synergeyes® A

hybrid contact lens for astigmatism™

FITTING GUIDE & TIPS FOR ACHIEVING SUCCESS

synergeyes®

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hybrid contact lens for astigmatism™

Contents

Overview

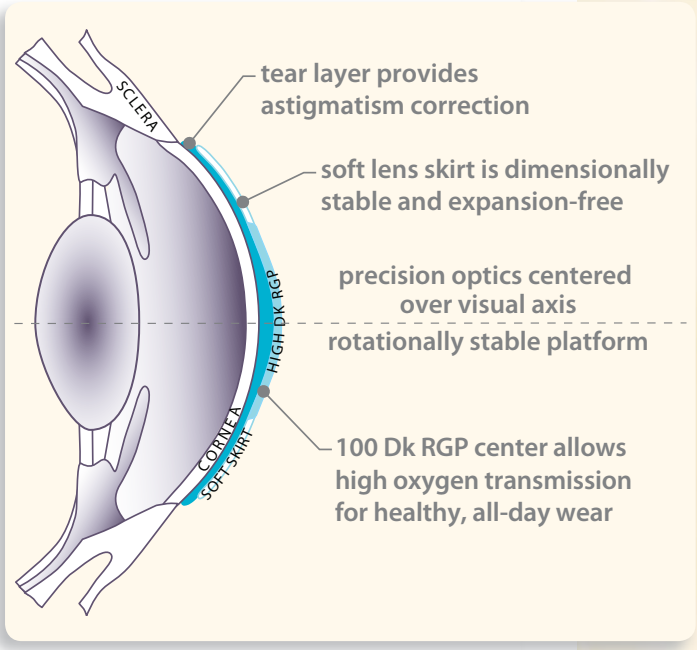
The *SynergEyes® A* hybrid contact lens combines a high Dk rigid gas permeable center and a low-water, non-ionic soft skirt to give patients with regular or irregular astigmatism the best of both worlds: the crisp visual acuity of a rigid lens and the all-day comfort and stability of a soft lens.

Patient Candidates

- Patients with moderate to severe amounts of corneal astigmatism
- RGP wearers looking for improved comfort and elimination of irritating debris that collects underneath RGP lenses
- Soft toric wearers desiring more consistent vision and improved acuity both day and night
- Soft lens wearers wanting crisp, high definition vision
- Active patients and other vision demanders that require the pristine vision of an RGP lens but cannot tolerate lens dislodgement and other wearability issues
- Previous contact lens wearers that dropped out due to discomfort, less-than-optimal vision, night vision problems, or instability on the eye
- Patients with irregular astigmatism, mild stages of keratoconus, and mildly oblate corneas

Key Features of *SynergEyes® A*

1. 100 Dk rigid gas permeable center allows high oxygen transmission to better satisfy corneal uptake
2. Rigidity of lens center delivers optimal visual acuity
3. Astigmatism correction without the inconsistent axis shift often associated with soft toric lenses

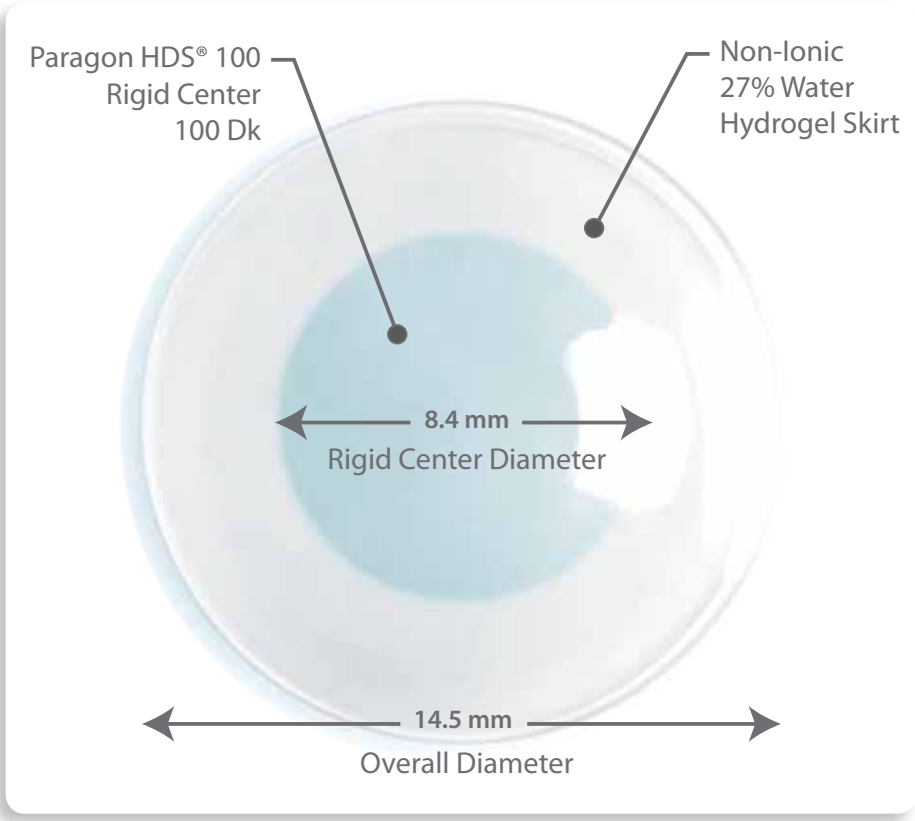


Design Features of SynergEyes® A

4. Lens centration ensures that the precision optics are centered directly over the visual axis
5. Hydrophilic, non-ionic soft skirt provides all-day comfort
6. Uniform edge engineered for maximum comfort across full power range
7. Exclusive patented HyperBond™ junction makes SynergEyes hybrid lenses much stronger than any other marketed hybrid contact lens[1]
8. Proprietary HydrolEyes™ surface science allows for outstanding in-vivo wetting and all-day comfort

[1] Data on file.

