

The technology behind Shamir Creation®

With a 19mm fitting height, Creation® was the first Shamir progressive design to be created utilizing Freeform Optics™. Semi-finished PALs produced using previous technologies require the use of ceramic molds (also known as mechanical molds). These mechanical molds replicate the lens design with 6/100 diopters of accuracy.

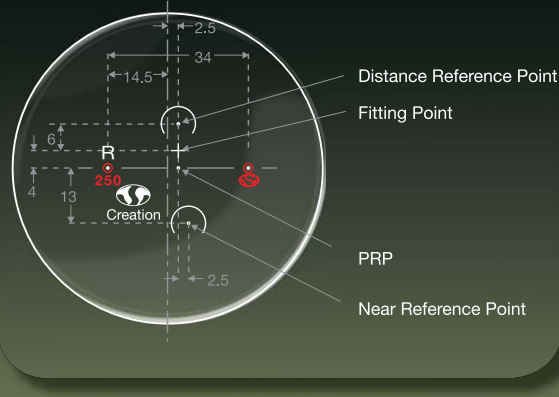
Freeform Optics™ patented software bypasses the ceramic molds and creates digital molds (glass molds). Freeform Optics™ molds provide up to six times more resolution than standard cast PALs.

By capitalizing on Freeform Optics™, Shamir engineers are able to transfer the lens design with the highest level of optical accuracy. In a way, one can make an analogy of Freeform Optics™ to the quality of a digital camera. The higher the pixel count, the higher the degree of resolution it facilitates and the more precise the level of visual fine-tuning it permits.

Shamir Creation® features an extended base curve selection (up to 20 percent more than a leading competitor) providing flatter, cosmetically superior lenses (up to 40 percent flatter). This extensive base curve selection not only produces flatter lenses, but also results in an optimally divided prescription range that guarantees the best optical performance for each prescription.

Ink Marking: White
Invisible Marking: Red

Minimum Fitting Height: 19mm
PRP Decentration: 2.5mm
Fitting Point: 4mm above PRP



Hard Resin 1.50 [hc/uc]

Prescription Range
Sphere: -8.50 [D] to +4.75[D]
Cylinder: up to -4.00[D]

Nominal Base	True Base 1.530	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
2.00	2.00	265.04	1.18	6.10	8.3	13.0	75/80	0.75 - 3.50	-8.50 to -4.00
3.00	2.99	177.54	1.77	4.60	11.7	12.9	75/80	0.75 - 3.50	-3.75 to -0.50
4.50	4.50	117.68	2.69	6.10	7.6	9.1	75/80	0.75 - 3.50	-0.25 to +1.50
5.50	5.49	96.58	3.29	6.10	7.1	7.3	75/80	0.75 - 3.50	+1.75 to +3.00
6.50	6.54	81.04	3.95	6.10	8.3	7.3	75/80	0.75 - 3.50	+3.25 to +4.50
7.50	7.59	69.80	4.63	5.10	11.7	7.1	75/80	0.75 - 3.50	+4.75 to +6.75

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 2.0mm

Material Data:

Index Nd	1.498
Abbe Value Nd	58.0
Density gr/cm³	1.31

Hard Resin Transitions 1.50 [gray/brown]

Prescription Range
Sphere: -8.50 [D] to +4.75[D]
Cylinder: up to -4.00[D]

Nominal Base	True Base 1.530	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
2.00	2.00	265.04	1.18	6.10	8.3	12.6	72/77	0.75 - 3.50	-8.50 to -4.00
3.00	2.99	177.54	1.77	4.60	11.7	12.7	72/77	0.75 - 3.50	-3.75 to -0.50
4.50	4.50	117.68	2.69	6.10	7.6	9.0	72/77	0.75 - 3.50	-0.25 to +1.50
5.50	5.49	96.58	3.29	6.10	7.1	7.2	72/77	0.75 - 3.50	+1.75 to +3.00
6.50	6.54	81.04	3.95	6.10	8.3	7.4	72/77	0.75 - 3.50	+3.25 to +4.50
7.50	7.59	69.80	4.63	5.10	11.7	7.3	72/77	0.75 - 3.50	+4.75 to +6.75

