

OSHA Standard: 1910.133 Eye and Face Protection

The most common eye hazards are flying particles, a hazard typical of many machine operations such as grinding, sawing, welding, and so on. Dusts, sparks, fumes, and splashes can all cause eye injuries unless we wear the appropriate protective eyewear.

When choosing "safety glasses" the primary consideration is to ensure that the glasses provide necessary impact protection and that they meet or exceed the ANSI Z87.1-1989 standard. Both frame and lens must meet this standard. The idea is to prevent flying and splashing objects from penetrating the lens or entering your eye. Damage to your sight is nothing to fool around with. Here are some common questions most often heard regarding safety and sun glasses:

- Why do I need to have my glasses meet the ANSI Z87.1-1989 standard? What about using sun glasses that claim they provide impact protection from a shotgun blast? They cost a lot more than those safety glasses... they must be safe.

These glasses may provide impact protection but have never gone through the testing rigors of approved safety glasses. Without official tests being done, you cannot ensure that they will provide the maximum protection. Always look for an ANSI Z87.1-1989 stamp on the glasses.

- But my dark glasses help protect my eyes from the sun, don't they?

That may be true if the glasses have ultraviolet (UV) and infrared (IR) protection-radiation which constitutes the two invisible ends of the electromagnetic spectrum. In fact, if the dark glasses do not provide UV and IR protection, they may be causing more damage than you know. Dark lenses allow the pupil to dilate (open) and let more light into the eye. This increases the exposure to harmful radiation if your eyewear doesn't filter it out.

When working out in the sun for any length of time, you may want to select glasses that provide both (UV) and (IR) protection. Overexposure to UV radiation from welding arcs can cause "welders' flash" while IR overexposure can cause thermal damage to the eyes resulting in cataracts and other eye problems. High doses of UV and IR radiation, such as from welding operations, can even cause partial or total blindness.

- What if I work both inside buildings and out of doors?

You may need two pairs of approved safety glasses if your work requires eye protection--one with a clear lens and the other with dark lens. Again, look for the ANSI Z87.1-1987 stamp. You may also want UV protection for your clear safety glasses if you wear them while working in the sunlight.

- Can I use my dark safety glasses for welding, cutting or brazing operations?

Unless they are specifically rated to use during those operations, this is never advisable. You need glasses with adequate, appropriate shading when you weld, cut or braze.

The use of correct eye protection is not only a matter of jobsite safety regulations. It is a very personal matter because it involves your children, spouse and relatives--as well as friends and co-workers. Will they have time to take care of you if you lose your eye-sight? Would you want them to?

Don't take chances with your precious eyesight! Protect it!

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