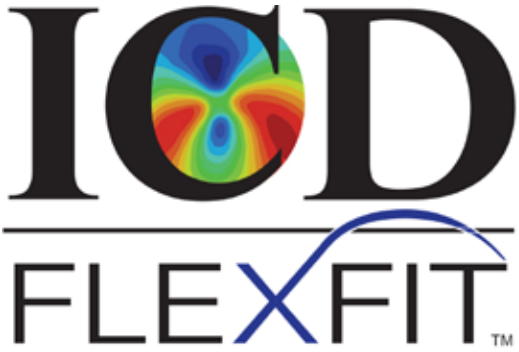


Fitting Guide

ICD FlexFit™ Is Featured In

PARAGON
HDS 100

ICD FLEXFIT™ 16.3mm

Fitting Guide

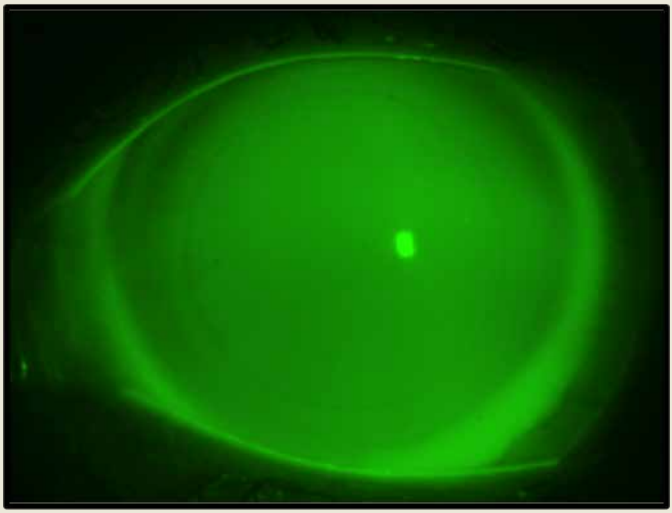
ICD FlexFit™ Is Featured In

PARAGON HDS 100

ICD FlexFit™ 16.3mm Diagnostic Set Lenses

For all Irregular Corneas

Sagittal Depth	Power
3,800	+2.00
4,000	Plano
4,200	-2.00
4,400	-4.00
4,600	-6.00
4,800	-8.00
5,000	-10.00
5,200	-12.00
5,400	-14.00



ICD FlexFit™ 16.3mm

The Adjustable Fitting Zones

- The Central Clearance Zone (CCZ)
- The Peripheral Corneal Clearance Zone (PCCZ)
- The Limbal Clearance Zone (LCZ)
- The Scleral Landing Zone (SLZ)

The ICD FlexFit™ lens sagittal depth can be adjusted in the mid-periphery area by adjusting the (PCCZ) Peripheral Cornea Clearance Zone (+ or -).

The ICD FlexFit™ lens sagittal depth can be adjusted in the limbal area by adjusting the (LCZ) Limbal Clearance Zone (+ or -).

Note: Any sagittal change in the LCZ or the PCCZ will adjust the overall sagittal depth of the lens by an equal amount.

Step 1

Select Initial Diagnostic Lens

Identify the Corneal Condition	ICD FlexFit™ 16.3mm for Irregular Corneas
Low Depth Eyes • Normal shaped eyes • Ocular Surface Disease • Post-Refractive Surgery	Start with the ICD FlexFit™ 16.3mm 4,000µm Sag
Median Depth Eyes • Early to Moderate Keratoconus • Pellucid Marginal Degeneration • Low Depth Corneal Transplants	Start with the ICD FlexFit™ 16.3mm 4,400µm Sag
High Depth Eyes • Advanced Keratoconus • High Depth Corneal Transplants	Start with the ICD FlexFit™ 16.3mm 4,800µm Sag

Step 2

Application of Diagnostic Lens:

- Clean and prepare the lens for application
- Fill the bowl full of preservative-free saline
- Add fluorescein
- Instruct the patient to stand and lean forward with their head parallel to the ground
- Have the patient pull back on both upper and lower lids using both hands
- Apply the lens with a lens applicator using two fingers and the thumb if needed, for enhanced stability
- **If a bubble exists, remove the ICD FlexFit™ lens with the DMV® lens removal device and re-apply**

Bubble

Step 3

Evaluate Central Corneal Zone for full clearance

Example:

4,400 sag

Unacceptable: Corneal touch. Apply the next deeper diagnostic lens.

