PRESCRIPTION SAFETY GLASSES

SAFETY EYEWEAR SPECIFICATION

Safety Protection Glasses

SafetyProtectionGlasses.com

MENU

ABOUT US

At Safety Protection Glasses we are passionate about, yes, you've guessed it – **Safety, Protection and Glasses!**

We're dedicated to giving you the very best lenses and range of frames for your sector, with a focus on safety, dependability and customer service.

Safety Protection Glasses is the European partner of Phillips Safety Products. This family-run business is well-known in the industry with over 100 years in the optical business using the latest technologies to produce safety glasses for laser, x-ray, glassblowing and other safety markets.

Safety Protection Glasses covers the European market and is based in Belfast, United Kingdom. The company carries laser, glassblowing, radiation and welding safety glasses, as well as general safety eyewear.

Using quality CNC edging facilities, Safety Protection Glasses offers the highest quality prescriptions in a variety of stylish frames.

CONTACT US

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WWW.SAFETYPROTECTIONGLASSES.COM

SAFETY GLASSES & GOGGLES

SAFETY PROTECTION GLASSES PROVIDES A RANGE OF PRESCRIPTION AND NON-PRESCRIPTION SAFETY GLASSES AND GOGGLES.

All of our glasses and goggles are made from the highest quality materials available with a focus on functionality and style.

Choose from a range of stylish wraparound, semi rimless, plastic or metal frames, with a variety of colours to suit your needs.

We provide branded safety glasses from the market leaders, including: Bolle, Wiley X, ArmouRx and OnGuard.

Safety Protection Glasses also carries a range of outdoor activity and sports glasses, which can help improve your vision during performance.

Our outdoor and sports frames meet the same high standards as our safety glasses, using high impact rated materials, as well as cutting-edge lens colouring and coatings to ensure your vision is protected.

HOW TO PURCHASE

website

Our fully functional website provides a unique range of glasses for you to choose from, with multiple pictures and colour options to browse.

Simply choose the pair you wish to purchase and select your frame colour or lens options.

BUY JUST THE GLASSES or **BUY WITH PRESCRIPTION** - depending on your needs.

BUY - you will be taken straight through to the checkout.

BUY WITH PRESCRIPTION - you will be taken to a lens option page where you have the follow options:

Lens Type: Single Vision, Digital Single Vision, Bifocal, Varifocal.
Lens Material
Lens Colour
Lens Coatings *(to be applied)*
Anti-Reflective Lens Coating *(to be applied)*
Mirror Lens Coatings *(to be applied)*

PRESCRIPTION FORM - where you can upload or fill a form.

UPLOAD - the file can be a jpg or pdf format.
FILL FORM - insert all your prescription specific details.

WE RECOMMEND **UPLOADING** YOUR PRESCRIPTION DIRECTLY TO THE WEBSITE
TO ALLOW US TO CHECK THE DETAILS BEFORE WE START PRODUCTION

ADD ANY COMMENT - if required.

CHECK OUT - complete your order using several different payment options.

Our website offers PayPal checkout, so you know your information is always safe!

email

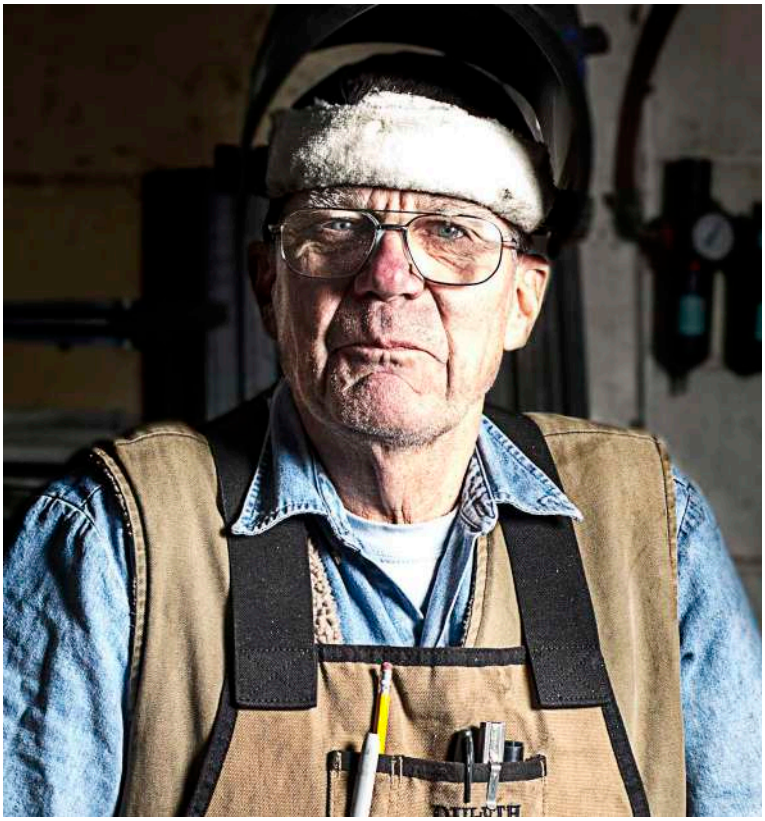
You can also complete your order via email.
We have an order form available, which asks for all necessary information for the order to be completed.

