# ESSILOR PRODUCT INFORMATION 2020















IN SPECTACLE **LENSES** WORLDWIDE\*



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## **CONTACTING ESSILOR**

#### CUSTOMER SERVICES AND FEEDBACK

Essilor is committed to providing excellent customer service. We welcome all customer comments and will endeavour to use this feedback to improve our service.

To demonstrate our commitment to listening to our customers, a Customer Comments Charter has been created.



- 1 Essilor welcomes comments from its customers
- 2 To make a comment simply:
  - a. Call our Customer Services Department on 01454 281 281
  - b. Send an email to: comments@essilor.co.uk
  - Send a letter to: The Customer Comments Manager, Essilor Ltd, Cooper Road, Thornbury Bristol, BS35 3UW
  - d. Speak to your Account Manager
- 3 Every customer will be treated with dignity and respect at all times
- 4 Comments will be dealt with impartially and with integrity
- 5 All comments will be fully investigated
- 6 Essilor will endeavour to process all comments as quickly as possible
- 7 All comments will be responded to according to the customer's preference i.e. either a letter, an email or a phone call
- 8 We will use information obtained through customer comments to improve our service



01454 281 281



orders@essilor.co.uk



01454 281 282



ecp.essilor.co.uk

#### Accounts

Telephone 01454 423 317 Fax 01454 423 393

**Customer Services** (For Irish customers only) Telephone 1800 936 377 Fax 0150 60367

#### **Essilor Glazing Bristol**

Telephone 01454 423 254 Fax 01454 423 510

#### **Essilor Glazing London**

Telephone 0207 421 6161

#### **Essilor Glazing Manchester**

Telephone 0161 866 8011

#### **Essilor Reception**

Telephone 01454 417 100

#### Instruments

Telephone 01454 423 457 Fax 01454 423 444

#### Marketing

Telephone 01454 423 450 Fax 01454 281 255

### **PRFCAI®**

#### OPTIMISED THICKNESS FOR ALL LENSES

Precal is a lens calculation process which predetermines the thickness of a glazed lens, based on frame shape, prescription and centration. Precal calculates the minimum centre thickness to which a lens can be surfaced to provide the thickness appropriate to the lens/mount combination. The Precal calculation will only be applied when specified by the customer or when stock lenses cannot be used due to the frame type e.g. semi-rimless (supra) or rimless mounts.

#### 1. Availability

Establish that the prescription is within range in the diameter required.

#### 2. Provide full prescription

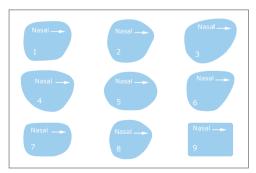
- · Lens type
- Prescription
- Tints and/or coatings
- Frame type or edge thickness. Quote the minimum distance between lenses (measured at the nasal points, NOT HCL)
- Edge thickness

#### 3. Shape outline

Draw around former or glazed lens with point of pen inclined inwards to ensure outline is true size and shape. Indicate the A and B measurements of the lens shape on the order. This eliminates any errors caused by drawing.

#### 4. Centration

Quote right and left monocular PDs. Quote right and left fitting heights\*.



#### Precal standard shapes

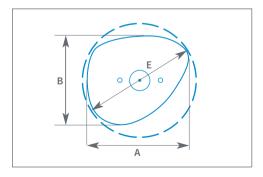
Select nearest shape and quote number, A, B and MDBL measurements

#### 5. Frame details

State frame type or quote the lens edge thickness required at the thinnest point, no less than 1mm. If no edge thickness is quoted for a rimless frame we will automatically aim for 1.5mm at thinnest edge (depending on frame) ensuring 2mm or 2.5mm at drill holes depending on lens material. Essilor gives a minimum edge thickness of 2mm for semi-rimless mounts (supra). You may also order Precal by telephone by quoting the lens type, prescription and coatings etc. accompanied by:

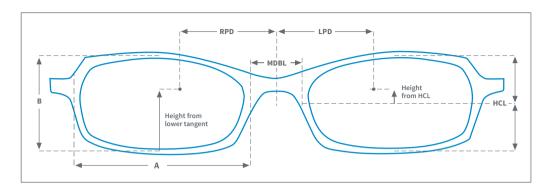
- A standard shape number
- The A box measurement
- The B box measurement
- The boxed minimum distance between lenses
- The thinnest glazed edge requirement or mount type e.g. metal, plastic, semi-rimless (supra) or rimless

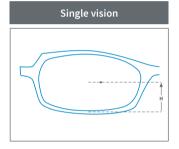
Tip - When it is difficult to clearly define the shape by number, SHAPE No.7, (a rectangular shape with rounded corners) or SHAPE No.5, (an oval shape) have been found to give consistently good results.

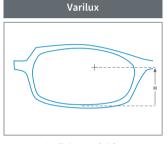


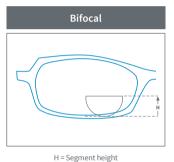
## **PRECAL®**

### OPTIMISED THICKNESS FOR ALL LENSES









H = Optical centre height

H = Fitting cross height

#### **Plus factors for using Precal**

- Mid or high plus prescription
- Plus cylinder axis of a toric lens running along the horizontal ± 30° (eg. +200/+250 X 165)
- Varifocal lens
- Lens with prism (base up, down, out or in)
- Shallow eye shape
- High decentration

#### Precal may also be used:

- To ensure the correct edging for rimless and semi-rimless (supra) glazing
- To balance thickness or weight of right or left lenses for both minus and plus prescriptions

#### Ordering using actual glazed shape



Or by post using an Essilor order form

## e-STORE

#### ONLINE ORDERING FROM ESSILOR

The e-Store is a simple to use online ordering system that validates orders during entry, allowing you to order your lenses, frames and promotional orders from Essilor.



#### Orders can be placed for

- Surfaced and stock lenses
- · Remote-edged lenses
- Stock replenishment for large quantities
- Glazing orders
- Société des Lunetiers frames with lenses
- Lens and frame packages
- Promotional lens orders

#### e-Store gives

- 24/7 secure access to Essilor's online ordering system
- All orders are validated during entry which prevents the selection of incompatible lens designs, materials, treatments or power ranges
- Lens offers are instantly updated when new products are launched
- Lens calculations and comparisons
- Access your account from an internet enabled PC, Mac, tablet or smartphone
- Essilor customers can benefit from exclusive online promotions

#### To access e-Store

- Visit ecp.essilor.co.uk
- · Click on e-Store
- Enter your account number and password to sign in
- To obtain your username and secure password please contact our EDI team via our customer services department on 01454 281 281.

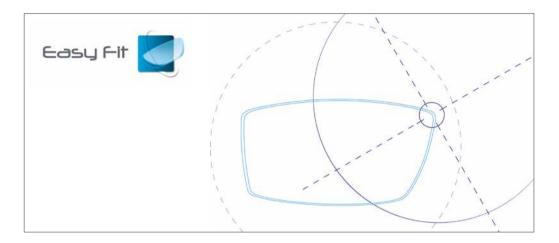
#### **Support**

- Use our video user guides to get the most from e-Store, available on:
  - ecp.essilor.co.uk/support/estore
  - Other Applications listed on e-Store
- Use chat feature to speak to an EDI Technician

## **EASY FIT**

### SAVE TIME, SPACE AND MONEY

Easy Fit is the remote edging solution from Essilor. Easy Fit ensures the lenses meet your optical demands perfectly and provides the fitting accuracy you expect. Ideal for the newest generation of lenses, Easy Fit ensures you will always be at the cutting edge of technology.



#### **Advantages**

- The accuracy of the lens edging is optimised.
   The compensation algorithm ensures that your lenses arrive without the need of any retouching
- You will save time so you can dedicate more time to your patients
- You just have to assemble your jobs, your practice will be cleaner and you'll have more space
- Easy Fit is ideal for your business, bringing savings and efficiency while ensuring the highest quality standard for your patients
- You eliminate breakage costs which means you grow profitability, as you only pay for the jobs you receive
- Easy Fit allows you to make shape modifications to your semi-rimless (supra) lenses
- Easy Fit has 12 worldwide patents, exclusive to Essilor

#### What do you need

The operating process is very quick, so only one tracer is required in the practice. An internet ready Mac or PC is also required. Essilor takes care of everything else. Our qualified staff use the latest technology to edge your lenses and give you a perfect fit.

#### Fast and easy ordering process

Visit **ecp.essilor.co.uk**, click on e-Store and enter your account number and password to sign in.

#### Video user guides

- Use our video user guides to get the most from the e-Store Shapemanager, available on:
  - ecp.essilor.co.uk/support/estore
  - Other Applications listed on e-Store

## **INSTRUMENTS / PRACTICE EQUIPMENT**

### THE RIGHT SOLUTION FOR THE NEEDS OF EVERY VISION CARE PRACTICE



#### Refraction

- Phoropters Vision-R 800
  - More accurate phoropter for a more precise refraction
  - Easier procedure for the practitioner for a fully reliable prescription
  - More comfortable experience for the patient for complete confidence
- Chart Systems
- Auto Kerato-Refractometers
- · Wavefront aberrometers
- Lensmeters

#### **Diagnostic**

- · Classic slit lamps
- · Digital slit lamps
- Corneal topographer
- · Fundus camera / Retinal screening
- Non-contact tonometer ATNC 500
  - Quiet and soft air puff to enhance patient comfort
  - IOP value automatically corrected by simply input of central corneal thickness
  - Tilting and swivelling screen to facilitate seated or standing position

#### **Furniture**

- OST 100 OST 150 / OST 200 OST 250 / OST 350
  - Two instruments translating table, projector holder and self-balancing refraction holding arm
  - Motorised chair with fixed back as standard
  - LED light illumination
  - Optional: Foot rest and elbow rest
  - Optional: Accessible chair available

#### **Finishing equipment**

- PRO-E<sup>™</sup> 600
- Mr Blue Sun and Sport edition
- Mr Blue / Mr Orange
- Neksia
  - One of the most user-friendly and productive systems in the world
- Delta2
  - The new compact edging system that reinvents simplicity for you

#### M'Eye E.Store

For your small equipment, tools and consumables, visit ecp.essilor.co.uk/instruments/m-eye-store

## **AVA™ - ADVANCED VISION ACCURACY**

#### ESSILOR'S BREAKTHROUGH JOURNEY OF HIGH PRECISION VISION

Unlock the full potential your patient's eyes deserve by offering more precise refraction integrated into premium lens designs.



## Position your practice at the leading edge of technology with AVA

Essilor's latest research shows that 95%<sup>(1)</sup> of people have more sensitive vision than the current correction steps of 0.25 dioptres. As innovators Essilor has challenged long standing correction standards and took them to the next level.

