

# FOAM TACK PRO CONSTRUCT

PU ADHESIVE FOAM

TECHNICAL DOSSIER

VERSION: 04/07/2025



# **TABLE OF CONTENTS**

INTRODUCTION	3
TECHNICAL DATA	4
LOAD-BEARING WALLS	5
PLASTERBOARD, FURNITURE PANELS, AND RIGID INSULATION PANELS	10

# FOAM**TACK**PRO CONSTRUCT

FoamTack Pro Construct is a powerful, KOMO-certified PU adhesive foam for load-bearing and non-load-bearing structures made of dimensionally stable materials. It is a high-quality alternative to traditional masonry or powder adhesive.

Thanks to its fast curing and moisture resistance, walls can be finished almost immediately. The product is ready to use and requires no mixing or waiting time between layers. The adhesive foam does not sag and ensures optimal contact between the bonded materials, even with hollow building blocks.

#### **ADVANTAGES**

- 1. KOMO certified (SKGIKOB.014905)
- 2. Fast processing and curing
- 3. Ready to use
- 4. Non-sagging for optimal contact
- 5. No waiting time between layers
- 6. Can be used indoors and outdoors
- 7. Stronger than mortar
- 8. Can be used from -10°C

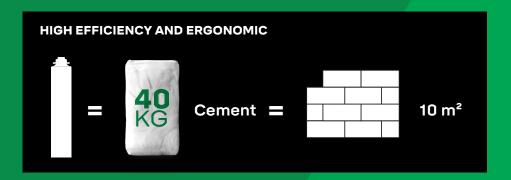
#### **APPLICATIONS**

- Bonding load-bearing structures made of dimensionally stable ceramic blocks, aerated concrete blocks, or sand-lime bricks
- Bonding hard insulation panels and other construction elements without thermal bridges
- Mounting plasterboard, furniture panels, and interior elements to walls and window frames
- Installing window sills
- Securing electrical installation boxes

PLEASE NOTE: As of August 24, 2023, it is mandatory to undergo appropriate training for industrial or professional use of

polyurethane-based

products.



# TECHNICAL INFORMATION

#### **TECHNICAL SPECIFICATIONS**

• Base: Polyurethane

• Curing: Polymerization through (air) humidity

• Colour: Gray

• Skin formation (at 23°C and 50% RH FEICA TM 1014): 6 min

• Loadable (at 23°C and 50% RH): 60 min

• Shape retention (FEICA TM 1004): <3% deformation

• Curing: 30 min

• Yield: 60 m diameter 2 cm

• Density: 22 kg/m<sup>3</sup>

• Thermal conductivity (FEICA TM 1020): 0,036 W/mK

• Sound insulation: 60 dB

• Shear strength: >0.9 N/mm<sup>2</sup> (concrete)

Processing temperature environment: -10°C / +35°C

• Processing temperature product: +10°C / +35°C

Temperature resistance: -40°C / +90°C
 (Peak temperatures -60°C / +130°C)

#### **CERTIFICATES**

• ITB fire resistance classification: REI 240 (tested with autoclaved aerated concrete blocks)







## **PROCESSING GUIDELINES**

### **LOAD-BEARING WALLS**



FoamTack Pro Construct is KOMO certified for bonding load-bearing walls. To achieve the best results, we have listed some important guidelines below.

- The materials must be structurally sound and suitable for the intended application. Assessing and calculating the load-bearing capacity of the structure is the responsibility of a trained and qualified person. Load-bearing walls may only be installed by professional and trained users.
- Only use dimensionally stable materials in all dimensions that are suitable for thin-layer bonding, such as sand-lime brick (calcium silicate brick) with tolerance level T3 or aerated concrete of class TLMB.
- The application of FoamTack Pro Construct must comply with the processing instructions as described in the KOMO certificate SKGIKOB.014905, which can be downloaded from the product page.
- As of August 24, 2023, it is mandatory to follow appropriate training for industrial or professional use of polyurethane-based products. Use the product in a wellventilated area and wear the necessary personal protective equipment.
- FoamTack Pro Construct does not adhere to PE, PP, and other plastics with a closed cell structure. If in doubt, always carry out an adhesion test.

Below you will find a simple step-by-step plan for processing FoamTack Pro Construct.

