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Technical Data Sheet (TDS)
POLYURETHANE MANSORY ADHESIVE

EXPERT LINE PROFESSIONAL THIN BED MORTAR 5-IN-1

PRODUCT DESCRIPTION

The masonry mortar for thin joints Expert Line is a one-component polyurethane mortar in the version with a gun applicator. It is intended for the construction of external and internal walls of autoclaved aerated concrete blocks in the TLMB dimensional class, ground ceramic blocks and silicate blocks with dimensional tolerances appropriate for this type of solution. masonry mortar for thin joints is a modern alternative to traditional cement mortar, which is used for erecting walls of single-family houses and multi-family housing.

APPLICATION

› dedicated both for load-bearing walls and partition walls;
› suitable for blocks in TLMB dimensional class made from autoclaved aerated concrete, ceramic hollow bricks and silicate blocks, with appropriate solutions for this type of high dimensional tolerances.

PRODUCT PROPERTIES

› The polyurethane mortar for thin joints allows for quick and durable erection of walls from various building materials that meet the requirements for appropriate dimensional deviations.
› Masonry mortar for thin joints is characterized by high frost resistance and water resistance.
› It is protected against the formation of mold and fungi in the joint.
› The polyurethane mortar allows for continuation of works at low temperatures (down to -5°C), which effectively extends the construction season.
› The masonry mortar has excellent thermal insulation properties, which allows for the elimination of thermal bridges, which are not desired in the technology of energy-saving construction.
› Easy and clean application.

TECHNICAL PARAMETERS

Colour	light grey
Working temperature (ambient temperature)	from -5°C to +30°C (optimally +20°C)
Can temperature	optimally +20°C
Skin formation time	5-12 min (23°C, RH 50%)
Correction time	< 3 min
Full hardening time	24 h
Sound insulation	to 61 dB
Thermal conductivity coefficient λ	0,036 W/(m·K)
Increase in height (expansion degree) of the foam applied in the gap), %	≥ 135
Tensile strength, kPa	≥ 100
Tensile strength (perpendicular to the plane of bonding) of the joint: ceramic block (group 2) – polyurethane mortar– ceramic block (group 2), kPa	≥ 100
Tensile strenght (perpendicular to the plane of bonding) of the joint: ceramic block (group 3) – polyurethane mortar– ceramic block (group 3), kPa	≥ 70
Tensile strength (perpendicular to the plane of bonding) of the joint: ceramic block with wool – polyurethane mortar– ceramic block with wool, kPa	≥ 120
Tensile strength (perpendicular to the plane of bonding) of the joint: autoclaved aerated concrete block – polyurethane mortar– autoclaved aerated concrete block, kPa	≥ 170
Tensile strength (perpendicular to the plane of bonding) of the joint: silicate block – polyurethane mortar– silicate block, kPa	≥ 200

Yield of 750 ml:

Material	Application type/numer of coats	Horizontal application (m^2)	Horizontal and vertical application (m^2)
Autoclaved aerated concrete block	block up to 12 cm wide/1 block over 12 cm wide/2	10 4,8	8 3
Ceramic hollow brick	block up to 12 cm wide/1 block over12 cm wide/2	10-12 5-6	7-8 3-4
Silicate block	block up to 12 cm wide/1 block over 12 cm wide/2	10 5,2	6-7 3,2

Thermal resistance (upon hardening)	from -50°C to +90°C
Solubility in organic solvents	acetone, before hardening

The above table is for informational purposes only

DELIVERY FORM | PACKAGE

Aerosol can, 750 ml

DIRECTIONS FOR USE

Substrate preparation:
The first layer of the wall must be raised with the use of traditional mortar. Only this guarantees precise levelling of the whole wall. In the case of substrates made of self-levelling floors, the erection of walls can be started by directly applying PU mortar to the substrate. Wear protective gloves. The working surfaces must be free of dust, debris and other materials that would impair the bond strength. Thoroughly clean and degrease the working substrate. Moisten the working surface with water, using e.g. a brush or sprayer. Protect surfaces from dirt (of PU mortar). Surfaces may become dirty from PU Mortar so should be protected e.g. with foil.

Product preparation:
Before use, warm the can with foam adhesive to room temperature (optimally +20°C) by, for example, immersing the can in warm water. Shake the can vigorously for 30 seconds to thoroughly mix the ingredients. Screw the can onto the expanding foam gun.

Adhesive application:
Dispense the adhesive in the 'upside down' working position. Adjust the adhesive flow by adjusting the knob or pressing the trigger of the application gun.

Apply the mortar with one bead in the middle of the block with a width of 12 cm or two parallel beads for blocks with a width exceeding 12 cm. Apply the mortar on the long side of the block keeping 3 cm distance from the side edge of the block forming bead with required diameter 3 cm for autoclaved aerated concrete blocks or bead with required diameter 5 cm for ceramic hollow bricks and silicate blocks. Blocks should be put on applied mortar up to 3 min after mortar application. The laid block should be pressed lightly in order to obtain thin joint evenly spread over the surface of the block. To achieve the desired accuracy position of the blocks should be leveled. Blocks can be horizontally corrected within 3 minutes by up to 0,5 cm without detaching them from the wall. Stabilize the blocks with a rubber hammer. Blocks cannot be removed from the wall. In case taking off the block required applying new lines of mortar. To eliminate thermal bridges and increase walls durability and resistance, mortar should be applied also on vertical surfaces of the blocks, in corners and connection between partition walls.

If application is interrupted for more than 15 minutes, secure the foam dispensing gun, leaving the can screwed on the gun until the next use. When work is complete, clean the gun of adhesive residue with PU Expert Line Foam Cleaner

STORAGE AND EXPIRY DATE

Store in a dry, cool and well-ventilated place, in an upright position, in the original closed container. Keep away from heat, open flames and other ignition sources. Recommended storage temperature is from +5 °C to +30 °C (optimally +20 °C). Storing the product in conditions other than recommended may result in shortening its lifetime by up to 3 months. Do not store the product in the cabin of a car. Transport only in the trunk.
Expiry date: 15 months. Store and use before the expiry date indicated on the bottom of the container.

HEALTH AND SAFETY RECOMMENDATIONS

When using this product, normal occupational hygiene rules should be followed. Keep out of reach of children. Before use, familiarize yourself with the conditions for safe use of the product on the packaging and in this technical data sheet. Detailed information on the safety of use and hazards posed by the product is included in the Material Safety Data Sheet.

With the publication of this data sheet, all previous editions become invalid. Release: 01/25

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