



March 6, 2023

The Honorable Alex Hoehn-Saric, Chairman
The Honorable Peter Feldman, Commissioner
The Honorable Richard Trumka, Jr., Commissioner
The Honorable Mary Boyle, Commissioner
U.S. Consumer Product Safety Commission
4330 East-West Highway
Bethesda, MD 20814

Re: STURDY Act and ASTM F2057-23

Dear Chairman Hoehn-Saric and Commissioners Feldman, Trumka, and Boyle:

On behalf of Consumer Reports (CR) and Kids In Danger (KID), we would like to express our gratitude for the significant amount of work that the CPSC has put into addressing the risk of injury from furniture tip-overs. Without the CPSC's research and active engagement, we would not be on the cusp of major improvements to furniture stability like we are today. CR and KID write to communicate our strong support of ASTM F2057-23, which is an important step forward, and we urge the Commission to promulgate a final consumer product safety standard under the STURDY Act (Pub. L. No. 117-328, div. BB, tit. II) that adopts its performance requirements as mandatory.

As you are aware, our organizations have sought for years to address the dangers of furniture tip-overs through a variety of efforts, including through our participation in the development of the ASTM standard, independent testing of dressers, engagement in the rulemaking process and support for the CPSC's safety standard on clothing storage units, and advocacy for the STURDY Act as championed by Congresswoman Jan Schakowsky and Senator Bob Casey. While the Commission appropriately determined that previous versions of the ASTM standard were woefully inadequate to prevent tip-over-related injuries and deaths, the current ASTM standard meets the requirements of the STURDY Act and would greatly reduce the risks posed by unstable clothing storage units (CSUs) to young children.

CR and KID, along with other consumer and health organizations and Parents Against Tip-Overs (PAT), supported amending the STURDY Act to require the CPSC to adopt the performance requirements of a voluntary standard if they meet the requirements of the legislation. Neither our organizations, nor the bill's sponsors, would have supported this

amendment if we were not confident that ASTM F2057-23 would greatly improve children's safety.

Under the STURDY Act, any standard promulgated or adopted by the CPSC must include testing that:

- Simulates the weight of children up to 60 pounds;
- Contains objective, repeatable, reproducible, and measurable tests or series of tests that simulate real-world use and account for impacts on clothing storage unit stability that may result from placement on carpeted surfaces, drawers with items in them, multiple open drawers, and dynamic force; and
- Evaluates all clothing storage units, including those 27 inches and above in height.

Such a standard must also include warning requirements based on ASTM F2057-19, or its successor at the time of enactment, provided that the CPSC may strengthen these warning requirements if reasonably necessary to protect children from tip-over-related death or injury.

¹ In addition, any adopted voluntary standard must "protect[] children up to 72 months of age from tip-over-related death or injury."²

Below we outline how ASTM F2057-23 satisfies each of the requirements of the law.

ASTM F2057-23 includes objective, repeatable, reproducible, and measurable series of tests that simulate real-world use.

The feasibility of ASTM F2057-23 for implementation by manufacturers around the world is an advantage of the standard. ASTM F2057-23 uses straightforward criteria to evaluate dresser stability: either a unit tips over as a result of testing, or it does not. The required tests are simultaneously rigorous and uncomplicated, making them feasible for manufacturers around the world to carry out, using testing equipment already at their disposal. All three of the voluntary standard's tests are objective, repeatable, reproducible, and measurable; simulate real-world use; and, when considered in their totality, meet the requirements of the STURDY Act.

ASTM F2057-23 Section 9.2.3 includes testing that simulates the weight of children up to 60 pounds, and accounts for impacts on clothing storage unit stability that may result from multiple drawers open and placement on carpeted surfaces.

Section 9.2.3, "Simulating a Reaction on Carpet with Child Weight," accounts for the weight of children up to 60 pounds, and the impacts on CSU stability that may result from multiple open drawers and placement on carpeted surfaces, in a single test. The test requires that a CSU's rear-most floor supports be placed on 0.43 inch blocks that the CPSC determined to "adequately simulate the effect of carpet," in a repeatable and reproducible manner.³ After a CSU is placed on testing blocks, the test addresses the impact of multiple open drawers on a unit's stability by requiring that all available extendible elements are opened or fully extended.

Next, a “test apparatus of not less than 60.0 [pounds]” is applied “over the top of the door or extendible element most likely to cause tip-over.” The weights must then “rest without additional support for 30 [seconds]” and the CSU must not tip during this period.⁴

ASTM F2057-23 Section 9.2.1 accounts for impacts on clothing storage unit stability that may result from drawers with items in them.

