Designation: F 2057 – 00

Standard Safety Specification for Chests, Door Chests, and Dressers[1]

This standard is issued under the fixed designation F 2057; 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

The Consumer Product Safety Commission (CPSC) estimates that there were 8100 emergency room treated injuries associated with the tipover of furniture in 1994.

In addition, the CPSC received reports of about six deaths each year associated with furniture tipover. Approximately two thirds of the deaths were said to have involved items with drawers, such as dressers, bureaus, and chests of drawers. Approximately 80 % were to children under the age of five.

1. Scope

1.1 This safety specification is intended to reduce injuries and deaths of children from hazards associated with tipover of clothing storage units.

1.2 This safety specification covers chests, drawer chests, chests of drawers, dressers, and bureaus only (see Section 2).

1.3 This safety specification does not cover shelving units, such as bookcases or entertainment centers, night stands, or under-bed drawer storage units.

1.4 This safety specification does not cover any items 30 in. or less in height.

1.5 This safety specification is intended to cover children up to and including age five.[2]

1.6 This safety specification replaces PS 110–98.

1.7 The following safety hazards caveat pertains only to the test procedure portion, Section 4, 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.*

2. Terminology

2.1 *Definitions of Terms Specific to This Standard:*

2.1.1 *chest, n*—a furniture item intended for the storage of clothing typical of bedroom furniture and containing one or more of the following: drawers, doors, stationary shelves, adjustable shelves, or pull-out shelves arranged in varying configurations.

2.1.2 *door chest, n*—a furniture item intended for the storage of clothing and consisting of a case with drawers at the bottom of the unit and drawer or permanent shelves covered by two doors at the top of the case.

2.1.3 *dresser, n*—a furniture item intended for the storage of clothing and consisting of up to nine drawers usually arranged in groups three high and three wide. Dimensions are usually 65 to 72 in. wide and 30 to 35 in. high.

2.1.4 *operational sliding length, n*—the total length of the shortest side of the drawer side, or, if the drawer slide has a stop built in, the length of the slide to the stop.

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

3. Performance Requirements

3.1 With the unit empty, test the unit in accordance with 4.1 and 4.2.

3.2 During the test, the unit shall not tip over or be supported only by an opened drawer, opened door, or opened or unopened flap.

3.3 If a failed component prohibits the completion of the test, the unit is to have the failed component repaired or replaced to the original specifications, or the unit replaced and the test repeated.

4. Test Procedure

4.1 *Stability of Unloaded Unit*:

4.1.1 Position the unit on a level flat surface composed of either concrete, wood flooring, or ⅛ in. vinyl over concrete. If the unit has leveling glides, these glides shall be installed and be in contact with the floor, and the units shall be level during testing.

4.1.2 Open all doors to 90° (Fig. 1) and extend all drawers and pullout shelves to two thirds of their operational sliding length or to the stop, whichever is shorter (2.1.4 and Fig. 2). Open flaps or dropfronts to their horizontal position or as near horizontal as possible.

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[1] This safety specification is under the jurisdiction of ASTM Committee F15 on Consumer Productsand is the direct responsibility of Subcommittee F15.42 on Furniture Tipover.

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[2] The majority (approximately 80 %) of deaths relate to children 5 years or younger (see Introduction).

