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all changes and occurrences, which are not criteria of performance but which may create hazard in case of a fire; for example the emission of appreciable volumes of smoke or noxious vapors from the unexposed side of the test specimen. The specimen shall be examined after the test for changes that have taken place and the information shall be noted in the test report.

(h) Duration of testing. The test shall be continued for at least 30 minutes to meet the requirements of \$164.008-2(b) or at least 60 minutes to meet the requirements of \$164.008-2(c). In either case, the test shall be continued until the maximum surface temperature rise values noted in \$164.008-4(a) have been reached, or until cracks which lead to flaming as specified in \$164.008-4(b) are formed.

§ 164.008-4 Test requirements.

(a) Thermal insulation: The insulation value of the specimens for the full scale test shall be such that the average temperature of thermocouples on the unexposed surface described in $\S164.008-3(f)(2)$ will not rise more than 139 °C. (250 °F.) above the initial temperature, nor will the temperature at any point on the surface, including any joint, rise more than 225 °C. (405 °F.) above the initial temperature at the end of 15 minutes. When failure is due to excessive temperature rise on the joint, consideration will be given to alternate joint construction. The results obtained on the small scale test (2'x2') $(60 \text{ cm.} \times 60 \text{ cm.})$ shall be recorded.

(b) The test shall determine the length of time, up to one hour, that the bulkhead panel, including the joint can withstand the passage of flame. Cracks and openings shall not be such as to lead to flaming of a cotton wool test pad as prescribed in §164.008–3(e)(3) held facing the aperture at about 25 mm. for a period of 30 seconds. If no flaming occurs, the pad shall be removed and reapplied after a suitable interval.

§ 164.008-5 Test report.

- (a) The test report required by \$164.008-7 (e) and (g) shall include at least the following:
 - (1) Name of manufacturer.
 - (2) Purpose of test.
 - (3) Test conditions and date of test.

- (4) Description of the panel tested giving size, thickness, density, detail of joint and method of assembling in test furnace.
- (5) Complete time-temperature data, including initial temperature, for each thermocouple together with curves of average temperature for the unexposed surface of the insulation and the thermocouple recording the highest temperature. In addition, for §164.008-7(g)(2) complete time-temperature data consisting of a numerical time-temperature table for each furnace and each surface of insulation thermocouple together with the initial temperature of each thermocouple.
- (6) A log setting forth the observer's notes relative to deflections, smoke or gas emission, glow, flame emission, and any other important data. The time of each observation should be noted.
- (7) Complete observations on the appearance of cracks and data on the testing of the cracks as specified in §164.008–4(b).
- (8) Photographs of both sides of the panel before and after testing.
 - (9) Summary of test results.
 - (b) [Reserved]

[CGFR 69-72, 34 FR 17500, Oct. 29, 1969; 34 FR 19030, Nov. 29, 1969]

§ 164.008-6 Retests.

(a) Manufacturers of approved bulkhead panels shall maintain quality control of materials used, manufacturing methods, and the finished product utilizing appropriate quality control testing so as to meet the requirements of this specification, and any other conditions outlined on the certificate of approval. Bulkhead panels are not inspected at regularly scheduled factory inspections; however, approved bulkhead panels are subject to retest for continued compliance with the requirements of this subpart on the following basis:

(1) The Coast Guard may detail a marine inspector or other Coast Guard designated inspector at any time to visit any place where bulkhead panels are manufactured to conduct any inspections or examinations deemed advisable and to select representative samples for further examination, inspection, or tests. The inspector shall