4,600 sag

Unacceptable: Inadequate clearance. Apply the next deeper diagnostic lens.

4,800 sag

Acceptable clearance.

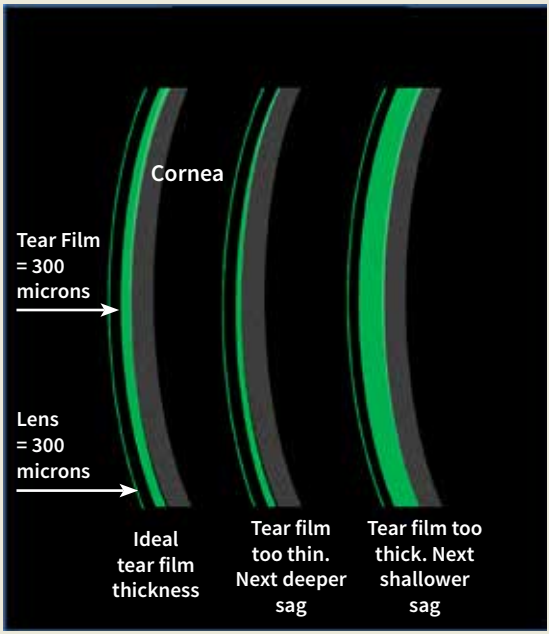
Step 4

Evaluate for full corneal clearance and measurement of vault

Use Optic Section:

- White light with fluorescein
- ICD FlexFit™ standard thickness = 300 microns
- Ideal tear film thickness = 300 microns

Ensure a minimum of 300 microns of corneal vault to allow for lens settling over time



Step 5

Slit Lamp Exam: Post-Application of the ICD FlexFit™ Diagnostic Lens

(CCZ) Central Clearance Zone

The diagnostic lens should completely vault the central cornea. Apply higher or lower sagittal depth diagnostic lenses to increase or decrease the central corneal clearance.

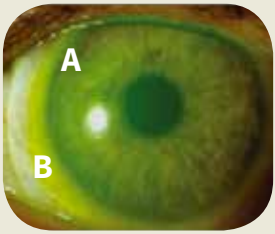
Corneal Bearing - Increase sag.

Ideal Clearance.

Note: Once you diagnostically achieve an acceptable apical clearance, it is important to remember that the lens will "settle" on the eye. After time, the lens may produce a different fluorescein pattern than on initial application.

(PCCZ) Peripheral Corneal Clearance Zone and (LCZ) Limbal Clearance Zone

- The diagnostic lens should completely vault the limbus and "land" with all of its weight on the sclera
- To observe clearance in this area, use white light to assess the fluorescein's "excursion" from the cornea past the limbus and out onto the sclera (A) with the absence of fluorescein near the edge (B)
- Order a modified LCZ (+) if the peripheral cornea and/or limbal depth are insufficient

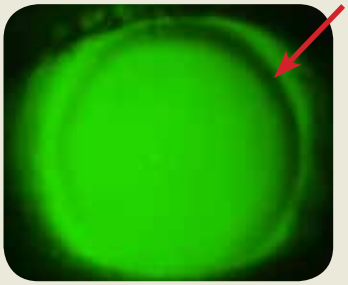


Inadequate PCCZ

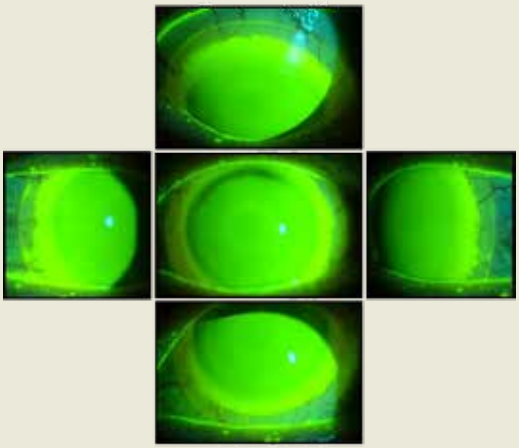
Ideal post-settling pattern

Scleral Positioning

- Due to the asymmetrical shape of the sclera, scleral lenses tend to position temporally and inferiorly.
- The view in primary gaze *may* give the appearance of inappropriate limbal touch superior and nasal.
- Ask the patient to look left, right, up and down to confirm appropriate peripheral corneal clearance and limbal clearance.



