

# PLANISTAR SUN+ Four seasons comfort

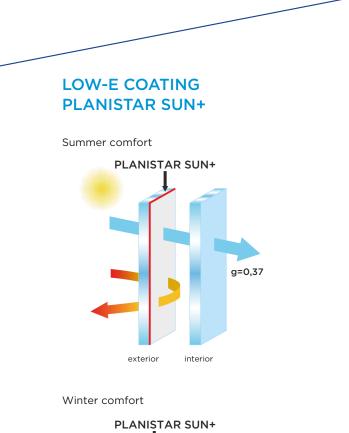


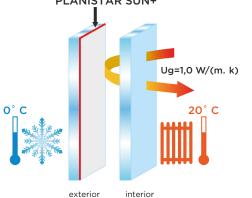
### SAINT-GOBAIN GLASS

## PLANISTAR SUN+

Windows are one of the significant factors in calculating the energy requirements of our home. Why? They can be a source of increased expensive to ensure the comfort of using the space in terms of optimal temperature and interior lighting inside.

An excellent way to save money is an effective method of improving the building's energy efficiency, which involves analysing the most critical aspect: glass. Appropriately selected, it can be energy-saving, reducing expenses on heating and cooling the home, and can also reduce artificial lighting by letting in plenty of daylight. **PLANISTAR SUN+** is one of the solutions that not only helps save energy throughout the year by providing increased thermal insulation in winter and significantly reducing the overheating in summer, but it is a source of daylight all over year.







#### **APPLICATIONS**

Windows in new and renovated residential buildings to improve the energy efficiency of the window and protect against overheating.

#### BENEFITS



PLANISTAR SUN+ guarantees lower energy demand throughout the year. The thermal insulation of the glass, thanks to a low Ug value, protects interiors from heat loss during the winter period. A low solar factor (g) reduces the use of energy-consuming air conditioners during the summer time.



Thanks to the high light transmission (LT) value, PLANISTAR SUN+ reduces the need for artificial interior lighting, ensuring high aesthetic qualities through natural color rendering.

#### **RANGE:**

- Thicknesess: 4mm and 6mm
- Size: 3210mm x 6000mm

#### PROCESSING

The processing of PLANISTAR SUN+ glass is the same as processing of every type of glass in the PLANITHERM range. PLANISTAR SUN+ must be assembled into an insulated glazing unit, coating positioned on face #2. In case of laminated glass, the coating have to be place outside of the laminate (on face #4).

PLANISTAR SUN+ is available on PLANICLEAR.



#### PERFORMANCES

	Ug* value [W/m²K]	Light Transmission LT** [%]	Solar factor g** [%]	Reflection outside Lre** [%]	Reflection inside Lri**
4/14/4/14/4 PLANISTAR SUN+ on face#2 PLANITHERM XN on face#5, 90% Argon	0,6	64	35	15	17
4/16/4/16/4 PLANISTAR SUN+ on face#2 PLANITHERM XN on face#5, 90% Argon	0,5	64	35	15	17
6/16/6/16/6 PLANISTAR SUN+ on face#2 PLANITHERM XN on face#5, 90% Argon	0,5	62	35	15	17

\* according to EN 673

\*\* according to EN 410

#### **Glossary:**

#### Key performance factors

LT - Light transmission, which determines how bright the glass is . The higher the percentage of light transmission, the brighter the room will be.

g - solar factor, a low value prevents the creation of a "greenhouse effect" in the room.

Ug value – measure of the heat loss by penetration of the glass. The lower the Ug-value is, the better the insulating properties are. Expressed in W/m²K.

### **IT'S GETTING WARMER**

A comfortable temperature for people indoors is 22-25°C. In the summer, when there are heatwaves that last for an extended period, the house overheats. Inside, it will be over 25°C. Such conditions are not good for either work or rest.

According to a study published in "Nature Climate Change," over the next three decades, record-breaking heatwaves worldwide may become two to seven times more frequent than in the last 30 years.

In Poland, as reported in the summary by the Institute of Meteorology and Water Management - National Research Institute (IMGW-PIB), the year 2022 was the sixth warmest in the 21st century. The average air temperature then was 9.5°C, which is 0.8 degrees higher compared to the average from 1991-2020.

And how many hot days<sup>\*</sup> were there in 2022? Residents of Wrocław, Toruń, and Leszno experienced 25 hot days. In the vast majority of the country, hot days occurred from 13 to 24 times.

\*when the air temperature reaches at least 30°C during the day.





SAINT-GOBAIN INNOVATIVE MATERIALS POLSKA SP. Z O.O. SAINT-GOBAIN GLASS IN DĄBROWA GÓRNICZA

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