

# CERTIFICAT

DE VERIFICARE A ASIGURĂRII CONTROLULUI PRODUCȚIEI ÎN FABRICĂ  
Numărul: CV-196-2023

## ELEMENTE DE VITRAJE IZOLANTE

Utilizare: *Instalări în ferestre, uși, pereți cortină*



Produse de:

**TERMOPANE DE LUX S.R.L.,**

Republica Moldova, mun. Chișinău, str. Pietrăriei, 19.

Loc de producție: mun. Chișinău, str. Pietrăriei, 19.

Produsele sunt supuse de către producător încercărilor inițiale de tip și unui control al procesului de producție care cuprinde toate măsurile necesare pentru îndeplinirea și menținerea cerințelor specificate în documentele de referință.

OC Certmatcon a efectuat verificarea asigurării controlului producției în fabrică, a evaluat rapoartele privind încercările inițiale de tip și confirmă corespunderea cu cerințele descrise în anexa ZA a standardului:

**SM EN 1279-5:2019**

Acest certificat a fost emis la data de 20.07.2023 și va rămâne valabil până la data de 19.07.2026 atât timp cât standardul armonizat, produsul pentru construcții, metodele de evaluare a constanței performanței și condițiile de producție în fabrică nu sunt modificate esențial și sunt confirmate în urma supravegherii de către OC Certmatcon.

Certificatul a fost emis în mod voluntar și la cererea producătorului și poate fi suspendat sau retras dacă se constată că nu se mențin condițiile inițiale.



Certificat valabil doar cu condiția vizării anuale.



Director General

Ion PUHA



# CERTIFICAT DE CONFORMITATE

Nr. de înregistrare 13 C002609-25

Data emiterii: 29 aprilie 2025

Valabil până la: 28 aprilie 2026

ORGANISMUL DE CERTIFICARE

CERTMATCON mun. Chişinău, str. Uzinelor, 4/2, etaj 4, of. 4, MD2023, tel. 022-903-001; cell. 078-191-001, e-mail: [office@certmatcon.md](mailto:office@certmatcon.md), [WWW.CERTMATCON.MD](http://WWW.CERTMATCON.MD).

PRIN PREZENTUL DOCUMENT SE CONFIRMĂ FAPTUL, CĂ PRODUSUL IDENTIFICATE ASTFEI:

DENUMIREA / DESCRIEREA

Profile din aliaje de aluminiu, pentru împărții, marca comercială "KURTOGLU".

Livrările se vor realiza conform condițiilor stabilite cu

"Kurtoglu Bakir Kursun Sanayi" A.S., Turcia.

SÎNT CONFORME CU CERINȚELE STABILITE ÎN:

RNI 06-5.3.35:2001 pct. 2.2.

PRODUCĂTOR

"Kurtoglu Bakir Kursun Sanayi" A.S., Turcia.

SOLICITANT

S.C. "ALUMINIU-GRUP" S.R.L.,

str. Uzinelor, 60, mun. Chişinău, Republica Moldova.

CERTIFICATUL ESTE ELIBERAT ÎN BAZA:

Raport de evaluare final Nr. 698 din 29.04.2025, eliberat de OC "CertMatCon", mun. Chişinău, str. Uzinelor,

4/2, etaj 4, of. 4, MD 2023; Raport de încercări Nr. 029/1 din 29.04.2025, eliberat de Centrul de Incercări,

Expertiză și Cercetare (CIEC) din cadrul "CertMatCon" SRL, mun. Chişinău, str. Fereedului, 12, MD 2005,

certificat de acreditare Nr. L1-101 valabil până la 11.07.2025, eliberat de CNA "MOLDAC"; Raport de

încercări Nr. 029/2 din 29.04.2025, eliberat de Centrul de Incercări, Expertiză și Cercetare (CIEC) din cadrul

"CertMatCon" SRL, mun. Chişinău, str. Fereedului, 12, MD 2005.

INFORMAȚIE SUPPLEMENTARĂ:

Schema de certificare tip 2, conform SM SR EN ISO/CEI 17067:2014. Certificatul a fost emis în mod voluntar la

cerea solicitantului și poate fi suspendat sau retras dacă se constată că nu se mențin condițiile contractuale.

