Glossary

Access
The brand name for Sola enhanced, near-vision lenses. An access lens is a single vision reading lens with an enhanced (extra-close) range at the bottom of the lens.

Addition (Add)
Dioptric power added to a distance prescription to accommodate some finite distance such as for reading. The dioptric power of a bifocal segment.

Age-related Macular Degeneration (AMD)
An acquired retinal disorder characterized by degeneration in the central (macular) area of the retina. This is the leading cause of blindness in persons over age 65.

Amblyobia “lazy eye”
Decreased vision in one or both eyes without detectable anatomic damage in the eye or visual pathways. Usually uncorrectable by eyeglasses or contact lenses.

American Optometric Association (AOA)
The national, professional association representing optometry.

Anti-reflective coating
A clear lens coating that limits light reflection by allowing the maximum amount of light to pass through the lens (e.g., Reflection-Free™).

Associates
A term used in place of “employees” to refer to an organization’s work force. “Associates” refers to people working together toward a common goal.

Astigmatism
A condition of the cornea or crystalline lens in which light rays converge on two separate focal points.

Axis
The part of a prescription that describes how the cylinder is oriented in the eyewire.

Base curve
The front curve of any lens. The higher the base curve (8-12 base) the more curved the lens is, thus making the frame curved.

Benchmarking
An improvement process in which an organization measures its performance against that of best-in-class organizations, determines how those organizations achieved their performance levels, and uses the information to improve its own performance. The subjects that can be benchmarked include strategies, operation, processes and procedures. The objective of benchmarking is to identify and learn “best practices” and then to use those procedures to improve performance.

Bifocal
A lens containing two different powers: one for distance vision and one for near vision.

Blended invisible bifocal/blended-segment lenses
A lens containing two different powers, one for distance vision and one for near vision. The segment with near-vision prescription is invisible.

Bridge
The part of the frame that rests on the nose and joins the two lenses.

Cataract
A partial or complete loss of transparency of the crystalline lens. The clouded lens is removed by surgery and usually replaced with a plastic lens called an intraocular lens implant.

Color blindness
Reduced ability to distinguish between colors especially shades of red and green inherited trait passed down from mothers to sons.

Computer Vision Syndrome (CVS)
Eye strain, blurred vision, headaches and other symptoms caused by prolonged computer use.

Comprehensive eye examination
It describes a level of service in which a general evaluation of the complete visual system is made. The comprehensive services constitute a single-service entity but need not be performed at one session. The service includes history, general medical observation, external and ophthalmoscopic examination, gross visual fields and basic sensorimotor examination. It often includes, as indicated, biomicroscopy, examination with cycloplegia or mydriasis and tonometry. It always includes initiation of a diagnostic and treatment program as indicated.

Contact lens
A small shell-like lens that rests directly on the eye. There are many styles:

- **Soft lens** – Lenses made from flexible water-absorbent plastics. These lenses are comfortable, even at the end of the day.
- **Daily-wear** – Lenses put in the eye at the beginning of the day and removed at the end of the day.
- **Disposable/planned-replacement** – Soft lenses
that are worn for a prescribed length of time, then are discarded. Compared to conventional soft lenses, these lenses offer the patient better eye health, clearer vision, increased comfort and a “fresh-lens feeling” on a continuous basis. There is very little to no maintenance involved with these lenses.

**Extended-wear** - A soft lens with the same comfort as a daily-wear soft lens, but that can be left in the eye for up to two weeks. Also tears easily.

**Gas-permeable** - A hard lens that is very oxygen-soluble and quite comfortable to wear. They need minimal care and last for years.

**Hard** - One of the first contact lenses. Made of hard plastic. Generally not as comfortable as soft or gas-permeable lenses.

**Monovision** - A contact lens fitting technique used to correct presbyopia. The dominant eye is used for distance vision, while the weaker eye is used to see close up.

**Scleral shell** - A contact lens that fits over both the cornea and the surrounding sclera (i.e., the “white of the eye”).

**Toric** - A contact lens of a specific design to correct astigmatism. Toric lenses may be made of soft or rigid materials. They are curved in a way that compensates for the irregularly shaped cornea.

**Visually required** - Contact lenses prescribed for conditions in which visual acuity cannot be adequately corrected with eyeglasses but can be corrected by contact lenses.

