

zenia zenia

S L I D E HEBESCHIEBE

NEW ERA OF SUPERIOR INSULATION IN SLIDING SYSTEMS

EPDM SEAL

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ZENIA INSULATED SLIDING SYSTEMS WINDOW AND DOOR SYSTEM

NEW ERA OF SUPERIOR INSULATION IN SLIDING SYSTEMS

Today, the importance of usage of energy resources and their efficient usage is increased. 82% of the energy utilized by building complexes is used for heating purposes. This rate corresponds to approximately 26% of the total energy consumed in our country. The heat loss in buildings arises from various sources: 40% through exterior walls, 30% through windows, 17% through exterior and balcony doors, 7% through roofs and 6% through the undersides of flooring. Due to this fact, residences stand out as the most important areas for energy saving and PVC window systems stand out as the best insulation systems for the purpose. The fact that energy is the most limited and expensive resource gives "energy conservation" in window systems, which is actually insulation, even more prominence.

Firat is blazing a new trail on this subject by presenting the "Zenia Slide" which eliminates the insulation problems with sliding systems used in residences and offices. When the windows are closed, the "Insulated Sliding Systems" ensure insulation at all points via EPDM seals. Thus, external factors such as wind, noise and rain are prevented from being transferred inside.

AESTHETICS

The frame and sash profiles of "Zenia Slide Systems" were designed to be at the same level, for ensuring a complete, elegant look. With a range that extends from the smallest window to the largest doors that open to offices, gardens and terraces, the systems have a wide area of usage. With 21 different color and texture options, they meet the architectural and decorative expectations.

SYSTEM FEATURES

- The system has 125-mm wide frame and 50-mm wide sash profile.
- It can be used with two different glazing bead profile types of 20 mm and 24 mm.
- When the windows are closed, insulation at all points is ensured via EPDM seals.
- Two different aluminum rail profiles were developed for doors and windows in order to facilitate passage over thresholds.
- The frame and sash profiles of the system were connected via welding method and the system was designed to be manufactured with the minimum amount of profiles at maximum speed.

→ Since each sash can carry up to 200 kgs, the system can be applied for a wide range from the smallest windows to the largest doors.

→ Sash connection points are the weakest points in sliding systems. The special interlock profile used in these points enables the insulation to be provided through two EPDM seals and sliding seal brush.

→ The special locking feature of interlock profiles completely eliminates the risk of window sashes pulling away from each other due to wind.

→ The gap in the connection point of the two upper horizontal sashes, which constitutes another weakness in sliding and parallel sliding systems, has been eliminated with the specially designed insulation profile and sliding stopper.

→ The profile specially designed for purposes of providing aesthetic conformity for the upper gap between the frame and the sash and sealing the gap also ensured the system integrity to remain unharmed.

WIND LOAD RESISTANCE

→ The "Zenia Slide" has very high wind load resistance by means of its locking system and interlock profile structure and is able to provide the same air impermeability performance values as high-insulation window systems.

→ While developing "Zenia Slide" the maximum wind load values to which the buildings can be exposed were taken into the consideration; the structure of the reinforcement steel as well as their positions inside the profiles were designed in the most effective way.

HEAT INSULATION

→ Profile width of "Zenia Slide", its chamber numbers, chamber widths, profile heights and EPDM seal systems were created to meet all the requirements regarding thermal conductivity coefficient.

→ Compatible with TS EN ISO 10077-2 standards, $U_g : 1,1 \text{ W/m}^2\text{K}$, $U_w : 1,6 \text{ W/m}^2\text{K}$ and $U_f : 1,7 \text{ W/m}^2\text{K}$ values were achieved with the Windows system which has the dimensions of $1,23 \text{ m} \times 1,43 \text{ m}$.

SOUND INSULATION

→ The "Zenia Slide" provides sound insulation with values up to 40 dB. Thus, the system makes it possible to attain an indoor sound level that accommodates a quality life, even in the noisiest environments.

→ The frame and sash profiles of the system were connected via welding method and the system was designed to be manufactured with the minimum amount of profiles at maximum speed.

ZENIA HEBESCHIBE

Zenia Hebeschiebe syetm is offered to the use of our customers with the addition of aluminum frame and aluminum double rail adapter used at the lower panel of the profiles of the Zenia Slide system.

