

Comfort 15 FITTING GUIDE

Designed For No7 By Dr Caroline Burnett-Hodd

Comfort 15 is a mini-scleral lens from No7 Contact Lenses.

Comfort 15 has been designed to make fitting a mini-scleral lens easier than ever before. There are only two fitting parameters to consider, sag and edge profile. This speeds up the fitting process and therefore saves chair time.

Comfort 15 is ideal for practitioners new to mini-sclerals or those looking for a low cost alternative to more complex designs.

The 15mm diameter makes for straight-forward insertion to the majority of eyes. Mini-scleral lenses have the advantage over corneal RGP lenses in that they provide excellent initial comfort and they are fitted to vault the irregularity which minimises scarring. However, they still provide the superior vision of a rigid lens.

Because mini-scleral lenses fit over the cornea and limbus and land all of their weight on the sclera, the keratometry or topography of the central cornea is not relevant to the fitting. Instead the lens needs to be fitted to the sagittal depth of the eye.

Why Comfort 15?

- No bearing on the corneal surface
- Fantastic comfort due to scleral landing
- Simple to fit
- Low price
- Optimum Extra material for excellent wetting
- Visual acuity of a rigid lens
- Available on Lenses For Life

Indications

- First fit for irregular corneas such as KC, PMD, Post Graft, Post Lasik Ectasia
- Refits for patients wearing RGPs but looking for better comfort
- Refits for patients wearing soft lenses but needing improved vision
- Patients with mild to moderate ocular surface disease and dry eye
- Patients with high cyls requiring optimum vision and comfort
- Patients who need to wear lenses in dusty environments

Material	Optimum Extra (Roflufocon D) (Blue & Clear)
DK	100
SAG	3400 to 5100 in 20 micron steps
Power	+25.00 to -25.00 (0.25 steps)
Wearing schedule	Daily
Replacement	Annual
Lens care	Cleaning solutions for soft lenses, No7 recommends Oté Sensation & Oté Clean

Fitting Summary

1

Find the correct depth of lens

Determine the fitting lens that gives correct sagittal depth.

2

Allow the lens to settle

Ideally the lens should be allowed to settle for 60 minutes. If there is bearing, increase the depth of the lens before continuing.

3

Assess the edge

If the edge of the lens appears tight, order with the flat edge option.

4

Perform an over-refraction

Perform a spherical over refraction. Consider over-specs if there is residual cyl.

5

Assess limbal clearance

If there is not a clear band of clearance in the mid-periphery/limbus then a small amount of reverse curve (2.5D in the first instance) is required to lift the lens off the area. In addition, a reverse geometry lens can be ordered for oblate eyes.

6

Fine tune the sag

You may add extra sag or decrease the sag in 20 micron steps up to 100 microns.

7

Order the lens

Order the lens stating the lens sag and power. Also state if you require any reverse curve or changes to the edge.

The Comfort 15 Fitting App

The Comfort 15 fitting app is available at www.no7contactlenses.com and can be used to calculate the required lens.

Alternatively, if you would like our technical team to calculate the lens for you, please contact us on 01424 850620.

The screenshot shows the 'Comfort 15 Lens Calculator' web app. At the top, it says 'Comfort 15' in a blue circle, followed by 'Comfort 15 Lens Calculator' and 'Use this web app to order the Comfort 15 lens'. The interface is divided into two main columns: 'Right Lens' and 'Left Lens'. Each column has a 'Final fitted lens number' field with a dropdown menu (currently set to 'No right lens' and 'No left lens' respectively), an 'Enter over-refraction' field, and a 'Choose material' dropdown (currently set to 'Blue'). Below these are 'Advanced Options' for each lens, including 'Change to edge curve' (STD - standard), 'Changes to sagittal depth' (No change), and 'Create Reverse Curve' (no reverse curve). A 'CALCULATE' button is at the bottom right.

