

AS 4386:2018
(Incorporating Amendment No. 1)



STANDARDS
Australia



Cabinetry in the built-in environment — Commercial and domestic



AS 4386:2018

This Australian Standard® was prepared by Committee BD-089, Kitchen Units. It was approved on behalf of the Council of Standards Australia on 18 June 2018.

This Standard was published on 29 June 2018.

The following are represented on Committee BD-089:

- Cabinet Makers and Designers Association
- Engineered Wood Products Association of Australasia
- Forest and Wood Products Australia
- Furnishing Industry Association of Australia
- Furniture Teachers Advisory Group
- Furntech-AFRDI

This Standard was issued in draft form for comment as DR AS/NZS 4386:2017.

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ISBN 978-1-76072-134-3

Cabinetry in the built-in environment — Commercial and domestic

Originated as AS/NZS 4386.1:1996 and AS/NZS 4386.2:1996.
Revised, amalgamated and redesignated as AS 4386:2018.
Reissued incorporating Amendment No 1 (March 2023).

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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee BD-089, Kitchen Units, to supersede AS/NZS 4386.1:1996, *Domestic kitchen assemblies*, Part 1: *Kitchen units* and AS/NZS 4386.2:1996, *Domestic kitchen assemblies*, Part 2: *Installation*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

[A₁] *This Standard incorporates Amendment No. 1 (May 2023). The start and end of changes introduced by the Amendment are indicated in the text by tags including the Amendment number 1. **[A₁]***

This objective of this Standard is to set out requirements for the design, manufacture and installation of cabinetry in the built environment covering kitchens and built-in furniture.

The major changes in this edition are as follows:

- (a) Scope extended to include the built-in sector and kitchen manufacturing and installation.
- (b) Updated requirements recognising new and current materials.
- (c) Incorporated requirements from AS/NZS 3000, AS/NZS 3500 (series) and AS/NZS 5601.
- (d) Added guidance surrounding tolerances.
- (e) Added requirements for formaldehyde and moisture resistant materials.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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Australian Standard®

Cabinetry in the built-in environment — Commercial and domestic

1 Scope

This Standard specifies the minimum requirements for the construction and installation of cabinets in the built-in environment for use in both commercial and domestic applications to ensure the required strength, durability and safety. It also specifies cabinet components. It is designed for use by manufacturers, builders, consumers, specifiers and regulatory authorities.

NOTE 1 [Appendix A](#) provides details for the ergonomic considerations of kitchen designs.

NOTE 2 Refer to AS 1428.2 and AS 4299 for kitchen cabinets built for people with disabilities.

NOTE 3 This Standard is primarily intended for Classes 1, 2, 3 and a Class 4 part building as defined in the Building Code of Australia (BCA), but may also include Classes 5, 6, 7B, 8 and 9.

2 Application

This Standard applies to the methods of construction, materials, and hardware of cabinetry in the built-in environment in domestic and commercial applications. It also covers cabinetry in high use areas, high moisture areas such as kitchens, bathrooms and other zones with water sources, and protected external applications.

3 Normative references

The following documents are referred to in this Standard:

AS 2796.3, *Timber—Hardwood—Sawn and milled products, Part 3: Timber for furniture components*

AS 4785.3, *Timber—Softwood—Sawn and milled products, Part 3: Timber for furniture components*

AS/NZS 1859.1, *Reconstituted wood-based panels—Specifications, Part 1: Particleboard*

AS/NZS 1859.2, *Reconstituted wood-based panels—Specifications, Part 2: Dry process fibreboard*

AS/NZS 1859.3, *Reconstituted wood-based panels—Specifications, Part 3: Decorative overlaid wood panels*

AS/NZS 1859.4, *Reconstituted wood-based panels—Specifications, Part 4: Wet process fibreboard*

AS/NZS 2269, *Plywood—Structural (series)*

AS/NZS 2270, *Plywood and blockboard for interior use*

AS/NZS 2271, *Plywood and blockboard for exterior use*

AS/NZS 2272, *Plywood—Marine*

AS/NZS 2754.1, *Adhesives for timber and timber products, Part 1 Adhesives for manufacture of plywood and laminated veneer lumber (LVL)*

AS/NZS 2754.2, *Adhesives for timber and timber products, Part 2 Polymer emulsion adhesives*

AS/NZS 2924.1, *High-pressure decorative laminates—Sheets made from thermosetting resins, Part 1: Classification and specifications*

AS/NZS 2924.2, *High-pressure decorative laminates—Sheets made from thermosetting resins, Part 2: Determination of properties*

