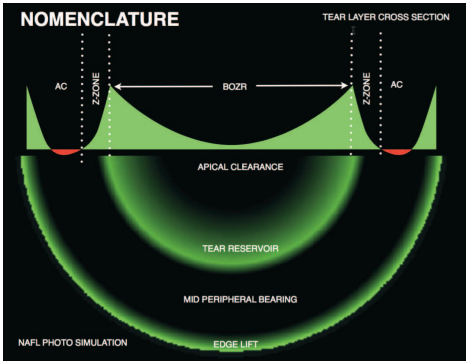
Designing **Forge Myopia Ortho-K** Lenses

Parameters:

- BOZR (mm) / Z-Zone (µm) / AC (mm) / Diameter (mm) / Lens power (D)
  Forge Myopia 8.8/330/7.9/11.0/+0.75



Checklist:

- Step 1: Diameter
- Step 2: BOZR
- Step 3: Alignment Curve
- Step 4: Z-Zone

Step 1: Diameter

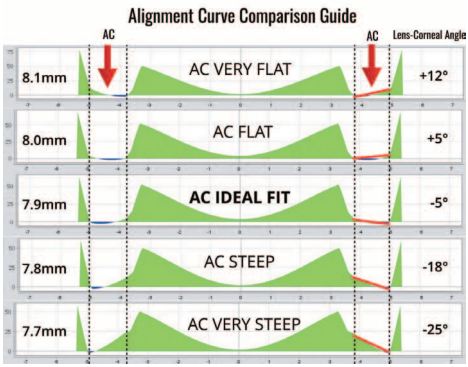
- Measure the HVID as horizontally as possible from each edge of the iris (shown darker) through the centre of the cornea.
- Lens diameter is calculated by EyeSpace as 93%-97% of HVID.
- On eye the lens should never overlap the limbus.

Step 2: BOZR

- Does not fit to cornea, rather is responsible for the amount of refractive change.
- BOZR = SimK + Spec Rx + Jessen Factor. Eg. 42.00 + -3.00 + -0.75 = 38.25 (D) = 8.823mm. EyeSpace will automatically calculate this for you.
- A flatter BOZR (higher numeric value in mm) will create more myopic correction.
- For further information regarding the BOZR and lens power calculations, click on the “Optical Analysis” tab.

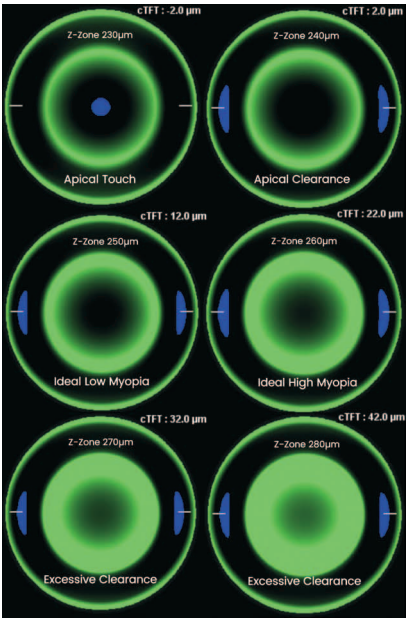
Step 3: Alignment Curve

- Responsible for the corneal lens bearing and centration on eye.
- The lens-corneal angle of bearing is the key concept to achieving perfect centration.
- The lens-corneal angle of bearing can be best visualised and assessed by the cross section tear layer profile of the alignment curve. See image.
- The ideal fit is one where the lens-corneal angle is slightly negative (sloping down towards the edge).



Step 4: Z-Zone (Reverse Curve)

- Controls the sagittal height of the lens and the corneal apical clearance (central tear film thickness).
- This is always the final check after adjusting any other parameter, as changing any other parameter will affect the overall depth (sagittal height) of the lens.
- Altering the Z-Zone will increase or decrease the sagittal height of the lens and therefore change the apical clearance and area of lens bearing. See image.
- The bearing of the lens on the cornea is displayed as blue in the simulation.
- A Forge Myopia lens should never have central lens bearing, as this will cause central cornea desiccation and staining, and an unstable fit, resulting in nasal or temporal decentration.
- The bearing of the lens on the cornea should be in the alignment zone. The ideal central tear film thickness for correcting low myopia (<-5.00) is 10-20 microns and for high myopia (> -5.00) is 20 to 30 microns.
- The greater the numeric value of the Z-Zone, the more apical clearance. For example, 290um has 5um less apical clearance than 295um.