Certificatul este valabil doar în cazul condițiilor asigurate la certificarea inițială. Supravegherea se va realiza cel

puțin o dată pentru perioada de valabilitate a certificatului. Contract de prestări servicii Nr. 102/2022 din

01.12.2024



Director General

PUHA Ion

In atenția antreprenorilor și organelor de control  
Copiile certificatelor de conformitate se legalizează în modul stabilit de  
OC "CERTMATCON", informații pe [www.certmatcon.md](http://www.certmatcon.md)  
Falsificarea certificatelor se pedepsește conform legislației!

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## New Project 07

Make-up Name	Glass 1 & Coating	Glass 2 & Coating	Visible Light			Solar Energy				Thermal Properties	Embodied CO <sub>2</sub>
			Transmittance	Reflectance		Transmittance	Reflectance	Solar Factor (g%)	Secondary Heat Transfer (q <sub>i</sub> )	U-Value	[eq. kg/m <sup>2</sup> ] A1-A3
				Visible (τ <sub>v</sub> %)	ρ <sub>v</sub> % out						
4/10/4/10/4	Guardian ExtraClear (CE)	Guardian ExtraClear (CE)	76.0	21.1	21.1	66.9	18.7	72.0	5.2	2.0	31.50
4/24/4Lowe	Guardian ExtraClear (CE)	ClimaGuard® Premium 2 (CE) on Guardian ExtraClear (CE)	81.9	12.4	12.6	58.0	28.0	63.8	5.8	1.4	24.30

Calculation Standard: EN 410:2011 / EN 673:2011

### 4/10/4/10/4

#### Outdoors

GLASS 1	Guardian ExtraClear (CE)	#1 -----
	Thickness = 4mm	#2 -----
GAP 1	100% Air, 10mm	
GLASS 2	Guardian ExtraClear (CE)	#3 -----
	Thickness = 4mm	#4 -----
GAP 2	100% Air, 10mm	
GLASS 3	Guardian ExtraClear (CE)	#5 -----
	Thickness = 4mm	#6 -----

Total Unit (Nominal) = 32 mm

Slope = 90°

Estimated Nominal Glazing Weight: 28.79 kg/m<sup>2</sup>

#### Indoors

### 4/24/4Lowe

#### Outdoors

GLASS 1	Guardian ExtraClear (CE)	#1 -----
	Thickness = 4mm	#2 -----
GAP 1	100% Air, 24mm	
GLASS 2	Guardian ExtraClear (CE)	#3 ClimaGuard® Premium2 (CE)
	Thickness = 4mm	#4 -----

Total Unit (Nominal) = 32 mm

Slope = 90°

Estimated Nominal Glazing Weight: 19.19 kg/m<sup>2</sup>

#### Indoors

## Important Notes

Calculations and terms in this report are based on EN 410:2011/EN 673:2011. The performance values shown above represent nominal values for the center of glass with no spacer system or framing. Solar Factor (g) and Secondary Heat Transfer (qi) are not available for sloped glazing, as no calculation method is prescribed by the standard for these attributes.

The KIWA logo and KIWA Validation Report MD - 14/477/GL are provided as evidence of validation of the Guardian Performance Calculator software, program version 4.1, for execution of calculations of luminous and solar characteristics of glazing and thermal transmittance, according to EN 410:2011 and EN 673:2011.

Embodied CO<sub>2</sub> [eq. kg/m<sup>2</sup>] A1-A3 is estimated based on material Embodied Carbon Factor (ECF), derived from Guardian Glass Regional third-party independently verified and published / current Environmental Product Declarations (EPDs) which are produced to EN 15804 and are compliant with the requirements of ISO 14044, the International Life Cycle Assessment (LCA) standard, and ISO 14025 and ISO 21930, the international standards covering EPD for construction products. The A1-A3 ECF is an estimate of the embodied carbon due to production of that material. The resulting material value should then be multiplied by the square area of glazing to provide an estimate of embodied carbon of the material at the project scale. Embodied CO<sub>2</sub> estimates provided by Guardian represent only values associated with the glass components manufactured by Guardian. The estimated values do not represent in any way a plant-specific and/or product specific guarantee.

### Laminated products:

The Performance Calculator allows the user to model a wide variety of laminated glass makeups using different float glass substrates, coatings and interlayer material, including those makeups where the coating faces the interlayer. It is the user's responsibility to assess whether the laminated glass makeup meets relevant regional standards and complies with applicable laminated glass safety regulations.

In addition, when the laminated glass makeup includes a coating facing the interlayer material, there may be a loss of thermal insulation performance and a color change compared to non-embedded coated glass.

