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E&EOptics

E & E Optics Ltd.

CE Precision Multi-Focal

Concentric Eccentricity Prebyopic MultiviSion

FITTING & REFERENCE GUIDE

The born of **CE Precision** is to provide practitioners a simple entry method to start fitting gas permeable lenses for senior citizen. **CE Precision** allows Optometrist to feel convenient and confident to fit Multi-focal GP lens. And it also let the patient change from Single-Vision or Mono-Vision to Multi-Focal lenses without any adaptation period.

NINE BENEFITS OF CE Precision

- 1. It may be the most simplified and effective system of Multi-Focal.
- Eye care professional will not have any hassle of choosing appropriate Multi-Focal design for long term RGP lens wearer. The Base curve design is compatible to Bi-aspheric GP lens design made by E & E Optics Ltd. But only add 0.50 eccentricity on the base curve in order to further improve the near vision and eliminate the aberration
- 3. You do not need to buy trial set if you have experience fitting regular GP lens.
- 4. Easiest method of evaluation and adjustment when troubleshooting is needed. The fluorescein pattern is the same as to conventional GP lens fitting.
- 5. Save you a lot of chairing time when switching regular GP lens to Multi-Focal lens. No change of parameter, no adjustment needed, no material and color changed, the only change is increasing practice income.
- 6. Almost reach the Maximum three diopters of contact lens ADD power limit.
- 7. Beyond the limit if combined with moderate or enhance mono-vision fitting method.
- 8. One stone hit two birds fitting. You got 14 lenses trial set to fit both regular GP and **CE Precision** Multi-Focal lenses.
- 9. All lenses are made to order, you have plenty of freedom to choose lens material, color, diameter and edge lift etc., you can order distance power up to +/- 25.00D.

INTRODUCTION

Many of contact lens wearers are reaching certain age to depend on reading glasses for near vision. Most of them do not want to give up contact lens wear if there have choice.

The **CE Precision** is the easiest available way to fit Multi-Focal lens. Most of the gas permeable lens wearer do not need adaptation period. Even new wearers adapt in a very short time.

The **CE Precision** Multi-Focal from E & E Optics was specifically developed with the needs of the mature presbyopic patient in Asian countries. The lenses designed and manufactured by E and E Optics in Hong Kong. This design was based on many years' theoretical and clinical research in Asian countries.

All presbyopic GP lens design meet the needs of emerging and moderate presbyopes.(± 1.00 to $\pm 1.75D$) When most the presbyopia reach ± 2.25 or above. Practitioner need to have good fitting skill and much experience on combination of products and modalities to achieve the acceptable fit for their patient.

To dates, there has no Multi-Focal design that is 100% successful across the entire range of presbyopic patients. Just like Lens for Orthokeratology, most patient need to compromise distance and near vision to reach self-satisfied 20/happy, not 20/20.

DESIGN PHILOSOPHY

CE Precision combined E&E Optics Bi-aspheric GP lens base curve design with a flexible, concentric front surface, eccentricity control platform, flexible distance/intermediate zone controls and flexible automated thickness controls. The main benefits of **CE Precision** are as followed:

- 1. Aspheric Base curve design, make the fitting method of **CE Precision** lenses as simple as fitting a regular GP lens.
- 2. Flexible, concentric front surface create the high ADD power far more than traditional aspheric front design.
- 3. Three different calculated eccentricity front curves were used to correct spherical aberration, virtually eliminating concentric optical distortion during zone transition.
- 4. The second and thirds zone are mainly designed for intermediate/near vision with ADD power plus low minus eccentric with heavy blending which aim to reduce high order aberration created from multiple aspheric power radius zones (Front Curves) junction over a single radius posterior surface (Base Curve).
- 5. Flexible, distance/intermediate zone according to the pupil size of room light illumination to accommodate small pupils for enhanced near vision and large pupils to reduce flare & glare.
- 6. The standard distance/intermediate combined zone is 8.10mm in diameter which was divided into three concentric eccentricity zones.

7. 2.50 to 3.00mm distance zone with high minus eccentricity design to cover the low ADD power with clear distance vision.

TRIAL LENS CHOSEN:

If Corneal Cylinder is:	Suggested Base Curve		
0.00D to 1.25D	On Flat K		
1.50D to 2.25D	On Mean K		
2.50D to 3.00D	On Steep K		
DIAMETER SELECTION			
If Base Curve is:	Select Diameter of		
6.90mm to 7.30mm	9.00 to 9.20mm		
7.40mm to 7.90mm	9.50 to 9.60mm		
8.00mm above	9.80 to 10.00 mm		

DISTANCE POWER DECISION

Determine the distance power by compensating for any vertex change if sphere power greater than +/-4.00D and also adjust for any tear lens change generated from the difference between the base curve and flattest K.

ADD POWER DETERMINATION

Order the near ADD power by adding 0.25D to the spectacle ADD power. If spectacle ADD power is +2.00, then contact lens near ADD power will be +2.25.

SUGGESTED FITTING SET PARAMETER:

(All trial lenses are made to order, we give suggestion for your decision)

BASE CURVES:	7.00 mm to 8.30mm (0.10mm steps, 14 lenses)		
DIAMETER:	9.60mm		
POWER DISTANCE:	-3.00 (made to order)		
POWER NEAR:	CE5 (+2.00D)		

DIAGNOSTIC FITTING CE Precision

After a thorough evaluation of the ocular health and refractive status of the patient, it is time to perform a diagnostic fitting. Select the lens from the standard diagnostic set according to the patient keratometric reading and your experience. Allow the lens to settle on the eye for 10-15 minutes before instilling fluorescein onto the eye and evaluate the fit, movement and centration. The desired position is centered with 1-2 mm of movement on each blink.

If the lens tends ride high or move excessively you will need to order the lens with steeper base curve. If the lens centers low and/or does not move, you should order flatter base curve.

To modify the fitting characteristics, choose a trial lens 0.1mm steeper or flatter (as needed) and assess centration and movement. When ordering, request the appropriate base curve with one of the front curve design in table 1 below.

In order to have a clear distance/intermediate vision. It is **VERY IMPORTANT** to measure the pupil diameter in normal room illumination.

TABLE 1

Front Design	Pupil size normal room light	ADD power	Front Design	Pupil size normal room light	ADD power
CE 1	3.0mm	1.50D	CE 7	4.0mm	1.50D
CE 2	3.0mm	2.00D	CE 8	4.0mm	2.00D
CE 3	3.0mm	2.50D	CE 9	4.0mm	2.50D
CE 4	3.5mm	1.50D	CE10	4.5mm	1.50D
CE 5	3.5mm	2.00D	CE11	4.5mm	2.00D
CE 6	3.5mm	2.50D	CE12	4.5mm	2.50D

END