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Revisions to ASTM F2057-23 Standard Safety Specification for Clothing Storage Units

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Before we begin



Housekeeping Items

- All meeting participants have been muted.
- Please use chat feature to enter questions.
 - Brief Q&A at the end
- No recording of presentation is permitted.
- Slides will be made available after the presentation.



- ASTM does not provide official interpretations to our standards.
- Today's presentation is an overview the of the changes to the ASTM F2057-23 standard that occurred as a result of the discussions during committee meetings and ASTM consensus process.
- Any interpretations provided are the opinion of the presenters and not the official interpretation of ASTM International.

Presenters



Richard Rosati

Vice President

Governmental Affairs and Industry Standards at Bureau Veritas Consumer Products Services Division

- Worked at BV for 23 years and a member of ASTM for over 20 years.
- ASTM F15.42 Furniture Safety Subcommittee Chair

Blake Gudbaur

- Senior Production-Product Engineer at Delta Children
- ASTM F15.42 Furniture Safety Task Group Lead

What we know today



- On 6 February 2023, ASTM International released ASTM F2057-23, the updated version of the voluntary stability standard for clothing storage units.
- Under the provisions of the STURDY Act, the CPSC has reviewed the revised standard for adequacy and has determined that it meets the requirements of the act. The Commission vote passed 4-1 and the revised ASTM standard is now adopted into law and mandatory compliance is required after September 1st, 2023.
 - tests that simulate the weight of children up to 60 pounds;
 - 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;
 - testing of all clothing storage units, including those 27 inches and above in height; and
 - warning requirements based on ASTM F2057–19, or its successor at the time of enactment, provided that the CPSC may strengthen the warning requirements of ASTM F2057, if reasonably necessary to protect children from tip-over-related death or injury.

Major Updates to ASTM F2057-23



- Standard covers children up to 72 months change from up to including 5 years of age
- Term nightstand removed from exemptions. Scope updated to include specific attributes:
 - 27 in. or greater in height and;
 - 30 lbs. or greater in mass and;
 - 3.2 ft³ or greater of enclosed storage space
- Test weight increased from 50 lbs. to 60 lbs. and applied to units with all available drawers open rather then only one drawer open
- Three new tests developed to simulate real life situations:
 - Drawers open and loaded test 8.5 lbs. per $\rm ft^3$
 - Simulated dynamic test 10 lb. horizontal force with all available drawers open
 - Simulated carpet test unit tilted forward using a 0.43 in. test block and 60 lbs. applied to open drawers
- Interlock drawer integrity test 30 lb. horizontal force test
- Compliance with ASTM F3096-23 force test increased to 60 lbs. to mirror ASTM 2057-23
- Label changes and location requirements
 - 0.5" or less from top of drawer side and 3" or less from the back of the drawer front.
 - On an open door or on the cabinet side adjacent to the door no more than 1" from door closed position

ASTM F2057-23



Design changes being implemented

- Drawer interlocks
- Additional weight on the bottom or lower back area of the unit
- Shorter drawer glide lengths
- Deeper units
- Smaller/shorter drawer boxes
- No "glides" on the feet
- Moving the fulcrum out as far as possible
- Tilting the unit back slightly
- Lighter drawer fronts



	ASTM F2057-19	ASTM F2057-23
Scope	CSU>/= 27" in height	CSU>/= 27" in height and 30 lbs. or greater in mass and 3.2 ft ³ or greater in open storage volume
Exemptions	Included nightstands	Nightstands removed and added attributes under scope
TestWeight	50 lbs.	60 lbs.
Testing	All drawers open, unloaded; Load application to 1 open drawer	Drawers open and loaded; Simulated dynamic force; Simulated reaction to carpet and child's weight
Interlocks	No requirement	Force test to locked drawers if interlocks exsist
Anti-Tip kit	Must comply with 3096	Must comply with 3096-23
Markings and labeling	Must comply with F2057-19	Must comply with new labeling and location requirements of 2057-23