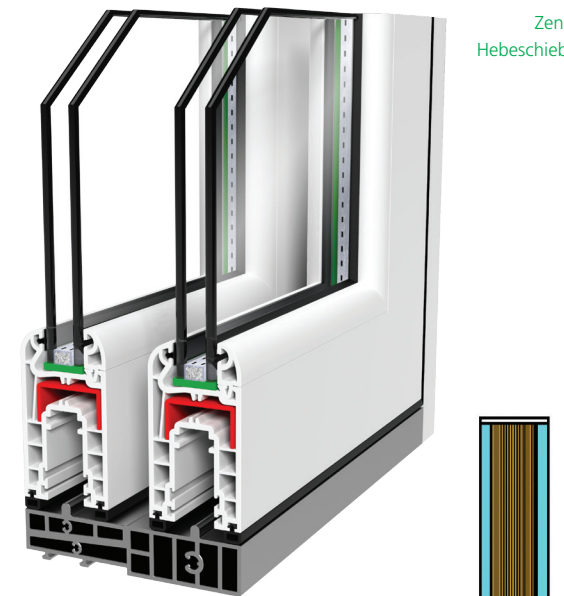
Hebeschiebe espagnolette and car systems can be used with the Zenia Hebeschiebe system. Thus, each wing reaches a bearing capacity of 300 kg. The Zenia Hebeschiebe systems, which can be used comfortably in the details of the building such as garden, pool and balcony outlets with large and high openings, bring you the ease of use and comfort of the slider system. The insulation advantage of the Zenia Hebeschiebe system adds value and comfort to your living spaces.

The gasket interlock system used in the Zenia Hebeschiebe system provides ease of use and insulation values at the highest level thanks to the EPDM gaskets used at all points, the upper insulation profile and the special profiles preventing the sash shakiness.

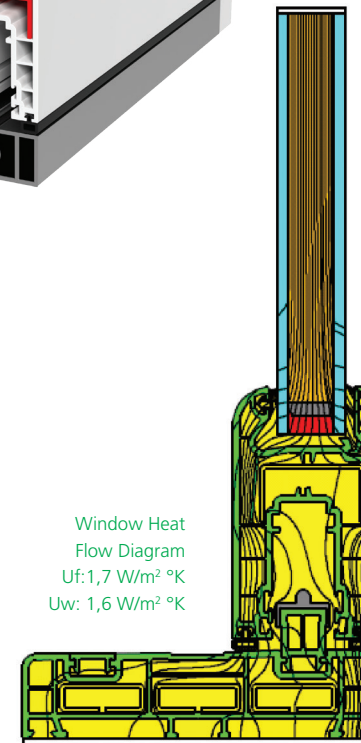
- **Perfect insulation with EPDM gasket at all points**
- **High rain and sound insulation**
- **200 kg load bearing capacity for each sash.**
- **Ease of use and installation**
- **Easy sliding with 3 cm sill height**
- **Aesthetic look with 125 mm frame – 50 mm sash width**
- **Thanks to a special locking system, sash can be locked at a desired position**
- **21 different color options**
- **The advantage of being available as ready-made joinery**
- **Sashes can be in any desired number**
- **Any sash/sashes can be movable**
- **Cost advantage compared to all insulated sliding systems and hebeschiebe espagnolette**
- **The Zenia system can be transformed into a Hebeschiebe system with the use of an aluminum lower frame. Thus, the load bearing capacity of each sash is 300 kg.**



Zenia Slide



Zenia Hebeschiebe



Window Heat Flow Diagram
 $U_f: 1,7 \text{ W/m}^2 \text{ °K}$
 $U_w: 1,6 \text{ W/m}^2 \text{ °K}$

COLOUR AND DESIGN CHART

PROFILE WIDTH
125 mm

PROFILE HEAT INSULATION
1,7 W/m² °K

WINDOW HEAT INSULATION
1,6 W/m² °K

SOUND INSULATION
40 db

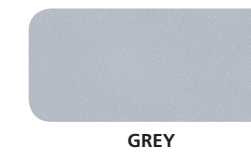
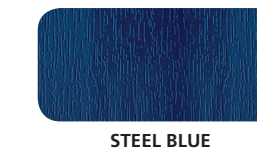
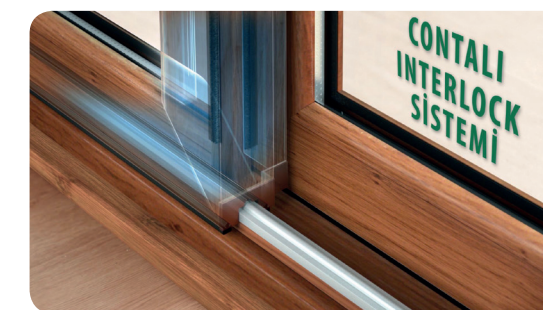
AIR PERMEABILITY CLASS
4

