# SICHERHEITSKLEBER FLEXIBEL



#### **Product performance**

- Brand adhesive in top quality for all ceramic tile types and formats.
- Also for difficult substrates, e.g., heated screeds, chipboard, precast concrete parts, firmly adhering interior paints, old tiles (inside).
  Highly flexible, waterproof, frost-resistant.
- Exceeds the highest standard class of EN 12004 and EN 12002 for S1 adhesives as C2TE adhesive.
- Exceeds the requirements of the "Flexmörtel" guideline of the associations Deutsche Bauchemie e.V. and IVK.
- I The high product quality is documented in several test certificates issued by independent testing institutes.

# Applications

For bonding

- 1. All ceramic tile types and formats, also on heated screeds, chipboards, precast concrete parts, firmly adhering interior paints, old tiles (indoors).
- 2. Tile in shower and bathroom on LUGATO DUSCHABDICHTUNG.
- 3. Tile on balconies and terraces on LUGATO UNIVERSAL-ABDICHTUNG.
- 4. Electric heating mats with subsequent tile laying.
- 5. Lightweight wood wool building boards, mineral fibre boards, decorative and insulating boards made of polystyrene.

On wall and floor. Indoor and outdoor use.



For shower and bath: the perfect sealing and adhesive system from LUGATO.

# **Substrates and preparation**

**The following applies to all substrates:** Level, able to carry a load, clean, dry and free of separating impurities such as form oil. Remove plaster or cement skin, non-adherent paints coats, wallpaper, wallpaper paste. Level out unevenness up to 5 mm with the adhesive, level out larger unevenness on the floor, e.g. with FLIESST & FERTIG, on the wall with ROHBAUSPACHTEL INNEN.

Substrates/ LUGATO Produkte	Condition/Preparation	Prime with BESTE BASIS
Anhydrite screeds	residual moisture < 0.5 CM-%, roughen, vacuum.	Х
Paints, interior	firmly adhering, waterproof, roughen.	
Concrete	older than 3 months.	
DUSCHABDICHTUNG	no additional preparation needed.	
Tiles (indoors)	Inside: for wall tiles, prime with HAFTGRUND or apply a thin layer of adhesive in advance and dry overnight. Not required for floor tiles. Outdoors: coat with UNIVERSAL-ABDICHTUNG According to instructions on the package.	
FLIESST & FERTIG, FLIESST & Fertig Schnell, Neu Auf Alt!	no additional preparation needed.	
Gypsum fibreboard, gypsum boards	fastened according to the manufacturer's instructions, vacuum.	Х
Gypsum plasterboards	fastened according to the manufacturer's instructions, vacuum.	
Gypsum plasters	at least 10 mm thick, at least 2 weeks old, not smoothed.	х
Mastic asphalt	clean.	
Rigid foam sheet	extruded sheets: Roughen the surface skin.	
Heated screeds, cement-bonded	3 weeks hardened, functionally heated, residual moisture < 2.0 CM-%. Switch off heating before bonding. Do not put into operation for at least 8 days after gluing. Put into use 8 days after gluing.	
Heated screeds, anhydrite bound	hardened for 7 days, functionally heated, residual moisture < 0.3 CM-%. Switch off the heating before gluing. Do not put into operation for at least 8 days after gluing	х
Heating mats, electric	apply adhesive with toothed trowel 6 x 6 x 6 mm. Embed the heating mat, press down with a smoothing trowel, cover with a spatula. Let dry for 2 days.	
Floorboards	compensated with NEU AUF ALT!.	
Lime cement, cement plasters	at least 10 mm thick, at least 2 weeks old.	
Masonry (brick, sand-lime brick, aerated concrete)	filled with ROHBAUSPACHTEL INNEN, outdoors and in damp rooms with ROHBAUSPACHTEL AUSSEN.	
Chipboard (from P3, P5, P7; formerly: Typ V100), OSB boards (OSB 3, OSB 4)	minimum thickness: 22 mm on the floor, 19 mm on the wall; glued in tongue and groove, screwed to slatted frame (slat spacing vertical and horizontal max. 50 cm).	x*
Terrazzo	roughen, vacuum. Outdoors: coat with UNIVERSAL-ABDICHTUNG According to instructions on the package.	

