

Home Laundering,” is found in Technical Manual of the American Association of Textile Chemists and Colorists, vol. 73, 1997, which is incorporated by reference. Copies of this document are available from the American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, North Carolina 27709. This document is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(v) A different number of wash and dry cycles using another procedure may be specified and used, if that procedure has previously been found to be equivalent by the Consumer Product Safety Commission.

(3) *Labeling*—(i) *Treatment label*. If a mattress pad contains a chemical fire retardant, it shall be labeled with the letter “T” pursuant to rules and regulations established by the Consumer Product Safety Commission.

(ii) *Care label*. All mattress pads which contain a chemical fire retardant treatment shall be labeled with precautionary instructions to protect the pads from agents or treatments which are known to cause deterioration of their flame resistance. Such labels shall be permanent and otherwise in accordance with rules and regulations established by the Consumer Product Safety Commission in § 1632.31(b).

(iii) *Exception*. One time use products as defined in § 1632.5(b)(1)(i) are not subject to these labeling requirements.

[49 FR 39796, Oct. 10, 1984, as amended at 65 FR 12938, Mar. 10, 2000]

#### § 1632.6 Ticking substitution procedure.

(a) This procedure may be used to verify acceptable equivalency if a mattress or mattress pad manufacturer wishes to change the ticking used on a particular mattress or mattress pad prototype without conducting a proto-

type test as specified in § 1632.4 or § 1632.5. The procedure includes a ticking classification test that may be used by a ticking, mattress or mattress pad manufacturer or by a distributor of ticking.

(b) *Definitions*. For the purpose of this section the following definitions apply in addition to those in § 1632.1.

(1) *Mattress ticking prototype*. Means a ticking of a specific construction, color, or combination of colors or color pattern, weave pattern design, finish application, fiber content, and weight per unit area. With respect to film-coated ticking, a mattress ticking prototype means in addition to the factors listed above, a given method of application, chemical formula, and thickness of application of film coating. With respect to a quilted ticking, a mattress ticking prototype means the combination of a specific ticking as described above; a specific filling, thickness, density, and chemical composition; a specific thread; a specific method of quilting; and a specific backing fabric construction, weave, finish, fiber content, and weight.

(2) *Mattress pad ticking prototype* (i) Means a ticking of a specific construction, color, or combination of colors or color pattern, weave pattern design, finish application, fiber content, and weight per unit area. With respect to film-coated ticking, a mattress pad ticking prototype means in addition to the factors listed above, a given method of application, chemical formula, and thickness of application of film coating.

(ii) Quilted ticking is excluded from this definition. Therefore, the following procedures may not be used to substitute quilted ticking used on or as a mattress pad.

(c) *Scope and application*. (1) This procedure provides an independent evaluation of the cigarette ignition characteristics of ticking and for the classification of ticking into one of three performance classes. Class A represents tickings evaluated as acting as barriers against cigarette ignition; Class B represents tickings evaluated as having no effect on cigarette ignition; and Class C represents tickings evaluated as having the potential, in some manner, to

## § 1632.6

## 16 CFR Ch. II (1–1–05 Edition)

act as a contributor to cigarette ignition.

(2) Substitution of any ticking which has been evaluated as Class A using the procedure in this §1632.6 for any other ticking material shall not be a “difference in materials” as that phrase is used in §§1632.1 (j) and (k). Consequently, any ticking material evaluated as Class A under this test procedure may be used on any qualified mattress prototype or on any qualified mattress pad prototype without conducting new prototype tests.

(3) Substitution of any ticking which has been evaluated as Class B using the procedure in this §1632.6 for the ticking material used on any mattress prototype or on any mattress pad prototype which was qualified in prototype testing with a testing material evaluated as Class B or a Class C shall not be a “difference in materials” as that phrase is used in §§1632.1 (j) and (k). Consequently, any ticking material evaluated as Class B under this test procedure may be used on any mattress or mattress pad which was qualified in prototype testing with a Class B or Class C ticking material without conducting new prototype tests. However, if Class B ticking material is to be used on any mattress or mattress pad which was qualified in prototype testing with a Class A ticking material, the mattress prototype or mattress pad prototype must be requalified, using a Class B ticking.