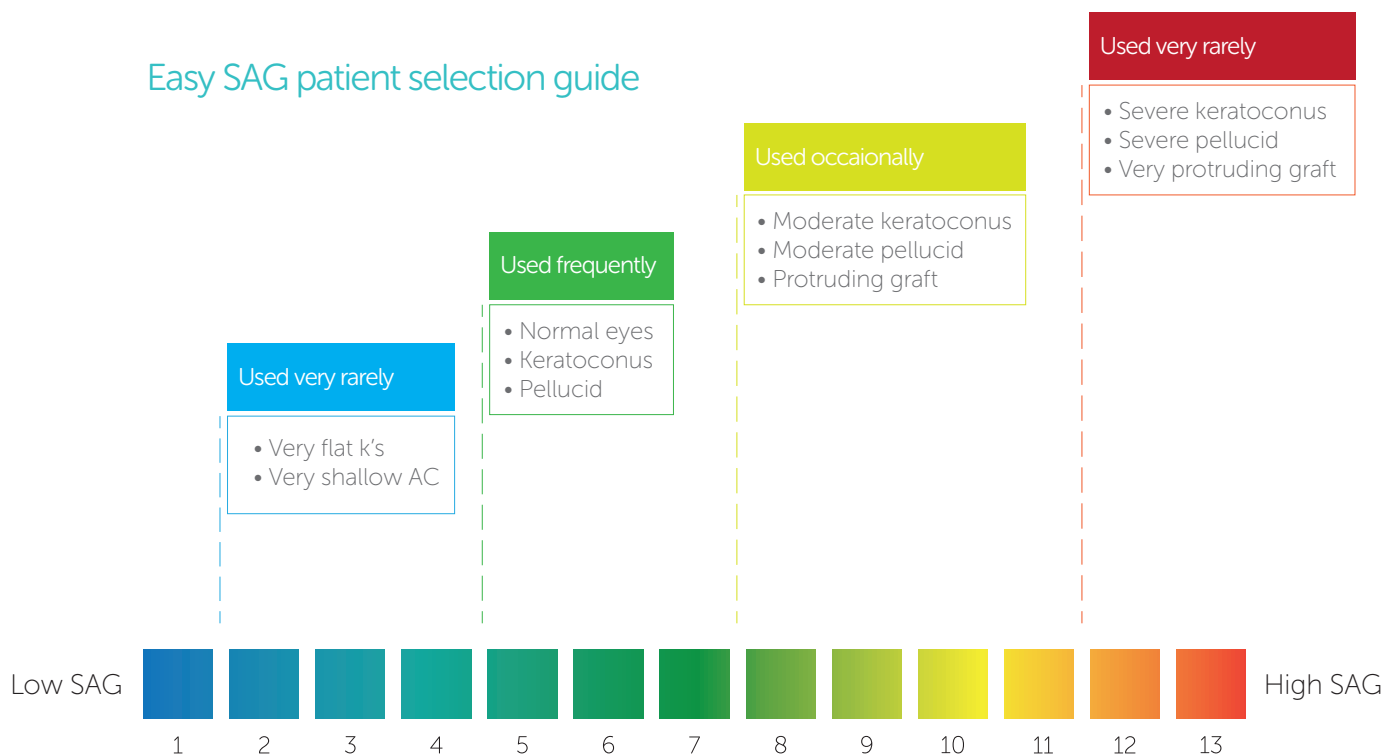
Fitting Guide

The Comfort 15 fitting set contains 13 lenses with depths ranging from 3500 μ m to 5000 μ m in 125 μ m steps. The aim of the fit is to find the lens that exceeds the sagittal depth of the eye by around 100-150 μ m.

Choosing the First Trial Lens

The Comfort 15 lens cannot be fitted empirically as keratometry and topography do not give a good indication of sagittal depth. However, the first trial lens can be chosen based on the eye condition to be fitted. Use the chart below to pick the first trial lens.

Easy SAG patient selection guide



Insertion

Lenses must always be inserted full to the brim with saline. Fluorescein must be added to the bowl of the lens prior to insertion as it will not get behind the lens after insertion.

