

Australian/New Zealand Standard™

Furniture — School and educational

**Part 1: Tables — Strength, durability
and stability**



AS/NZS 4610.1:2020

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- Furniture and Cabinetmaking Association of New Zealand
- Furntech — Australasian Furnishing Research & Development Institute
- Human Factors and Ergonomics Society of New Zealand
- National Retail Association
- Plastics New Zealand

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Originated as AS/NZS 4610.3:1999.
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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS-088, Furniture — Domestic and Commercial, to supersede in part AS/NZS 4610.3:1999, *Furniture — School and educational, Part 3: Tables and storage furniture — Strength, durability and stability*.

The objective of this Standard is to provide educational authorities, purchasers, specifiers, users, manufacturers and consumers with requirements for school and educational tables/desks with and without storage features that specify sizing, safety, strength, durability, stability and marking requirements to assist in selection and evaluation.

This Standard is Part 1 of the AS/NZS 4610 series consisting of the following:

AS/NZS 4610.1, *Furniture — School and educational, Part 1: Tables — Strength, durability and stability* (this Standard)

AS/NZS 4610.2, *Furniture — School and educational, Part 2: Chairs — Strength, durability and stability*

AS/NZS 4610.3, *Furniture — School and educational, Part 3: Storage furniture — Strength, durability and stability*

The major changes in this revision are as follows:

- (a) A more comprehensive scope has been included.
- (b) A section relating to general safety has been included, see [Clause 5.1](#).
- (c) Test level and dimensional size marks have increased from seven categories to eight and have changed from numerical to alphabetical designation.
- (d) Legroom requirements have been included, see [Section 4](#).
- (e) A formaldehyde emissions requirement has been added for materials used in construction, see [Clause 5.3](#).
- (f) A durability test for tables with castors has been included, see [Appendix N](#).
- (g) A durability test for the adjustment mechanism of continuously height adjustable tables has been added, see [Appendix O](#).
- (h) Wherever possible, test methods have been simplified and/or clarified for ease of use.

The terms “normative” and “informative” are used in Standards to define the application of the appendix to which they apply. A “normative” appendix is an integral and mandatory part of a Standard, whereas an “informative” appendix is only for information and guidance.

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Australian/New Zealand Standard

Furniture — School and educational

Part 1: Tables — Strength, durability and stability

Section 1 Scope and general

1.1 Scope

This Standard specifies the dimensional requirements (size mark), general safety, strength, durability, stability and marking requirements for freestanding tables with and without additional storage features used in educational environments as places of study.

Tables covered by this Standard may be of —

- (a) fixed height or height adjustable;
- (b) stacking or non-stacking;
- (c) flip top;
- (d) cantilevered;
- (e) pedestal;
- (f) sitting;
- (g) standing;
- (h) sit-to-stand; or
- (i) tables of similar nature and purpose other than those specifically excluded from this Standard.

The work surface may be horizontal, inclined or inclinable to a maximum of 20° towards the user. The work surface may be height adjustable. Tables may also —

- (i) be fitted with glides, castors or wheels on some or all of the legs or supports;
- (ii) contain additional storage such as drawers or shelves; and
- (iii) be fully assembled or require full or partial assembly.

The following are not covered by this Standard:

- (A) Work benches used in manual arts areas, such as woodwork, metalwork, welding and small engine services.
- (B) Laboratory work benches.
- (C) Glass forming any part of the table.
NOTE Testing of glass is not covered in this Standard.
- (D) Clerical tables for teachers, administration staff or management.
- (E) General purposes tables for other than places of work by users.
- (F) Tables used in commercial environments.
- (G) Electrical conformance, power and communication cable management.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS/NZS 4610.3, *Furniture — School and educational, Part 3: Storage furniture — Strength, durability and stability*

AS ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ISO 48-4, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 4: Indentation hardness by durometer method (Shore hardness)*

ISO 48-5, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 5: Indentation hardness by IRHD pocket meter method*

1.3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

1.3.1

accuracy

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

1.3.2

clear space

internal height of a drawer defined by the maximum height of a box that allows the drawer to be closed

1.3.3

deflection

maximum displacement of the tabletop measured under load at the time specified in the test

Note 1 to entry: The residual or permanent effect of the load or forces applied is deformation.

1.3.4

deformation

permanent change in shape or size due to the application of loads or forces

1.3.5

drawer

box like storage compartment without a lid and made to slide horizontally in and out of a unit with the aid of a runner and fitted with an out-stop

Note 1 to entry: See *pencil drawer* ([1.3.14](#)) and *tote* ([1.3.24](#)).

1.3.6

extendible member

flat or near flat shelf-like component that slides in and out of a unit with the aid of a runner and fitted with an out-stop

1.3.7

flap

door hinged at either the top or bottom that is opened by pulling up from the bottom or down from the top

1.3.8

flip top table

table with a top (usually pivoted about the horizontal centre-line) that allows the top to be rotated from an approximately horizontal working position to a vertical or near vertical storage position