Fitting Guide

For Comfort and Clarity, the choice is Clear - SoClear!

Three designs from the SoClear® Family of Lenses

STANDARD  ASPHERICAL CONE  PROGRESSIVE
3 Step Fitting Guide for SoClear®

1. Determine Initial Trial Lens

Determine initial trial lens according to the Primary Keratometer reading and the amount of corneal cylinder present.

Choose the starting base curve that is closest to the mean K. Add flat and steep K together and divide by 2. This is the mean K. Do not be concerned with how the central fit looks at this point. Focus on the peripheral fit, the area beyond the limbus and over the sclera. It is most important that the trial lens be properly aligned with the sclera, see example 1 for proper scleral alignment.

*Note that this is a starting point based on a normal HVID (Horizontal Visible Iris Diameter) which is normally between 11.5 and 12.0 mm. For a larger than normal HVID start with a trial lens that is 1.00 Diopter steeper than the mean K. For a smaller than normal HVID start with a trial lens that is 1.00 Diopter flatter than the mean K.

Example 1 – Good lens fit

If the scleral fit shows too much clearance, as shown in example 2, choose the next steeper base curve from the trial set until the scleral fit is similar to example 1.

Example 2 – Edge Lift indicates peripheral fit is too flat

If the scleral fit is too steep, as shown in example 3, choose the next flatter trial lens until the scleral fit is similar to example 1.

Example 3 – Note blanching at the limbus, indicating the lens is too deep

*Note the trial lens base curve that provides the best scleral fit.

2. Determine if Mid-peripheral Fit Needs to be Adjusted

Using the trial lens that provides the best scleral fit, observe the mid peripheral fit of the lens. This is just inside the limbus and approximately 2 to 4 mm towards the center of the cornea, see example 4 for proper mid-peripheral alignment. No adjustment will be required for the trial lens base curve that provides good scleral and mid-peripheral alignment.

Example 4 – Good Scleral and mid peripheral alignment

If the mid-peripheral fit has too much clearance, as shown in example 5, an order adjustment of 1.0 diopter steeper on the base curve will need to be made. See the example listed in step 3.

Example 5 – shows too much clearance in the mid-periphery

If the mid-peripheral fit has too little clearance, as shown in example 6, an order adjustment of 1.0 diopter flatter on the base curve will need to be made. See the example listed in step 3.

Example 6 – shows too little clearance

*Note the trial lens base curve that provides the best scleral fit.
3. Determine Final Lens Power, Peripheral Adjustment and Diameter

Over reformat the trial lens that provided the best scleral alignment fit to determine the final power.

*Note the trial lens base curve that provided the best scleral alignment as shown in example 1. If the mid-peripheral fit shows good mid-peripheral alignment as shown in example 4, no base curve adjustment is required. Order the base curve power and diameter as noted.

If the mid-peripheral fit showed too much clearance, as shown in example 5, an adjustment of 1.0 diopter steeper will need to be made to the final base curve. Order the base curve one diopter steeper than the best scleral aligned trial lens and specify the periphery to be one diopter flatter than normal.

Example: Best scleral fit was with 44.00 D base curve but the mid-periphery showed too much clearance as in example 5. Order the base curve as 45.00 D with a peripheral curve adjustment that is 1.0 D flatter than standard. Make sure to compensate the final power for the tear layer change from 44.00 D to 45.00 D by -1.00 D.

If the mid-peripheral fit showed too little clearance, as shown in example 6, an adjustment of 1.0 diopter flatter will need to be made to the final base curve. Order the base curve one diopter flatter than the best scleral aligned trial lens and specify the periphery to be one diopter steeper than normal.

Example: Best scleral fit was with 44.00 D base curve but the mid-periphery showed too little clearance as in example 6. Order the base curve as 43.00 D with a peripheral curve adjustment that is 1.0 D steeper than standard. Make sure to compensate the final power for the tear layer change from 44.00 D to 43.00 D by +1.00 D.

*Note that the trial lens set has a diameter of 14.0 mm. This would be considered an average diameter for a normal HVID (Horizontal Visible Iris Diameter). If the HVID is unusually large or small adjust the final diameter to be 2.2 mm larger than the measured HVID. Changing the diameter has little or no affect on the fit, as the increase in diameter is in the outer peripheral curve.

You are now ready to place your lens order.

Place the order providing the final base curve after any adjustment, final adjusted peripheral curve noting steeper or flatter adjustment if necessary and the diameter. Normally the diameter will be 14.0 mm but this may vary for a larger or smaller than normal HVID.

Art Optical Guarantee:
Our worry-free approach to fitting GP lenses provides two refits per eye and full cancellation privileges for 90 days. Guaranteed Fit Program also available - ask for details!

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## Troubleshooting

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<th>Finding</th>
<th>Cause</th>
<th>Solution</th>
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<td>Central Air Bubble</td>
<td>Base curve too steep</td>
<td>Try next flatter base curve in trial set and observe if the scleral alignment is still adequate.</td>
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<tr>
<td>Shallow, stationary mid-peripheral air bubbles with little mid-peripheral clearance</td>
<td>Insufficient mid-peripheral clearance</td>
<td>Order lens in this peripheral curve system but ask for flattened base curve (typically 1 Diopter flatter)</td>
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<tr>
<td>Deep mid-peripheral air bubbles found in areas of excessive pooling or vault clearance</td>
<td>Excessive mid-peripheral clearance</td>
<td>Order the lens in this peripheral curve system, but ask for a steeper base curve (typically 1 Diopter steeper)</td>
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<tr>
<td>Lens Adherence</td>
<td>a) Insufficient mid-peripheral clearance &lt;br&gt;b) Lens flexes and compresses eye&lt;br&gt;c) Fenestration needed / Fenestration not needed</td>
<td>a) Flatten Base Curve by 1 Diopter and hold peripheral curve system the same &lt;br&gt;b) Increase center thickness by .05mm &lt;br&gt;c) Remove or Add Fenestration</td>
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<tr>
<td>Lens flexure</td>
<td>a) Lens too thin&lt;br&gt;b) Lens too flat</td>
<td>a) Increase center thickness by .05 mm &lt;br&gt;b) Reassess scleral fit for proper alignment</td>
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