

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.

This Standard was published on 10 May 2019.

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

This Standard was issued in draft form for comment as DR AS 21987:2018.

### **Keeping Standards up-to-date**

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

[www.standards.org.au](http://www.standards.org.au)

[www.standards.govt.nz](http://www.standards.govt.nz)

ISBN 978 1 76072 447 4

Australian/New Zealand Standard™

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

First published as AS/NZS ISO 21987:2011.  
This edition AS/NZS 21987:2019.

## **COPYRIGHT**

© ISO 2019 — All rights reserved

© Standards Australia Limited/the Crown in right of New Zealand, administered by the New Zealand Standards Executive 2019

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth) or the Copyright Act 1994 (New Zealand).

## 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.

# Contents

<b>Preface</b> .....	<b>ii</b>
<b>Foreword</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Classification</b> .....	<b>3</b>
<b>5 Requirements</b> .....	<b>3</b>
5.1 Reference temperature .....	3
5.2 Lenses used in manufacturing complete spectacles .....	3
5.3 Optical requirements .....	3
5.3.1 General .....	3
5.3.2 Back vertex power .....	4
5.3.3 Direction of the cylinder axis .....	4
5.3.4 Addition power or variation power .....	5
5.3.5 Prism imbalance (relative prism error) for mounted single-vision lenses (excluding position-specific single-vision lenses) and multifocal lenses .....	5
5.3.6 Prism imbalance (relative prism error) for position-specific single-vision lenses and power-variation lenses .....	7
5.4 Requirements for thickness .....	7
5.5 Requirements for positioning .....	8
5.5.1 Multifocal lenses .....	8
5.5.2 Position-specific single-vision lenses and power-variation lenses .....	9
5.6 Orientation requirement for polarizing lenses .....	9
<b>6 Verification methods</b> .....	<b>9</b>
6.1 General .....	9
6.2 Verification method for back vertex power .....	9
6.3 Verification method for the direction of the cylinder axis .....	9
6.4 Verification method for addition power or variation power .....	10
6.4.1 General .....	10
6.4.2 Method for verification of addition power for multifocal lenses .....	10
6.4.3 Method for verification of variation power (including addition power) for power-variation lenses .....	10
6.5 Verification method for position and tilt .....	11
6.6 Verification method for prism imbalance (relative prism error) for mounted single- vision lenses (excluding position-specific single-vision lenses) and multifocal lenses .....	11
6.7 Verification method for planes of transmission of polarizing lenses .....	11
6.7.1 General .....	11
6.7.2 Apparatus .....	11
6.7.3 Procedure .....	12
6.8 Inspection method for material and surface quality .....	12
<b>7 Marking for position-specific single-vision lenses and power-variation lenses</b> .....	<b>12</b>
7.1 Permanent marking .....	12
7.2 Optional non-permanent marking .....	13
<b>8 Recommendations on mounting</b> .....	<b>13</b>
<b>9 Identification</b> .....	<b>13</b>
<b>10 Reference to this document</b> .....	<b>13</b>
<b>Annex A</b> (informative) <b>Material and surface quality</b> .....	<b>14</b>
<b>Annex B</b> (informative) <b>Recommendations on mounting</b> .....	<b>15</b>

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-