

Australian/New Zealand Standard™

**Ophthalmic optics – Mounted spectacle lenses (ISO 21987:2017, MOD)**



AS/NZS 21987:2019

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee MS-024, Spectacles. It was approved on behalf of the Council of Standards Australia on 4 April 2019 and by the New Zealand Standards Approval Board on 6 March 2019.

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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
- Optometrists and Dispensing Opticians Board
- Optometry Australia
- Queensland University of Technology
- University of New South Wales

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## Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand MS-024, Spectacles to supersede AS/NZS ISO 21987:2011, *Ophthalmic optics—Mounted spectacle lenses*.

The objective of this Standard is to specify requirements and test methods for mounted spectacle lenses relative to the prescription order.

This Standard is an adoption with national modifications, and has been reproduced from, ISO 21987:2017, *Ophthalmic optics — Mounted spectacle lenses*.

Appendix ZZ lists the variations to ISO 21987:2017 for the application of this Standard in Australia and New Zealand.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

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

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

This second edition cancels and replaces the first edition (ISO 21987:2009), which has been technically revised.

## NOTES

# Australian/New Zealand Standard

## Ophthalmic optics – Mounted spectacle lenses (ISO 21987:2017, MOD)

### 1 Scope

This document specifies requirements and test methods for mounted spectacle lenses relative to the prescription order.

### 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. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7944, *Optics and optical instruments — Reference wavelengths*

ISO 8429, *Optics and optical instruments — Ophthalmology — Graduated dial scale*

ISO 8598-1, *Optics and optical instruments — Focimeters — Part 1: General purpose instruments*

ISO 8624, *Ophthalmic optics — Spectacle frames — Measuring system and terminology*

ISO 8980-1, *Ophthalmic optics — Uncut finished spectacle lenses — Part 1: Specifications for single-vision and multifocal lenses*

ISO 8980-2, *Ophthalmic optics — Uncut finished spectacle lenses — Part 2: Specifications for power-variation lenses*

ISO 13666, *Ophthalmic optics — Spectacle lenses — Vocabulary*

ISO 14889, *Ophthalmic optics — Spectacle lenses — Fundamental requirements for uncut finished lenses*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13666 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

#### 3.1

##### **power-variation lens**

spectacle lens with a smooth variation of focal power over part or all of its area, without discontinuity, designed to provide more than one focal power

Note 1 to entry: These are usually designed to provide increasing or decreasing spherical power, typically in a vertical meridian, so as to provide correction for different object distances.

Note 2 to entry: Examples of *power-variation lenses* are, but not limited to, *progressive-power lenses* (3.2) and *degressive-power lenses* (3.3).