SynergEyes® A Lens Design



- Rigid lens optic zone is 7.8mm, with a peripheral curve that blends across the junction to the soft skirt.
- Available in 10 base curves ranging from 7.10mm to 8.00mm in 0.1mm steps.
- Each base curve comes with two skirt curve options: 1.0mm or 1.3mm flatter than the base curve.
- Thicker enhanced profile lens design is also offered to reduce flexure resulting from high amounts of corneal astigmatism.

Diagnostic Set

To enable practitioners to check the fit of the lens and to allow patients to experience the acuity and comfort SynergEyes lenses offer, a 20-lens diagnostic set is available. The diagnostic set includes lenses in 10 base curves ranging from 7.10mm to 8.00mm in 0.1mm steps, and each base curve is available in two skirt curve options. All of the diagnostic lenses are -3.00D in sphere power.

If conducting a fluorescein evaluation with the diagnostic lenses, it is important to use high molecular weight fluorescein and place it in the bowl of the lens before inserting the lens.

SynergEyes Diagnostic Set

Key Fitting Principles

When fitting the *SynergEyes® A* lens, the goal is to find a base curve that supplies enough sagittal depth to vault over the central cornea and a skirt curve that provides fit alignment.

Normal Corneas

When fitting the *SynergEyes® A* lens on normal, healthy corneas, it is important that the lens always be fit steeper than flat K. A successful SynergEyes fit results in a lens that rides on a layer of tears. By creating this tear layer underneath the lens, an effective tear pump mechanism is produced.

The following fitting principles apply:

- Spherical corneas do well with a base curve 1.00D steeper than flat K
- Astigmatic corneas (with up to 1.50D of corneal astigmatism) require a base curve 1.50D steeper than flat K
- Patients with more than 1.50D of corneal astigmatism may require an even steeper base curve

Irregular Corneas

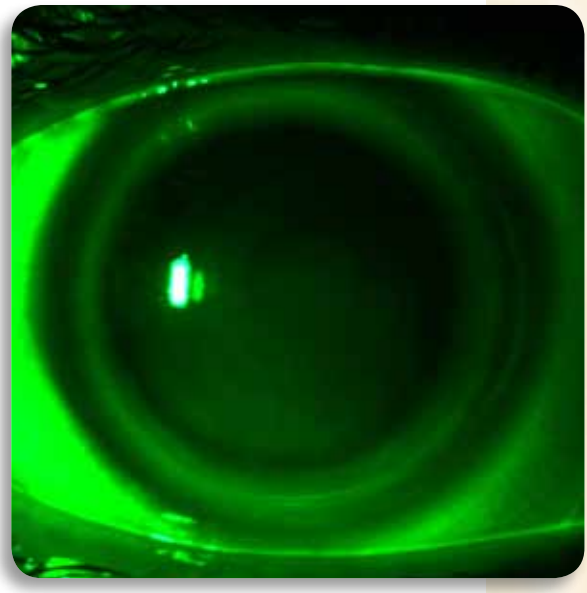
The appropriate SynergEyes® lens design selection should be based on the shape of the cornea, not just the patient history or diagnosis.

When working with a patient who has an irregular cornea, empirical fitting is not possible and will not result in a proper fit. You must use the *SynergEyes® A* diagnostic set and conduct an in-office fluorescein evaluation to verify the proper fit.

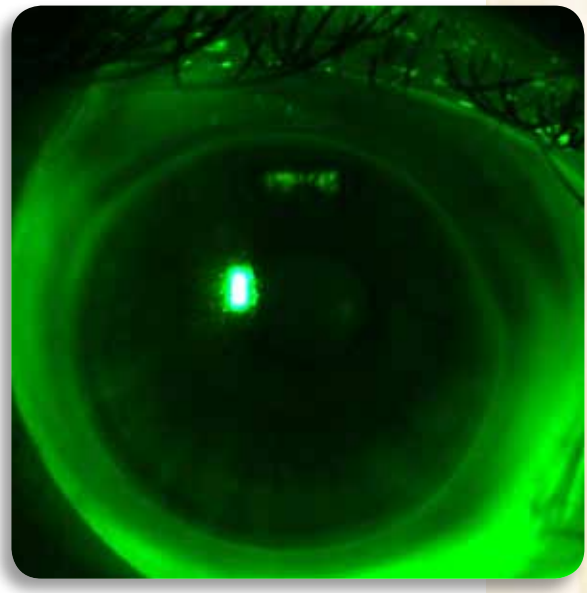
Key Fitting Principles, *continued*

The *SynergEyes® A* lens may be fit empirically on normal corneas; however, fluorescein evaluation using high molecular weight fluorescein (i.e., Fluoresoft®) is highly recommended for the first 3-5 fits or until you are comfortable fitting the hybrid platform. When using the diagnostic lenses to evaluate the fit, it is important to use high molecular weight fluorescein and place it in the bowl of the lens before inserting the lens.

Although it may seem counter-intuitive,the appropriate way to correct a tight/flat fitting lens in most cases is to steepen the base curve. Lenses with little or no movement that appear tight actually mean the lens is touching too much of the cornea. Steepening the base curve will correct this fit.



Ideal SynergEyes® A Fit



Flat Fitting Lens

Fitting *SynergEyes® A*

Use the SynergEyes® A slide rule to select the initial lens when fitting normal corneas.

Step 1: *Selecting the Initial Lens*

Normal Corneas

Use the handheld slide rule or electronic calculator to determine the base curve and skirt curve of the initial lens based on K readings.

Turn the slide rule to the reverse side and, with Rx in minus cylinder form; enter the patient's sphere power (NOT the spherical equivalent) into the window on the left.

Note: Vertex adjustments for power are already factored into the slide rule calculations.

Order the lens power that appears in the right window.

If performing a diagnostic evaluation, select the diagnostic lens in the recommended parameters and follow the instructions for insertion on Page 9.