**Convergence**
The movement of the eyes in such a way that the internal recti turn the visual axes to intersect at some finite point.

**Cornea**
Transparent portion of eye in front of the iris (colored part).

**Correction**
The specific lens prescription power required by a patient to render the best vision possible.

**Cylinder**
The part of a prescription that indicates the correction needed for an astigmatism.

**Diagnostic dilation**
The opening of or enlarging of the pupil by means of eye drops to better see inside the eye.

**Dilated examination (dilation)**
The enlargement of the pupil by the application of diagnostic drugs in the form of eye drops. The larger pupil opening allows more detailed inspection of the peripheral retina to facilitate diagnosis and documentation of numerous potential diseases or disorders.

**Diopter**
A unit of measure used in optics to designate less power, curvature or prism.

**Dominant eye**
The eye that “leads” its mate during eye movements.

**DPA**
Diagnostic Pharmaceutical Agents. A term used by eye doctors for eye drops used for diagnostic purposes during an eye examination.

**Drill mounts**
Where the lenses are drilled to allow for mounting screws with rimless frames.

**Edging**
The process of cutting a lens blank to the appropriate size and shape required for a particular frame.

**Executive bifocal**
Bifocal in which the near (reading) portion is across the entire bottom of the lens. Useful for extended close-up work (e.g., bookkeeping) at a desk.

**Eye**
The sense organ responsible for the sense of vision.

**Eyeglasses**
A term commonly used to describe an ophthalmic frame with lenses inserted.

**Eye care professional**
An Ophthalmologist, an Optometrist or an Optician, as defined by the Plan, who has signed an agreement with the Claim Supervisor to provide Covered Services to Enrollees.

**Farsightedness**
A common term for hyperopia.

**Fashion eye consultant**
An optical assistant who helps patients select frames and fills out frame-related fields on the patient’s invoice(s).

**Fitting**
The measurement and/or adjustment of frames or mountings for the specific visual needs of the customer.

**Frame**
Plastic or metal structure for holding lenses.

**Frame, Combination**
A frame whose front consists of a metal chassis with attached trim parts (sometimes known as top rims). These trim parts are typically plastic, aluminum or other metal, and are attached to the top portion of the chassis. Top rims may serve functional or cosmetic purposes, or both.
Frame, Dress ophthalmic
A frame for prescription or corrective lenses, intended for ordinary use in correcting or improving vision. Such a frame is not intended for occupational or safety use.

Frame, Rimless
A type of frame that provides no, or only partial, peripheral support for the lenses.

“Frames”
A book that is published quarterly and lists every frame manufactured along with a price list that all doctors use to establish UCR for frames.

Front
A component of an ophthalmic frame typically consisting of a bridge and eyewires.

Full-Spectrum Lens
An ophthalmic lens made from a plastic that transmits approximately 90% of ultraviolet light. (A conventional plastic lens transmits only 10%).

Fusion
Using both eyes together (referred to as “normal” when both eyes work together).

Glasses
Colloquial name for eyeglasses.

Glaucoma
A disease caused by high pressure in the eye. When pressure gets too high, it blocks circulation to the retina and retinal tissue, resulting in a loss of vision and, in severe cases, blindness. Glaucoma is usually controlled by eye drops. Laser treatment is sometimes necessary when eye drops fail.

Gradient coat
A lens coating that is darker at the top of the lens, fading to lighter at the bottom.

Guide to lenses
See Addendum following Glossary: Guide to Lenses

High-index/high lite
Material that is used to create thinner (by almost one-third) lenses than normal plastic. Does not contain the impact-resistant qualities of polycarbonate.

Hyperopia
Farsighted (difficulty seeing up close).

Hyperphoria
Tendency of one eye to deviate upward.

Hypertropia
An actual deviation of the z-axes in the vertical meridian.

Hypophoria
Vertical heterophora in which one eye tends to deviate downwards relative to the other. This can be differentiated from Hyperphoria in the other eye only by evidence of paresis or paralysis of elevating.

Impact-resistant
Lens that is resistant to shattering or splintering. Polycarbonate is the most impact resistant lens material making it very safe to wear.

Intermediate-vision lenses
That area in a trifocal lens or lens blank that has been designed to correct vision at intermediate to distant ranges.

