



# EYE PROTECTION

## TOOLBOX TALK: Eye Protection & ANSI Z87.1 Safety Requirements

*RATTLIR Safety Series – “Strike Before It Bites”*

### Purpose

Eye injuries are among the most common workplace hazards, yet nearly all are preventable with proper protective equipment. This toolbox talk explains key risks, the importance of ANSI Z87.1-compliant eye protection, and how to select the right protection for the job.



### ANSI Z87.1 Eye Protection Requirements

All safety glasses and protective eyewear used in the workplace must meet the ANSI Z87.1 standard. This standard confirms that the eyewear has passed impact resistance testing, optical clarity inspections, and coverage requirements.

- Look for “Z87” or “Z87+” stamped on the frame or lenses.



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- “Z87” indicates basic impact protection.
- “Z87+” indicates high-impact protection suitable for grinding, cutting, or high-velocity debris.
- Side shields are required when there is a risk of lateral impact.
- Prescription safety glasses must also be ANSI Z87.1-rated to be acceptable in the field.

## Common Eye Hazards

- Flying particles from cutting, drilling, grinding, or chipping.
- Dust, sand, and airborne debris carried by wind or machinery.
- Chemical splashes from cleaning products, oils, or solvents.
- Radiation from welding arcs, UV exposure, or bright sunlight.
- Tools, straps, cables, or objects under tension snapping unexpectedly.

## Prevention Strategies

- Wear ANSI Z87.1-rated eye protection at all times in designated areas.
- Choose eyewear appropriate for the task – basic impact, high impact, chemical splash goggles, or face shields.
- Ensure lenses are clean and free from scratches that can distort vision.
- Replace damaged eyewear immediately—cracks and deep scratches compromise safety.
- Secure straps, loose clothing, or equipment that could swing into the face.
- Use welding hoods or shaded lenses for any arc-producing work.

## Emergency Response

- For chemical splashes: Immediately rinse eyes at an eyewash station for at least 15 minutes.
- For particulate impacts: Do not rub the eye—seek medical evaluation.
- For severe injuries: Contact emergency services and protect the eye from further contact.
- Report all eye injuries, even minor irritations, to ensure proper follow-up.

## Discussion Questions

- Are your safety glasses stamped with the ANSI Z87.1 or Z87+ rating?
- What eye hazards exist in today’s tasks?
- Do you know where to access additional PPE if your eyewear becomes damaged?

## RATTLIR Takeaway

Your eyes are irreplaceable. Wearing ANSI Z87.1 rated protection is one of the simplest and most effective ways to prevent life-changing injuries. Stay protected, stay alert, and strike before it bites.