(4) A ticking material which has been evaluated as Class C using the procedure in this §1632.6 may be used only on a mattress or mattress pad which was qualified in prototype testing with that particular Class C ticking material. Consequently, a ticking material evaluated as Class C under this test procedure may not be used on any mattress or mattress pad which was qualified in prototype testing using another Class C ticking material, or a Class A or Class B ticking material, without conducting new prototype tests.

(d) *General requirements.* (1) This procedure is a ticking prototype performance classification test. Ticking not classified according to this procedure may be used on mattresses or mattress pads if the mattress prototype or mattress pad prototype has been qualified

utilizing the unclassified ticking in question.

(2) *Test criterion.* (i) Cigarette—An individual cigarette test location passes the test if the char length is not more than 1 inch (2.54 cm) in any direction from the nearest point of the cigarette, and the cotton felt is not ignited.

CAUTION: In the interest of safety, the test operator should discontinue the test and record a failure before reaching the 1 inch (2.54 cm) char length if, in his opinion, an obvious ignition has occurred.

(ii) Test Specimen—An individual test specimen passes the test if all three cigarette test locations meet the cigarette test criterion of this paragraph.

(3) *Specimen selection.* Three specimens shall be used for each ticking prototype classification test, with each specimen measuring no less than 20 inches by 20 inches (50.8 cm × 50.8 cm) square. The three specimens shall be selected from any fabric piece taken from a ticking prototype. The specimens shall be representative of the ticking prototype.

(4) *Ticking classification.* A ticking prototype is classified as Class A, Class B, or Class C, in accordance with the following schedules.

(i) Class A—A ticking prototype is classified as Class A when three specimens, tested in accordance with §1632.6(e), meet the test criterion in §1632.6(d)(2) when the ticking is tested directly over the cotton felt on the test box.

(ii) Class B—A ticking prototype is classified as Class B when three specimens, tested according to §1632.6(e), meet the test criterion in §1632.6(d)(2) when the ticking is tested on a  $\frac{1}{4}$  inch  $\pm\frac{1}{32}$  inch (6.3 mm  $\pm$  0.8 mm) thick urethane foam pad covering the cotton felt on the test box.

(iii) Class C—A ticking prototype is classified as Class C when any specimen tested according to §1632.6(e), fails to meet the test criterion in §1632.6(d)(2) when the ticking is tested on a  $\frac{1}{4}$  inch  $\pm\frac{1}{32}$  inch (6.3 mm  $\pm$  0.8 mm) thick urethane foam pad covering the cotton felt on the test box.

(e) *Test procedure*—(1) *Apparatus.* For the purpose of this section the following apparatus and materials are required in addition to that which is listed in §1632.4 (a) and (b).

(i) *Sheet and sheeting material.* Test covers made from sheets or sheeting material shall not be less than 12 inches by 12 inches (30.48 cm by 30.48 cm) square.

(ii) *Template.* Designed to allow for a one inch marking around the placement of the cigarette (see figure 3). Use of this template is optional.

(iii) *Stapler or masking tape* or other means of attachment to secure fabric to test box.

(iv) *Mounting box.* A 6 inch deep, 12 inch square plywood box. The box contains two ½ inch in diameter ventilation holes. (See figure 4.)

(v) *Cotton felt.* (A) The cotton felt shall be a thoroughly-garnetted mixture of all new material consisting of not less than 67% linters and of not more than 33% clean picker blend or equivalent binder and not more than 5% non-cellulosic total content. The felt shall not be bleached, moistened or chemically treated in any way.

(B) The felt may be re-used repeatedly after completion of each test by removing all of the smoldering, charred, heat-discolored fibers, or fibers exposed to water as a result of extinguishing the cotton ignited by previous test.

