

with two hours between each weighing constitutes equilibrium. Cigarettes shall be removed from any packaging and exposed in a suitable manner to permit free movement of air around them during conditioning. Calculate the weight of material necessary to fill the holder (volume 4,000 cm<sup>3</sup> or 0.14 ft<sup>3</sup>) at the settled density as determined in § 1209.4(e). The material shall be blown, combed, or otherwise mixed to remove lumps and shall be loaded uniformly into each specimen holder, level and flush to the top of the holder. The weight of each specimen shall be measured to the nearest 0.2 g (0.007 oz) or less by weighing the holder before and after filling. If the weight of the specimen is less than that calculated, a removable extension top shall be placed on top of the holder, the necessary amount of insulation is placed inside the extension and the loaded holder shall be dropped from a height no greater than 7.6 cm. (3 in) onto a hard flat surface. This process shall be repeated until the calculated weight of material completely fills the holder. The extension top is then removed. With the specimen in the holder and placed on the insulated pad, a rod of 8 mm (.31 in) diameter with a pointed end shall be inserted vertically into the approximate center of the material being tested and withdrawn to form an appropriate cavity for the ignition source, such that the cigarette fits snugly and maintains uniform contact with the specimen. A well lit cigarette, burned not more than 8 mm (0.31 in), shall be inserted in the formed cavity, with the lit end upward and flush with the specimen surface. Burning of the cigarette and specimen shall be allowed to proceed undisturbed in the test area for at least 2 hours or until the smoldering is no longer progressing, whichever period is longer.

(2) After completion of burning and after the holder has cooled down to approximately room temperature, the specimen holder with its material residue shall be weighed, at least to the nearest 0.1 g (0.003 oz), and the percent weight loss of the original specimen calculated. The weight of the cigarette residue is ignored in this calculation. (That is, the weight of the cigarette residue is not subtracted from the net

weight of the specimen holder's contents at the conclusion of the test.)

(3) Three specimens per sample shall be tested.

#### § 1209.8 Procedure for calibration of radiation instrumentation.

This procedure is used to calibrate the radiation instruments used in the test procedures for measuring critical radiant flux.

(a) *Radiation pyrometer.* Calibrate the radiation pyrometer by means of a conventional black body enclosure placed within a furnace and maintained at uniform temperatures of 490, 500, and 510 °C (914, 932, and 950 °F). The black body enclosure may consist of a closed chromel metal cylinder with a small sight hole in one end. Sight the radiation pyrometer upon the opposite end of the cylinder where a thermocouple indicates the black body temperature. Place the thermocouple within a drilled hole and in good thermal contact with the black body. When the black body enclosure has reached the appropriate temperature equilibrium, read the output of the radiation pyrometer. Repeat for each temperature.

(b) *Total heat flux meter.* The total flux meter shall be calibrated by the National Bureau of Standards, (direct request for such calibration services to the: Radiometric Physics Division, 534, National Bureau of Standards (NBS), Washington, DC 20234.), or, alternatively, its calibration shall be developed by transfer calibration methods with an NBS calibrated flux meter. This latter calibration shall make use of the radiant panel tester as the heat source. Measurements shall be made at each of the nine dummy specimen positions and the mean value of these results shall constitute the final calibration.

(c) *Recommendation.* It is recommended that each laboratory maintain a dedicated calibrated reference flux meter against which one or more working flux meters can be compared as needed. The working flux meters should be calibrated according to this procedure at least once per year.

#### § 1209.9 Labeling requirement.

(a) Manufacturers, importers, and private labelers of cellulose insulation