

**DEPARTMENT OF CONSUMER AFFAIRS,  
BUREAU OF ELECTRONIC AND APPLIANCE REPAIR,  
HOME FURNISHINGS AND THERMAL INSULATION**

**ADDENDUM TO THE INITIAL STATEMENT OF REASONS**

Hearing Date: March 26, 2013

Subject Matter of Proposed Regulations: New Flammability Standards for Upholstered Furniture and Articles Exempt from Flammability Standards

Sections Affected: §1101, §1126, §1370, §1373.2, §1374, §1374.1, §1374.2, §1374.3 and §1383.2 of Title 4, Division 3, Articles 1, 2, 13, and 15.5 of the California Code of Regulations

The Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation (Bureau) has considered the comments received during the 45-day comment period. In response, the Bureau is making the following modifications to the originally proposed regulations. The purpose for this addendum is to outline the specific purpose and rationale for these modifications.

**Updated Technical Bulletin 117-2013 Standard:**

The Bureau made grammatical modifications throughout the Technical Bulletin 117-2013 (TB 117-2013) standard to make the document more user friendly. The Bureau also corrected typographical errors and renumbered subsections accordingly. Since these changes are nonsubstantive they will not be discussed in this addendum.

**SECTION 1. COVER FABRIC TEST (ASTM section 10 and 11):**

Modifications to this section's originally proposed language are as follows:

**1.3 TEST PROCEDURES**

**Subsection 1.3.1, Subsection 2.3.1, and Subsection 3.4.1:** These subsections were deleted from the test procedures sections for the specific purpose of eliminating references to the draft enclosure from the standard. This modification is also reflected with the deletion of the drawing of the draft enclosure exemplified in Figure A-1.

**Problem being addressed:**

The draft enclosure restricts airflow to the test specimen which may affect the burning behavior of the test specimen. In addition, allowing the draft enclosure to be used optionally adds variations to the test results.

**Anticipated benefits from this proposed action:**

Manufacturers and suppliers will benefit as they will be provided consistent results of the tests conducted on their materials, regardless of where the test is conducted. Consumer safety will be enhanced as tests conducted at different laboratories will garner similar performance results.

**Rationale:**

Removing the draft enclosure from the standard is necessary since it may allow for inconsistencies and variations to the tests results. It is extremely important that all tests, regardless of where and by whom they are performed, be performed under well-defined and standardized conditions so that the external parameters such as variations in the room temperatures, relative humidity and air supply and/or air flows do not impact the test results. This can be achieved as long as the specifications outlined in Annex A are met.

**Subsection 1.3.4 and Subsection 2.3.4:** These subsections were deleted for the specific purpose of removing the step which extends the measuring of the char length to all directions from the cigarette. Instead, ASTM steps 11.9 and 21.9 will be followed entirely.

The specific purpose and rationale for these modifications are explained in the modifications made to subsection 1(b) below.

#### **1.4 PASS/FAIL CRITERIA**

**Subsection 1(b) and Section 2.4, Subsection 1(b):** These subsections were modified to make specific that the pass or fail of a test specimen would be determined by measuring the vertical char length instead of measuring the char length in any direction.

Problem being addressed:

Requiring that the char length be measured in all directions is redundant with the requirement that the test specimen is to meet the 45 minute test duration.

Anticipated benefits from this proposed action:

Consumers will benefit from this modification as the combination of the vertical char length measurement coupled with the 45 minute test duration will adequately evaluate the smoldering resistance of the mockup.

Rationale:

The proposed pass/fail criteria consist of a vertical char length and a 45-minute continuous smoldering duration. Numerous laboratory tests on specimen mockups have demonstrated that the combination of these two criteria adequately evaluates the smoldering resistance of the mockup. The test results have demonstrated that if the char depth in other directions, including inside the filling substrate and down to the crevice, exceeds the limit, the smoldering will have continued beyond the 45 minute time duration that constitutes a failure. Therefore, in such a case, even if the vertical char length does not exceed the pass/fail limit, the continued smoldering time will.

#### **SECTION 2. BARRIER MATERIALS TEST (ASTM Sections 20 and 21):**

Modifications to this section's originally proposed language are as follows:

##### **2.2 TEST SPECIMEN:**

The initial instruction referencing ASTM Section 20 was deleted to allow for modification to the measurements of the test materials.

**Subsection 2.2.1:** This subsection was modified for the purpose of specifying that the fabric dimensions differ from the measurements mentioned in ASTM step 20.1.

**Subsection 2.2.2:** This subsection was added for the purpose of specifying that the dimensions of the Standard Type II cover fabric differs from the measurements mentioned in ASTM step 20.2.

