

# GUIDE TO AIRE-O-LITE LENSES

by Chadwick Optical



# THE AIRE-O-LITE STORY

## HISTORY

From 1978 to 2024, Aire-O-Lite Optical manufactured some of the most exotic and hard to find lenses in the world out of their small factory in Alma, Georgia. They became known for the most unique semi-finished lens blanks available. High adds and high curves were no match for the ingenuity of Aire-O-Lite's founder, Donnie Dyal.

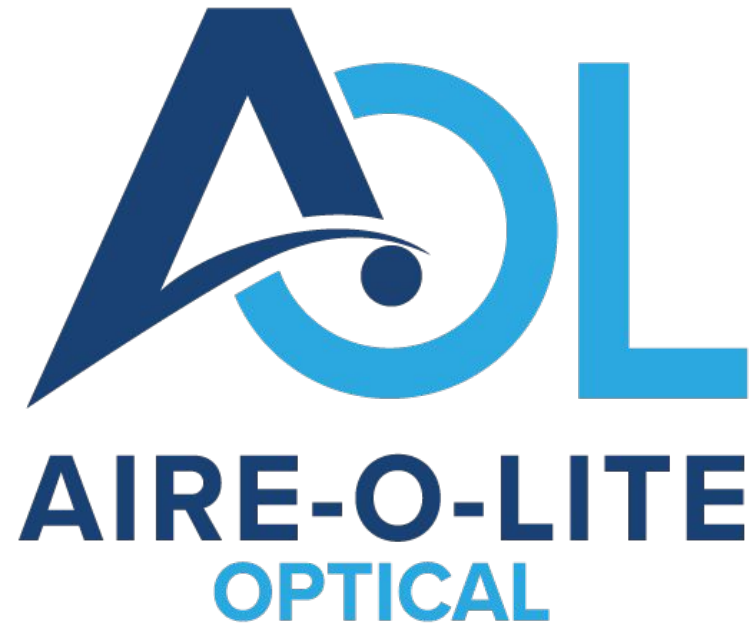
In 2020, Donnie and his son Bryan passed away suddenly, leaving Aire-O-Lite's future uncertain. Luckily, Bryan's sons, Dawson and Eli remembered what they had learned while working summers and were able to keep the manufacturing processes alive. In 2024, a fire destroyed the manufacturing process, and the company decided to close.

## A NEW LIFE

Like so many other labs, Chadwick has relied on Aire-O-Lite for years for hard to find lenses. Upon hearing of the closure of Aire-O-Lite, the folks at Chadwick Optical sprung into action.

There was no staff. There were documented processes, a bunch of glass molds, some inventory, and Dawson and Eli eager to keep their grandfather's legacy alive.

In just over 3 months, the team at Chadwick brought a fully functional lens casting facility online in their Pennsylvania factory. For some perspective, this is similar to a restaurant opening up a dairy farm to make their own cheese, or a machine shop opening up a metal foundry to make their own metal. Chadwick no longer just processes materials, we make the materials as well.



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ALL LENS BLANK DATA IS AVAILABLE IN OUR VCA DATA FILE.  
[CLICK HERE](#) OR SCAN THE QR CODE TO VIEW THE FILE.



# SINGLE VISION AND LENTICULARS

All lenses are 1.50 uncoated

Let's Exceed the Standard of Care.

## SINGLE VISION

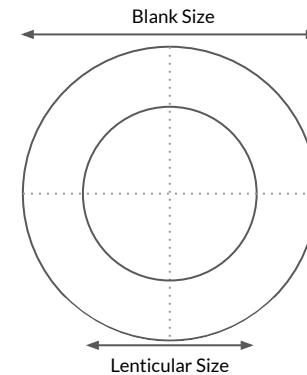
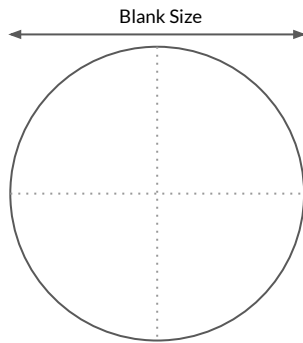
### BASE CURVE

Blank Size	Edge Thk	-10.25	-8.25	-6.25	-4.50	-2.75	PLANO	2.00	4.25	6.25	8.25	10.00	12.00	16.00
★ 65	12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65	15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65	22	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71	12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SINGLE VISION LENTICULARS

### BASE CURVE

Blank Size	Lenticular Size	10.00	12.00	14.00	16.00	18.00	20.00	22.00	25.00	28.00	30.00
65	34	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
65	38	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
65	44	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65	48	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65	54	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65	60	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71	44	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71	50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



& ★ = Unless specified otherwise in your order, these are the blank/lenticular size variations we will default to.