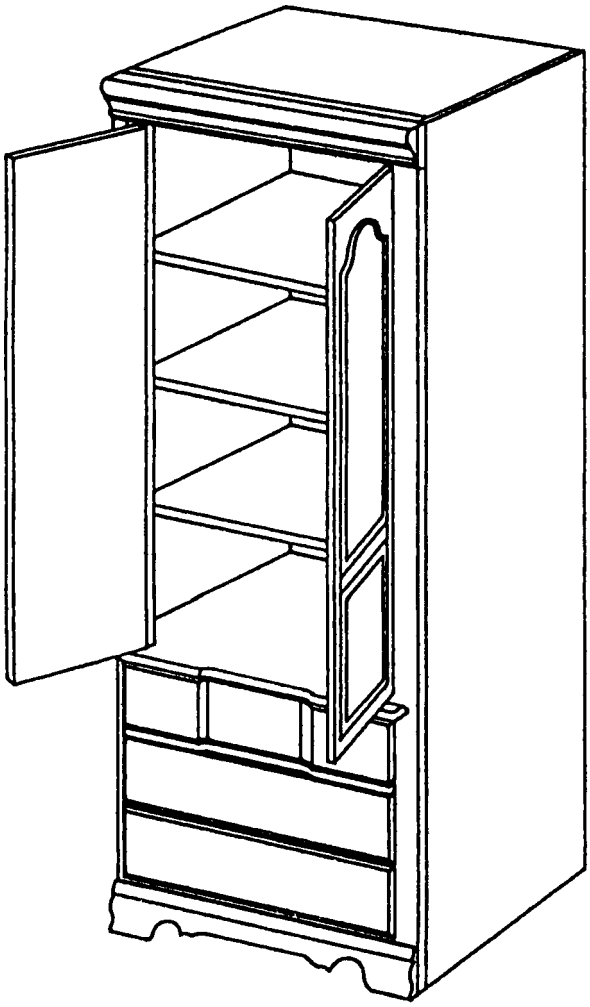
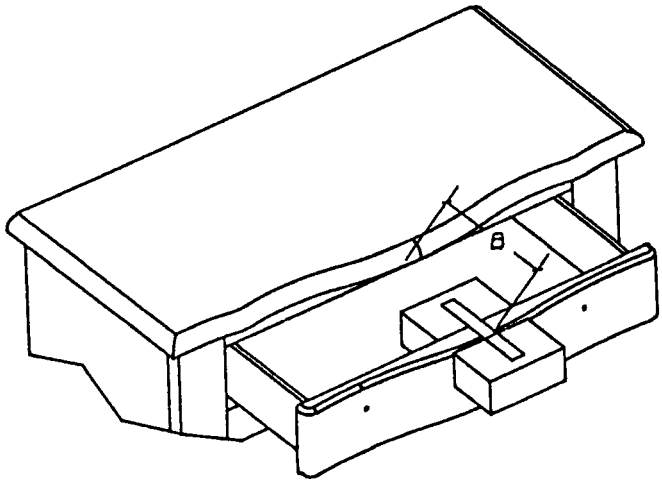
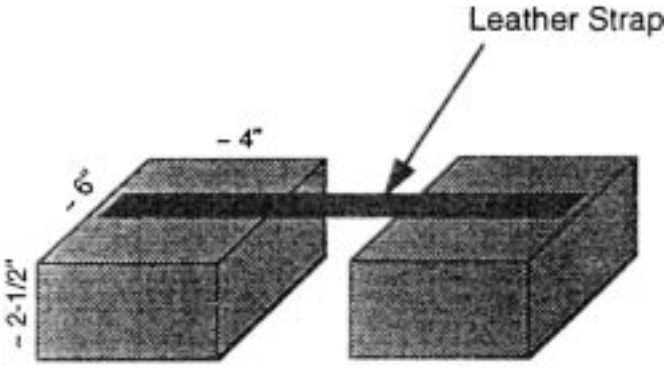


FIG. 1 Doors



NOTE 1—$B = A \times 0.66$.

FIG. 2 Drawers and Pullout Shelves



NOTE 1—Two 25 ± 1 lb weights, made of lead, approximately 6 × 2½ × 4 in. deep.

FIG. 3 Weights

4.2 *Stability with Load*:

4.2.1 Position the unit on a level flat surface composed of either concrete, wood flooring, or ⅛ in. vinyl over concrete. If the unit has leveling glides, these glides shall be installed and be in contact with the floor, and the units shall be level during testing.

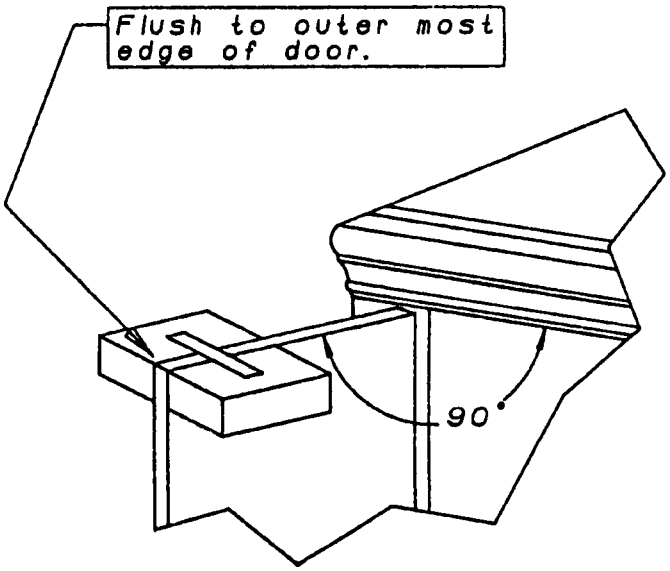
4.2.2 One drawer or door after another shall be opened/extended in accordance with 4.1.2, tested in accordance with 4.2.3, and then closed. Drawers and doors not undergoing testing shall be in the closed position unless they must be open to access other components behind them.

4.2.3 Gradually apply dual weights of 25 ± 1 lb each (see Fig. 3) over the center of the front of each drawer (see Fig. 2). For odd shaped drawers, apply weights to the front edge that protrudes the farthest. For doors, apply the weights to each door so that the center of the outer weights is 3 in. from the outermost edge of the door (see Fig. 4).

NOTE 1—The total weight of 50 lb is equal to the 95th percentile 5 year old child.

5. Keywords

5.1 chests; door chests; drawers, children; dressers; furniture, tipover



NOTE 1—Door shall be open to 90° to the case. Weight is to be placed such that the center of the brace is 3 in. (75 mm) from the outermost edge of door.

FIG. 4 Door Weight Placement