Problem being addressed:

The material measurements described in the ASTM steps 20.1 and 20.2 do not allow for proper assembly of the test specimen.

Anticipated benefits from this proposed action:

These modifications benefit manufacturers as proper assembly of the test specimen will ensure the highest degree of accuracy and precision in the test results.

Rationale:

The measurements specified are necessary to ensure that an adequate amount of material is available to wrap around and under the test specimen as described in the test procedures. This also ensures that an adequate amount remains so that the material can be fastened in place with pins.

**2.3 TEST PROCEDURE:**

**New Subsection 2.3.1:** This subsection is the same as ASTM step 21.1. The specific purpose for adding this subsection to the standard is to ensure that the directions are clear and easy to follow.

**New Subsection 2.3.2:** This subsection was added for the purpose of specifying that the dimensions of the cover fabric differ from the measurements mentioned in ASTM step 21.2. This modification provides consistency with Section 2.2.2 which is explained above.

**Former Subsection 2.3.1:** The specific purpose and rationale for this modification is explained in the modifications made to subsection 1.3.1.

**Subsection 2.3.4:** The specific purpose and rationale for this modification is explained in the modifications made to Section 1.4 and Section 2.4, Subsection 1(b).

**2.4 PASS/FAIL CRITERIA:**

**Subsection 1(b):** The specific purpose and rationale for this modification is explained in the modifications made to Section 1.4, Subsection 1(b).

**SECTION 3. RESILIENT FILLING MATERIAL TEST (ASTM Section 16 and 17):**

Modifications to this section's originally proposed language are as follows:

**3.2 WEIGHING DEVICE, 3.3 TEST SPECIMEN, Subsection 3.3.4, 3.4 TEST PROCEDURE, Subsections 3.4.6 and 3.4.7:** The specific purpose for deleting these sections is to remove the definition and references which relate to the weighing device and weighing of the test specimen. This modification provides consistency with the modifications made to Section 3.4 Pass/Fail Criteria which reflect that the pass or fail of a test specimen would be determined by measuring the vertical char length instead of by weighing mass loss. The specific purpose and rationale for these modifications are provided in below in Section 3.4 Pass/Fail Criteria, Subsection 1.

**3.4 PASS/FAIL CRITERIA:**

**Subsection 1:** This subsection was modified for the specific purpose of adding a time limit of 45 minutes to the test duration and to make specific that the pass or fail of a test specimen would be determined by measuring the vertical char length instead of by weighing the mass loss.

Problem being addressed:

Requiring that the mass loss be measured is redundant with the requirement that the test specimen is to meet the 45 minute test duration.

Anticipated benefits from this proposed action:

Consumers will benefit from this modification as the combination of the vertical char length measurement coupled with the 45 minute test duration will adequately evaluate the smoldering resistance of the mockup.

Rationale:

Although in theory a weight loss criteria may be the best indicative of fire performance of a test specimen, in practice most smoldering specimens do not register measurable weight losses within the time frame of the test unless and until all charred materials are removed. However, if a smoldering specimen is manually extinguished (e.g. with water) accurate measurement of the weight loss can be impractical even after long periods of drying. Samples with weight loss ( $\geq 20\%$ ) will also fail one or both of char length and 45-minute smoldering criteria.

**NEW - SECTION 4. DECKING MATERIAL TEST (ASTM Sections 18 and 19):**

This section was added for the specific purpose of adding a decking material test method to the standard. The test method mirrors that of ASTM E1353-08a<sup>e1</sup> and measures the tendency of decking materials to smolder and contribute to fire propagation when subjected to a smoldering source. A description of the decking material tester was added to the Scope subsection 1.4.4 and exemplified in Figures C-5 and C-6. A definition of the deck was added to the Terminology subsection 3.5.

Problem being addressed:

There remains a possibility that the decking material may be exposed and contribute to fire propagation when subjected to a smoldering source.

Anticipated benefits from this proposed action:

This modification ensures a higher degree of fire safety for the consumers by screening out the smolder prone decking materials that may pose a smoldering fire hazard. Manufacturers and material suppliers will also have more confidence in the fire behavior of their products and materials.

Rationale:

The likelihood of a cigarette falling through the seat/back or the seat/arm crevice and reaching the decking area is very unlikely when the seat cushions are in proper position and used as intended. However, to err on the side of caution, adding the decking material test to the standard is necessary for instances where the cushions are not in proper position, therefore exposing the decking material.