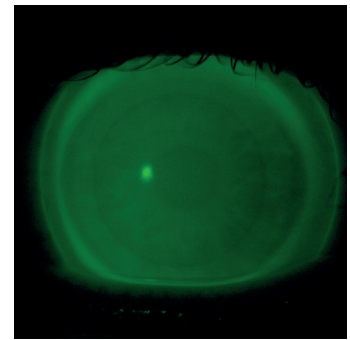
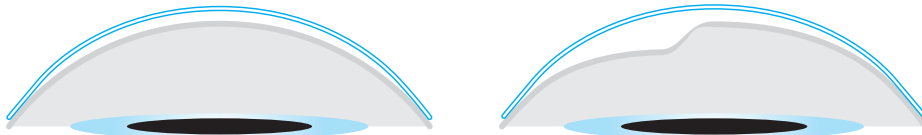
The patient should be bent forward with their nose pointing towards the floor and their chin tucked in. The lens can either be supported on a tripod of three fingers or on a DMV inserter

Ideal Fit

Sagittal depth of the lens exceeds depth of the eye by 100µm.

A good fit will show: -

- Low vaulting of the cornea
- No edge lift
- No scleral impingement
- Mid-peripheral clearance
- Limbal clearance



Fitting Tip

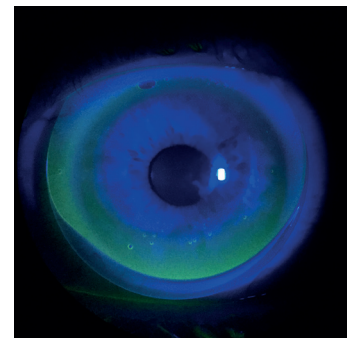
If there is limbal touch add 2.5D of reverse curve to increase limbal clearance (remember to alter the power to compensate).

Shallow/Flat Fit

Sagittal depth of the lens is less than the sagittal depth of the eye

A flat or shallow fit will show: -

- Edge lift
- Central bearing
- Discomfort



Action

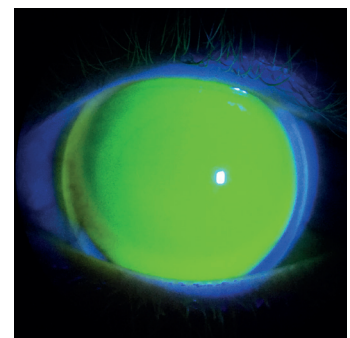
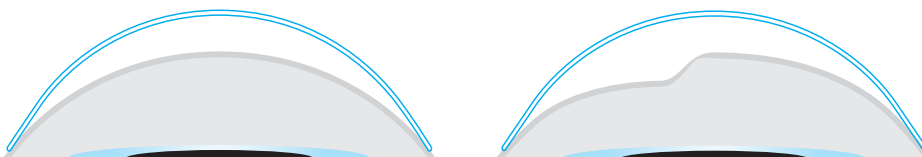
Remove the lens and insert a lens with a higher sag (a deeper lens).

Deep/Steep Fit

Sagittal depth of the lens exceeds the sagittal depth of the eye

A deep or steep fit will show: -

- Excessive central NaFL pooling
- Central bubble
- Scleral impingement



Action

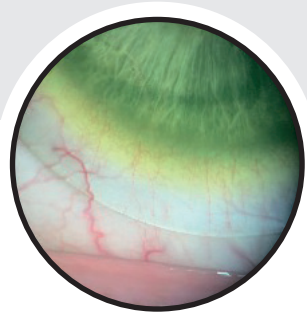
Remove the lens and insert a lens with a lower sag (a more shallow lens).

Assessing The Edges

The edges should be assessed after the lens has settled for 60 minutes. To assess the edge of the lens, push the inferior sclera just below the edge of the lens. If the lens flares away very easily, it is flat. If it takes a significant push to get any flaring away of the lens, the edge is tight or the lens is too deep. Also check for vessel impingement or scleral blanching

If the ideal vaulting lens shows vessel impingement or scleral blanching (Fig.1) order the lens with a flatter edge option.

