SynergEyes[®] KC Fitting Flowchart



SynergEyes® KC Parameters

Material	Paflufocon D center (hemiberfilcon A skirt)		
Water Content	27% (soft skirt)		
Base Curve	5.70 to 7.10 in 0.2mm steps		
Diameter	14.5mm		
Skirt Curvature	Steep, Medium, Flat		
Sphere Power	Plano to -20.00 in 0.50D steps		
Dk	100		
Wear Indications	Daily Wear		
Replacement Cycle	Every 6 Months		
Lens Care Recommendations	Chemical or Hydrogen Peroxide		
Delivery	1-2 Weeks		



SynergEyes[®] KC Fitting Guide and Tips for Achieving Success



Fitting Guide

The SynergEyes[®] KC Hybrid Contact Lens

Step 1:

Step 2:

Step 3:

Step 4:

The SynergEyes[®] KC design is ideal for the highly prolate cornea, found with keratoconus and other ectasias, in which an unusually steep cornea is surrounded by relatively flat, normal corneal curvatures.



synergeyes[®] KC

hybrid contact lens for keratoconus



in relation to the keratoconus apex radius.* (see Figure 1). Example: Keratoconus apex= 52.50D

*Round down (steeper) to nearest base curve = 6.30BC (53.50D).

Start with the determined base curve in the **medium skirt curve** option.

Note: In the absence of topography, use steep K to determine initial diagnostic lens base curve.

Determine the initial diagnostic lens base curve by selecting the **closest base curve radius**





FIGURE Evaluate the lens/cornea fitting relationship using high molecule fluorescein



FIGURE 3 Landing occurs in soft skirt



FIGURE 4 Apical clearance with the steepest base curve



- Instill one (1) drop of high molecule fluorescein (FluoreSoft®) into the bowl of the lens and apply (see Figure 2). Allow excess fluorescein to dissipate (15-30 seconds).
- Observe fluorescein pattern and evaluate the lens/cornea fitting relationship in the following manner: Ideal SynergEyes® KC Fit:
- Apical clearance over central cornea has little or no touch in rigid portion of lens
- Corneal clearance free of central bubbles
- Light touch at 9mm chord diameter landing occurs in soft skirt (see Figure 3)
- Soft skirt free of scleral impingement
 - If edge impingement is observed, switch to flatter skirt curve radius
- Soft skirt free of edge fluting
 - If edge lift or "fluting" is observed, switch to steeper skirt curve radius
- Lens free to move on lid-push-up
- The optimum SynergEyes® KC lens will demonstrate apical clearance with the steepest base curve that is free of central air bubbles (see Figure 4).



Step 5:

When ideal fluorescein pattern is achieved, over-refract to determine final lens power for the selected base curve radius. If the over refraction is greater than 4.00D, adjust for vertex distance. SynergEyes® KC diagnostic lenses range from -4.00D to -14.00D sphere power depending on the base curve selection as follows:

Sphere Power of Diagnostic Lenses			
BASE CURVE	SPHERE POWER	BASE CURVE	SPHERE POWER
7.10	-4.00D	6.30	-10.00D
6.90	-5.00D	6.10	-12.00D
6.70	-6.00D	5.90	-14.00D
6.50	-8.00D	5.70	-14.00D

Tips for Achieving Success

The SynergEyes[®] KC Hybrid Contact Lens

- IF BUBBLES ARE PRESENT, remove lens and re-insert with fluorescein in bowl of lens. Identify the shape and location of the bubbles.
- a. If a large central bubble is present, (see Figure 5) flatten (increase) the base curve radius.





FIGURE 5

Note: Fit the steepest base curve that is free of bubbles with greater than 2mm diameter. Smaller bubbles will typically dissipate.

Additional Fitting Tips

- A successful SynergEyes® KC fit demonstrates total apical clearance. A well-fit lens should come to a soft landing where the base curve joins the skirt curve, with minimal touch in the rigid portion of the lens.
- The steeper skirt curve radius will add sagittal depth to the lens and lift the bearing point to produce a lighter landing. This step will improve comfort and prevent late onset tightening.
- Many corneas with emerging or moderate keratoconus may be fit with the SynergEyes® A lens design.
- SynergEyes[®] KC is required with significant ectasia and high eccentricity.
- Use of a Wratten filter may be helpful in viewing fluorescein patterns.





IF SIGNIFICANT TOUCH IS OBSERVED, note the location of the touch area.

a. If the area of touch is observed at the steepest area of the cornea (Figure 6), steepen (decrease) the base curve radius.





- FIGURE 6
- b. If significant touch is observed peripherally at the rigid/soft junction (Figure 7), steepen (decrease) the skirt curve radius.



FIGURE 7

