Bureau Veritas

Bulletin

BIFMA Revises Performance Standard for Office Chairs

A new revision of the industry standard for office chairs, ANSI/BIFMA X5.1-2011, has been released after more than three years of work by the Chair Standards Subcommittee of the Business and Institutional Furniture Manufacturers Association (BIFMA). Published through ANSI, the new version contains several substantial procedural changes as well as many changes to the test loads, drop heights, etc. These changes will impact future manufacturing and sales of office chairs in both the retail and hospitality industries.

Background

BIFMA began preliminary work on its office chair standard in 1974, releasing the first version in January 1977, and making several revisions since. After using the 2002 version of X5.1 for several years, the subcommittee on chair standards conducted reviews to ensure that the tests accurately described the proper means to evaluate the safety, durability, and structural adequacy of general-purpose office chairs. As a result of this review, the group recognized the need for several changes within the Standard in order to improve evaluations.

Summary of Key Changes

One factor identified by the subcommittee was that the general population continues to grow larger and heavier, which could have significant impact on office chairs. After reviewing this data, the subcommittee worked with the Ergonomics subcommittee to update the test loads used throughout the standard. For the revised version of the standard, the test loads are based on the 95th percentile male user, which was determined to weigh 253 lbs. Some of the load changes within the standard are to the following sections:

- Section 9, Swivel Test
- Section 13, Arm Strength Test – Vertical – Static
- Section 17, Caster / Base Durability Test – Cyclic
- Section 18, Leg Strength Test – Front and Side Application
- Section 22, Out Stop Test for Chairs with Manually Adjustable Seat Depth

Two other significant procedural changes have been made for the following two tests:

- Rear Stability: For this test, the “BIFMA Block” that was used previously has been eliminated and has been replaced by a stack of loading disks. These disks harmonize with ISO stability tests and the collection of disks better approximates the distribution of weight that a consumer places against the chair back.
- Arm Strength Test – Vertical - Static: This evaluation was changed so that it now specifies applying an initial vertical pull force, unless the chair design does not allow for such a pull force to be applied. Previously, the standard allowed either a pull or a push force to be used when testing the arms, but research demonstrated that results could differ depending on the means of application.

Bureau Veritas Assistance

Bureau Veritas has actively participated on the BIFMA technical subcommittee responsible for this standard throughout its revision process. The new Standard impacts both the retail and hospitality markets which Bureau Veritas supports through a suite of testing services. We have multiple global labs with the capability and experience to test and evaluate office chairs to the new requirements.

Contact Information

If you have any comments and/or questions, please contact your customer service representative or email: cps.info@us.bureauveritas.com