Irregular Corneas

Use topography to determine the steepest area on the cornea and select an initial base curve closest to the steepest corneal radius. In the absence of topography, choose the initial diagnostic lens closest to steep K to vault over the entire ectasia.

Fitting *SynergEyes® A, continued*

Step 2: *Insert the Diagnostic Lens*

1. Stabilizing the lens between the index and middle finger (see photo), instill 1 drop of high molecular weight Fluorescein (i.e. FluoreSoft®) into the bowl of the lens and fill the rest of the bowl with saline.

Bowl of lens filled with fluorescein and saline

2. Ask the patient to lean forward and tuck their chin to chest. The patient's nose should be pointing toward the floor.

Patient position during insertion

3. Have the patient hold one lid back, while you retract the other and insert the lens.
4. Allow excess fluorescein to dissipate for approximately 15-30 seconds.
5. Observe the fluorescein pattern and evaluate the lens/cornea fitting relationship.

Patient holding one lid back

Fitting *SynergEyes® A, continued*

Step 3: *Evaluate the Fit*

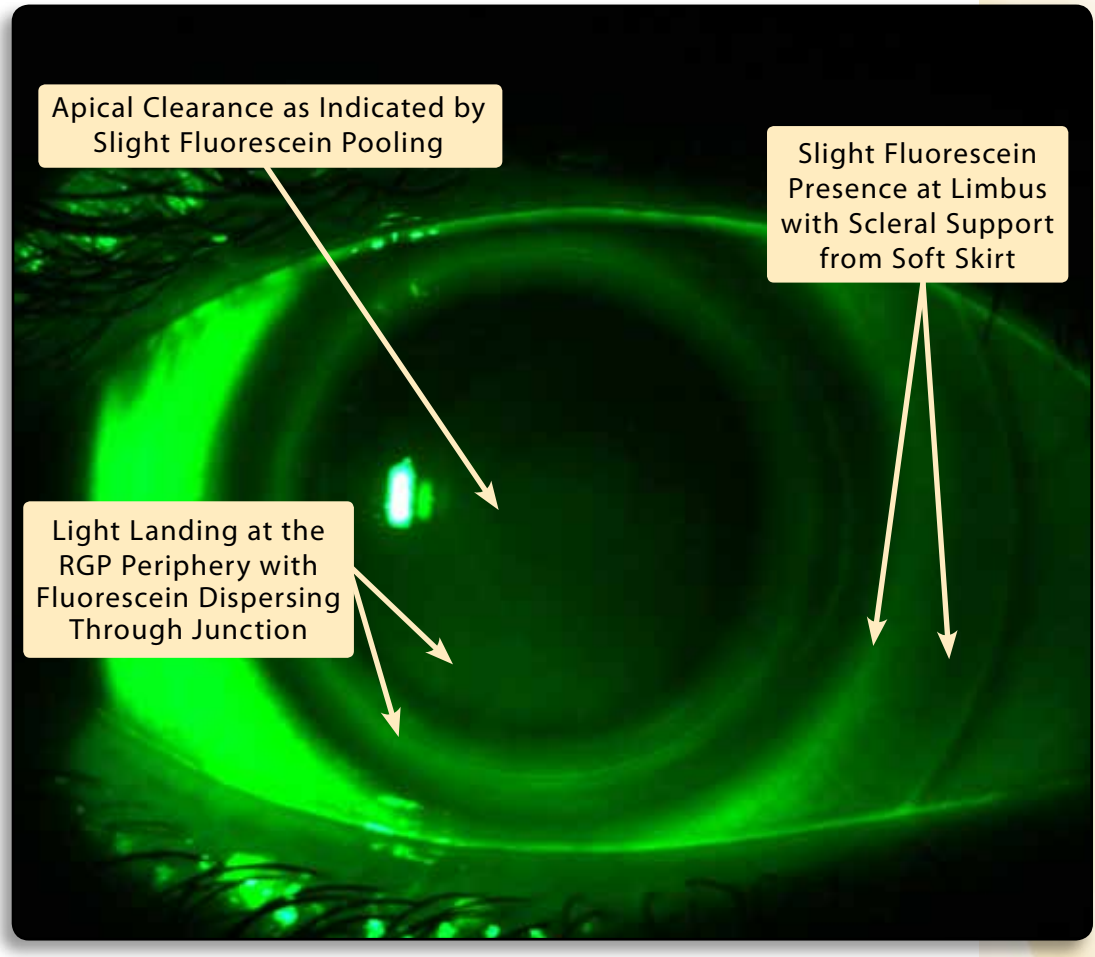
Normal Corneas

The ideal *SynergEyes® A* fit on a normal cornea will exhibit:

- Apical clearance over the central cornea (the optimum fit shows no touch in the rigid zone of lens – total corneal clearance)
- Light landing at the RGP periphery
- Alignment under the soft skirt
- Soft skirt free of scleral impingement
- Soft skirt free of edge fluting
- Lens free to move on lid-push-up

To view videos of ideal lens movement, insufficient lens movement, and excessive lens movement, visit the practitioner site at www.FitSynergEyes.com.