**4.1 SCOPE (NEW):** The scope was added to define the purpose of the test method performed.

**4.2 TEST SPECIMEN (ASTM Section 18):** This subsection incorporates by reference the Test Specimen procedures found in the ASTM Section 18 – steps 18.1 and 18.2.

**4.3 TEST PROCEDURE (ASTM Section 19):** This subsection incorporates by reference the Test Procedure section found in the ASTM Section 19 – steps 19.1 through 19.6.

**Subsection 4.3.1 (NEW):** The specific purpose for the proposed language is to identify the minimum spacing required for each specimen and to add the use of a fiberglass board in testing.

Problem being addressed:

The ASTM standard does not address the minimum spacing between specimens or specify the use of a fiberglass board in testing.

Anticipated benefits from this proposed action:

Identifying the placement and minimum spacing of specimens will add more clarity to the standard and ensure more consistent testing results. Using a fiberglass board will increase safety within the laboratory space and testing. Further, the fiberglass board is used under the specimens and can prevent damage to countertops or other test surfaces due to specimen failures. The fiberglass board is an inert substrate which does not allow heat transfer or effect test results.

Rationale:

The additional information provides clarity to the test standard. This provides more consistency in conducting tests while adding additional protection to the laboratory space and equipment.

**Subsection 4.3.2 (NEW):** The specific purpose of the language proposed is to clarify that the timer used to record the testing time is to begin after applying proper contact of materials.

Problem being addressed:

The ASTM standard currently specifies the proper placement of material but the standard is silent on when to begin the timer for testing.

Anticipated benefits from this proposed action:

Providing more specificity on when to begin the timing of the test adds clarity to the standard, benefiting both stakeholders and the Bureau.

Rationale:

The proper timing of testing is necessary to determine the performance of the material and test results. Providing further clarification will ensure consistent application of the standard and better testing performance.

**4.4 PASS/FAIL CRITERIA (ASTM Section 19.7):** The purpose is to specify pass/fail criteria for the decking material tests.

Problem being addressed:

The ASTM standard classifies fabrics based on the testing performance of the material. The Bureau does not use fabric classifications as a basis of determining if a material will pass or fail the flammability standard, and instead must specify testing results as pass/fail.

Anticipated benefits from this proposed action:

Specifying the criteria as pass/fail instead of fabric classifications, benefits stakeholders and the Bureau as it provides the specific performance expectations of a material and an accurate indication of whether the material passes the flammability standard.

Rationale:

Pass/fail criteria adds clarity to the standard and provides an accurate indication of whether the material passes the flammability standard, ensuring consistent application of the standard. Furthermore, it is necessary for the Bureau to enforce its flammability rules.

**ANNEX B**

Modifications to this section's originally proposed language are as follows:

**Ignition Source:** This section was modified for the specific purpose of clarifying that the Bureau may certify other equivalent substitutes for the SRM 1196 testing cigarettes.

Problem being addressed:

Currently there are several cigarette ignition sources available which are comprised of various properties.

Anticipated benefits from this proposed action:

Use of equivalent substitutes for the SRM 1196 provides a cost savings to the industry.

Rationale:

Making specific that the Bureau may certify equivalent substitutes for the SRM 1196 cigarette is necessary to ensure that consistency is maintained with the testing results. Without knowing the specific ignition source or its properties the Bureau would not have a practical way of enforcing its flammability rule as performance can vary based on the ignition source used. In return, industry could be provided with a cost savings as they are not limited to purchasing cigarettes from only one source.

**The Standard Polyurethane Foam Substrate:** This section was modified for the specific purpose of including additional foam specifications to the standard test material.

Problem being addressed:

Comments were made that the proposed foam specifications were not enough to ensure consistent foam smoldering performance and is not suitable for a standard test material.

Anticipated benefits from this proposed action:

Providing specificity to the standard test material benefits manufacturers as clear, specific, and detailed foam specifications will ensure the highest degree of accuracy and precision in the test results.

Rationale:

Testing performance can vary based on the range of density and properties of the standard polyurethane foam source used. The Bureau consulted the Polyurethane Foam Association (PFA) on the foam specification. Modifications to the foam specification have been made which were developed by the PFA Executive Committee and peer reviewed by PFA manufacturing and supplier members. A number of possible variables that could affect smolder performance were addressed resulting in more consistent and reproducible test results.

**Laundering Procedures:** This section was added for the specific purpose of making clear the laundering procedures that should be followed for the test specimen. This test method is also listed as a referenced document under section 2.3.

Problem being addressed:

The standard did not address laundering procedures for the test specimen.

