

ALBARINO® MID HAZE GEN II

Product:

Tempered extra-white patterned glass with and without anti-reflective coating referring to the EN12150.

Optical Properties:

	AS standard [%]	AS 1AR [%]	AS 2AR [%]	Tolerance
T HEM (NEN 2675:2018)	82.5	85.5	87.5	+/- 1
T L or DIRECT (NEN 2675)	91.5	94.0	96.0	+/- 1
Haze (WUR method)	50			+/- 5
F-Scatter	25			+/- 5

Remarks:

1. Values based on measurements made on samples 500 x 500 x 4mm
2. Single AR: Coating is applied on the smooth side
3. Measurements to be made according to **NEN 2674:2018**: "Optical measurements performed e.g. by WUR do have tolerances. These may be added or subtracted by comparison with data sheet value. The same applies to the production tolerance specified in the data sheet. If the range of measured values and tolerances and the range of datasheet values and tolerances overlaps, the glass is inside specification."
4. Measurements to be made at a **minimum distance of 25mm from the glass edge**

Glass Properties and physical characteristics:

Dimensions / Weight	Thickness	4mm ± 0.2 mm / 5mm ± 0.3mm
	Specific weight	2500 kg /m ³ of glass mass
	Tolerance of length and width	+/- 1mm
	Rectangularity	Difference between diagonals: 3 mm
Mechanical properties	Edges	C-Edge (round matt edge) F-edge (bevelled edge) Manuel edge (grinded edge) A mixture of different types within one project is possible.
	Bending strength	> 90 N /mm ² for pattern glass >120N/mm ² for float glass
	General drilling requirements	According to EN 12150
	Drill hole tolerance	+/- 1mm
	Tolerance position drill hole to glass edge	+/- 2mm referred to a reference edge
Surface / warp	Surface condition	matt / prismatic
	Local warp	Maximum 0.5 mm / 300mm (measured on an ideal plate)
	Global warp	Maximum of 4 mm / m

Saint-Gobain Glassolutions Isolierglas-Center GmbH, Niederlassung Mannheim

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Amtsgericht Bamberg · HRB 90 · Geschäftsführer: Lionel Bisch, Michiel Vanhoutte · Ust-IdNr.: DE 132268781

Defects, Quality Criteria from prEN572-5/94: Distance of observation 1,5m perpendicular to glass sheet parallel to a grey background at a distance of 3m at diffuse day light	Inclusions	< 0,5 mm	unlimited
		0,5 - 1,5 mm	1
		> 1,5 mm	2
	Spherical bubbles	< 2mm	unlimited
		2-3 mm	max. 3
	Longitudinal bubbles (length in mm at max. 1 mm width)	< 10 mm	unlimited
		10 - 15 mm	max. 4
		15 - 20 mm	1
		> 20 mm	0
	Shells (l x w x d)	10 x 1,5 x 1mm	

Saint-Gobain AR coating characteristics:

Durability Test (Typical data)	EN 61215 Damp Heat (2000h) Thermal Cycling (1200h) Humidity Freeze (480h) UV Arizona (1600h)	remaining performance, from initial TE: 99,8% ± 0,4% * 99,9% ± 0,4% * 99,9% ± 0,4% * 99,8% ± 0,4% *
	Automotive Glass Test UV Florida (1600h) Salt Spray test (1000h) Acid test (240h)	99,8% ± 0,4% * 99,8% ± 0,4% * 99,8% ± 0,4% * [* incl. 0.2% measurement inaccuracy]
Mechanical properties (Typical data)	EN 1096 Abrasion Test (after 500 cycles) - remaining performance	remaining performance, from initial TE: 99,1% ± 0,4% * [* incl. 0.2% measurement inaccuracy]
	EN 15184 Pencil Hardness Test	5H / 6H
	vkf test instruction No. 04, Version 1.03 Hail resistance test	HW4 (on representative ALBARINO 4mm)

Packaging conditions:

Packaging	End-caps with top and bottom timber (wood)
Interlayer	Powder

- The quantity per packaging unit is variable
- We advise for Oversea transport an encapsulation with plastic- or Aluminium foil and desiccant

Marking	A safety glass label will be marked on the smooth surface of the glass, design of marking is variable, incomplete printed lines are allowed.
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