

Buying Glasses? Some Terms You May Encounter

Aspheric Lenses are usually also **high-index lenses** (see below). Aspheric lenses reduce thickness, especially in *very strong* corrections for farsightedness and *severe* nearsightedness. Aspheric lenses can be made with much flatter curves, so there is less bulging of the lens from the frame.

Bifocal Lenses have two distinct viewing areas within the same lens; the distance area and the near area. The distance area in bifocals is designed like a single vision lens, while the near area contains the distance prescription and the additional amount of focal power needed to see at a reading distance.

CR-39 is the standard plastic lens material, slightly thicker than standard glass but much lighter. (Also see **polycarbonate** plastic lenses below)

Crizal is a brand name for a premium anti-reflective lens coating treatment that also resists smudges and scratches.

Digital lenses are manufactured by equipment that uses the measure, analysis and computation of lens data in the form of numerical digits. The process offers a higher level of precision when creating the lens.

Frame selection varies. At General Vision Service offices in the metro New York area, members are entitled to any frame up to \$150 in retail value, or \$150 off higher-priced frames within the GVS collection. At GVS member offices outside of the metro area, the value of your benefit is up to \$100 in retail value.

Gradient lenses are darker at the top of the lens and get progressively lighter at the bottom. Lightly tinted versions of gradient lenses are used mainly in fashion glasses.

High-Index Lenses are intended for higher eyeglass prescription strengths. High-index lenses can offer the appropriate correction without the heavy, thick "Coke bottle" lenses from the past. The lens material is 25% to 30% thinner than regular lenses. *However, for eyeglass prescriptions that are less than +/- 2.00, the benefits of high-index lenses for reducing weight and thickness are negligible, and the added cost is unnecessary.*

Hyperopia, also called farsightedness, is the condition in which vision for distant objects is better than for near objects.

Index of Refraction is a measure of the optical power of the lens material (in simple terms). Crown glass has a refractive index of 1.53. High-index glass and high-index plastic have a refractive index ranging from 1.60 to 1.90. The higher the material's index of refraction, the thinner the lens can be.

Kodak is a brand name for **progressive lenses** (see below): photosensitive, polycarbonate and non-glare.

Myopia is a vision defect commonly known as nearsightedness. Those with myopia can see clearly up to a certain distance, then objects begin to appear fuzzy.

Ophthalmologist An ophthalmologist is a physician who specializes in the medical and surgical care of the eyes and visual system and in the prevention of eye disease and injury. He or she provides a full spectrum of care including routine eye exams, diagnosis and medical treatment of eye disorders and diseases, prescriptions for eyeglasses, surgery, and management of eye problems that are caused by systemic illnesses. Ophthalmologists can be medical doctors (M.D.) or doctors of osteopathy (D.O.).

Optician A dispensing optician fits eyeglasses and, in some states, contact lenses. Opticians analyze and interpret prescriptions written by ophthalmologists or optometrists to determine which eyeglasses or contact lenses are best suited to the patient's lifestyle and visual needs.

Optometrist An optometrist diagnoses and treats vision problems, eye diseases and related conditions, and prescribes eyeglasses, contact lenses, and medications to treat eye disorders. Optometrists cannot perform surgery, but they often provide patients with pre- and postsurgical care. Sometimes ophthalmologists and optometrists work in the same practice and co-manage patients.

Photosensitive Lenses, also known as polychromatic lenses, darken in sunlight.

Polarized Lenses filter out glare from reflective surfaces, and protect against ultraviolet radiation. Polarized lenses can be used in sunglasses; they cannot be used with regular prescription lenses in regular glasses.

Polycarbonate Lenses use lens material that is thinner, lighter, and more impact resistant than standard plastic. Polycarbonate lenses are recommended for children's eyewear.

Presbyopia is loss of the ability of the eye to change focus, such as from far to near, because of age-related thickening and hardening the eye.

Progressive Lenses, sometimes called no-line bifocals or blended-segment lenses, eliminate the visible lines of traditional bifocals and trifocals. Progressives correct vision for two or three different distances without the visible segment lines seen in bifocal or trifocal lenses. Instead they have a graduated section in which the power of the lens progresses smoothly from one prescription to the other, allowing the wearer to see clearly at all distances.

Single Vision Lenses have only one viewing area throughout the lens. This corrected area can be for far distance, intermediate or reading.

Scratch Resistant Treatments are lens protection coatings that guard against scrapes and abrasions. The coatings resist scratches, but are not scratch-proof.

Surcharges at General Vision Service: Surcharges range from \$65.00 to \$150.00 and up for photosensitive lenses, high-index lenses, polycarbonate lenses, polarized lenses, progressive lenses and anti-reflective coatings.

Trifocal Lenses are an extension of bi-focals, which provide vision correction for distance, intermediate and close up near viewing.

Varilux is a brand name for **progressive lenses** (see above).