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specimen rack so that the tip of the indicator finger just touches the surface of the specimen.

(3) Adjust the position of the specimen rack of the flammability test chamber so that the tip of the indicator finger just touches the face of the mounted specimen.

(4) String the stop thread through the guides in the upper plate of the specimen holder across the top of the specimen, and through any other thread guide(s) of the chamber. Hook the stop weight in place close to and just below the stop weight thread guide. Set the timing mechanism to zero. Close the door of the flammability test chamber.

(5) Begin the test within 45 seconds of the time the specimen was removed from the desiccator. Activate the trigger device to impinge the test flame. The trigger device controls the impingement of the test flame onto the specimen and starts the timing device. The timing is automatic and stops when the weight is released by the severing of the stop thread.

(6) At the end of each test, turn on the hood fan to exhaust any fumes or smoke produced during the test.

(7) Record the burn time (reading of the timer) for each specimen, along with visual observation using the test result codes given in §1610.8. If there is no burn time, record the visual observation using the test result codes. Please note for raised-fiber surface textile fabrics, specimens should be allowed to continue burning, even though a burn rate is measured, to determine if the base fabric will fuse.

(8) After exhausting all fumes and smoke produced during the test, turn off the fan before testing the next specimen.

[73 FR 15640, Mar. 25, 2008, as amended at 73 FR 62187, Oct. 20, 2008]

§1610.7 Test sequence and classification criteria.

(a) *Preliminary and final classifications.* Preliminary classifications are assigned based on the test results both before and after refurbishing. The final classification shall be the preliminary classification before or after refurbishing, whichever is the more severe flammability classification.

(b) *Test sequence and classification criteria.*

(1) Step 1, Plain Surface Textile Fabrics in the original state.

(i) Conduct preliminary tests in accordance with §1610.6(a)(2)(i) to determine the fastest burning direction of the fabric.

(ii) Prepare and test five specimens from the fastest burning direction. The burn times determine whether to assign the preliminary classification and proceed to §1610.6(b) or to test five additional specimens.

(iii) Assign the preliminary classification of Class 1, Normal Flammability and proceed to §1610.6(b) when:

(A) There are no burn times; or

(B) There is only one burn time and it is equal to or greater than 3.5 seconds; or

(C) The average burn time of two or more specimens is equal to or greater than 3.5 seconds.

(iv) Test five additional specimens when there is either only one burn time, and it is less than 3.5 seconds; or there is an average burn time of less than 3.5 seconds. Test these five additional specimens from the fastest burning direction as previously determined by the preliminary specimens. The burn times for the 10 specimens determine whether to:

(A) Stop testing and assign the final classification as Class 3, Rapid and Intense Burning only when there are two or more burn times with an average burn time of less than 3.5 seconds; or

(B) Assign the preliminary classification of Class 1, Normal Flammability and proceed to §1610.6(b) when there are two or more burn times with an average burn time of 3.5 seconds or greater.

(v) If there is only one burn time out of the 10 test specimens, the test is inconclusive. The fabric cannot be classified.

(2) Step 2, Plain Surface Textile Fabrics after refurbishing in accordance with §1610.6(b)(1).

(i) Conduct preliminary tests in accordance with §1610.6(a)(2)(i) to determine the fastest burning direction of the fabric.

(ii) Prepare and test five specimens from the fastest burning direction. The burn times determine whether to stop

testing and assign the preliminary classification or to test five additional specimens.

(iii) Stop testing and assign the preliminary classification of Class 1, Normal Flammability, when:

(A) There are no burn times; or

(B) There is only one burn time, and it is equal to or greater than 3.5 seconds; or

(C) The average burn time of two or more specimens is equal to or greater than 3.5 seconds.

(iv) Test five additional specimens when there is only one burn time, and it is less than 3.5 seconds; or there is an average burn time less than 3.5 seconds. Test five additional specimens from the fastest burning direction as previously determined by the preliminary specimens. The burn times for the 10 specimens determine the preliminary classification when:

(A) There are two or more burn times with an average burn time of 3.5 seconds or greater. The preliminary classification is Class 1, Normal Flammability; or

(B) There are two or more burn times with an average burn time of less than 3.5 seconds. The preliminary and final classification is Class 3, Rapid and Intense Burning; or

(v) If there is only one burn time out of the 10 specimens, the test results are inconclusive. The fabric cannot be classified.

(3) Step 1, Raised Surface Textile Fabric in the original state.

(i) Determine the area to be most flammable per § 1610.6(a)(3)(i).

(ii) Prepare and test five specimens from the most flammable area. The burn times and visual observations determine whether to assign a preliminary classification and proceed to § 1610.6(b) or to test five additional specimens.

