

ID No	Version	Confirmation date
SPEC.P.04-10	1	02.12.2020

Sapphire AR Clear

Technical specification

Sapphire AR Clear is available with either one or two-sided anti-reflective coating on low iron substrate. The low iron substrate coating combination is designed to enhance clarity. One side coated Sapphire AR Clear is used for bonding and lamination, while the two-side product is used for general applications. Sapphire AR Clear is used for applications where clarity is crucial – museums, installations, showcases etc.

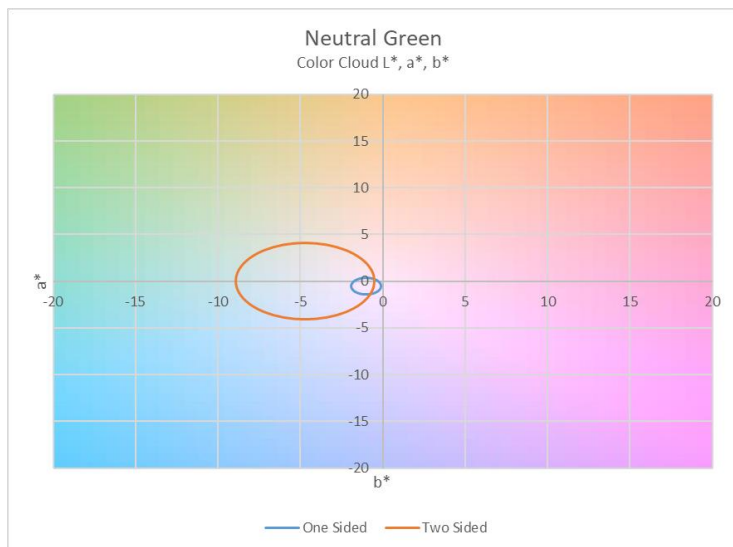
Optical properties

Optical performance [annex 1] and additional information about the products are described below :

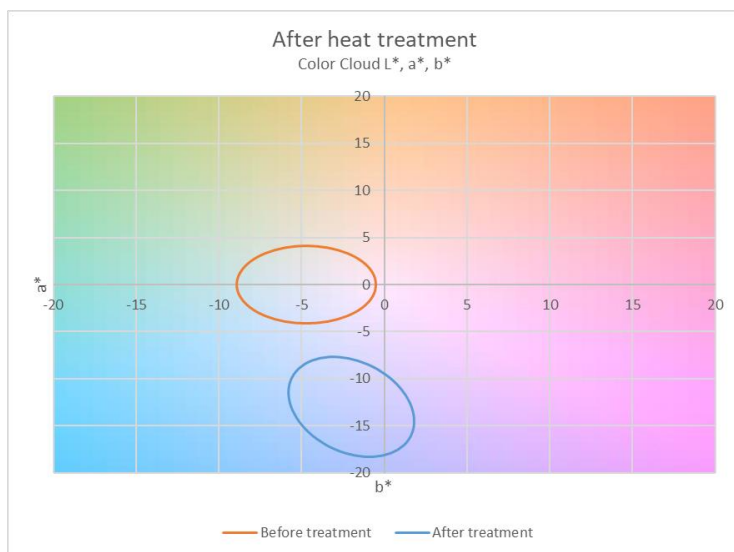
		One sided	Double sided
Visible Light Transmittance (380-780nm, according to EN410)	3 mm	≥ 94,5 %	≥ 98,4 %
	4 mm	≥ 94,4 %	≥ 98,2 %
	5 mm	≥ 94,3 %	≥ 98,0 %
	6 mm	≥ 94,2 %	≥ 97,9 %
	8 mm	≥ 93,9 %	≥ 97,7 %
	10 mm	≥ 93,7 %	≥ 97,4%
	12 mm	≥ 93,5 %	≥ 97,2 %
Visible Light Reflection at 8° angle (380-780nm, according to EN410)	3 mm	≤ 4.7 %	≤ 1.0 %
	4 mm		
	5 mm		
	6 mm		
	8 mm		
	10 mm		
	12 mm		
Refelection colour ^[see graphs bellow]		Neutral green (if thermally treated, shifts to neutral blue)	
Glass Substrate Type*		Low Iron	
Glass substrate Thickness, mm*		3 - 12 mm	

* For other thicknesses or substrate type, please contact sales@groglass.com

Colour cloud as deposited (without thermal treatment):



From our experience, if glass is heated above 460° C, color clouds shifts to blue color tint. Possible colour shift after heat treatment*:



*It is an estimate. Reflection colour needs to be validated after all processing steps.

Mechanical and chemical properties

The substrate used for the product complies with EN 572. Magnetron sputtered coating Sapphire AR Clear is manufactured to comply with ISO 1096-2 Class A and product conforms to ISO 18916 – it passes the Photographic Activity test.

The product performance is listed below:

Temperable	✓
Bendable	NOT BENDABLE
Weather resistance	PASS [according to EN 1096-2]
Neural salt spray	PASS [according to EN 1096-2]
Acid rain test	PASS [according to EN 1096-2]
UV and condensation	PASS [according to EN 1096-2]
Abrasion resistance	PASS [according to EN 1096-2]
ISO 18916 Photographic Activity test	PASS

² Bendable radius differ on thickness thus needs to be determined through testing.

Technical information

The size of a stock sheet (gross size) is 3210 x 2250 mm (126" x 88"). Standard packaging is in Endcaps (max. 2.2 t) and packed through powder. For quantities in one package see the table below:

Thickness	Quantity
3 mm	36 pcs
4 mm	27 pcs
5 mm	21 pcs
6 mm	18 pcs
8 mm	14 pcs
10 mm	11 pcs
12 mm	9 pcs

For other packing options or net sheet sizes, contact sales@groglass.com.

Information about Storage, Handling, Washing e.t.c. can be found in "Handling and cleaning Guidelines"

Annex 1

Example spectra for Sapphire AR Clear™ double sided 4 mm LI