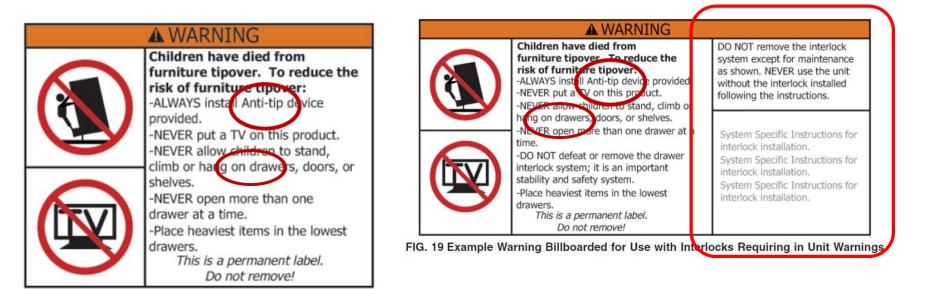




- The intended use, as well as the likely perceived use, is used to determine if an item is in scope, what an item is named may be a clue to intent, but it is not the only one.
 - The manufacturer's intent, if reasonable
 - Whether the product is marketed as a CSU
 - Whether the product is commonly recognized by consumers as a CSU
- Free-standing definition:
 - Does not require permanent attachment to the building
 - The anti-tip device is not considered permanent attachment

ASTM F2057-23 Label Requirements





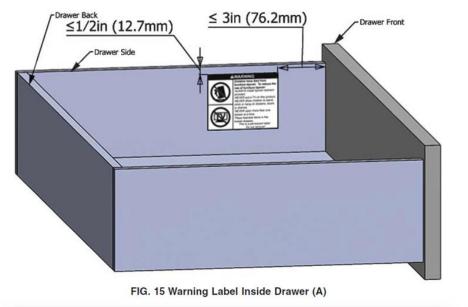
2 Mistakes on some of the example warnings:

•"Anti-tip device" should be "anti-tip device" (10.2.3.3)

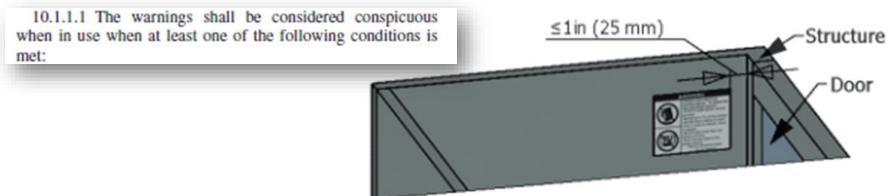
•"..hang on drawers, doors.." should be "hang on any drawers, doors.." (10.2.3.5)

ASTM F2057-23 Label Requirements





Meet one section of 10.1.1.1, there are (4) options
Permanency tests are unchanged from previous versions and are common tests.



