QUADRANT ZONING
FITTING GUIDE

There have been a large number of changes in contact lens lathes and materials over the past few years.

ACL is now able to manufacture lenses with a different range of curves in up to 4 different quadrants. This is available across our entire range of rigid lens designs, including large diameter designs, such as Limbal lift (formerly E & K series). These developments enable us to offer more options for irregular & complicated corneas. Some examples are: pellucid marginal degeneration, post grafts, post PRK and includes keratoconus types such as centred, sagging and keratoglobus.

In the past, we have been able to supply toric or toric periphery designs, which are optimal in many cases, as most corneas are symmetrical. However, for irregular and keratoconic corneas, it may be necessary to have quadrants that vary and are therefore better able to match the distorted shape of the cornea.

Note: Keratoconic patients only require Quadrant Zoning if the cornea is truly steepening below the cone. If a keratoconic eye is fitted with a flat lens, the top lid will press on the top part of the lens, which will then pivot on the top of the cone and therefore lift up the lower portion of the lens. This subsequently makes it appear as though the cornea steepens in the lower quadrant, but is not the case. Refitting with minimal central touch is all that is required.

Ordering “Quadrant Zoning” on standard Spherical, Graft, Twin Curve, or Kera lens designs simply requires a trial fitting (using the appropriate standard trial set) or evaluation of existing lens, noting the width of excessive edge clearance. For example, if the edge clearance is 1.0mm (normally 0.5mm), we would start the steepening process 1.0mm in from the lens edge. So the order would be: QuadZone .50mm over 1.0 mm. The amount of steepening required will vary with the amount of clearance.

A good guide would be as follows:

1. If the clearance is not very wide, then .50mm reduced lift is required.
2. Full width but no bubble, then .80mm reduced lift is required.
3. Full width with bubble, then 1.10mm reduced lift is required.

LIMBAL LIFT LENSES
(formerly E & K SERIES)

These lenses are available with Quadrant Zoning in order to reduce the amount of clearance on the lower portion of the lens. It is important not to remove all clearance, just the excess, as the lenses still need to be able to rock.

The following is an example of E Series with Quadrant Zoning: if the periphery of the lens is ideal on the top 3 quadrants with E5 for the edge profile, but there is excessive clearance at 6 o’clock, then you would order: - E5 * E5 * E5 * E2. The lens will automatically spin itself around until the steeper section of the lens matches the cornea.

ROSE K DESIGNS

Quadrant zoning is available on Rose K designs, however it is known as ACT (Asymmetric Corneal Technology) and offers three standard choices. Please see separate RK fit guide.