

Bricklaying Gun PU Foam Adhesive 1000 / 880

One-component polyurethane PU bricklaying mortar hardening due to air humidity. The foam is manufactured in compliance with requirements of ISO 9001:2008 standard.

APPLICATIONS

Thin Bed Mortar is designed for raising walls with thin joints, made of high-accuracy materials (flatness/height deviation not larger than 3mm per running meter). The joined elements are calibrated blocks made of autoclaved aerated concrete and grinded ceramic blocks used construction of ground outer plastered walls and inner walls. The PU mortar is dedicated both for load-bearing walls and partition walls.

BENEFITS

▲▲▲ EFFICIENCY OF BRICKLAYING FROM ONE PACK (CAN)
▲▲▲ ADHESION TO BUILDING MATERIALS SURFACE
▲▲▲ WIDE APPLICATION TEMPERATURE RANGE
▲▲▲ EFFECTIVITY OF PREAPRATION
▲▲▲ EFFECTIVITY OF APPLICATION
▲▲▲ THERMAL BRIDGES ELIMINATE
▲▲▲ CLEAN TECHNOLOGY
▲▲▲ high; ▲▲ increased; ■ normal; ▼▼ decreased; ▼▼▼ low; - no application

APPLICATION CONDITIONS

Can / applicator temperature [°C] (optimal +20°C)	+10 - +30
Ambient / surface temperature [°C]	-10 - +30

DIRECTIONS FOR USE

Prior to application, read safety instruction presented at the end of TDS and in MSDS.

1. SURFACE PREPARATION

Thin bed mortar presents ideal adhesion to typical construction material, such a: cellular concrete, brick, concrete, plaster.

- Absolutely perform the proper leveling the first layer using classic/traditional mortar.
- Clean the surface of block from dust to not reduce the mortar adhesion.
- Sprinkle the working surface with water (with painter's brush for example) in temperature >0°C.
- Secure surfaces exposed to accidental mortar contamination.

2. PRODUCT PREPARATION

- Too cold can should be brought to room temperature, e.g. by immersion in warm water with temperature up to +30°C or leaving it in room temperature for at least 24 h.
- Applicator temperature cannot be lower than can temperature.

3. APPLICATION

- Put on protective gloves.
- Vigorously shake the can (10-20 seconds, the valve facing down) to thoroughly mix the components.
- Screw the can onto the applicator.
- Working position of the can is "valve facing down".
- Absolutely perform the proper leveling the first layer using classic/traditional mortar.
- Sprinkle the working surface with water (with painter's brush for example) in temperature >0°C.
- Recommended number of lines because of width of the wall:

CELLULAR CONCRETE AND BLOCK CERAMIC:

Width [mm]	Number of lines
To 130	1
More than 130	2

- Apply the mortar along the brick/ block forming bead with required diameter for: aerated concrete blocks 2-3 cm.
- Apply the mortar along the brick/ block forming bead with required diameter for: calibrated ceramic bricks 5 – 6 cm.
- Stream volume and pace of application is controlled by pressure force on the applicator trigger.
- Keep the gun during application with distance ca. 1 cm from the surface of the block. Keep the gun during application with distance ca. 1 cm from the surface of the block.
- Blocks/ bricks should be put on applied mortar up to 3 minutes from it's application (within advised 'open time"). For best results put the block/ brick 1 minute after mortar application.
- After applying the masonry element to push it to get the thinnest gap.
- It is possible to correct the position of the cellular concrete blocks but not more than 5 mm in the horizontal position without lifting the masonry element. Calibrated ceramic bricks correction is not possible.
- Walling Corners performed in accordance with the manufacturer's instructions masonry.
- Lintels laid in accordance with general accepted methods of mounting the lintels.
- Stream volume and pace of application is controlled by pressure force on the applicator trigger.
- Should application be interrupted for more than 5 minutes, the applicator nozzle with fresh foam should be cleaned with polyurethane foam cleaner and the can should be shaken prior to application.

