



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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

INTRODUCTION

This consumer safety specification is intended to address incidents reported by the U.S. Consumer Product Safety Commission (CPSC) relating to clothing storage units. In response to the incident data compiled by the CPSC, this consumer safety specification attempts to minimize the hazards associated with these products. This consumer safety specification does not apply to products that are blatantly misused, nor does it apply to products used by consumers in a careless manner that violate normal practice or disregard the instructions or warnings provided with the product, or both.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

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.

2. Referenced Documents

2.1 *ASTM Standards*:³

F3096 Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)

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).

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

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.

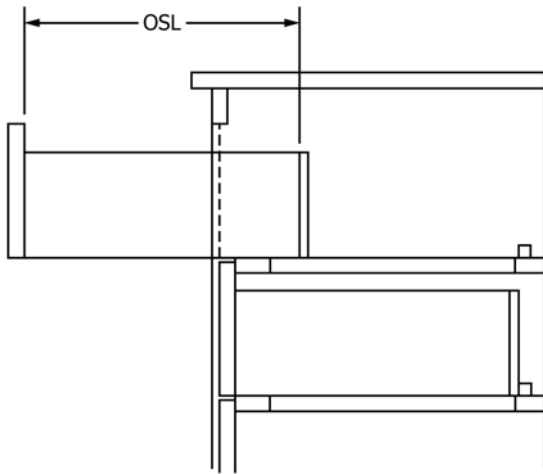


FIG. 1 Operational Sliding Length (OSL)

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 $\frac{2}{3}$ (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 $\frac{2}{3}$ (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).

8. Precision and Bias

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

9. Keywords

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

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.

TEST METHOD

5. Scope

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

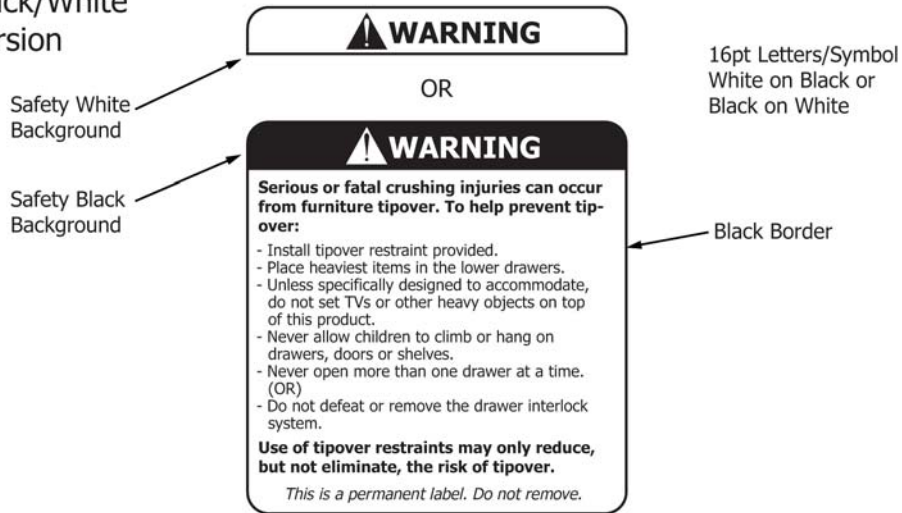
6. Significance and Use

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.

Color Version



Black/White Version



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

NOTE—This label is not to scale.