If the depth of the lens appears correct but the edge stands off order the lens with a steeper edge.



Ideal edge

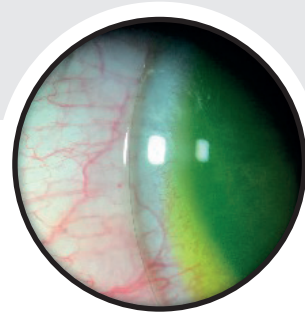


Fig 1: Steep edge

Fitting Oblate Corneas

Flat Eyes/Sunken Grafts/ Post Refractive Surgery

After a corneal graft or refractive surgery many corneas become flat in the centre whilst the periphery and sclera retain their original shape. This shape, where the eye becomes steeper in the periphery, is known as an oblate cornea.

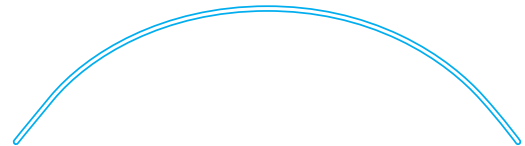
If this is the case it is possible to modify the shape of the Comfort 15 to give a reverse geometry lens by flattening the central curve whilst keeping the sagittal depth and periphery the same.

The ideal trial lens fit will show bearing in the mid-periphery due to the shape of the eye. The lens matches scleral and limbal shape and sagittal depth of the eye.

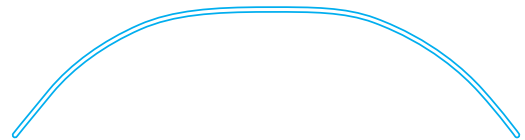
Ordering a Reverse Curve Lens

The lens should be ordered with a reverse curve option. In the first instance, try 5 dioptres of reverse curve. If the mid-peripheral bearing is very heavy, try 10 dioptres.

Normal



Reverse geometry lens



Post surgery eye/oblate cornea



Post Surgery, Trial Lens Fit

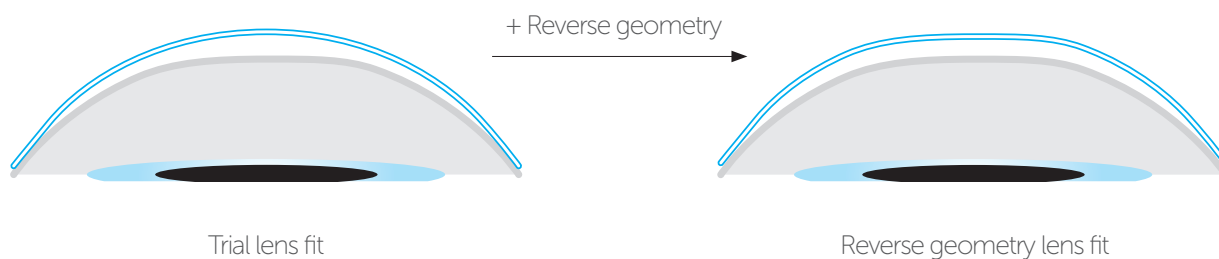
The trial lens will show mid-peripheral bearing but will match scleral and limbal shape. The amount of touch helps determine the amount of reverse curve necessary.

Post Surgery, Ideal Reverse Geometry Ordered Lens Fit

The lens supplied by No7 will have a flattened central curve that should eliminate mid-peripheral bearing. It should have a NaFL pattern similar to the ideal keratoconic or normal fit.

Power of Ordered Lens

The power of the lens will be altered to compensate for the flattened central curve.



Care Solutions

RGP Solutions are too viscous for use with Comfort 15. Soft lens solutions such as Oté Sensation work well with daily cleaning using Oté Clean.



Replacement schedule

No7 recommends annual replacement of Comfort 15



No7 Contact Lenses
01424 850620
sales@no7contactlenses.com
www.no7contactlenses.com
@no7cl