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Standard Consumer Safety Specification for Clothing Storage Chests[1]

This standard is issued under the fixed designation F2598; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

ε[1] NOTE—Editorially updated Referenced Documents in Section 2 in June 2017.

INTRODUCTION

This consumer safety specification addresses chest accidents that have been identified by the U.S. Consumer Product Safety Commission (CPSC).

This consumer safety specification attempts to minimize the following: (*1*) possible entrapment and strangulation hazards associated with sudden lid closing or dropping and (*2*) possible crushing, pinching, and laceration hazards associated with folding mechanisms, hinges, and lid supports.

1. Scope

1.1 This consumer safety specification covers the performance requirements and test methods to ensure the safety of chests.

1.2 This consumer safety specification is intended to minimize the incidents and injuries to children resulting from normal use and reasonably foreseeable misuse or abuse of these chests.

1.3 This consumer safety specification applies to products known as clothes chests or other single-compartment closed rigid boxes (sometimes referred to as "cedar chests") that are designed and marketed as storage containers for clothes, blankets, or linens. The products subject to the requirements are those with a single volume of 1.1 ft^3 (0.031 m^3) or more.

1.4 No chest produced after the approval date of this consumer safety specification shall, either by label or other means, indicate compliance with this specification unless it conforms to all requirements contained herein.

1.5 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.6 The following precautionary caveat pertains only to the test methods portion, Section 5, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

1.7 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

F963 Consumer Safety Specification for Toy Safety

2.2 *ANSI Standard:*[3]

ANSI Z535.4 Product Safety Signs and Labels

2.3 *Federal Standard:*[4]

Title 16 Code of Federal Regulations--Commercial Practices

16 CFR 1303 Ban on Lead-Containing Paint and Certain Consumer Products Bearing Lead-Containing Paint

3. Performance Requirements

3.1 *Lid Support:*

3.1.1 Chests with vertically opening hinged lids shall be provided with lid-support mechanisms to prevent sudden collapse or dropping of the lid.

[1] This consumer safety specification is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.42 on Furniture Safety.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.

[4] Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, http://www.access.gpo.gov.

3.1.2 The lid-support mechanism shall support the lid so that at no position in the arc of travel of the lid from within 2.0 in. (50.8 mm) of the fully closed position through an arc not to exceed 60° from the fully closed position shall it drop more than 0.50 in. (12.7 mm) under the influence of its own weight, except in the last 2.0 in. (50.8 mm) of travel. The test shall be conducted in accordance with 5.1.

3.1.3 The chest lid shall comply with this requirement before and after being subjected to 3500 opening and closing cycles, as described in Section 5.

3.1.4 The lid-support mechanism shall not require adjustment by the consumer to ensure adequate lid support, nor shall it require adjustment to comply with 3.1.2 after being cycled according to 5.1.2.

3.1.5 Lid-support mechanisms shall be designed so as to prevent pinching, crushing, or laceration injuries to fingers. Clearances or gaps produced by the action of such mechanisms (between components of the mechanism or between the mechanism and the chest lid) shall be constructed so that if the gap admits a 0.19-in. (4.8-mm) diameter rod it will also admit a 0.50-in. (12.7-mm) diameter rod at all positions of the arc of travel of the lid. This requirement does not apply to lid-support mechanisms installed on the inside of the chest that are at least 12 in. (305 mm) from the front and side edges of the chest or its lid.

3.2 *Closures*—Chest closures such as lids, covers, and doors shall not be fitted with automatic locking devices.

3.3 Closures and lids shall be of a type that can be opened with a force of 10 lbf (45 N) or less when tested in accordance with 5.2.

3.4 *Locks*—Locks shall be safety locks that do not automatically engage.

3.5 Chest shall withstand a load of 250 ± 5 lb (113 ± 2 kg) applied to the center 8 by 8-in. (20 by 20-cm) area of the lid without permanent damage.

NOTE 1—Simulating an adult sitting on top of the chest.

4. Labeling

4.1 The name and address (city, state, and zip code) of either the manufacturer, distributor, or seller of the chest shall either be permanently and conspicuously labeled on the product or conspicuously marked in collateral information provided to each user that includes information on assembly, proper use, safety and product care.

4.2 Only those chests that meet the requirements of this safety specification may be marked or labeled on the product or its collateral materials with the phrase “Meets ASTM Safety Specification F2598.”

4.3 If the product does not comply with Consumer Safety Specification F963, the chest shall be permanently and conspicuously labeled inside on the lid with the words: “WARNING—This chest is not intended or suitable for use as a toy chest” and “Risk of Child Suffocation.” Labels shall meet the guidelines of ANSI Z535.4.

5. Test Methods

5.1 *Lid Support Mechanisms:*

5.1.1 Assemble the chest in accordance with manufacturer’s instructions.

5.1.2 Lift the lid to any position in its arc of travel to a distance greater than 2.0 in. (50.8 mm) but not to cause the lid to move through an arc of more than 60° from the lid’s fully closed position measured at the outermost edge of the lid. Release the lid and observe any dropping motion of a point in the approximate center of the outermost edge of the lid.

5.1.3 Subject the lid to 3500 opening and closing cycles. One cycle consists of raising the lid from its fully closed position to a fully open position and returning it to fully closed.

5.1.4 To prevent undue stress on screws or other fasteners used to attach lid support mechanisms, take care not to force the lid beyond its normal arc of travel.

5.1.5 Complete one cycle in approximately 10 to 15 s. Complete the 3500 cycles, then repeat the test described in 5.1.2.

5.2 *Closures and Lids:*

5.2.1 *Hinged Lids*—With the lid in a closed position, apply a gradually increasing force in an upward direction perpendicular to the plane of the lid at a point within 1 in. (25.4 mm) from its geometric center. Note the maximum force to cause the lid to begin to open.

6. General Requirements

6.1 All finishes and materials used in the construction of the chests shall be nonhazardous as defined by regulations under the Federal Hazardous Substances Act and must conform to the requirements of the regulations for Lead in Paint under the Consumer Product Safety Act.[5]

6.2 All paints and coatings shall comply with the limitations of antimony, arsenic, barium, cadmium, chromium, lead, mercury, and selenium as outlined in Consumer Safety Specification F963.

7. Keywords

7.1 cedar chest; chest; clothes chest; storage chest

[5] Regulations promulgated under these acts can be found under Title 16 of the Code of Federal Regulations.