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 2.0mm

Index Nd	1.497
Abbe Value Nd	57.0
Density gr/cm³	1.27

SuperLite™ Clear 1.60 [hc/uc]

Prescription Range
Sphere: -12.00 [D] to +8.00[D]
Cylinder: up to -4.00[D]

Nominal Base	True Base 1.630	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
1.75	1.72	307.55	1.02	6.10	10.1	15.6	75/80	1.00 - 3.50	-12.00 to -4.50
3.00	2.98	177.68	1.77	6.10	10.9	15.4	80/85	1.00 - 3.50	-4.25 to -0.50
4.50	4.50	117.90	2.68	6.10	8.7	10.9	80/85	1.00 - 3.50	-0.25 to +1.75
5.50	5.50	96.35	3.30	6.10	10.0	10.9	80/85	1.00 - 3.50	+2.00 to +3.25
6.50	6.49	81.66	3.92	6.10	9.0	8.4	75/80	1.00 - 3.50	+3.50 to +4.75
7.50	7.55	70.18	4.60	5.10	12.4	7.7	75/80	1.00 - 3.50	+5.00 to +8.00

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 1.5mm

Index Nd	1.592
Abbe Value Nd	42.0
Density gr/cm³	1.30

SuperLite™ Transitions 1.60 [gray]

Prescription Range
Sphere: -12.00 [D] to +8.00[D]
Cylinder: up to -4.00[D]

Nominal Base	True Base 1.630	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
1.75	1.72	307.55	1.18	6.10	10.1	15.1	72/77	1.00 - 3.50	-12.00 to -4.50
3.00	2.98	177.68	1.77	6.10	10.9	15.2	75/80	1.00 - 3.50	-4.25 to -0.50
4.50	4.50	117.90	2.68	6.10	8.7	10.5	75/80	1.00 - 3.50	-0.25 to +1.75
5.50	5.50	96.35	3.29	6.10	10.0	10.7	75/80	1.00 - 3.50	+2.00 to +3.25
6.50	6.49	81.66	3.95	6.10	9.0	7.9	72/77	1.00 - 3.50	+3.50 to +4.75
7.50	7.55	70.18	4.63	5.10	12.4	8.1	72/77	1.00 - 3.50	+5.00 to +8.00

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 1.5mm

Index Nd	1.592
Abbe Value Nd	42.0
Density gr/cm³	1.30



SuperLite™ Clear 1.67 (hc/uc)

Prescription Range
 Sphere: -12.50 [D] to +8.00[D]
 Cylinder: up to -6.00[D]

Nominal Base	True Base 1.530	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
1.50	1.47	360.54	0.88	6.10	10.3	16.3	75/80	1.00 - 3.50	-12.50 to -4.00
3.00	2.99	177.25	1.77	6.10	8.6	12.7	75/80	1.00 - 3.50	-3.75 to +2.25
4.50	4.52	117.25	2.70	6.10	8.1	10.0	75/80	1.00 - 3.50	-0.00 to +2.25
5.50	5.52	96.14	3.31	6.10	6.8	7.3	75/80	1.00 - 3.50	+2.50 to +3.75
6.50	6.51	81.41	3.93	6.10	9.4	8.5	75/80	1.00 - 3.50	+4.00 to +6.00
7.50	7.53	70.38	4.59	6.10	10.9	8.0	75/80	1.00 - 3.50	+6.25 to +8.00

Material Data

Index Nd	1.664
Abbe Value Nd	32.0
Density gr/cm ³	1.37

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 1.5mm

SuperLite™ Transitions 1.67 (gray)

Prescription Range
 Sphere: -12.50 [D] to +8.00[D]
 Cylinder: up to -6.00[D]

Nominal Base	True Base 1.530	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
1.50	1.47	360.54	0.88	6.10	10.3	14.9	72/75	1.00 - 3.50	-12.50 to -4.00
3.00	2.99	177.25	1.77	6.10	8.6	10.8	72/75	1.00 - 3.50	-3.75 to -0.25
4.50	4.52	117.25	2.70	6.10	8.1	9.6	72/75	1.00 - 3.50	-0.00 to +2.25
5.50	5.52	96.14	3.31	6.10	6.8	6.9	72/75	1.00 - 3.50	+2.50 to +3.75
6.50	6.51	81.41	3.93	6.10	9.4	8.3	72/75	1.00 - 3.50	+4.00 to +6.00
7.50	7.53	70.38	4.59	6.10	10.9	7.9	72/75	1.00 - 3.50	+6.25 to +8.00

