

American National Standard

*for Ophthalmics –
Ophthalmic Optics –
Specifications for Single-Vision
Ready-to-Wear Near Vision
Spectacles*



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ANSI®
Z80.31-2012

American National Standard
for Ophthalmics –

**Ophthalmic Optics –
Specifications for Single-Vision
Ready-to-Wear Near-Vision Spectacles**

Secretariat
The Vision Council

Approved July 25, 2012

American National Standards Institute, Inc.

American National Standard

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Developed by

The Accredited Committee Z80 for Ophthalmic Standards

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Foreword (This foreword is not part of American National Standard ANSI Z80.31-2012.)

The purchasers and users of single-vision ready-to-wear near-vision spectacles need to be assured of certain minimum levels of performance and quality in these products. These are either implicit expectations in the product performance, or safety. The purchaser of the product does not ordinarily have the means to properly assess these characteristics. In order to accomplish these goals, it is necessary to establish commonly accepted definitions, equations, sources, and methodology so that manufacturers can produce products to meet the standard.

This American National Standard specifies impact-resistant characteristics; cosmetic, refractive properties of lenses; and the flammability of frames and lenses. Cosmetic, refractive, and frame properties specified herein are intended as guidelines, and therefore they are subject to revision since there is a need to study further the validity of these property specifications as related to actual normal use requirements.

The Z80.31 working group is under the subcommittee SC2 of Z80, which also reviews Z80.3, Nonprescription Sunglass and Fashion Eyewear Requirements, and was organized in December 1970 and had its first meeting on January 1971. The current Chair of the committee is Kenneth L. Frederick, Technical Director of the Sunglass Association of America. He has been chair since 2004. The committee usually meets formally twice per calendar year, and the members review material by email, phone, or fax throughout the year. Working groups may be formed to investigate specific projects, and a working group for single-vision ready-to-wear near-vision spectacles was formed in 2010 and developed the standard, Z80.31-2012.

This standard contains one annex, which is informative and is not part of this standard. Suggestions for improvement of this standard will be welcome. They should be sent to the Vision Council, 225 Reinecker Lane, Suite 700, Alexandria, VA 22314.

This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Ophthalmic Standards, Z80. Committee approval of this standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the Z80 Committee had the following members:

Thomas C. White, Chairperson
Quido Cappelli, Vice Chairperson
Dr. Robert Rosenburg, Secretary
Jeff Endres, Secretariat
Rick Van Arman, Legal Counsel

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American Ceramic Society	Lyle Rubin
American Glaucoma Society	Dr. Steven Gedde
American Optometric Association	Dr. Karl Citek
American Society of Cataract and Refractive Ophthalmology	Dr. Stephen Klyce
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Contact Lens Institute	Stan Rogaski
Contact Lens Manufacturers Association	Quido Cappelli
Department of Veterans Affairs	Dr. John Townsend
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The Vision Council	Jeff Endres
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Subcommittee SC2 on Nonprescription Sunglasses and Fashion Eyewear, which approved this standard, had the following members:

Kenneth L. Frederick, Chairperson
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<i>Organization Represented</i>	<i>Name of Representative</i>
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American Ceramic Society	Lyle Rubin
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The Working Group for Single-Vision Ready-to-Wear Near-Vision Spectacles, which developed this standard, had the following members:

Dr. Karl Citek, Chairperson
Dr. Jan Bergmanson
Kenneth L. Frederick
Dan Torgersen
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for Ophthalmics –

Ophthalmic Optics – Specifications for Single-Vision Ready-to-Wear Near-Vision Spectacles

1 Scope

This Standard specifies the minimum requirements for complete single-vision ready-to-wear near-vision spectacles with positive power, without regard to luminous transmittance, available directly to the public without the prescription of a licensed professional.

1.1 Purpose

The purpose of this standard is to establish requirements for ready-to-wear near-vision spectacles, commonly called “readers”. They are not designed to be industrial safety eyewear as defined in ANSI Z87.1-2010, sports eyewear as defined in ASTM F803, nor prescription eyewear as defined in ANSI Z80.1-2010.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and particular agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ANSI Z80.1-2010, *Recommendations for prescription ophthalmic lenses*¹

ANSI Z80.17-2008, *Focimeter*

ANSI Z80.5-2010, *Requirements for ophthalmic frames*¹

ANSI Z87.1-2010, *Practice for occupational and educational eye and face protection*¹

ASTM D412-2002, *Test methods for rubber properties in tension*²

ASTM F803-2003, *Eye protectors for use by players of selected sports*²

ASTM D2240-2003, *Standard test method for rubber property – Durometer hardness*²

Title 21, Code of Federal Regulations, Section 801.410³

Title 19, United States Code, Section 1304³

Title 19, Code of Federal Regulations, Section 134³

¹ For electronic copies of some standards, visit ANSI's Electronic Standards Store (ESS) at www.ansi.org. For printed versions of all standards, contact ANSI's Customer Service Department at 212-642-4900.

² Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

³ Available from the Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954.