4. WORKS AFTER COMPLETION OF APPLICATION

- Immediately after full foam hardening, it should be secured against exposure to UV rays by using e.g. plaster or paints, acrylic, silicon.

- After completion of work, the applicator should be thoroughly cleaned. To this end, a can with the cleaner should be screwed on the applicator and its trigger should be pushed until the moment, when clean fluid starts flowing out.

5. REMARKS / RESTRICTIONS

- The mortar is designed for usage with calibrated bricks with flatness surface tolerance no higher than +/-0.3mm only.
- Open foam package should be used within 1 week.
- PU mortar displays lack of adhesion to polyethylene, polypropylene, polyamide, silicone and Teflon.
- Fresh PU mortar should be removed with polyurethane foam cleaner.
- Hardened PU mortar may only be removed mechanically (e.g. with a knife).
- Quality and technical condition of used applicator affect the parameters of final product.
- The PU mortar should not be used in spaces without access of fresh air and poorly ventilated or in places exposed to direct sunlight.

TECHNICAL DATA

Color	
Pale grey	+

PARAMETER (+23°C/50% RH) ¹⁾	Value	
Yield [mb] ²⁾	40 - 60	
Bricklaying size [m ²] ³⁾	max. 12 m ²	
Correction time [min]	≤ 3	
Time to maximum durability [h]	24	
Heat conductivity coefficient (λ) [W/m*K] (EN 12667:2002) ⁴⁾	0,036	
Compressive strength of the wall, calculated by [MPa] (EN 1052-1:2001)	The wall with ceramic hollow bricks	The wall of AAC blocks
	$fk = 0,50 \cdot fb^{0,7^*)}$	$fk = 0,70 \cdot fb^{0,85^*)}$
Bending strength in case of destruction at parallel plane to cantiver slits [MPa] (EN 1052-2:2001)	fxk1 = 0,15	fxk1 = 0,30
Bending strength in case of destruction at perpendicular plane to cantiver slits [MPa] (EN 1052-2:2001)	fxk2 = 0,10	fxk2 = 0,20
Shear strength [MPa] (EN 1052-3:2001)	fvok = 0,08	fvok = 0,10
Tensile strength perpendicular to slits after 24 h [MPa] (EN 1607:1999)	0,13	0,24

- 1) All presented data are based on laboratory tests measured according to internal standards of producer and strongly depends on curing conditions (can temperature, ambience temperature, substrate temperature, quality of gun applicator, skills and experience of person who is applying)
- 2) The value specified for cellular concrete blocks for the tail with a diameter of about 3cm. In the case of ceramic blocks braid diameter should be about 6 inches so the yield will be 20-30m.
- 3) The size depends on the type and size of a component masonry as well as the width of the application method, the number of braids, wide tails, the application and the quality of the applicator.
- 4) For free foaming.

*) fb- normalized brick compression strength based on classification of compression strength (MPa)

TRANSPORT / STORAGE

Transport temperature	Foam transport period [days]
< -20°C	4
-19°C ÷ -10°C	7
-9°C ÷ 0°C	10

The mortar maintains its usability within 12 months from manufacturing date, provided that it is stored in original packaging in vertical position (valve facing up) in a dry place in temperature +5°C do +30°C . Storage in temperature exceeding +30°C shortens the shelf life of the product, adversely affecting its parameters. The product may be stored in temperature 5°C, no longer however than for 7 days (excluding transport). Storage of foam cans in temperature exceeding + 50°C or in vicinity of open flame is not allowed. Storage of the product in a position other than recommended may result in jamming the valve. The can cannot be squeezed or pierced even when it is empty. Do not store the foam in the passenger compartment. Transported only in the trunk.

Detailed transport information is included in the Material Safety Data Sheet (MSDS).

The information contained herein is offered in good faith based on Producer's research and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information shall not be used in substitution for customer's tests to ensure that Producer's products are fully satisfactory for your specific applications. Producer's sole warranty is that the product will meet its current sales specifications. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. Producer specifically disclaims any other expressed or implied warranty of fitness for a particular purpose or merchantability. Producer disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.