# 

The Name for Quality and Cost-effective Building



### **Frame Window Systems**

Convincing and convenient solutions



WOLFA was the first company in Europe to produce frame windows from fiberglass reinforced polyester more than 35 years ago. A pioneer with over 50 years of experience in fiberglass reinforced plastics technology (GRP), WOLFA offers standard solutions tried and tested a million times as well as new, innovative frame window systems that meet all requirements.

### Frame Window System **ZO** – *WDIFA* Soft

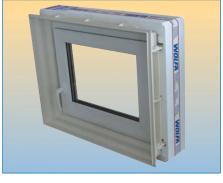
Our newly developed ZO – **WOLFA** SOFT window frame system, copyright protected within Europe, sets new standards for windows set in embrasures. The universal frame window offers full flexibility and well-engineered window inserts that perfectly fit this system. From sturdy steel basement window insert to high-class, state-of-the art and energy-saving (EnEV) 5-chamber tilt-and-turn insert with excellent heat insulation characteristics – take your pick.



HABM 469028-0001-0014 Marke + Muster eingetragen



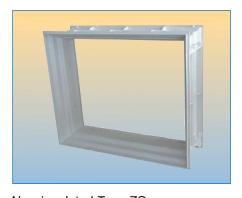
Heat-insulated frame type ZOW



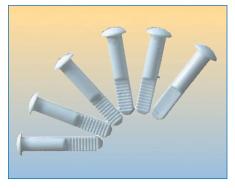
Type ZOW with high-class three-or five- chamber tilt-and-turn insert with  $U_g$  1,1 vacuum jacket that corresponds to the current standards of EnEV or RAL guidelines



Type ZOW with casement window insert with 5-mm thick glass or with 15-mm or 20-mm insulating glass; also available with protective grille.



Non-insulated Type ZO



Simple installation of window inserts with wedge-anchors: put the window inserts into the frame, mount the anchors – finished!



Frame type ZOW with steel basement window insert SD 1, with opening grille and glass sash – strong and safe.

Ask for our completely assembled frame windows - ready-to-mount with the window insert you want!



#### We make living dreams come true!



The plastic tilt-and-turn casements are available in a variety of colors – just take your pick!



Frames 125 cm wide – for even more living comfort we supply double-sash as well as single-sash tilt-and-turn casements.

#### Widths available (in cm):

For setting in concrete:

14, 15, 16, 17, 18, 19, 20, 24, 25, 30, 36,5

For setting in brick walls:

27, 33, 39,5

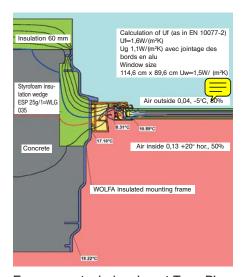
#### Window sizes available (in cm):

Width x	Height	Width x Height	Width x Height					
75 x	50	100 x 50	125* x 62,5					
75 x	62,5	100 x 62,5	125* x 75					
75 x	75	100 x 75	125* x 100					
		100 x 100	* from 20-cm walls					
We also supply appoint sizes 50 x 77, 75 x 100								

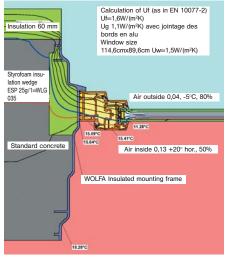
#### We also supply special sizes 50 x 77, 75 x 100 or 100 x 125 – ask for more information!

### Planning reliability through isothermal calculation

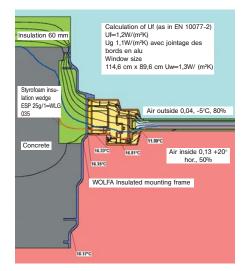
#### Energy efficiency and heat insulation are more to us than just words: we practice both!



Encasement window insert Type Plus



Three-chamber tilt-and-turn insert Type MDK



Five-chamber tilt-and-turn insert Type MDK de Luxe



#### Not only for use in your basement



**WOLFA** frame windows are not only used in basements but are employed more and more in prefabricated components. The narrow outside edges of the frame facilitate its mounting in site-mixed concrete and prefabricated concrete components.

**WOLFA** frames are made of fiberglass reinforced polyester (GRP). This thermosetting plastic material proves itself with its unbeatable advantages over conventional thermoplastics such as polypropylene. Our frames are acid- and alkali -proof and almost absolutely resistant to heat and frost.

These characteristics and the window widths up to 125 cm are extremely advantageous for the producers of industrial and agricultural buildings.