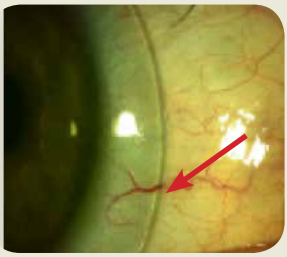
Acceptable post-settling pattern



Scleral Landing Zone (SLZ)

- View the SLZ to determine if there is excessive edge lift, excessive tightening or blanching
- Verify that the Scleral Landing Zone (SLZ) is aligning with the conjunctiva, 360 degrees around the sclera.
- Order the following adjustment based on the degree of tightness present:
  - Mildly tight: order SLZ -1
    (One arcuate area of vessel restriction)
  - Moderately tight: order SLZ -2
    (Opposing sides of vessel restriction)
  - Severely tight: order SLZ -3
    (>180° of vessel restriction)

Every degree of angle change (+ or -) raises or lowers the sagittal depth of 25 microns



Appropriate landing. No restriction of blood flow under edge.

Restriction of blood vessels and blanching.

The Adjustable Fitting Zones Chart

- Adjustments in clearances are best accomplished by increasing or decreasing the PCCZ (mid-periphery and/or the LCZ (limbus) depending on where in change is required
- Adjustments can be made in 25 microns steps
- Example: 4 steps = 100 microns

Any adjustment to these zones will affect the overall sagittal depth of the lens by the amount of the change

Each 1 step change in either the PCCZ or the LCZ
= 25 microns of sagittal depth change

Each 1 step change in the SLZ angle
= 25 microns of sagittal depth change

PCCZ and LCZ

Example:

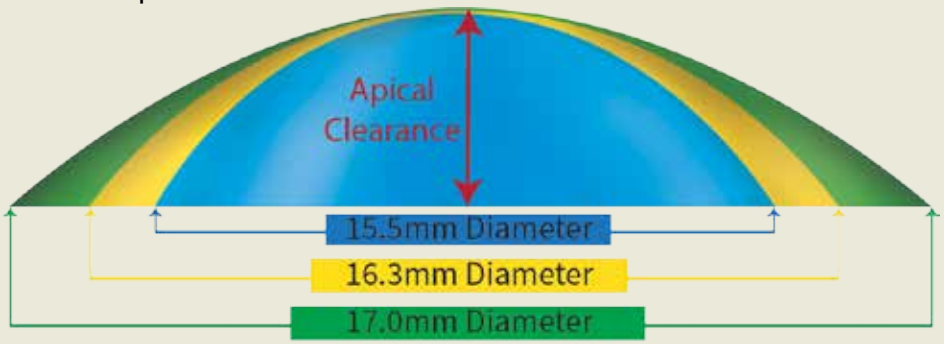
- A +/- 4 step change will affect the lens sagittal depth 100 microns

LCZ

Example:

- A 2 step change in the angle of the landing zone will affect the lens sagittal depth 50 microns

Changes in diameter can be made and the auto-adjust feature will maintain Apical Clearance



Step 6

Perform both a spherical (or if required) sphero-cylindrical over-refraction to determine the lens power.

Step 7

Call your Authorized Laboratory to place your ICD FlexFit™ order.

Specifications required for ordering the ICD FlexFit™ from the Laboratory:*

- Sag of ICD FlexFit™ diagnostic lens
- Diagnostic lens power
- Spherical over-refraction
- Modifications to, PCCZ,LCZ,SLZ

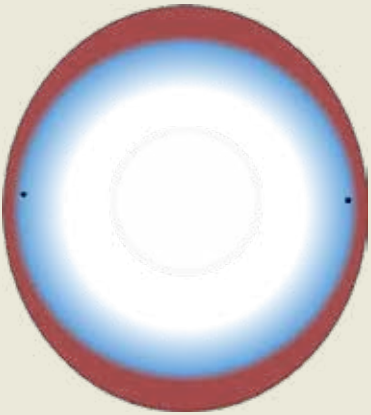
**If you require consultation to optimize the fit, make sure that you measure and note the apical clearance of your selected diagnostic lens.*

ICD FLEXFIT™ 16.3mm

Use ICD FlexFit™ Front Surface Toric when correcting Residual or Lenticular Astigmatism

When a sphero-cylindrical over refraction significantly improves the best corrected vision, front toric optics can be incorporated. The ICD FlexFit™ 16.3mm comes standard with ALZT (Asymmetric Landing Zone Technology™).

