Australian Standard™

Filing cabinets

Part 2: Vertical filing cabinets (ANSI BIFMA X5.3–1997, MOD)

Standards Australia

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PREFACE

This Standard was prepared by the Standards Australia/Standards New Zealand Committee CS-088, Commercial Furniture at the request of manufacturers.

The objective of this Standard is to provide specifiers and manufacturers with a Standard for the determination of strength, stability, performance characteristics and durability of vertical filing cabinets and to assist purchasing authorities, retailers and users in their selection and evaluation.

The Standard is an adoption with national modifications and has been reproduced from ANSI BIFMA X5.3—1997, *Vertical Files—Tests*. Variations to the source document for application in Australia are listed in Appendix ZZ and the text affected is indicated by a marginal bar.

The terms 'vertical file cabinet' and 'vertical filing cabinet' can be used interchangeably, meaning a filing cabinet whose depth is greater than or equal to its width.

Committee CS-088 considers that occupational health and safety considerations in Australia make it imperative for a cabinet to have a method of preventing toppling over when two or more loaded drawers are open. A requirement has been added to the ANSI Standard to fit an anti-tilt device, if there is no other means of preventing toppling over of the filing cabinet when two or more loaded drawers are opened.

Other modifications in this Standard, considered necessary by the Committee, comprise the addition, where necessary, of retention, drop and cycling testing as detailed in Sections 4, 11 and 12 of AS 5079.1:2003. These additional requirements are set out in Appendix ZZ.

This Standard is Part 2 of a series of requirements for filing cabinets, dimensions and testing of vertical files. Other Parts in this series are as follows:

Part 1: Lateral filing cabinets

Part 3: Mobile pedestals

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AUSTRALIAN STANDARD

Filing cabinets

Part 2:
Vertical filing cabinets (ANSI BIFMA X5.3—1997, MOD)

1 SCOPE

This standard is intended to provide manufacturers, specifiers, and users with a common basis for evaluating the function, safety, durability, and structural adequacy of free-standing vertical files. The standard defines specific tests, the laboratory equipment, and the test conditions. It specifies the acceptance levels to evaluate these products, independent of construction materials, manufacturing processes, and mechanical and/or aesthetic designs. These acceptance levels are based on the actual field and test experience of The Business and Institutional Furniture Manufacturer's Association (BIFMA) members. These tests are not intended to assess a product that has been in use.

2 Definitions

Note: The common dictionary definition shall be used for terms not defined in this section.

2.1 acceptance level: The performance level required to pass the test.

2.2 accessory item: Items such as hanging rail bars, divider plates, and other items supplied by manufacturers for the convenience of the users of the products.

2.3 adjustable glides: Support devices for leveling and/or stabilizing a vertical file. (Alternately referred to as "glides," "levelers," "adjustable supports," or "height adjusters.")

2.4 anti-rebound: The feature that ensures that an extendible member will stay closed and will not roll or bounce out of the compartment.

2.5 cabinet: The case and the full complement of extendible members.

2.6 case: The cabinet shell, including all structural parts but excluding extendible members.

2.7 caution label: A label that is attached to the vertical file instructing a prospective user of precautions to be considered for the proper use of the cabinet and of any potential hazards of misuse.

2.8 clear dimensions: The clear dimensions of the extendible member are defined by the sides of the largest rectilinear box that fits into the member and clears all stationary elements as the extendible member is taken through its full travel.

2.8.1 clear depth: The horizontal dimension of the box in the direction of travel. The clear depth is not reduced by the presence of a compressor.

2.8.2 clear height: The vertical dimension of the box. Exception: In the case where there is no bottom for the extendible member, the clear height will not exceed 305 mm (12 in.).

2.8.3 clear width: The horizontal dimension of the box at right angles to direction of travel.

2.9 clear space: The volume defined by the product of the clear dimensions e.g. clear space = (clear depth) x (clear width) x (clear height).

2.10 closed: The extendible members of the vertical file are fully retracted into the case and/or doors are in the position blocking entry into the cabinet.

2.11 compartments: The areas into which the case is divided.

2.12 compressor: A device used to restrict the movement of the filed material.