Email **INFO@SAFETYPROTECTIONGLASSES.COM** for a copy of this form.

PLEASE NOTE PRODUCTION WILL NOT START ON YOUR GLASSES UNTIL
THE ORDER HAS **BEEN COMPLETED** ON PAYPAL

OUR ADVANTAGES

At Safety Protection Glasses, we are dedicated to giving you the very best lenses and range of frames for your sector, with a focus on safety, dependability and customer service.



- Certified according to EU standard 166 and CE marked.
- Specially designed and manufactured for workplace eye protection.
- Stylish selection of frames and colours available.
- The latest technology is used to make our lenses.
- Provides optimal care for your employees.
- Can be individually adapted for the wearer to their specific needs.
- Good value for money with an extended shelf life through our durable frames.
- Reduces accidents in the workplace.

REGULATION & STANDARDS

Safety Glasses differ from standard eyewear, as they are developed to provide significantly more protection for your eyes.

For this reason, ALL SAFETY GLASSES are **EN 166 certified** - European certification for eye protection.

All glasses marked as EN 166 certified are extremly durable - they pass a series of tests in order to meet this superior certification level, which **guarantees your protection from hazards that may contribute to damaging your eyes**.

Getting a pair of glasses EN 166 approved is the best way to know that your eyes are protected while you're at work or play.

EN 166 - CATEGORIES

The EN 166 standard is a broad category that covers several different types of certification, all encompassing different elements of protection under its umbrella.

EN 166S - This is an enhanced, robust standard for safety glasses. Both the lens and the frame of these glasses have been selected as being able to withstand a particular stress test.
Glasses in this category are deemed EN 166S if they do not shatter and remain in the frame itself, which also must remain intact.

The stress test includes a 22 mm steel ball being dropped from 1.3 metres onto the glasses - the ball weighs 43 grams and is dropped at a speed of 18 km per hour.

EN 166F - This is the low energy impact standard, which will also provide you with protection against blunt force.

In this test, a pair of glasses (both lens and frame) must remain intact when hit with a steel ball measuring 6mm, weighing 0.86g and is dropped onto the glasses

EN 166B - This is the European standard for safety goggles, rather than safety glasses. Goggles provide wearers with additional durability and protection in harsh environments. The EN 166B standard is for medium energy impact tests.

If goggles withstand this test, it means that they have withstood a 6mm ball, weighing 86g being shot at a speed of 432 km per hour.

EN 166 - MARK

Every pair of safety glasses will be stamped with a series of markings. There will be a manufacturers mark to let you know who produced the glasses, as well as the EN 166 stamp and a series of letters and numbers. Each series of numbers relates to a different categorization.

For example, if you see an 'S' on your safety glasses frame, then it means that this frame and lens have passed a series of robust tests for general safety. A '3' corresponds to protection from chemical liquids.

The EN 166 standard exists to provide wearers with the confidence to know that the glasses they are using will protect them sufficiently in the environment for which they have chosen.

CERTIFICATION SAFETY GLASSES & GOGGLES

Hazards for employees can vary greatly across industries and job types, and many jobs often present a combination of hazards on-site. Each pair of safety glasses must be approved via individual testing procedures to gauge its protection level.

- Mechanical hazards due to debris and moving parts.
- Biological and chemical substances.
- Optical radiation such as UV or IR radiation.
- Laser beams.
- Electrical hazards.

The test of the mechanical strength is classified into protection class S or F.

Frames and lenses are tested and certified separately. On the previous page you will find an overview of the EN 166 classifications. Some other certifications such as CE Marks also provide rigorous testing to ensure standards are adhered to.

You should consider when purchasing safety glasses whether you require a CE mark on your glasses.

CERTIFICATION TESTS

ADDITIONAL TESTS THAT MAY BE CARRIED OUT

FLAMMABILITY

Safety glasses must withstand a steel rod which is heated to +650 degrees. The rod is then placed on the glasses or lens for 5 seconds and is considered viable if it does not ignite or glow.

RESISTANCE TO INCREASED TEMPERATURE/AGING

The glasses are placed in a furnace or heating cabinet at temperatures in excess of 55 degrees for 60 minutes. At the end of this period they are inspected for deformation, aging and optical changes.

CORROSION RESISTANCE

The glasses or goggles are placed into boiling sodium chloride solution for at least 15 min. The frame is removed and placed into sodium chloride at room temperature for an additional 15 min before being removed, rinsed and inspected.
If all surfaces of the metal parts are corrosion free, the frame will have been deemed to have passed.

RESISTANCE TO AGING BY UV EXPOSURE

The lens to be inspected is exposed to 50 hours of strong radiation from a UV lamp. This will provide reassurance that the frames and lenses can withstand UV exposure in simulated sunlight for 2 years. The inspector will be measuring whether transmission and stray light meet the specific requirements.

FIELD OF VISION

All glasses and goggles must have a sufficient field of vision for the wearer. This test is carried out via a laser in a fixed head position which simulates fixed viewing directions. The glasses or goggles will only be deemed certified if the minimum field of vision is observed.