Intermediate examination
Describes a level of service pertaining to the evaluation of a new or existing condition complicated with a new diagnostic or management problem. This does not necessarily relate to the primary diagnosis. It includes history, general medical observation, external ocular and adnexal examination and other diagnostic procedures as indicated; it may include the use of mydriasis.

Intraocular
Within the eye.

Iris
Colored part of eye.

Keratometer
An instrument used to measure the curvature of small areas of the cornea by reflected light.

Keratitis
Inflamed cornea.

Keratoconus
A condition (cause unknown) in which the cornea gets progressively steeper (cone-shaped). Fitting with a hard contact lens may slow progression. Surgery may eventually be necessary.

LASIK
Acronym: Laser in Situ Keratomileusis. Type of refractive surgery in which the cornea is reshaped to change its optical power.

Lens
A transparent medium bounded by two geometrically defined surfaces, one of which is curved – that is, spherical, cylindrical, toroidal or aspheric.

Lens, Bifocal
A lens designed to provide correction for two viewing ranges.

Lens, Corrected curve
A lens designed to reduce peripheral power errors for the
conditions of intended use over a specified portion of the field of view.

**Lens, Lenticular**
A lens, usually of strong refractive power, in which the prescribed power is applied over only a limited central region of the lens, called the lenticular portion. The remainder of the lens, called “the carrier,” provides no refractive correction but gives dimension to the lens to allow for mounting in a spectacle frame.

**Lens, Multifocal**
A lens designed for two or more viewing ranges for example, bifocal or trifocal lenses.

**Lens, One-piece multifocal**
A multi-focal lens or a lens blank fabricated from a single piece of glass or plastic.

**Lens, Pattern**
A cam, or template, used in lens-edging equipment to generate the correct peripheral shape and geometric center location. Also called a lens former.

**Lens, Photochromic**
A lens that darkens in response to the ultraviolet component of sunlight.

**Lens, Plano**
A lens that has zero refractive power.

**Lens, Plus**
A lens that has positive refractive power. It is thicker at the center than at the edge.

**Lens, Progressive power**
A lens that is designed to provide correction for more than one viewing range, in which the power changes continuously rather than discretely.

**Lens, Semi-finished**
A lens that has only one surface finished.

**Lens, Single vision**
A lens designed to provide correction for a single viewing distance.

**Lens size**
The horizontal box dimension (A-dimension) of a finished lens. Also called eye size.

**Lens, Spherical**
A lens that has the same refractive power in all meridians. Such a lens may have rotationally symmetrical aspheric surfaces.

**Lens, Sphero-cylinder**
A lens that has different refractive power in the two principal meridians. It is sometimes referred to as an astigmatic or toric lens. It is sometimes incorrectly referred to as a cylinder lens.

**Lens, Stock factory finished uncut**
A lens supplied by a manufacturer with both surfaces finished and a specific back vertex power or powers. Such a lens has yet to be edged to a specific shape.

**Lens, Toric**
A lens that has two distinct curvatures at right angles (90 degrees) to each other. See **Lens, Sphero-Cylinder**.

**Lens, Uncut**
A lens with finished optical surfaces on both sides but not edged for mounting in a frame.

**Lensometer**
Instrument that can measure the power of a spectacle lens.

**Lenticular lens**
See **Lens, Lenticular**

**Light**
A form of energy necessary to see. Visible light is that part of the spectrum that produces sensation of sight in the human eye. The radiation wavelengths in this visible range are very small and are usually expressed in either millimicrons or nanometers. The values given for the limits of the visible-light wavelength range depend on the textbook you are reading, but are around 380-760 nanometers or 400-750 nanometers. The rays that cause us to see violet have the smaller, shorter wavelength, around 380 nanometers or millimicrons. Each color of the spectrum - blue, green, yellow and orange - have a range of wavelengths. Red has the highest range, at around 660-750 nanometers.

**Low vision**
Term usually used to indicate vision of less than 20/20.

**Magnification**
The property of some optical lenses or systems of projecting a real inverted image of an object that is of a larger area than the object itself.

**Major reference point**
The point on a lens at which the specified distance prescription requirements shall apply (commonly but imprecisely referred to as the optical center).

**Members**
The end user of products and services; the patient.

**Mirror coating**
A thin deposit of appropriate material to the front surface of a lens, causing a portion of the light striking the lens to reflect directly from the front surface.
**Monocular**
Refers to only one eye or one side of a prism binocular.

