Performance Glass

LAROS windows include high performance glass that guarantee a high level of comfort year round. We offer three different types of glass for different applications.

- Standard triple glazing lets in winter sun while keeping out summer heat.
- For extra warmth in winter, high-gain glass lets in more of the sun's heat.
- Where more heat needs keeping out, such as windows without external blinds, low-gain glass is the better choice.

All three options insulate equally well.

Overview of technical data for triple glazed panes:

	Standard glass	**High-gain glass**	**Low-gain glass**
Glass name	XN	Eclaz	SKN165
Summary	Used for most applications. Good balance of insulation and solar gain.	Some buildings need additional heat in winter from the sun's energy. This glass is a new development that has a higher solar gain. It is like double glazing solar gain with triple glazing insulation value.	Some buildings tend to overheat in summer. Normally external shading should be used wherever possible. However, sometimes external shading is cannot be used, e.g. on doors. That's where low-gain glass can be useful. The downside is that it also lets in less energy in winter.
U-value triple (Insulation)	0.6 W/m2K		
g-value (Solar gain)	0.53	0.59	0.31

Below is the technical data for each option.

LAROS

Performance Glass

Calumen

SAINT-GOBAIN

XN

Configuration: 4 FT (16 Argon 90) 4 (16 Argon 90) 4 FT [Swisspacer Advance]
Coating: PLANITHERM XN II #2 / PLANITHERM XN II #5
Computed by: Steffen Walz Computed on: 24/09/2026 Product catalog: Australia Norms: EN410:2011

Glazing type

Glazing 1
- PLANICLEAR(4mm) - Tempered
- PLANITHERM XN II

Cavity1
- Argon 90% 16 mm
- Swisspacer Advance

Glazing 2
- PLANICLEAR(4mm) - Annealed

Cavity2
- Argon 90% 16 mm
- Swisspacer Advance

Glazing 3
- PLANITHERM XN II
- PLANICLEAR(4mm) - Tempered

swisspacer

Swisspacer Advance
Psi-values (Ψg) for triple glazing 4-12-4-12-4 (Ug = 0.7 W/m².K)

For windows	
Metal with thermal break	0.042 W/(m.K)
PVC	0.037 W/(m.K)
Wood	0.037 W/(m.K)
Wood / Metal	0.040 W/(m.K)
For facade profiles	
Wood / Metal	0.061 W/(m.K)
Metal with thermal break (di = 100mm)	0.075 W/(m.K)
Metal with thermal break (di = 200mm)	0.078 W/(m.K)

Source: ift Rosenheim directive WA-08/3 and WA-22/2 ("Warm edge" working group) / Bundesverband Flachglas (German Flat Glass Association) window data sheets

Simulated performance datas

Luminous Factors	**CIE015:2018**
Light Transmittance (TL)	73%
Outdoor Reflectance (RLe)	14%
Indoor Reflectance (RLi)	14%
Energy Factors	**EN410:2011**
Transmittance (TE)	46%
UV (Tuv)	N/A
Outdoor Reflectance (Ree)	30%
Indoor Reflectance (Rei)	30%
Absorptance A1 (AE1)	14%
Absorptance A2 (AE2)	4%
Absorptance A3 (AE3)	5%
Solar Factors	**EN410:2011**
Solar Factor (g)	0.53
Shading Coefficient (SC)	0.61
Thermal Transmission	**EN673:2011**
Angle relative to the vertical	0°
Ug	0.6 W/(m2.K)
Acoustics	**EN 12758**
Acoustic measurement values according to EN 12758 and from notified body	
Rw (C;Ctr)	32 (-1; -5) dB
Ra	31 dB
Ra,tr	27 dB
STC (ASTM E413)	0
OITC (ASTM E1332)	0
Color Rendering	**CIE015:2018**
Transmission (Ra)	97.8
Reflection (Ra)	94
Safety Class	**EN12600**
Pendulum Body Resistance	1C3/NPD/1C3
Anti-Burglary	**EN356**
Burglar Resistance	NPD
Manufacturing Sizes	
Nominal Thickness	44.0 mm
Weight	30 kg/m²
Sustainability	
Carbon footprint	
The value is estimated based on the composition and calculated according to the standard EN 15804+A2	
Global Warming Potential (GWP) – A1-A3	**EN 15804+A2**
(kg, CO_2 eq./m²) European average	53

Performance Glass

Calumen

SAINT-GOBAIN

Eclaz

Configuration: 4 FT (16 Argon 90) 4 (16 Argon 90) 4 FT [Swisspacer Advance]
Coating: ECLAZ II #2 / ECLAZ II #5
Computed by: Steffen Walz Computed on: 24/09/2026 Product catalog: Australia Norms: EN410:2011

Glazing type

Glazing 1
- PLANICLEAR(4mm) - Tempered
- ECLAZ II

Cavity1
- Argon 90% 16 mm
- Swisspacer Advance

Glazing 2
- PLANICLEAR(4mm) - Annealed

Cavity2
- Argon 90% 16 mm
- Swisspacer Advance

Glazing 3
- ECLAZ II
- PLANICLEAR(4mm) - Tempered

swisspacer

Swisspacer Advance
Psi-values (Ψg) for triple glazing 4-12-4-12-4 (Ug = 0.7 W/m².K)

