In order to have a complete Safety Glass Program, the protection of both non-prescription lens and prescription lens wearers must be considered. Many people understand that if their PPE Hazard Assessment shows that they should require safety glasses, then Plano safety glasses should be purchased, but the protection for the prescription lens wearers is not understood. Plano lenses are protective eye equipment used by workers who do not require vision correction to protect against eye injuries.

OSHA states in 1910.133 Eye and Face Protection that side protection shall be provided when there is a hazard from flying objects. Since we cannot predict what direction materials will take, it is understood that side shields are needed. A little further in the beginning of that Standard it states; “The employer shall ensure that each affected employee who wears prescription lenses while engaged in operations that involve eye hazards wears eye protection that incorporates the prescription in its design, or wears eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses”.

Many prescription lens wearers believe they are protected because the place they got their glasses from told them that safety glass is included. That is the only safety feature they share with industrial safety glasses. Safety glass is the same thing that is in vehicle windshields, and if broken, will shatter into small rounded pieces that will not embed in the eye. The American National Standards Institute (ANSI) Z87.1 is the Standard to refer to when determining if the glasses have been manufactured and tested to the standards for safety eyewear. The ANSI Z87.1 manufacturing and testing requirements are more rigorous than those for regular prescription glasses.

Chances are good that when you ask a worker if they are wearing prescription safety glasses they will say yes. Your first clue to dig deeper is the fact that they will not have side shields, but go to the next step even if they do. The next step is to ask them to remove their glasses and either you or they can look at the corner of the lenses or on the frame for the Z87.1 designation. If the glasses do not have the Z87.1, then they are not safety glasses. You might at that point say that we can just put side shields on their glasses, but this will not be appropriate. Adding the side shields to glasses that do not meet the rest of the ANSI testing is not affording them the same level of protection as non-prescription safety glass wearers.

Although OSHA requires the employer pay for the Plano safety glasses, the employer is not required to purchase the prescription glasses. Many employers will at least subsidize the purchase as they do with safety shoes. If the company paid $100 it would go a long way to paying for many safety glasses. It is strongly recommended to partner with a local vendor to help administer the prescription safety glass program. Additionally, the side shields should be permanently attached because the employer is not subsidizing the purchase of their regular prescription glasses. The employer should be prepared for when the side shields break or become detached. Replacement side shields are available either from your safety supply vendor or through your partner for the prescription safety glasses. It is imperative that you do not purchase the thin film plastic side shields that unfortunately are sold as side shields. They are not rated by ANSI and they give very little to no protection.
The last consideration is what to do for visitors or vendors who arrive without prescription safety glasses and need to go into areas where safety glasses are required. Contractors shall supply their own safety glasses whether they are Plano or prescription. The local safety equipment vendor will have OTG (over-the-glasses) safety glasses. These are large Plano safety glasses that will fit over their regular prescription glasses. As stated in the OSHA Standard, you can also use these for employees who wear prescription glasses, but this is not recommended. Many people who have worn them say that they give them headaches and distort their vision because they have to look through two lenses close to their face.

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