

MICOM IMPACT →

**New ANSI/BIFMA X5.9-2004 Standard
Storage Units - Tests**

As you may know, BIFMA has been working on a new standard for storage units for some time. The proposed new standard for Storage Units X5.9-2004 was approved by ANSI on November 17, 2004. The new standard is largely based on BIFMA X 5.5-98 and BIFMA X 5.2-1997. There are also a few new tests. BIFMA X5.9 now replaces the BIFMA X5.2 standard.

This newly developed standard offers the advantage over BIFMA X5.5 to limit the amount of loading that must be put in the unit in order to meet the standard's requirements. There are also some new stability tests that were added for products like bookshelves.

Please find below a test-by-test comparison between this new standard and the previous X5.2-1997 and X5.5-1998 standards.

We trust this information will be of interest to you. Should you have any questions, please do not hesitate to contact us.

Regards,



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ANSI/BIFMA X 5.9-2004 section #	ANSI/BIFMA X5.5-98 or X5.2-97 standard section #	Major difference(s)
4 Strength Test	X5.5: 4 Unit Static Load Test X5.2: 13 Strength Test	Same as test #4 from X5.5 with a max. limit to the load to be applied
5 Leg/Glide Assembly Strength Test	X5.5: 12 Leg Strength	Different than in X5.5. In X5.5, Leg Strength didn't to Freestanding pedestal. It now applies to every thing but units with casters
6 Racking Resistance Test	X 5.2: Racking Test	Identical to BIFMA X5.2, test #14. No equivalent in X5.5.
7.1 Top load ease Test – Cyclic	X5.5: 5 Top Load Ease Test	Same as BIFMA X5.5, test #5. Previously didn't apply to 2 high lateral file in X5.2
7.2 Drop test – Dynamic - for Units with Seat Surface	●●●	Similar to BIFMA X5.1, test #8 (only 200 lb instead of 300 lb). New test for pedestals with seat surfaces only
7.3 Durability test for Units with Seating Surfaces – Cyclic Impact	●●●	Similar to BIFMA X5.1, test #11 (only 7500 cycles instead of 100 000). New test for pedestals with seat surfaces only
8.1 Horizontal Disengagement Test for Tall Storage Units with Attached or Stackable components	X5.5: 24 Dislodgment Test for Tall Desk/Table Products	Identical to X5.5, test #24
8.2 Upward Force Impact Dislodgement Test for Storage Units	●●●	Identical to X5.6 test #11.2. Not in X5.5 and X5.2. Only for storage components that extend beyond the footprint or are wall-mounted.
9.2 Horizontal Force Stability Test for Tall Storage Units Without Extendible Elements	X5.5: 23 Force Stability Test for Tall desk/Table Products	Similar to X5.5, test #23 (6 impact location in X5.9 instead of 4 in X5.5)
9.3 Stability Test for Type I Storage units	X5.2: 5.2 Stability Test	Identical to X5.2, test #5.2
9.4 Stability Test for Type I Storage Units with Multiple Ext. elements	X5.2: 5.4 Stability Test	Identical to X5.2, test #5.4

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9.5 Stability Test for Type II Storage Units having extendible elements	X5.5: 13.4 Stability Test for Freestanding Pedestals.	Identical to X5.5, test #13.4
9.6 Vertical Force Stability Test for Units Without Extendible Elements	●●●	New test. Not in any other BIFMA standard. In our experience, so far, the rate of failure on this test is low.
9.7 Stability Test for Pedestals/Storage Units with Seat Surfaces	●●●	Similar to BIFMA X5.1, #12 Front stability test. New test for pedestals with seat surfaces only
10 Storage Unit Drop test	X5.5: 11 Drop Test	Similar to BIFMA X5.5, #11 but modulated as a function of the unit's weight (the heavier the unit, the lower the drop height)
11 Movement Durability test for mobile storage units	X5.5: 14 Caster Durability Test for Mobile Pedestals	Similar to BIFMA X5.5, test #14 with lower loads and lower number of cycles for units over 100 lbs.
12 Rebound test	X5.5: 9 Rebound Test X5.2: 6 Rebound Test	Identical to X5.5, test #9 & X5.2, test #6
13 Out Stop Test	X5.5: 8 Out Stop Test X5.2: 7 Out Stop Test	Identical to X5.5, test #8 & X5.2, test #7
14.2 Force Test for Extendible Element Locks	X5.5: 6.2 Force Test for Extendible Member Locks X5.2: 8 Lock Test	Identical to X5.5, test #6.2 & X5.2, test #8
14.3 Force Test for Door Locks	X5.5: 6.3 Force Test for Door Locks	Identical to X5.5, test #6.3
14.4 Locking Mechanism Cycle Test for All Locks	X5.5: 6.4 Locking Mechanism Cycle Test for All Locks	Identical to X5.5, test #6.4
15.2.1 Extendible Element Cycle Test Deeper than Wide	X5.5: 7.2 Cycle Test for Extendible Members Deeper than wide	Identical to X5.5, test #7.2