After five years of scientific research and analysing more than 100,000 vision parameters, we have developed a breakthrough journey of high precision vision: AVA, Advanced Vision Accuracy. AVA is based on two technological pillars:

## 1 A more precise eye examination based on a new subjective refraction at 0.01D

Essilor's breakthrough phoropter, Vision-R 800, delivers subjective refraction values at 0.01D thanks to:

- A revolutionary optical module
- A smart refraction programme

## 2 A precise prescription integrated in Essilor premium lens designs

New AVA lens ordering option in 0.01D steps is available with Essilor's existing premium lenses:

- Varilux X series
- Varilux E series
- Varilux Physio 3.0
- Eyezen Start / Eyezen Boost

<sup>&</sup>lt; 2020

## **EYECODE**

### A UNIQUE BREAKTHROUGH IN LENS PERSONALISATION

Eyecode is a unique breakthrough in lens personalisation and is at the forefront of innovation.



For the first time, Essilor reveals the unique code of each human eye. Currently, all lenses that are manufactured assume every person has the same Eye Rotation Centre (ERC), when in fact it can vary by up to 30%. The dynamic 3D measurements, which can only be measured by Essilor's Visioffice system, are based on pinpointing the exact Eye Rotation Centre that is unique to every person, delivering a truly tailored eye diagnosis, that is quick, easy to determine and highly accurate. Provided as x, y, z readings, this measurement is called eyecode.

Right eye	Pd	Fh	ERCd
Eyecode	33.1	16.2	24.2
Left eye	Pd	Fh	ERCd
Eyecode	32.5	16.5	29.9

Eyecode can be combined with the frame and behaviour parameters to deliver lenses that are truly tailored to each wearer.

#### Your advantages

The ERC measurement is independent from head posture (respecting its natural behaviour) and is unaffected by convergence / phoria problems. Lens centring is more accurate, as for the first time both the pupil distance (Pd) and the fitting height (Fh) are related to the ERC position.

#### **Patient benefits**

- Lenses that are more optically precise, giving a total lens-to-eye synergy
- Instant vision without effort
- Dynamic and highly contrasted vision

#### **Availability**

Eyecode personalisation option is available on all premium Varilux and single vision lenses:

	Eyecode	Frame	Dominant eye	Behaviour
Varilux Xclusive 4D	Mandatory	Mandatory	Mandatory	Optional
Varilux X track 2	Optional	Mandatory	n/a	n/a
Varilux X design / short	Optional	n/a	n/a	n/a
Varilux E 2	Optional	Mandatory	n/a	n/a
Varilux E design / short	Optional	n/a	n/a	n/a
Varilux Physio 3.0	Optional	n/a	n/a	n/a
Essilor Eyezen Boost / Start	Optional	n/a	n/a	n/a
Essilor Road Pilot	Optional	n/a	n/a	n/a

## **ESSILOR EYEZEN START**

#### THE NEW GENERATION OF SINGLE VISION LENSES

Our eyes work harder due to variable distances and smaller pixelated characters on digital devices. Eyes have to focus more intensively and repeatedly over-stimulating the eyes calling for the need of an adapted solution.



#### We are all living in a connected world

Digital devices are shaping the way we live. They allow us to learn, work, play, socialise and even more! This connected life creates new standards.

## Most single vision lenses are still based on old optical standards

Standard single vision lenses are optimised for far vision only at the lens optical centre. The eye has to strain to deal with aberrations and see objects at close distance.

## Studies show that imperfect vision correction issues lead to visual fatigue

The eyes have to strain to correct vision issues while focusing on complex digital content.<sup>(1)</sup> The combination with intensive use of screens and uncorrected vision issues lead to visual fatigue.<sup>(2)</sup>

#### **Eyezen Dualoptim**

For the first time single vision lenses are optimised in two zones according to object location. Thanks to Dualoptim technology the near vision zone is optimised according to gaze direction and object distance, bringing the correct power and correct astigmatism for near and far vision.

#### **Eye Protect System**

Essilor Eyezen clear and Transitions lenses automatically include Eye Protect System innovation.<sup>(3)</sup>

#### **Patient benefits**

- Comfortable vision
- Better acuity in near vision
- Sharper vision

#### The Essilor Eyezen Start range

All Essilor Eyezen Start lenses are available with AVA and Eyecode, resulting in lenses being more optically precise and offering instant and effortless vision.

#### **Essilor Eyezen Start lenses are recommended for:**

- Any single vision digital device users under 40 years old with low visual fatigue
- Any patient attracted to technical innovation

**Please note:** Essilor Eyezen lenses with AVA and/ or eyecode will be supplied with a compensated prescription, so completed orders will highlight an ordered power and a measured power.

<sup>(1)</sup> Rosenfield M, Hue JE, Huang RR, Bababekova Y. (2012).

<sup>(2)</sup> Vision Council 2015

<sup>(3)</sup> Discover Eye Protect System on page 26

## **ESSILOR EYEZEN BOOST**

#### A COMPLETE RANGE OF DIGITAL LENSES DESIGNED FOR A CONNECTED LIFE

With extensive research Essilor has identified four main profiles of single vision digital users and has created an Essilor Eyezen BOOST lens for each category to help reduce eyestrain while protecting vision health.



#### Today's connected life generates new optical needs

Due to their new multi-screen lives, wearers' environments and behaviours have changed. Eyes have to focus more intensively and repeatedly to adjust to variable distances and view increasingly smaller and pixelated characters displayed on screens.

## Essilor's R&D study shows the impact of digital devices

2 out of 3 people feel that digital screens require additional effort to see well and 3 out of 4 suffer from tired eyes.<sup>(1)</sup>

## Essilor innovates and introduces a new lens category, Eyezen

Using two innovations Essilor has developed four lens designs specific for each single vision digital user profile.

#### **Eyezen Focus**

An exclusive power distribution technology with a specific extra power for each user profile in the specially designed lower part of the lens.

#### **Eye Protect System**

Essilor Eyezen clear and Transitions lenses automatically include Eye Protect System innovation. (2)

- (1) Consumer quantitive study conducted in 2014 among 4000 individuals in France, Brazil, China and the US by Ipsos for Essilor.
- (2) Discover Eve Protect System on page 26

#### **Patient benefits**

- Better readability of small characters
- Reduction in visual fatigue, even during prolonged use of digital devices
- Less glare and improved contrast

#### The Essilor Eyezen Boost range

Essilor Eyezen 0.40	Offers an extra +0.40D boost in the bottom part of the lens, to relax eyes of 20-34 year olds from digital stress
Essilor Eyezen 0.60	Offers an extra +0.60D boost in the bottom part of the lens, to relax eyes of 35-39 year olds from digital stress
Essilor Eyezen 0.85	Offers an extra +0.85D boost in the bottom part of the lens, to relax eyes of 40-44 year olds from digital stress
Essilor Eyezen 1.10	Offers an extra +1.10D boost in the bottom part of the lens, to relax eyes of 45-50 year olds from digital stress

All Essilor Eyezen lenses are available with AVA and Eyecode, resulting in lenses being more optically precise and offering instant and effortless vision.

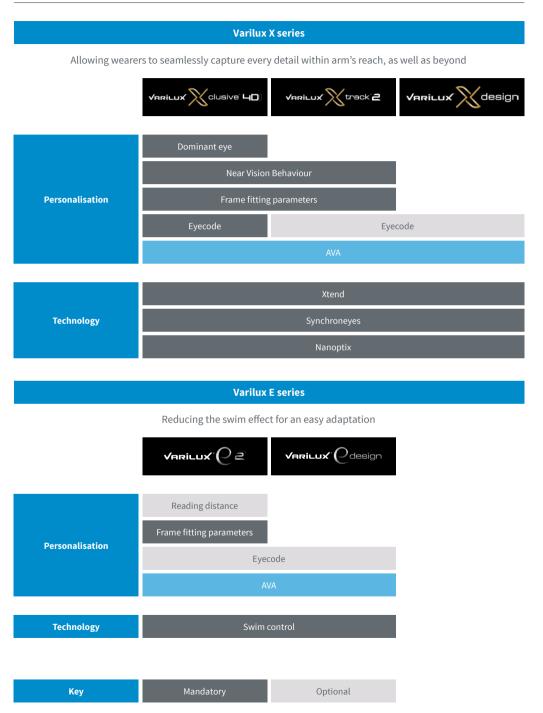
#### **Essilor Eyezen Boost lenses are recommended for:**

- Patients using digital devices either at work or at home
- Any patient attracted to technical innovation

**Please note:** Essilor Eyezen lenses with AVA and/ or eyecode will be supplied with a compensated prescription, so completed orders will highlight an ordered power and a measured power.

## **VARILUX® SERIES RANGE**

## THE WORLD'S MOST ADVANCED VARIFOCAL LENSES



## **VARILUX® X SERIES**

#### FOR A GENERATION OF WEARERS WITH NEW NEEDS

The emergence of new technologies is shaping the way we live, creating new visual needs and challenges. By studying extensively how this new way of life has an impact on presbyopes, Varilux has re-invented near vision at arm's length. This is made possible through the combination of three revolutionary technologies.



#### Xtend

Xtend™ technology delivers the highest match with wearers' visual needs within arm's reach that has ever been achieved by a progressive lens design. (1) Varilux designers captured wearers' volume of needs and reshaped a specific zone: The Arm's Length Vision Zone (ALV). Thanks to Xtend technology optimisation wearers can view multiple targets with one gaze direction.

#### **Synchroneyes and Nanoptix**

- Synchroneyes takes into account the physiological differences between the two eyes to ensure maximised fields of vision. Each lens optimisation integrates the differences between the right and left prescription as well as the distance between pupils
- Nanoptix entirely reengineers the fundamental structure of both lenses to reduce swim effect.
   As both base curve and power impact the beam deviation, their combination is optimised for each element

#### Personalisation

- The Near Vision Behaviour measurement takes into account a wearer's behaviour and posture when reading ensuring that their own vision volume is positioned and shaped where and how they need it
- The exclusive 4D technology takes the dominant eye into account in the lens calculation

#### **Patient benefits**

Wearers will experience outstanding sharpness, continuous vision and fluidity from near to far allowing them to seamlessly capture every detail within arm's reach with high precision, as well as beyond.

#### The Varilux X series range

When ordering:

- Varilux Xclusive 4D is the most advanced Varilux X series lens, taking into account the importance of the dominant eye and Near Vision Behaviour.
   Eyecode and Near Vision Behaviour measurement are compulsory
- Varilux X track 2 incorporates the frame data and Near Vision Behaviour measurements as standard, with eyecode optional
- Varilux X design and X design short offer the performance of Xtend technology, Synchroneyes and Nanoptix. Eyecode and AVA are available as an option
- Varilux X series clear and Transitions lenses automatically include Eye Protect System innovation.<sup>(2)</sup>

#### Varilux X series lenses are recommended for:

 Any patient interested in the latest technologies available and the best optical performance

#### Please note:

Varilux X series lenses will be supplied with a compensated prescription, so completed orders will highlight an ordered power and a measured power.

