

AMERICAN NATIONAL STANDARD



*for Ophthalmics –  
Nonprescription Sunglasses and  
Fashion Eyewear –  
Requirements*

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**ANSI®**  
**Z80.3-2001**  
(Revision and consolidation of  
ANSI Z80.3-1997 and ANSI Z80.3a-1999)

American National Standard  
for Ophthalmics –  
Nonprescription Sunglasses and  
Fashion Eyewear –  
Requirements

Secretariat  
**Optical Laboratories Association**

Approved November 20, 2001  
American National Standards Institute, Inc.

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## *Developed by*

The Accredited Committee Z80 for Ophthalmic Standards -  
Optical Laboratories Association  
Z80 Secretariat  
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**Foreword** (This foreword is not part of American National Standard ANSI Z80.3-2001.)

The purchasers and users of nonprescription sunglasses and fashion eyewear 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, and transmittance properties of lenses; and the flammability of frames and lenses.

Cosmetic, refractive, transmittance, 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 Z80.3 Subcommittee was organized in December 1970 and had its first meeting on January 7, 1971. The chairman was appointed by Dr. Arthur Keeney, chairman of the parent Z80 Committee. Other members were appointed jointly by Dr. Keeney and the previous chairman of the subcommittee, John K. Davis.

Suggestions for improvement of this standard will be welcome. They should be sent to Optical Laboratories Association, PO. Box 2000, Merrifield, VA 22116-2000.

This standard was processed and approved for submission to ANSI by Accredited Standards Committee on Ophthalmic Standards, Z80 Committee approval of the 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:

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Subcommittee Z80.3, which developed this standard, had the following members:

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David Elliott  
Kenneth L. Frederick  
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David S. Loshin  
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American National Standard  
for Ophthalmics –

# Nonprescription Sunglasses and Fashion Eyewear – Requirements

## 1 Scope and purpose

### 1.1 Scope

This standard applies to all nonprescription sunglasses and fashion eyewear, normally used for casual, dress, and recreational purposes, having lenses of substantially plano power. This standard specifically excludes products covered by ANSI Z87.1-1989 (R1998), ANSI Z80.1-1999, ANSI/ASTM F803-01a and high-impact-resistance eyewear designed exclusively for designated sports use. Sunglass needs for aphakics may not be met by this standard.

### 1.2 Purpose

The purpose of this standard is to establish standards for noncorrective (essentially plano power) lenses that are intended for attenuation of light and for fashionwear, and the flammability of frames and lenses. These products are commonly called sunglasses and are not designed to be industrial safety eyewear as defined in ANSI Z87.1-1989 (R1998), or to provide corrective prescriptions as defined in ANSI Z80.1-1999, or to provide protection for selected sports defined in ANSI/ASTM F803-01a. Lenses covered by this standard are not intended for use under conditions of reduced illumination, such as for night driving.

## 2 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 parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

### 2.1 Normative References

- ANSI Z80.1-1999, *Recommendation for Prescription Ophthalmic Lenses*<sup>1)</sup>
- ANSI Z80.17-2001, *Focimeters*<sup>1)</sup>
- ANSI Z87.1-1989 (R1998), *Practice for Occupational and Educational Eye and Face Protection*<sup>1)</sup>
- ANSI/ASQC Z1.4-1993, *Sampling Procedures and Tables for Inspection by Attributes*<sup>1)</sup>
- ASTM D412-92, *Test Methods for Rubber Properties in Tension*<sup>2)</sup>
- ASTM D1415-91, *Test Method for Rubber Property -International Hardness*<sup>2)</sup>
- ANSI/ASTM F803-01a, *Eye Protectors for Use by Players of Racket Sports*<sup>2)</sup>
- Title 21, *Code of Federal Regulations, Section 801.410*<sup>3)</sup>

<sup>1)</sup> For electronic copies of some standards, visit ANSI's Electronic Standards Store (ESS) at [www.ansi.org](http://www.ansi.org). For printed versions of all standards, contact Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112-5704, 800-854-7179.

<sup>2)</sup> Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

<sup>3)</sup> Available from the Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954.