

Test-by-test comparison between ANSI/BIFMA X 5.9-2012 and X 5.9-2004

# test	ANSI/BIFMA X 5.9-2012	Re-Testing Required ? (note 1)	Rationale
4	Functional Load Test 4.2 & 4.3 - Functional Load + 4.6.2	Required for units with extendible elements	4.3.2 requires to perform pull force test without removing load from extendible elements. Other changes not requiring retesting: loads requirements for unit tops were changed to harmonize with X 5.5-2008. Height ranges also changed.
	Proof Load Test 4.4 & 4.5 - Proof Load		
4.6.3	Extendible Element Static Load Tests - Proof (4.6.3)	No	New section but redundant with 4.2 & 4.3; testing only needs to be performed once.
5	Leg/Glide Assembly Strength Test (no	No	Same test as before
6	Racking Resistance Test (no casters)	No	Same test as before
7,1	Top Load Ease Cycle Test	No	Number of cycles lowered to harmonize with BIFMA X 5.5 and X5.6
7,2	Drop test - Dynamic - for Units with Seat Surfaces	No	Same test as before
7,3	Durability Test for Units with Seating Surface - Cyclic Impact	Required	Drop test height increased from 1" to 1.2" to harmonize with X 5.1-2011. Pull force requirement added after test completion in Acceptance Level.
8,1	Separation Test for Tall Storage Units with Vertically Attached or Stackable Components	Required	Impact centered at 4 inches from top edge instead of 6". Repositioning of unit between impacts is not allowed anymore. This test was not applicable to units lighter than 40 lbs; threshold lowered to 20 lbs. 8.1.3.1 segment added: For unit-mounted privacy screens or screen assemblies whose surface will not accept the full impact (i.e., textile or plastic filler inside of a frame), center the impact bag on the frame as close as possible to the locations given in Figure 8a. 8.1.3.2 segment added: if the impact location is centered on an open area (e.g. open book shelf), move the impact to the closest vertical location on the unit. -8.1.4 acceptance level added: Cracked or broken glass is not acceptable.

Micom: a one stop laboratory for the furniture industry



CAL 133 TESTING

Test-by-test comparison between ANSI/BIFMA X 5.9-2012 and X 5.9-2004

8,2	Upward Impact Force Disengagement Test for Storage Units	no	Same test as before
8,3	Upward Force Static Disengagement Test for Wall Mounted Components	Required	New test; same as test #12 from ANSI/BIFMA X 5.6-2010
9,2	Horizontal Force Stability Test for Tall Storage Products (>42")	Required for units with extendible elements	Same test as before but whereas units with extendible elements did not have to be tested to that test, now they do . Slight addition to the acceptance level for units with doors interfering with tipping upon testing.
9,3	Stability Test for Type I Units with at least one Extendible Element	No	Same test as before
9,4	Stability Test for Type I Storage Units with Multiple Ext elements	No	Same test as before. Clarification: 9.4.2.b segment added: If the unit has drawers that open in opposite directions that would counterbalance themselves upon opening, open the drawer (or drawers) on one side of the unit only.
9,5	Stability Test for Type II (small) Storage Units having extendible elements	No	Same test as before
9,6	Vertical Force Stability Test for Storage Units (for units >42 inches)	Required for units with extendible elements	Same test as before but whereas units with extendible elements did not have to be tested to that test, now they do .
9,7	Stability Test for Pedestals/Storage Units with Seat Surfaces	No	Same test as before
10	Storage Unit Drop Test (no type II, no casters)	No	Same test as before. Length limitation (max 72") for test applicability. Test does not apply anymore to units heavier than 300 lbs
11	Movement Durability Test for Mobile Storage Units	No	Same test as before
12	Rebound test	No	Same test as before
13	Extendible Element Retention Impact and Durability (Out Stop) Tests	No	Same test as before.

Shipping Damages?



Pre-Shipment Testing (ISTA)

Test-by-test comparison between ANSI/BIFMA X 5.9-2012 and X 5.9-2004

14,2	Force Test for Extendible Element Locks	No	Same test as before Wide pull category now only applies to units wider that 12"
14,3	Force Test for Door Locks	Required	Unit now needs to be tested when it is loaded. Previously the unit was empty
14,4	Locking Mechanism Cycle Test for All Locks	No	Same test as before; editorial changes only
15,2	Cycle Tests for Extendible Elements Deeper than Wide that Do Not Swivel	No	Same test as before; editorial changes only
15,3	Cycle Tests for Extendible Elements Wider than Deep that Do Not Swivel	No	Same test as before, number of cycles lowered for harmonization purposes with X 5.5 2008. (note could cause problems with specific requirements of potential customers (i.e.: Army core of Engineers))
15,4	Horizontal Cycle Test for Television/Video Display Terminal Extendible Elements	No	Same test as before; editorial changes only
15,5	Cycle Test for Low Height Drawers	New	new test; harmonized with BIFMA X 5.5 2008
16	Interlock Strength Test	No	Same test as before
17,2	Strength Test for Vertically Hinged, Bi-fold, and Vertically Receding Doors	No	Same test as before
17,3	Hinge Override Test for Vertically Hinged Doors	No	Same test as before
17,4	Vertical Receding Doors Strength Test	No	Same test as before
17,5	Horizontal Receding doors Strength Test	No	Same test as before
17,6	Wear and Fatigue Tests for Hinged, Horizontally Sliding, and Tambour Doors	Generally: No but yes for hinged and tambour doors with wide pulls	Same test as before except for hinged and tambour doors with wide pulls (please refer to table #9)
17,7	Wear and fatigue test for vertical receding door	No	Same test as before
17,8	Wear and fatigue test for horizontal receding doors	No	Same test as before

A lab that provides solutions...



Material testing

Test-by-test comparison between ANSI/BIFMA X 5.9-2012 and X 5.9-2004

17,9	Vertical and Horizontal Receding Door Out Stop Test – Cyclic Impact & Durability	No	Same test as before
17,10	Slam Closed Test for Vertically Hinged and Vertically Receding Doors	No	Number of cycles lowered from 50 to 10 times
17,11	Drop Test for Horizontally Hinged and Horizontally Receding Doors - Cyclic	No	Number of cycles lowered from 500 to 200 times
17,12	Slam Test for Doors which Free Fall Open or Closed	No	Same test as before. 17.12.2 b) has a provision for doors which could free fall at both ends of the travel (very rare)
17,13	Slam Open and Closed Test for Doors which Do Not Free Fall	Potentially	Pull force required for the testing is calculated differently. The pull force required in the new test will be higher if the pull force required to open the door is equal or less than 4.4 lbf. The number of cycles lowered from 50 to 10 times
17,14	Door latch test	No	Same test as before
18	Clothes Rails Static Loading Test	No	Same test as before
19	Swivel Cycle Test for Tel/Video Display Terminal Surf	No	Same test as before
20	Pull force test	No	Same test as before

Note 1: The statements made in this document are made on a general basis strictly to help manufacturers and other interested parties to get an overview of how this new standard's version could potentially impact product compliance requirements and status. Re-testing may or may not be required on specific configurations despite the statements made in the above document which only represent Micom Laboratories Inc.'s opinion. Specific re-testing requirements should be based on a case-by-case analysis and cannot be unilaterally decided strictly based on the statements made above; they should be used strictly as general guidelines. Whether re-testing needs to be performed needs to be decided by Manufacturers or their customers.

**Your own test lab
at a fraction of the
price...**



**Temperature &
Humidity Cycling**