Anticipated benefits from this proposed action:

Providing specificity to the laundering procedures benefits manufacturers as clear, specific, and detailed specifications will ensure the highest degree of accuracy and precision in the test results.

Rationale: Adding laundering procedures is necessary to ensure that the tests are performed under well-defined and standardized conditions.

**(NEW) Precision and Bias:** This section was added for the specific purpose of including a summary of the results from the interlaboratory study.

Problem being addressed:

Comments were made that the deviations made from the ASTM are not justifiable or based on reliable and reproducible data.

Anticipated benefits from this proposed action:

Manufacturers, material suppliers, and consumers will benefit from this modification as they will have more confidence in the validity of the standard.

Rationale:

Adding this section to the standard is necessary to assure to stakeholders that the TB 117-2013 is proven to be reproducible and repeatable.

**AMENDMENTS TO PROPOSED REGULATIONS - IMPLEMENTATION OF TB 117-2013:**

**Proposed modifications to Section 1126(11) and (12):** Modifications to these subsections are made for the specific purpose of updating the standard's reference date from January 2013 to June 2013 to reflect its revision date.

Problem being addressed:

The TB 117-2013 has been updated since January 2013.

Anticipated benefits from this proposed action:

Stakeholders will benefit from this action as they are provided with the most current and up-to-date version of the standard.

Rationale:

This change is without regulatory effect but necessary to ensure that the most current version of the standard is being referenced.

**Proposed repeal of Section 1370(a):** The specific purpose for repealing this section is to remove misleading and duplicative language from regulation.

Problem being addressed:

The terminology used in this section is inconsistent with current practices and is misleading. Also, the intent of the regulation is duplicative to the flammability and labeling requirements of Sections 1374 and 1374.3.

Anticipated benefits from this proposed action:

The repeal of this section removes misleading and duplicative language making the document more user friendly.

Rationale:

The current labeling requirements of Section 1374.3 does not require the terminology such as "fire resistant" "flame resistant" to appear on the label as inferred by the current regulatory language. Repealing this section is necessary since the current regulatory language is obsolete and is essentially duplicative to the language found under Section 1374(a).

**Proposed modifications to Section 1373.2:** The specific purpose for modifying “On or after July 1, 2014” to “On or after January 1, 2015” is to update the mandatory compliance date.

The specific purpose for deleting “test” and adding “fire retardant” in this section is to make clear the intent of the regulation.

The specific purpose for updating the standard’s reference date is explained in the modification made to Section 1126(11) and (12).

The specific purpose for adding “which is incorporated by reference” to this section is to incorporate the proposed technical bulletin into regulation.

Problem being addressed:

Comments have been made that manufacturers are in need of twelve to eighteen months to implement the new standard; the July 1, 2014 implementation date would have provided an insufficient transition period.

The use of the term “test” limits the applicability of the regulation to the test method only and not the standard in its entirety.

The modification made to the revision date is explained in the modification made to Section 1126(11) and (12).

The adding of the words “which is incorporated by reference” addresses the need to incorporate the new technical bulletin into regulation.

Anticipated benefits from this proposed action:

Stakeholders will benefit from this action as they are provided additional time to sell through their current inventory of products.

Removing the term “test” and adding “fire retardant” benefits manufacturers as the regulatory requirements set forth in this section is made clearer and easier to understand.

The anticipated benefit for updating the standard’s reference date is explained in the modification made to Section 1126(11) and (12).

Incorporating the new TB 117-2013 by reference allows for easy referencing as it is a multiple page document.

Rationale:

Modifying “On and after July 1, 2014” to “On or after January 1, 2015” is necessary to provide sufficient time for compliance. The Bureau historically sets a prospective date for compliance when implementing new standards as new equipment and test protocols are required. Further, it will substantially reduce and/or eliminate the manufacturers’ cost of compliance as they have a time period to deplete their current supplies.

Deleting the term “test” and adding “fire retardant” is necessary to broaden the scope of the regulation and to achieve the intent of the standard. The current proposed regulatory language implies that the fabric must meet the test method with no other alternative. However, should the fabric fail the test method, the Resilient Filling Materials Test, Section 3 specifies alternatives which would allow the fabric to meet fire retardant requirements and still be used in upholstered furniture.



Therefore, by removing the term “test” the applicability of the regulation is not limited to the test method only but with the section in its entirety.

The rationale for updating the standard’s reference date is explained in the modification made to Section 1126(11) and (12).

It is necessary to incorporate the new TB 117-2013 by reference as it is a stand-alone document that should be referenced by manufacturers to understand the performance requirements that are to be met.

