

Designing EyeSpace Bespoke Lenses

The EyeSpace Bespoke lens is a daily wear Rigid Gas Permeable lens and is available with the following parameters:

Parameters: Rotationally Symmetric | Parameters: Toric

- BOZR / AC / Diameter / BVP
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- EyeSpace Bespoke 8.3 / 7.8 / 10 / -10.5
- BOZR / AC
- EyeSpace Bespoke Toric 8.3 / 7.85 / 10 / -10.5
- 8.1 / 7.7

Checklist

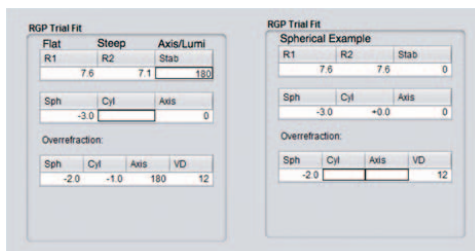
- Step 1: Lens Diameter
- Step 2: BVP
- Step 3: BOZR
- Step 4: Alignment Curve

Step 1: Lens Diameter

- The lens diameter is calculated by EyeSpace. Measure the HVID as horizontally as possible from the edge of the iris (shown darker) through the centre of the cornea.

Step 2: Back Vertex Power

- EyeSpace automatically calculates the correct Back Vertex Power (BVP) of the lens.
- You can use a trial lens with known parameters or spectacle refraction and topography to design the lens.
- Enter the Back Optic Zone Radius or BOZR values of the trial lens in block R1 and R2.
 - For back toric trial lenses, enter the flat BOZR in block R1, the steep BOZR in block R2 and the axis rotation of the flat BOZR on the eye in the block labelled 'Stab'.
 - R1 and R2 will be identical for rotationally symmetric/spherical cases.
 - To check the BVP before ordering select the Optical Analysis tab. This shows the calculated Ideal Back Vertex Power, Vertex Spectacle Power and Tear Power over the cornea.

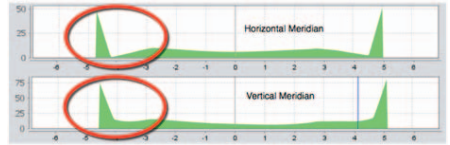


Step 3: BOZR

- The Central Tear Film Thickness (cTFT) is recommended to be between 5 -10 microns.

Step 4: Alignment Curve (AC)

- Controls the corneal lens bearing and centration on the eye.
- The lens-corneal angle of bearing is essential to centre the lens in the horizontal meridian and allow vertical movement when blinking.
- 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 (downward sloping) towards the edge in the horizontal meridian and in alignment or slightly flat in the vertical meridian to assist with lens movement and lid attachment.



Tips:

For more experienced contact lens practitioners, EyeSpace Bespoke lens offers advanced parameters to further customise the lens design.

To view and modify the advanced parameters click the 'Show Advanced Parameters' checkbox. These include:

- Back Optic Zone Diameter modification (BOZD).
- The AC eccentricity value can be increased or decreased which is useful to improve the AC fit relationship in corneas with either very low e-values or very high e-values as seen in Keratoconus.
- Lens Edge Width and Edge Radius can be increased or decreased. Modifying these two parameters is helpful to regulate the tear flow under the lens and to control lid attachment.
- For EyeSpace Bespoke lenses fitted on regular corneas, aim to have the horizontal edge tear profile to be between **50 and 75 microns** and the vertical edge tear profile to be between **75 and 100 microns**.
- For irregular corneas, like keratoconus, the horizontal edge tear profile can be increased to be between 75 and 100 microns and the vertical edge tear profile to be between 100 and 150 microns.



Optimizing the Fit:

- When manipulating Advanced Parameters, the lens-to-cornea fit relationship will be affected. Click the 'AC' button to let the software recalculate the ideal lens-to-cornea fit.

Fitting EyeSpace Bespoke Lenses

EyeSpace Bespoke Delivery:

- EyeSpace Bespoke lenses should be inspected and cleaned well before dispensing.
- Verify the engraving against the members.eyespace.com.au website.
- Place one drop of a preservative free solution with sodium fluorescein NaFl in the back of the lens.
- With the patient in a face-down position, insert the lens directly onto the cornea.
- Communicate to the patient the warranty period for lens adjustments.
- 50% discount for all remakes.

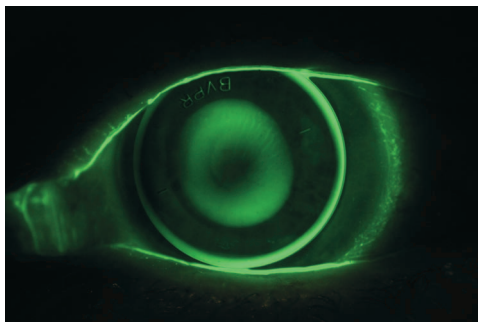
EyeSpace Bespoke Assessment:

- Assess the lens centration and movement.
- Hold the eyelids and manipulate the lens to a central position for best assessment of the lens alignment, observing the NaFl pattern with a blue light and Wratten yellow filter.
- If possible, it is good practice to photograph the NaFl pattern in a central position for your record keeping and potential troubleshooting.
- Note the location and stability of the lens markings for Bespoke Toric designs.
- Perform a spherocylindrical refraction over the lens (ROL) on the eye. Perform an over-refraction over the lens on the eye.

EyeSpace Bespoke Review:

- Review the lens fit at regular intervals: Lens delivery, two weeks, one month and six months.
- Slit lamp assessment of the ocular surface using NaFl to check for corneal staining or opacity.
- Schedule annual reviews after completion of the fit.
- At annual reviews assess lenses for chips, scratches and deposits.
- Recommend lens replacement is every two years.

- A drop of preservative-free lubricant in the back of the lens on insertion can improve comfort and reduce dryness with lens wear.
- Insert the lens with the patient face down to avoid air bubbles.
- Aim to insert the lens directly over the pupil.
- For new wearers, it takes between 10 and 15 days to adapt to RGP contact lenses.¹
- Plasma treatment and HydraPEG coating can be applied to improve wettability, comfort and dryness symptoms.
- The patient's eyes must look good, feel good and see good. When 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

Bespoke Lens Accessories

Cleaning Solution	Hydrogen peroxide solution, such as AOSep/ Clear Care with Hydraglyde
Lubricant	Non-preserved lubricant such as Xailin HA, Hylofresh and Refresh PF eye drops
Intensive Cleaning Solution	Menicare Progent, Boston daily or Lobob daily cleaner
Removal Tools	DMV Classic or DMV Ultra contact lens remover



¹Eye Contact Lens. 2016 Mar;42(2):108-14. doi: 10.1097/ICL.0000000000000153.Symptoms and Signs in Rigid Gas Permeable Lens Wearers During Adaptation Period. Carracedo G1, Martin-Gil A, Peixoto-de-Matos SC, Abejón-Gil P, Macedo-de-Araújo R, González-Méjome JM.