Ideal *SynergEyes*® *A* Fit on a Normal Cornea

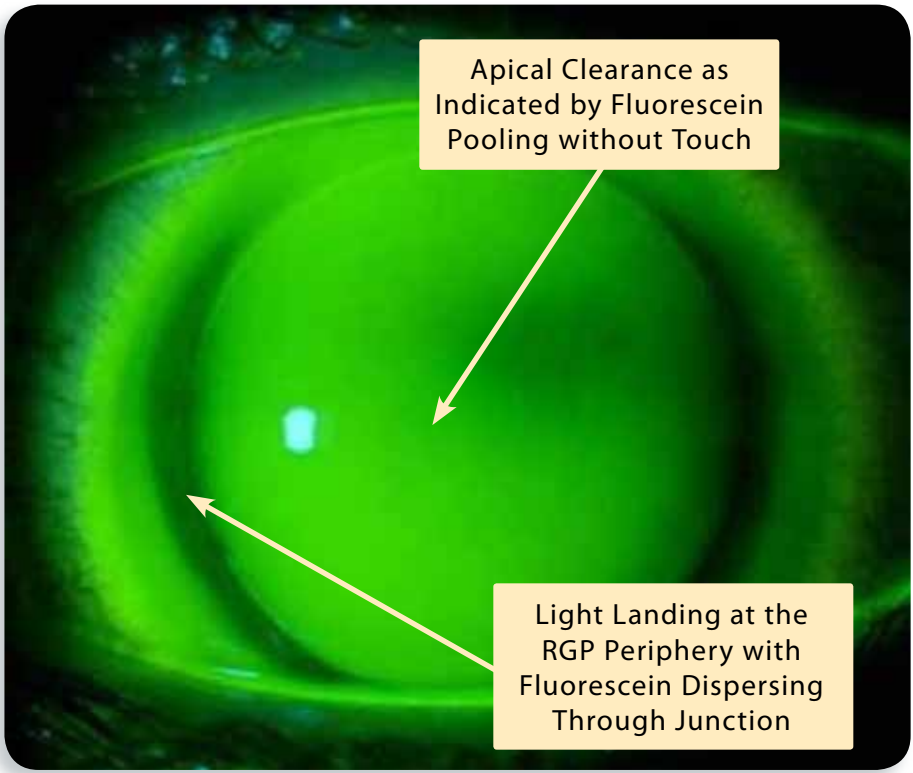


Ideal *SynergEyes*® *A* Fit on a Keratoconic Cornea

Step 3: *Evaluate the Fit* *(continued)*

Irregular Corneas

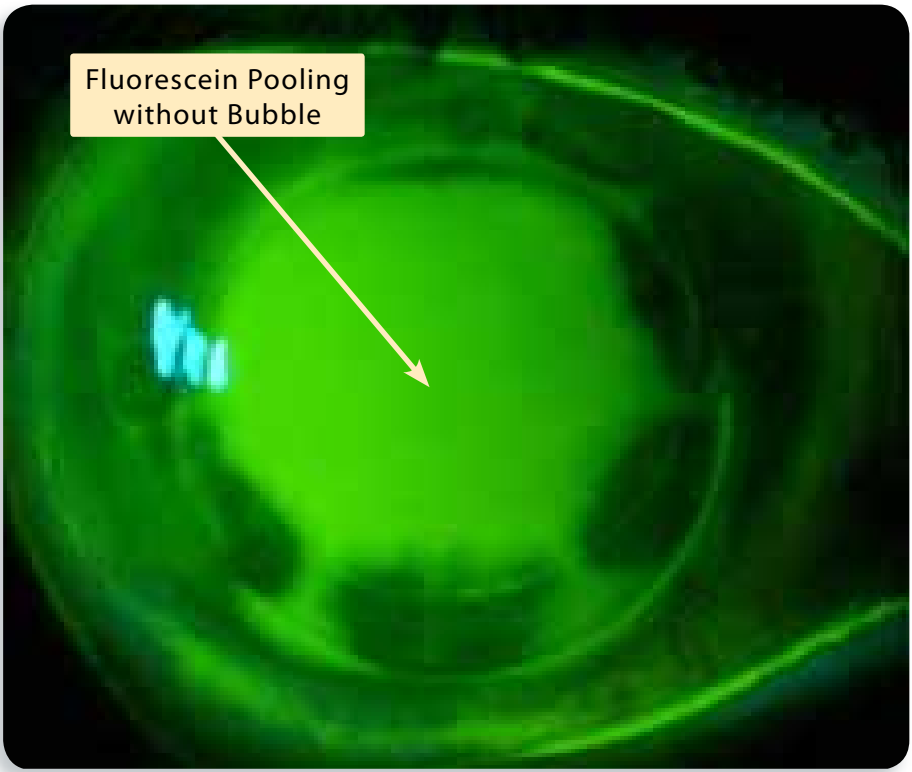
The ideal *SynergEyes*® *A* fit on a prolate cornea will exhibit central clearance. If touch is observed, the patient may not be a candidate for the *SynergEyes*® *A* lens.



Ideal *SynergEyes*® *A* Fit on a Post Surgical Cornea

Step 3: ***Evaluate the Fit*** *(continued)*

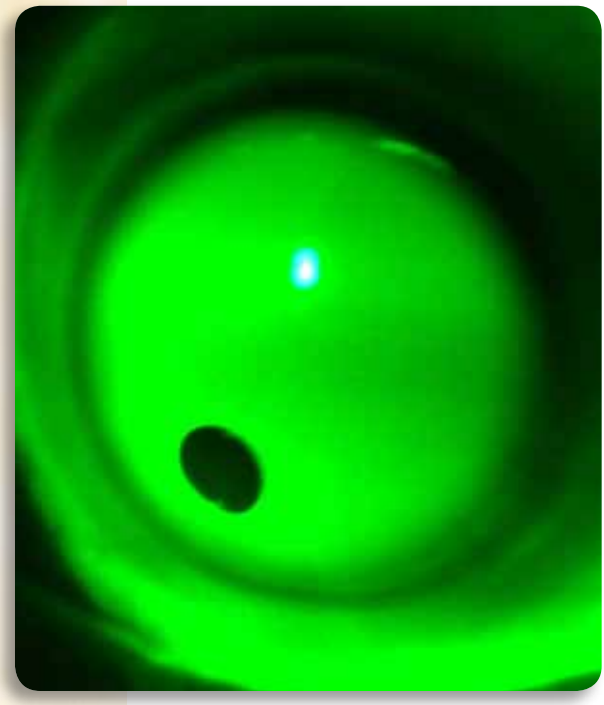
The ideal *SynergEyes*® *A* fit on an oblate cornea will show central fluorescein pooling without a bubble. If a persistent central bubble is observed, the patient may not be a candidate for the *SynergEyes*® *A* lens.



