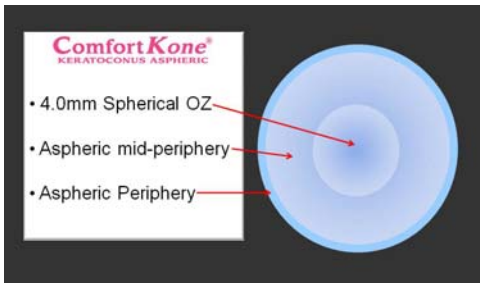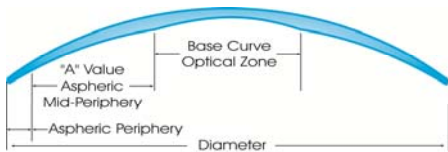# ComfortKone®
KERATOCONUS ASPHERIC

ComfortKone lenses provide a comfortable alignment fit to the cornea. Fitting is approached from center outward or," from the inside-out".

Design of the posterior surface consists of a spherical curve in the central 4mm, an aspheric zone from 4mm out to 8mm and a bi-aspheric periphery.

ComfortKone®
KERATOCONUS ASPHERIC
• 4.0mm Spherical OZ
• Aspheric mid-periphery
• Aspheric Periphery

The key fitting element of the ComfortKone design is the posterior "aspheric periphery" and is represented as the "A" value. The "A" value controls the "edge lift" and provides mid-peripheral "alignment". The greater the "A" value number, the more aspheric flattening and the greater the edge lift.

Always Ahead of the Curve

METRO OPTICS
800-223-1858
www.metro-optics.com

Lens Parameter Availability

- Base Curve*
  4.5mm (75.00 diopters) to 8.00mm (42.00 diopters)
- "A" Value A3 to A25 (steps of 1)
- Diameter* 7.5mm to 9.5mm (0.1mm steps)
- Power* Any sphere power
*Custom Parameters available

Fitting ComfortKone

Step 1 Initial Diagnostic Lens Selection

1. Select a base curve nearest the steepest reading from keratometer readings or corneal topography.
2. Select the highest "A" value available in calculated base curve range.

Example:

52.37 @ 43 /. 57.87 @ 133 =

Steep K = 57.87

Conversion- 57.87= 5.83mm

Round to nearest .10 = 5.80mm

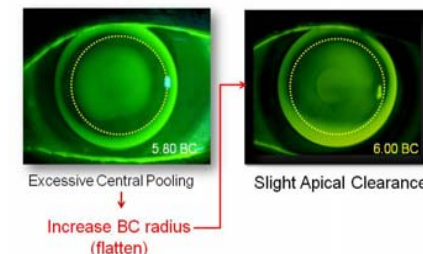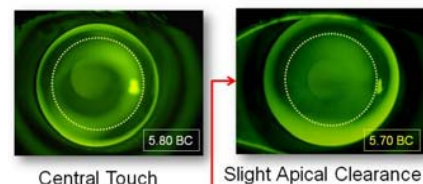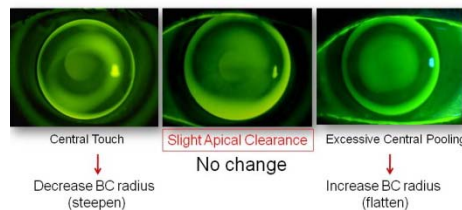## 5.80 Base Curve/A20-
Initial Diagnostic Lens

Important Note – The initial diagnostic lens is only a starting point.

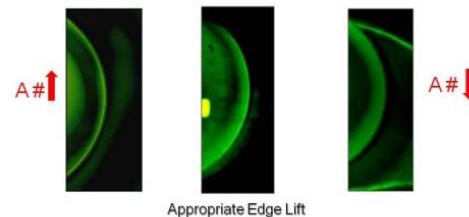## Step 2 Apply Initial Diagnostic lens and instill Fluorescein.

Note: ComfortKone diagnostic lenses contain a UV blocker. For best results, evaluate fluorescein with blue cobalt light and a **Yellow Wratten filter.**

Step 3 Evaluate *Central* Fluorescein Pattern

Slight Apical Clearance is preferred.

Central Touch — Decrease BC radius (steepen)
Slight Apical Clearance — No change
Excessive Central Pooling — Increase BC radius (flatten)

Central Touch — Decrease BC radius (steepen) — 5.80 BC
Slight Apical Clearance — 5.70 BC

Excessive Central Pooling — Increase BC radius (flatten) — 5.80 BC
Slight Apical Clearance — 6.00 BC

Step 4 Evaluate Edge Lift Profile Independently from Base Curve Evaluation

A#↑   A#↓
Appropriate Edge Lift

Step 5 Over-Refract

When the best fitting diagnostic lens is determined, allow the lens to settle for 3 to 5 minutes and over-refract.

