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zenia zenia **SLIDE** HEBESCHIEBE

NEW ERA OF SUPERIOR INSULATION IN SLIDING SYSTEMS



FIRATPEN



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 wise 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, Ug : 1,1 W/m²K, Uw : 1,6 W/m²K and Uf: 1,7 W/m²K values were achieved with the Windows system which has the dimensions of 1,23 m x 1,43 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 sound insulation level to be acquired via acoustic glasses that can be used with the system isolates the noise from the outside from indoors in the most efficient way.

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 to 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.





Window Heat Flow Diagram Uf:1,7 W/m² °K Uw: 1,6 W/m² °K

COLOUR AND DESIGN CHART	GOLDEN OAK	OAK	MAHOGANY	ZENIA (INSULATED SLIDING) SYSTEMS SERIES PROFILES		
					SLIDING FRAME PROFILE	ALUMINUM LOWE
PROFILE WIDTH 125 mm	DARK OAK	EICHE RUSTICAL	DARK GREEN			
PROFILE HEAT INSULATION 1,7 W/m² °K				ALUMINUM DOUBLE RAIL	SLIDING SASH PROFILE	SLIDING SASH CLOSING F
WINDOW HEAT INSULATION	WALNUT	ANTEAK	ANTHRACITE	FRAME ADAPTER		ri
1,6 W/m² °K				22.5		225
Sound Insulation 40 db	CEDAR	WINCHESTER	STEEL BLUE	SASH CLAMP PROFILE	RAIL CHANNEL CLOSING PROFILE	RAIL PASSING THE LOWE
AIR PERMEABILITY CLASS 4						
WATER	GREY	CREAM WHITE	WHITE			
IMPERMEABILITY CLASS 9A				RAIL PASSING THE UPPER SIDE	UPPER CLOSING PROFILE	ADAPTER PROFILE WITH IN
WIND LOAD RESISTANCE	SILVER BRUSH EFFECT	TROMPET	MACORE			
CLASS C3				SLIDING DOUBLE GLAZING BEAD PROFILE (20 MM)	SLIDING DOUBLE GLAZING BEAD PROFILE (24 MM)	
GLASS THICKNESS 20, 24 MM	BLACK ULTI-MATT	SILVER D (SILVER GREY)	ALUMINIUM BRUSH EFFECT			
The calculations were made by using a glass unit with a thermal conductivity coefficient of 1,1 W/m² °K for a window with dimensions of 1,23x1,43 m	SMOOTH ANTHRACITE	A	LIFTING	INSULATED SLIDING SERIES TECHNICAL DETAILS		
in accordance with the standard TS EN ISO 10077-2 .			AILITLEME SISTEMI		It provides excellent With the hel UPPER INSU of EPDM seals used at PROFILE, air	JLATIONINTERLOCK SYpassageby the help of so
peneskop					FRAME AND SASH between two connection points. sashes is pre	
	CONTALI INTERLOCK SISTEMI			Isolation weakness occurring in vertical direction is prevented	the second second second second second second second second second second second second second second second se	Aesthetical look is achieved thelp of UPPER SLIDING PLL the need for manually cutting
		and the second		by attaching the UPPER base section of INSULATION BUFFER interlock profiles. prevented.	sliding sash closing profile in rail shape	

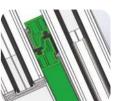


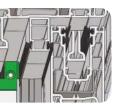
JMINUM LOWER











look is achieved with the PER SLIDING PLUG without r manually cutting of the closing profile in upper rail the risk of closing profile to the rail is removed.