SIDE PROTECTION/SIDE SHIELDS

This test is similar to the field of vision test and ensures that the field of vision is not obstructed by any side protection that is included on the frames. It also requests that the side shields are fit for purpose and restrict foreign objects from going into the eye or frame from the side.

ADDITIONAL TEST PROCEDURE: RESISTANCE TO DAMAGE FROM SMALL PARTICLES

In this procedure, a sand trickle test in used where 3kg of natural quartz sand is sieved onto the lens. The lens is then checked using the Scattered Light test to ensure its clarity after exposure to small particles.

TESTING FOR OCCUPATIONAL SAFETY GLASSES

UV PROTECTION

UV exposure is threat to eyesight and can be amongst one of the most common risks that an employee is subjected to. Should a person be exposed to UV without adequate protection, they are likely to experience serious eye damage which can include retinal issues, lens opacity, and can irreversible sight loss.

SCATTERED LIGHT/STRAY LIGHT

This light scattering reduces the contrast of the image projected on the retina, thus decreasing the quality of vision. A lens can be tested for Stray light by using a laser beam which is shone through the lens at a determined angle. The laser beam is then picked up using a radiation receiver and is assessed for deviation of the beam to ensure it is within the tolerance level.

LIGHT TRANSMITTANCE

A spectrophotometer is used to quantitatively measure the transmission and reflection of visible light, UV light or infrared light. Spectrophotometers measure intensity as a function of the light sources wavelength. For glasses which are used for mechanical or chemical hazards, the light transmission must be higher than 74.4%.

REFRACTIVE INDEX/ SPHERICAL & ASTIGMATIC EFFECT

A lens is created using specific correction values matched against an apex refractive index, and must be within tolerant levels. Should it pass the minimum requirements, it will be designated as Class 1, which is suitable for occasional wear and has a refractive power of ± 0.06 dioptres. This is the normal optical quality for all safety spectacles & goggles.

MATERIAL & SURFACE QUALITY

The surface of the lens is inspected for any defects that might affect the vision of the wearer. These defects can include scratches, bubbles, inclusions or cloudiness.

THE CE CERTIFICATE

After successful completion of the rigorous testing procedures, the glasses will be awarded a CE certificate and approved for use as safety glasses. Each model will have its own tests carried out and its own certificate issued.

IF A SAFETY FRAME OR LENS IS CE MARKED IT WILL CARRY ITS OWN MARKINGS TO PROVIDE THIS INFORMATION TO THE WEARER. THE MARKINGS WILL BE ON BOTH THE LENSES AND THE FRAME.

MARKINGS ON GLASSES

Each lens created by a manufacturer and will have engravings upon it to provide the necessary information as to what it is. These markings are limited so as not to restrict the field of vision.

IDENTIFICATION OF LENS MARKINGS

MARK	LENS MARKING
2C - 1.2	PROTECTION LEVEL OF THE FILTER EFFECT (UV RADIATION, COLOR DETECTION)
GA	IDENTIFICATION MARK OF THE MANUFACTURER
1	OPTICAL CLASS
S or F	MECHANICAL STRENGTH
CE	CONFORMITY MARK

IDENTIFICATION OF THE FRAME MARKINGS

MARK	LENS MARKING
GA	IDENTIFICATION MARK OF THE MANUFACTURER
166	NUMBER OF THE STANDARD EN DIN 166
S or F	MECHANICAL STRENGTH
CE	CONFORMITY MARK

DIFFERENT LENS TYPES

SINGLE VISION

GLASSES FOR DISTANCE

To compensate for near-sighted eyesight.

GLASSES FOR READING

For wearers of reading glasses and safety glasses, which assist those with far-sightedness.
These lenses are suitable for proximity and provide unrestricted vision up to approx. 40 cm.

LINED BIFOCAL LENSES

These lenses are two-strength and are for the simultaneous correction of ametropia.
The lenses provide correction for distance and onset near-sightedness.

VARIFOCAL LENSES

These lenses provide correction between close and long range. Varifocals are often used to correct presbyopia, where the lens becomes harder and less elastic, making it more difficult for the eye to focus on close objects.
These lenses are suitable from approx. 40 cm to 1 meter.

DIGITAL LENSES

At Safety Protection Glasses we take advantage of modern technology to produce our lenses.

While we still produce the standard single vision lenses, we have also incorporated use of the latest computer controlled machines and complex calculation programs to provide our **Digital Single Vision Lenses**.

Digital Single Vision means that every point on the back surface of the lens is individually calculated and manufactured to the users specifications. This makes them as unique as you are and provides: improved clarity and sharper vision, superior night and low-light vision, and thinner and flatter lenses for increased cosmetic appearance.

Digital lenses are sometimes referred to as free-form, wavefront or high-definition lenses.

WIDER FIELD OF VIEW

STANDARD PRESCRIPTION LENSES
BLURRED EDGES

DIGITAL PRESCRIPTION LENSES
CLEAR EDGE-TO-EDGE

DIFFERENCES BETWEEN STANDARD SINGLE VISION & DIGITAL LENSES

standard single vision

The stronger the prescription, the greater the possibility for distortion in the lenses.