Key: x = BESTE BASIS required

\* = Prime with BESTE BASIS, then precoat with DUSCHABDICHTUNG.

Substrates and preparation (continued)				
Dry screeds	fastened according to the manufacturer's instructions, vacuum.	Х		
UNIVERSAL-ABDICHTUNG	no additional preparation needed.			
Zementestriche	at least 2 weeks old, residual moisture $<$ 2,0 CM- $\%$ .			

Key: x = BESTE BASIS required.

#### Processing



#### **Mixing:**

Stir the contents of the bag (25 kg) into approx. 6.5 I clean water using a slow-running agitator Stir again after 5 minutes.



Bonding tiles in a shower: SICHERHEITSKLEBER Apply FLEXIBEL to DUSCH-ABDICHTUNG and comb it with a toothed trowel



Tiles can be inserted and aligned within 30 minutes.



Bonding tiles to a heated screed on the floor: Knock on the tiles with a rubber mallet. Grout on the floor after 2 days, on the wall after 1 day.

#### Additional processing information:

- For manufacturing reasons, tile backs are often covered with a white powder. This residue, which acts as a separating layer, must be removed before laying the tiles, e.g. by brushing off.
- I Smooth tiles with a highly profiled reverse side with an adhesive scratch filler on the rear.
- I When laying tiles, check the wetting of the back of the tile repeatedly by picking up a tile that has already been laid. Wetting should be at least 60–70% on the wall and 80–90% on the floor. If wetting is too slight, increase the amount of adhesive by using a larger toothing of the toothed trowel and/or additional application of adhesive to the back of the tile (approx. 2 mm thick).
- I In the following applications, to achieve as void-free an installation as possible always apply adhesive to the back of the tile (approx. 2 mm thick): outdoors, under water, under heavy mechanical or thermal stress (load with heavy weights or temperature changes on heated screeds, in winter gardens).
- I Tile formats larger than 60 x 60 cm or 3600 cm<sup>2</sup> should be laid with a middle bed mortar.

#### **Product data**

Quantity required, yield, depending on the tile and slab format and toothing of the toothed trowel

Tile and slab format/ Edge length	Toothing of the toothed trowel	Quantity required	Yield of 25 kg SICHERHEITS- KLEBER FLEXIBEL
to 5 cm	3 x 3 x 3 mm	1.3 kg/m²	approx. 19 m <sup>2</sup>
5–15 cm	4 x 4 x 4 mm	1.7 kg/m²	approx. 15 m <sup>2</sup>
10–20 cm with back profile	6 x 6 x 6 mm	2.4 kg/m <sup>2</sup>	approx. 10 m <sup>2</sup>
20-33 cm	8 x 8 x 8 mm	3.5 kg/m²	approx. 7 m <sup>2</sup>
over 33 cm	10 x 10 x 10 mm	4.2 kg/m <sup>2</sup>	approx. 6 m <sup>2</sup>

Product data (continuation)	
Processing time (pot life)	5–6 hours.
Open time	30 minutes.
Processing temperature	5–25 °C.
Temperature resistance of the adhesive	-25 to 100 °C.
Can be walked on/carry loads	after 2 days/after 7 days.
Waiting time until jointing with LUGATO products	on the floor 2 days, on the wall 1 day, with tile on tile 2 days.
Adhesive tensile strength (according to EN 1348, stoneware tiles)	> 1.0 N/mm <sup>2</sup> for each type of bearing.
Bending tensile/compressive strength (DIN 18555,3)	2.7 N/mm <sup>2</sup> / 5.5 N/mm <sup>2</sup> .
Fire behaviour	class E.
Ingredients	Standard cement, quartz sand, calcite fillers, plastic additives, defoamers.
Ecology	Very low emissions PLUS (EMICODE EC 1 PLUS R).
Package sizes	25 kg, 5 kg.
Shelf life	approx. 18 months in original packaging Store in a dry place. All times based on 15–20 °C and 65 % rel. humidity.