- Best heat insulation values (see isothermal diagram.
- Employment of heat-absorbing glass Ug 1.1
- XXL window pane possible
- Frame window made of acid-proof fiberglass reinforced polyester
- Flame-resistant
- Weather-proof and maintenance-free
- Frame size up to 125 x 100 cm
- Perfect for installation in brick and concrete walls



**WOLFA** Frame Window Systems - also a pillar to agricultural buildings!



#### The classic - tried and tested, strong and safe

The **WOLFA** type Z frame window has been used successfully in new buildings all over Europe for the last 20 years. With hardly any changes, it has become the classic among frame window systems. The hopper window proves itself with its easy handling and meets all requirements for basement windows. The over 400,000 **WOLFA** windows installed today speak for themselves!

### Type Z Hopper Sash Frame Window The window for universal use in any basement

The advantageous shape of the **WOLFA** type Z frame window guarantees maximum stability and maximum light. The hopper sashes are available with 5-mm single-sheet glass and with 15-mm insulating glass, with or without protective grille. The single-sheet glass can be replaced by insulating glass at any time and the addition of a protective screen later on is an easy thing to do. Patterned or safety glazing are available at extra cost. Frame as well as hopper encasement consist of fiberglass-reinforced polyester, a high-quality material that is characterized by many advantages:

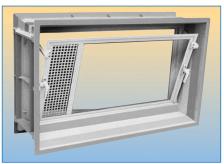
- Fiberglass-reinforced polyester
- Low weight
- Maximum stability
- Breakproof
- Resistant to ultraviolet rays
- Weather-proof
- Maintenance-free
- Flame-resistant (no PVC)
- Acid and alkali resistant
- Inexpensive



Type Z frame window - hopper sash



**Type Z frame window - hopper sash** with galvanized protective grille (cm<sup>2</sup> hole pitch).



Type Z frame window – hopper sash with ventilation grille

Perfect for boiler rooms and boiler houses for permanent fresh air circulation

#### Widths available (in cm):

For setting in concrete: 20, 24, 25, 30 und 36.5

Window sizes available (in cm): 27, 33 und 39,5

#### Window sizes available (in cm)

Width	X	Height	Width	X	Height
75	Χ	50	100	Χ	75
75	Χ	62,5	100	Χ	100
75	Х	75			
100	Χ	50			
100	Х	62,5			



The universal frame window offers the house builder, the installer and the prefab producer a variety of advantages over other systems:



- One single frame and an extensive range of matching window inserts
- Innovative outside sill of the same material and design
- Perfect for setting in bricks, in-place concrete and prefabricated components
- Sharp-edged on both sides, ideal for setting in concrete
- Maximum interlocking and thus stability in concrete thanks to cross ribs and webs
- No PVC, therefore temperature-resistant; no deformation or shrinkage
- Low weight, therefore easy handling
- Large range of different sizes widths up to 125 cm!
- Unique insulation characteristics
- Simple installation
- Large range of accessories

### RAL-certified Heat Insulation – Certified home manufacturing of insulation products

We use fully automatic production lines for the manufacture of our heat insulation glasses. Our insulation glass brands **WOLFA**-Therm® and **WOLFA**-Maxitherm® have been tried and tested for their energy-saving and heat insulation characteristics. Our insulation glass production was audited and certified according to the DIN EN 410 standards and is monitored by the IFT Rosenheim.







State-of-the-art production technologies for better products.

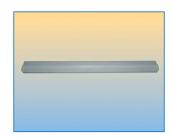


#### **Accessoires**

#### An elaborate, extensive accessories portfolio completes the program!





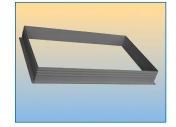


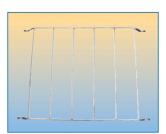
Forced central heating room ventilation for all encasement

Outside window sill that perfectly fits all frame sizes





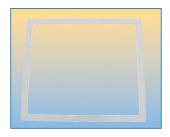


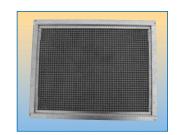


Air outlet and dryer connection for all encasements

Click-on perimeter bezel for insulations up to 200 mm

Sturdy, burglar-proof bar grate for plastic encasements

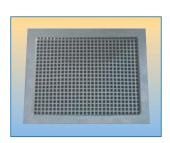






Free wood mounting frame included

Mosquito screen and wire mesh for plastic encasements



Rodent screen with cm<sup>2</sup>-holes for all encasements



Lockable handle grips for tilt-and-turn windows

#### The Safety Issue

- Shatter-proof safety glazing (ESG/VSG) for all types
- Sound-absorbing glazing
- Burglar-proof fittings

Ask us - we can help!



#### Instructions for encasing in concrete:



Nail up the wooden support frame



Mount the frame window





Nail up the inside wooden support



Place the inside formwork – pour the concrete



Remove the casings done!



### VOLFA - simply better!

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