### Non-specular products (translucent or diffuse):

The performance measurement for non-specular (translucent or diffuse) materials such as translucent interlayers or acid etched glass surface, or surface with ceramic frit is limited by the current experimental technologies. Since measurements capture physically only a part of the resulting radiation, calculated performance results provided herein and based on such measurements are not compliant with any standard (including EN 410) and may only be used as a general reference. Actual values may vary significantly based upon exact fabrication process, as well as type, thickness and color of used non-specular material.

## Explanation of Terms according to EN 410:2011/EN 673:2011

**Visible Light Transmittance (T<sub>v</sub>, %)** is the percentage of incident light in the wavelength range of 380 nm to 780 nm that is transmitted by the glass.

**Ultraviolet (UV) Transmittance (T<sub>uv</sub>, %)** is the percentage of the incident UV component of the solar radiation in the wavelength range of 280 nm to 380 nm that is transmitted by the glass.

**Solar Energy Direct Transmittance (T<sub>e</sub>, %)** is the percentage of incident solar energy in the wavelength range of 300 nm to 2500 nm that is directly transmitted by the glass.

**Visible Light Reflectance Outdoors/Indoor (R<sub>v out/in</sub>, %)** is the percentage of incident visible light directly reflected by the glass.

**Solar Direct Reflectance Outdoors/Indoors (R<sub>e out/in</sub>, %)** is the percentage of incident solar energy directly reflected by the glass.

**Solar Energy Absorptance (A<sub>e</sub>, %)** is the percentage of the sun's energy that is absorbed by glass.

**U-Value (U<sub>g</sub>, W/m<sup>2</sup> K)** is the glazing parameter that characterizes the heat transfer through the central part of the glazing, i.e. without edge effects, and expresses the steady-state density of heat transfer rate per temperature difference between the environmental temperatures on each side. Temperature differential according to standard conditions: ΔT=15K°. The lower the value, the greater is the insulating value. EN 673 defines the value with 1 decimal place. The value is also provided with 3 decimal places for informational purposes.

**Solar Factor or Total Solar Energy Transmittance or g-value (g%)** is the total solar radiation transmitted by the glass.

**Shading Coefficient (sc)** is Solar Factor divided by 0.87. It is a measure of the solar heat gain referenced to 3 mm clear glass which has the designated value of 1.00.

**Secondary Heat Transfer Coefficient ( $q_i$ )** is the result of heat transfer by convection and longwave IR-radiation of that part of the incident solar radiation which has been absorbed by the glazing.

**Colour Rendering Index in transmission, D65 ( $R_a$ )** is the change in colour of an object as a result of the light being transmitted through the glass.

#### Disclaimer

This performance analysis is provided for the limited purpose of assisting the user in evaluating the performance of the glass products identified on this report.

Spectral data for products manufactured by Guardian reflect nominal values derived from typical production samples or CE Initial Type Testing and subject to variations due to manufacturing and calculation tolerances. Spectral data for products not manufactured by Guardian were derived from the LBNL International Glazing Database and have not been independently verified by Guardian. Guardian recommends a full-size mock-up be approved.

The values provided herein are generated according to established engineering practices and applicable calculation standards. Many factors may affect glazing characteristics, including glass size, building orientation, shading, wind speed, type of installation, production process and others. The applicability and results of the analysis are directly related to user inputs and any changes in actual conditions can have a significant effect on the results. It is the responsibility of the users of the analysis to ensure that the intended application is appropriate and complies with all relevant laws, regulations, standards, codes of practices, processing guidelines and other requirements. Guardian makes no guarantee that any glazing modeled herein is available from Guardian or any other manufacturer. The user has the responsibility to check with the manufacturer regarding availability of any glass type or make-up.

While Guardian has made a good faith effort to verify the reliability of the tools used for this analysis, they may contain unknown programming errors that could result in inaccurate results. The user assumes all risk relating to the results provided and is solely responsible for selection of appropriate products for user's application. Guardian makes no express or implied warranty of any kind with respect to the tools used by Guardian and this analysis. There are no warranties of merchantability, non-infringement or fitness for a particular purpose with respect to the tools used by Guardian and this analysis and no warranty shall be implied by operation of law or otherwise. The only warranties applicable to Guardian products are those separately provided in writing for each product. In no event shall Guardian be liable for direct, indirect, special, consequential or incidental damages of any kind relating to or resulting from use of Guardian tools and analyses.

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Program Version: 4.1.0.9850  
Database Version: 20230804