<sup>(</sup>i) 75% match with Varilux® X design. Best score vs 8 premium lenses from main competitors tested. % match is calculated on the base of lenses sets [-4.00D ADD +2.00, -4.00D ADD +2.00]; [-3.00D ADD +2.00, -1.50D ADD +2.00]; [Plano Add +2.00], Plano Add +2.00]; [+1.50D ADD +2.00, +2.50D ADD +2.00]; [+4.00D ADD +2.00, +4.00D ADD +2.00] and head posture [Incl: 50° Ex: 0°]; [Incl: 20° Ex: 0°]; [Incl: 0° Ex: 5°]; [Incl: -10° Ex: 5°]; [Incl: -10° Ex: 5°].

<sup>(2)</sup> Discover Eye Protect System on page 26

## **VARILUX® E SERIES**

#### FASY VISION FOR AN FASY LIFE

Varilux E series stems from advanced technologies in optics. With Varilux E series, more wearers can now have access to the outstanding Varilux performance.



## The secret of Varilux E series, Swim Control Technology

Swim Control Technology is derived from a multipatented calculation based on the creation of micro elements. These micro elements are used to manage the lens power independently from the lens curvature: When the lens power increases, the lens curvature remains flat. As the lens curvature remains flat, the swim effect is dramatically reduced.

#### How the Swim Control makes the difference?

The calculation of the micro elements has been simplified to concentrate on the sides of the lens where the swim effect is the greatest.

#### Deeper into the technology

Varilux E series lenses are manufactured using advanced digital surfacing, which ensures a much more accurate blocking of the lens. This allows for the Swim Control technology to be applied with a high level of precision. No less than five patents protect this unique manufacturing process.

#### **Patient benefits**

Wearers will benefit from up to 50% less swim effect and easier adaptation.

## The Varilux E series range

#### When ordering:

- Varilux E 2 incorporates the frame data measurements as standard
- Varilux E design short provides Varilux E design performance even in small frames (minimum fitting height 14mm)
- All Varilux E series lenses are available with AVA and Eyecode, resulting in lenses being more optically precise and offering instant and effortless vision
- Varilux E series clear and Transitions lenses automatically include Eye Protect System innovation<sup>(1)</sup>

#### Varilux E series lenses are recommended for:

- Any patients interested in the latest technologies
- Presbyopes who are currently wearing Varilux Comfort New Edition
- First time varifocal wearers

#### Please note:

Varilux E series lenses will be supplied with a compensated prescription, so completed orders will highlight an ordered power and a measured power.

<sup>(1)</sup> Discover Eye Protect System on page 26

## **VARILUX® PHYSIO 3.0**

#### FFFORTI ESS VISION EVEN ON THE MOVE

The lifestyle of presbyopes has changed: they are connected, dynamic and in search of performance. Varilux Physio 3.0 answers their concerns.



#### Wave 2

Varilux Physio 3.0 benefits from Wave 2, a design innovation which maps pupil size whilst utilising the latest wavefront technology.

- Coma control to reduce higher order aberration
- Axis control to keep the axis of unwanted astigmatism vertical in order to meet the eye preference
- Power control to extend vertically the zone of stabilised near power

## Binocular Booster, the new technology added to make Varilux Physio even better

80% of presbyopes have different prescription between their right eye and left eye.  $^{(1)}$ 

Binocular Booster allows for a better control of this prescription difference.

#### **Patient benefits**

- Improved lower light performance
- Superior visual sharpness
- Wider field of intermediate vision
- Excellent performance in dynamic situations

#### The Varilux Physio 3.0 range

- Varilux Physio 3.0 short provides Varilux Physio 3.0 performance even in small frames (minimum fitting height 14mm)
- All Varilux Physio 3.0 lenses are available with AVA and Eyecode, resulting in lenses being more optically precise and offering instant and effortless vision
- Varilux Physio 3.0 clear & Transitions lenses automatically include Eye Protect system innovation<sup>(2)</sup>

#### Varilux Physio 3.0 lenses are recommended for:

- Existing Varilux Physio 2.0 wearers
- Active presbyopes

<sup>(1)</sup> Based on 20, 391 prescrition, Essilor Internal order database

<sup>(2)</sup> Except Varilux Physio 3.0 Lineis 1.74 clear. Discover Eye Protect System on page 26

## **VARILUX® COMFORT NEW EDITION**

#### BECAUSE MODERN LIFE IS SO DEMANDING



#### **The Total Comfort System**

The Total Comfort System initiative has enabled the development of a lens that meets the requirements of wearers working and living in today's demanding environment. By using its exclusive Live Optics approach, Essilor Research & Development are able to determine the exact behaviours of presbyopes over long periods of time.

Varilux Comfort New Edition lenses are manufactured using digital surfacing to ensure that the Total Comfort System is properly applied. The calculation of the design has been optimised and the manufacturing process is used to adapt the lens design precisely and optimise it for each individual wearer's prescription.

#### **Patient benefits**

- Wider field of vision through new calculation technology
- More comfortable dynamic vision and less swim sway effect thanks to a softer design

#### The Varilux Comfort New Edition range

 Varilux Comfort New Edition short provides Varilux Comfort New Edition performance even in small frames (minimum fitting height 14mm)

## **VARILUX® LIBERTY NEW EDITION**

## STEP INTO THE WORLD OF NATURAL VISION



Varilux Liberty New Edition has been designed using Essilor's exclusive 'Live Optics' Research and Development technique, which considers wearer physiology and optics, following which a full evaluation of the final design through detailed wearer tests are conducted. Each lens is digitally surfaced to ensure the performance is optimised regardless of the wearer's prescription.

#### **Patient benefits**

- Clear vision at any distance
- Access to Varilux digital quality

#### The Varilux Liberty New Edition range

 Varilux Liberty New Edition short provides Varilux Liberty New Edition performance even in small frames (minimum fitting height 14mm)

### **ROAD PILOT**

#### ENHANCE YOUR VISUAL COMFORT FOR SAFER DRIVING AT NIGHT

Introducing Essilor Road Pilot and Varilux Road Pilot: An Essilor innovation combining a premium single vision or Varilux lens with a Crizal coating adapted to driving.



## Why do we experience discomfort when driving at night?

Eye sensitivity is different in the day time than at night. Rod cells are the only photoreceptors in the retina to react to low lighting. This is what we call mesopic or night vision. At night, we are exposed to multiple and intense sources of light that create reflections and glare. These reflections and glare disturb rod cells, creating discomfort and lower visual acuity.

#### What are the consequences on our vision?

When night comes, multiple sources of light (headlights, traffic lights...) impact our vision creating:

- · Difficulty in adapting to glare
- Low peripheral vision
- Decreased contrast sensitivity
- Increased response time
- Difficulties in motion perception

## Minimising the level of reflections helps to maintain our visual acuity throughout the day and night.

Crizal Drive is a new premium anti-reflective coating that offers impeccable clarity of vision. Thanks to the coating performance reflections are up to 90% less when driving at night.<sup>(1)</sup>

#### **Patient benefits**

- A better clarity of vision throughout the day and night
- A Crizal coating that protects your patients lenses from the enemies of clear vision

#### And for Varilux Road Pilot wearers:

- A more enhanced field of vision with a larger intermediate vision zone
- A smooth and comfortable switch from intermediate to distance vision

#### The Road Pilot range

- · Varilux Road Pilot lens with:
  - A specific design to best match the drivers' visual needs
- Essilor Road Pilot lens with:
  - A Wavefront Management System for optical maximisation on the whole lens for single vision wearers

#### Varilux Road Pilot lenses are recommended for:

Presbyopic patients with a lifestyle that involves frequent driving

#### Essilor Road Pilot lenses are recommended for:

 Single vision patients with a lifestyle that involves frequent driving.

#### Please note:

Varilux Road Pilot lenses will be supplied with a driver specific addition based on their reading addition. Essilor Road Pilot lenses with eyecode and Essilor Road Pilot Orma 1.5 lenses will be supplied with a compensated prescription, so completed orders will highlight an ordered power and a measured power.

Full two year guarantee against scratching and manufacturing defects with Crizal Drive.

For more information visit ecp.essilor.co.uk

<sup>(1)</sup> vs. a standard hard coat lens with no anti-reflective coating

## **VARILUX® DIGITIME**

#### LENSES DESIGNED FOR A CONNECTED LIFE

A new generation of occupational lenses for patients with a near vision correction, who use digital devices daily or have any other near or intermediate vision activities, to help relax their eyes and posture in front of screens.



#### Today presbyopic patients use multiple digital devices with screens, for work and for leisure.

Previous occupational lenses did not take into account changes in the digital environment and the areas of the lenses a modern wearer will use to view their devices

#### New behaviours require an adapted ophthalmic solution.

Varilux Digitime lenses are designed specifically with the patient in mind, Essilor's Research and Development has used findings from numerous studies on posture, viewing distances, eye declination and more to develop Varilux Digitime lenses.

#### Our eves have to focus more intensively to adjust to variable distances and increasingly smaller and pixelated characters.

70% of 45 to 65 year olds suffer from tired eyes and 60% say it takes more effort to read smaller characters(1). With Varilux Digitime a new ultra near vision zone, which offers additional power to overcome these symptoms, is available depending on the design chosen.

#### **Patient benefits**

- Relaxed eyes even for prolonged use of digital devices
- New ultra near vision zone for improved readability of very small characters
- Natural posture in front of digital devices

#### The Varilux Digitime range

- Varilux Digitime Near: Offers up to +0.50D in the ultra near vision zone for presbyopes, who regularly use smartphones, tablets and other near vision items
- Varilux Digitime Mid: Offers up to +0.25D in the ultra near vision zone for presbyopes, who regularly use computers and other intermediate vision items
- Varilux Digitime Room: Offers up to +0.125D in the ultra near vision zone for presbyopes who regularly use large screens and other extended vision items

#### Varilux Digitime lenses are recommended for:

- Presbyopic patients using digital devices either at work and/or at home
- Patients whose hobbies / lifestyle involve significant intermediate and near vision tasks

#### Please note:

Varilux Digitime lenses are not suitable for driving.

<sup>(1)</sup> Consumer quantitive study conducted in 2014 among 4000 individuals in France, Brazil, China and the US by Ipsos for Essilor.

