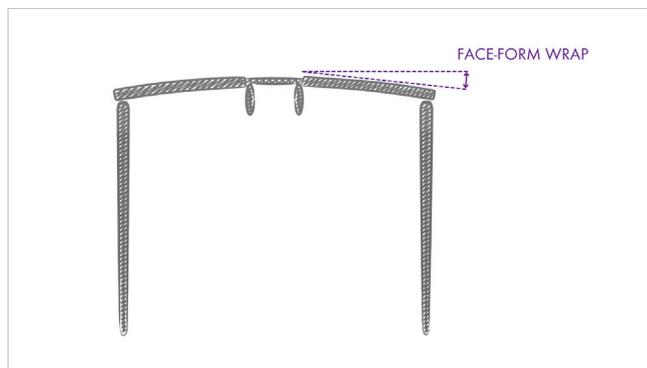
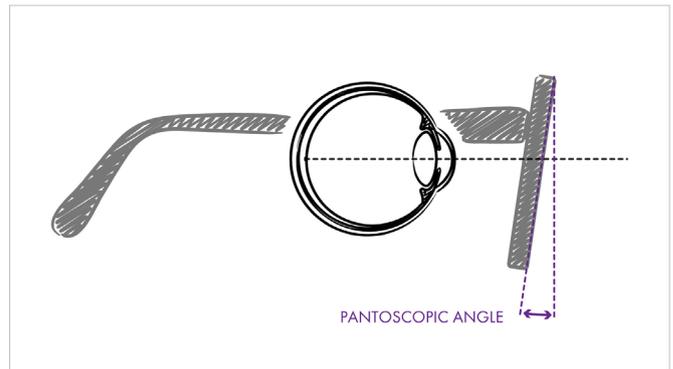


With freeform spectacle lenses, some wearing parameters are assumed based upon population averages. There are also individualised design measurements, for example, how a particular frame sits on the face, which are inputted into the lens surface calculations.

**The common measurements required are:**

### PANTOSCOPIC ANGLE >

This is the inclination of the bottom of the lens towards the face from a vertical plane. Pantoscopic tilt should be measured on the wearer from a vertical plane parallel to the face and perpendicular to the line of sight in primary (straight-ahead) gaze.

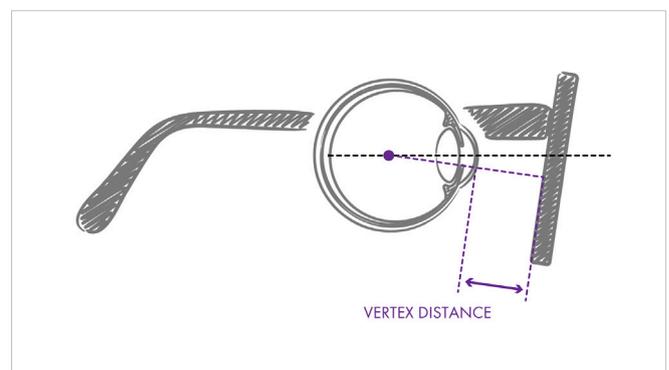


### < FACE-FORM WRAP

This is the inclination of the temporal edges of each lens towards the face. Face-form wrap can be measured directly from the angle of horizontal lens tilt using a frame wrap protractor tool.

### VERTEX DISTANCE >

This is the distance from the back vertex of the lens to the cornea. Vertex distance can be measured using a distometer or approximated using either a pupilometer or a PD ruler.



For all three measurements, both digital devices and simple inexpensive tools from lens manufacturers are available.