**Mono vision**
A vision correction method where one eye is corrected for distance vision and the other is corrected for near vision.

**MRP (Materials Review Program)**
The quality assurance program performed by the RQARs. The frame Collection is audited for removal of discontinued styles and replacement of missing frames. Additionally, information on current and future clients is provided. The visit is an effective feedback mechanism.

**Multifocal**
A lens having more than one focal power. Bifocal, trifocal and progressive lenses for example.

**Myopia**
Nearsighted (difficulty seeing at distances).

**Near point**
The closest point at which accommodation can be momentarily maintained; also called punctum proximum (PP).

**Nearsightedness**
A condition that usually starts in childhood and stabilizes in the late teens or early twenties. Because the eye’s focusing powers are too strong for the size of the eye, near objects are seen more clearly and those far away appear blurry. Light is focused in front of the retina (see Myopia).

**Network**
The group of all eye care professionals who have contracted with the Claims Supervisor to provide Covered Service to Enrollees.

**Ocular**
1. An eyepiece.
2. Pertaining to the eye.

**Occluder**
A device that excludes light from one or both eyes.

**Oculus Dexter (OD)**
A term used by practitioners to refer to the right eye.

**Oculus Sinister (OS)**
A term used by practitioners to refer to the left eye.

**Oculus Uterque (OU)**
A term used by practitioners to refer to both eyes.

**OLA (Optical Laboratories Association)**
A trade organization for wholesale laboratories.

**OMA (Optical Manufacturers Association)**
A trade organization for the manufacturers of ophthalmic frames and lenses.

**Ophthalmic**
With reference to the eye and its functions.

**Ophthalmologist**
A medical doctor who has completed a residency program in ophthalmology and specializes in vision care that is related to medical conditions, such as treating diseases of the eye and performing ocular surgery. “Title” is M.D.

**Ophthalmoscope**
An instrument used to examine internal health of the eye.

**Ophthalmoscopy**
A test for internal health of the eye.

**Optic**
Pertaining to light or the sense of sight.

**Optic nerve**
The nerve that carries impulses from the eye to the brain.

**Optical axis**
The line connecting the centers of curvature of a lens or system of lenses. The cardinal points lie on this line or its extensions. This is also referred to as the anterior-posterior axis of the eye.

**Optical center**
A point on the lens axis midway between the nodal points.

**Optician**
A fabricator and dispenser of eyeglasses. Some opticians also fit contact lenses. An optician is skilled in the application of the science of optics, including optical lens and/or instrument designing or manufacturing.

**Optometrist**
A doctor of optometry, who provides all ophthalmic services except surgery. In most states, they are licensed to treat ocular diseases. “Title” is O.D.

**Oversize**
A larger-than-standard lens required to fabricate eyeglasses.

**Patient**
An alternative term used to refer to the plan member or end user.

**Peripheral vision**
Side vision. That which an eye can see to the side while looking straight ahead.

**Photobrown**
Lenses that turn brown when exposed to the sun.

**Photochromic lenses**
Variable tint lens that can darken or lighten depending on
the degree of exposure to light.

**Photogrey**
Glass lenses that turn grey when exposed to the sun.

**Photorefractive Keratectomy (PRK)**
Refractive surgery to eliminate myopia by flattening the central portion of the cornea with a laser.

**Pinnacle Lens**
The trade name of a private-label series of ophthalmic lenses available only at Davis Vision point-of-service locations. The lens is an aspheric design in polycarbonate material with anti-reflective coating and improved scratch resistance.

**Plano**
Eyeglasses to which no prescription has been applied.

**Photosensitive lenses**
Lenses that darken when exposed to the sun's ultraviolet rays.

**Polaroid**
Two lenses that are laminated to remove glare. Polaroid lenses are especially useful for boaters and pilots.

**Polished edge**
A cosmetic service to make the sides of a cut lens look clear rather than a milky white. This service can be used on any “minus” lens and on most “plus” lenses. It is not beneficial to polish the edges of a lens when:
1. An Anti-Reflective Coating has been applied, because polished edges may let light in through the sides, which causes glare negating this feature.
2. Lenses are thin, in which case the polished sides can affect the structure of the lens.