The periphery of the design is “Dual Depth”, having 125 microns of elevation difference to better align the asymmetric nature of the sclera and provide a comfortable landing 360°.



The “Dual Depth” with ALZT provides the rotational stability required for Front Surface Toric options.

The ICD FlexFit™ 16.3mm Front Surface Toric Optics Design

Position and stability of the rotation markers

- With the lens in place, locate the two flat meridian markers
- Note the axis of the toric markings after 2-3 minutes of lens settling and when the lens is rotationally stable
- Perform a sphero-cylindrical over-refraction and order the lens

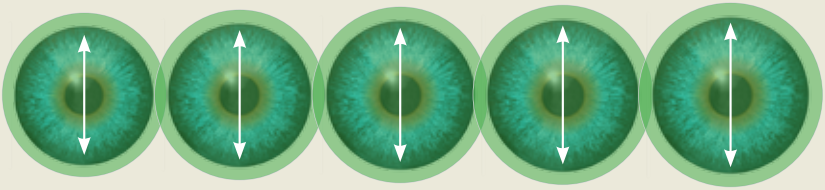
Specifications required for ordering the ICD FlexFit™ Front Surface Toric from the Laboratory:*

- Sag of ICD FlexFit™ diagnostic lens
- Diagnostic lens power
- Sphero-Cyl over-refraction
- Any modifications to PCCZ, LCZ, SLZ
- Axis of the rotation markers

**If you require consultation to optimize the fit, make sure that you measure and note the apical clearance of the selected diagnostic lens.*

“Flexing the Diameter” The ICD FlexFit 16.3mm design

- The ICD FlexFit™ 16.3mm design can be “flexed” in diameter.
- The diameter can **range** (from the standard 16.3mm) **down to** 15.5mm and **up to** 17.0mm in .1mm increments, ***while maintaining the desired apical clearance***.



15.5mm 15.7mm 16.3mm 16.7mm 17.0mm

Indications for “Flexing” the diameter

- Fitting inside or vaulting pingueculae
- Filtering blebs
- Small apertures/Deep set eyes
- Application and removal challenges
- Larger diameters for Ocular Surface Disease

ICD

FLEXFIT™ 14.8mm

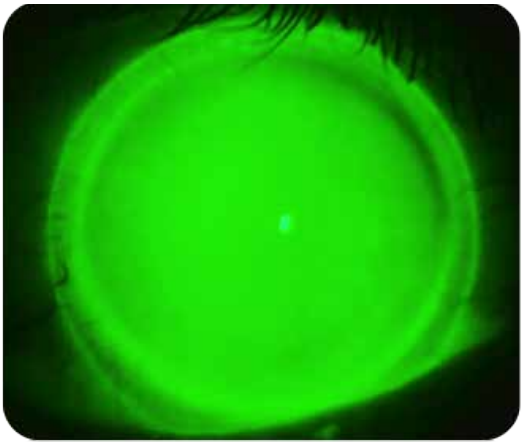
Fitting Guide

ICD FlexFit™ Is Featured In

PARAGON HDS™ 100

ICD FlexFit™ 14.8mm Diagnostic Set

For Regular, Normal Corneas



ICD FlexFit™ 14.8mm

Step 1

Select 3,400 Sagittal Depth for Initial Evaluation

Sagittal Depth	Power
3,400	-4.00
3,600	-6.00
3,800	-8.00
4,000	-10.00
4,200	-12.00

Step 2

Application of Diagnostic Lens:

- Clean and prepare the lens for application
- Fill the bowl full of preservative-free saline
- Add fluorescein
- Instruct the patient to stand and lean forward with their head parallel to the ground
- Have the patient pull back on both upper and lower lids using both hands
- Apply the lens with a lens applicator using two fingers and the thumb if needed, for enhanced stability
- **If a bubble exists, remove the ICD Flex Fit™ lens with the DMV® lens removal device and re-apply**

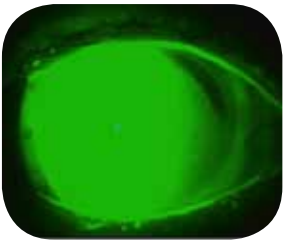
Step 3

Evaluate (CCZ) Central Clearance Zone for sufficient apical clearance

3,600 sag

Unacceptable: Corneal touch. Apply the next deeper diagnostic lens.