For windows	
Metal with thermal break	0.042 W/(m.K)
PVC	0.037 W/(m.K)
Wood	0.037 W/(m.K)
Wood / Metal	0.040 W/(m.K)
For facade profiles	
Wood / Metal	0.061 W/(m.K)
Metal with thermal break (di = 100mm)	0.075 W/(m.K)
Metal with thermal break (di = 200mm)	0.078 W/(m.K)

Source: ift Rosenheim directive WA-08/3 and WA-22/2 ("Warm edge" working group) / Bundesverband Flachglas (German Flat Glass Association) window data sheets

Simulated performance datas

Luminous Factors	**CIE015:2018**
Light Transmittance (TL)	76%
Outdoor Reflectance (RLe)	14%
Indoor Reflectance (RLi)	14%
Energy Factors	**EN410:2011**
Transmittance (TE)	51%
UV (Tuv)	N/A
Outdoor Reflectance (Ree)	26%
Indoor Reflectance (Rei)	26%
Absorptance A1 (AE1)	13%
Absorptance A2 (AE2)	4%
Absorptance A3 (AE3)	6%
Solar Factors	**EN410:2011**
Solar Factor (g)	0.59
Shading Coefficient (SC)	0.68
Thermal Transmission	**EN673:2011**
Angle relative to the vertical	0°
Ug	0.6 W/(m2.K)
Acoustics	**EN 12758**
Acoustic measurement values according to EN 12758 and from notified body	
Rw (C;Ctr)	32 (-1; -5) dB
Ra	31 dB
Ra,tr	27 dB
STC (ASTM E413)	0
OITC (ASTM E1332)	0
Color Rendering	**CIE015:2018**
Transmission (Ra)	98.1
Reflection (Ra)	93.8
Safety Class	**EN12600**
Pendulum Body Resistance	1C3/NPD/1C3
Anti-Burglary	**EN356**
Burglar Resistance	NPD
Manufacturing Sizes	
Nominal Thickness	44.0 mm
Weight	30 kg/m²
Sustainability	
Carbon footprint	
The value is estimated based on the composition and calculated according to the standard EN 15804+A2	
Global Warming Potential (GWP) - A1-A3	**EN 15804+A2**
(kg, CO_2 eq./m²) European average	53

Performance Glass

Calumen

SAINT-GOBAIN

SKN165

Configuration: 6 FT (14 Argon 90) 4 (14 Argon 90) 4 FT [Swisspacer Advance]
Coating: COOL-LITE SKN 165 II #2 / PLANITHERM XN II #5
Computed by: Steffen Walz Computed on: 24/09/2026 Product catalog: Australia Norms: EN410:2011

Glazing type

Glazing 1
- PLANICLEAR(6mm) - Tempered
- COOL-LITE SKN 165 II

Cavity1
- Argon 90% 14 mm
- Swisspacer Advance

Glazing 2
- PLANICLEAR(4mm) - Annealed

Cavity2
- Argon 90% 14 mm
- Swisspacer Advance

Glazing 3
- PLANITHERM XN II
- PLANICLEAR(4mm) - Tempered

swisspacer

Swisspacer Advance
Psi-values (Ψg) for triple glazing 4-12-4-12-4 (Ug = 0.7 W/m².K)

For windows	
Metal with thermal break	0.042 W/(m.K)
PVC	0.037 W/(m.K)
Wood	0.037 W/(m.K)
Wood / Metal	0.040 W/(m.K)
For facade profiles	
Wood / Metal	0.061 W/(m.K)
Metal with thermal break (di = 100mm)	0.075 W/(m.K)
Metal with thermal break (di = 200mm)	0.078 W/(m.K)

Source: ift Rosenheim directive WA-08/3 and WA-22/2 ("Warm edge" working group) / Bundesverband Flachglas (German Flat Glass Association) window data sheets

Simulated performance datas

Luminous Factors	**CIE015:2018**
Light Transmittance (TL)	55%
Outdoor Reflectance (RLe)	18%
Indoor Reflectance (RLi)	20%
Energy Factors	**EN410:2011**
Transmittance (TE)	28%
UV (Tuv)	N/A
Outdoor Reflectance (Ree)	35%
Indoor Reflectance (Rei)	38%
Absorptance A1 (AE1)	34%
Absorptance A2 (AE2)	1%
Absorptance A3 (AE3)	3%
Solar Factors	**EN410:2011**
Solar Factor (g)	0.31
Shading Coefficient (SC)	0.36
Thermal Transmission	**EN673:2011**
Angle relative to the vertical	0°
Ug	0.6 W/(m2.K)
Acoustics	**EN 12758**
Acoustic simulated values	
Rw (C;Ctr)	36 (-2; -6) dB
Ra	34 dB
Ra,tr	30 dB
STC (ASTM E413)	36
OITC (ASTM E1332)	28
Color Rendering	**CIE015:2018**
Transmission (Ra)	92.9
Reflection (Ra)	83.5
Safety Class	**EN12600**
Pendulum Body Resistance	1C2/NPD/1C3
Anti-Burglary	**EN356**
Burglar Resistance	NPD
Manufacturing Sizes	
Nominal Thickness	42.0 mm
Weight	35 kg/m²

Sustainability
Carbon footprint
The value is estimated based on the composition and calculated according to the standard EN 15804+A2

Global Warming Potential (GWP) – A1-A3	**EN 15804+A2**
(kg, CO_2 eq./m²) European average	58