Troubleshooting & Tips for Success

Bubbles

Because air bubbles can affect the appearance of the fluorescein pattern, it is critical to eliminate them prior to evaluating the fit. A bubble does not necessarily indicate that the lens is too steep.



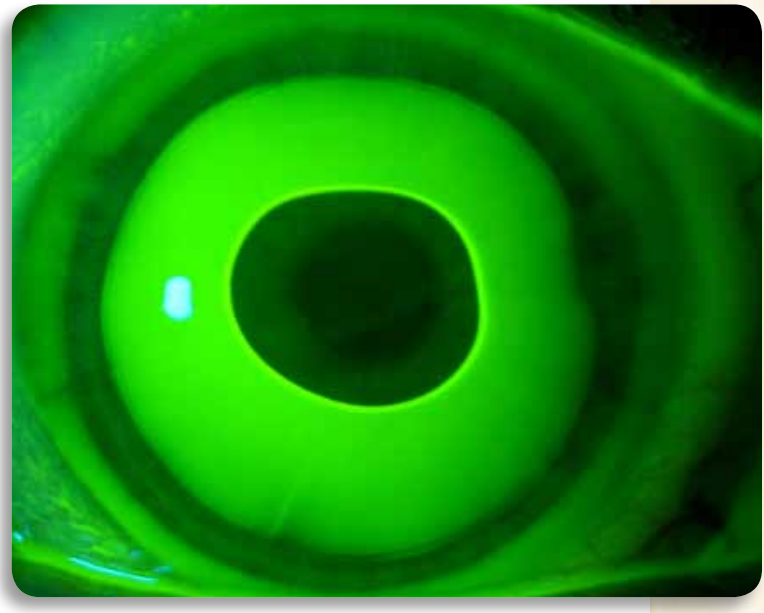
A bubble does not necessarily mean the lens is too steep.

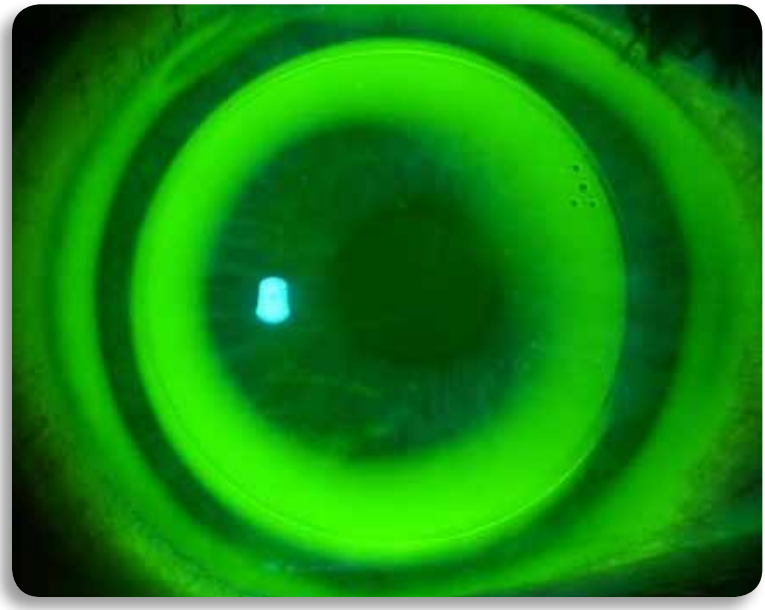
- If a bubble is seen underneath the lens upon insertion, the lens has not been inserted properly. Insertion bubbles may occur because there are areas within the optic zone that could trap air pockets if the lens is not inserted properly.
- If there are bubbles under the lens, you must remove the lens and re-insert it. Make certain that the bowl of the lens is filled to the TOP with saline.
- Bubbles are less likely to occur if patient maintains fixated gaze (straight to the floor) throughout the insertion process.

Troubleshooting & Tips for Success

Bubbles vs. Touch

Bubbles are indicated by a very distinct outer edge





Touch patterns typically have a less defined edge.

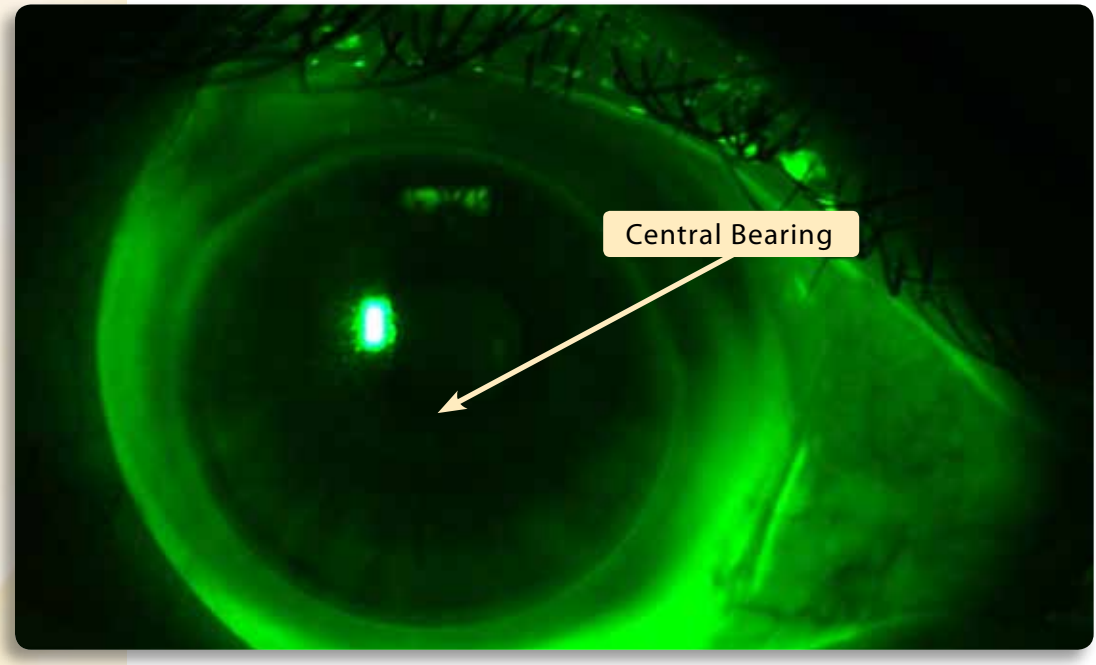
Troubleshooting & Tips for Success

Base Curve Changes

The base curve of the SynergEyes® A lens may be steepened to:

