SUNMAX RANGE

Low-iron float glass for horticulture application

All you need is light!

SunMax Premium is exclusively produced in a float glass process. Its smooth surface ensures a consistently high hemispheric transmission in every season. Combined with our double-sided, ultra-durable antireflective coating, **SunMax Helios** is the product of choice for the cultivation of lettuce. The high permeability of UV radiation leads to improved plant growth, a better taste and more intensive colors.

SunMax Horizon	Cost-efficient low-iron float glass. Thermally toughening is optional.
SunMax Meridian	Ultra low-iron float glass with optimized optical properties and higher transmittance in the UV range. Thermally toughening is optional.
SunMax Zenith	Thermally toughened ultra low-iron float glass, performed with a single-side ultra-durable antireflection coating.
SunMax Helios	The top-quality product of our horticulture glass family. Thermally toughened and performed with a double-side ultra-durable antireflection coating, which enhances the light transmission considerably.

Performance

Optical properties

	Normal transmittance T n (1)	Hemispherical transmittance T_{Hem} (3), (4)	Normal transmittance UV (4), (5)	Normal transmittance @ 320 nm (4)
Method	WUR-TNO	WUR-TNO		
Standard	NEN 2675+C1:2018 nl	NEN 2675	EN 410	
SunMax Horizon	90.5 % - 0.5 / + 1.0 %	83 %	67 %	22 %
SunMax Meridian	91.5 % ± 0.5 %	84 %	85 %	71 %
SunMax Zenith	94.0 % ± 1.0 % (2)	87.0 %	88 %	74 %
SunMax Helios	96.5 % ± 1.0 % (2)	89.5 %	90 %	76 %

(1) Photosynthetically Active Radiation (T normal) standardized to 4 mm thickness.
(2) Measured after a purification- and tempering process.
(3) Photosynthetically Active Radiation (T hemispherical) standardized to 4 mm thickness.
(4) Typically values standardized to 4 mm thickness.
(5) Ultraviolet radiation standardized to 4 mm thickness.

Report optical lab Wageningen UR Greenhouse Horticulture is available on request.

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Your Dreams, Our Challenge

Glass properties

	Cut	Thermally toughened	Antireflection coated
Density (at 18°C)	2500 kg / m³		
Thickness	4 mm ± 0.2 mm and 5 mm ± 0.2 mm		
Thermally toughened	No	Yes	Yes
Mechanical strength	≥ 45 x 10^6 Pa	≥ 120 x 10^6 Pa	
Maximum dimension	2600 mm x 2200 mm	2600 mm x 1500 mm	
Tolerance	Length of edge: ± 1 mm		
Rectangularity	Difference between diagonals: ≤ 3 mm		
Edge	Cut edge	Ground edge RK2 (C-edge)	
Local warp	n/a	0.5 mm / 300 mm	
Global warp	n/a	3 mm / m	
Longitudinal bubbles (core size)	≤ 3 mm: Unlimited > 3 mm to 10 mm: Maximum 4 per sheet > 10 mm: Not allowed		
Other point blemishes	≤ 0.5 mm: Unlimited > 0.5 mm to 2.0 mm: Maximum 2 per sheet > 2.0 mm: Not allowed		
Chips (l x w x d)	n/a	Maximum 10 mm x 2.5 mm x 1 mm	

Conformity

The products described comply with the most recent version of DIN EN 572-2 - Glass in building - Basic soda lime silicate glass products - Part 2: Float glass.

The thermally toughened products described comply with the most recent version of DIN EN 12150 - Glass in building - Thermally toughened soda lime silicate safety glass.

The coated products described comply with the most recent version of DIN EN 1096 - Glass in building - Coated glass.

11/2022

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