



*Gelflex* 

*Australian contact lenses*

---

# PROFESSIONAL FITTING GUIDE

---

SOFT BIFOCAL LENSES

 (03) 9792 3127 · 1800 335 559

 (03) 9793 1635

 [orders@gelflex.com](mailto:orders@gelflex.com)

 [www.gelflex.com](http://www.gelflex.com)

# SOFT BIFOCAL LENSES

## FITTING GUIDE

### SIMULTANEOUS IMAGE DESIGN

Custom made concentric design with distance power in the centre of optic and near power surround.

The term simultaneous image is derived from the concept of how the images from the near and distance zones fall on the retina. Rays of light passing through one zone of the lens (i.e. reading) simultaneously fall on the retina with rays of light that pass through the distance zone. These images are superimposed on each other. When the patient is regarding an object at a distance the distance image is in focus on the retina and light rays are coming from the near zone form an out of focus image superimposed in the clear distance image.

It has been hypothesized that there is selective suppression of the out of focus image. There are certain indications for simultaneous image bifocals. The pupil size should ideally be within the normal range of 3-4.5mm. Patients who have flaccid or sensitive lower lids can benefit from this type of lens, as translation is unnecessary. Patients who have lower lids in a position below or above the lower limbus can also benefit from the simultaneous image bifocals.

Large pupils cause more optical aberrations, particularly at night. When the pupil is too small rays of light may not be able to pass through the reading portion of the bifocal and the patient may be unable to read. With average size pupil there is minimum optical aberrations and in addition an appropriate quantity of both dist and near rays pass through the pupil to the retina to allow good reading vision. To minimize these visual problems the lens must be centred in the primary gaze position.

We can manufacture these bifocals to any parameters in 38% & 45G soft lens materials. Use soft sphere for fitting to evaluate the base and dia required. Measure minimum pupil dia.

Average dist optic found to be 2.75mm and a need to increase reading addition by +0.50.

### FITTING GUIDE WHEN INCORPORATING MODIFIED MONOVISION

- Determine dominant eye
- A centre distance design is preferred (for both eyes)
- Distance optic for dominant eye should be about 0.5mm greater than for non dominant eye
- Distance optic for dominant eye should approximately equal minimum pupil size
- Under plus at distance in dominant eye
- Over plus at near in non-dominant eye

Distance optics of less than 2.0mm or greater than 3.50mm are to be avoided. Lenses with distance optics of less than 2.0mm are not easily made. Lenses with distance optics of greater than 3.50mm will lead to unsatisfactory near vision.

Fitting Example

R+2.00DS, L+2.50DS +2.25

Add RE dominant Minimum pupil size = 3.0mm

Order

RE +1.75, +2.25 Add 3.00mm distance optic

LE +2.50, +2.50 Add 2.50mm distance optic

Information courtesy of Richard G Lindsay Bsc. Optom FVCO.



**Gelflex**   
Australian contact lenses

*The content of this booklet is correct at the time of print, August 2018. F1080-01.*