



Designation: F2057 – 17

Standard Safety Specification for Clothing Storage Units¹

This standard is issued under the fixed designation F2057; 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 has been created to provide performance specifications for clothing storage units. For many years the U.S. Consumer Product Safety Commission (CPSC) has collected data regarding incidents of injuries related to the use of clothing storage furniture. In response to the incident data compiled by the CPSC, as well as industry experience of actual customer use, this consumer safety specification has been prepared to minimize the hazards associated with these products. This specification does not address hazards created by blatant misuse of a product, including, but not limited to, use of the product in a manner that is neither intended by the manufacturer nor reasonably foreseeable.

1. Scope

1.1 This safety specification is intended to reduce injuries and deaths of children from hazards associated with tipover of free-standing clothing storage units, such as chests, door chests and dressers, over 30 in. (762 mm) in height.

1.2 This safety specification does not cover shelving units, such as bookcases or entertainment furniture, office furniture, dining room furniture, jewelry armoires, underbed drawer storage units or built-in units intended to be permanently attached to the building.

1.3 This safety specification is intended to cover children up to and including age five.²

1.4 This safety specification replaces PS 110–98.

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 safety hazards caveat pertains only to the test procedure portion, Section 7, of this safety 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,*

health, and environmental 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:*³

D3359 Test Methods for Rating Adhesion by Tape Test
F3096 Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)

2.2 *ANSI Standards:*⁴

ANSI Z535.4 Product Safety Signs and Labels

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *clothing storage unit, n*—furniture item intended for the storage of clothing typical of bedroom furniture.

3.1.2 *operational sliding length, n*—length measured from the inside face of the drawer back to the inside face of the drawer front with measurements taken at the shortest drawer depth dimension (see Fig. 1).

¹ This 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 The majority (approximately 80 %) of deaths relate to children 5 years or younger.

³ 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.

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

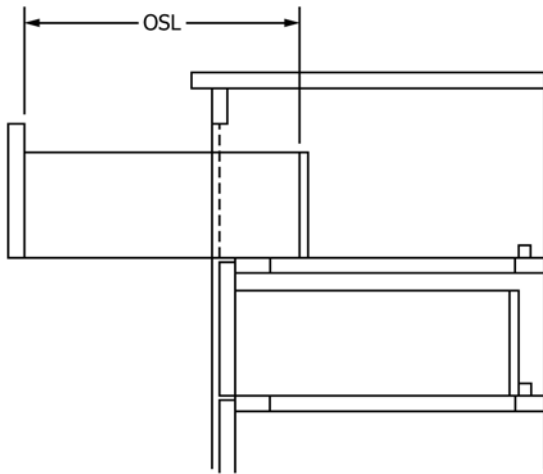


FIG. 1 Operational Sliding Length (OSL)

3.1.3 *outstop, n*—any feature that limits outward motion of drawers or pullout shelves, or both.

3.1.4 *tipover, n*—event at which a furniture unit pivots forward to the point at which the unit continues to fall.

3.1.5 *tipover restraint, n*—supplemental device that aids in the prevention of tip over.

4. Performance Requirements

4.1 With the unit empty and without the tipover restraint, test the unit in accordance with 7.1 and 7.2.

4.2 During the test, the unit shall not tip over or be supported by any component unless that component was specifically designed for that purpose.

4.3 If a failed component prohibits the completion of the test, then the failed component(s) shall be repaired or replaced to the original specifications, or the component replaced and the test repeated with the failed component secured as to not affect the test results but to prevent the component from failing.

4.4 Tipover restraints shall be included with each item of furniture covered under the scope of this safety specification for attachment by the consumer.

4.5 The tipover restraint provided shall meet the requirement of Specification F3096.

4.6 A permanent warning label (see Fig. 2) shall be attached to the clothing storage unit in a conspicuous location when in use.

4.6.1 Reference ANSI Z535.4 for alternate label formatting. The content within this warning label shall not be modified except to include languages other than English.

