

To qualify as "safety glasses," the glasses must meet two qualifications:

- 1. the use of a safety frame--shown by Z87 being imprinted on both temples (side pieces) and the front (part that holds the lenses), and,
- the use of lenses made at least 3 millimeters thick and imprinted by a mark identifying the manufacturing optical laboratory.
  Putting "safety" lenses in a dress frame never makes the glasses "safety glasses."

The safety glasses Empire Optical makes meets or exceeds all requirements of American National Standard Z87.1 and the Occupational Safety & Health Administration.

But any wearer of safety glasses should know these facts:

- 1. The lenses in safety glasses are *impact resistant*, not *shatter-proof*. Your lenses not only can break, but given enough force, they will break. Lenses in safety glasses do not shatter into harmless granules, but can break into splinters that can cause serious damage to the eye. Even if the lens does not break, it can be driven out of the frame and into your eye. Never believe that safety glasses make you invulnerable to eye injury.
- 2. Glass lenses are the most likely lenses to cause eye injury if hit. If your glass lenses get pitted or scratched, they are much more likely to break and should be replaced. Anyone who has cut glass knows that all you have to do is score or scratch glass, and then with a small tap you can break the glass along the scratch; glass lenses are no different. Plastic lenses are more impact resistant than glass, particularly if hit by a sharp object. Far and away, the most impact resistant lens you can buy is made out of polycarbonate.
- 3. Sometimes more impact protection is needed than can be provided by just wearing safety glasses; consider whether you also need a face shield or cover goggles worn over your safety glasses.