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15.2.2 Extendible Element Cycle Test Wider than deep	X5.5: 7.3 Cycle Test for Extendible Members Wider Than Deep X5.2: 9 Extendible Member Cycle Test	Same as BIFMA X 5.5, test # 7.3 with 50% more cycles. Identical to X5.2, test #9.
15.3 Horizontal Adjustment Cycle Test for Television/Video Display Terminal Extendible Elements	●●●	New test (10 000 cycles)
16 Interlock Test	X5.5: 16 Interlock test X5.2: 10 Interlock Test	Includes both an unloaded and loaded procedure (more rigorous than X5.5 and X5.2 that had only the test performed with unloaded drawers)
17.2 Strength test for vertically hinged doors	X5.5: 17.2 Strength test for vertically hinged doors	Same as X 5.5 with lower load varying as a function of door height.
17.3 Hinge Override Test for Vertically Hinged Doors	●●●	New test (18 lbf @ 4 inch from closing edge while door fully opened)
17.4 Vertical Receding Doors Strength Test	●●●	New test (18 lbf @ 4 inch from closing edge)
17.5 Horizontal Receding doors Strength Test	●●●	New test (18 lbf @ 1 inch from closing edge while door is inset)
17.6 Wear and fatigue test for Vertically hinged doors & sliding doors	X5.5: 17.3 Wear and Fatigue Tests for All Hinged Doors	Similar to BIFMA X 5.5, test #17.3 but takes into account the pull width
17.7 Wear and fatigue test for vertical receding door	X5.5: 18.3 Wear and Fatigue Test for Vertical Receding Door	Same as BIFMA X 5.5, test #18.3 with less cycles (10K instead of 20 K)

17.8	Wear and fatigue test for horizontal receding doors	X5.5: 18.2 Cycling Test for Receding Door	Similar to BIFMA X5.5, test #18.2 but takes into account the pull width
17.9	Vertical & Horizontal Receding Door Out stop test - Cyclic Impact	●●●	Identical to X5.6, test #10.19. Not present in X5.5 and X5.2.
17.10	Slam open and closed test for doors which do not free fall	X5.5: 19.4 Slam Test for Doors which Free Fall Open or Closed	Identical to X 5.5, test #19.4
17.11	Slam Closed Test for Vert. Hinged Doors & Vert. Receding Doors	X5.5: 17.4 Slam Open/Closed Test For Vertically Hinged Doors	Same basic test as BIFMA X 5.5, test #17.4 but different procedure
17.12	Drop test for horizontally hinged doors - cyclic	X5.5: 17.5 Drop Test for Horizontally Hinged Doors X5.2: 11 Drop Test for Receding Door	Different test than X5.5, test #17.5 & X5.2, test #11; less cycles but door opened to 90 degrees
17.13	Slam test for doors which free fall open or closed	X5.5: 19.3 Slam Test for Doors which Free Fall Open or Closed	Identical to X5.5, test #19.3
17.14	Door latch test	X5.5: 20 Door Latch Test	Identical to X5.5, test #20
18	Clothes Rails Static Loading Test	●●●	New test
19	Swivel Adjustment Cycle Test for Tel./Video Display Terminal Surf.	●●●	New test
20	Pull Force test	X5.5: 25 Pull Force Test X5.2: 15 Pull Force Test	Identical to X5.5, test #25. Higher threshold than X5.2, test #15.