**Proposed modifications to Section 1374(a):** The specific purpose for modifying “On or after July 1, 2014” to “On or after January 1, 2015” is explained in the modification made to Section 1373.2.

The specific purpose for deleting “test” and adding “fire retardant” is explained in the modification made to Section 1373.2.

The specific purpose for updating the standard’s reference date is explained in the modification made to Section 1126(11) and (12).

The specific purpose for adding the language referencing Section 1374.3 is to ensure that the labeling requirements are met.

Problem being addressed:

The modification made to the mandatory compliance date is explained in the modification made to Section 1373.2.

The deleting of the term “test” and adding of “fire retardant” is explained in the modification made to Section 1373.2.

The modification made to the revision date is explained in the modification made to Section 1126(11) and (12).

The labeling requirements are not referenced in this section.

Anticipated benefits from this proposed action:

The anticipated benefits of modifying the mandatory compliance date is explained in the modification made to Section 1373.2

The deleting of the term “test” and adding of “fire retardant” is explained in the modification made to Section 1373.2.

The anticipated benefit for updating the standard’s reference date is explained in the modification made to Section 1126(11) and (12).

Stakeholders will benefit from this reference as they are directed to the labeling requirement Section 1374.3.

Rationale:

The rationale for modifying “On and after July 1, 2014” to “On or after January 1, 2015” is explained in the modification made to Section 1373.2.

Deleting the term “test” and adding “fire retardant” is explained in the modification made to Section 1373.2.

The rationale for updating the standard’s reference date is explained in the modification made to Section 1126(11) and (12).

The reference to Section 1374.3 is necessary to direct the user to the specific sections regarding labeling requirements.

**Proposed modification to Section 1374.2(c):** Modifications to this section were made for the specific purpose of deleting infant mattresses and infant mattress pads from the criteria of exemption.

Problem being addressed:

Including infant mattresses and infant mattress pads to the criteria of exemption is redundant and unnecessary.

Anticipated benefits from this proposed action:

Stakeholders will benefit from this modification as it will make clear that the articles mentioned are not subject to TB 117-2013.

Rationale:

The infant mattresses and infant mattress pads fall under the jurisdiction of the Federal flammability standards. As they are not currently subject to TB 117 nor will they be subject to TB 117-2013, they will be removed from the exempted items to alleviate confusion regarding regulatory authority.

**Proposed addition of Section 1374.2(d):** This subsection is being added for the specific purpose of establishing the criteria that an article of upholstered furniture is to meet so that it may be considered exempt from flammability standards.

Problem being addressed:

The criterion has not been established that would allow for an article of furniture to be exempt from flammability standards based on a consumer’s medical need.

Anticipated benefits from this proposed action:

Consumers will benefit from this modification as manufacturers are provided more flexibility to make an article of furniture that is tailored more toward their medical need.

Rationale:

This addition is necessary to allow articles of furniture to be manufactured in accordance with a health care professional’s written prescription, or with other comparable written medical therapeutic specification, that would be exempt from having to meet flammability standards. This is intended to ensure that the flammability requirements are not the cause of hindering or compromising recovery from a medical condition. This addition also defines the term “health care professional” to make clear who would be qualified to write a prescription that would be considered valid and acceptable under this section.

**Proposed amendment to section 1383.2(a):**

The specific purpose for the amendment is to eliminate the citation and fine provisions related to the flammability resistance and exempted labels requirements. Both sections 1370 and 1374.1 are proposed to be repealed.

**Problem being addressed:**

The citation and fine provisions become obsolete with the repeal of section 1370 and 1374.1.

**Anticipated benefit:**

The repeal of these sections will alleviate any confusing and duplicative language making the document more user friendly.

**Rationale:**

The current regulatory requirement of Section 1370 is unnecessary as the intent of the regulation is essentially duplicative to the language found under Section 1374(a). With the proposed repeal of Section 1370, the repeal of the citation and fine provision found under Section 1383.2 is necessary as this language becomes obsolete. The Bureau maintains equivalent citation and fine provisions for flammability resistance requirements under the citation and fine provisions of Section 1374.

In regards to Section 1374.1, the current regulatory requirement is to place an exemption label on exempted items that are specified in regulation. It is unnecessary and an added cost to manufacturers to label items that are exempt from regulation. The Bureau has determined that it does not provide added consumer protection to affix an exemption label on products. Further, the current verbiage in the label implies that the article for which the label is attached failed to meet the Bureau's flammability standard.

**Proposed amendment to Table of Contents:**

Eliminate the reference of sections 1370 and 1374.1 in this section of regulation as they are being repealed. The purpose for this change is detailed in section 1370 and 1374.1 above.