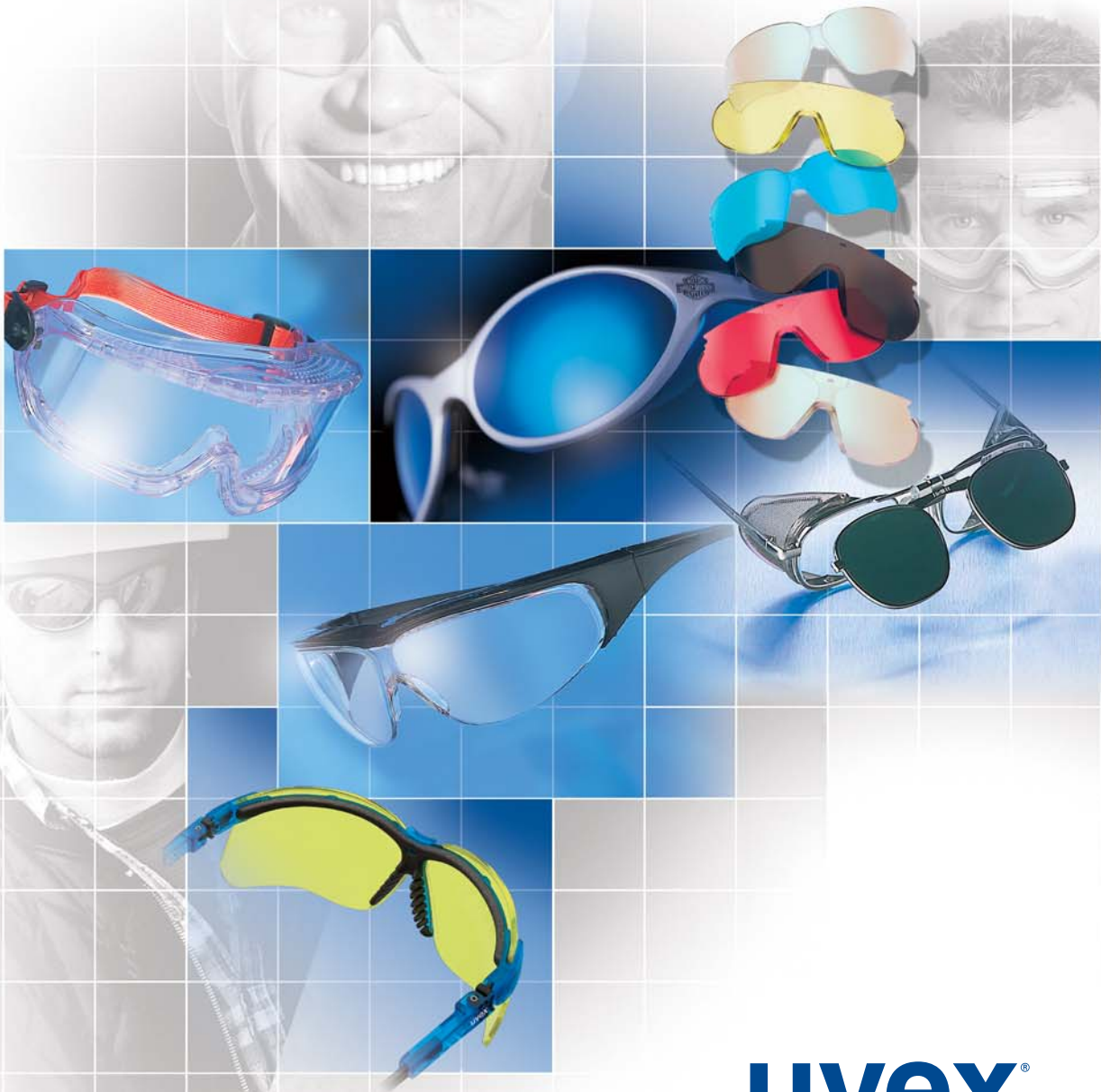


Are You Ready For The Change?

