TECHNICAL DATA SHEET

<u>WAT 500</u>



ADHESIVES • PLASTERS • THERMAL INSULATION

Adhesive and reinforcement base-coat plaster for insulation boards

Cement-based hydrophobic mixture for bonding and plastering of mineral wool thermal insulation boards

PURPOSE

WAT 500 is a cement-based adhesive and base-coat plaster, with added fine mineral filters, reinforced mono fibres and polymer additives. It is designed for bonding mineral wool boards on walls and ceilings, in performing inner and external insulation of buildings. The material is suitable for building new walls, as well as for renovation of old buildings.

Implementation of protective reinforcement base-coat with **WAT 500** prevents the insulation boards from "aging" and from the influence of the weather. The product ensures waterproofing and crack resistance of the finished layer and at the same time it protects the insulation layer from mechanical injuries. It creates an excellent basis for decorative finishing of the facades with the high-quality silicone plaster **SICOLIT**.

PROPERTIES

- easy to apply
- enough open time (for work)
- ✤ cold resistant
- impact resistant (with 3 mm thickness of the layer)
- ✤ vapour-permeable

PREPARATION OF THE BASE

WAT 500 has an excellent adhesion to different construction surfaces, such as bricks, concrete, plasters, cement and gypsum base-coats, etc. The base should be dry, well cleaned and strong. Application over oil (grease) stains, dust and other (contaminants) is not allowed. The old unstable plasters and other coatings must be removed. Bases with high absorption, such as aerated concrete or gypsum blocks, should be primed in advance with deeply penetrating primer **TERAZID G-55**.



CHARACTERISTICS AND TECHNICAL DATA

Colour:	grey;
Base:	cement;
 Density: 	1,4 kg/l;
 Temperature of 	-
work:	+5°C to +30°C;
Time for 'maturing':	10 minutes;
 Time for bucket stay: 	about 3 hours;
 Open time (for work) 	30 minutes;
 Time for final bounding 	
and subsequent operations:	14 days;
 Recommended thickness of 	
the base coat layer:	3 mm;

APPLICATION AND PROCESSING

For the complete dissolution of 25 kg **WAT 500**, around 6,5 litters of water are required. Into a preliminary prepared container with water, the necessary amount of dry mixture is poured and stirred with mechanical mixer, until a homogeneous mass is achieved. Thus, the stirred mixture is left to stay for 8-10 minutes so that it gets "mature", after that it is stirred once again and it is ready for work.

Bonding: When working on smooth and plane surfaces, the prepared solution is applied resembling a comb with the help of notched mortar-board with edges size of 8-10 mm.

When the basis is rough, the solution is applied on the entire outer rim of the insulation panel under the form of a strip with a width of 4-5 cm and on a couple of places on the inner side of the panel under the form of "pillows".

Additional fixing of the insulation with anchors can start not earlier than 3 days after bonding (when the temperature is not less than 20°).



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Plastering: After the boards are anchored, **WAT 500** can be used as base-coat. The solution is prepared in the same way and is uniformly applied, after that the reinforcement fiberglass mesh is applied vertically. It is tightly pressed and smoothed with the help of a mortar-board. The recommended thickness of the base-coat layer is 3 mm.

CONSUMPTION

- **Bounding:** 5-5.5 kg/m², depending on the base.
- Reinforcing: 4 kg/m²

TOOLS FOR WORK

- bucket
- electrical drill and stirrer
- trowel
- mortar-board
- lute

WEATHER CONDITIONS AT WORK

The minimum twenty-four-hour temperature of the air and the basis should not be less than $+5^{\circ}$ C, and the maximum – not higher than $+30^{\circ}$ C.

It is not recommended applying of **WAT 500** at high level of air humidity, or when the forecast is for coming rain, or during a rain.

FORM OF DELIVERY

Dry mixture in paper packages of 25 kg

NOTES

Characteristics and technical data of the product, pointed out into this Technical Data Sheet are defined at a standard temperature (20°C) and relative humidity (50%). In other weather conditions, the technological time for some of the processes, mentioned above, could be shorter or longer.



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The information of the product is based on the practical experience of the manufacturer and the technical tests in specialized laboratories.

It is not recommended to add cement, sand, etc. to the product, because this will only lead to deterioration of the quality.

All hazards and precautionary statements about **WAT 500** can be checked in the Safety Data Sheet of the product.

STORAGE

12 months into the originally sealed packages, in a dry and ventilated store. It is recommended to be stored on pallets.

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NB 2032 DoP № 20191114-01-D		
WAT 500		
Adhesive and reinforcement base-coat plaster for mineral wool insulation boards		
Reaction to fire	A1	
Bond strength with	1430 kPa	
concrete base		
Bond strength with MW	90 kPa	
slab (adhesive)		
Bond strength with MW	340 kPa	
slab (reinforced base coat)		
Compressive strength	7.45 N/mm ²	
Flexural strength	3.2 N/mm ²	
Coefficient of capillary	$0.12 \text{ kg/m}^2.h^{0.5}$	
absorption of water - c	class W2	
Heat transmission $\lambda_{10^{\circ}C,DRY}$	0.45 W/m.K	

The manufacturer recommends checking the suitability of the product in the Technical Data Sheet. The same is responsible for the product quality, but not for the ways and conditions of its applying.

The information into the present Technical Data Sheet is reliable but only if the product is used under stated conditions. The responsibility of any other usage of the product, including its usage in a combination with any other product or a process, is borne by the user.

