



Standard Consumer Safety Specification for Toy Chests¹

This standard is issued under the fixed designation F 834; 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.

INTRODUCTION

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

For the period from 1973 through 1981, the Commission documented 21 fatalities and one case of permanent brain damage from falling toy chest lids. The pattern generally involves a toy chest lid falling on a child while he or she is leaning into the chest. If the child's neck is extended across the upper edge of the front of the chest when the lid falls, the child can be caught and strangled. Additional accidents and less serious injuries have been identified, including finger entrapment and pinching associated with toy chest hardware and attachments.

This consumer safety specification attempts to minimize the following: (1) possible entrapment and strangulation hazards associated with sudden lid closing or dropping; (2) possible crushing, pinching, and laceration hazards associated with folding mechanisms, hinges, and lid supports; and (3) possible suffocation hazards due to lack of adequate ventilation.

This consumer safety specification is written within the current state-of-the-art technology. It is intended to update this specification whenever substantive information becomes available which necessitates additional requirements or justifies the revision of existing requirements.

1. Scope

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

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

1.3 For the purposes of this consumer safety specification, these requirements apply to products known as toy chests or toy boxes that are designed and marketed as storage containers for toys. The products subject to the requirements are those with a volume of 1.1 ft³ (0.031 m³) or more.

1.4 No toy chest or toy box 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 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.

2. Performance Requirements

2.1 Lid Support:

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

2.1.2 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.

2.1.3 The toy chest lid shall comply with this requirement before and after being subjected to 7000 opening and closing cycles, as described in Section 5.

2.1.4 The lid-support mechanism shall not require adjustment by the consumer to ensure adequate lid support, nor shall it require adjustment in order to comply with 2.1.2 after being cycled according to 5.1.2.

2.1.5 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 toy chest lid) shall be constructed so that if the gap admits a 0.19-in. (4.8-mm) diameter rod it will also admit

¹ This specification is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.22 on Toy Safety.

Current edition approved June 29, 1984. Published July 1984.