**Polarized lenses**
Lenses that block light reflected from horizontal surfaces such as water, in order to reduce glare.

**Polycarbonate**
Highest impact-resistant lens material available. Its high-index properties result in lenses 20–25% thinner than “regular plastic.” Used for safety and children’s eyewear, as well as for sports and cosmetic purposes.

**Premium ARC**
Technological advanced forums of Anti-Reflective Coatings with improved durability.

**Presbyopia**
A reduction in accommodative ability. This occurs normally with age and causes the need for bifocal eyewear.

**Progressive addition lens**
A lens that has no line but progresses from distance to intermediate to near vision (e.g., Varilux®, Seiko®, etc.). An all-distance lens.

**PSPC (Professional Standards and Practices Committee)**
The PSPC sets clinical standards of practice and evaluates conformance with existing protocols, making modifications when necessary.

**Pupil**
The dark opening in the center of the iris.

**Pupil Distance (PD)**
Measurement of the distance between the pupils.

**Pupillary Distance, Monocular (MPD)**
The measurement from the center of the nose to the pupil.

**Quadrifocal lens**
A spectacle lens with different powers in four different segments, typically for occupational use.

**Ray**
A straight line representing the direction of a ray or bundle of rays of light. An element of geometrical optics.

**Readers**
Reading glasses that are worn to help with reading or other near vision tasks.

**Readables**
Varilux® reading lenses with an expanded visual range that provides an extra-close range at the bottom of the lens. Ideal for single vision reading lenses. Also available in Varilux® bifocal.

**Refraction**
Loosely referred to as an eye examination (brief eye examination). The measuring of visual acuity and required correction.

**Retina**
The thin transparent membrane in back of the eye. The light-receptive portion of the eye.

**RLX coating**
Scratch-Resistant coating.

**Safety glasses**
Protective eyeglasses with a minimum lens thickness of 3.0mm (1mm thicker than conventional lenses). Special (stronger) frames must be used instead of conventional dress frames.

**Scratch-resistant coating**
Coating applied to spectacle lenses to increase the scratch resistance of the lens surface (e.g., Supershield®).

**Service representative**
The associate responsible for the daily interaction with and authorization of services for all members (and their
dependents) and all participating eye care professionals.

**Single vision lenses**
A lens with one correction, either for distance vision or for near vision, as opposed to a bifocal lens, which has corrections, for both near and distance vision.

**Size**
See Lens Size.

**Spectacle**
Another term for eyeglasses. An ophthalmic device consisting of two ophthalmic lenses and a supporting frame to position and retain the lenses in proper optical alignment with the eyes.

**Sphere**
The prescription power, in diopters, that corrects for hyperopia or myopia.

**Standard progressive addition lenses**
A Multifocal lens that has no visible line but with powers that progress from distance to intermediate to near in different positions of gaze. Often referred to as an invisible bifocal, these lenses provide appropriate correction for all viewing distances for persons in need of different correction for distance versus near.

**Solid tint**
A lens dyed or coated with pigment of uniform color and density, which causes rays of light to be refracted.

**Subjective examination**
An eye test using patients’ responses to help determine the prescription for glasses.

**Temple**
The part of the frame attached to the frame front that runs along the side of the face and rests over the ears. Consists of the shaft, the bend and the earpiece.

**Tints**
Normal tints that can be added to lenses to block between 5% and 20% of light. A darker tint is also available, which blocks up to 88% of light. The UV coating is always recommended with a sunglass tint. The most common tint colors are grey, green and brown.

**Transitions®**
Photochromic lenses that turn dark when exposed to the ultraviolet rays of the sun.

**Trifocal lens**
A multifocal lens with three different powers in three different positions. Usually, the top (largest) portion is for distance vision, the middle portion is for intermediate distances and the bottom portion is for near vision.

**Ultra ARC**
The current generation of the most technologically advanced forms of Anti-Reflective Coatings with improved durability, corrosion resistance and ease of cleaning and handling.

**Ultraviolet coating (UV)**
A coating that blocks ultraviolet rays.

**Utilization review**
The process of reviewing the appropriateness and quality of care provided to patients.

**Value-adding process**
Those activities that transform an input into a customer-usable output.

**Visual acuity**
Degree of visual sharpness, as determined by a conformance to or deviation from the standard 20/20 measurement.
Addendum
Guide to lenses

Please note: Lens type and brand are prescribed according to eye care professional recommendation.

