

FITTING GUIDE: Horizon Cone

Pre-Fitting Examination

A complete exam should be performed including a thorough slit lamp exam and topography. The progression of the Keratoconus will determine the first lens to select during the trial lens fitting. Typically an emerging cone will show minimal physiological and topographical keratoconic signs. As the condition progresses distinct physiological signs such as "Munson's ring", thinning of the cornea, corneal scarring and increased cornea distortion will become present. These findings should be noted at the initial fitting.

Selecting Lens Size

Lens diameter is determined by the severity of the cone progression. As a rule of thumb, the steeper the cone the smaller the lens. Typically, a 9.0 mm lens will be used on an emerging cone while a 8.5mm or 8.0mm lens will be used on a more advanced cone. It is recommended that our spherical **Horizon** lens with its aspherical periphery be used on the emerging Keratoconus patient. For a more advanced cone, our inside lenticulated **Horizon Cone** should be used. With the ability to change the base curve and the diameter, a fluorescein pattern of three point touch can be obtained.

RECOMMENDED TRIAL LENS SIZE	
Flat K / Steep K	Diameter
47.00< 50.00<	9.0mm / Horizon sphere
48.00> 52.00>	9.0mm-8.5mm / Horizon Cone
52.00> 56.00>	8.5mm-8.0mm / Horizon Cone

Base Curve Selection

The initial base curve trial lens is determined by evaluating the patient's corneal topography. It is important to note both the "sim K" and the color map itself. Attention should be given to how steep the cornea is at its steepest area. An average of the total corneal cylinder should be done. This average is determined by subtracting the flattest "sim K" from the steepest area on the color map. It is important to read the color grid accurately in order to determine the absolute steepest area of the cornea. Once that difference is determined, divide that number by 3 and add the answer to your flat "sim K" for your initial base curve trial lens.

Physical Fit And Fluorescein

A properly fit lens should move on the cornea and routinely exhibits a fluorescein pattern with three points of touch. Caution should be taken not to have a lens that shows 360 degrees of bearing. This will cause seal off and result in a lens that fits too tight. The lens should lightly touch centrally and in the mid-periphery. If your trial lens shows central touch with 360 degrees of seal off, fit the same base curve in a smaller diameter. If your trial lens shows heavy bearing go to a steeper lens; if it shows heavy central pooling go flatter.

Power Determination

The power of the lens should be determined by over refracting a properly fitting trial lens.