The New ANSI Z87.1-2003 Standard



uvex[®]

WILLSON[®]

Dear Bacou-Daloz Distributor:

We are pleased to inform you that the new ANSI Z87.1-2003 Standard is approved. It took several years for the ANSI committee of industry experts to come to an agreement on the new Practice for Occupational and Educational Personal Eye and Face Protective Devices. The new Standard is called ANSI Z87.1-2003 (Z87+).

Because we understand that many questions will arise as a result of this new Standard, we have prepared this informational brochure and a number of support materials based upon the new Standard.

The brochure highlights the most significant differences between the 1989 and the 2003 Standard and includes a "Frequently Asked Questions" section.

With the informational brochure, we've included:

- A Certificate of Compliance that lists all existing Uvex and Willson safety eyewear products that meet the new 2003 Standard.*
- A copy of an Information Bulletin for your Customer – to explain how the new Standard could impact their future safety eyewear purchases.*

If you have any questions or would like to order additional copies of the enclosed information, please feel free to contact our Customer Service Department at 800-343-3411.

Thank you,



*Anne Chambers
Brand Manager, Eye & Face Protection*

Scope and Purpose

OLD ANSI Z87.1-1989

This Standard shall apply to those occupational and educational operations or processes where eye and face hazards exist. These include, but are not limited to, machining operations, material welding and cutting, chemical handling, and assembly operations. The objective of this Standard is to provide minimum requirements for eye and face protective devices and guidance for the selection, use, and maintenance of these devices. The requirements of this Standard apply to protectors when they are first placed in service.

NEW ANSI Z87.1-2003

Section 2 has been expanded to clarify the intent of the Standard. It emphasizes the types of hazards that the protectors meeting the Standard will address, while continuing to except specialized areas of radiation protection, sports and bloodborne pathogens. Users are cautioned in selecting eyewear where other standards may apply or where no definitive performance standards exist. If marked Z87, the entire device must meet all the requirements of the Standard. The user is cautioned to use extreme care in selecting replacement components to ensure ongoing compliance.

Frame Tests

OLD ANSI Z87.1-1989

Frames, housings or headgear assemblies meant to hold removable lenses are fitted with test lenses and subjected to:
High Mass Test — A 500 gm pointed projectile is dropped from a height of 130 cm (51.2 in). No parts or fragments of the protector shall contact the eye of the headform. Four samples are tested — all must pass.
High Velocity Tests — A 6.35 mm (.25 in) steel ball is propelled at a speed appropriate to the projector type. No contact with the headform is allowed, nor shall any parts or fragments be ejected. 20 samples are tested — one failure is allowed. Products with non-removable lenses are tested as complete devices using the same tests.

NEW ANSI Z87.1-2003

As in the current Standard the frame, body, housing or headgear components are tested by installing "test" lenses that are strong enough to allow high mass and high velocity tests to be conducted. These components must have the integrity to comply with the tests regardless of the actual lens that will be in the model. The high velocity and high mass test methods are carried over from the 1989 Standard, but in the high velocity test, no failures are allowed. Spectacle frames intended to house prescription lenses shall meet the same criteria. Lateral coverage requirements have been increased to provide expanded rearward protection which primarily affects spectacles.

Frame Marking

OLD ANSI Z87.1-1989

All major frame or housing components shall bear the manufacturer's trademark and shall be marked "Z87" to indicate compliance with the Standard. Frames intended for prescription lenses shall meet the marking requirements of ANSI Z80.5-1986.

NEW ANSI Z87.1-2003

All spectacle frames and temples, goggle bodies or housings, faceshield headgear and welding helmet components shall carry a permanent and legible mark or logo identifying the manufacturer. In addition, they are to be marked "Z87". Spectacle frames intended to hold prescription lenses are to be marked "Z87-2", and shall meet the requirements of Z80.5-1997. For those products classified as having non-removable lenses, the product need carry only one marking. For spectacles, the Z87 (basic impact level) or Z87+ (high impact level) mark may be placed on the frame or temple. For goggles, faceshields or welding helmets, the Z87 or Z87+ mark may be applied to any component including the lens.