#### Frame selection

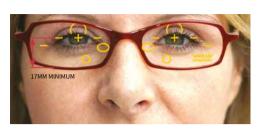
- 1 Ensure minimum depth below pupil of 14mm for:
  - Varilux Xclusive 4D, X track 2, X design short
  - Varilux Physio 3.0 short
  - Varilux E 2, E design short
  - Varilux Comfort New Edition short
  - Varilux Liberty New Edition short
  - Varilux Road Pilot

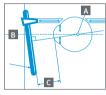
#### 15mm for:

• Varilux Exceptio

#### 17mm for:

- Varilux X design
- Varilux Physio 3.0
- Varilux E design
- Varilux Comfort New Edition
- Varilux Liberty New Edition
- Varilux Digitime
- 2 Ensure the distance from fitting cross to top bevel is greater than 8mm for all Varilux lenses
- 3 Adjust frame before taking measurements





A. Centre rotation of the eye B. 8 - 12° pantoscopic tilt C. 12 - 14mm vertex distance

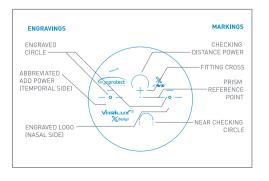
#### **Fitting measurements**

- 1 Take monocular PDs (use Digital Pupilometer for accuracy, Visioffice or Eye-Ruler)
- 2 Take monocular fitting heights. Fitting height should be no lower than the centre of the pupil. Allow for frame slippage.
- 3 Check the lens will cut out with the centring chart. Select another frame if necessary



#### Verification

- 1 Locate laser engravings to confirm the lens is the correct type
- 2 Confirm monocular PDs and fitting heights are within 1mm
- 3 Check distance prescriptions
- 4 Check add power. This is shown below the temporal engraved circle or it can be read as the difference between the front vertex distance and near powers
- 5 Check prism thinning at prism reference point. Standard thinning prism is 2/3 add base down



## VARILUX FITTING HEIGHTS

#### **Spectacle collection**

- 1 Leave markings on lenses or re-mark them.
- 2 Confirm frame fits correctly.
- **3** Fitting cross should be no lower than pupil centre.
- 4 Remove markings.
- **5** Demonstrate distance, intermediate and near viewing areas.
- 6 Issue Certificate of Origin and Varilux guarantee card.





E. Distance F. Intermediate

G. Near

## Fitting heights and trouble shooting

VARILUX RANGE FITTING HEIGHTS					
Minimum fitting height 14	mm 16r	nm	18mm	20mm	Beyond
Varilux X design short	RECOMMENI	ED	ACCEPTA	BLE	<b>→</b>
Varilux Physio 3.0 short	RECOMMENI	ED	АССЕРТА	BLE	<b>→</b>
Varilux E design short	RECOMMEN	ED	АССЕРТА	BLE	<b>→</b>
Varilux Comfort New Edition short	RECOMMENI	ED	ACCEPTA	BLE	<del></del>
Varilux Liberty New Edition short	RECOMMENI	ED	АССЕРТА	BLE	<b>→</b>
Varilux Xclusive 4D					<del></del>
Varilux X track 2					<b>→</b>
Varilux E 2  Varilux X design					
Varilux Physio 3.0		_			$\rightarrow$
Varilux E design		-			<b>→</b>
Varilux Comfort New Edition		-			<b>→</b>
Varilux Liberty New Edition		-			<b>→</b>
Varilux Road Pilot					<b>→</b>
Varilux Digitime		-			<b>→</b>
Varilux Exceptio	_				<del></del>

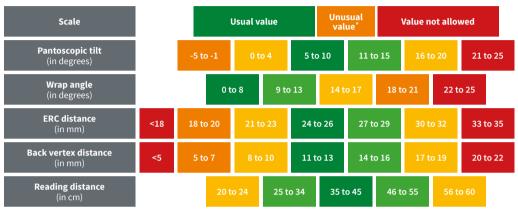
SYMPTOM	SOLUTION
Patient lifts head or spectacles to read	Fitting too low or reading power too weak. Adjust frame or remake lenses
Patient lowers head or spectacles to look in distance	The lenses are fitting too high. Adjust frame or remake lenses
Patient moves reading material off to side for better focus	Halve PDs off (check each eye separately), submit correct PD measurement and have lenses remade for optimum performance
Peripheral vision blurs and moves	Increase facial wrap of frame
Patient has narrow reading area	Increase pantoscopic tilt and fit closer if possible check fitting height

### VARILUX FRAME FITTING PARAMETER GUIDE

#### Main wearer and frame parameters

To guide you, here are the average values for the main fitting parameters.

**Recommendation:** Please ensure that the frame and clip are correctly adjusted.



<sup>\*</sup>Please double check measurements

#### **Additional setting information**

Ensure all Varilux minimum fitting heights are respected. If not, please be advised that this may affect the Varilux guarantee.



## OPTIMUM VARILUX FRAME PARAMETERS

Optimum pantoscopic tilt 8 to 12 degrees

# Optimum faceform angle (Wrap) 2 to 6 degrees

#### **Optimum vertex distance** 10 to 12mm

**Optimum ERCd** Can only be taken using Visioffice

#### Please note:

Before taking any measurements please ensure the frame is set up to the 'as worn' position





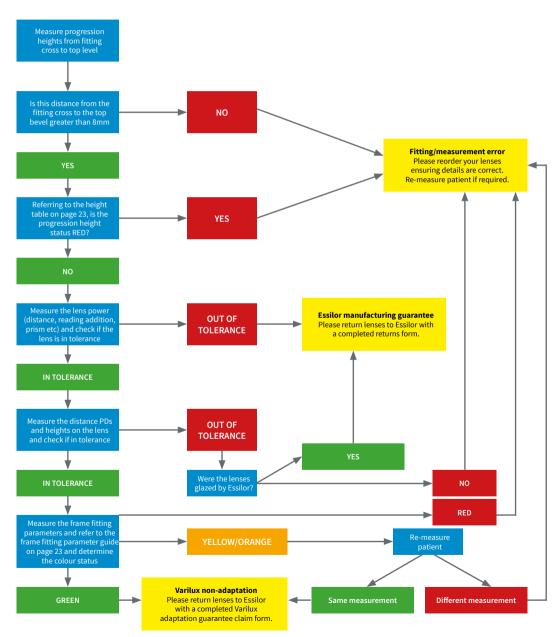






### VARILUX ADAPTATION DECISION TREE

Please use the following decision tree when completing a Varilux adaptation guarantee claim form to ensure the best patient satisfaction.



## **SPECIAL LENSES**

With Special Lenses you can offer the excellence of Essilor products to patients with a high sphere power, an out of range cylinder and/or a special parameter.



#### Meet all vision correction needs

Special Lenses are for patients with special optical requirements. Essilor can offer a complete range of solutions and expertise, to satisfy specific vocational needs or unique vision demands, helping you improve the quality of life of your patients.

#### **Patient benefits**

- Options for patients with high myopia and toroidal prescriptions to benefit from thinner and lighter lenses and an improved aesthetic
- Full two year guarantee against scratching and manufacturing defects with Crizal Prevencia and Crizal Sapphire UV
- Varilux Special Lenses are covered by the Varilux Guarantee Scheme

#### **Special Lenses characteristics**

- Flange curves enable edge thickness of concave lenticular lenses to be reduced significantly
- Franklin type mounting by bonding together two lenses of the same material, providing a wide range of possibilities to answer very special requests in term of power and usage
- Extremely high power and/or strong prism availability
- Elimination of annular scotoma

#### **Recommended for**

Patients with specific vocational or unique vision demands

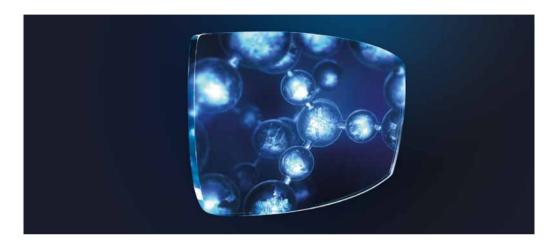
#### Please note:

- The prescription range available will depend upon the parameters ordered e.g. diameters, aperture and prescription combination
- When ordering Special Lenses we can only confirm your order once it has been received by the Special Lenses team

## **EYE PROTECT SYSTEM™**

#### HARMFUL LIGHT PROTECTION

Discover Eye Protect System™: A revolution in protection against harmful UV and Blue-Violet light in an aesthetically clear lens.



#### **UV** protection

- UV is one identified factor contributing to the development of cataracts<sup>(1)</sup>
- UVA & UVB rays are efficiently absorbed by the lens<sup>(2)</sup>
- UV protection measured by the E-SPF index(3)

#### **Smart Blue-Violet light protection**

- Blue-Violet part of visible light has been identified in recent research to be the most harmful to the outer retina and is one contributing factor of AMD<sup>(4)</sup>
- Blue-Violet absorbers target the most harmful Blue-Violet light
- More protective against Blue-Violet light than standard prescription lenses, uncovered by in vitro photoprotection tests on retinal cells<sup>(5)</sup>

#### **Aesthetic clarity**

- Enhanced lens aesthetics without altering a wearer's colour perception
- No residual yellow reflex
- No blue reflections

#### **Eye Protect System combined with Crizal UV**

- Boosts the overall UV protection of Eye Protect System as measured by the E-SPF index<sup>(6)</sup>
- Enhances the aesthetics of Eye Protect System lenses

#### **Crizal Prevencia powered by Eye Protect System**

- Enhanced harmful light protection
- Guarantee on Crizal Prevencia element for risk free dispense
- Ideal solution for patients wanting premium eye health protection

 $^{(1),\,(2),\,(3),\,(4),\,(5),\,(6)}$  See page 48 for details

## **LINEIS™ 1.74**

#### DISCOVER THE PLEASURE OF WEARING SPECTACLES

Looking good in spectacles is no longer just a dream. With Lineis 1.74 from Essilor, it's now a reality! An innovative ophthalmic lens with ultra high performance that preserves natural looks. It is ideal for strong prescriptions.



#### **Technology and Essilor knowledge**

- 1.74 material: UHI organic material
- Available across the premium Varilux designs and aspheric single vision designs including Essilor Eyezen
- Full and graduated Essilor tints available
- Available with Transitions Signature Gen8 Brown and Grey
- Compatible with all frame types, even rimless(1)

#### The flattest lens

- The flattest lens available today
- For myopes, up to 10 times less curved than a mineral UHI!