FIG. 2 Warning Label

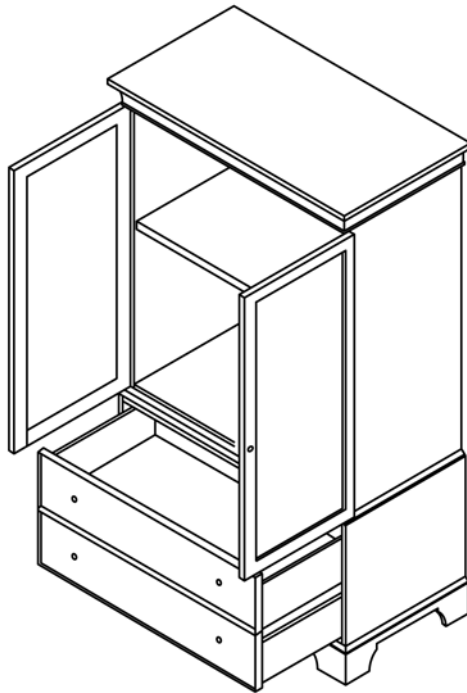


FIG. 3 Stability of Unloaded Unit

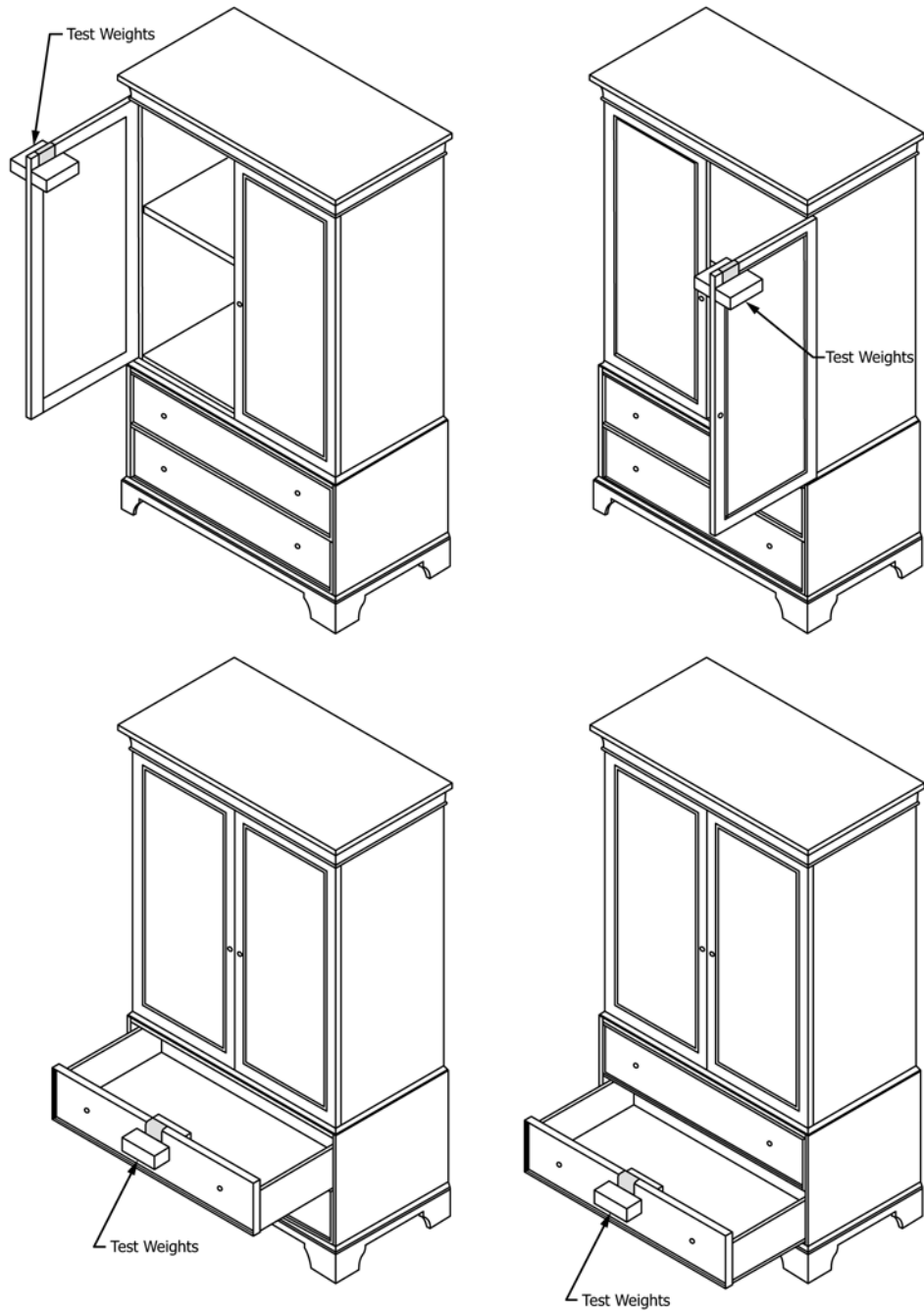
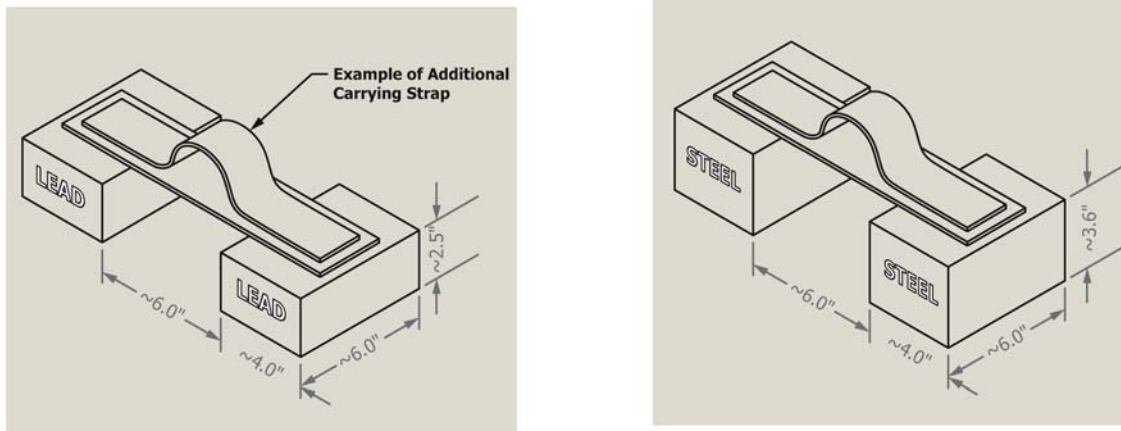