(vi) *Urethane foam.* The urethane foam shall have a density of 1.2 to 1.5 pounds per cubic foot, an indentation load deflection of 22 to 35 pounds, with each test specimen measuring no less than 12 inches by 12 inches (30.48 cm by 30.48 cm) square, having a thickness of ¼ inch ± 1/32 inch (6.3 mm ± 0.8 mm). The foam shall not be treated with a flame retardant chemical.

(2) *Conditioning.* The test specimens, cigarettes, laundered sheets or sheeting material, foam and felt shall be conditioned as described in § 1632.4(c).

(3) *Specimen preparation.* (i) Place 907.2±4 grams (two pounds) of cotton felt in the test box, allowing the felt to protrude above the opening of the box to a height of up to 3 inches (7.62 cm) at the crown.

(ii) For the first part of this test, place a 12 inches by 12 inches (30.48 cm by 30.48 cm) square urethane foam pad on top of the cotton felt. Stretch the ticking specimen over the foam pad and fasten it to the sides of the test box using a stapler or tape. Be careful

to avoid wrinkles in the fabric and have sufficient tautness to assure firm contact between the fabric and the filling materials in the test box.

(4) *Testing.* (i) Ticking specimens shall be tested in a testroom with atmospheric conditions of a temperature greater than 18 °C (65 °F) and a relative humidity less than 55%.

(ii) Three cigarettes shall be burned on each ticking specimen, with no more than one cigarette burning at any time. At least one cigarette shall be placed on the most prominent part of the color and weave pattern design in the ticking. If the ticking is quilted, one cigarette shall be placed over the thread or in the depression created by the quilting process. Each cigarette must be positioned no less than two inches (5.08 cm) from any other cigarette or the edge of the box.

(iii) Light and place one cigarette on the test specimen. Immediately cover the burning cigarette with a sheet test cover. The cigarette shall be well lighted but not burned more than 4 mm (0.16 inch) when placed on the test specimen. The cigarette may be supported by three straight pins such that one pin supports the cigarette at the burning end, one at the center and one at the butt. The heads of the pins must be below the upper surface of the cigarette. Upon completion of the three cigarette burns and removal of the fabric and foam specimens, remove all of the char or heat discoloration on the cotton felt as stated in § 1632.6(e)(v)(B). Fresh new felt shall be added to replace the discarded fibers in the amount necessary to maintain the full 907.2±4 grams (two pounds) of felt for each test.

(iv) If the cigarette extinguishes before burning its full length, the test must be repeated with a freshly lit cigarette on a different portion of the ticking specimen until either three cigarettes have burned their full lengths or three cigarettes have extinguished. Report result for each cigarette as pass or fail as defined in Test Criterion § 1632.6(d)(2). An obvious ignition is recorded as a failure.

(v) If ignition occurs with any of the three cigarette burns on the ticking specimen, terminate testing of that

## § 1632.6

## 16 CFR Ch. II (1–1–05 Edition)

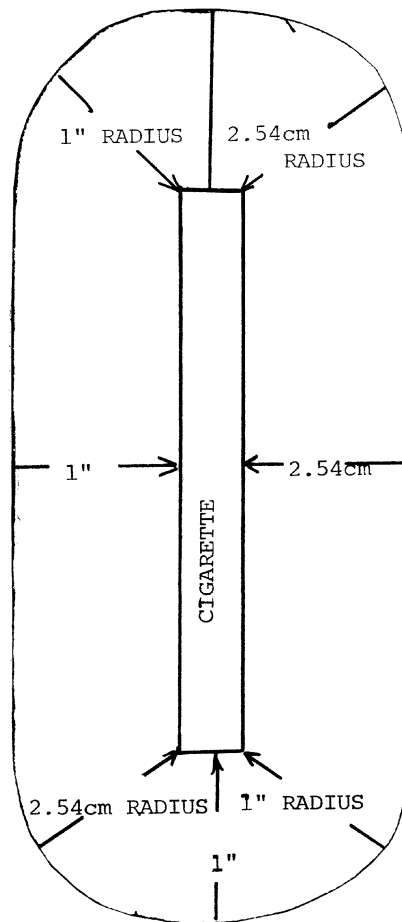
specimen and classify according to § 1632.6(d)(4).