#### Ultra thin & light

- 50% thinner than a standard CR39 lens
- On average, 10% thinner than an AS 1.67 or a mineral 1.7
- For myopes, a thickness equivalent to that of a 1.8... but without the weight!
- Up to 3 times lighter than a mineral lens

# Help your patients to achieve visual confidence 63% of high prescription wearers<sup>(2)</sup> are not happy

of high prescription wearers<sup>(2)</sup> are not happy with their current spectacles. For half of them, their dissatisfaction is down to them not being happy with the way they look and feel in their spectacles, for example:

- Thick lenses
- Heavy spectacles
- Eve magnification

With Lineis 1.74, eyes feel natural and those with higher prescriptions will rediscover the pleasure of wearing spectacles.

68% of patients with strong corrections wish to wear attractive and discreet lenses that satisfy their needs for:

- Aesthetics
- Comfort
- Fashion

Material features		
Index	1.74	
Abbé number	33	
Density	1.46	
UV cut off	396nm	

<sup>(1)</sup> For more information please contact Customer Services

<sup>(2)</sup> Wearer study, Ireland 2001 - 73 mid to high spectacle wearers (50 myopes - 5.00 To -10.00 and 23 hypermetropes +3.00 to +6.00 already wearing organic lenses)

## **STYLIS® 1.67**

### THINNER AND FLATTER LENSES WITH MORE STYLE

Everything around us is becoming thinner, smaller and more stylish. Spectacle lenses are no exception. More and more customers are demanding lenses that are thinner and flatter for improved aesthetics. We are all more conscious of our personal appearance and realise that the choice of lens can enhance the look of our spectacles, whatever our prescription.



Some people are attracted to a lens by technological innovation or simply want the latest and best lens available. However, one thing we all have in common is that we want the best quality vision and perfect transparency from our lenses. Stylis 1.67 lenses provide perfect results every time.

#### **Elegant and discreet**

The Stylis 1.67 index lens material combined with an aspheric design makes Stylis lenses remarkably thin and attractive.

- When compared to a 1.5 index lens, Stylis 1.67 is up to 40% thinner
- Up to 6 times more impact resistant than standard CR39 lenses
- Available in spherical form for frames where the rim curvature is not suited to the flatter aspheric type. Please note that spherical form is supplied by default if aspheric is not requested

#### A range of benefits

- Transparent high-index 1.67 material, with an exceptionally clear, pure look
- Full UVA/UVB protection
- Ultra-flat bases with optimised base curve selection for optimal vision
- Specific hard coating for performance and adhesion with the lens material
- Perfectly adapted to the stresses applied by current mounting methods (drilling, grooving, notching etc...) for a perfect and durable fit whatever the type of frame
- Wide range of stock and prescription lenses
- Full and graduated Essilor Tints available

Material features		
Index	1.67	
Abbé number	32	
Density	1.36	
UV cut off	395nm	

## ORMIX™ 1.6

### THE MATERIAL YOU CAN RELY ON

Ormix 1.6 is a material you can recommend to wearers with confidence. Ormix 1.6 lenses perfectly meet wearers' needs. They are discreet and suitable for any occasion.



#### Thin lens

Thanks to its refractive index, Ormix 1.6 is up to 30% thinner than Orma 1.5.

#### **UV** protection

Ormix 1.6 lenses offer great protection against harmful UVA & UVB rays: 395nm cut off. UV rays can damage the retina just as they can harm the skin.

#### **Ultimate optical correction**

Ormix 1.6 material offer excellent contrast and clear images (V=41).

### Suitable for the most popular frames

Ormix 1.6 gives you perfect mounting every time – including rimless frames.

- Easy to edge
- Easy to drill

#### A wide range

Single vision Ormix 1.6 spherical and aspherical lenses are available in prescription and in stock, in an extensive power range. The optical design has been enhanced to create thinner lenses with high optical quality.

Ormix 1.6 lenses are also available across the whole Varilux range.

Single vision and Varilux lenses come as clear, Transitions or Xperio Polarised with Essilor's state of the art Crizal coatings.

Ormix 1.6 lenses can be tinted with Essilor Tints and are available with Crizal Sun UV.

Material features		
Index	1.6	
Abbé number	41	
Density	1.30	
UV cut off	395nm	

## **AIRWEAR® 1.59**

#### LIGHTNESS AND STRENGTH ALL IN ONE

For people who rely on their spectacles for daily use, having the right lens is paramount. The lenses must be comfortable yet robust enough to cope with all daily activities.



#### Airwear 1.59 lenses as light as a feather...

Airwear 1.59 lenses owe their ultra lightness to the material from which they are made, which boasts an unrivalled index/density ratio.

Airwear 1.59 is:

- 30% lighter on average than a 1.5 index lens
- 15% lighter on average than a 1.53 index lens
- 12% lighter on average than a 1.6 index lens

#### A lens made to last...

#### Shock and scratch-resistant...

Tests carried out prove that Airwear is 12 times more shock-resistant than standard plastic lenses. Airwear has also passed the most stringent European and American tests (Safety standard ANSI Z87.1).

Many sporting pastimes and some occupations increase the risk of damage to the eye. Airwear's extreme resistance to impact makes it the ideal choice for active wearers. Children also fall into this category and can now benefit from Airwear Junior and Airwear Crizal Kids, our Airwear lenses tailored for children. Airwear lenses are resistant to scratches.

All wearers can benefit from Airwear lenses and feel safe in them

#### A lens that makes your patients feel good...

Because of its 1.59 index, an Airwear lens is 20% thinner than standard 1.5 index lenses and perfectly suited to discreet, lightweight frames.

Its robustness and weight make Airwear lenses particularly suitable for rimless frames also.

#### A lens for all occasions

Perfect for outdoor activities, Airwear lenses provide great protection against harmful UVA and UVB rays. Airwear 1.59 is also available with Essilor Tints to protect wearers against glare even in bright sunlight.

Material features		
Index	1.59	
Abbé number	31	
Density	1.20	
UV cut off	385nm	

## CRIZAL® PREVENCIA™

#### LASTING PROTECTION FOR EYE HEALTH

Crizal Prevencia is an Essilor innovation that selectively filters light for improved eye health protection. Light plays an essential role in everyday life but can also be the cause of premature eye ageing.





#### **UV RAYS**

**UV RAYS ARE AS DANGEROUS TO OUR EYES** as they are to our skin. The resulting damage accumulates over a lifetime, accelerating eye ageing and the development of cataracts.

#### **BLUE-VIOLET LIGHT**

HARMFUL BLUE-VIOLET LIGHT is one of the factors recently identified which can cause damage to retinal cells.

UV and Blue-Violet light is present everywhere, indoors and outdoors.

PROTECTION IS RECOMMENDED FOR EVERYONE ALL DAY LONG AND ALL YEAR LONG

HEALTHY DAMAGED RETINAL CELLS CELLS

#### Selectively filters out harmful light

- Reduces retinal cell death by 25%<sup>(1)</sup> by filtering harmful Blue-Violet light
- 30% less back surface UV reflection with E-SPF 35 index lenses<sup>(1)</sup>
- For enhanced harmful light protection Crizal Prevencia can be combined with Eye Protect System.<sup>(2)</sup>

#### Preserves your overall well-being

 By letting essential visible light pass through (including good Blue-Turquoise), which regulates sleep/wake cycles, mood, cognitive performances, etc...

#### Provides optimal vision & durable transparency

 By offering the most complete protection against reflections, scratches, smudges, dust and water

### Protects against the enemies of clear vision















<sup>(1)</sup> See page 48 for details.

<sup>(2)</sup> Discover Eye Protect System on page 27. Harmful light = UV and Blue-Violet light

## CRIZAL® SAPPHIRE UV™

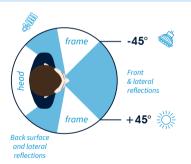
ALMOST INVISIBLE(1)

# Crizal Sapphire UV is the perfect combination of excellent anti-reflective efficacy and strong UV protection. (1)



#### A NEW WAY OF THINKING ANTI-REFLECTIVE LENSES

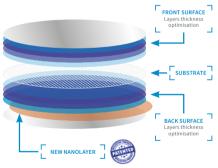
Anti-reflective lenses were designed to be efficient only on frontal angle between -15° and +15°



- First anti-reflective lens designed to reduce reflections whatever the light incidence angle, from -45° to +45°, both on front and back surfaces of the lens
- New Alpha (α) measurement indicates the overall anti-reflective efficiency, whatever the light direction and taking into account both surfaces of the lens.
- With Alpha (α) calculation\*:
   Reflections at all angles, on both surfaces of the
   lens, are reduced by up to 25% compared to Crizal
   Forte UV

## A NEW WAY OF DESIGNING ANTI-REFLECTIVE LENSES

Both surfaces are interacting together to reduce reflections



- The thickness of the layers is recalculated to provide multi-angular property on both surfaces of the lens.
- On the back surface, an innovative SIO2 nanolayer structure is added to minimise visible light reflections at 360° while keeping a high level of UV protection (protected by patent applications).

## **CRIZAL® DRIVE**

#### ENHANCE VISUAL COMFORT FOR SAFER DRIVING AT NIGHT

Crizal Drive enhances the driving visual experience for optimised comfort. It is a premium anti-reflective coating that offers impeccable clarity of vision. Thanks to the coating performance reflections are up to 90% less when driving at night.



#### Why do we experience discomfort at night?

Our vision is not adapted to this environment. Rod cells are the only photoreceptors in the retina to react to low lighting. This is what we call mesopic or night vision. Eye sensitivity is different in the day time than at night. At night, we are exposed to multiple and intense sources of light that create reflections and glare. These reflections and glare disturb rod cells, creating discomfort and lower visual acuity.

When night comes, multiple sources of light (headlights, traffic lights...) impact our vision creating:

- Difficulty in adapting to glare
- Low peripheral vision
- Decreased contrast sensitivity
- Increased response time

#### **Introducing Crizal Drive**

Crizal® Drive is a premium anti-reflective coating that offers impeccable clarity of vision. Thanks to the coating performance reflections are up to 90% less when driving at night<sup>(1)</sup>, because of its perfect adaptation to lightwaves and extreme clarity of vision. It's also as effective as Crizal Sapphire UV during the day<sup>(2)</sup>.

#### **Patient benefits**

- Better clarity of vision throughout the day and night
- A Crizal coating that protects your patients lenses from the enemies of clear vision

#### Protects against the enemies of clear vision









protection<sup>(3</sup>

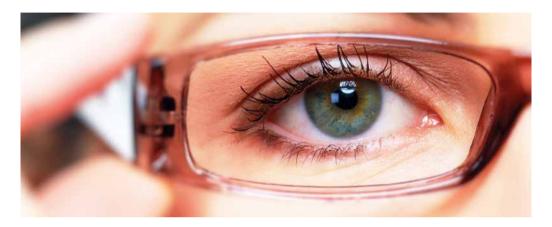
<sup>(1)</sup> vs. a standard hard coat lens with no anti-reflective coating

<sup>(2)</sup> In-Life Wearers Test Rupp+Huhbrach Optik 'AR day and night' Eyedrive GERMANY - 2016 n=49

<sup>(3)</sup> See page 48 for details.