#### **TECHNICAL PARAMETERS**

- The adhesive blocks are bonded horizontally to each other, replacing traditional mortar with FoamTack Pro Construct.
- This changes the joint thickness from 1 cm to 0.5 mm.
- The tolerances that a load-bearing wall must meet must always be taken into account. These are described in Technical Information TV271 from Buildwise.
- → Bonding differs from traditional masonry in many ways!
- → Please note: we only offer product-related advice. The structural design, including damp-proofing, cavity wall anchors, etc., remains the responsibility of the user.
- → The load-bearing wall must be constructed in accordance with current standards and best practice.

#### REQUIREMENTS



- Adhesive blocks (bricks with a specific tolerance level, as described in the KOMO report)
- Tec7: FoamTack Pro Construct
- Tec7: Spray & PUR Gun
- Tec7: Spray & PUR Cleaner
- Additional tools: brush, water-cooled table saw, masons' lines with profiles, falsework, etc.



#### **PREPARATION**

- Check the materials for dimensional stability and quality. The surfaces must be free of ice, clean, and dust-free. The bricks may be slightly damp (dry to the touch), but not soaked. Misting with water before or after applying the adhesive accelerates the reaction and promotes uniform cell formation on very dry bricks. The ideal temperature of the can is +20°C.
- · Protect sensitive materials from spillage.
- Mark out the load-bearing walls carefully so that you are sure to start laying in the right place.
   Then place the profiles at the ends of the wall, ensuring that they are perfectly level in every direction. Next, place the masons' line to make it easy to check that the bricks are being laid correctly.





#### **PLACING THE BASE LAYER**

(first layer of transition from floor to wall)

 This layer must be placed entirely in a mortar bed. Check that the base layer is perfectly level in all directions. After hardening, the next layers can be placed with FoamTack Pro Construct.







# APPLYING THE DAMP BARRIER (DPC FOIL)

- Shake the Foamtack Pro Construct can vigorously for 30 seconds. Mount the can on the Spray & Pur Gun. Adjust the dosing screw so that you can easily spray out the desired adhesive bead. Spray from a height of approximately 1 cm and hold the gun at an angle of approximately 45 degrees.
- Spray the adhesive in an even, pulling motion. Shake the can regularly during use. Brush the top of the foundation block to remove dust. Spray two adhesive beads of 2 cm wide onto the foundation block and apply the DPC foil. Wait 5 to 10 minutes for the first layer of adhesive to cure.



#### VERTICAL MASONRY

- Shake the Foamtack Pro Construct can vigorously for 30 seconds. Mount the can on the Spray & Pur Gun. Adjust the dosing screw so that you can easily spray out the desired bead of adhesive. Spray from a height of approximately 1 cm and hold the gun at an angle of approximately 45 degrees. Spray with a pulling motion. Shake the can regularly during use.
- Always brush the top of the previous layer and the bottom of the brick to be placed to remove dust and irregularities. Use one bead of adhesive for bricks up to 13 cm wide. Use two beads for wider bricks.
- Place the next layer of stones before skin formation occurs. The stones must be stacked within 3 to 6 minutes after applying the adhesive beads, depending on the temperature and humidity. If skin formation occurs due to waiting too long, the adhesive must be scraped off and new adhesive must be applied.
- When using tongue and groove bricks, the standing joints must not be bonded. For corner connections, custom-cut bricks, or bricks without tongue and groove, the vertical joints must be bonded.







## BONDING CERAMIC BLOCKS

- Only use suitable flat-ground and calibrated ceramic blocks and follow the manufacturer's processing instructions. The walls must always be laid in accordance with best practice to ensure a straight construction on all surfaces.
- Stay 4 to 5 cm away from the side of the brick. Place the next layer of bricks within 3 to 6 minutes of applying the adhesive beads (depending on the temperature and humidity) and before skin formation occurs.







## BONDING SOLID BUILDING BLOCKS

(AERATED CONCRETE SILICATE BLOCKS)

- Only use suitable, dimensionally stable blocks that are recommended for thin, dry bonding. Use mansonry profiles and/ or a suitable spirit level to ensure the straightness of the structure.
- Spray 1 to 2 adhesive beads with a
   thickness of 2 to 3 cm over the entire length
   of the previous layer. Stay 4 to 5 cm away
   from the side of the brick. Place the next
   layer of bricks within 3 to 6 minutes after
   applying the adhesive beads (depending
   on the temperature and humidity) and
   before skin formation occurs. Use a rubber
   mallet hammer to gently tap the bricks into
   position within the open time.