Example



3,800 sag

Acceptable clearance.

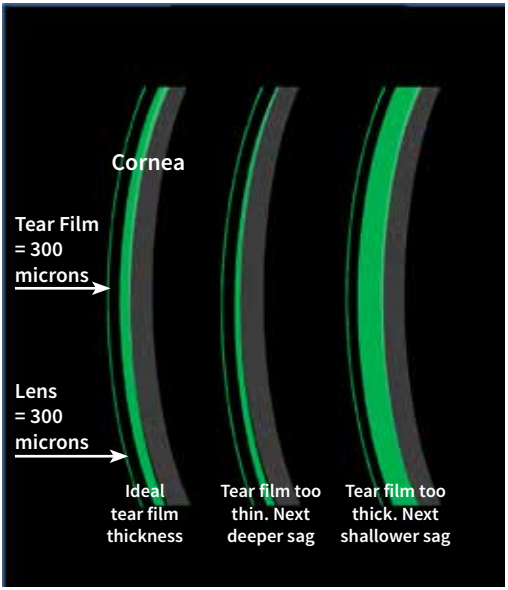
Step 4

Estimating Central (Apical) Clearance

Use Optic Section:

- White light with fluorescein
- ICD FlexFit™ standard thickness = 300 microns
- Ideal tear film thickness = 300 microns

Ensure a minimum of 300 microns of corneal vault to allow for lens settling over time

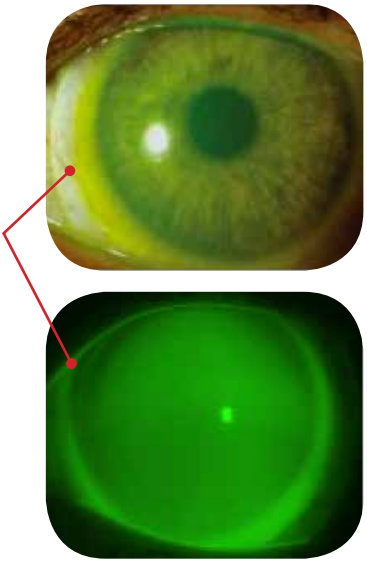


Step 5

Peripheral Lens Evaluation

The diagnostic lens should completely vault the limbus and “land” with all of its weight on the sclera.

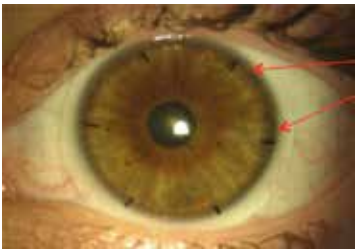
Ideally, fluorescein is evident from the peripheral cornea, over the limbus and onto the sclera, with the absence of fluorescein near the edge.

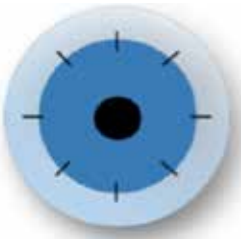


Step 6

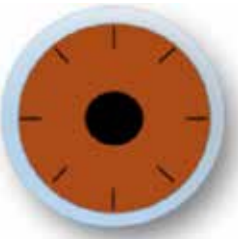
Determining Optimal OAD (Overall Diameter) and Ensuring Limbal Clearance Using Scribe Markers

New Patent Pending Technology!
Use the six Scribe Markers on the diagnostic lens to instantly observe the location of LCZ (Limbal Clearance Zone) and easily determine the OAD required to safely clear the limbus.

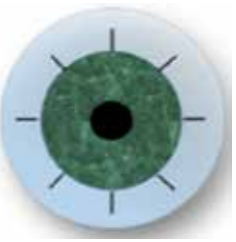




Ideal Diameter
Scribe Markers covering limbus from end-to-end.

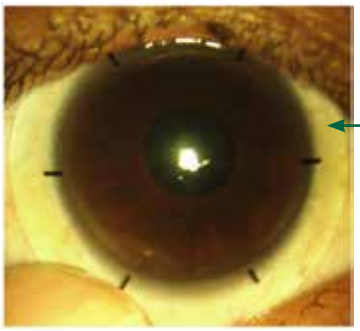


Flex the Diameter Larger
Scribe Markers inside the limbus.