2.13 counterweights: A device or material used to improve resistance to tipping of a vertical file. These items may be supplied as original manufacturer's equipment, or as a manufacturer's option, installed according to the manufacturer's instructions.

2.14 cycle: A complete operation of loading and unloading or of stress reversal; one complete revolution; to operate in a cyclic fashion.

2.15 doors: A barrier by which an area is closed or opened. Types include: horizontal receding, vertical receding, tambour, sliding, vertical swinging, horizontal swinging, accordion, and others.

2.16 extendible member: A movable load bearing storage component, including, but not limited to: drawers, shelves, and filing frames. (This excludes doors and writing shelves.)

2.17 force: A vector quantity, expressed in Newtons or pounds force (lbf.), that tends to produce an acceleration of a body in the direction of its application.

2.18 fully extended: The extendible member pulled out to the limit of its stops.

2.19 functional load: A level of loading believed to be typical of hard use.

2.20 ganging: Two or more vertical files secured together in a group, side to side, rear to rear, or a combination of the two.

2.21 interlock: A device which restrains the extension of one or more extendible members.

2.22 lbf.: Abbreviation for pounds-force. The corresponding unit in the Metric System is the Newton(N).

2.23 leveled: A condition where the vertical file, when installed, adopts and maintains a true horizontal and vertical attitude. Leveling may be accomplished by, but not limited to, the use of adjustable glides or shimming.

2.24 load: An applied weight or force.

2.25 lock: A device that secures the stationary and extendible members of the vertical file against undesired access or opening.

2.26 loss of serviceability: The failure of any component to carry its intended load or to perform its normal function or adjustments.

2.27 N (Newtons): Abbreviation for Newtons, a unit of force in the Metric System.

2.28 proof load: A level of loading or force in excess of hard use.

2.29 pull: The feature used to open the extendible member. Pull refers to both projecting or recessed features.

2.30 stability: The ability of a vertical file to resist tipping under normal loading and use conditions.

2.31 stops: Devices that limit travel of extendible members or doors.

2.32 suspension: The system that is used to facilitate the movement of the extendible member in and out of the case (alternately referred to as “drawer slides” and “drawer supports”).

2.33 test platform: The hard work surface, (concrete or other unyielding surface) on which the unit to be tested is placed during testing.

2.34 tip over: The condition where the unrestricted vertical file will not return to its normal upright position.

2.35 vertical file: A file cabinet whose depth is greater than or equal to its width.

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3 General

3.1 Types of Tests

The testing and evaluation of a product against this standard may require the use of materials and/or equipment that could be hazardous. This document does not purport to address all the safety aspects associated with its use. Anyone using this standard has the responsibility to consult the appropriate authorities and to establish health and safety practices in conjunction with any applicable regulatory requirements prior to its use.

The types of tests to be employed fall into the following general categories:

a) static load applications;
b) dynamic load applications;
c) endurance or durability cycling tests.

It is not intended that all of the tests in this standard be conducted on a single unit. The tests may be performed on a series of units at the discretion of the manufacturer. It is the intent of this standard that all vertical file products shall be capable of meeting all of the applicable tests. Only worst case conditions (i.e. size and construction) need to be tested for a specific vertical file product type. Only one extendible member of each type, as applicable, per vertical file shall be tested. However, it is the intent of this standard that all extendible members shall be capable of meeting all of the applicable tests. It is not necessary to repeat the tests for a particular type of extendible member because more than one is provided as part of the vertical file. However, when a test requires a functional load and a proof load be applied as part of a test criteria, the functional and proof loads shall be applied to the same unit.

3.2 Tolerances

Unless otherwise specified tolerances shall be:

- Test Weights, ± 2%
- Forces, velocities, and time, ± 5%
- Linear measurements, ± 1.5 mm (1/16 in.)
- Angles, ± 5 degrees
- Level, within 5 mm per meter (1/16 in. per linear foot)
- Cycle requirements are minimums

3.3 Manufacturer's Instructions

When a manufacturer provides specific assembly or loading instructions, caution labels, or maintenance adjustments that may be required in order to keep the product in good operating condition, these instructions shall be followed during testing unless otherwise specified by test procedures.