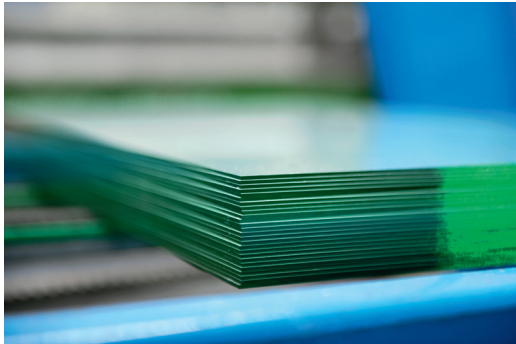


Thin and ultra-thin glass



for an extended range of applications



AGC Glass Europe's thin and ultra-thin glass is available in a wide range of compositions, thicknesses and dimensions for an extended range of applications. Furthermore, surface treatments can be applied in-house to the glass to give it special properties such as anti-glare or anti-warping. Last but not least, AGC offers a large selection of processing options that can be done in its own facilities. The glass you select will perfectly match your needs.

High quality float glass down to 0.5 mm

What's so special about it? | What does this mean for you?

Lightweight	<ul style="list-style-type: none">– Opens up a wide range of design possibilities for various applications– Reduces CO₂ emissions in the automotive industry
Perfect flatness	<ul style="list-style-type: none">– Offers excellent optical properties thanks to AGC's industrial float process with rigorous quality control
Wide range of compositions	<ul style="list-style-type: none">– Available in clear and extra-clear soda-lime and alumino-silicate glass
Industrial process	<ul style="list-style-type: none">– Very cost-effective option thanks to industrial production
Good surface quality	<ul style="list-style-type: none">– The glass surface is scratch-resistant, meeting high quality standards
Large choice of surface treatment and processing options	<ul style="list-style-type: none">– Allows to adapt the product to each customer's specific needs (more info on page 2)

What can you use it for | ... be inspired

Displays	<ul style="list-style-type: none">– PCs, laptops, tablets, e-readers, smartphones– Digital signage, interactive flat panel displays– Anti-glare screens and protective screens
Automotive	<ul style="list-style-type: none">– Trains, aerospace, automotive interiors and exteriors– Lightweight laminated windshields– Rear-view mirrors, electrochrome mirrors
Buildings	<ul style="list-style-type: none">– Lightweight assemblies, creative designs, etc.
Cosmetics	<ul style="list-style-type: none">– Cosmetic mirrors
Medical	<ul style="list-style-type: none">– Microslides for microscopy and other medical uses
Substrate for solar mirrors	<ul style="list-style-type: none">– Special mirrors for solar energy projects
Picture framing	<ul style="list-style-type: none">– Protective glass for framing photographs, posters, adverts, maps, documents, awards, etc.

Performances

Properties	Substrate	Parameters	1.6 mm	0.5 mm
Optical properties	Clear soda-lime	LT (D65,2°)	90.7	91.5
		ET (ISO 9050)	89.2	91
		Refractive index (visible)	1.52+/-0.005	
		Photoelastic constant	26.9 nm/cm/MPa	
	Extra-clear soda-lime	LT (D65,2°)	91.7	91.8
		ET (ISO 9050)	91.3	91.8
		Refractive index (visible)	1.52+/-0.005	
		Photoelastic constant	26.9 nm/cm/MPa	
	Alumino-silicate	LT (D65,2°)	91.6	92.1
		ET (ISO 9050)	91.5	92.1
		Refractive index (visible)	1.515+/-0.005	
		Photoelastic constant	27.2 nm/cm/MPa	
Mechanical properties	Soda-lime and alumino-silicate	Density	~2.48 g/cm ³	
		Young's Modulus	71-73 GPa	
		Poisson's Ratio	0.22	
Chemical strengthening properties	Soda-lime	Depth of Layer	> 20 µm	
		Compressive Stress	> 350 MPa	
	Alumino-silicate	Depth of Layer	> 40 µm	
		Compressive Stress	> 500 MPa	
Thermal properties	Soda-lime	Tg	~555°C	
		Coefficient of thermal expansion	87.10 ⁻⁶	
	Alumino-silicate	Tg	~565°C	
		Coefficient of thermal expansion	90.10 ⁻⁶	
Chemical resistance	Soda-lime	Hydrolytic class	3	
	Alumino-silicate	Hydrolytic class	2	

Processing options

Safety	Toughening (chemical)
Cutting	Straight or circular
Shaping and edge finishing	Edge grinding, drilling
Special treatments	Anti-warping
	Silkscreen printing
	Bending (thermo-forming and cold-bending)
	Acid etching (single or double)
	Anti-reflective coating
	Wet coating application (anti-fingerprint/hydrophobic coating)
	Safe foil application
	UV gluing

Availability

Standard thicknesses	Standard tolerance	Typical max sheet size
0.5 mm	+/-0.05 mm	1245*3210 mm
0.7 mm		1350*3210 mm
0.9 mm		1480*3210 mm
1.1 mm		
1.3 mm	+/- 0.1 mm	1600*3210 mm
1.6 mm		

Other thicknesses, dimensions or specific properties (flatness, parallelism, roughness, cutting tolerance, etc.) are possible upon agreement between the customer and AGC.

AGC GLASS EUROPE, A LEADER IN FLAT GLASS

AGC Glass Europe is the European branch of AGC, the world's leading flat glass producer. Its baseline, Glass Unlimited, reflects its core assets: innovative strength in advanced glass technologies, a global sales network and an industrial presence stretching from Spain to Russia. AGC Glass Europe has representatives worldwide.



GLASS UNLIMITED

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