FIG. 4 Stability with Load



- NOTE—**
- Two 25 ± 1 -lb test weights, made of lead, wrapped in cellophane or similar protective barrier, approximately 6 by $2\frac{1}{2}$ by 4 in. deep.
 - If block is made of steel, change dimension in following from 2.5 to 3.6 in. (adjusting dimensions to accommodate change from lead to steel, keeping width and height the same).
 - Inside distance between test weights is approximately 6 in.
 - Width of strap ~ 3 in.
 - An additional strap may be added to the strap to aid in carrying and applying the test weight.
- The total weight of 50 lbs (23 kg) is equal to the 95th percentile five-year-old child.

FIG. 5 Test Weights

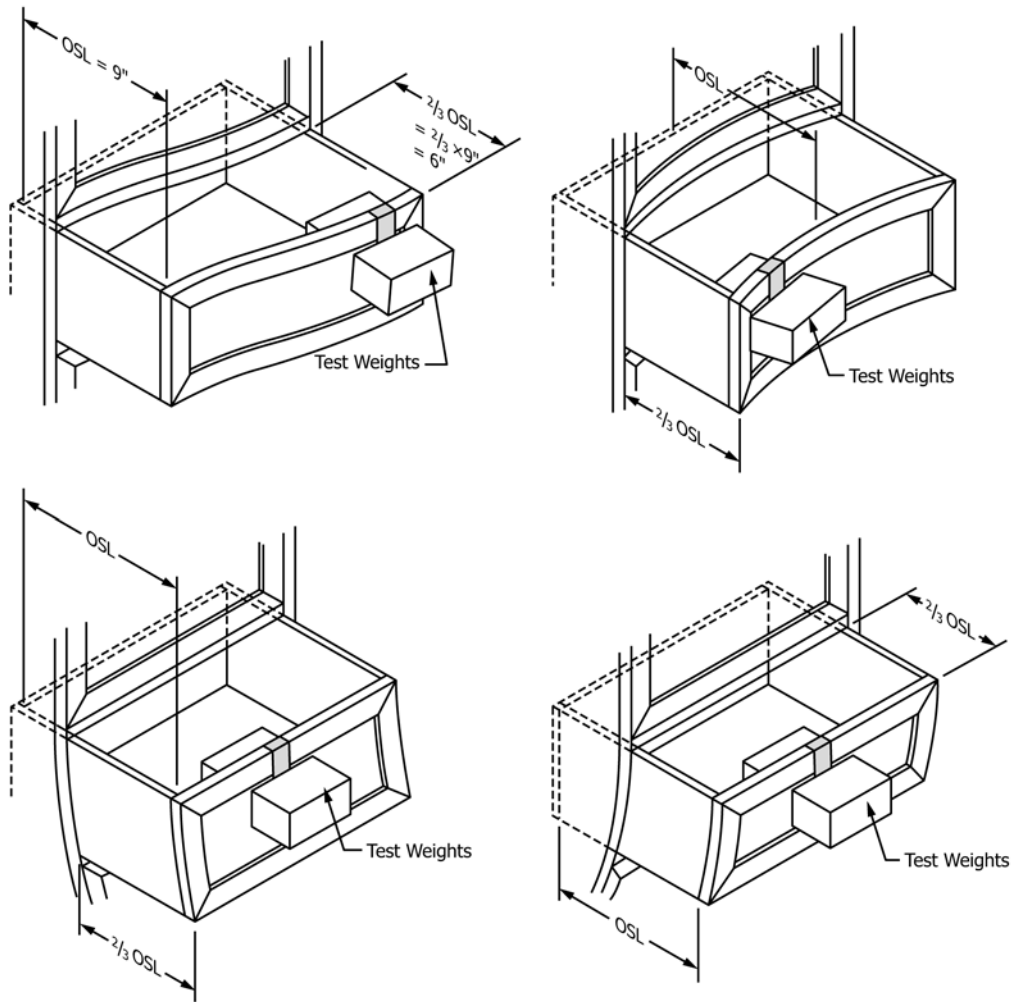


FIG. 6 Drawer Test Weight Placement Examples

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