm on 3 equally spaced vertical axes. The furnace is correctly calibrated if the temperature of the furnace tube wall is between 825 and 875 °C. 50 mm above and below the midline of the wall and if the average wall temperature is approximately 850 °C.

#### § 164.009-15 Test procedure.

(a) *General.* Paragraphs (b) through (k) of this section contain the test procedures for each material submitted for approval, except fiberglass and other materials that melt at  $750^\circ \pm 10$  °C. Paragraph (l) of this section contains test procedures for fiberglass and