

LET'S BUILD A BETTER FUTURE

 **SKB STYROTERM**
TOP - MOUNTED ROLLER SHUTTER

SKB STYROTERM

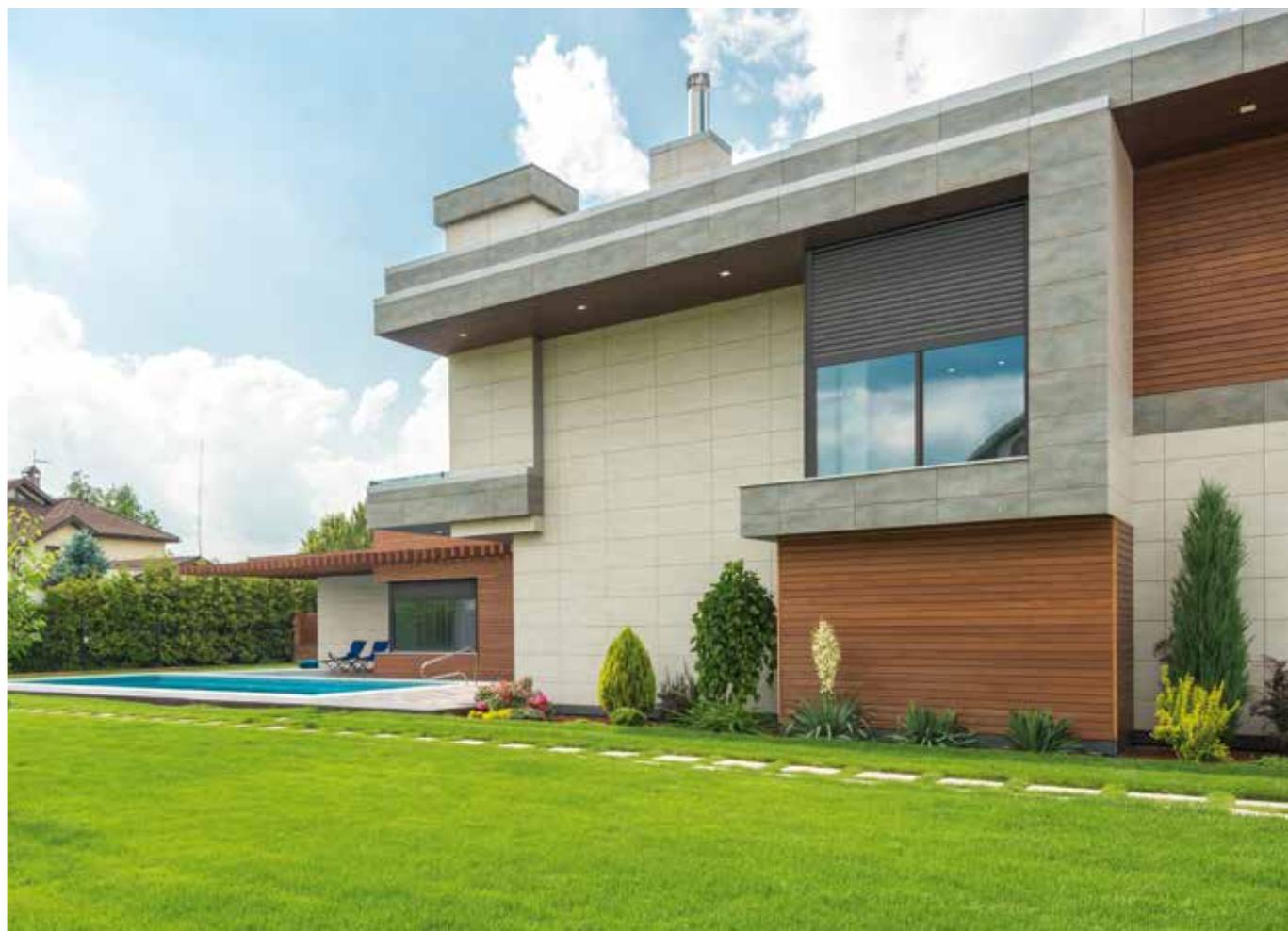
SKB STYROTERM is a high-tech solution of top-mounted roller shutters, which was designed mainly to improve the energy balance in a building. The main element of this system is a shutter box, which is made of high quality material with very good thermal properties. The shutter box is available in two sizes. Research at a renowned research institute IFT ROSENHEIM has shown that the proposed solution has an extremely high thermal transmittance coefficient U_{sb} from **only 0.29 W/(m²K)**, which places the system in the first place among other products of this type.