(vi) If all cigarette test locations meet the Test Criterion in § 1632.6(d)(2), repeat procedure outlined in § 1632.6(e)(4)(iii) for the second part of the test with new ticking specimens that will be retested directly over the cotton felt, without the urethane foam pad. Remove the urethane foam pad and charred or heat discolored area from the cotton felt as specified in § 1632.6(e)(v)(B) prior to testing. Record the test results as pass or fail as defined in *Test Criterion* § 1632.6(d)(2) and classify according to § 1632.6(d)(4).

(5) *Records.* Records of any ticking classification test results relied upon by the mattress or mattress pad manufacturer or importer shall be main-

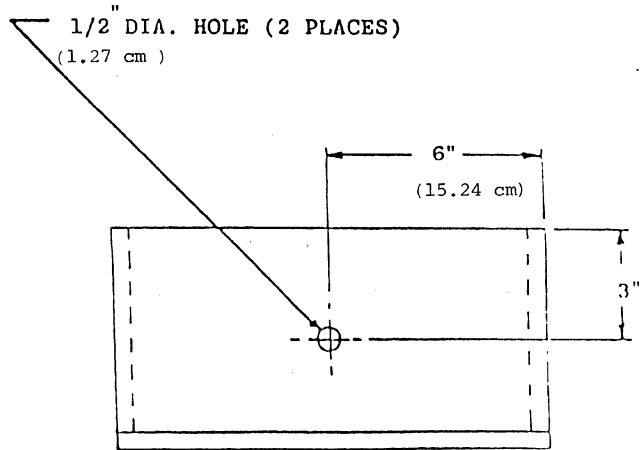
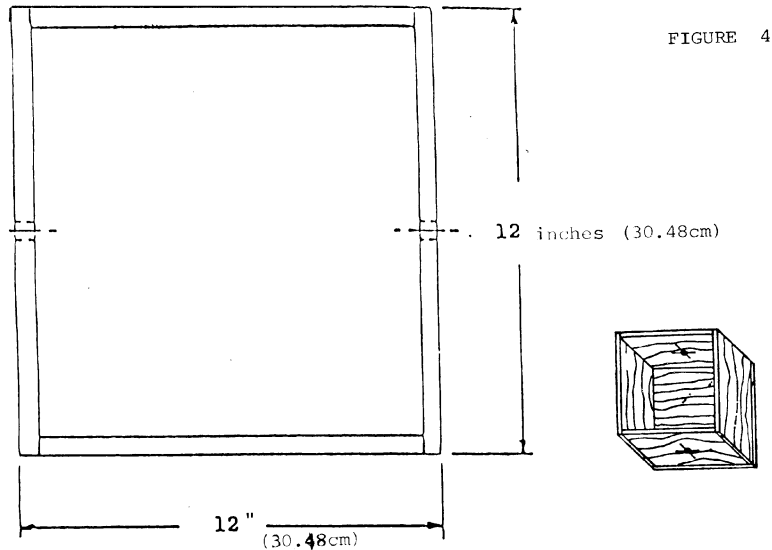
tained in accordance with rules and regulations established by the Consumer Product Safety Commission in § 1632.31(c). As provided by § 1632.31(c)(6), manufacturers or importers of mattresses or mattress pads may rely on a certification of compliance with this section of the standard provided by the ticking manufacturer or distributor; however, if a mattress or mattress pad fails to comply with the standard, the mattress or mattress pad manufacturer or importer must assume full responsibility under the standard. The Commission has no authority under this standard to compel ticking manufacturers or distributors to comply with this section or to establish, maintain and provide upon request, the records specified in § 1632.31(c).

FIGURE 3



1 INCH ( 2.54cm ) TEMPLATE

TOLERANCES + 1/32" - 0"



TEST BOX  
MATERIAL 1/2" PLYWOOD  
TOLERANCES + 1/32 " - 0"