



Base Curves

Base curve : the front curve on a lens. It is called a "base curve" because once the front or "base" curve is determined, the laboratory can calculate which curves to grind on the back of the lens to create the power the doctor has prescribed.

A great deal of research has been done by lens manufacturers and in academic settings in order to determine which base curve will provide maximum visual acuity for each power of a lens. This body of research has been published by the large lens manufacturers as a series of charts, telling optical laboratories (or anyone else) which base curve to use for each lens power. Empire Optical, as well as all other labs, follow these research results by using the lens manufacturers' base curve charts in selecting the proper base curve for each lens, so that maximum visual acuity for that power of lens will be available to the patient.

What this boils down to is an optical fact: if over time your prescriptions call for *different powers* in your lenses, over time Empire Optical (or any other lab) should use *different base curves* for your lenses so that we can give you the best vision possible.

Occasionally a patient will have difficulty adjusting to a new prescription. Even if they have problems initially, most people will adjust to their new lenses in just a few days, which is why many doctors ask you to wear your new glasses all the time for a week to ten days before checking back with them (while not wearing your old glasses). But for some of those patients having a continuing adaptation problem, the doctor might recommend that as few things be changed in the person's lenses as possible, and have the lab go "off the charts," and grind a lens with the same base curve the patient had been wearing with his old prescription.

This is one of the rare reasons we can think of for not using the base curve charts derived from so much research. Some visual acuity may be sacrificed in order to ease the adaptation process in adjusting to the new power in your lenses.

Empire Optical is glad to cooperate with your doctor in selecting the base curve that will make things as easy as possible for you.