AS/NZS 3000, *Electrical installations (known as the Australian/New Zealand Wiring Rules)*

AS/NZS 3500, *Plumbing and drainage (series)*

AS/NZS 4266.2, *Reconstituted wood-based panels — Methods of testing, Part 2 Decorative overlain panels*

AS/NZS 4387, *Domestic kitchen assemblies—Methods of test (series)*

AS/NZS 4790, *Furniture—Storage units—Determination of strength and durability*

AS/NZS 5601, *Gas installations (series)*

ISO 4586, *High-pressure decorative laminates (HPL, HPDL)—Sheets based on thermosetting resins (Usually called Laminates) (series)*

ISO 8555-5, *Hardware for furniture—Terms for furniture fittings, Part 5 Height adjusters, furniture legs, underframes*

ISO 8555-7, *Hardware for furniture—Terms for furniture fittings, Part 7 Handles, knobs, escutcheons, escutcheon insets*

DIN 68856-5, *Hardware for furniture; Terms for furniture fittings; Height adjusters, furniture legs, underframes*

DIN 68856-7, *Hardware for furniture; Terms for furniture fittings; handles, knobs, escutcheons, escutcheon insets*

DIN 68930, *Kitchen Furniture—Fitness For Purpose-Requirements And Testing*

BS EN 15338, *Hardware for furniture—Strength and durability of extension elements and their components*

BS EN 15570, *Hardware for furniture—Strength and durability of hinges and their components—Hinges pivoting on a vertical axis*

DIN EN 15338, *Hardware for furniture—Strength and durability of extension elements and their components*

EN 15338, *Hardware for furniture—Strength and durability of extension elements and their components*

EN 15570, *Hardware for furniture—Strength and durability of hinges and their components—Hinges pivoting on a vertical axis*

4 New designs, materials and innovations

Alternative materials, designs and methods of assembly may be used provided that equivalent results to those required by this Standard for conformance can be demonstrated.

5 Definitions

For the purpose of this Standard the definitions below apply.

NOTE See also [Figures 1](#) and [2](#) for a pictorial representation of some of these definitions.

5.1

appliance housing

cabinet designed to house a specific appliance, e.g. an oven or refrigerator

5.2

appliances

refrigerators, freezers, stoves, cooktops, ovens, dishwashing machines and other items of equipment which require connection to an energy source and which are to be dimensionally coordinated with cabinet/assemblies

5.3**assembly**

worktops and cabinets joined together

5.4**benchtop**

Note 1 to entry: See [5.33](#).

5.5**built-in appliance**

appliance which is inserted into a cabinet/assembly

5.6**built-in cabinet**

cabinet intended to be permanently fixed

5.7**cabinet**

complete unit including drawers, doors, loose shelves and fixtures

5.8**carcass**

unfinished framework or skeleton of the cabinet, i.e. excluding drawers, doors, loose shelves or fixtures

5.9**depth**

horizontal distance from front to back

5.10**edging**

strip of material applied to the edge of a panel

5.11**end panel**

panel which is usually fitted on any side of a carcass which is visible in a cabinet assembly

5.12**floor cabinet**

floor standing cabinet below a worktop normally incorporating a kickboard or support system

5.13**height**

vertical dimension

5.14**hob**

rim surrounding the heat source of an elevated or freestanding cooking appliance

5.15**infill panel**

panel which is fitted between a wall and a carcass or between two carcasses at a change of direction in a continuous run of cupboard cabinets