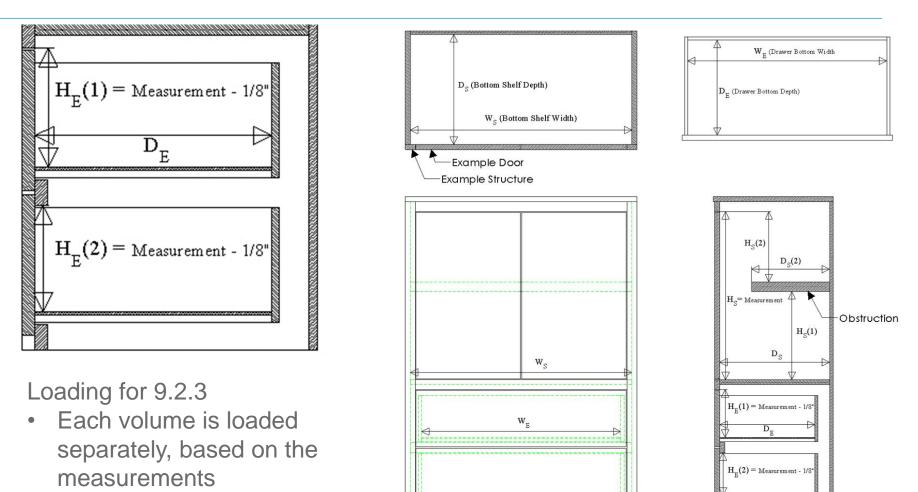




- Adjusted on a level surface before all other testing
- Minimum adjust is used to ensure the lowest possible unit height and approximate the least a consumer will do.
- Height Adjusters are included differently than levelers only to ensure units cannot be easily adjusted to become in-scope units.
 - The height adjusters described are not likely the most common.

Measurements

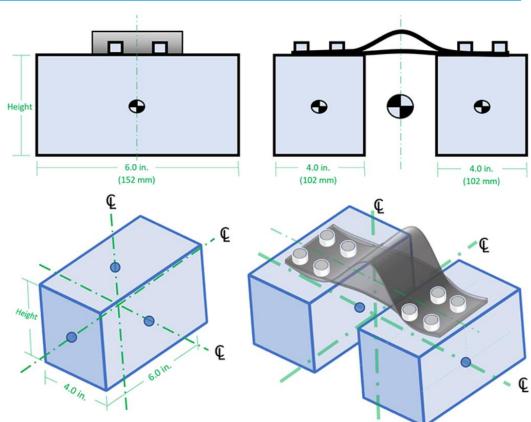




• All enclosed volumes are loaded, or none are.

Test Apparatus

- Total Mass
 - 60.0lbs is not possible
- Symmetry
 - of each weight
 - Between weights
- Handles
 - Part of the strap
 - Separate from the strap
- Hardware
 - Part of the test weight mass
- Materials





Testing Questions



- How are casters treated in testing?
 - There is no provision to remove them. This may be future work to further clarify.
- How are hand holds other than pulls, knobs, and drawer front top edges tested?
 - Alternate attachment fixtures may be used. This may be future to work to further clarify
- Drawer with multiple outstops.
 - The first, based on the definition. This may be future work to clarify/change.
- Open drawer/door touching the test surface after the test block is added.
 - See 4.2
 - CPSC may based their criteria on

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.

See CPSC Website

- Requirements for 3rd party testing
 - GCC vs. CPC
 - General use vs. children's product
- Questions on interpretation
 - Multi-use units
 - Units other than typical residential bedroom furniture
- Timing of implementation
- Inventory/Sell through





Resources



- ASTM International Staff
 - Get Involved: <u>https://www.astm.org/get-involved/membership.html</u>
- 3rd party testing labs
 - Bureau Veritas, Intertek, SGS, TUV Rheinland, UL, others
- US Consumer Product Safety Commission
 - Office of Small Business Ombudsman:
 - <u>https://www.cpsc.gov/Business--Manufacturing/Business-</u> Education/FAQ?p=3019&tid%5B3026%5D=3026
 - <u>https://www.cpsc.gov/Business--Manufacturing/Business-Education/Business-Guidance/Clothing-Storage-Units</u>
 - Federal Register Notice:
 - <u>https://www.federalregister.gov/documents/2023/05/04/2023-08997/safety-standard-for-clothing-storage-units</u>
- Trade Association
 - American Home Furnishings Alliance (AHFA)
- Consumer Advocacy Groups
 - Parents Against Tipovers, Consumer Reports, Kids In Danger, Consumer Federation of America

Additional Standards Activities



Subcommittee F15.42 on Furniture Safety

- On-going revisions to F2057-23 Standard Safety Specification for Clothing Storage Units
- On-going revisions to F3096-23 Standard Performance Specification for Tipover Restraint(s) Used with Clothing Storage Unit(s)
- New activity to develop safety standard for recliners and motion furniture
- Discussion on potential standard for murphy beds
- New draft standard development on storage ottomans (WK80158)
- Next ASTM Meeting:
 - Thursday, September 21, 2023 Kansas City, MO
 - Contact ASTM Staff Manager for more information





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Thank you

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