AS/NZS ISO 12870:2012
ISO 12870:2012

AS/NZS ISO 12870:2012

Australian/New Zealand Standard™

Ophthalmic optics—Spectacle frames—Requirements and test methods

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 22 October 2012 and on behalf of the Council of Standards New Zealand on 12 October 2012.
This Standard was published on 5 November 2012.

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 Association Australia
Queensland University of Technology
University of Auckland
University of New South Wales

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS ISO 12870.

Australian/New Zealand Standard™

Ophthalmic optics—Spectacle frames—Requirements and test methods

Originated in Australia as AS 2228.2—1992.
Jointly revised and redesignated as AS/NZS ISO 12870:2012.

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

ISBN 978 1 74342 285 4

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MS-024, Spectacles, to supersede AS 2228.2—1992, *Spectacles—Spectacle frames*. This Standard replaces relevant text in AS 2228.2—1992, which is intended to be withdrawn by September 2013.

This Standard is identical with, and has been reproduced from ISO 12870:2012, *Ophthalmic optics—Spectacle frames—Requirements and test methods*.

The objective of this Standard is to specify requirements for spectacle frames.

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'.

(d) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian/New Zealand Standard*	
ISO		AS/NZS ISO	
8624	Ophthalmic optics—Spectacle frames—Measuring system and terminology	8624	Ophthalmic optics—Spectacle frames—Measuring system and terminology
		AS	
105	Textiles—Tests for colour fastness	2001	Methods of test for textiles
105-A02	Part A02: Grey scale for assessing change in colour	2001.4.A02	Method 4.A02: Colourfastness tests—Grey scale for assessing change in colour
105-B02	Part B02: Colour fastness to artificial light: Xenon arc fading lamp test	2001.4.B02	Method 4.B02: Colourfastness tests—Colourfastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:1994, MOD)

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An 'informative' annex is only for information and guidance.

CONTENTS

AUSTRALIAN/NEW ZEALAND STANDARD

Ophthalmic optics—Spectacle frames—Requirements and test methods

1 Scope

This International Standard specifies fundamental requirements for unglazed spectacle frames designed for use with all prescription lenses. It is applicable to frames at the point of sale by the manufacturer or supplier to the retailer.

This International Standard is applicable to all spectacle frame types, including rimless mounts, semi-rimless mounts and folding spectacle frames. It is also applicable to spectacle frames made from natural organic materials.

NOTE See Annex A for recommendations on the design of spectacle frames.

This International Standard is not applicable to complete custom-made spectacle frames or to products designed specifically to provide personal eye protection.

2 Normative references

The following referenced documents are indispensable for the application 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 105-A02, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

ISO 105-B02, *Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test*

ISO 3160-1, *Watch cases and accessories — Gold alloy coverings — Part 1: General requirements*

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO 7998, *Ophthalmic optics — Spectacle frames — Lists of equivalent terms and vocabulary*

ISO 8596, *Ophthalmic optics — Visual acuity testing — Standard optotype and its presentation*

ISO 8624:2011, *Ophthalmic optics — Spectacle frames — Measuring system and terminology*

ISO 11380, *Optics and optical instruments — Ophthalmic optics — Formers*

ISO 11381, *Optics and optical instruments — Ophthalmic optics — Screw threads*

ISO/TS 24348, *Ophthalmic optics — Spectacle frames — Method for the simulation of wear and detection of nickel release from coated metal and combination spectacle frames*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 7998 and ISO 8624 and the following apply.

3.1
spectacle frame model
spectacle frame produced to a common design, using the same materials (but not necessarily the same pigmentation) and surface treatment