# BOSTON® MultiVision Fitting Guide Multifocal RGP Fitting Made S.I.M.P.L.E.

Select a patient with +1.50 add or lower, interested in full-time wear and has visual tasks at varying levels.

Interview patient regarding expected lens use, vocation and hobbies, previous type of lens wear, etc.

Measure the cornea, refractive error, lid structure and position. K's and spectacle Rx will be the key measurements for initial lens selection.

Place a diagnostic lens on the eye. Choose this lens from the Initial Base Curve Selection Chart. Determine lens power by over-refraction.

Look for central to superior-central lens position. This provides for adequate distance vision, while reducing edge glare and flare in dim light or at night.

Evaluate fluorescein pattern and lens translation. Unlike most other aspherical multifocal RGPs, the BOSTON MultiVision lens employs alignment fitting.

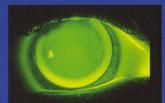
## **INITIAL BASE CURVE SELECTION CHART**

All Values Relative to "Flat K" Reading

9.6 mm Diameter	Determine Flat K	Flat K Range to Diopters	39.00 to 39.25	39.50 to 39.75	40.00 to 40.25	40.50 to 40.75	to	41.50 to 41.75	to	42.50 to 42.75	43.00 to 43.25	to	44.00 to 44.25	44.50 to 44.75	45.00 to 45.50	45.75 to 46.25	46.50 to 47.00	47.25 to 47.75
	Select Recommended Base Curve	Corneal Astigmatism ≤1.50D		8.40	8.30	8.20	8.10	8.00	7.90	7.80	7.70	7.60	7.50	7.40	7.30	7.20	7.10	7.00
	Select Recommended Base Curve	Corneal Astigmatism >1.50D	8.40	8.30	8.20	8.10	8.00	7.90	7.80	7.70	7.60	7.50	7.40	7.30	7.20	7.10	7.00	

Evaluation of lens positioning and fluorescein pattern

#### **Preferred Fit**



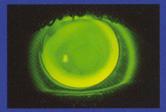
Alignment fit with central to superior-central positioning

### 0.1 mm Steeper Fit



Increased apical clearance, combined with midperipheral bearing

### 0.1 mm Flatter Fit



Increased central bearing with loss of lens stability

# **Initial Base Curve Selection by Keratometry**

Measure the central corneal curvature and identify the flat K reading (smallest dioptric value).

Example: Flat K = 43.00 @ 180, 44.00 @ 90

(The flat K is used as the reference point to select the base curve from the INITIAL BASE CURVE SELECTION CHART)

Calculate the amount of corneal astigmatism (difference between the flat and steep K).

Corneal astigmatism = 1.00D

Select the Initial Base Curve based on the amount of corneal astigmatism from the INITIAL BASE CURVE SELECTION CHART.

Recommended base curve is 7.70mm

## **Evaluation of Lens Position and Movement**

Ideally the lens should position in the central to superior/central position, with the lens optics situated over the pupil.

Typically, the fluorescein pattern will demonstrate "alignment" along the flattest corneal meridian.

During downward gaze, the lens should easily translate superiorly, providing maximum reading vision.

## **Lens Power Selection**

Perform spherical over-refraction over the best-fitting diagnostic lens.

Adjust over-refracted power for vertex distance if above +/- 4.00D.

Over-refraction is best performed with loose trial lenses or a trial frame (not a phoropter).

## Choose initial lens to achieve alignment

Unlike other posterior surface aspheric RGP multifocals, the BOSTON® MultiVision lens is designed to be fit in alignment with the central and superior-central cornea. Follow the INITIAL BASE CURVE SELECTION CHART when choosing the initial lens.

## Ensure that lens translation occurs

BOSTON MultiVision lenses provide both simultaneous and alternating vision through their unique posterior surface construction. This means that the lens must translate easily across the corneal surface as the patient looks from distance to reading tasks. Proper base curve selection will usually ensure that the lens will move easily along the vertical corneal meridian.

#### Fits or does not fit

If an alignment fitting relationship, combined with acceptable vertical translation, cannot be achieved with the initial diagnostic lens, simply choose the next steeper or flatter base curve and evaluate.

## No modifications should be made to the back surface

Due to the complex posterior surface geometry of the BOSTON MultiVision back surface, modifications should not be performed. Any induced surface changes will compromise clinical performance by impacting the optical and fitting characteristics of the lens.