Spectacle lens options

Anti-reflective coating, non-glare (ARC)
Anti-Reflective (AR) Coating reflects light off the lens surface, providing wearers with a reduction in glare and eye fatigue. Anti-Reflective coating is especially helpful when driving after dark and working on a computer. Anti-Reflective Coating is typically sold under a variety of brand names. Anti-Reflective categories include:

- Standard tier
  - Reduces glare
  - Creates a better cosmetic appearance than ordinary lenses with no AR treatment

- Premium tier
  - Reduces glare and reflections
  - Easier to clean, and more durable than standard AR lenses
  - Provides comprehensive UV protection

- Ultra tier
  - Reduces glare and reflections
  - Easier to clean by having superior protection against smudges, oil, and water
  - Provides comprehensive UV protection

- Ultimate tier
  - Exceptional visual clarity and protection against glare and reflections
  - Repels dust and dirt for clearer vision and less cleaning
  - Provides comprehensive UV protection
  - With Crizal and Viso Prevencia, patients will also receive protection from harmful blue light

Glass or plastic lenses

Plastic has replaced glass as the material used in eyewear due to its high impact resistance and cost efficiency. We still do administer and offer glass lenses if medically necessary.

- Single-vision lenses
  Used to correct for only one distance; same prescription throughout entire lens.

- Lined bifocal lenses
  The upper part of the lens is used for distance vision and the lower part of the lens is used for near vision. The difference between watching TV and reading for example.

- Trifocal lenses
  Used for three different distances, upper is for distances, like driving for example, middle is for intermediate distances, like looking at a computer, and the lower segment is for reading.

- Lenticular lenses
  Used to correct extreme hyperopia (farsightedness) which causes difficulty focusing on near objects. This condition often created by cataract surgery when lens implants are not possible. They are also referred to as post-cataract or post-operative lenses.

High-index lenses

An alternative choice to plastic lenses. High-Index lenses are comprised of a dense material, resulting in thinner and lighter lenses than those produced from plastic. High-Index lenses are especially useful to those with strong prescriptions, creating eyeglasses that are comfortable to wear without the awkward look of thick lenses. “HI 1.74” refers to a lens with a refraction index of 1.74 and is the thinnest lens offered. A “HI 1.67” lens has a refraction index of 1.67.

Plastic photochromic lenses

Plastic Photochromic lenses are light-adaptive and darken when they are exposed to ultraviolet rays. The most common brand is called Transitions® adaptive™ lenses or generic versions called, “photochromic” or “photosensitive” lenses, these lenses provide the wearer protection from the harmful effects of the sun.

Polarized Lenses

Polarized lenses are used in sunglasses and provide wearers with a filter to eliminate the horizontal glare experienced from reflective surfaces, such as water or the road’s surface. Polarized lenses are also capable of being worn indoors to protect light-sensitive individuals from light exposure. These lenses are recommended for patients with eye conditions such as cataracts and age related macular degeneration.

Polycarbonate lenses

Polycarbonate lenses are comprised of a lightweight impact-resistant material and are used where eye safety is a concern. Additionally, Polycarbonate lenses provide protection from the sun’s UV rays. Popular uses include safety eyewear, sports protective eyewear and children’s eyeglasses.
• **Children**
  Polycarbonate lenses are covered in full (no copayment) for dependent children.

• **Adults**
  Polycarbonate lenses are covered for adults if they are monocular patients and patients with prescriptions +/- 6.00 diopters or greater.

  - Monocular patients see out of one eye.

  - A diopter is a unit of measurement of the optical power of the lens. Convex lenses have positive value (+1.00 to +3.00 for example) and are used to correct farsightedness. Concave lenses have negative value (−1.00 to −3.00 for example) and are used to correct nearsightedness. Optometrists usually measure refractive error using lenses graded in steps of 0.25 diopters.

**Progressive lenses (PAL)**
Progressive lenses provide continuous progression of lens powers between multifocal lenses, resulting in many lens powers to facilitate all viewing distances without the visible line of bifocal or trifocal lenses. They are categorized in the following groups within the Davis Vision formulary, which includes many popular brand names and the latest technology:

• **Standard tier**
  - Available in traditional designs
  - Wide reading areas with a smooth progression from the distance viewing area down to the reading area of the lens

• **Premium tier**
  - Available in both traditional and digital designs
  - Wider fields of vision in the distance and reading viewing areas versus stand progressive designs

• **Ultra tier**
  - Every design is digitally surfaced
  - Greater enhanced visual clarity

• **Ultimate tier**
  - Best in digital design and cutting edge technology
  - Widest viewing areas for both distance and reading, and every distance in-between

**Scratch protection plan**
A warranty which ensures that if the coating does not prevent scratches it will be replaced at no additional charge.

