

Optical Glossary

Anti-reflective Lenses

A durable lens that reduces glare from artificial light, whether it's from the lights in your home, your office environment, or night-time driving.

Astigmatism

A condition in which the cornea is irregularly curved. This causes an image to focus at multiple points, resulting in blurry or multiple vision.

Bifocals

Bifocal lenses have two regions, each with their own focusing powers. One region is usually focused for distance, the other for reading.

Frames

Frames are the non-lens portion of a pair of glasses. The Eye Clinic of Wisconsin offers a wide variety of fashionable frames by some of the world's top designers.

Rigid Gas-Permeable Contact Lenses

Also called "hard" contact lenses, these lenses are durable and offer consistently crisp vision. They are available in bifocal designs as well, as can help many people with presbyopia, or lack of reading vision.

Hi Index Lenses

Lenses that are very thin and that offer UV and scratch resistance.

Hyperopia (farsightedness)

A condition that occurs when the cornea is not steep enough or the eyeball is too short. Light rays reach too far into the eye, effectively focusing behind the retina. This causes

objects near to the eye to appear blurry, while distant objects will appear in focus. Previously, farsighted patients had few options for correction of this condition.

Myopia (nearsightedness)

A condition that occurs when the cornea is excessively curved or the eyeball is too long. Light rays cannot reach far enough into the eye and do not focus on the retina as they should. This causes objects that are close to eye to appear in focus clearly, while distant objects appear blurred.

Office Lenses

Special occupational lenses made for office and computer use.

Polarized Lenses

The best sunglass lens that blocks glare from horizontal surfaces such as reflections off of water, snow and road surfaces.

Presbyopia (loss of reading vision)

Beyond the age of 40, most people begin to have more difficulty reading fine print and seeing close objects clearly. The eye's lens gradually loses elasticity over the years, and this makes it difficult to focus on nearby items, leading most people to rely on reading glasses or bifocals.

Progressive Lenses

Progressive lenses serve a similar function to bifocals, aiding both distance and reading vision. Rather than having two distinct regions, though, progressive lenses move from one focusing power to another in a gradient.

Spherical Contact Lenses

The term "spherical" refers to the design of the lens, in which both the front and rear surfaces are portions of sphere. Spherical lenses are used to correct basic vision aberrations such as nearsightedness and farsightedness.

Soft Contact Lenses

Lenses made of a soft material. Soft contacts are instantly comfortable to wear and require little adjustment.

Toric Contact Lenses

Toric lenses are specially designed for nearsighted and farsighted individuals who also have astigmatism and may not be able to wear other types of contact lens.

Transition Lenses

Lenses that are clear in any light, transition lenses react to UV rays, darkening in sunlight.