Note: Vertex all Over-refraction ± 4.00D

Step 6 Order Lens
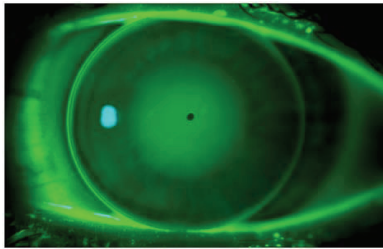
Important Note – ComfortKone lenses will gravitate over the cone and do not need to position centrally to achieve excellent results. If best fitting decenters excessively, call Metro Optics consultation.
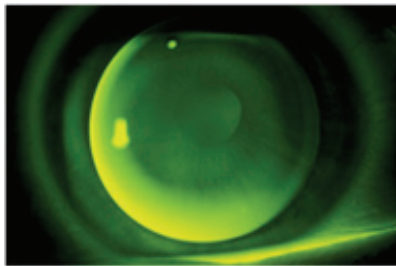
Fitting tips:

During Diagnostic Fitting:
- Make Base Curve changes in .2mm steps to evaluate effect.
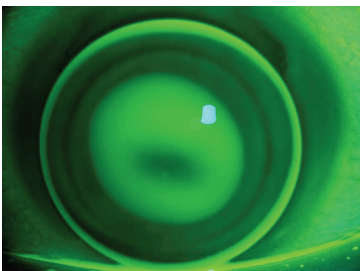- Make "A" value changes in steps of 5 "A" values to evaluate effect.

Troubleshooting

Bubbles and/or Central pooling indicate a base curve that is too steep.
Make flatter BC changes in .2mm steps to assess. improvement.

Central Touch indicates a base curve that is too flat.
Make steeper BC changes in .2mm steps to assess improvement.

This lens has **insufficient edge lift** *and* a BC that is too steep.
1. Flatten BC to achieve slight apical clearance.
2. Adjust "A" value to achieve proper edge lift .
.

Conversion Charts

Vertex Chart (12mm Vertex Distance)

Minus Power		Plus Power	
-4.00	-3.87	+4.00	+4.25
-4.50	-4.25	+4.50	+4.75
-5.00	-4.75	+5.00	+5.25
-5.50	-5.12	+5.50	+5.87
-6.00	-5.62	+6.00	+6.50
-6.50	-6.00	+6.50	+7.00
-7.00	-6.50	+7.00	+7.62
-7.50	-6.87	+7.50	+8.25
-8.00	-7.25	+8.00	+8.87
-8.50	-7.75	+8.50	+9.50
-9.00	-8.12	+9.00	+10.12
-9.50	-8.50	+9.50	+10.75
-10.00	-8.87	+10.00	+11.37
-10.50	-9.37	+10.50	+12.00
-11.00	-9.75	+11.00	+12.75
-11.50	-10.12	+11.50	+13.37
-12.00	-10.50	+12.00	+14.00
-12.50	-10.87	+12.50	+14.75
-13.00	-11.25	+13.00	+15.50
-13.50	-11.62	+13.50	+16.12
-14.00	-12.00	+14.00	+16.75
-14.50	-12.37	+14.50	+17.50
-15.00	-12.75	+15.00	+18.25
-15.50	-13.00	+15.50	+19.00
-16.00	-13.50	+16.00	+19.75
-16.50	-13.75	+16.50	+20.50
-17.00	-14.12	+17.00	+21.50
-17.50	-14.50	+17.50	+22.25
-18.00	-14.75	+18.00	+23.00
-18.50	-15.12	+18.50	+23.75
-19.00	-15.50	+19.00	+24.75

Diopter / Radius Conversion Chart

D	MM	D	MM	D	MM
45.00 --	7.50	59.00 --	5.72	67.25 --	5.02
45.25 --	7.46	59.25 --	5.70	67.50 --	5.00
45.50 --	7.42	59.50 --	5.67	67.75 --	4.98
45.75 --	7.38	59.75 --	5.65	68.00 --	4.96
46.00 --	7.34	60.00 --	5.63	68.25 --	4.95
46.25 --	7.30	60.25 --	5.60	68.50 --	4.93
46.50 --	7.26	60.50 --	5.58	68.75 --	4.91
46.75 --	7.22	60.75 --	5.56	69.00 --	4.89
47.00 --	7.18	61.00 --	5.53	69.25 --	4.87
47.25 --	7.14	61.25 --	5.51	69.50 --	4.86
47.50 --	7.11	61.50 --	5.49	69.75 --	4.84
47.75 --	7.07	61.75 --	5.47	70.00 --	4.82
48.00 --	7.03	62.00 --	5.44	70.25 --	4.80
48.25 --	6.99	62.25 --	5.42	70.50 --	4.79
48.50 --	6.96	62.50 --	5.40	70.75 --	4.77
48.75 --	6.92	62.75 --	5.38	71.00 --	4.75
49.00 --	6.89	63.00 --	5.36	71.25 --	4.74
49.25 --	6.85	63.25 --	5.34	71.50 --	4.72
49.50 --	6.82	63.50 --	5.31	71.75 --	4.70
49.75 --	6.78	63.75 --	5.29	72.00 --	4.69
50.00 --	6.75	64.00 --	5.27	72.25 --	4.67
50.25 --	6.72	64.25 --	5.25	72.50 --	4.66
50.50 --	6.68	64.50 --	5.23	72.75 --	4.64
50.75 --	6.65	64.75 --	5.21	73.00 --	4.62
51.00 --	6.62	65.00 --	5.19	73.25 --	4.61
51.25 --	6.59	65.25 --	5.17	73.50 --	4.59
51.50 --	6.55	65.50 --	5.15	73.75 --	4.58
51.75 --	6.52	65.75 --	5.13	74.00 --	4.56
52.00 --	6.49	66.00 --	5.11	74.25 --	4.55
52.25 --	6.46	66.25 --	5.09	74.50 --	4.53
52.50 --	6.43	66.50 --	5.08	74.75 --	4.52
52.75 --	6.40	66.75 --	5.06	75.00 --	4.50
53.00 --	6.37	67.00 --	5.04	75.25 --	4.49

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