The advantage of this solution is also the possibility to choose the method of revision from inside or outside the room. In addition, a VENTI variant is available, which has been designed for installation in ventilated façades and clinker buildings. In addition, the **SKB STYROTERM** system is also available in a version adapted to the assembly of venetian blinds and screens.

Roller shutters in the **SKB STYROTERM** system can be equipped with insect screens installed in a shutter box. Its assembly with the “click-in” technology is very fast and easy.



The warmest roller shutter box on the market



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Windows and doors can generate a loss in winter of to **25%** of heat! The older the windows, the greater the losses.



Excessive heat loss indoors is primarily associated with increased energy consumption for heating, which translates into increased building operating costs.



Unexpected **challenges for investors**

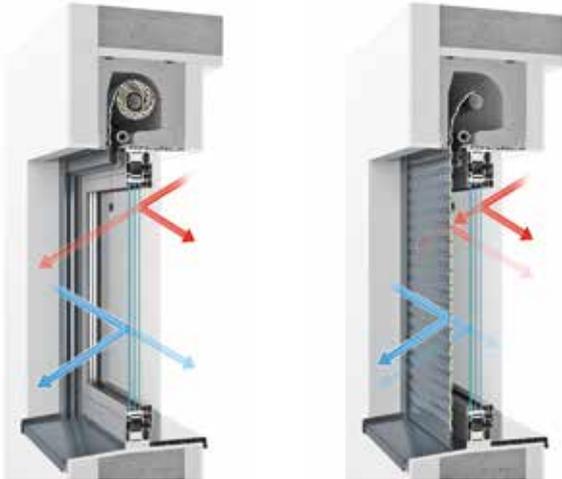


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Excessive internal heat gains can lead to overheating, which in turn has a negative impact on the comfort and health of the occupants. At the same time, air-conditioning equipment has to be used, which entails additional financial outlay.

The absence of sunshades can result in an excessive **30-80%** increase in solar radiation entering the room.

A powerful ally in the fight against heat loss



How does the SKB STYROTERM works?

- the lowered roller shutter curtain provides additional thermal resistance ΔR , resulting from both the air layer between the curtain and the window and the curtain itself;
- this additional partition effectively restricts the flow of warm air from inside the building;
- the higher the ΔR value, the lower the heat transfer coefficient.

What do we gain by using SKT STYROTERM?

- for passive windows with $U_w = 0.8 \text{ W}/(\text{m}^2\text{K})$ the closed shutters of the SKB Styroterm system improve the heat transfer coefficient of a window up to **$U_{ws} = 0.67 \text{ W}/(\text{m}^2\text{K})$** ;
- or the windows with $U_w = 1.1 \text{ W}/(\text{m}^2\text{K})$ by **21%**;
- in the case of windows with $U_w = 1.4 \text{ W}/(\text{m}^2\text{K})$ by **25%** and in the case of older windows by more than **30%**.

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With SKB STYROTERM we can not only improve the energy balance of the building, but most importantly reduce expenditure on heating and cooling throughout the year up to **30%**.



On a cold but sunny day, the weather-automation system can raise the external roller shutter curtain on the side of the building most intensively heated by the sun, allowing heat to accumulate inside the building. Furthermore, the use of natural energy guarantees savings for the budget.

The automation of the roller shutters allows precise control of the heat exchange process, thereby reducing the load on the electricity grid in winter due to the intensive reheating of flats.



Intelligent expenditure control



If there is no sunshine and the outside temperature drops, the roller shutters are automatically closed, allowing heat to accumulate inside the building. The increase in thermal insulation also guarantees additional savings in heating costs.



**SKB STYROTERM
with SkyFlow blinds package**



The clever design of the system allows the SkyFlow Venetian blind mechanism to be used in the box. Installation of the rail is very quick and easy. This makes it possible to aesthetically combine external roller shutters and Venetian blinds on the same façade.