# **Test certificates**

- I Tests as C2TE adhesive according to EN 12004 and S1 adhesive according to EN 12002 by the Säurefliesner-Vereinigung e.V., Großburgwedel.
- I With LUGATO DUSCHABDICHTUNG: General building supervisory test certificate P-AB 046-03 of MPA Braunschweig as sealing in combination with tile and slab coverings for building waterproofing according to the building products mentioned in the building regulations list A part 2, no. 1.10.
- I With LUGATO UNIVERSAL-ABDICHTUNG: General building supervisory test certificate P-AB 032-00 of MPA Braunschweig according to the test principles for flexible sealing slurries for building waterproofing according to building regulations list A part 2, cons. no. 1.9.
- I With LUGATO UNIVERSAL-ABDICHTUNG: General building supervisory test certificate P-AB 047-03 of MPA Braunschweig according to the test principles for waterproofing in combination with tile and slab coverings for building waterproofing according to the building products mentioned in the building regulations list A Part 2, cons. no. 1.10.



The declaration of performance can be requested if required or downloaded from the Internet at www.lugato.de .

#### **Please note**

#### For gluing marble, use MARMOR + GRANIT KLEBER.

#### Health & safety:



Causes skin irritations. Causes severe eye damage. Can irritate the respiratory system. If medical advice is necessary, keep the packaging or marking label ready. Keep out of the reach of children. Use only outdoors or in well-ventilated rooms. Wear protective gloves (e.g. nitrile-soaked cotton gloves)/ protective clothing/eye protection/face protection.

IN CASE OF CONTACT WITH THE EYES: Rinse carefully with water for several minutes. If possible, remove contact lenses beforehand. Continue to rinse. Handover contents/container to hazardous waste disposal. GIS-CODE: ZP1. Contains Portland cement. Shows strong alkaline reactions when exposed to water. Prevent dust formation and mortar splashes.

#### Disposal: F

Recycle packaging free from residues

The statements made in this information sheet reflect our current knowledge and experience. Since we do not have influence on the building-specific circumstances and the correct execution of the work, we can only guarantee the consistent quality of our products.

For that reason in case of doubt, verify the suitability of the product through a sufficient number of test applications. A direct legal liability can be derived neither alone from the instructions in this information sheet nor from any oral consultation.

The publication of this technical information sheet invalidates the previous editions. Subject to change without prior notice.



Responsible Care (RC) for the chemical industry means taking responsible action. It makes this clear though a worldwide initiative. In many countries, chemical associations run national RC programs. In the international initiative, thousands of companies are active with millions of employees. The goal is voluntary commitment to do more than just the compulsory: Promoting sustainability, demonstrating product responsibility, creating more safety for factories and the neighbourhood, improving health protection at the workplace and improving environmental protection. In the frame of its membership in the Verband der deutschen chemischen Industrie, LUGATO has committed itself to adhere to this objective.

## If you're not sure of something, please ask!

Feel free to give us a call. You can reach the LUGATO experts at: (040) 6 94 07-222.

## Seminars

In cooperation with its trading associates, LUGATO is glad to pass on practical knowledge such as how to install tiles. Find more information about the current range of handyman seminars at www.lugato.de or at your local dealer.



# **SIMPLY DO IT YOURSELF**

Ask your retailer about the "SIMPLY DO IT YOURSELF" brochure. On more than 160 pages with over 1000 illustrations from "Gluing Tiles" to "Sealing Buildings". All instructions are simply explained picture-by-picture.



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