Fitting steps

FIRST

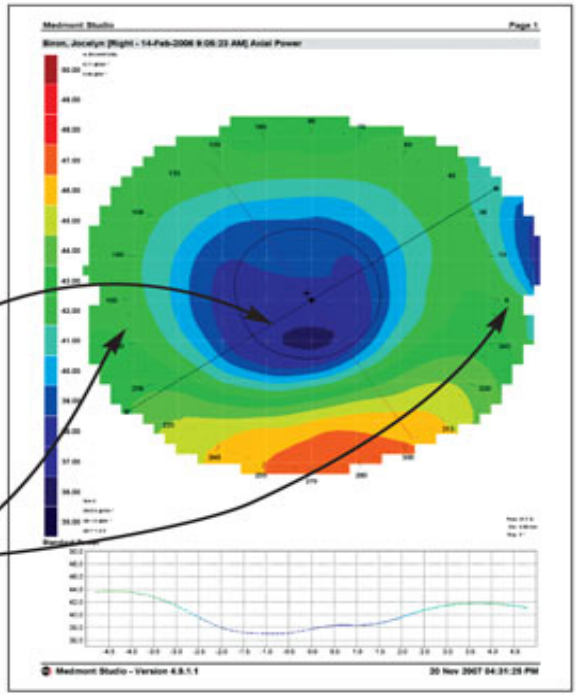
- DETERMINE THE FITTING AND CENTRAL CURVE VALUES FROM TOPOGRAPHY OR KERATOMETRY READINGS.

From topography

When designing a lens from topography, it is recommended to use the axial map as the point of reference. From the axial map, both the central base curve and fitting curve can be determined.

CENTRAL CURVE
0.50D to 1.00D steeper than the flattest post surgical corneal curvature (minimal 2mm diameter)

FITTING CURVE
Equal to the flattest corneal curvature at 3 and 9 o'clock 4.10 mm from the central visual axis.



From keratometry readings

FITTING CURVE

Use 42.00D if pre-surgical K readings are not available.

If pre-surgical K readings or pre-surgical Rx are available, please refer to the examples below on how to derive the initial fitting curve value, or call consultation for assistance.

CENTRAL CURVE

1.00D TO 1.50D steeper than flattest central K reading.

EXAMPLES

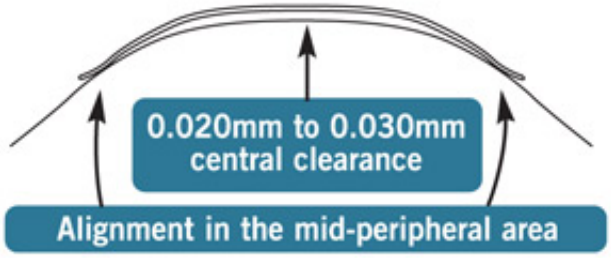
PRE-SURGICAL K READINGS	PRE-SURGICAL RX
FORMULA Fitting curve = average pre-surgical K - 1.00D	FORMULA Fitting curve = post-surgical flat K + pre-surgical Rx - 1.00D
EXAMPLE 44.00D x 46.00D @ 90 (Average K: 45.00D)	EXAMPLE -5.50D -1.00 x 180 Post-surgical flat K: 39.00D (Spherical equivalent = -6.00D)
Fitting curve = 44.00D (45.00D - 1.00D)	Fitting curve = 44.00D (39.00D + 6.00D - 1.00D)

SECOND

- EVALUATE THE DIAGNOSTIC LENS

Central / Mid-peripheral fit

Look for 0.020mm to 0.030mm central clearance with alignment in the midperipheral area. Change the fitting curve/central base curve relationship to achieve the desired fit.



Fitting Tips

Making changes to both the fitting and the central base curve values at the same time can get confusing. When making a change, it is recommended to change only one curve value at a time.

First, trial fit to determine which FITTNG CURVE value gives you the desired alignment in the mid-peripheral area. When doing so, select a CENTRAL BASE CURVE that allows sufficient clearance (2.00D to 3.00D steeper than flattest post surgical corneal curvature) ensuring no central touch. Ignore the central tear layer profile at this stage.

Second, with the correct FITTING CURVE VALUE in situ, progressively flatten the CENTRAL BASE CURVE value to achieve the desired 0.002mm to 0.003mm clearance over the post surgical central area.

For more information on how the curves interact with each other, please refer to the section included in this guide (FITTING CURVE / CENTRAL BASE CURVE INTERACTION).

Peripheral / Edge fit (Edge lift)

Once you have achieved the desired central and mid-peripheral fit, assess the peripheral / edge fit. Look for a peripheral band of 0.5mm to 0.7mm in width. Order Flat or Steep edge lifts accordingly. When the inferior quadrant is significantly steeper then the superior quadrants, causing excessive lift at 6 o'clock consider ordering a lens with ACT (Asymmetric Corneal Technology). For more information on ACT please refer to the section included in this guide.

Diameter

The standard diameter is 10.5mm. Reducing the diameter will release some pressure in the mid-peripheral area and allow the lens to move more freely, conversely, increasing the diameter will increase pressure in the mid-peripheral area, improve centration and reduce lens movement.

THIRD

- OVER-REFRACTION

- Perform over-refraction in normal light conditions
- Begin with ±1.00D steps
- Refine with ±0.50D and ±0.25D
- Order lenses with the following parameters:
    - Central base curve
    - Fitting curve
    - Diameter
    - Peripheral edge configuration
        - is ACT required?
    - Lens power