#### **CORRECTION LAYER**

- It is possible to apply a leveling correction layer of mortar every
  10 to 15 layers. The reason for this is the joint thickness of 0.5 mm.
- Since the joint thickness is extremely thin, there is a chance that, regardless of how clean the bricks are, dirt will get between the brick layers. This will cause the layers to look uneven, so a correction layer in mortar must be applied.
- In reality, in residential construction, this correction layer is level with the floor and does not require any extra effort.



## APPLYING CAVITY ANCHORS

 The joint thickness of bonding load-bearing walls is extremely thin, so it is not possible to place a cavity anchor between the brick layers. We recommend drilling the cavity anchors with the correct diameter and without a hammer function. Then insert the anchor plug and secure the cavity anchor using a hammer and tube.





#### **CLEANING AND FINISHING**

- Loadable and finishable after 60 minutes.
- Remove uncured foam with Spray & PUR Cleaner.
  Also clean the gun externally and internally with Spray & Pur Cleaner.
- It is best to leave an opened canister mounted on the Spray & Pur Gun. Fully close the dosing valve and store upright with the gun facing upwards. This way, a canister can be reused for several weeks.
- When unscrewing the canister from the gun, foam may spray out of the valve. Do this in a wellventilated, safe environment. Point the valve away from people and vulnerable surfaces.
- Clean hands with Powerwipes. Remove hardened foam by scraping it off. Any remaining residue can be removed with Remove All.
- Always store FoamTack Pro Construct upright.
  During transport, the canisters must be placed upright and secured so that they cannot fall over.



## PLASTERBOARD

### **FURNITURE PANELS**

## **RIGID INSULATION BOARDS**



FoamTack Pro Construct is ideal for bonding plasterboard, furniture panels, and rigid insulation boards. Once fully cured, this adhesive has high strength, ensuring that the sheet material is firmly and permanently bonded.

As of August 24, 2023, appropriate training must be completed for industrial or professional use of polyurethane-based products. Use this product in a well-ventilated area and provide appropriate personal protective equipment.

FoamTack Pro Construct does not adhere to PE, PP, and other plastics with a closed cell structure. Perform an adhesion test if in doubt.

Before gluing with FoamTack Pro Construct, the necessary preparations must be made. Due to the short open time of the product, everything must be planned in advance to achieve the desired result.

Below are a few steps to optimize the use of FoamTack Pro Construct.

#### REQUIREMENTS



- · Plasterboard, furniture panels, or rigid insulation boards
- Tec7: FoamTack Pro Construct
- Tec7: Spray & PUR Gun
- Tec7: Spray & PUR Cleaner
- Required tools: knife, plasterboard lifter, etc.



#### **PREPARATION**

- The desired sheet material must be cleaned so that the back of the sheet is free of dust and grease. The wall (or other surface) must also be cleaned.
- · Protect sensitive materials from spillage.
- After spraying the adhesive, skin formation occurs after 3 to 6 minutes. Therefore, draw up a clear plan of action in advance. In other words, after applying the adhesive foam, there is not much time to think about how something should be positioned.







#### BONDING PLASTERBOARD, FURNITURE PANELS, AND RIGID INSULATION PANELS

- Apply the adhesive in beads with a diameter of 2 to 5 cm, depending on the flatness of the surface. Wait a moment before applying until the adhesive forms threads when touched (+/- 2 minutes). The adhesive now has sufficient adhesion to support the boards. Apply the boards to the wall and fix in place for 10 minutes.
- Bonding to an existing wall: apply Foamtack Pro Construct evenly around the perimeter (5 cm from the edge) and in a cross pattern.
- Bonding to a wooden, aluminum, or steel support structure: apply Foamtack Pro Construct to the support structure.



#### **CLEANING AND FINISHING**

- Loadable and finishable after 60 minutes.
- Remove uncured foam with Spray & PUR Cleaner. Also clean the gun externally and internally with Spray & PUR Cleaner.
- It is best to leave an opened canister mounted on the Spray & PUR Gun. Close the dosing valve completely and store upright with the gun facing upwards. This way, a canister can be reused for several weeks.
- When unscrewing the canister, foam may spray out of the valve. Do this in a safe environment and point the valve away from people and sensitive surfaces.
- Clean hands with Powerwipes. Remove hardened foam by scraping it off. Any remaining residue can be removed with Remove All.
- Always store FoamTack Pro Construct upright. During transport, the canisters must be placed upright and secured so that they cannot fall over.