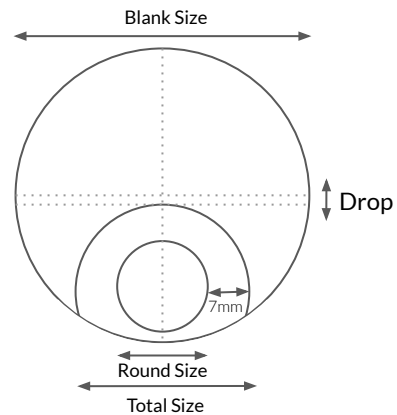


# TRIFOCALS

All lenses are 1.50 uncoated

Let's Exceed the Standard of Care.

Round Size	Blank Size	Base Curve	Add Power																										
			2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00
★ 7x22x36	65	2.00	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓
★ 7x22x36	65	4.25	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				
★ 7x22x36	65	6.25	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				
★ 7x22x36	65	8.25	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				
7x22x36	65	10.00	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				
7x22x36	65	12.00	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
7x22x36	65	14.00	✓		✓		✓		✓		✓		✓		✓		✓												
7x22x36	71	2.00	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				
7x22x36	71	4.25	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				
7x22x36	71	6.25	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				
7x22x36	71	8.25	✓		✓		✓		✓		✓		✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓				



★ = Unless specified otherwise in your order, these are the blank/lenticular size variations we will default to.

## MOLD INVENTORY/CUSTOM BLANK AVAILABILITY

Aire-O-Lite has an inventory of tens of thousands of glass molds. What you see as a semi-finished lens is a combination of a front curve, a back curve, and a gasket with a certain depth. If necessary, we have the ability to cast lenses using non-typical combinations of molds and gaskets. Contact us for details if you need something out of the ordinary.

## LENS AVAILABILITY

We typically keep stock of our most popular lenses, but many lenses are made to order. Custom-molded lenses require a lead time of a week or more.

## TIPS FOR PROCESSING BLANKS

- LMS systems put a nominal or estimated curve into their system for RX calculations. While this is fine for standard base curves, we find that there's enough variance in high base curve lenses that it warrants a more customized calculation. For every lenticular lens, we write the true curve on the lens. For best results, we recommend you enter the true curve into the LMS prior to blocking.
- High-add rounds can unintentionally create prismatic error by lifting a section of the lens that's in contact with the block. When blocking, ensure that no features of the lens create any sort of "rocking point" on the blocker. If it does, this will create undesired effects in the finished product
- All Aire-O-Lite lenses are uncoated. Applying a hard-coat is recommended.

## TEST LENSES (\$5/each)

We have a joke here that for certain lenses, we have enough inventory to meet intergalactic demand for all eternity. We realize our lenses are a bit expensive relative to mass-produced blanks, so if you need some to practice on, let us know what type of lenses you're looking for. We have some factory seconds and some unique lenses that we're happy to part with for testing.

***Please order using the category SKUs below:***

High Add Rounds	9999901615
Lenticular Rounds	9999901623
Negative Base-Curves	9999901631
Small-Bowl Lenticulars	9999901649
Super Thick	9999901656
Concentric Trifocals	9999901664
Reverse Slabs	9999901672

## OTHER STUFF & HOW TO ORDER

### RETURN POLICY

Any lens with a defect that makes it unprocessable is returnable for full credit, and accepted with our deepest apologies.

Typically stocked lenses are accepted back with a 25% restocking fee. This restocking fee can be avoided by placing a cover order of greater or equal value.

Custom-molded lenses are not returnable.

### TECHNICAL ASSISTANCE

We realize that the stuff we make is weird, and we'd love to help you on your manufacturing path. If you have any questions about how to process lenses, it's best if we know your LMS and the types of machines you'll be processing the lenses on.

For technical assistance on choosing the best lenses for you, reach out to our customer service team. If they can't help you, they'll put you in touch with one of our technical specialists.

**ORDER ONLINE WITH OPTICOM**

**OR CALL/EMAIL US TO ORDER**

**aireolite@chadwickoptical.com**  
**800-410-1618**