



Exceeds Commercial and Institutional Standards

## Chair Standards

The Business and Institutional Furniture Manufacturer's Association (BIFMA) sets industry standards for commercial-grade furniture. The standards are intended to provide manufacturers and users with a common basis for evaluating safety, durability, and the structural adequacy of the specified furniture. The standards define specific tests, laboratory equipment to be used, formulas to determine weight or height to use in each test, the conditions of testing, and the acceptance levels to be used in evaluating these products.

1. **Back Strength Functional Load-** The chair is restrained from movement and 150 lbs of force is applied to the chair back for a period of one minute. The chair passes if there is no structural breakage or loss of serviceability, including stacking ability.
2. **Back Strength Proof Load-** The chair is restrained from movement and 250 lbs of force is applied to the chair back. The chair passes if there is no sudden change in the structural integrity of the product. Loss of serviceability is acceptable.
3. **Stability Test (Backward)-** A 173 lb weight is strapped to the chair as if an adult male was sitting in the chair. The rear legs of the chair are blocked. A rear load is applied to the chair until the total weight is transferred to the rear legs. The chair passes if the force required is greater than 35 lbs.
4. **Stability Test (Forward)-** The front legs of the chair are blocked and a force is applied downward at 45° from the surface of the seat. The chair passes if the force required is greater than 40% of the total chair weight.
5. **Chair Leg Strength Functional Load (Side)-** The entire chair is restrained on its side. A 75 lb weight is applied one inch from the bottom of the front leg for one minute. This is repeated on the back leg. The chair passes if there is no structural breakage or loss of serviceability.
6. **Chair Leg Strength Proof Load (Side)-** The entire chair is restrained on its side. A 115 lb weight is applied one inch from the bottom of the front leg for one minute. This is repeated on the back leg. The chair passes if there is no sudden change in the structural integrity of the product. Loss of serviceability is acceptable.
7. **Chair Drop Functional Load-** A 225 lb weight is positioned 6 inches above the seat of the chair and allowed to free-fall onto the center of the seat. The chair passes if there is no structural breakage or loss of serviceability.
8. **Chair Drop Proof Load-** A 300 lb weight is positioned 6 inches above the seat of the chair and allowed to free-fall onto the center of the seat. The chair passes if there is no sudden change in the structural integrity of the product. Loss of serviceability is acceptable.
9. **Seating Impact Test-** A 125 lb weight is dropped from a height of 2 inches onto the surface of the chair seat for 100,000 cycles. The chair passes if there is no structural breakage or loss of serviceability.