4.6.2 The warning shall be permanent when tested in accordance with 7.3.1, 7.3.2, or 7.3.3 as appropriate.

TEST METHOD

5. Scope

5.1 This test method is designed to test free-standing clothing storage unit tipover.

6. Significance and Use

6.1 The test method in 7.1.2 and 7.2.2 was developed to show how far the drawers of the unit being tested should be pulled out regardless of whether there are outstops or not.

7. Test Procedure

7.1 Stability of Unloaded Unit:

7.1.1 Position the empty unit on a hard, level, flat surface. The unit shall be level during testing unless specifically designed otherwise.

7.1.2 Open all doors to 90° (see Fig. 3) and extend all drawers or pullout shelves, or both, to the outstop or, in the absence of such feature, to 2/3 (66 %) of their operational sliding length (see 3.1.2 and Fig. 1). Open flaps or drop fronts to their horizontal position or as near horizontal as possible.

7.2 Stability with Load:

7.2.1 Position the empty unit in accordance with 7.1.1.

7.2.2 Open one drawer to the outstop or, in the absence of such a feature, to 2/3 (66 %) of its operational sliding length. All other drawers and doors not undergoing testing shall be in the closed position unless they must be opened to access other components behind them. Test in accordance with 7.2.4. Close drawer and repeat until all drawers have been tested. (See Fig. 4.)

7.2.3 Open one door to 90°. All other drawers and doors not undergoing testing shall be in the closed position unless they must be opened to access other components behind them. Test in accordance with 7.2.4. Close door and repeat with another door until all doors have been tested. (See Fig. 4.)

7.2.4 Gradually apply test weights (see Fig. 5) over the front of each drawer. For odd-shaped drawers, apply test weights to the front edge that protrudes the farthest (see Fig. 6). For doors, apply test weights to each door so that the outer edge of the test weight is flush with the outermost upper corner of the door (see Fig. 4).

7.3 Permanency of Labels and Warnings Testing:

7.3.1 A paper label shall be considered permanent if, during an attempt to remove it without the aid of tools or solvents, it cannot be removed, it tears into pieces upon removal, or such action damages the surface to which it is attached.

7.3.2 A non-paper label shall be considered permanent if, during an attempt to remove it without the aid of tools or solvents, it cannot be removed or such action damages the surface to which it is attached.

7.3.3 *Adhesion Test for Warnings Applied Directly onto the Surface of the Product:*

