

E & E Optics Ltd.

易安易光學有限公司

ISO-13485: 2003 / GMPc US FDA, 1992 / GMPc Council of Europe, 1995

香港新界沙田源顺围 5-7 号沙田工业中心 B 座地下七号室

Unit 7, G/F, Block B, Shatin Industrial Centre, 5-7 Yuen Shun Circuit, Shatin, Hong Kong TEL: (852) 2648-3338 FAX: (852) 2648-7333



E & E Optics Corneal-Scleral Lens

FITTING & REFERENCE GUIDE

The first Larger Diameter GP Lens
Designed and Manufactured
In Asia on 2008
By E & E Optics Ltd

INTRODUCTION

The E-SEE Lens (E & E Corneal-Scleral Design) is a multiple curves lens with progressive flattening and heavy blending curves design. The E-SEE lens provides a smooth, spherical surface to the disease eyes (e.g. keratoconus, post-surgical, post-graft, high irregular astigmatism etc) and giving good and stable vision. By cooperating High Oxygen permeable material to E & E's revolutionary lens designing concept, E-SEE lenses provide your patient an excellent comfort and remarkable oxygen transmission to the cornea during wear. With the help of 14 pieces diagnostic set, the E-SEE lenses is very easy to fit and is suitable for the most of ophthalmic pathology causing irregular astigmatism which fitting corneal contact lenses do not have satisfactory result. e.g. advanced Keratoconus, Post Refractive surgery with a diminishing of best-corrected visual acuity (BCVA)

INDICATIONS:

- Keratoconus (Oval, Nipple)
- Pellucid Marginal Degeneration
- Keratoglobus
- Post Graft
- Post Refractive surgery induced ectasia
- Any other eye disease or surgery causing secondary irregular cornea

FITTING CHARACTERISTICS

- Before you begin, it is important to understand that Corneal-Scleral Lens should be fit from the sclera first rather than the corneal center. Because the E-SEE lens align on the sclera. If you always consider that the primary fit should start with the scleral alignment, it will aid you in getting the proper limbal vault which will lead to better central corneal alignment
- 2. When trial fitting, the ideal lens chosen should show light touch on center. If an apical touch is not light, and more than 2mm touch in the central zone, choose next lens with BC 0.50D (one step) steeper. When in doubt about 2 different base curve values, always opt for the steeper Base, as the lens tends to settle in after a few hours of wear.
- 3. The mid-periphery zone should be vaulting the limbus and aligning on the sclera.
- 4. After deciding the optimal BC needed. Write down on your prescription what Base curve of the lens you need. And if the mid-peripheral fit is still need improvement, then try to figure it out a lens with better mid-peripheral fit using the same diagnostic set.
- 5. There should be mid-peripheral clearance with a slight pool of tears in the mid-peripheral zone. In case of bubbles formation, try decreased clearance by choosing a lens with 0.50D flatter (one step) base curve. In case of touching, choosing a lens with 0.50D steeper Base curve.

- After finding the final lenses of the satisfactory mid-peripheral fitting lens.
 Write down the base curve figure of the lens you have found the best mid-peripheral fit
- 7. Put down the BC figure on the blank of mid-peripheral figure on the EE SC lens prescription form.
- 8. The standard peripheral curve figure of diagnostic lens is 14.00mm / 0.8mm. If the edge clearance is too much (bubbles) or too little (scleral impingement), order a lens specifying accurate peripheral curve accordingly, e.g. 13.50mm/0.8mm or 15.00mm/0.80mm
- 9. The movement of the lens is very limited and even no movement found. Perform over-refraction in normal light conditions. Start by using ± 1.00D steps and refine with 0.25D steps
- 10. When stagnant bubbles persist and the best possible alignment has been achieved but bubbles persist, consider ordering a lens with a fenestration.

FITTING THEORY

A Scleral lens fitting is to achieve a relationship between the posterior lens surface and the anterior cornea, thus creating a spherical tear layer which compromise most of the irregular astigmatism.

DIAGNOSTIC SET PARAMETER

A diagnostic set is composed of 14 lenses as follows:

BC: 40.00D – 46.50D, 0.50D STEP (8.44mm – 7.26mm)

PWR: Customer Specified

DIAM: 14.4MM

Material: BOSTON XO (Only Clear color available)

ORDER FORM

A/C CODE:

Office name:

Dr. or Opt. name and Date:

Patient Name:

Base Curve (D):

Mid-Peripheral Curve (D): you need to write down the Base Curve of the lens with appropriate mid-peripheral fit. Then we will transfer those mid-peripheral curves of that

diagnostic lens to your custom ordered lens.

All lens will be diameter 14.40 in Boston XO material.

INSERTION

Place a drop of wetting solution on both surfaces of the lens.

With the drop of wetting solution still on the concave surface. Place the lens on

your index finger. Hold the upper lid up and away from the eye with another hand and creating a clear path for the lens to the eye. Bring the lens up slowly and touch the lens to the eye.

Once in place, release lid and blink

REMOVAL

Minutes before you begin removal, it is important that you place a drop or two of wetting solution in the eye. Develop the habit of working with the same lens first to avoid mix-ups.

The method of removing E-SEE lens is exactly like the regular GP lens or Ortho-K lens except when choosing the lens remover method. Patient may need a bigger and stronger remover which will be available form your larger lens supplier. And it is important to position the lens remover towards the edge of the lens. Do not position the center of the lens or any part of the exposed eye.

TROUBLE SHOOTING

Finding	Possible Cause	Suggestion
Central bubble	Base curve too steep	Try next diagnostic lens with 0.50D flatter base curve
Peripheral bubble	Insufficient mid-peripheral clearance	Try next diagnostic lens with 0.50D flatter base curve which the peripheral curve will also be 0.50D flatter. If the trouble solve, order the same base curve with peripheral 0.50D flatter. If the finding not improve, try flatter lens or consider ordering a lens with fenestration.
Lens Adherence	Insufficient mid-peripheral clearance Fenestration needed	Try next diagnostic lens with flatter base. Evaluating the fluorescein pattern and decide to order a lens with flatter base and/or peripheral.