- Provide a better fit for patients with higher amounts of corneal astigmatism
- Improve patient comfort
- Provide greater corneal clearance, which will increase lens movement

Remember that every 0.1mm base curve change will require a 0.50D adjustment in power. Employ the SAM/FAP (Steeper Add Minus/Flatter Add Plus) rule.



Base Curve Too Flat - Steepen Base Curve (Ex. 7.7mm BC -> 7.6mm BC)

Troubleshooting & Tips for Success

Base Curve Changes *(continued)*

Consider using a base curve steeper than that initially recommended by the slide rule or electronic calculator when:

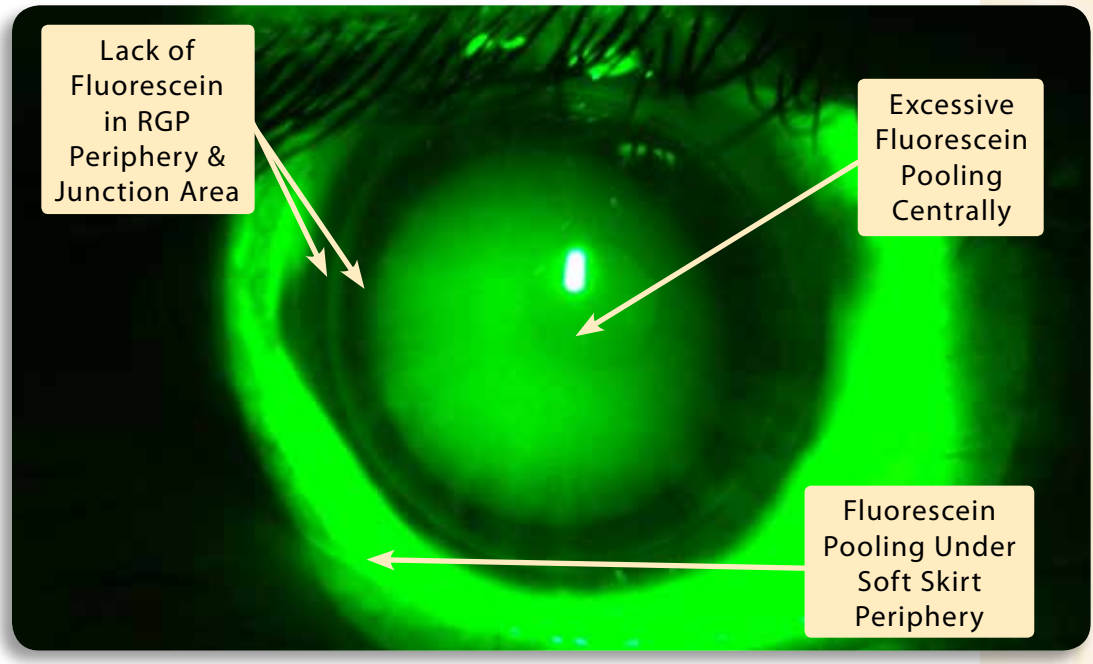
- A patient has more than 1.50D of corneal astigmatism
- Fluorescein evaluation shows apical touch
- Patient complains of initial discomfort or discomfort after wearing the lenses for a period of time
- Lens does not exhibit movement on blink or push up

The base curve of the SynergEyes® A lens may be flattened to:

- Decrease excessive lens movement

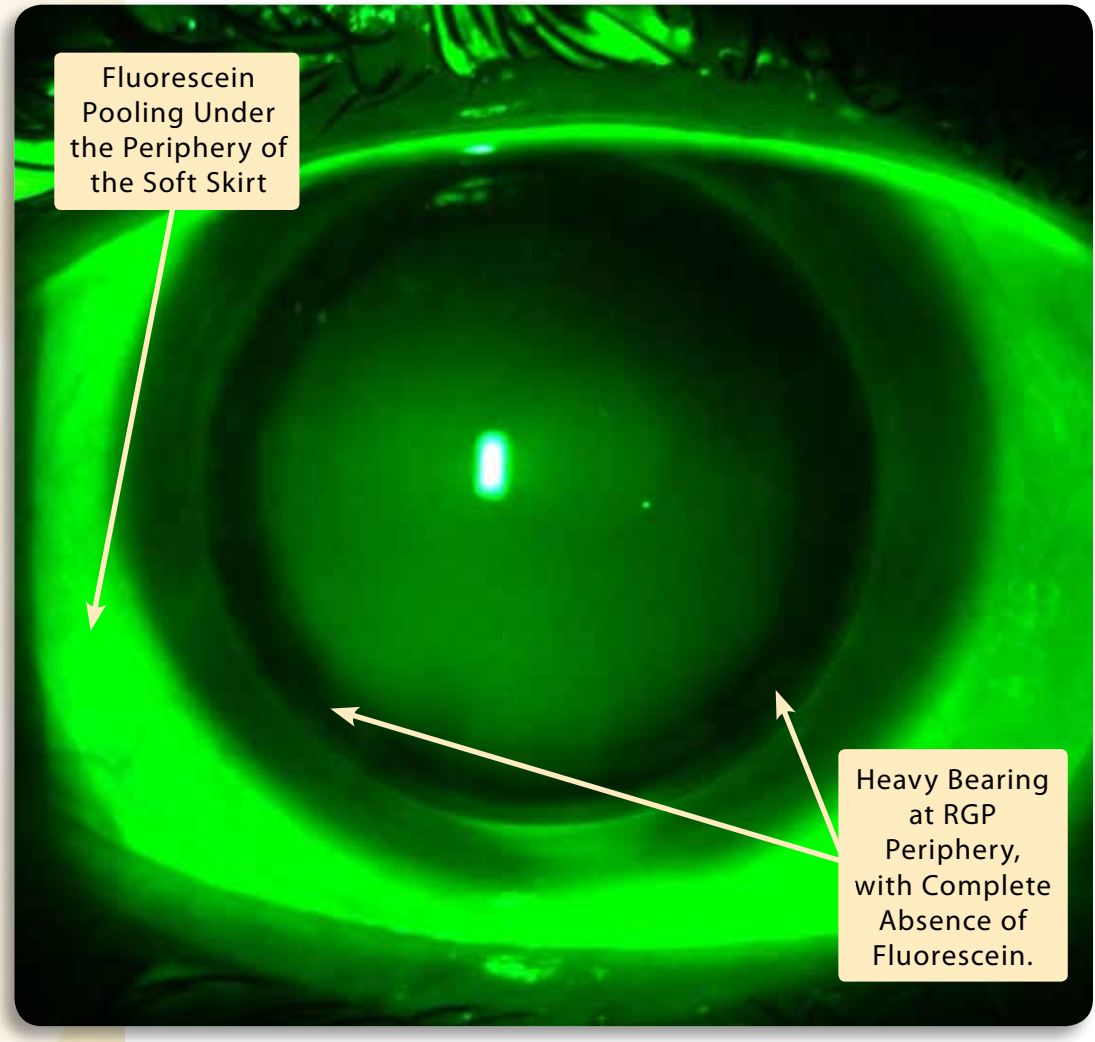
Consider flattening the base curve when:

- Lens shows excessive amounts of movement
- Fluorescein evaluation shows excessive central pooling



Base Curve Too Steep - Flatten Base Curve (Ex. 7.6mm BC -> 7.7mm BC)

Troubleshooting & Tips for Success



Skirt Curve Too Flat

Troubleshooting & Tips for Success

Skirt Curve Changes

The skirt curve of the SynergEyes® A lens may be steepened to:

- Improve patient comfort
- Increase lens movement

Consider using a steeper skirt curve when:

- Patient complains of discomfort initially or after a few hours of wear time, and steepening the base curve does not improve comfort
- Lens does not exhibit movement on blink or push up and the use of a steeper base curve does not adequately increase lens movement
- Edge fluting is observed
- Fluorescein evaluation shows a dark heavy ring of bearing at the junction of the rigid center and soft skirt.*
- Fluorescein evaluation shows pooling under the periphery of the soft skirt

The skirt curve of the SynergEyes® A lens may be flattened to:

- Improve patient comfort

Consider using a flatter skirt curve when:

- Lens exhibits edge impingement

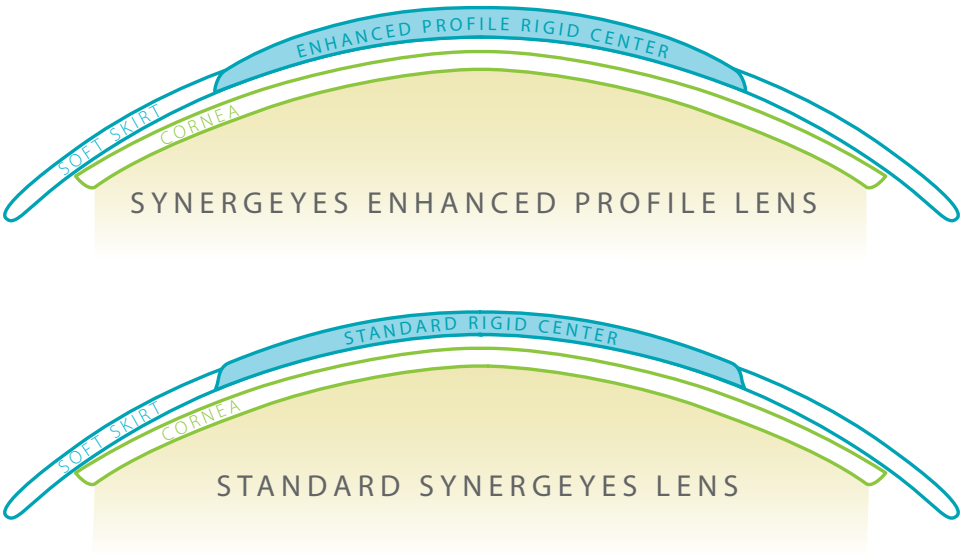
*If the patient is already wearing the steeper skirt, call SynergEyes consultation to discuss ordering a custom lens with a steeper skirt or the peripheral blend design, which slightly flattens the RGP periphery and soft skirt to create a less pronounced landing zone across a broader area of the peripheral cornea.

Enhanced Profile Lens

The *SynergEyes® A* lens is available in an enhanced profile thickness that will improve visual acuity when a patient's corneal astigmatism is not completely corrected by the standard thickness lens.