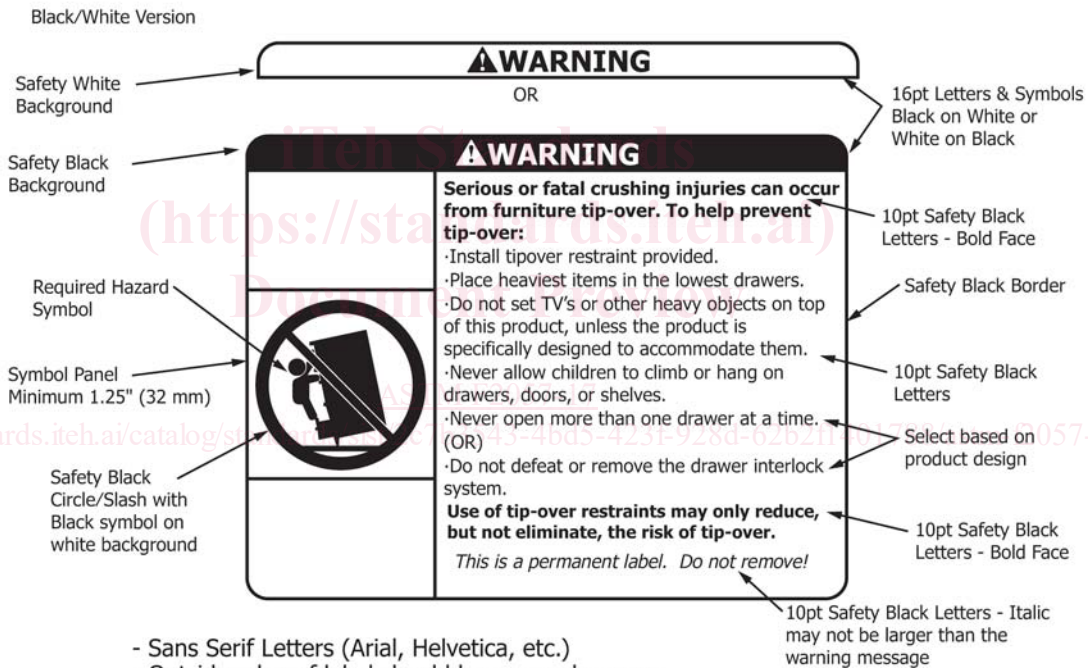
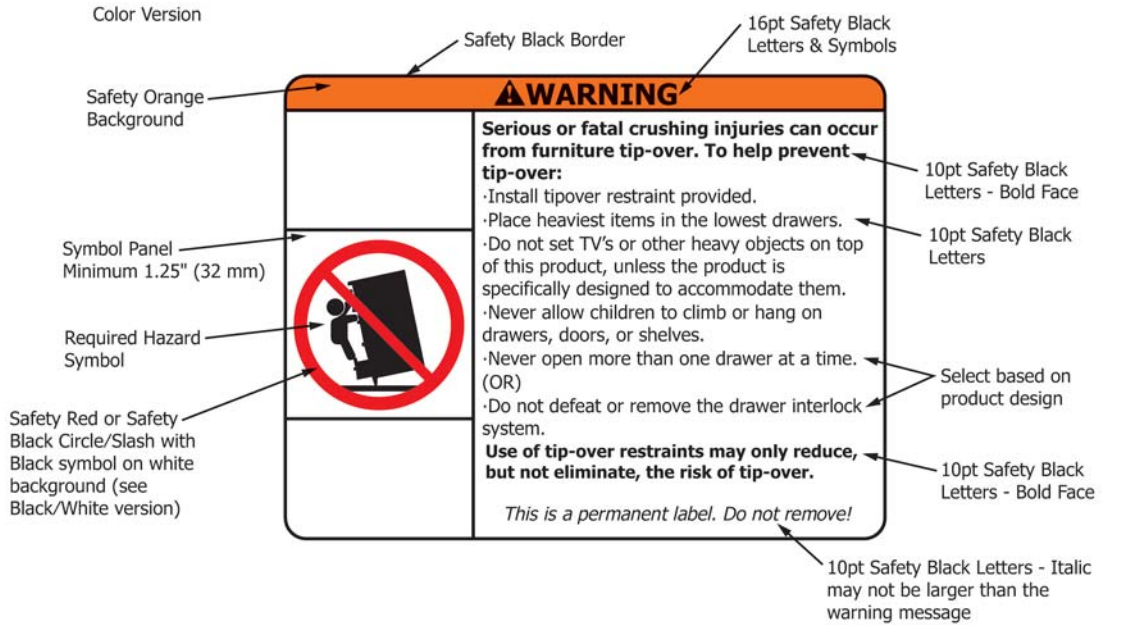
7.3.3.1 Apply the tape test defined in Test Method B – Cross-Cut Tape Test of Test Methods D3359 eliminating parallel cuts.

7.3.3.2 Perform this test once in each different location where warnings are applied.

7.3.3.3 The warning statements shall be considered permanent if the printing in the area tested is still legible and attached after being subjected to this test.

8. Precision and Bias

8.1 No information is presented because the test result is non-quantitative.



- Sans Serif Letters (Arial, Helvetica, etc.)
- Outside edge of label should have round corners
- Letter height may be larger. However, signal word letter height must be at least 50% larger than letter in the message panel.

NOTE - This label is not to scale.

FIG. 2 Warning Label

9. Keywords

furniture; outstop; tipover

9.1 chests; children; consumer safety specifications; door chests; drawers; dressers; free standing clothing storage unit;