

## EYE HEALTHCARE

### DO YOU REQUIRE THINNER LENSES ?

Generally, a visit to the optician to get the 'right' pair of glasses, be it through correct and guided frame selection or lens choice, is a relatively straight forward process. However, approx. 15% of us with 'higher' prescriptions warrant '**hi-index lenses**' which cosmetically look superior to standard lens materials, being significantly thinner and feeling a lot lighter.

The term 'hi-index' is a reference given to the 'index of refraction' (the capability to bend or refract light) of a particular lens material. A standard plastic lens, for example, has an index rating of approx 1.5, which is used for, the majority of spectacle lens (up to +/- 2.50 dioptries). As the prescription increases, short sighted lenses get progressively thicker at the edges (centre remains thin), where long sighted prescriptions become thicker centrally (with thin edges), hence warranting a slimmer and lighter lens made of this 'denser' hi index material.

The main 'plastic' hi-index lenses are the 1.6 type (offering some 25-30% thickness reduction), the 1.67 type (promising a 40% reduction) and the best is the 1.74 type (45-50% reduction). As the index increases, so does the cost, so your optician will advise which one suits your prescription best. Even higher indices can be achieved using a 'glass' based material (achieving 1.8 and 1.9) which, although are extremely thin, can become quite heavy and induce distortion (chromatic aberration).

With an anti-reflective coat as standard on all hi-index lenses, your eyecare professional will guide you through the choices with complete ease.

Noel McCrystal  
BSc.(Hons.)MCOptom.Dip.Sc.V MASv.P

Scotch Street Centre  
T: 028 87722379  
[www.mccrystalopticians.com](http://www.mccrystalopticians.com)