The Section 9.2.1 “Simulated Clothing Load” test requires calculating the usable volume of each drawer and storage compartment. Enclosed storage volume, “the amount of storage inside drawers and behind doors intended for clothing storage,” is calculated as “the total of all extendible element volume ... and all non-extendible enclosed storage volume.”⁵ If 50% or more of extendible elements can be extended, all enclosed storage space (drawers and storage behind doors) is weighted with 8.5 pounds per cubic foot to simulate clothing fill. Similar to the CPSC rule, if more than 50% of the volume remains in the case (i.e., cannot be extended), weight is not added. If interlocks are employed, the standard has testing to assure they will work effectively to limit how many drawers are open.

ASTM F2057-23 Section 9.2.2 accounts for impacts on clothing storage unit stability that may result from dynamic force.

The Section 9.2.2 “Simulated Horizontal Dynamic Force” test, which simulates the dynamic force created by a child interacting with a CSU, requires that an empty CSU be placed on a test surface with all doors and all available extendible elements extended. The test then requires the application of a 10 pound horizontal force, “parallel to the direction of outward motion, at the highest hand-hold, not to exceed 56 [inches], on the extendible element most likely to cause tipover.”⁶ The position is held for 10 seconds, during which the unit must remain stable. Importantly, it is our understanding that the primary reason for the inclusion of the language, “protects children up to 72 months of age from tip-over-related death or injury,” in subparagraph (d)(2)(A) of the STURDY Act, was for consistency, and it was intended to mirror the language of subsection (b), “CPSC Determination of Scope.”⁷

ASTM F2057-23 requires testing of all clothing storage units including those 27 inches and above in height.

The scope of ASTM F2057-23 applies to CSUs “including but not limited to chests, chests of drawers, drawer chests, armoires, chifforobes, bureaux, door chests, and dressers, which are 27 inches or greater in height, 30 pounds or greater in mass, and contain 3.2 feet squared or greater of enclosed storage volume.”⁸ The CPSC’s rule similarly uses the 27-inch height limit, based on CPSC staff’s finding that “the number of incidents associated with shorter units is small and these incidents did not result in deaths or serious injuries.”⁹ In line with this determination, the scope of the ASTM standard is reasonable.

ASTM F2057-23 warning and labeling requirements are precise, well placed, and informative.

Recognizing that warnings are not nearly as effective in preventing tip-overs as design changes that improve CSU stability, ASTM F2057-23 warning requirements (see Sections 9.3 and 10) are robust, well placed, and designed to be as effective as possible. The warning requirements are more specific and conspicuous than the warning requirements of ASTM F2057-19, and include warnings against defeating interlock systems, should they exist. The STURDY Act also states that the CPSC can “strengthen the warning requirements [of ASTM F2057-23]” if doing so is “reasonably necessary to protect children from tip-over-related injury or death.”¹⁰

We appreciate the time and energy the CPSC has dedicated in recent years to understanding furniture tip-overs in order to protect children. The STURDY Act provides an opportunity for the CPSC to rely upon ASTM F2057-23 if it meets the requirements of the STURDY Act. We are confident that it does. Testing by both KID and CR, using elements of the new voluntary standard, show that units on the market that meet the performance requirements of the 2019 standard would fail under the more rigorous requirements of the 2023 standard, underscoring the additional layers of protection the new evaluations provide. The tests included in ASTM F2057-23 account for real-world use and impacts on stability from various child interactions. The tests have simple pass-fail criteria, making determining compliance easy for testers. As is required under the STURDY Act, ASTM F2057-23 was developed in consultation with representatives from consumer groups, safety professionals, clothing storage unit manufacturers, and other furniture industry representatives, and it is widely supported. We appreciate your consideration and welcome any questions you may have.

Sincerely,

Nancy Cowles
Executive Director
Kids In Danger

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¹ Consolidated Appropriations Act, 2023, Pub. L. No. 117-328, div. BB, tit. II, §201(c)(2)(d) <https://www.congress.gov/bill/117th-congress/house-bill/2617/text> (2022).

² *Id.*

³ Safety Standard for Clothing Storage Units, 87 Fed. Reg. 72598, 72634 (Nov. 25, 2022).

⁴ ASTM F2057-23, Standard Safety Specification for Clothing Storage Units (Feb. 6, 2023) (www.astm.org/f2057-23.html).

⁵ *Id.*

⁶ *Id.*

⁷ Consolidated Appropriations Act, 2023, *supra* note 1, at div. BB, tit. II, §201(b), (d)(2)(a).

⁸ ASTM F2057-23, *supra* note 3.

⁹ CPSC, *supra* note 2, at 72623.

¹⁰ Consolidated Appropriations Act, 2023, *supra* note 1, at div. BB, tit. II, §201(c)(2)(d).