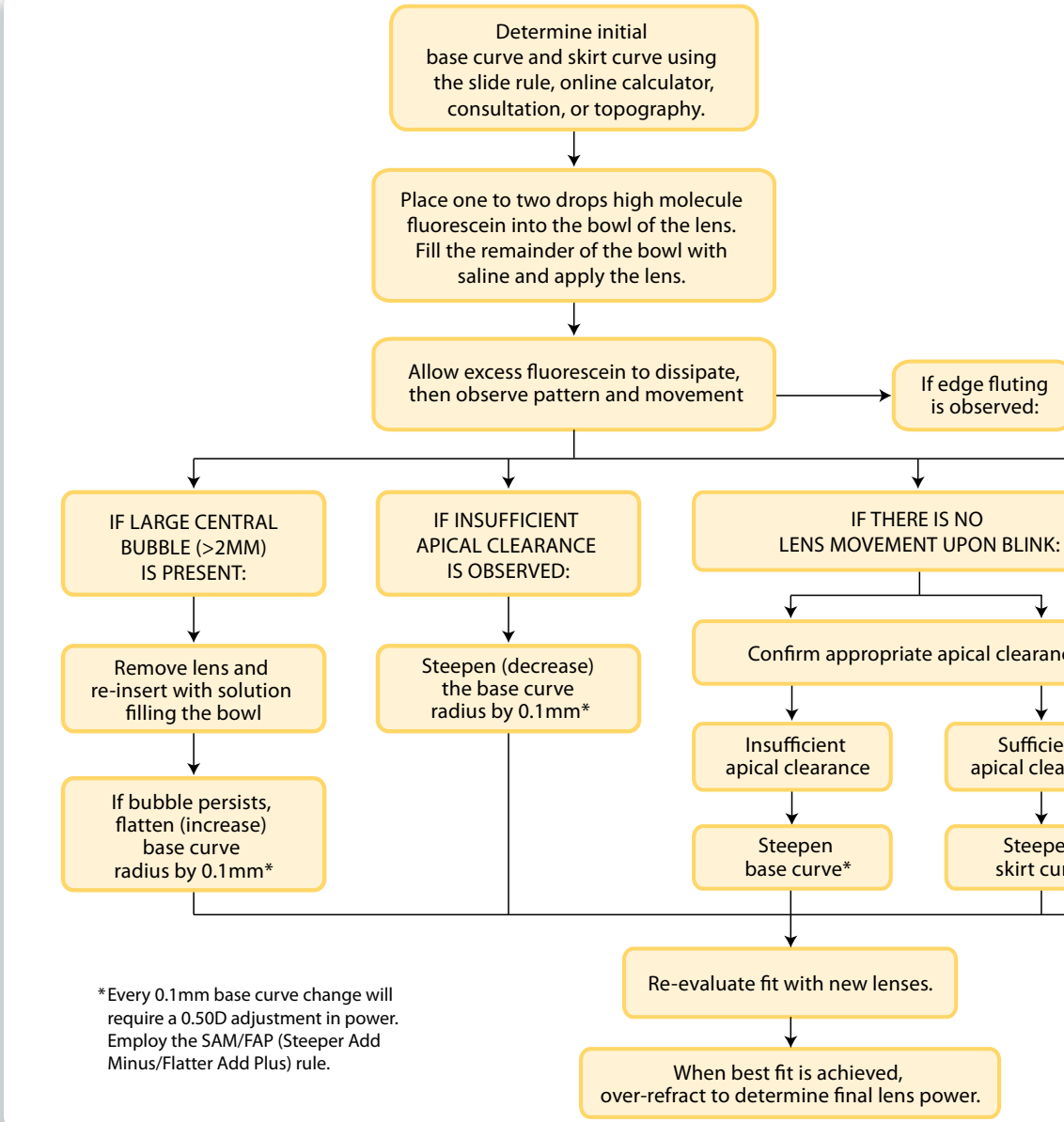
Consider ordering the enhanced profile lens when:

- Empirically fitting a patient with more than 2.00D of corneal astigmatism
- Over-refraction on top of the lens yields a sphero-cylindrical Rx consistent with lens flexure
- Keratometry or topography with the lens on eye produces a cylindrical reading
- Lens flexure is >0.50D

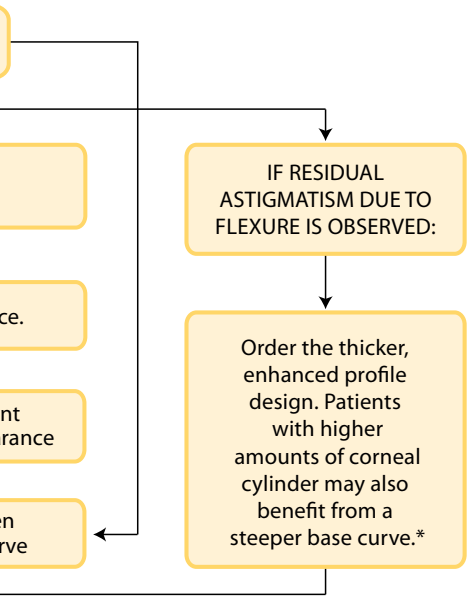


SynergEyes® A Fitting Flowchart

Use the following flow chart when evaluating the fit of the *SynergEyes® A* diagnostic lenses.



*Every 0.1mm base curve change will require a 0.50D adjustment in power. Employ the SAM/FAP (Steeper Add Minus/Flatter Add Plus) rule.



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For additional information on fitting *SynergEyes® A,* please visit **www.FitSynergEyes.com**.

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SynergEyes® A Parameters

Material	Paflufocon D center (hemiberfilcon A skirt)
Dk	100
Water Content	27% (soft skirt)
Diameter	14.5mm
Base Curve	7.10 to 8.00 in .10mm steps
Skirt Curvature	1.0 (steep) & 1.3 (flat)
Sphere Power	+4.00D to -8.00D in .25D steps -8.50 to -20.00 in 0.50D steps +4.25 to +8.00 in .25D steps +8.50 to +20.00 in .50D steps
Wear Indications	Daily Wear
Replacement Cycle	6 Month
Lens Care	Hydrogen Peroxide

In-stock parameters ship next day. Please allow
1-2 weeks for custom and Enhanced Profile lenses.

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