Made for flat lenses, as know as cause distortion in wraparound styles, the fishbowl effect.

Used as prescription inserts due to the vertex* distance - causing distortion as it sits further from your eyes.

**distance between your eyes and the lens.*

digital lenses

Great for strong prescriptions, as well as for astigmatism or cylinder correction.

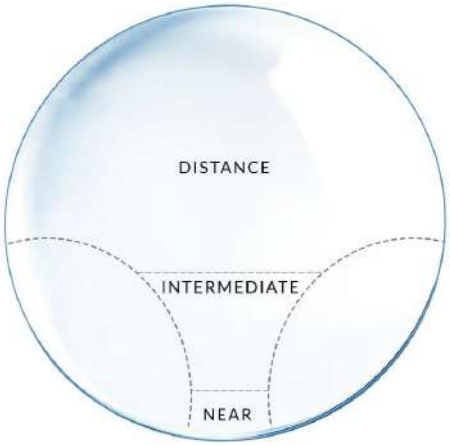
Made for any kind of lenses - do NOT cause distortion.

Accommodates the different vertex distance from wearing a prescription insert and provides the same clarity regardless.

Better quality, clear vision, and no distortions.

VARIFOCALS

VARIFOCAL LENSES ARE THE MOST COMPLICATED BIFOCALS YOU CAN GET, AND THEY ARE ALSO THE MOST POPULAR.



There are many different types and brands of varifocals, and they all have their specific purpose.

In prescription safety glasses, varifocal lenses tend to have a taller “corridor” than those in normal glasses, which is to say that the bifocal is longer.

Where as varifocal lens on a pair of street glasses may start in the center of the lens and end 12mm down at the reading circle, a varifocal lens for safety glasses will start at the center and end 17mm down at the reading circle.

There are also some limits to varifocal lenses in wraparound frames that have to do with your pupil distance (PD) and the size of the lens blank used.

Varifocal lenses are the most aesthetically pleasing bifocals because they do not have a line, however they are more complicated than the classic lined bifocal.

If you are ordering varifocals online, it is good practize to double-check all your measurements and give us a call if you have any questions. Calling before you order is a lot easier than calling after you have ordered and made a mistake.

Shopping for varifocal lenses in safety glasses can be tricky. We have a lot of lens options and frames to choose from and the task can be daunting, so please do not hesitate to call if you have any questions. We are here to help.

PRESCRIPTION VARIFOCAL LENSES ON SAFETY GLASSES

SAFETY LENSES ARE GENERALLY TALLER THAN STREET GLASSES LENSES

Generally, varifocal lenses are taller as well. This means that the distance from your pupil down to the reading area is longer than on street glasses, giving you more space to read.

VARIFOCAL LENSES MUST BE CENTRED DIRECTLY ON YOUR PUPIL

To do this, the varifocal lens blank must have the lens cut out of it in such a way that the optical centre ends up right in front of your pupils. If you have a large wraparound frame, varifocal lenses,or if your pupillary distance is narrow, we may not be able to cut your varifocal lenses out to get the bifocal centred on your eye.

IF YOUR PUPILLARY DISTANCE IS TOO NARROW FOR A WRAPAROUND VARIFOCAL

Sometimes we can make it at our sister lab in a digital varifocal lens for an added fee.

ADJUST TO USING VARIFOCAL LENSES IN WRAPAROUND FRAMES

If you have a hard time adjusting to a wraparound prescription glasses or if it this is your first varifocal, it may be prudent to order prescription safety glasses in a flatter frame (such as our Plastic Safety Glasses).
Most of our customers do not have issues with this, but there are those that the optical industry calls “progressive non-adapts,” and this is more likely when the lens is curved, like in wraparounds.

VARIFOCAL LENSES ARE AVAILABLE IN ALL LENS TYPES AND COLOURS WHEN ORDERING POLYCARBONATE

Most other lens materials, on the other hand, do not have nearly as many varifocal lens options.
This is especially true if you are ordering varifocal lenses in a wraparound frame, because many other lens materials have smaller lens blanks, which you cannot cut a large wraparound lens out of.