Lens Tests

OLD ANSI Z87.1-1989

Removable plano lenses, as well as prescription lenses, shall be capable of resisting the impact of a 25.4 mm (1 in) steel ball dropped 127 cm (50 in). For spectacles where the removable lens is less than 3mm thick, they shall be capable of meeting the High Velocity Impact Test. Products with non-removable lenses are to be tested as complete devices, and be capable of passing both the High Mass and High Velocity Tests.

Plastic lenses are required to resist the impact of a weighted (44 gm) needle dropped from 127 cm (50 in). The lens may neither fracture nor be penetrated.

NEW ANSI Z87.1-2003

Personal eye protectors will now be classified, based on performance, as either basic or high impact models. They are to be tested as complete products as they will be offered to the user, and there is no distinction made based on whether the product has removable or non-removable lenses. Basic impact models shall be capable of passing the 1 inch drop ball test and high impact models shall comply with high mass and high velocity impact criteria. The basic vs. high level impact requirements now fully apply to prescription spectacles.

The penetration test continues to apply to plano plastic lenses, for all protectors, whether they are of the basic impact or high impact type.

Lens Thickness

OLD ANSI Z87.1-1989

Minimum Thickness of Plano Lenses — All removable plano (non-prescription) spectacle lenses shall be not less than 3.0 mm (.118 in) thick, except lenses which are capable of withstanding a 45.7 mps (150 fps) impact of 6.35 mm (1/4 in) steel ball, when tested in accordance with Section 15.1. Such lenses shall not be less than 2.0 mm (.079 in) thick.

NEW ANSI Z87.1-2003

Lens thickness requirements for goggle lenses, faceshield windows and welding filters are unchanged. Basic impact lenses in these product categories must be at least 3.0 mm thick.

The most significant change relates to spectacle lenses. High impact plano spectacles that are tested as complete products have no minimum thickness requirement. Basic impact spectacle lenses must be at least 3 mm thick. High impact lenses that will be installed in prescription frames must be no thinner than 2.0 mm.

Lens Marking

OLD ANSI Z87.1-1989

Each lens shall be distinctly marked in a permanent and legible manner with the manufacturer's monogram. If other than clear or special purpose, each lens shall be marked with the applicable shade designation. Special purpose lenses shall be marked with an S or in the case of photochromic lenses, marked with a V.

NEW ANSI Z87.1-2003

Removable lenses must be marked in a permanent and legible manner. All lenses must bear a mark or logo identifying the manufacturer. For spectacles with removable lenses, basic impact lenses require no additional mark related to Z87, but high impact lenses require a "+" mark indicating the elevated impact performance. For all other product categories, non-removable lenses, windows or filters require the manufacturer's mark or logo. The product need carry only one marking. Basic impact lenses shall be marked with "Z87" and high impact lenses shall be marked "Z87+". Special purpose lenses and photochromic lenses continue to carry "S" and "V" markings respectively. A product marking chart is provided in a new Annex G.

Optical Requirements

OLD ANSI Z87.1-1989

Optical requirements for plano spectacles are specified in the areas of refractive power, prismatic power and definition. Haze for lens components shall not exceed 3%. Transmittance requirements are specified for clear, tinted and shaded filter lenses and windows. Table 1 lists the requirements for general purpose filters.

NEW ANSI Z87.1-2003

The optical performance values are largely unchanged in the new addition including the upper limit for haze which continues at 3%. Table 1 for shaded filter requirements is unchanged, and a new table, Table 2 has been added to clarify transmittance ranges for special purpose lenses. Another new table, Table 3 has been added to specify switching index times for Auto Darkening Filters (ADFs) that are a relatively new technology in welding eye protection.

Sideshields

OLD ANSI Z87.1-1989

The use of protectors providing side protection should be encouraged wherever practical.

NEW ANSI Z87.1-2003

There is no change in this recommendation, and it should be part of the overall hazard assessment to determine those areas in which side protection should be worn.