5.16**island cabinet**

cabinet attached to the structure of the building only by the floor

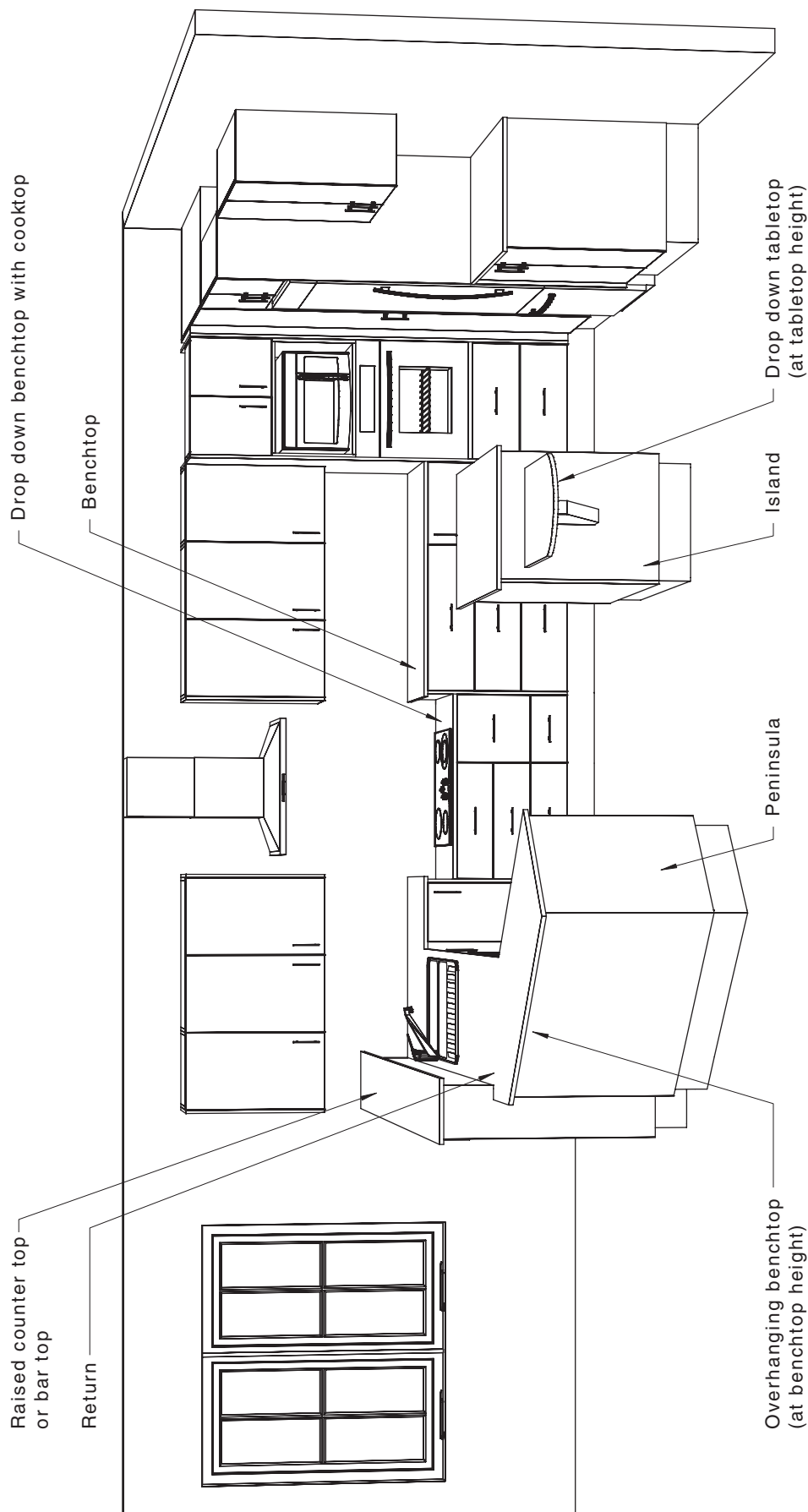


Figure 1 — Example of various kitchen assembly components

5.17**kickboard**

fascia panel covering the void area under the base of the cabinet

5.18**may**

indicates the existence of an option

5.19**moisture resistant**

wood-based panel grade made in accordance with AS/NZS 1859.1, AS/NZS 1859.2, AS/NZS 1859.4, and plywood made in accordance with AS/NZS 2269 (series), AS/NZS 2270, AS/NZS 2271 or AS/NZS 2272 and having a Type-B bond

Note 1 to entry: Plywood Type-C bonds are acceptable for internal applications.

5.20**plinth**

underframe that may support any floor mounted cabinets

5.21**protected external applications**

area outside of a fully enclosed building which is sufficiently protected from external atmospheric conditions to be equivalent to an internal kitchen or laundry location

5.22**return**

cabinet or cabinets that are attached to the wall at one end

5.23**shall**

indicates that a statement is mandatory

5.24**should**

indicates a recommendation

5.25**sink cabinet**

floor cabinet designed to accommodate a sink bowl(s) with or without draining board(s)

5.26**storage accessories**

storage component attached to or supported by a cabinet, e.g. wire baskets

5.27**tall cabinet**

cabinet that normally corresponds in height with the top of an installed wall cabinet and is normally floor standing

Note 1 to entry: Also referred to as 'full height cabinet'.

5.28**thermoplastic adhesives**

adhesives that can be softened by the application of heat, e.g. PVA, EVA

5.29**thermosetting adhesives**

adhesives that cannot be softened by the application of heat, e.g. urea formaldehyde, epoxy, cross-linked PVA