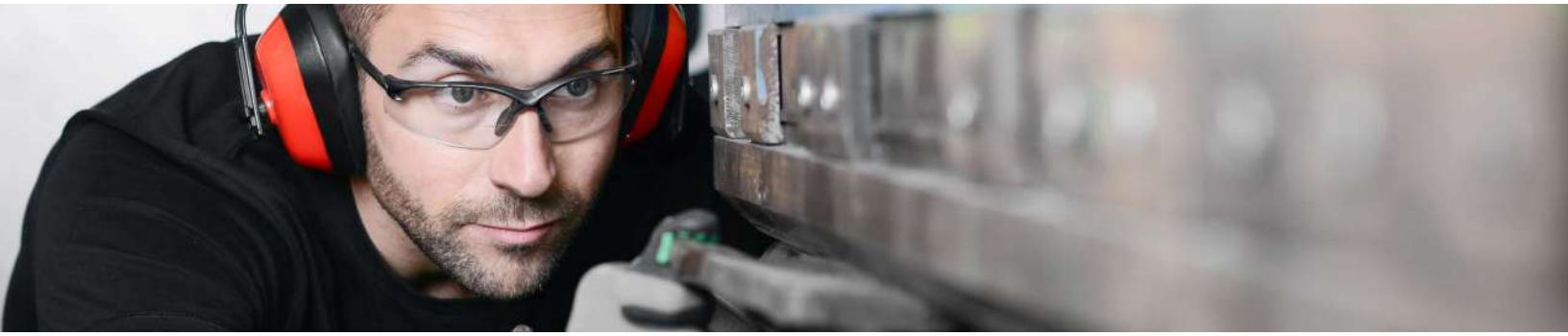
FIRST TIME USING VARIFOCAL LENSES

If you are a first-time varifocal wearer and your new varifocals do not feel right, give them some time. Many people feel that way at first with varifocal lenses, and most adjust and then never notice them again.

ORDERING VARIFOCAL LENSES ONLINE

If you are ordering varifocal lenses online, it is important to get your segment height measured before you place the order.

You can do this by ordering the “Frame Only” on our website, putting it on, having someone measure the millimetre distance from the bottom of the lens to the centre of your pupil as you gaze straight ahead, and then sending the glasses back to be made with prescription lenses.



LENS MATERIALS

CONSIDER WHAT YOU ARE GOING TO BE USING YOUR PRESCRIPTION GLASSES FOR WHEN CHOOSING A LENS MATERIAL.

Choosing your lens material is a good starting point when shopping for prescription glasses.
Once you've decided on a material, your other lens choices may be somewhat narrowed, so it will be easier to decide the rest of your lens options.

- **STANDARD PLASTIC**
  This material type has a low index but is fairly scratch resistant. It is available in any colour or prescription type and can be made in any prescription. Because its index is low, it gets very thick in strong prescriptions.
- **HIGH INDEX PLASTIC**
  As its name implies, this material has a higher index than other plastics or polycarbonate. It is thinner than plastic and polycarbonate in high prescriptions, though it is not as optically clear as standard plastic. It is not available in all lens colours and prescription type combinations.
- **POLYCARBONATE**
  This lens material is the most impact resistant and least scratch resistant. Its index is between that of plastic and high index plastic, as is its optical clarity. Polycarbonate is best for safety glasses such as motorcycle glasses. It is available in all lens colours and prescription types.
- **GLASS**
  Well known as the most scratch resistant, yet the most brittle lens material. It has high optical clarity but is much heavier than any plastic material. Available in most lens colours and prescription types, though it is not good for many wraparound frame types and cannot be done with a drill-mounted frame.
- **HIGH INDEX GLASS**
  This option shares many qualities with standard glass except the optical clarity is below all other lens materials. It has the most brittle material and is very easy to break. Its the thinnest lens material available. It is only available in clear single vision and progressive.

RECOMMENDATION - BEST MATERIAL ACCORDING TO YOUR PRESCRIPTION

PLASTIC - prescriptions between -3.00 and +3.00

POLYCARBONATE - prescriptions between -5.00 and +4.00

HIGH INDEX PLASTIC - recommended for stronger prescriptions (especially with clear lenses)

HIGH INDEX LENSES

The stronger the prescription, the thicker the lens that is required to accommodate it. A prescription above +/- 3 diopters will have lenses that become thicker at the edge or the middle.

To combat this, we would recommend using higher refractive lens materials also known as high index lenses. These types of lenses are generally thinner at the edge or centre and have higher refractive power due to increased optical density.

This type of lenses material can be much lighter than its counterparts.

HIGH INDEX ADVANTAGES

- **THIN PROFILE**
  High index lenses are thinner than standard lenses, making them more aesthetically pleasing.

- **LIGHTWEIGHT**
  These lenses are lightweight because of their thin lens profile. Less lens material means less weight on your nose all day.

- **SCRATCH RESISTANCE**
  High index lenses are denser than standard plastic or polycarbonate lenses, making them more scratch resistant. This is extremely useful for everyday glasses as it increases their lifespan.

- **LESS EYE DISTORTION**
  High index lenses remove much of the eye distortion associated with high prescriptions.
  Thick, strong lenses can distort the way your eyes look to others, making them seem smaller or larger than they are.

- **MORE PRESCRIPTION OPTIONS**
  High index lenses allow higher prescriptions to be inserted into many of these frames, broadening your frame options to choose from.

LENS COATINGS FOR SAFETY GLASSES

When you are purchasing prescription safety glasses online, it is important to consider which lens coating is appropriate for the work you will be doing.

Different kinds of work dictate a different set of coatings. It is important to know that sometimes the coating for your everyday glasses will not work in your prescription safety glasses environment.

ANTI-REFLECTIVE (AR) COATING

AR coating is best for work behind a computer or in a clean room where safety eyewear is still required. This coating is not good for situations where your eyewear will be outdoors or in dirty environments indoor.

MIRROR COATINGS

Mirror coatings are only a good choice if you are getting a dark tint. These include dark grey, brown, polarized grey, and polarized brown lens tints.
Mirrors are not suitable for clear or transitions lenses, and they will wear out like anti-reflective coating if they are cleaned repeatedly throughout the day.