**Scratch resistant coating**
Many lenses manufactured today automatically come with a basic scratch resistant coating. Although scratch resistance does not mean 100% scratch proof, it can help to prevent minor scratches that can occur with daily wear. This is different from the Scratch Protection Plan offered by Davis Vision.

**Single vision, single vision digital**
Single vision is a lens that corrects one aspect of the wearer’s vision. Distance, reading, intermediate. The digital version goes through a process in which a lens is manufactured with less overall distortion and aberration as found with traditionally surfaced lenses. Progressives can also be manufactured as digital.

**Tinting of plastic lenses**
Tinting can be added for fashion, functionality, or both. Tinting is done on regular lenses; however, tinting cannot be done on non-glare lenses. Tinting can be done in various colors and at different levels from mild to dark. For example, yellow tinted lenses can benefit people who do a lot of driving. The yellow tinting can add contrast and can decrease fatigue and increase visual acuity when driving in fog, haze, or during overcast conditions.

**Ultraviolet coating**
Ultraviolet Coating provides sun protection for the wearer’s eyes, blocking harmful ultraviolet light. Too much exposure to the sun can result in eye damage including cataracts and retinal damage. UV Coating is different from the tinting applied to lenses - dark tinted lenses that do not filter UV lighting may actually put the eyes at greater risk. Pupils may remain larger due to the dark tinting, allowing more

**Tech watch**
Commonly referred to as **free-form** or **HD progressive lenses**, this new optimized lens design offers the latest in progressive lens technology and is ideal for people with specific visual needs. This includes those who are new to progressives and needing them for the first time. Also suitable for those motivated to wear progressive lenses, but have had issues adapting to them in the past, as well as current progressive wearers interested in the latest technology.

With free-form lenses the fabrication of the lenses from the wearer’s eyeglass prescription is optimized with computer-controlled surfacing equipment that is much more precise than conventional tools. The result is that high-definition digital progressive lenses may provide sharper image quality, better peripheral vision and improved contrast sensitivity. This digitally enhanced technology is available in multiple lens materials and brand names. When combined with a premium anti-reflective coating these lenses offer the best visual experience for the progressive lens wearer. These lenses are featured as options within the Premium and Ultra Progressives Lens categories within the Davis Vision Formulary.
unfiltered UV light to enter.

VDT (Video Display Terminal)
A term that refers to a specific type of glasses designed to be worn while working on the computer to address the different visual requirements and distance of the wearer. May also be referred to as “occupational” glasses and addresses a condition commonly referred to as “computer vision syndrome”. Usually VDT glasses are only covered as a second pair if they are ordered at the same time as the primary or main pair.

Other lens add-ons

Edge polish
Edge of lens is polished from a cloudy appearance to a clear transparent edge

High luster edge polish
Same as above

Mirror (solid, single, and double gradient)
Mirror coating is applied to front surface only (versus tint which is absorbed by the lens). Gradient mirror is the same concept as gradient tint. Double gradient mirror is mirror coat at both top and bottom and gets lighter towards the middle of the lens.

Rimless drill
Frame in which the lenses are drilled into to attach the nasal and temple parts of the frame. Lenses serve as the shape of the frame

Roll and polish
A rolled edge is created when the edge of a lens is beveled down to reduce edge thickness. Edge is then polished for cosmetic purposes. Getting an edge polished is strictly the wearer’s preference.

Roll edge
Same as above but without the polish

Scratch resistant coating (standard)
Automatically applied to polycarbonate lenses. Can be added to other lenses as well. Is applied to the back side only

Slab off
Used when there is a significant difference in powers for each eye on a patient’s prescription. Used when patient experiences a prismatic effect or image displacement due to anisometropia

Specialty lenses (Myodisc, Lenticular Grind, Double Sided Grind)
- Myo-disc: A lens that will correct high myopia. Grinded on both sides to reduce thickness.
- Lenticular: A lens that will correct high hyperopia. Essentially a lens within a carrier lens to reduce thickness
- Double Grind: myo-disc

Tint
Process in which the lens is darkened. Can be customized to be a cosmetic light tint, sunglasses or in between. Usually a percentage is specified.