Index Nd	1.664
Abbe Value Nd	32.0
Density gr/cm ³	1.37

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 1.5mm

SuperLite™ Polarized 1.67 (gray)

Prescription Range
 Sphere: -12.50 [D] to +8.00[D]
 Cylinder: up to -6.00[D]

Nominal Base	True Base 1.530	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
1.50	1.59	333.33	0.94	6.40	10.4	16.0	74/79	1.00 - 3.00	-12.00 to -4.00
3.00	3.10	170.97	1.84	6.40	8.8	12.5	74/79	1.00 - 3.00	-3.75 to -0.25
4.50	4.60	115.22	2.75	6.40	8.5	11.0	74/79	1.00 - 3.00	-0.00 to +2.25
5.50	5.63	94.14	3.38	6.40	7.6	8.0	74/79	1.00 - 3.00	+2.50 to +3.75
6.50	6.60	80.30	3.99	6.40	10.0	8.5	74/79	1.00 - 3.00	+4.00 to +6.00
7.50	7.59	69.83	4.63	6.40	11.5	8.5	74/79	1.00 - 3.00	+6.25 to +8.00

Index Nd	1.664
Abbe Value Nd	32.0
Density gr/cm ³	1.37

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 1.5mm

PolyPlus™ 1.59 (hc/np)

Prescription Range
 Sphere: -12.00 [D] to +7.50[D]
 Cylinder: up to -6.00[D]

Nominal Base	True Base 1.530	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
1.75	1.71	309.94	1.01	2.00	11.0	11.4	80/85	1.00 - 3.50	-12.00 to -4.50
3.00	2.97	178.45	1.76	3.00	9.5	9.5	80/85	1.00 - 3.50	-4.25 to -0.50
4.50	4.51	117.52	2.69	5.50	9.0	10.7	80/85	1.00 - 3.50	-0.25 to +1.75
5.50	5.45	97.25	3.27	5.50	7.5	7.5	80/85	1.00 - 3.50	+2.00 to +3.25
6.50	6.48	81.79	3.91	5.50	11.0	9.2	80/85	1.00 - 3.50	+3.50 to +4.75
7.50	7.45	71.14	4.54	7.50	11.0	11.0	80/85	1.00 - 3.50	+5.00 to +7.50

Index Nd	1.586
Abbe Value Nd	30.0
Density gr/cm ³	1.20

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 1.2mm

PolyPlus™ Transitions 1.59 (gray)

Prescription Range
 Sphere: -12.00 [D] to +7.50[D]
 Cylinder: up to -6.00[D]

Nominal Base	True Base 1.530	Base Radius (mm)	Sag 50mm*	Concave Curve	CT (mm)	ET (mm)	Diameter	Add Powers	Power Range
1.75	1.71	309.94	1.01	2.00	11.0	11.4	80/85	1.00 - 3.50	-12.00 to -4.50
3.00	2.97	178.45	1.76	3.00	9.5	9.5	80/85	1.00 - 3.50	-4.25 to -0.50
4.50	4.51	117.52	2.69	5.50	9.0	10.7	80/85	1.00 - 3.50	-0.25 to +1.75
5.50	5.45	97.25	3.27	5.50	7.5	7.5	80/85	1.00 - 3.50	+2.00 to +3.25
6.50	6.48	81.79	3.91	5.50	11.0	9.2	80/85	1.00 - 3.50	+3.50 to +4.75
7.50	7.45	71.14	4.54	7.50	11.0	11.0	80/85	1.00 - 3.50	+5.00 to +7.50

Index Nd	1.586
Abbe Value Nd	30.0
Density gr/cm ³	1.20

*Do not sag! Use printed sag values for power calculations only. Minimum center thickness for surfacing: 1.2mm