Corrosion

OLD ANSI Z87.1-1989

Metal parts are boiled in a 10% aqueous solution of sodium chloride for 15 minutes. Then immersed in the same solution at room temperature, removed and allowed to dry for 24 hours. The metal parts are then rinsed in lukewarm water and allowed to dry. The function of the spectacles shall not be impaired by the corrosion.

NEW ANSI Z87.1-2003

No change in test method or pass/fail criteria.

Flammability

OLD ANSI Z87.1-1989

Protector components or representative test plaques are tested for flammability per Federal Test Standard No 406, Method 2021.

NEW ANSI Z87.1-2003

A new test method, ASTM D635-1998 has been designated, but the pass/fail criteria is unchanged.

Respirators

OLD ANSI Z87.1-1989

The 1989 edition did not address respiratory products.

NEW ANSI Z87.1-2003

Full facepiece and loose fitting NIOSH approved respirators are now covered by the Z87.1 Standard. These devices contain lenses or windows and are subject to complete product requirements including optics, impact resistance and markings.

Enforcement

OLD ANSI Z87.1-1989

OSHA under Regulation 29 CFR Standard 1910.132 regulates the enforcement of Personal Protective Equipment. Safety Spectacles are considered Personal Protective Equipment.

NEW ANSI Z87.1-2003

OSHA continues to enforce use of protective equipment under Regulation 29CFR 1910.132. Section 1910.133 addresses Eye and Face Protection specifically, and ANSI Z87.1-1989 is still incorporated by reference, subject to change at a later date.

Frequently Asked Questions

Can I continue to sell the Uvex or Willson safety eyewear stock I have in inventory even though the eyewear has the old ANSI Z87 markings?

Yes! There are only a few products in both the Uvex and Willson lines that do not comply with the new Standard. These products will be discontinued, modified or replaced.

Over 90% of the safety eyewear products **DO** meet the new Standard; however, they are not marked with the new Z87+ yet. These products were manufactured and placed in the Bacou-Dalloz warehouses prior to the final approval of the new Standard. Bacou-Dalloz has prepared a list of all products that meet the Standard and will include the new ANSI marking as soon as current inventory levels are depleted. An informational brochure has been prepared that includes the names of those products. Additionally, we have developed a certificate of compliance that specifically identifies all products in compliance with the new Standard. A copy of that document can be obtained by logging onto www.uvex.com or www.bacou-dalloz.com.

Where can I go for more information regarding changes to the Standard?

The best source of information is the American National Standard Institute. You can locate them at www.ANSI.org. Copies of the new Standard can only be obtained through this ANSI website – Standards Store. Uvex has prepared a brochure that identifies and compares the differences between ANSI Z87.1-1989 and ANSI Z87.1-2003. For a copy of this document, log on to www.uvex.com or www.bacou-dalloz.com

What are the major changes to the ANSI Z87 Standard?

Bacou-Dalloz has prepared a brochure that identifies and compares the differences between ANSI Z87.1-1989 and ANSI Z87.1-2003. For a copy of this document, log on to www.uvex.com or www.bacou-dalloz.com

What specific Uvex or Willson safety eyewear products do not comply with the new Standard? Will these products be discontinued, modified or replaced?

The following products will be modified to comply with ANSI Z87.1-2003.

Uvex Bandit™ and Uvex Bandido®

Uvex Tomcat®

Uvex Skyper X2®

Willson Prevail®

The following products will be discontinued effective 12/31/2003.

Spartan A500 series

Will the new ANSI Z87.1-2003 Standard be enforced by OSHA?

Currently, ANSI Z87.1-1989 is incorporated by reference into the federal regulations (OSHA), and, as such, carries the force of law. Changes to the regulations are published in the Federal Register. As of June 25, 2003, no changes have been announced. If OSHA chooses to adopt ANSI Z87.1-2003, by reference, it need only reference that change in federal regulations 40 CFR 1910.6 and 40 CFR 1910.133. We do not know if, or when, this may occur, but we continually monitor the Federal Register for the announcement of such changes.