**SKB STYROTERM
with SkyRoll blinds package**



Thanks to the specially designed guide channels, it is possible to use a ZIP or Classic screen package in the box. Very good thermal properties in relation to solutions available on the market.



One system
many applications

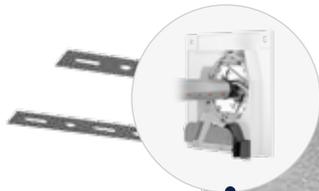
SKB STYROTERM VENTI
– solution for ventilated façades and clinker constructions



Above all, the system ensures free air circulation. The shutter box has a smaller size than the basic variant, which gives more possibilities for the external façade layer to be finished maintaining the same winding. Two revision options are available: from the inside or outside of the room, and the system can be fitted with an insect screen for extra protection against insects.

Innovative design and versatility of details

The well thought-out design of the system provides for the possibility of routing the power supply cable within the shutter box. Simply remove the specially prepared space in the end cap of the shutter box and insert the electric drive cable, which can then be easily connected to the power supply.



Very easy and quick assembly of the insect screen in the entry guide, due to the use of snap-on technology. This allows the shutter box and MKT sets to be produced separately. The installation of the insect screen can take place at any stage of production after mounting the entry guides and proper winding of the spring. Simply click on the MKT end caps in the roller entry guides and the insect screen is fully integrated with the roller shutter.



Assembly of the shutter box is very fast and easy. It involves direct mounting of the shutter box on the window frame by means of an appropriately selected adaptive profile by inserting or snapping-in. The assembly method is identical to that of the Opoterm SKT system and allows for significant time-saving.

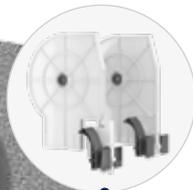


For external revision option, new two-part guide channels have been designed, which can be partially hidden in the insulation. They are available in maxi and mini versions, and their use depends on the size of profiles used in the construction of the roller curtain.

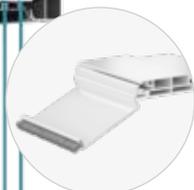


Use of a universal division wall with replaceable entry guides adaptors, adjusted to the selected system version, which allows for optimization of stock levels.

It is possible to replace the entry guide without the need to dismantle the entire roller shutter. It is inserted into the side cover by means of a "T" type lock and then screwed onto it with a screw, which stabilizes the fastening of all elements. The socket in which the screw is fixed has been aesthetically concealed.



The commonly used revision cover in the form of an angle bracket screwed to the window frame in the version with revision from the outside has been replaced by an inserted aluminium profile, which ensures non-invasive installation. The aluminium profile is inserted directly into the base shutter box profile, which is made of PVC. This solution ensures appropriate stiffness of revision, and what is more, it enables colour matching to the joinery or façade, as this profile can be painted in any colour from the RAL palette.



There is also a universal pin for guide channels that can be used regardless of the selected version of the revision system. Simply turn it in a specific way during assembly in the side cover of the shutter box. This allows for significant optimization of stock levels.



RICH RANGE OF COLOURS



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See more information
on available colours:



What do you gain by using of external **Roller shutters?**



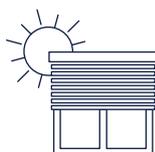
SAFETY – the roller shutter curtain discourages potential burglars, making you feel safe at home.



ACOUSTIC INSULATION – a roller shutter curtain reduces the external noise.



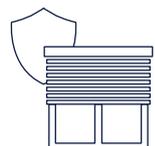
EXCELLENT THERMAL INSULATION – lowered roller shutter curtain reduces heat loss through windows in the winter season up to **26%**.



SUNSHADE – both the roller shutter curtain, as well as the technical fabric used in the screen, provide excellent protection against overheating in summer.



PRIVACY – the roller shutter curtain protects the interiors of our flats from undesirable gazes.



WINDOW PROTECTION – the roller shutter curtain effectively protects window joinery against harmful external factors such as wind, rain or direct sunlight.



HEALTHY SLEEP – the closed curtain of the roller shutter creates a comfortable darkness in the room, which allows for a healthy and restful sleep.



SAVINGS – the roller screen contributes to reducing expenditure on heating in winter and air conditioning in summer.



PROTECTION AGAINST INSECTS – the use of the ZiP version of the screen also provides a barrier that effectively protects the interior of the house from the presence of annoying insects.