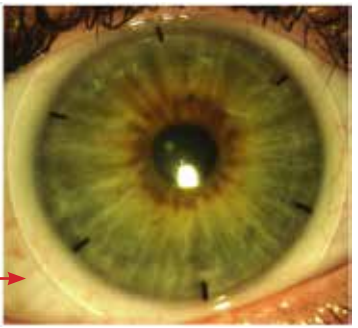
Flex the Diameter Smaller
Scribe Markers outside the limbus.

Example



Ideal Diameter

Flex the Diameter Larger



When you need to flex the diameter to be larger, order the "Flex 3" Option, which provides the necessary clearances algorithmically by auto-adjusting:

- **The PCCZ (Peripheral Corneal Clearance Zone)**
- **The LCZ (Limbal Clearance Zone)**
- **The Diameter**

See page 7 for complete details on the "Flex 3" option.

Step 7

Calculating the diameter with VID (Visible Iris Diameter)

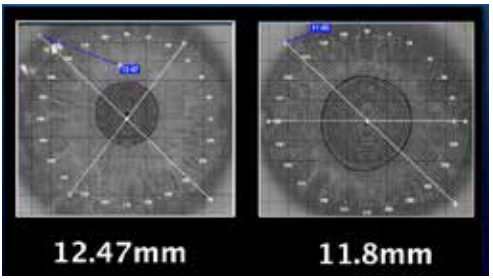
Measure the VID and add 3.5mm

Example:
VID measures 11.5mm + 3.5mm = OAD (Overall Lens Diameter)
15.0 mm ICD FlexFit lens

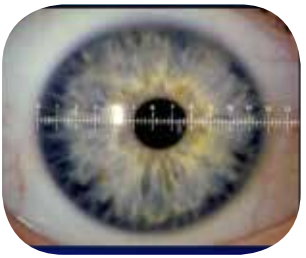
Measurement Methodology

VID (Visible Iris Diameter)

VID Corneal Topography

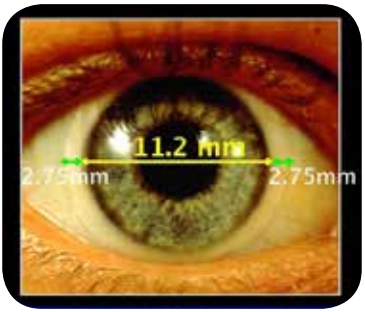


Measuring Corneal Diameter:
Slit Lamp Reticule

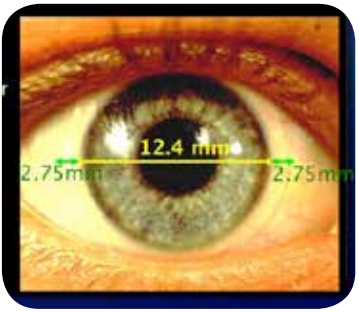


Corneal Diameter / Lens Diameter

VID 11.2mm + 3.5mm = 14.7mm



VID 12.4mm + 3.5mm = 15.9mm*



*Maximum small diameter ICD FlexFit is 15.5mm.

*Requires the larger diameter 16.3mm ICD FlexFit design

The "Flex 3" Option for Mid-Peripheral Touch and/or Limbal Landing

In the presence of **ANY** Mid-Peripheral Touch or Limbal Landing that appears more than 180° circumferentially :

During the *Initial Evaluation or at a Follow-up visit*, order the "Flex 3" option for this patient.

The "Flex 3" Option provides the necessary clearances through the auto-adjusting:

- **The PCCZ (Peripheral Corneal Clearance Zone)**
- **The LCZ (Limbal Clearance Zone)**
- **The Diameter**

The "Flex 3" Option will provide the appropriate vault from the peripheral cornea out through to the sclera

Peripheral Touch

After the *Flex 3* auto-adjustment

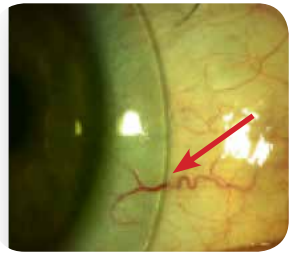
Step 8

(SLZ) Scleral Landing Zone evaluation

Scleral Landing Zone (SLZ)

