

TIPS NO: 185

Revision: C

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Technical Information and Processes

Signet Armorlite, Inc.

# Navigator® Precision Progressive Lens Product Specifications.

#### Purpose:

The following is provided for processing *Navigator Precision* progressive lenses.

**SUMMARY OF CHANGES:** The ABBE value has been changed.

### GENERAL:

Standard surfacing procedures for CR-39® progressive lenses should be used with the *Navigator* lens. If you have questions regarding these lenses, contact Technical Services at 1-800-759-0075

**BLANK Size:** 80 mm diameter blanks decentered 2.5 mm

Effective diameter is 85 mm.

BASE CURVES: 2.00, 4.50, 5.75, 7.75

Power RANGE: -8.00 to +5.50

ADD RANGE: 0.75 to 3.50 in .25 Diopter steps.

CHARACTERISTICS	Navigator Progressive Lens			
Refractive Index	1.499			
Dispersion Value (Abbe)	58.0			
Density	1.32			
Visible Light	92%			
Heat Distortion	165°F			
UV Transmission Cutoff	355			
Chemical Resistance	Excellent			
Machinability	Excellent			
Rear Surface Coating	Optional			
Scratch Resistant	In-Mold RLX <i>Plus</i> ®			

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Navigator Precision Progressive Lens - DIMENSIONS

NOMINAL BASE CURVE	ACTUAL BASE CURVE	RADIUS mm	50mm SAG VALUES	CONCAVE CURVE	THICKNESS AT 90° AND GEOMETRIC CENTER	
					<b>E</b> DGE	CENTER
2.00	1.97	269.035	1.16	3.00	16.20	14.90
4.50	4.59	115.468	2.74	6.00	11.80	10.20
5.75	5.84	90.753	3.51	6.00	9.80	10.00
7.75	7.90	67.089	4.83	6.00	9.60	13.80

#### SEMI-VISIBLE MARKINGS:

Navigator lens markings have a "+" at the nasal and temporal sides along the 180° axis line. Approximately 3 mm below the nasal "+" you will find the " ▷ " product code. Approximately 3 mm below the temporal "+" you will find the add power of the lens. These marks can be located by visually inspecting the lens. Position the lens at arms length, preferably in front of an overhead fluorescent light. Slowly move it away from the edge of the light fixture while looking at the estimated location of the marks along the surface of the lens. At a given angle of light the marks will become visible.

## REMOVAL/REMARKING THE TEMPORARY REFERENCE MARKS:

The *Navigator* lens markings may be removed by wiping the surface with alcohol or standard lens mark removing solvents. These marks are designed to withstand all processing procedures. They provide an easy way to verify the edging accuracy and can be removed before or after tinting.

To remark the lens, locate the semi-visible markings, specifically the "+" symbols engraved along the 180° axis line (See above procedure for locating the semi-visible marks). Once you have located the semi-visible marks, marked them on the lens and use the *Navigator* verification mask for the final frame adjustment.

## **TINTING AND NEUTRALIZING:**

Navigator progressive lenses tint and neutralize as other RLX*Plus* lenses using normal materials and methods. If the temporary lens markings are removed prior to tinting, the tinted lens should be cleaned with alcohol or acetone to remove excess dye from the surfaces.

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