

Australian/New Zealand Standard™

**Office desks, office workstations and
tables intended to be used as office
desks—Mechanical, dimensional and
general requirements and test methods**



AS/NZS 4442:2018

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PREFACE

This Standard has been prepared by Joint Standards Australia/Standards New Zealand Committee CS-088, to supersede AS/NZS 4442:1997, *Office desks* and AS/NZS 4443:1997, *Office panel systems—Workstations*.

The objective of this Standard is to provide manufacturers, specifiers, retailers, purchasers and users with requirements and test methods for general safety, strength, durability, stability and dimensions for office desks, office workstations, and tables intended to be used as office desks (the term ‘unit’ is used in this Standard), for use in indoor commercial and/or home office environments, to assist in determining the suitability of these items for their intended purpose.

The revision of AS/NZS 4442 and AS/NZS 4443 was considered necessary to maintain relevance, implement improvements, and to ensure the methodology and requirements reflect current use and design. For example, monitor technology has changed, and unit designs have become more complex in the years since AS/NZS 4442 and AS/NZS 4443 were first published in 1997.

The revision of AS/NZS 4442 and AS/NZS 4443 into one standard was considered practical due to desks and workstations fulfilling a near identical role in the office environment, which necessitated near identical requirements and test methodologies.

This Standard references AS/NZS 4790:2006 (reconfirmed 2016), *Furniture—Storage units—Determination of strength and durability*, for the testing of storage units that are attached to the unit.

This Standard references AS/NZS 4688.2:2000 (reconfirmed 2016), *Furniture—Fixed height chairs*, Part 2: *Determination of strength and durability*, for the testing of fixed height seating that is attached to, or is integrated into the structure of the unit.

In the wider furniture industry the terms ‘office workstation’ and ‘office desk’ are often used interchangeably. Readers of this Standard should be aware that specific definitions of an office desk, office workstation, and a table intended to be used as an office desk are used in this Standard.

The Standard’s dimensional requirements are intended to allow the ergonomically correct use of the unit by the user. However, this Standard does not instruct on the ergonomic use of a unit.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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FOREWORD

A lack of current Australian and New Zealand anthropometric data necessitated the selection of another source if dimensional requirements were to be included in this Standard. Business and Institutional Furniture Manufacturers Association document, BIFMA G1-2013, *Ergonomics Guideline—Ultimate Test for Fit*, was referred to in the preparation of this Standard because it was publicly available and considered likely to be relatively similar to the Australian and New Zealand populations.

When used with adjustable height chairs and, if necessary, suitable foot stools, units meeting the dimensional requirements of this Standard, with the exception of the work surface height of fixed height primary worktops, can be expected to be suitable for the majority of users within the height range (stature) from 5th percentile female to 95th percentile male as defined in the publication BIFMA G1-2013.

The work surface height of fixed height primary worktops meeting the dimensional requirements of this Standard can be expected to be suitable for the majority of users within the height range from 5th percentile female to <95th percentile male, as defined in BIFMA G1-2013.

The exception of fixed height primary worktops is included because, by being fixed, a primary worktop's height must be skewed toward use by taller users to enable a greater range of people who can utilize it. Shorter people may need to utilize a footrest with such a worktop and 95th percentile height range males may not find the fixed worktop high enough and should use a height adjustable desk. Therefore, user height adjustable primary worktops, either manual or electric, are recommended over the ergonomic compromise that is a fixed height primary worktop.

The strength and durability tests of this Standard have been developed to emulate the estimated rigours of a typical 10 year unit life that encompasses single shift (8 hour) use per day. Conformance with this Standard does not necessarily guarantee a 10 year life, because in practice variables such as the environment, user size, usage, care, misuse, and maintenance cannot be fully anticipated.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies testing procedures and performance requirements to assist with evaluation of office desks, office workstations and tables intended to be used as office desks (collectively referred to as a ‘unit’), to determine their suitability for use in the internal commercial or home office environment. Minimum requirements for dimensions, general safety, stability, strength and durability are specified. This Standard is applicable to units with fixed height, height adjustable, and/or flip top worktops.

The following are not covered by this Standard.

- (a) Acoustics attenuation properties.
- (b) Counter units.
NOTE: Defined as desks of standing or sitting height across which workers on one side of the unit perform transactions or services for the public who are located on the other side of the unit.
- (c) Tables not intended to be used as office desks.
- (d) Electrical safety and electrical compliance with regulations.
- (e) Environmental and sustainability concerns, except for formaldehyde emissions covered under Clause 2.3.6, and the sustainability benefits inherent in a unit conforming to this Standard’s dimensional, general safety, stability, strength, and durability requirements.
- (f) Flammability.
- (g) Free standing screens.
NOTE: Defined as freestanding vertical space dividers that do not possess a primary worktop.
- (h) Units fixed to the structure of a building.
- (i) Ergonomic use.
- (j) Units designed specifically for use by disabled persons.
- (k) Monitor arms.
- (l) Desktop converters.
NOTE: Defined as height adjustable platforms that sit on a desk’s worktop. By raising the platform, on which a monitor and keyboard sit, they enable a person to work while standing at the desk.

1.2 APPLICATION

Conformance to this Standard cannot ensure suitability of any particular unit for all potential office uses. Therefore, specifiers and purchasers should determine suitability for each individual application.

Units with a fixed height worktop generally require use of chairs with an adjustable seat height and may also require use of a footrest to allow the operator to obtain a suitable working position.

A unit with a fixed height worktop and an adjustable keyboard platform fitted may be an adequate alternative when a unit with a user height adjustable worktop is not available and where keyboard operation is the major task undertaken.

Keyboard platforms are not recommended, but if they are present, they are considered a part of the primary worktop if they are set into it and can be set level with it and will need to satisfy dimensional and mechanical requirements.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

NOTE: Further information may be found in documents listed in Appendix A.

AS/NZS

- 1859 Reconstituted wood-based panels—Specifications
- 1859.1 Part 1: Particleboard
- 1859.2 Part 2: Dry process fibreboard
- 2098 Methods of test for veneer and plywood
- 2098.11 Method 11: Determination of formaldehyde emissions for plywood
- 2269 Plywood—Structural
- 2269.0 Part 0: Specifications
- 4266 Reconstituted wood-based panels—Methods of testing
- 4266.1 Method 1: Base panels
- 4688 Furniture—Fixed height chairs
- 4688.2 Part 2: Determination of strength and durability
- 4790 Furniture—Storage units—Determination of strength and durability

ISO

- 17025 General requirements for the competence of testing and calibration laboratories

1.4 DEFINITIONS

For the purpose of this Standard the following definitions apply.

1.4.1 Accuracy

The degree of closeness to the true value or the specified value of whatever dimension is being measured, or force applied.

1.4.2 Corner sleeve

A sleeve that slides across two joining planes of a primary worktop, filling the corner and effectively becoming an extension of the worktop. Corner sleeves are typically metal and extend the worktop thereby increasing worktop depth. A corner sleeve is also known as a 'desk sleeve', 'keyboard sleeve', or 'desk lozenge'.

1.4.3 Deflection

The distortion produced in the plane of the primary or secondary worktop's work surface as a result of test force application.