Tint (gradient)
Tint is darker at the top and gradually lightens towards the bottom.

Trivex
Lens that offers similar lightweight and impact resistant characteristics like polycarbonate but offers better clarity then poly due to higher Abbe value.

UV coat
UV protection can be applied to plastic lenses. Other lenses already have UV protection trough the hard coating that is automatically applied

Contact lens options, types, and terms

Contact Lens Evaluation, Fitting, and Follow-Up Care (CLEFFU)
If you wear or want contacts, you need a contact lens exam in addition to a comprehensive eye exam. Your eye doctor will perform special tests during a contact lens exam to evaluate your vision with contacts. The first test will measure your eye surface to determine what size and type of contacts are best for you. Your doctor may also do a tear film evaluation to make sure you have enough tears to comfortably wear contacts.

With the results of those tests, your eye doctor can provide a contact lens prescription that is the right fit for your eyes. An eyeglass prescription is no substitute for a contact lens exam because the two are very different. An eyeglass prescription measures for lenses that are positioned approximately 12 millimeters from your eyes; whereas a contact lens prescription measures for lenses that sit directly on the surface the eye. An improper fitting or prescription of contacts can damage the health of the eyes.

Once you have the correct fit and prescription for contacts, you’ll need to decide whether you want disposable contacts or extended wear, and if you want your contacts to be colored.

Your doctor will fit you with a trial pair of contacts and have you wear them for a few days. In about a week, you’ll need a follow-up exam to make sure you have adjusted to your new lenses.
Whether you wear glasses or contacts, it’s a good idea to get a yearly eye exam to see if you have new or existing vision problems, and if you need vision correction.

**Daily wear**
May also be called “conventional” lenses. Typically, daily wear lenses must be removed overnight to be cleaned/disinfected by leaving them in the contact lens solution. Eye care professional and manufacturer guidelines should be followed.

**Disposable/planned replacement**
Soft lenses that are worn for a prescribed length of time and then discarded. Eye care professional and manufacturer guidelines should be followed.

**Extended wear**
Typically can be worn overnight. However, that can also increase the risk of eye infections. Eye care professional and manufacturer guidelines should be followed.

**Standard**
Single-vision spherical lenses (can be planned replacement, disposable)

**Specialty**
Includes but is not limited to, toric, multifocal and gas permeable lenses

- **Toric lenses**
  Toric lenses are used to correct astigmatism because they are curved in a way that compensates for the irregularities in the cornea.

- **Multifocal/bifocal**
  Multifocal and bifocal contact lenses are very similar to their glasses counterparts.

- **Soft lenses**
  Most common material for today’s most popular contact lenses. Most patients require little adaptation during the initial wearing period.

- **Gas permeable**
  Gas permeable lenses require adaptation, are rigid lenses made of durable plastic that transmits oxygen and should be worn every day in order for the eyes to condition to them. Also known as rigid gas permeable lenses.

**Visually required**
In general, visually required contact lenses may be prescribed in lieu of eyeglasses, when it will result in significantly better visual acuity and/or improved binocular function, including avoidance of diplopia or suppression. This includes contact lenses that are identified as medically necessary in the treatment of the following conditions: Keratoconus, Anisometropia, Corneal Disorders, Pathological Myopia, Aniseikonia, Post-Traumatic Disorders, Aphakia, Aniridia and Irregular Astigmatism. Prior approval by Davis Vision is required for coverage.

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**What’s the difference between an eye exam and a contact lens exam?**
A routine / comprehensive eye exam is not the same as a contact lens exam. For contact lens wearers, a contact lens exam is necessary to ensure the lenses are fitting both eyes properly and that the health of the eyes is not harmed by the contact lenses.

A comprehensive eye exam is an important part of caring for your overall health whether you need vision correction or not. By looking into your eyes, your doctor can check for signs of serious health conditions like hypertension and diabetes. During a comprehensive eye exam, your doctor will look for signs of glaucoma, perform tests to check your vision sharpness, determine your prescription strength, examine how your eyes work together, and check the fluid pressure in your eyes. She may also dilate your eyes to see if you have any eye conditions or signs of other serious health conditions.