## CRIZAL® GLAZING GUIDE

Follow these instructions carefully to ensure the Pad Control System stays in place during every step of the glazing process.



#### Lens features

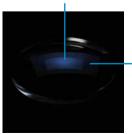
One of the distinctive features of the Crizal coatings (Crizal Prevencia, Crizal Sapphire UV, Crizal Drive, Crizal Easy UV, Crizal Sun UV) is a blue layer called the Pad Control System that allows edging without the need for special adhesive pads.

This coating ensures that standard blocking pads stick to the lens and retain a firm hold throughout edging and that other operations such as grooving, drilling and retouching can be carried out normally.

The Pad Control System alters the lens aspect by giving it a blue reflection. After cleaning with soft tissue paper or a cotton cloth when lens mounting has been completed, the lens will go back to the original Crizal Prevencia / Crizal Sapphire UV / Crizal Drive / Crizal Easy UV / Crizal Sun UV aspect.

#### Initial aspect of the lens on delivery

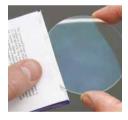
Blue reflection due to the unique Pad Control System



Final aspect of the lens after cleaning
Blue-Violet reflection of Crizal Prevencia
Discrete blue reflection of Crizal Sapphire UV
Pink amber reflection of Crizal Drive
Green reflection of Crizal Easy UV / Crizal Sun UV

#### Lens handling

Ensure only your fingers make contact with lens edges.



When handling the lens before and after edging and during grooving, drilling and retouching, the Pad Control System must remain on the front and back surfaces of the lens at all times.

Avoid damaging the blue layer during glazing operations through hand contact or accidental cleaning and fingerprints.

Avoid lens surface inspection on receipt of the lens.

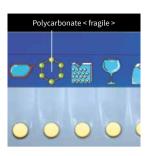
#### Blocking



#### For the best blocking

- Select the right edging blocks. The edging block must be as big as possible according to the frame and match the front curve of the lens
- Do not put your finger on the Pad Control System
- Check that the blocking pad is dry (if it has just been used)
- Carefully put the blocking pad onto the lens. Avoid re-blocking

# **CRIZAL® GLAZING GUIDE**



# **Edging**

- Select the edging cycle adapted to anti-reflective lenses and select the correct lens material option: Polycarbonate, UHI for Lineis 1.74, MHI for Stylis 1.67 (Plastic by default) or Plastic
- Check before each operation that all wheels and blades are clean and sharp
- Select correct clamping option: Eg. fragile option for MHI lenses
- Place the lens carefully on the edger clamping mechanism
- After the edging cycle, rinse the lens in clean water

It is imperative that all glazing, drilling and retouching operations are carried out with the Pad Control System in place.

#### **Edgers: Technical features recommended:**

Edgers must include Polycarbonate cycle for glazing Airwear 1.59. For Stylis 1.67 edging, it is recommended to select the << mhi >> material option otherwise select << plastic >>.



# Before final mounting

- Check the exact sizing of the lens before de-blocking
- Take off the block after all the edging operations have been carried out making sure to twist the block off rather than prizing it
- Take off the Pad Control System in the edge areas, near joints and the bridge by cleaning with soft tissue paper or a cotton cloth

This operation removes coating residues which would be unreachable once the lens is mounted in the frame



# Final cleaning and lens surface checking

Cleaning must be carried out with soft tissue paper or a cotton cloth by cleaning both faces of the lens simultaneously.

Microfibre cloths do not easily remove the Pad Control System. Check that the blue reflection has been totally removed.

Now that the Pad Control System has been taken off, the surface of the Crizal Prevencia / Crizal Sapphire UV / Crizal Drive / Crizal Easy UV / Crizal Sun UV lens can be inspected for aspect.

Note: Do not use Acetone to clean Crizal lenses, use Essiclean. Essiclean is no a frame cleaner.



# Usage guidelines for stock lenses only

- For Crizal Prevencia / Crizal Sapphire UV / Crizal Easy UV / Crizal Sun UV before edging remove the static film by pulling the strip
- All other operations are as described above

#### **Recommended consumables:**

Soft tissue paper: Wypall L40° ©Kimberly Clark

To mark the drilling points or the pal control points it is possible to use the marker pen Staedtler "permanent' or 'permanent special'.

# TRANSITIONS® SIGNATURE™ GEN8

THE BEST OVERALL PHOTOCHROMIC LENSES(1)

Transitions Signature Gen8 lenses are the new generation of Transitions lenses and are the result of five years of research and development.



The combination of a disruptive nano-composite matrix and a new generation of ultra agile dyes delivers breakthrough technology.

Transitions Signature Gen8 is Transitions fastest lens providing all the benefits patients want. Using a multidimensional approach, Transitions Signature Gen8 lenses deliver a new frontier of performance, without sacrificing any level of performance.



# **Iconic colours - Also available in Transitions Style Colours**







# AVAILABLE IN BROWN, GRAPHITE GREEN AND GREY

- (1) Based on achieving the highest weighted composite score among main everyday photochromic lenses across measurements of key photochromic performance attributes weighted by their relative importance to consumers. The survey and analysis used to measure attribute relative importance was conducted by an external research agency, in France, Italy, UK & US in 2019.
- (2) See page 48 for details.

Transitions Signature Gen8 lenses are covered by the **Love 'em or Leave 'em guarantee**. For more information, please visit our website **ecp.essilor.co.uk** 

# TRANSITIONS® SIGNATURE™ GEN8 STYLE COLOURS

PICK YOUR COLOUR, CHOOSE YOUR STYLE

Transitions Style Colours are available in a choice of four vibrant colours and integrate the breakthrough technology from Transitions Signature Gen8.



# The ideal lens for fashion-conscious wearers

- New and improved Amber is conveying a special style twist: Vintage with fashion. It's great in a lot of colour combinations, such as light tortoiseshell or honey
- Amethyst coordinates either with warm and cold hues frames. The contrast will be striking with a purple, lilac or pink frame
- Emerald is the most versatile option. Any frame in light brown tones will be enhanced with the fresh touch of colour
- Sapphire with its cool hue looks great with a blue acetate or metal frame. It brings a cool factor and exciting twist

# Transitions Style Colours are for patients who are:

- Stylish and fashion conscious
- Health conscious and want the most from their lenses
- Always on the go
- Interested in products with increased functionality

# Available in four fashionable colours









AVAILABLE IN AMBER, AMETHYST, EMERALD AND SAPPHIRE

(1) See page 48 for details.

# TRANSITIONS® XTRACTIVE™

# BEST FOR EXTRA PROTECTION, EVEN IN THE CAR

Uniquely designed to protect your eyes from the brightest sun outdoors and harsh artificial light indoors.



# **How do Transitions XTRActive lenses work?**



## **Outdoors**

Uniquely designed for extra light protection, even in the brightest sun and hottest conditions.



# Indoors

Subtle indoor tint relaxes many wearers' eyes when they are in brightly lit internal environments.



# In the car

Achieves up to category 2 darkness behind the windscreen to protect eyes from sunlight while driving.

# Transitions XTRActive lenses are for patients who:

- Spend more time outdoors
- Drive frequently
- Are light sensitive or concerned about eye health
- · Are interested in products with increased functionality

# **Advanced protection**

Crizal Transitions lenses feature double protection against UV and glare, combining the best light control technology with optimal UV protection for everyday lenses and are up to three times more protective against Blue-Violet light than standard prescription lenses.<sup>(1)</sup>







# AVAILABLE IN BROWN, GRAPHITE GREEN AND GREY

(1) See page 48 for details.

# **TRANSITIONS® XTRACTIVE™ STYLE MIRRORS**

OUR MOST STYLISH PHOTOCHROMIC LENS

Transitions XTRActive Style Mirrors are the perfect photochromic lens for fashion wearers.



# **Benefits**

# **Fashion**

Transitions XTRActive Style Mirrors offer the comfort and protection of a photochromic lens only with added WOW factor. Mirrored lenses are very on trend and will inspire a new generation of Transitions wearers with its stylish shimmer.

# **Intelligent visual comfort**

Transitions XTRActive Style Mirrors have a hint of a tint indoors and will seamlessly activate outdoors, even in the car, providing wearers with visual comfort all day long.

# Protection

100% of UVA and UVB light is blocked, protecting wearers at all times.

# Available in four fashionable colours









AVAILABLE IN BLUE, GOLD, GREEN AND SILVER

(1) See page 48 for details.

# **QUALITY ASSURANCE**

# AN INTEGRATED APPROACH TO REDUCE RISK

Essilor has adopted an integrated approach to quality systems in order that all activities across the business operate effectively. There are four key elements.<sup>(1)</sup>



# **Products of the highest standard**

Essilor operates in accordance with BE EN 13485: 2015 to ensure that our products meet customer and CE requirements. Essilor maintains and operates within European and UK optical and product standards. CE marking ensures that products supplied by Essilor are safe in use and meet the needs of our customers. Whilst at the forefront of implementing new technology, rigorous testing of new processes and products ensures risk is fully managed prior to launching to the market.

## Safety for our people

Essilor is certified to BS EN ISO 45001 which ensures that employees, sub contractors and visitors are safe while on site. We are confident in our full compliance with the ever increasing volume of legislation. We take pride in the good safety status of the business.

# Care for the environment

Essilor was the first prescription laboratory in the Essilor Group worldwide to gain certification to ISO14001:2015 which ensures that all significant environmental impacts are identified and controlled.

Third parties confirm our compliance with all appropriate legislation and we are actively working to maximise energy efficiency, increase waste recycling and reduce water and solvent consumption. We adopt ethical purchasing policies and seek to ensure that all our suppliers and sub contractors meet our stringent requirements. This is further supported by strong links with regulatory bodies.

# Reducing the likelihood of a crisis

Essilor has implemented a business continuity programme with documented contingency plans should a serious incident occur. This ensures that we are best placed to maintain levels of service to our customers in the unlikely event of a fire, flood, significant IT failure, supply issue or other scenario. We are confident we are able to respond quickly and in a structured manner, with each person being clear on their responsibilities.

# Follow-up

Please contact our Quality Department on 01454 417 100 should you wish to discuss relevant information in relation to these topics.

<sup>(1)</sup> Policies are published for each of the four elements and documented objectives shared across the business to ensure ongoing best practice.