(iii) Assign the preliminary classification and proceed to § 1610.6(b) when:

(A) There are no burn times. The preliminary classification is Class 1, Normal Flammability; or

(B) There is only one burn time and it is less than 4 seconds without a base burn, or it is 4 seconds or greater with or without a base burn. The preliminary classification is Class 1, Normal Flammability; or

(C) There are no base burns regardless of the burn time(s). The preliminary classification is Class 1, Normal Flammability; or

(D) There are two or more burn times with an average burn time of 0–7 seconds with a surface flash only. The preliminary classification is Class 1, Normal Flammability; or

(E) There are two or more burn times with an average burn time greater than 7 seconds with any number of base burns. The preliminary classification is Class 1, Normal Flammability; or

(F) There are two or more burn times with an average burn time of 4 through 7 seconds (both inclusive) with no more than one base burn. The preliminary classification is Class 1, Normal Flammability; or

(G) There are two or more burn times with an average burn time less than 4 seconds with no more than one base burn. The preliminary classification is Class 1, Normal Flammability; or

(H) There are two or more burn times with an average burn time of 4 through 7 seconds (both inclusive) with two or more base burns. The preliminary classification is Class 2, Intermediate Flammability.

(iv) Test five additional specimens when the tests of the initial five specimens result in either of the following: There is only one burn time and it is less than 4 seconds with a base burn; or the average of two or more burn times is less than 4 seconds with two or more base burns. Test these five additional specimens from the most flammable area. The burn times and visual observations for the 10 specimens will determine whether to:

(A) Stop testing and assign the final classification only if the average burn time for the 10 specimens is less than 4 seconds with three or more base burns. The final classification is Class 3, Rapid and Intense Burning; or

(B) Assign the preliminary classification and continue on to § 1610.6(b) when:

(*1*) The average burn time is less than 4 seconds with no more than two base burns. The preliminary classification is Class 1, Normal Flammability; or

(*2*) The average burn time is 4–7 seconds (both inclusive) with no more than 2 base burns. The preliminary

classification is Class 1, Normal Flammability, or

(*3*) The average burn time is greater than 7 seconds. The preliminary classification is Class 1, Normal Flammability; or

(*4*) The average burn time is 4 through 7 seconds (both inclusive) with three or more base burns. The preliminary classification is Class 2, Intermediate Flammability, or

(v) If there is only one burn time out of the 10 specimens, the test is inconclusive. The fabric cannot be classified.

(4) Step 2, Raised Surface Textile Fabric After Refurbishing in accordance with § 1610.6(b).

(i) Determine the area to be most flammable in accordance with § 1610.6(a)(3)(i).

(ii) Prepare and test five specimens from the most flammable area. Burn times and visual observations determine whether to stop testing and determine the preliminary classification or to test five additional specimens.

(iii) Stop testing and assign the preliminary classification when:

(A) There are no burn times. The preliminary classification is Class 1, Normal Flammability; or

(B) There is only one burn time, and it is less than 4 seconds without a base burn; or it is 4 seconds or greater with or without a base burn. The preliminary classification is Class 1, Normal Flammability; or

(C) There are no base burns regardless of the burn time(s). The preliminary classification is Class 1, Normal Flammability; or

(D) There are two or more burn times with an average burn time of 0 to 7 seconds with a surface flash only. The preliminary classification is Class 1, Normal Flammability; or

(E) There are two or more burn times with an average burn time greater than 7 seconds with any number of base burns. The preliminary classification is Class 1, Normal Flammability; or

(F) There are two or more burn times with an average burn time of 4 through 7 seconds (both inclusive) with no more than one base burn. The preliminary classification is Class 1, Normal Flammability; or

(G) There are two or more burn times with an average burn time less than 4 seconds with no more than one base burn. The preliminary classification is Class 1, Normal Flammability; or

(H) There are two or more burn times with an average burn time of 4 through 7 seconds (both inclusive) with two or more base burns. The preliminary classification is Class 2, Intermediate Flammability.

(iv) Test five additional specimens when the tests of the initial five specimens result in either of the following: There is only one burn time, and it is less than 4 seconds with a base burn; or the average of two or more burn times is less than 4 seconds with two or more base burns.

(v) If required, test five additional specimens from the most flammable area. The burn times and visual observations for the 10 specimens determine the preliminary classification when:

(A) The average burn time is less than 4 seconds with no more than two base burns. The preliminary classification is Class 1, Normal Flammability; or

(B) The average burn time is less than 4 seconds with three or more base burns. The preliminary and final classification is Class 3, Rapid and Intense Burning; or

(C) The average burn time is greater than 7 seconds. The preliminary classification is Class 1, Normal Flammability; or

(D) The average burn time is 4–7 seconds (both inclusive), with no more than two base burns. The preliminary classification is Class 1, Normal Flammability; or

(E) The average burn time is 4–7 seconds (both inclusive), with three or more base burns. The preliminary classification is Class 2, Intermediate Flammability; or

(vi) If there is only one burn time out of the 10 specimens, the test is inconclusive. The fabric cannot be classified.

§ 1610.8 Reporting results.

(a) The reported result shall be the classification before or after refurbishing, whichever is the more severe; and based on this result, the textile shall be placed in the proper final classification as described in § 1610.4.

(b) Test result codes. The following are the definitions for the test result