Tips:

- The single most important factor to achieving a successful result in topography based contact lens fitting and orthokeratology is the reliability and repeatability of the prefit topography.
- An ideal baseline corneal topography has geometrically centred placido rings, has lids and lashes held out of the way, and is free of ring jam.
- If you are ever unsure when designing a lens, simply send the order to your distributor, using the “review and order” button in the shopping cart page. Your distributor can then guide you through the fitting process to achieve the best result for you and your patient.

Fitting **Forge Orthokeratology** Lenses

Forge Ortho-K Delivery:

- Forge Ortho-K lenses should be inspected and cleaned well before dispensing.
- Verify the engraving against the members.eyespace.com.au website.
- Instill one drop of topical local anaesthetic for neophyte wearers.
- Place one drop of preservative free solution with NaFl in the back of the lens. With the patient in a face down position, insert the lens directly onto the cornea. If bubbles are present under the lens, remove and reinsert.
- Allow the lens to settle and assess the lens fit. Please note neophyte wearers may need longer settling time (30 mins) due to blepharospasm and epiphora.

Forge Ortho-K Lens Assessment:

- Note the position and stability of the lens markings for toric designs.
- Perform a refraction over the lens on eye.
- Assess for lens centration, and movement. Hold the eyelids and manipulate the lens to a central position for best assessment of the NaFl pattern. Photograph the NaFl pattern in a central position and send to your distributor for troubleshooting.

Forge Ortho-K Review (World):

- 1 day, 1 week, 1 month, 3 months, 6 months, 12 months.
- Communicate to the patient the warranty period for lens adjustments.
- Per case Forge Myopia orders: 2 free remakes within 90 days.
- All other Per Case Forge Orders: 2 free remakes within 120 days.

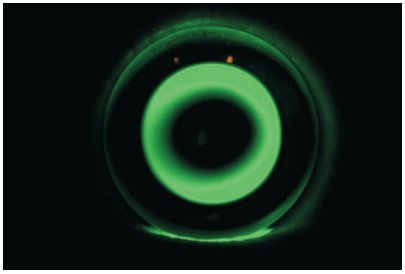
Forge Ortho-K Review (USA only):

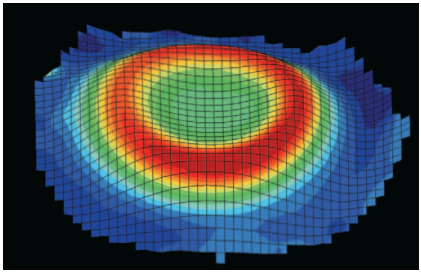
- 1 day, 1 week, 1 month, 3 months, 6 months, 12 months.
- Communicate to the patient the warranty period for lens adjustments.
- 50% discount for all remakes.

Forge Ortho-K Follow Up:

- Corneal topography.
- Monocular unaided vision at distance and near.
- If unaided vision reduced, measurement of residual refraction.
- Slit lamp assessment of the ocular surface with NaFl to check for corneal staining or opacity.
- Assessment of lens for defects, scratches, chips, depositing.

- Ortho-K lens wearers should always place one drop of preservative free solution in the back of the lens, and insert the lens in a face down position, placing the lens directly onto the eye over the pupil.
- Insert the lens 10-15 minutes prior to going to bed to allow the lens to settle.
- The lens should be removed within 15 minutes of waking.
- The lens needs to be loosened prior to removal. To loosen the lens, insert a drop of lubricant into the eye. Free the lens by using the index finger to push up the bottom eyelid against the lower edge of the lens.
- The single most important factor to achieving a successful result in Ortho-K is the reliability and repeatability of the corneal topography.
- The patient's eyes must look good, feel good, and see good. If in doubt discontinue lens wear. Contact your distributor if you have any concerns or queries.





For more information & tips please visit the EyeSpace knowledge base: **KB.EYESPACE.COM.AU**

Forge Ortho-K Lens Accessories

Region	Australia	New Zealand	South Africa	USA
Cleaning Solution	Hydrogen Peroxide solution, such as AO Sept Plus	Hydrogen Peroxide solution, such as AO Sept Plus	Hydrogen Peroxide solution, such as AOsept or Oxysept	Hydrogen Peroxide solution, such as Clear Care Plus
Lubricant	Non-preserved lubricant, such as HYLO-FORTE® eye drops	Non-preserved lubricant, such as Thera Tears Gel Drops & Eyeye Saline	Xailin HA or Optive Fusion	Non-preserved lubricant, such as Menicon Lacripure
Intensive Cleaning Solution	Menicare Progent fortnightly	Menicare Progent fortnightly	Lens Plus or preservative free saline	Menicon Progent
Removal Tools	DMV Classic or DMV Ultra contact lens removers	DMV Classic or DMV Ultra contact lens removers	DMV Classic or DMV Ultra contact lens removers	DMV Classic or DMV Ultra contact lens removers