Summary

This new edition, ANSI/ISEA Z87.1-2010, replaces the Z87.1-2003 standard. As of the date of this summary, the Occupational Safety and Health Administration (OSHA) has not incorporated the 2010 standard into the eye and face protection regulation (29 CFR 1910.133).

The key changes to the eye and face protection standard include:

1) A focus on the hazard, rather than on the protector type, to encourage safety personnel and users to identify and evaluate specific hazards in their workplace such as Impact, Optical Radiation, Splash, Dust, and Fine Dust Particles. Therefore, under the revised standard, selection of the appropriate eye and face protective devices should be based on the hazard.

2) New criteria for compliance:

- Impact ratings:
  The 2003 version described two levels of protection: “Basic” & “High” impact protection. The 2010 revision describes devices to be either “Non Impact Rated” (complying to the impact requirements under “General Requirements”) or “Impact Rated” (complying to more stringent requirements within the revision).

- New headform for product testing:
  The 2003 version used the “Alderson” head form. The 2010 revision adopts the European (CE) small & medium headform sizes for testing to harmonize with existing international test methods.

- New test for splash/droplet, dust and fine dust:
  The 2003 version had no defined performance criteria for splash/droplet, dust or fine dust. The 2010 revision has specific performance and marking requirements for devices claiming to provide protection from splash/droplet, dust or fine dust hazards.

Protection all the way

At 3M, we believe that health and safety is the priority in any working environment, and that greater comfort and modern styles improve worker compliance. Therefore, we take care in adding comfort features where they are needed most, such as heavy contact areas like nose bridges and temple tips. The materials we choose to provide better comfort are designed to be durable to last and soft to the touch. We are also continually working on new coatings, new materials and new designs to bring the latest technology, innovation and fashion into our protective eyewear line.

For an official copy of the newly revised ANSI/ISEA Z87.1-2010 Standard go to:

http://www.safetyequipment.org/c/stdz871-2010.cfm

ANSI Z87.1-2010 Standard Update for Non-Prescription Eye and Face Protective Devices*

* Safety prescription spectacle protective devices may have different requirements in some cases.

ANSI Z87.1-2010 has been approved.


This summary of the revision of this eye and face protection standard focuses on the key changes to the standard; it does not represent any official or legal interpretation of the standard or even serve as a complete summary of the revision. If questions occur, the revised standard itself should be reviewed and relied on, rather than this summary. For an official copy of the newly revised ANSI/ ISEA Z87.1-2010 Standard go to:

http://www.safetyequipment.org/c/stdz871-2010.cfm
2) New criteria for compliance (cont):
Minimum coverage requirements:
The 2003 version had no defined minimum coverage requirement. The 2010 revision has a minimum frontal requirement and, for an “Impact Rated” device, a lateral coverage requirement. In effect, this makes lateral coverage MANDATORY for an “Impact Rated” device.

2) New criteria for compliance (cont):
New “Ignition” test:
The 2010 revision eliminates the previous (2003) flammability test and replaces it with an ignition test which uses a hot steel rod contacting the protector to determine if the protector will ignite.

3) New markings requirements:
Lens markings:
The 2010 revision requires a manufacturer’s mark and, if the product is “Impact Rated”, a “+” symbol. Example: “3M Z87+” for an Impact Rated product.

Frame markings:
The 2010 revision requires “Optical Radiation” scale or shade marking. There are tables and markings for specific lens types (clear, welding, UV filter, visible light filter and IR filter). Example: “3M+ W3” for a spectacle welding lens with a shade 3.0 welding filter.

Frame markings:
The 2010 revision requires a manufacturer’s mark plus Z87 and, if the product is “Impact Rated”, a “+” symbol will follow the Z87. Example: “3M Z87+”

4) New section on selection, use and maintenance.
This section provides guidance on hazard assessment and selection. It also includes a pull-out selection chart, showing recommended protectors for various types of work activities that can expose the worker to impact, heat, chemical, dust or optical radiation hazards.