- View the SLZ to determine if there is excessive edge lift, excessive tightening or blanching
- Verify that the Scleral Landing Zone (SLZ) is aligning with the conjunctiva, 360 degrees around the sclera.
- Order the following adjustment based on the degree of tightness present:
  - Mildly tight: order SLZ -1
    (One arcuate area of vessel restriction)
  - Moderately tight: order SLZ -2
    (Opposing sides of vessel restriction)
  - Severely tight: order SLZ -3
    (>180° of vessel restriction)

Every degree of angle change (+ or -) raises or lowers the sagittal depth of 25 microns

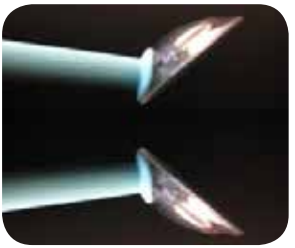


Appropriate landing. No restriction of blood flow under edge.

Restriction of blood vessels and blanching.

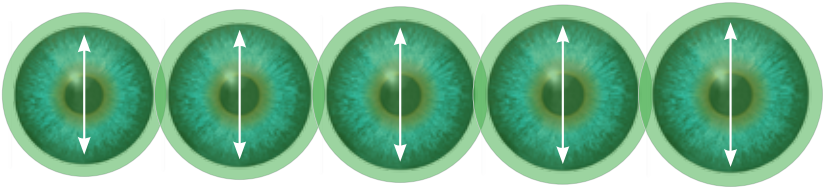
Removing the Lens

- Ensure the lens can move freely on the eye
- Place the DMV lens remover on the bottom portion of the lens and gently pull up and out
- Rinse the lens thoroughly and place in the case with fresh solutions for overnight storage



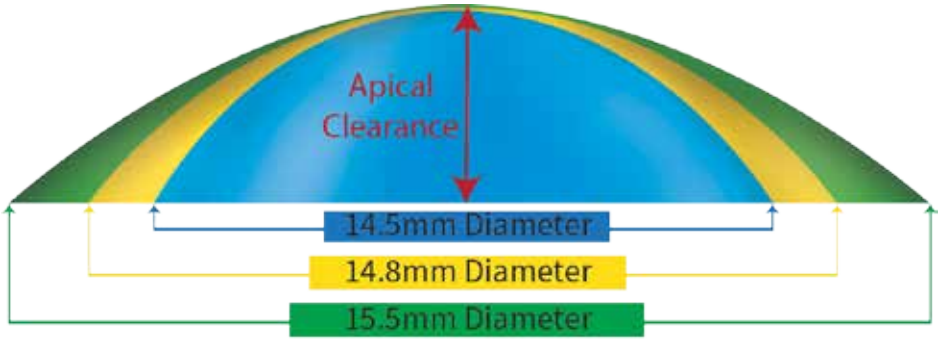
“Flexing the Diameter” The ICD FlexFit 14.8mm design

- The ICD FlexFit™ 14.8mm design can be “flexed” in diameter,
- The diameter can **range** (from the standard 14.8mm) **down to** 14.5mm and **up to** 15.5mm ***while maintaining the desired central clearance***.



14.5mm 14.7mm 15.0mm 15.3mm 15.5mm

Changes in diameter can be made and the auto-adjust feature will maintain Apical Clearance



Indications for “Flexing” the diameter

- Fitting inside or vaulting pingueculae
- Filtering blebs
- Small apertures/ Deep set eyes
- Application and removal challenges
- Larger diameters for Ocular Surface Disease

Step 9

Call your Authorized Laboratory to place your ICD FlexFit™ order.

Specifications required for ordering the ICD FlexFit™ from the Laboratory:*

- Sagittal Depth of the ICD FlexFit diagnostic lens
- Diagnostic lens power
- Spherical over-refraction
- *Flex 3* Option?
- Any modifications to PCCZ, LCZ, SLZ

**If you require consultation to optimize the fit, make sure that you measure and note the apical clearance of your selected diagnostic lens.*

Notes:

IGD FLEXFIT™

KATT DESIGNGROUP

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Canada V6A 1M4
Phone: **(604) 215-1467**
Toll Free: **1(800) 663-4248**
Email: **sales@ptsoptics.com**

Eastern Canada
Cardinal Contact Lens Inc.
#7-38 Cowansview Rd., Cambridge, Ontario,
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Tel: **(519) 740-3050** • Fax: **(519) 740-3296**
Toll Free: **1(800) 263-3973**
E-mail: **info@cardinalcontactlens.com**

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