# **OPTICAL TOLERANCES**

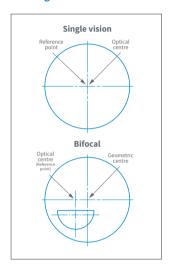
# Tolerances on the power of lenses(1)

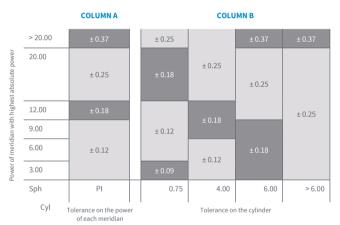
The tolerances apply to the back vertex power and should be measured at the optical centre of a single vision lens, distance centre of a bifocal or the distance checking circle of a varifocal lens. The tolerance of the power for each meridian is determined by the highest absolute meridian power. Use column A to check that the meridians are within tolerance (e.g. single vision lens power S -4.75 C -2.25, highest meridian is -7.00. The tolerance on -7.00 is  $\pm$  0.12; tolerance on -4.75 is  $\pm$  0.12).

To check that cylinder power is within tolerance, use column B (e.g. single vision lens power S -4.75 C -2.25, highest meridian is -7.00, cylinder is -2.25 and tolerance is  $\pm$  0.18).

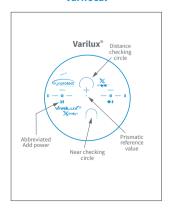
(1) ISO 8980-1 & 2

# Single vision and bifocal





#### Varifocal



	COLUMN A			COLUMN B				
Power of meridian with highest absolute power	> 20.00	± 0.37		± 0.25		± 0.37	± 0.37	
	20.00	± 0.25		± 0.18	±0.25	± 0.25	± 0.25	
	12.00							
	9.00	± 0.18			± 0.18			
	6.00	± 0.12		± 0.12		±0.18		
	Sph	PI		0.75	4.00	6.00	> 6.00	
	Cyl Tolerance on the power of each meridian		r	Tolerance on the cylinder				

# **OPTICAL TOLERANCES**

Accuracy of optical centration and prismatic power should be assessed at the nominal geometric centre of a single vision lens, the distance optical centre of a bifocal lens or the prism reference point of a varifocal lens.

**NOTE:** Varifocal lenses from Essilor incorporate a base down cosmetic thinning prism equal to two-thirds of the reading addition. This should be taken into account when checking any prescribed prism.

# Prescriptions compensated for the 'as worn' position

Certain Essilor lens designs have the lens prescription modified for the 'as worn' position when fitted to the frame or mount. These include all Varilux X series, Varilux Physio 3.0, Varilux E series and all lenses with eyecode.

With such lenses the prescription when measured on a focimeter differs from the ordered prescription.

Lenses with compensated prescriptions are supplied in lens packets displaying the ordered prescription first and the compensated prescription below.

#### Ordered

Sph +3.75 Cyl +0.75 Axis 30 Add 2.75

# Compensated

Sph +3.71 Cyl +0.61 Axis 39

The prescription measured at the power checking circle is a combination of the compensation and the prescribed power. The wearer will perceive the prescription as the prescriber intended it. It is recommended that the lens packets should be forwarded to the final point of checking in the practice so the measured values are visible for this purpose. When the measured cylinder value is 0.20D or less, the axis becomes impractical to measure and so is not displayed.

# Tolerances on the direction of cylinder axis - all lens types\* CYLINDER POWER (D) <=0.50 >0.50 <=0.75 >0.75 <=1.50 >1.50 TOLERANCE ON AXIS (DEG) $\pm 7^{\circ}$ $\pm 5^{\circ}$ $\pm 3^{\circ}$ $\pm 2^{\circ}$

Tolerances on the addition power - Bifocal and varifocal lenses*						
VALUE OF ADD (D)	<=4.00	>4.00	The addition power of all Essilor bifocal and varifocal lenses is expressed as the difference between the front vertex distance power and			
TOLERANCE (d)	± 0.12	± 0.18	the front vertex near power			

Tolerances on optical centration prismatic power*					
PRISMATIC POWER	HORIZONTAL	VERTICAL			
>0.00 and =/<2.00	± (0.25 + 0.1 x smax)	± (0.25 + 0.05 x smax)			
>2.00 and =/<10.00	± (0.37 + 0.1 x smax)	± (0.37 + 0.05 x smax)			
>10.00	± (0.50 + 0.1 x smax)	± (0.50 + 0.05 x smax)			

**NOTE** smax is the focal power in dioptres in the meridian of higher absolute power.

NOTE An example of applying the above tolerances to a distance power of +0.50/- 2.50 axis 20 in a varifocal prescription with a prismatic power of not greater than 2.00A is as follows:

For this prescription, the principal powers are +0.50D and -2.00D so that the meridian of higher absolute power is 2.00D.

For a power of 2.00D the horizontal tolerance is  $\pm (0.25 + 0.1 \times 2.00) = \pm 0.45 \Delta$ . The vertical tolerance is  $\pm (0.25 + 0.05 \times 2.00) = \pm 0.35 \Delta$ .

# **CE REGULATIONS**

# **EUROPEAN STANDARDS FOR OPTICAL PRODUCTS**



CE regulations for ophthalmic optic products were introduced in June 1998. The purpose, set out in European Directive 93/42, is to harmonise national standards for optical products throughout the European Union, through the International Standards Organisation (ISO).

#### **Assurance**

Essilor Ltd confirms that all the lenses in our product catalogue meet the key requirements defined in European Directive 93/42.

Our lenses have been tested and meet all the following criteria:

- Optical performance Standard EN/ISO 14889, 8980-1 & 2
- Physiological performance, flammability and static robustness
   Standard EN/ISO 14889
- Transmission specifications and test methods Standard EN/ISO 8980-3
- Coatings test specifications Standard EN/ISO 8980-4
- Glazed product
  BS EN ISO 21987 Mounted spectacle lenses
- Frames standard BS EN ISO 12870 2014
- Ready to wear sunglasses
   BS EN ISO 12312-1: 2014 A1 2015

#### **CE certification mark**

The CE certification mark is applied to all Essilor lens packaging. It indicates that the lenses comply with the relevant CE regulations.

# **Product conformity**

Orders from opticians for lenses whose properties (ie. thickness, tint etc) do not comply with the requirements of Directive 93/42 cannot be supplied. Treatments applied to ophthalmic lenses by the practice or a third party are the responsibility of the retailer and Essilor Ltd will not be liable.

# Standard information and restrictions

We are required to provide all the information and restrictions required by MDR 2017/745 regarding the correct use of our products. This information should be passed on to your customers. Restrictions on lens usage appear on our delivery note to act as a reminder.

# Glazing

If you glaze or use NRE (remote edge) you are required to register with the Medicines and Healthcare products Regulatory Agency (MHRA). It is an offence not to be correctly registered. The CE regulations prohibit Essilor Ltd from glazing any new frames which are not marked with the CE mark or are not accompanied by a tag or literature which has the CE mark. This does not refer to second hand frames (so-called re-glazing) where normal quality verification activity is conducted.

## **Patient information**

Opticians are required to give patients information and advice on the correct use, care and limitations of their lenses. The information required is specific, particularly in terms of the restrictions on use of lenses. Much of it is information that any optician would give patients as a matter of course, but under the Directive, opticians are encouraged to do so systematically.

# **Driving**

Lenses are deemed unsuitable for driving if light transmission is less than 8%, or if the tint affects the perception and recognition of traffic lights.

For night driving, light transmission should not be less than 80%.

# **LENS RETURNS**

# ESSILOR LENS RETURN POLICY

## General

It is the aim of Essilor Ltd to provide all products and services to the appropriate ISO standard. If this is not the case we would like to be given the opportunity to replace the product free of charge or arrange a credit upon receipt of the defective lens. This policy applies to lenses ordered as uncuts, glazed lenses which are part of an Essilor glazed order and remote edged lenses.

In order to rapidly process the returned order, please send the defective lenses accompanied by the original delivery note and a fully completed Essilor returns notification form (ref 57-09-011) to:

Essilor Returns Department Essilor Ltd, Cooper Road, Thornbury, Bristol BS35 3UW

Or, for Irish customers

Essilor Ltd Troopersfield Industrial Estate, Blessington, Co Wicklow

Failure to do so may result in lenses returned to you and unactioned. All returns forms can be downloaded from ecp.essilor.co.uk Defective items are required to be returned to Essilor Ltd within 28 days of despatch.

We are committed to processing returned orders on the working day that we receive them.

## **Optical tolerances**

Essilor lenses are manufactured in compliance with ISO 14889 – 2003. Lenses found to be outside of these tolerances will be replaced free of charge or credited providing the lenses are not edged. Some Essilor lenses will display the ordered power and the compensated power on each lens packet. When checking such lenses the tolerances apply to the compensated power readings.

Customers will be contacted and advised where the returned lenses are found to be within tolerance and the lenses will be returned with no credit or remake action.

# **Cosmetic quality**

Essilor lenses are manufactured to high standards of visual appearance. If minor visual defects are found upon receipt of lenses, please contact Customer Services who will in some instances issue authorisation for cutting.

# Order error

Essilor Ltd will not replace free of charge or credit lenses where the customer has entered the order incorrectly using EDI systems. Where an order is placed by telephone, Customer Services will read back the order and take the name of the person who placed the order. It is in your interest to ensure the information is correct at the time of ordering. Essilor Ltd will not replace free of charge or credit read back orders. All calls are recorded and will be checked if necessary.

Where an order is duplicated by Essilor Ltd, a credit will be issued when both delivery notes relating to the same order are received along with the Return Notification Form (ref 57-09-011). Customer duplication will not be credited.

We can not replace free of charge or credit an order that has been queried by us and accepted for processing at your own risk. Essilor Ltd cannot be held responsible for any orders cancelled by your customer. Cancellation will only be accepted with a cancellation reference and the name of the Customer Services person accepting the cancellation. Essilor Ltd will replace and charge when the returned order specification has changed from the original order.

#### Uncut returns process

In most cases Essilor Ltd will replace products rather than credit. Where a product is believed to be defective the product should be returned to Essilor for replacement along with the original delivery note and a fully completed Essilor returns notification form (ref 57-09-011), which can be found on ecp.essilor.co.uk in the lenses section under Essilor guarantees.

Sometimes speed is important, if this is the case please use the FAST TRACK order service. Charged replacement lenses can be ordered using the Essilor FAST-TRACK order service via the Customer Services order line. A new manufacturing order number will be quoted and the lenses will be charged. The defective lenses should be sent back to Essilor within 28 days from the original date of despatch and the Returns Notification Form must quote the FAST-TRACK order number. If the returned lenses are found to be defective a credit will be issued which will cover the cost of the product or service supplied and not any subsequent process or treatments applied by the customer.

