

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)

Dioptic power added to a distance prescription to accommodate some finite distance such as for reading. The dioptic 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.

Amblyopia “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” by Davis Vision to refer to its 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.

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

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.

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.

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 heterophoria 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 Davis Vision's 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 Providers who have contracted with the Claims Supervisor to provide Covered Service to Enrollees.

Network Provider

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.

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 Davis Vision associate responsible for the daily interaction with and authorization of services for all members (and their dependents) and all participating providers with Davis Vision.

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.