

Australian/New Zealand Standard™

Ophthalmic optics—Spectacle frames— Measuring system and terminology



AS/NZS ISO 8624:2011

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The following are represented on Committee MS-024:

Australian Dispensing Opticians Association
New Zealand Association of Optometrists
Optical Distributors and Manufacturers Association of Australia
Queensland University of Technology
The University of Melbourne
The University of New South Wales
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MS-024, Spectacles.

The objective of this Standard is to specify a measuring system for spectacle frames.

This Standard is identical with, and has been reproduced from ISO 8624:2011, *Ophthalmic optics—Spectacle frames—Measuring system and terminology*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘this International Standard’ should read ‘this Australian/New Zealand Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

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AUSTRALIAN/NEW ZEALAND STANDARD

Ophthalmic optics — Spectacle frames — Measuring system and terminology

1 Scope

This International Standard specifies a measuring system for spectacle frames and related terminology. It is applicable to fronts which are intended to be symmetrical.

2 Terms, definitions and symbols

For the purposes of this document, the following terms, definitions and symbols apply. For complementary terms and definitions, see Annex A.

2.1

boxed centre

C

intersection of the **horizontal centreline** (A.1) and **vertical centreline** (A.2) of the rectangular box which circumscribes the **lens shape** (A.10)

See Figure 1.

2.2

horizontal boxed lens size

horizontal lens size

a

distance between the vertical sides of the rectangular box which circumscribes the **lens shape** (A.10)

See Figure 1.

NOTE For spectacle frames having a significant **face form angle** (A.13), the horizontal boxed lens size shall be measured in the “plane” of the individual lens shape.

2.3

vertical boxed lens size

vertical lens size

b

distance between the horizontal sides of the rectangular box which circumscribes the **lens shape** (A.10)

See Figure 1.

2.4

boxed centre distance

distance between centres

c

distance between the **boxed centres** (2.1)

See Figure 1.

NOTE For spectacle frames having a significant **face form angle** (A.13), the boxed centre distance shall be measured between the **boxed centres** (2.1) marked on the back surfaces of lenses of appropriate base curve fitted to the frame. See Figure 4.

2.5 distance between lenses

d

horizontal distance between the nasal vertical sides of the rectangular boxes which circumscribe the right and left **lens shapes** (A.10)

See Figure 1.

NOTE Former users of the obsolete datum system should note that this is the datum measurement “minimum between lenses”.

2.6 overall length of side

l

length from the intersection of the dowel screw's axis with the median plane of the joint to the end of the side and parallel to the centreline of it, the drop having been straightened

See Figure 2.

NOTE For sides without a joint, the side should be held open at $(90 \pm 5)^\circ$ to the front or to that part of the side that is intended to be attached to the front, and the length measurement is from the end of the side to the front less 10 mm. See Figure 3.

3 Measuring system

The measuring system for spectacle frames shall be in accordance with Figures 1 to 4, as defined in Clause 2.

If codes are used in spectacle frame documentation, the symbols given for the terms defined in Clause 2 shall be employed.

The measuring system comprises several horizontal and vertical dimensions and reference points. The knowledge of these is necessary for the manufacturing, ordering and adjustment of spectacle frames as well as for the exact mounting of spectacle lenses into spectacle frames.

The measuring system is based on the boxed lens (boxing) system, which uses a rectangle tangential to the lens shape as the basis for the determination of the dimensions of the spectacle front. The upper tangent is common to both lens shapes and shall be regarded as horizontal, except in the case of spectacle frames having a significant face form angle, for which the line touching the uppermost edges of the right and left lens shapes shall be regarded as horizontal.