



# BULLSEYE

GLASS CO.

## ANNEALING THICK SLABS

This annealing chart has been formulated for use with Bullseye clear glass. It is derived from Corning's method as shown in McLellan and Shand.\* It is based on a flat slab of uniform thickness that is set up in such a fashion that it can cool equally from top and bottom.

If the piece is not set up in such a fashion that it can cool equally from top and bottom or is anything besides a flat slab of uniform thickness, select an annealing cycle for a piece that is twice the thickness of the thickest area of the piece. Even a very conservative annealing cycle may not work if the kiln is not capable of cooling the work uniformly.

For more Bullseye technical and product information see [www.bullseyeglass.com](http://www.bullseyeglass.com)

THICKNESS	ANNEAL SOAK TIME	INITIAL COOLING RATE	INITIAL COOLING RANGE	2nd COOLING RATE	2nd COOLING RANGE	FINAL COOLING RATE	FINAL COOLING RANGE	TOTAL MINIMUM TIME
inches	@ 900 °F	°F/hr	°F	°F/hr	°F	°F/hr	°F	Hours
mm	@ 482 °C	°C/hr	°C	°C/hr	°C	°C/hr	°C	
0.5 in	2 hr	100	900-800	180	800-700	600	700-70	~5 hr
12 mm		55	482-427	99	427-371	330	371-21	
0.75 in	3 hr	45	900-800	81	800-700	270	700-70	~9 hr
19 mm		25	482-427	45	427-371	150	371-21	
1.0 in	4 hr	27	900-800	49	800-700	162	700-70	~14 hr
25 mm		15	482-427	27	427-371	90	371-21	
1.5 in	6 hr	12	900-800	22	800-700	72	700-70	~28 hr
38 mm		6.7	482-427	12	427-371	40	371-21	
2.0 in	8 hr	6.8	900-800	12	800-700	41	700-70	~47 hr
50 mm		3.8	482-427	6.8	427-371	22	371-21	
2.5 in	10 hr	4.3	900-800	8	800-700	26	700-70	~70 hr
62 mm		2.4	482-427	4.3	427-371	14.4	371-21	
3.0 in	12 hr	3	900-800	5.4	800-700	18	700-70	~99 hr
75 mm		1.7	482-427	3.1	427-371	10	371-21	
4.0 in	16 hr	1.7	900-800	3.1	800-700	10	700-70	~170 hr
100 mm		0.94	482-427	1.7	427-371	5.6	371-21	
6.0 in	24 hr	0.75	900-800	1.3	800-700	4.5	700-70	~375 hr
150 mm		0.42	482-427	0.76	427-371	2.5	371-21	
8.0 in	32 hr	0.42	900-800	0.76	800-700	2.5	700-70	~654 hr
200 mm		0.23	482-427	0.42	427-371	1.4	371-21	

\* McLellan and Shand (1984), *Glass Engineering Handbook*, 3rd Edition, New York, McGraw Hill.