## Stock returns process

Returned stock lenses should be sent to Essilor Ltd in an unopened and undamaged state. The lenses should be available in the current catalogue and covered by the relevant paperwork. We are committed to advising when stock is to be discontinued with substantial lead time for bulk returns. Unwanted stock exceeding 18 months will not be accepted.

## **Glazed products**

Essilor Ltd glazes lenses in compliance with BS2738-1:1998. Lenses glazed by Essilor Ltd which are found to be outside of these tolerances will be replaced and reglazed free of charge or credited. Essilor Ltd will not be responsible for broken or damaged glazed lenses caused by accidental damage, frame adjustments or mishandling. Essilor Ltd only accepts reglaze frames (patient's own) at own risk and will not be covered by credit. All reglaze orders will be confirmed at own risk on the day of receipt. Essilor Ltd will however, replace or credit (upon receipt of cost invoice) any new frame damaged during glazing process.

# **Coating guarantee**

All coatings including adherence are guaranteed for two years. This applies to all Crizal UV coatings and Hard coat. The lenses will be replaced free of charge. Damage to the lens coating or material due to adverse wear and tear or patient misuse will not be covered.

#### **Transitions**

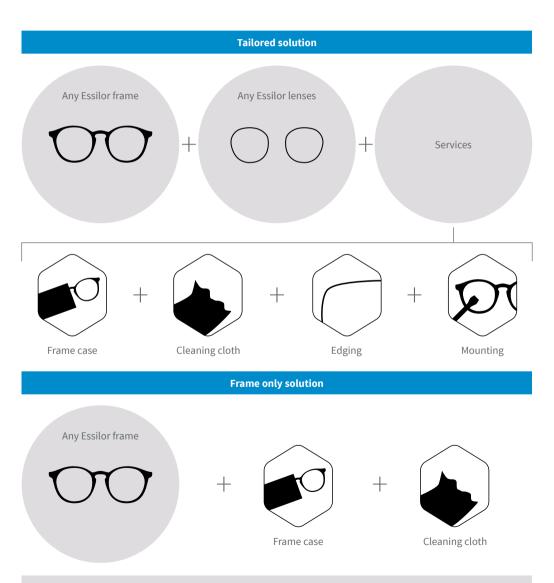
The performance of Transitions lenses is guaranteed for two years. After that time, the performance cannot be guaranteed.

# FRAMES FROM ESSILOR

# A UNIQUE BRAND WITH A WIDE RANGE TO CHOOSE FROM

Available exclusively to independent opticians, Société des Lunetiers is bringing both an advantageous service to opticians and a strong collection of shapes and colours.

Supplied from our Thornbury site, Société des Lunetiers frames are available as a frame only order or glazed with your lens order without the need to send the frame in.



# **SOCIÉTÉ DES LUNETIERS**

# A FUSION OF TRADITION AND MODERNITY

Founded in 1849, the innovative Société des Lunetiers is an integral part of the Essilor DNA, having invented the Nylor frame and the famous Varilux lens.

With timeless style that subtly combines modern materials and vintage designs, Société des Lunetiers revisits its classics without betraying the brand's original spirit: a unique fusion of tradition and modernity.



## **Brand story**

Société des Lunetiers was born of a unique human adventure, which began in 1849 in the heart of Paris. It was in the historic district that thirteen Parisian spectacle makers, driven by the passion of their craft and beautiful workmanship, came together to create their frame manufacturing company.

# **Collection summary**

The range offered by Société des Lunetiers is broad covering all the shapes that are sought after. Fused with Parisian chic, the range has both expressive and classic colours to suit all.

# Marketing

To help showcase the brand in practice, we have a range of POS available to order on our website or email: poscrm@essilor.co.uk

Alternatively you can utilise our experienced trade marketing team to create anything from a one-off bespoke door drop to an extensive annual marketing activity plan including digital marketing & press releases.

# **ADDITIONAL INFORMATION**

# SUNWEAR AVAILABILITY





Our innovative polarised brand available in seven colours – full and graduated.



Seven fashionable colours, two tint densities – there is an E-Mirror UV for every style.



Our range of specially developed tinted lenses.



A tool to educate and raise awareness that sun lens protection is more than a 100% UVA/UVB sticker.



Taking protection and visual performance to the highest level.



All you need to know about protection and usage.

# ADDITIONAL INFORMATION

# EYE PROTECT SYSTEM™ / E-SPF® INDEX

#### **EYE PROTECT SYSTEM CLAIMS**

- 1 Sunlight and the 10-year incidence of age-related maculopathy: The Beaver Dam Eye Study. Arch. Ophthalmol., 122, 750-757. New discoveries and therapies in retinal phototoxicity, Serge Picaud and Emilie Arnault, Points de Vue N°68, Spring 2013.
- 2 Orma 1.5 does not absorb 100% UV light.
- 3 The E-SPF® index depends on the lens material itself and the coating. E-SPF® is a global index rating the overall UV protection of a lens. E-SPF® was developed by Essilor International and endorsed by 3rd party experts. Lens performance only. The E-SPF® index excludes direct eye exposure that depends on external factors (wearer's morphology, frame shape, position of wear).
- 4 Eye health relies on various factors (age, genetic, smoking, diet...).Light is one of the modifiable risk factors on which an ophthalmic lens may act. The outer retina is composed of retinal pigment epithelium (RPE) cells plus the outer segments of visual photoreceptors RPE is critical to the functioning, survival and constant renewal of photoreceptors. In vitro photobiology experiments conducted by Essilor and Paris Vision Institute. Primary retinal pigment epithelium cells were photosensitised with A2E, a major component of the age pigment lipofuscin. These cells were then exposed for 18 hours to 10 nm illumination bands centered from 390 to 520 nm in 10 nm increments (+ illumination band centered at 630 nm). To mimic physiological light conditions, light irradiances were moderate and normalised with respect to the natural sunlight reaching the retina. (Arnault et al., 2013 PLOS One).
- 5 For Eve Protect System<sup>™</sup> lenses with Crizal Forte® UV. 25% decrease in light-induced retinal cell death versus no filter. For standard lenses: Orma 1.5 or Airwear 1.59 with Crizal Forte® UV, about 7% decrease (mathematically modeled). Smart Blue Filter™ lens feature provides a minimum level of efficacy, decreasing light-induced retinal cell death versus no filter: 25% (+/-5%). It depends on the lens material and the coating and can be evaluated by in vitro tests on RPE cells or by mathematical modeling. Blue-Violet light protection is measured through in vitro photobiology experiments conducted by Essilor and a 3rd party. Photosensitized RPE (Retinal Pigment Epithelium) cells were exposed to Blue-Violet light, reproducing the physiological exposure to sunlight of the 40 year old eye. For Eye Protect System™ lenses with Crizal Forte® UV, 25% decrease in light-induced retinal cell death versus no filter. For standard lenses: 1.5 or Poly material with Crizal Forte® UV, about 7% decrease (mathematically modeled).

# **CRIZAL SAPPHIRE UV CLAIMS**

- 1 Perceived invisibility based on Wearers Test 2017 (Fr) N = 50 - resulting from a better perception of anti-reflective feature.
- 2 Main premium competitors analysis made by Essilor R&D International
- 3 Crizal Sapphire UV almost invisible compared to Crizal Forte UV.

#### **E-SPF 35 INDEX CLAIMS**

# E-SPF 35 index claims/30% less back surface UV reflection with E-SPF \* 35 index lenses

Compared to lenses with E-SPF® 25 index in the same UV exposure conditions. Back surface UV reflection is weighted by the UV risk function W (\(\Delta\)). E-SPF® 35 index means that 97.2% of the UV reaching the back surface of the lens are not reflected towards the eyes; a tolerance of -0.5% is applicable.

The E-SPF® index depends on the lens material itself and the coating. E-SPF® is a global index rating the overall UV protection of a lens. E-SPF® was developed by Essilor International and endorsed by 3rd party experts.

The E-SPF® index relates to lens performance only and excludes direct eye exposure that depends on external factors (wearer's morphology, frame shape, position of wear). E-SPF®=35 for Crizal Prevencia and Crizal Forte UV lenses with Lineis 1.74, Stylis 1.67, Ormix 1.6 or Airwear 1.59. E-SPF®=10 for Crizal® UV lenses with Essilor Orma 1.5®.

The E-SPF® rating system is the result of several years of unparalleled experimentation initiated by Essilor and validated by independent experts.

#### For E-SPF 25 claims

The E-SPF® index depends on the lens material itself and the coating. E-SPF® is a global index rating the overall UV protection of a lens. E-SPF® was developed by Essilor International and endorsed by 3rd party experts. Lens performance only.

The E-SPF® index excludes direct eye exposure that depends on external factors (wearer's morphology, frame shape, position of wear). E-SPF®=10 for Crizal® UV lenses with Essilor Orma 1.5®.

#### **CRIZAL PREVENCIA CLAIMS**

Crizal Prevencia blocks 20% of the harmful Blue-Violet light, reducing retinal cell death by 25%. The Blue-Violet light cut may slightly differ depending on lens material. In vitro experiments conducted by Essilor and Paris Vision Institute, retinal pigment epithelium cells were exposed to Blue-Violet light, reproducing the physiological exposure to sunlight of the 40 year old human eye.

For lenses with Crizal Prevencia coating, 25% (+/-5%) decrease in light induced retinal cell death versus standard prescription lenses, based on in vitro photoprotection tests on retinal cells.

Standard AR lens = a lens with an AR coating, non-UV optimised without blue protection.

Over time harmful light is one contributing factor of eye diseases (cataract, AMD):

- 1 McCarty CA, Taylor HR. A review of the epidemiologic evidence linking ultraviolet radiation and cataracts. Dev Ophthalmol. 2002; 35:21-31.
- 2 Sunlight and the 10-year incidence of age-related maculopathy: The Beaver Dam Eye Study. Arch. Ophthalmol., 122, 750-757.
- 3 New discoveries and therapies in retinal phototoxicity, Serge Picaud et Emilie Arnault, Points de Vue N°68, Spring 2013.

# **Lens ordering**

Telephone: 01454 281 281 Fax: 01454 281 282

Email: orders@essilor.co.uk e-Store: ecp.essilor.co.uk

# Lens support

e-Store: 01454 281 281

Essilor Bristol glazing: 01454 423 254 Essilor London glazing: 0207 421 6161 Essilor Manchester glazing: 0161 866 8011

Instruments: 01454 423 457

Lens technical assistance: 01454 423 253

Marketing: 01454 423 450 Returns / quality: 01454 281 281

# **Essilor Ltd**

Cooper Road Thornbury Bristol South Gloucestershire BS35 3UW

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