

per cubic centimeter of the molded deck covering.

(e) *Spot check tests.* (1) Deck coverings are not inspected at regularly scheduled factory inspections; however, the cognizant Officer in Charge, Marine Inspection, may detail a marine inspector at any time to visit any place where deck coverings are manufactured to conduct any inspections or examinations deemed advisable and to select representative samples for further examination, inspection or tests. The marine inspector shall be admitted to any place where work is done on deck coverings or component materials.

(2) Manufacturers of approved deck coverings shall maintain quality control of materials used, manufacturing methods, and the finished product so as to meet the requirements of this specification, and any other conditions outlined on the certificate of approval, but the Coast Guard also reserves the right to make spot-check tests of approved deck coverings at any time on samples selected by a marine inspector at the place of manufacture or samples obtained from other sources in the field. The manufacturer will incur no expense for such tests, but the results shall be binding upon the approval of his product. The manufacturer will be advised in advance of the time of testing of the samples selected and may witness the tests if he so desires.

[CGFR 53-25, 18 FR 7874, Dec. 5, 1953, as amended by CGFR 61-15, 26 FR 9302, Sept. 30, 1961]

**§ 164.006-5 Procedure for approval.**

(a) If a manufacturer desires to have a deck covering approved, a request shall be presented to the Commandant of the Coast Guard, together with the following information:

(1) The trade name and designation of the deck covering.

(2) The range of thicknesses in which it is proposed to lay the deck covering together with any information the manufacturer may have as to maximum or minimum thicknesses.

(3) Description of method of attachment to or protection of the steel deck together with the trade name and designation of adhesive or protective coating if used.

(4) A sample of the molded deck covering at least 6 inches square and ¼ inch thick. This may or may not be attached to a backing material at the manufacturer's option.

(b) The material submitted will be examined and the manufacturer advised as to the number and thicknesses of samples to be submitted together with the estimated cost of the tests.

(c) If the deck covering is indicated as being suitable, the manufacturer shall then submit the following:

(1) Two samples of each thickness to be tested laid in the manner designated on a ¼"×12"×27" steel plate for the purpose of the smoke test and fire resistance and integrity test noted in § 164.006-4 (b) and (c).

(2) Sufficient bulk material (unmixed) to lay a sample one inch thick on an area of 12"×27". If an adhesive or protective coating is used, a liberal sample shall be supplied.

(3) If the manufacturer desires to witness the tests, he should so indicate at this time.

(4) A commitment that he will reimburse the National Bureau of Standards for the cost of the tests when billed by them.

(d) The above material will be submitted to the National Bureau of Standards by the Coast Guard for testing. The tests noted in § 164.006-4 will be conducted and a report submitted to the Coast Guard.

(e) A copy of the test report will be forwarded to the manufacturer and he will be advised if his material is approved under this specification, and if approved, in what thicknesses it may be laid, and in what thicknesses it must be laid to meet the requirements for Class A-60 decks without the use of any other insulating material. If approved, this information will be published in the FEDERAL REGISTER.

[CGFR 53-25, 18 FR 7874, Dec. 5, 1953, as amended by CGFR 61-62, 27 FR 180, Jan. 6, 1962]

**Subpart 164.007—Structural Insulations**

SOURCE: CGFR 69-72, 34 FR 17498, Oct. 29, 1969, unless otherwise noted.

**§ 164.007-1 Applicable specification and referenced material.**

(a) *Specification.* The following specification of the issue in effect on the date of manufacture of the structural insulation shall form a part of the regulations of this subpart (see §§2.75-17 through 2.75-19 of subchapter A (Procedures Applicable to the Public) of this chapter:

(1) Coast Guard specification:

Subpart 164.009 of this part, Incombustible Materials for Merchant Vessels.

(b) *Guidance.* For guidance you may use the following technical reference: ASTM E 119-98, Standard Test Methods for Fire Tests of Building Construction and Materials. You may obtain it from The American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

(c) *Copies on file.* A copy of the specification listed in paragraph (a) of this section shall be kept on file by the manufacturer, together with the certificate of approval and this specification. It is the manufacturer's responsibility to have the latest issue of the specification on hand together with the certificate of approval and approved plans when manufacturing under this specification subpart.

(1) The Coast Guard specification may be obtained from the Commandant (G-MSE), U.S. Coast Guard, Washington, DC 20593-0001.

[CGFR 69-72, 34 FR 17498, Oct. 29, 1969, 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-1999-5151, 64 FR 67185, Dec. 1, 1999]

**§ 164.007-2 Purpose.**

The purpose of this specification is to set forth tests necessary to measure the insulation value of structural insulation specimens under fire exposure conditions. The tests are not intended to measure the integrity of structural components of an assembly. Insulation meeting this specification is adequate to limit the average temperature rise of a steel bulkhead to 139 °C. (250 °F.) at the end of a 60-minute standard fire test.

**§ 164.007-3 Conditions of approval.**

(a) Structural insulation shall be of such quality as to successfully meet the requirements for an incombustible material as set forth in subpart 164.009 of this part.

(b) Structural insulation shall be of such quality and thickness as to successfully pass all of the tests set forth in §164.007-4, and the retests required by §164.007-8.

(c) The product shall be so marked as to be readily identifiable to an inspector in the field. The marking shall include the Coast Guard approval number.

**§ 164.007-4 Testing procedure.**

(a) *Tests.* All tests, including the retests, shall be conducted at the National Bureau of Standards or other laboratories designated by the Coast Guard.

(b) *Test of physical properties.* (1) Density measurement: The smallest sample for density measurements of solid materials shall be 30 cm × 30 cm (12"×12") by the submitted thickness. Length and width measurements shall be made to the nearest 1 mm. (1/32"), thickness to the nearest 0.25 mm. (0.01"), allowance being made of any nonflatness of the major surfaces of the specimen. Measurements of dimensions of fibrous insulations shall be made to the nearest 1.5 mm. (1/16") on a nominal 30 cm. (12") cube assembled from sheets of thickness as received. The average of at least four measurements of each dimension shall be reported. The weight shall be determined with a scale or balance sensitive and accurate to 0.5 percent or less of the total weight. The dimensional and weight measurements shall not be made until the sample has been conditioned 1 week, or longer if required to reach constant weight, in an atmosphere at 23° ±1 °C. (73 °F. ±2°) and 50 percent relative humidity.

(2) Transfer to a previously dried and weighed wide-mouth weighing bottle provided with a glass stopper. Remove the stopper and heat the bottle and sample at 105° ±5 °C. (221° ±9 °F.) for 4 hours, insert the stopper, cool and weigh. Calculate the content of moisture and other volatiles as percent of the final dry weight of the sample.