SCRATCH COATING

This is always a good choice for all safety glasses. It is an inexpensive way to extend the life of your glasses, and while it does not stop scratches entirely, it will work to help prevent them.

ANTI-FOG COATING

Although this coating prevents fog, it is not as efficient as our Cat Crap anti-fog paste. Please visit our website to learn out more about our anti-fog coatings, as well as to place an order.

UV COATING

This is useful to protect your eyes from the sun, but it is not necessary on polycarbonate lenses or if the glasses are only to be used indoors.

If you are not sure whether a coating is right for the glasses you need, just contact us for a specialists opinion. We can tell you exactly what is best for your work environment.

MIRROR COATINGS FOR SUNGLASSES

Mirror coating on sunglasses means that the sunglasses have lenses that reflect light away from your eyes - more so than standard tinted lenses.
The coating gives the sunglasses a mirror-like appearance on the outside and can come in a variety of densities, colours, and styles. Available in prescription and non-prescription varieties.

MIRROR COATING ADVANTAGES ON PRESCRIPTION SUNGLASSES

- **REDUCE THE GLARE**
  The mirror style reduces the glare you can expect during an average day. Sun rays that reflect off other surfaces are reflected, rather than absorbed by the lens, which protects your eyes from damage and keeps your eyes comfortable.

- **INCREASE YOUR BRIGHTNESS**
  Mirror coating reflects rather than absorbs, which means you will be able to see the surrounding area better. Everything is a bit brighter, significantly enhancing your field of vision.

- **MIX & MATCH THE COLOURS**
  Mirror coating comes in a variety of colours and styles. You can apply any colour to your prescription without compromising your visibility.

- **PRIVACY**
  When adding mirror coating to your prescription sunglasses, you prevent others from seeing your eyes. The mirror effect in this case is both effective and real.

- **IMPROVE RESISTANCE TO WEAR AND TEAR**
  Mirror coating is manufactured specifically with durability in mind, helping to protect your lenses from scratches and other typical wear.

LENS COLOUR OPTIONS

MOST OF OUR PRESCRIPTION LENSES CAN BE TREATED WITH A TINTED COATING OR FORMED WITH A TINTED LAYER, IN ALL THE POPULAR COLOURS.

Certain colour tints adjust to or cancel out other types of light, which is why there are so many different colours available for sunglasses. They all provide general sun ray protection but are uniquely coloured to provide specific light blockage.

TINTS AVAILABLE ON PRESCRIPTION SAFETY GLASSES

PHOTOCHROMIC/TRANSITION LENSES

These versatile lenses darken to a comfortable tint when exposed to sunlight and return to a clear state when no UV light is present.

The benefits photochromic lenses bring to your prescription safety glasses are substantial. You no longer need two distinct pairs of prescription glasses: one clear and one tinted to handle the sun; a single pair transforms itself to meet the existing light conditions, over and over again without any effort or action on your part.

TRANSITION LENSES: BROWN VS GREY

Most significant in the differences between transition brown vs grey lensest are the contrast, darkness, and colour compatibility.

If you are looking for better contrast to increase visual acuity for things like golfing and fishing, then transition brown is the colour for you. But if you are looking for the absolute darkest transition lens possible, you should veer towards transition grey.

Otherwise, if you are looking solely to match the colour of your lens to your frame, you should choose the lens colour that is most compatible with your respective frame colour.

- **TRANSITION GREY LENSES ARE SLIGHTLY DARKER THAN TRANSITION BROWN LENSES**
  Making them best for those looking for the darkest possible transition lenses.

- **TRANSITION BROWN LENSES ENHANCE CONTRAST AND VISUAL ACUITY IN THE SUN**
  Making them best for those looking for golfing glasses, fishing glasses, or enhancement glasses.

