

COOL-LITE® SKN 176 (II)

Highly Selective Solar Control Glass

VARSO PLACE

Varso 1 i 2
Project: HRA Architekci
Location: Warszawa



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HIGHLY SELECTIVE SOLAR CONTROL GLASS WITH ENHANCED THERMAL INSULATION

Do you know that selectivity refers to the ratio of visible light passing through the glass to the total solar energy transmitted through the glass? The higher the value, the more natural light reaches the interior while protecting it from overheating.

For COOL-LITE® SKN 176 (II) glass, selectivity is 1.89, which guarantees a reduction of energy consumption for air-conditioning needed to cool interior and minimizes used artificial lighting.



COMFORT



SOLAR PROTECTION



LIGHT TRANSMISSION

BENEFITS*

High level of light transmission

(63%) which allows for the creation of bright, daylight spaces.

Solar factor g equals 0.34

The glass blocks out 66% of solar radiation.

Excellent of thermal insulation

Ug=0.5 W/m²K

APPLICATIONS

COOL-LITE® SKN 176 (II) is an ideal solution provides an optimal combination of solar protection, light transmission and thermal insulation.

Thanks to its excellent performances, COOL-LITE® SKN 176 (II) is an perfect glazing for applications requiring the use of tempered safety glass, such as facades, skylights, large windows, and winter gardens.



DL Tower
Project: Ostrowscy Architekci
Location: Katowice

EFFECTIVE SOLAR CONTROL PROTECTION

The use of energy for cooling of indoor spaces has increased by more than three times between 1990 and 2016, according to the International Energy Agency (IEA) in its 2018 report „Future of Cooling”. It is estimated that in 2016, the operation of air conditioning units worldwide consumed over 2,000 TWh of electricity. According to the IEA scenario, if nothing changes, the demand for energy consumed by air conditioning will more than triple by 2050.

Based on the assumption that glazing on the south facade accounts for 50% of the facade surface, the annual demand for electricity needed to cool the interior in the case of using COOL-LITE® SKN 176 (II) will be 27 kWh/m². Under the same scenario with the installation of a low-e PLANITHERM® XN coating, the demand will increase by almost twice and reach 50.6 kWh/m².*

PRODUCT RANGE

COOL-LITE® SKN 176 (II) is available in a standard sheet size of 6000x3210 mm with a thickness of 4, 6, 8 and 10 mm.



COOL-LITE® SKN 176 II glass is also available on the world's first low-carbon glass ORAE®.

Non-standard thicknesses and sheet sizes (larger or smaller) are available on request.

COOL-LITE® SKN 176 glass has a product environmental declaration:



and certified Cradle to Cradle Certified® at Bronze level with the latest version 4.0 of the standard in all the five categories.



* Calculation made in Hemera for IGU 6/16/4

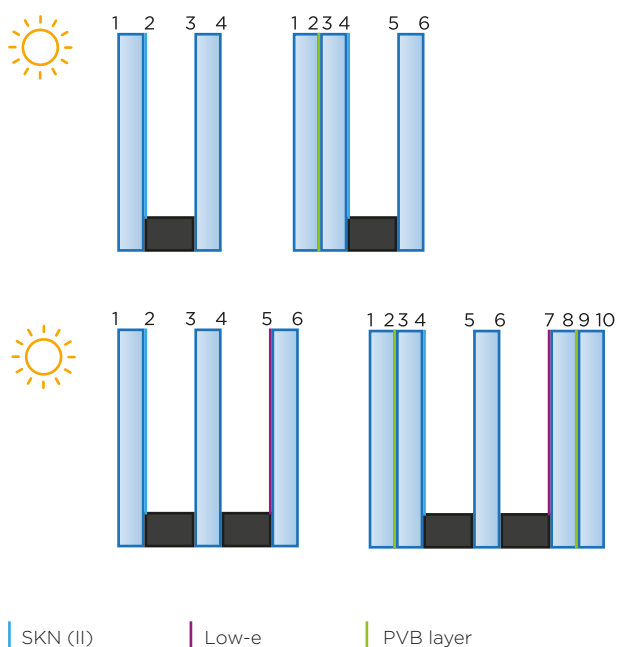
PROCESSING

In order to achieve its performances and aesthetics COOL-LITE® SKN 176 (II):

- Tempered – compatible with Heat Soak Test (only applicable for tempered)
- Edge deleted prior to assembling
- Assembled into an insulated glazing unit. Positioned on the face 2 (inside the IGU)

COOL -LITE® SKN 176 (II) can be laminated, taking care to place the coating outside of the laminate (coating on face 4 of the laminated pane).

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PERFORMANCES

	Ug* value [W/m²K]	Light Transmis- sion LT** [%]	Solar factor g**	Reflection outside Lre** [%]	Reflection inside Lri**
6/16/4/16/6 COOL-LITE SKN 176 (II) on face#2 PLANITHERM XN on face#5, 90% Argon	0,5	63	0,34	15	17
8/16/6/16/55.2 COOL-LITE SKN 176 (II) on face#2 PLANITHERM XN on face#5, 90% Argon	0,5	61	0,34	15	17
6/16/4/16/6 COOL-LITE SKN 176 (II) on face#2 ECLAZ on face#5, 90% Argon	0,5	64	0,34	15	17
8/16/6/16/55.2 COOL-LITE SKN 176 (II) on face#2 ECLAZ on face#5, 90% Argon	0,5	63	0,34	15	17

* according to EN 673

** according to EN 410

Selvita Research Centre
Project: Industria Project
Location: Kraków



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