WATER IMPERMEABILITY CLASS
9A

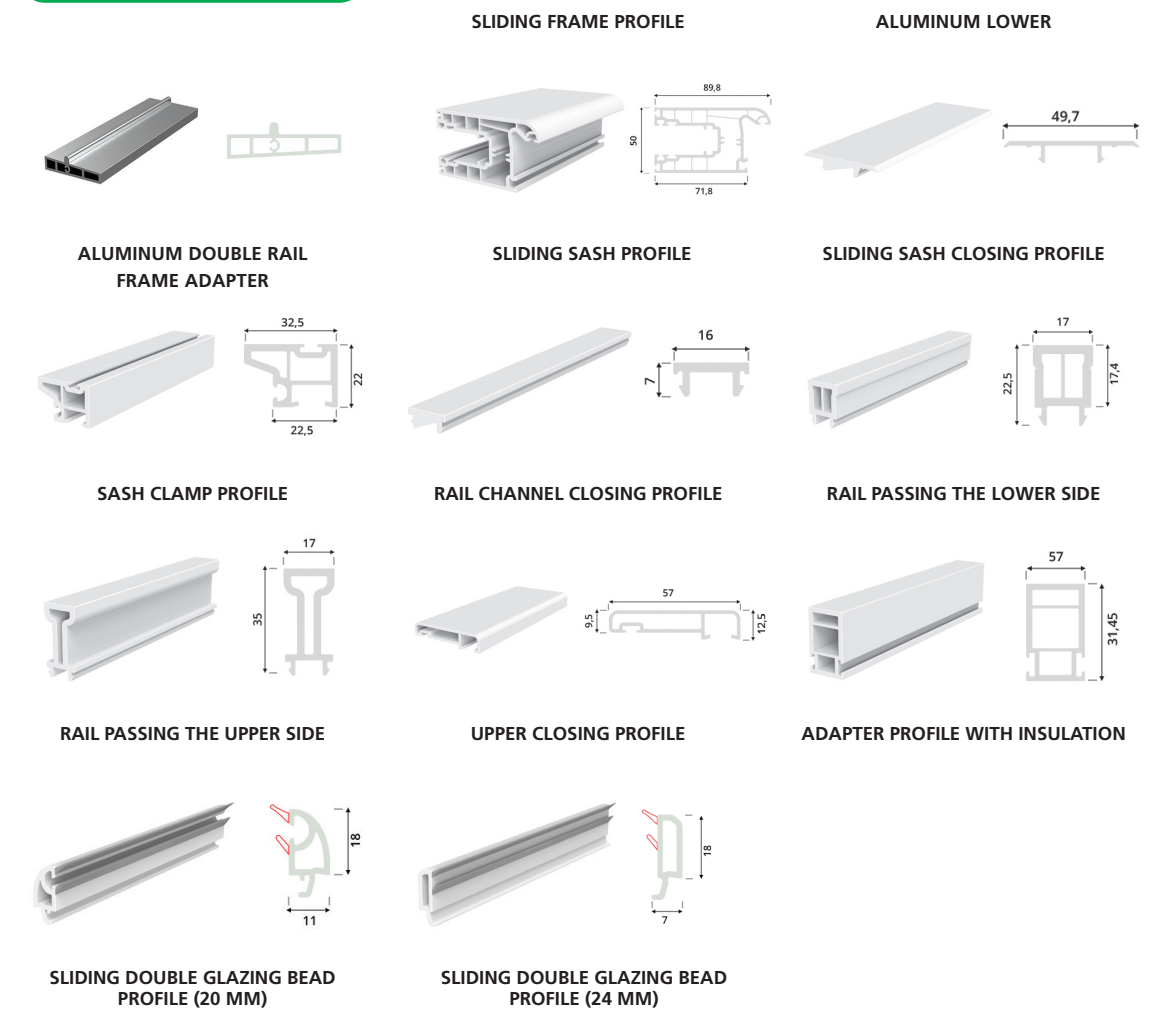
WIND LOAD RESISTANCE CLASS
C3

GLASS THICKNESS
20, 24 MM

The calculations were made by using a glass unit with a thermal conductivity coefficient of $1,1 \text{ W/m}^2\text{°K}$ for a window with dimensions of $1,23 \times 1,43 \text{ m}$ in accordance with the standard **TS EN ISO 10077-2**.



ZENIA (INSULATED SLIDING) SYSTEMS SERIES PROFILES



INSULATED SLIDING SERIES TECHNICAL DETAILS