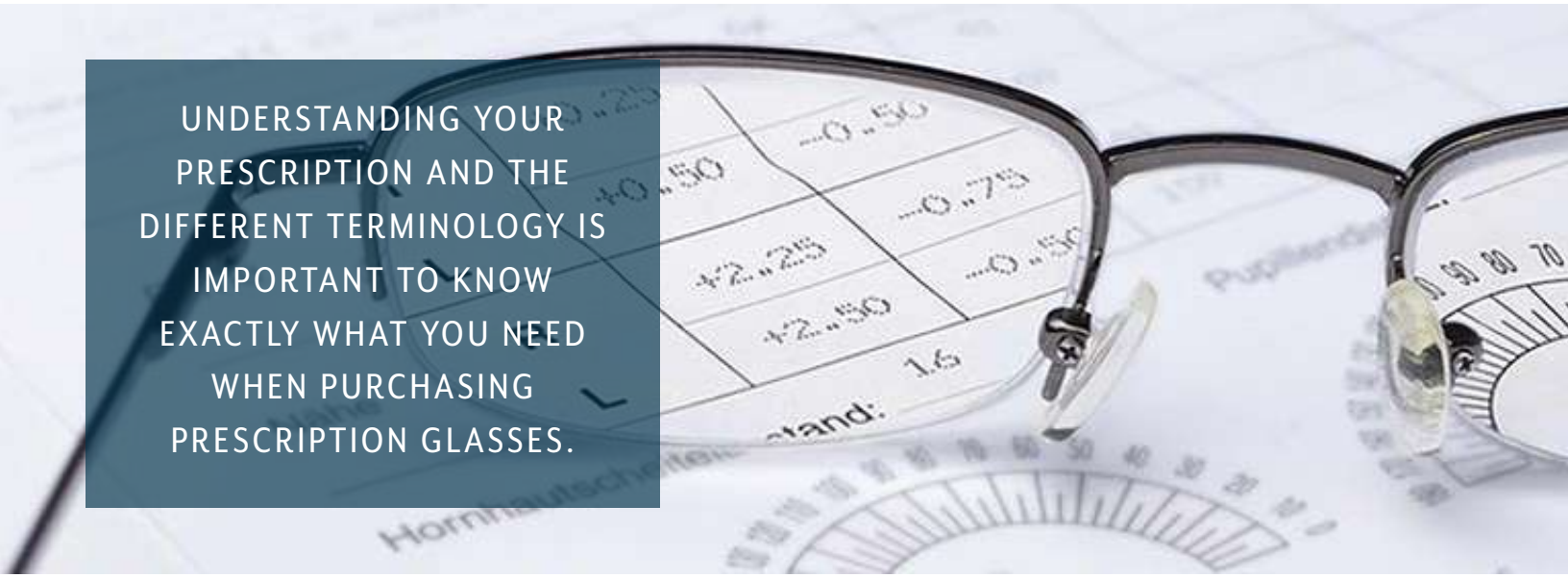
- **TRANSITION GREY LENSES DO NOT ALTER COLOURS**
  So the colours you see will be true, only darker, while wearing transition grey lenses in the sun.

- **TRANSITION BROWN LENSES DO MAKE COLOURS APPEAR DIFFERENT**
  This happens because everything is tinted brown.

- **BOTH COLOURS WILL TURN CLEAR WHEN OUT OF THE SUN**
  So there is no difference between transition brown vs grey when indoors or at night.

If you are not concerned with the benefits of the colour, we suggest you choose the colour that goes best with the colour of the frame you are putting the lenses in.

HOW TO READ YOUR PRESCRIPTION



UNDERSTANDING YOUR PRESCRIPTION AND THE DIFFERENT TERMINOLOGY IS IMPORTANT TO KNOW EXACTLY WHAT YOU NEED WHEN PURCHASING PRESCRIPTION GLASSES.

- **OD | OS | OU**

  OD - **RIGHT EYE** information.
  OS - **LEFT EYE** information.
  OU - **BOTH EYES** information.

- **SPHERE**

  Often written as SPH, this indicates the strength of lens required to correct your focus. It is measured in the unit known as dioptre (D).
  NEARSIGHTED - there is a **(-)** minus sign next to the number - i.e. myopia *(difficulty focusing on distant objects).*
  FARSIGHTED - there is a **(+)** plus sign next to the number - i.e. hyperopic *(difficulty focusing on close objects).*

- **CYLINDER**

  Cylinder or CYL is used to identify how much lens power in your prescription, as well as for astigmatism *(difficulty focusing at certain angles)*. It always comes after sphere power in a prescription.
  NEARSIGHTED ASTIGMATISM - there is a **(-)** minus sign next to the number.
  FARSIGHTED ASTIGMATISM - there is a **(+)** plus sign next to the number.
  IF YOU HAVE A CYLINDER, YOU MUST ALWAYS HAVE AN AXIS.

- **AXIS**

  The axis specifies where the astigmatism is on your eye. **IT IS ONLY PRESENT IF THERE IS VALUE IN YOUR CYL BOX - IF YOU HAVE A CYL, YOU HAVE AN AXIS**.
  The measurament is in DEGREES and the value range is between 0 and 180.

- **ADD**

  The Reading Addition (ADD), is the **ADDITIONAL CORRECTION REQUIRED FOR READING**. This can be used to make reading, bifocal or varifocal glasses. Add value indicates how much extra power is required 'on top' of the prescription for near or intermediate glasses.

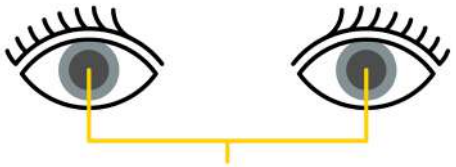
- **PRISM**

  Required to **CORRECT A LAZY EYE**. This is included with a prescription to correct special conditions or eye disorders (like squints) that require the focused image to move position.

MEASURING PUPILLARY DISTANCE

WHAT IS PUPILLARY DISTANCE?

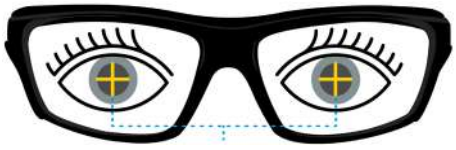
Pupillary Distance (PD) measures the distance between the centre of your pupils. This measurement is used to determine where you look through the lens of your glasses and should be as accurate as possible.



PD = 62mm

IMPORTANCE OF PUPILLARY DISTANCE

Every set of prescription lenses has an "optical centre," which is determined by pupillary distance.
An incorrect measurement means you may not be able to see through your glasses.



