



## Fresnel prisms

Prisms bend the light that passes through them. This is why an image viewed through one is seen in a different position. A Fresnel prism consists of many small prisms in the form of a small, flexible sheet, which can temporarily be applied to a pair of glasses. This is commonly used in orthoptic practice where there is misalignment of eye position giving double vision. The Fresnel prism restores single vision, by moving one of the images to join the other, or by placing one of the images in a position where it is easier for the patient to ignore.

## Fitting the prism

The Fresnel prism is cut to fit the shape of one, (or occasionally both) of the lenses of your glasses. It is then applied using water, by pressing the smooth side of the Fresnel prism to the inside of the lens.

## Will I be able to see the Fresnel prism on my glasses?

Yes, you will be able to see fine lines on your glasses.

## Will the Fresnel prism affect my vision?

Yes, you will be aware of some mild blurred vision caused by the many fine

rows of prisms. This is less noticeable in lower strength prisms, but more noticeable in stronger prism strengths. Patients generally feel the disadvantage of blurred vision in one eye is outweighed by the relief from double vision.

## Are there any alternatives to wearing a Fresnel prism?

Yes, one of the double vision images can be obscured by using opaque tape on one of the lenses in your glasses.

## Can I drive wearing a Fresnel prism?

All drivers are required to inform the DVLA if they have double vision and wish to continue driving. If the double vision can be controlled, it may be possible to drive providing the DVLA criteria are fully met.

Your eye doctor or orthoptist will help with any questions you may have regarding your eyesight and ability to drive safely.

## Care of the Fresnel prism

If you feel you need to clean the Fresnel prism, it can be peeled off the lens and washed with soapy water. A soft brush can be used if required. Please note; smoking will cause permanent prism discolouration. The Fresnel prism has

been cut to fit the shape of the lens, and this will help you re-apply it correctly. It is important to remember that the fine lines must go in the same direction as before. It is the smooth side of the Fresnel prism that is pressed to the inner surface of the lens under running water. Squeeze out any air bubbles that may be present and dry carefully.

## How long will I need a Fresnel prism for?

Fresnel prisms are used until the double vision resolves completely or stabilises. This can take several months. During this time, the orthoptist will review the prism strength and alter it accordingly. If the double vision does not resolve, a permanent prism can be incorporated into a pair of glasses by an optician. This is usually only advisable if the prism strength is low, as stronger prisms can make glasses thicker and heavier. The orthoptist will advise you if prism incorporation is appropriate.

## What happens if I get double vision with my prism on?

If you experience double vision with the Fresnel prism on your lens, it can be due to a change in your eye position. Please telephone the Orthoptic department for advice and an earlier appointment will be arranged if necessary.