OPTICAL CENTER

MEASURE THE DISTANCE

Your prescription may tell you your PD.
If the PD is not available, use your friend or a mirror to help you figure it out.

MILLIMETRE RULER

MIRROR

WE NEED YOUR DISTANCE PD ON THE ORDER FORM IF YOU ARE ORDERING DISTANCE OR BIFOCAL GLASSES, AND YOUR NEAR PD ON THE ORDER FORM IF YOU ARE ORDERING READING GLASSES.

IF **YOU DO NOT SUPPLY YOUR PD MEASUREMENT**, WE WILL SET DISTANCE OPTICAL CENTRE AT:
65MM FOR MEN AND 63MM FOR WOMEN.

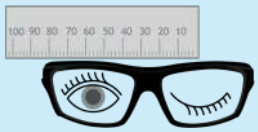
MEASURING YOUR OWN PD

1. STAND 8in. AWAY FROM THE MIRROR

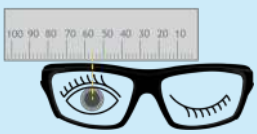
2. WITH YOUR FACE STRAIGHT, HOLD THE RULER AGAINST YOUR BROW.

3. CLOSE YOUR RIGHT EYE AND ALIGN THE RULER'S ZERO TO THE CENTRE OF YOUR LEFT PUPIL.

4. WHILE LOOKING STRAIGHT, CLOSE YOUR LEFT EYE AND OPEN YOUR RIGHT EYE.



5. READ THE MM LINE THAT LINES UP WITH THE CENTER OF YOUR RIGHT PUPIL.
THIS NUMBER IS YOUR PD.



REMEMBER

MEASURE YOUR PD 3-4 TIMES TO ENSURE IT'S ACCURATE AND CONSISTENT.

RANGE OF ADULT PD: 54-74mm

RANGE OF CHILD PD: 43-58mm

IF A FRIEND IS MEASURING

- HAVE THEM CROUCH/SIT WHILE YOU STAND SO THEY ARE OUT OF YOUR FIELD OF VISION.
- KEEP YOUR EYES AS STILL AS POSSIBLE.
- LOOK ABOVE HIS/HER HEAD AT SOMETHING APPROXIMATELY 10-20 ft. AWAY.
- **DO NOT LOOK AT THE PERSON MEASURING!**

MEASURING SEGMENT HEIGHT

WHAT IS SEGMENT HEIGHT?

Segment Height (SH) is the certical distance between the bottom of the lens in your frame and the bifocal line on a progressive lenses.

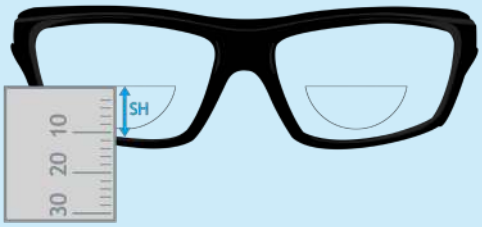
IMPORTANCE OF SEGMENT HEIGHT

Segment Height (SH) is essential because it will determine the proportions of your lens.

HOW TO MEASURE SH

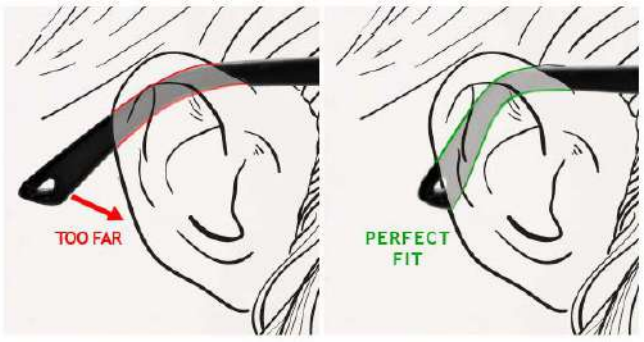
USING A MM RULER, MEASURE THE VERTICAL DISTANCE BETWEEN THE BOTTOM OF THE **LENS** AND THE TOP OF YOUR BOTTOM EYELID.

ATTENTION: THE MEASUREMENT REFERS TO THE BOTTOM OF THE LENS - **NOT THE FRAME**.



TEMPLE BARS

The temples of a frame are an important part of the safety glasses as these are responsible for a perfect fit and optimal hold of your eyewear onto your face. It is important to choose a frame with temples that are the correct length for the size of your face and head.



- If your glasses have temple ends which are too long for your face, your glasses will not be fitted correctly and will slide down your nose.
- The temples should be at a 45 degree angle at the top of your ears and should extend beyond this to around 30-45mm, bending around the ear without placing pressure on your ears.
- In frames curved or cable temples, the curved end should fit close to the ear but should not impact on it to cause pressure.
- If your temples are straight then they should extend beyond your ears and touch the back or sides of your head to help keep them in place.

RUBBERISED TEMPLES - offer a secure grip and are non-slip, helping to keep your glasses where they should be.

ADJUSTABLE TEMPLE ENDS - ensure that you have the correct temple length and fit for your head.
Frames which are manufactured with adjustable length temples can also be adjusted to suit specific anatomical profiles.

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