

MULTIFUNKTIONS-ABDICHTUNG 1K PRO



PUR-based rapid flexible liquid plastic for standard-compliant sealing in accordance with DIN 18531 and DIN 18533 on roof, wall and floor areas.

With European Technical Assessment (ETA) in accordance with EAD 030350-00-0402.

Product characteristics

- | Single-component PUR sealant, for processing in liquid form.
- | Resistant to roots.
- | Permanently waterproof, UV-resistant, strong adhesion, flexible and resistant to alkalis.
- | Very low emissions, EC¹PLUS.

Applications

1. For permanent sealing of areas and details on roofs, balconies, walkways and loggias in accordance with DIN 18531 and on windows, doors and façades.
2. For sealing floor slabs in contact with soil and exterior wall surfaces (water effect class W1-E, W4-E and W2.1 in accordance with DIN 18533-1).
3. For sealing soil-covered ceiling surfaces (water effect class W3-E in accordance with DIN 18533-1).
4. For connections to domed rooflights, flues, chimneys, pipe lead-throughs and raised edges.
5. For manufacturing walk-on/drive-over wear layers and for visual design in combination with FLÜSSIG-BESCHICHTUNG 1K and DEKOR-FARBCHIPS for balconies, terraces, corridors, storage spaces and lock-ups.

Roofs, walls and floors. Outdoors



Perfect with MULTIFUNKTIONS-ABDICHTUNG 1K PRO.

Substrates and preparation

Substrates / LUGATO products	Requirement / properties / preparation	Priming
MULTIFUNKTIONS-ABDICHTUNG 1K PRO and REPARATUR-DICHTMASSE 1K	Cleaned with MULTIFUNKTIONS-REINIGER.	0
Cementitious LUGATO products	Product-specific processing and sufficient hardening.	0
Concrete	at least 3 months old.	HAFTGRUNDIERUNG
Bitumen sheeting (sanded)	Sanding intact.	0
Bitumen sheeting and bitumen coatings	Heat the coatings and scatter with quartz sand.	0
Roof sheeting, e.g. made from ECB, EVA, EPDM, TPO, FPO	Cleaned with MULTIFUNKTIONS-REINIGER.	HAFTGRUNDIERUNG KUNSTSTOFF
Elastomer bitumen e.g. made from PYE	Sanding intact.	0
Fibre cement		0
Tiles	intact, sanded, joints grouted with REPARATUR-DICHTMASSE 1K.	HAFTGRUNDIERUNG
GRP (glass fibre reinforced plastic)	Cleaned with MULTIFUNKTIONS-REINIGER.	HAFTGRUNDIERUNG KUNSTSTOFF
Wood (OSB, chipboard)	untreated.	0
Masonry	Properly constructed and sufficiently solidified.	0
Metal Aluminium, stainless steel, iron, copper, steel, sheet steel, galvanised steel, zinc	Cleaned with MULTIFUNKTIONS-REINIGER.	HAFTGRUNDIERUNG
PVC (soft, hard)	Cleaned with MULTIFUNKTIONS-REINIGER.	HAFTGRUNDIERUNG KUNSTSTOFF
Cement screed	at least 14 days old.	HAFTGRUNDIERUNG

The following applies to all substrates: The substrate must be cleaned! I.e. sufficiently solidified, hard, dry to moist, load-bearing, non-slip, level, clean, i.e.

! free of separating substances such as oils, grease, wax, impregnating materials, cleaning materials.

! free of non-adhesive materials such as dust, gravel, sand, leaves etc.

! free of organic growth such as moss and lichen.

! free of separating layers such as coatings, sealing materials, verdigris, sinter layers.

Bubbles in roof sheeting must be opened and smoothed so that they are load-bearing. Concrete and cement substrates and tiles must be sanded. Imperfections and cavities up to 5 mm must be filled with MULTIFUNKTIONS-ABDICHTUNG 1K PRO above the edge area and bridged with ABDICHTUNGS-VLIES. Then a top coat of MULTIFUNKTIONS-ABDICHTUNG 1K PRO must be applied. Imperfections and cavities more than 5 mm deep, at/on roof sheeting must be filled with REPARATUR-DICHTMASSE 1K over the entire surface and allowed to harden through. Then go over again with MULTIFUNKTIONS-ABDICHTUNG 1K PRO. ABDICHTUNGS-VLIES must be laid in the fresh sealant overlapping by 10 cm at all sides, and provided with a top coat of MULTIFUNKTIONS-ABDICHTUNG 1K PRO.

Fill imperfections and cavities more than 5 mm deep at/on cementitious substrates with R&R HOCHLEISTUNGSMÖRTEL flush with the surface, allow to harden through and dry. Then go over again with MULTIFUNKTIONS-ABDICHTUNG 1K PRO.

When used without ABDICHTUNGS-VLIES as a wear/decorative layer in combination with FLÜSSIG-BESCHICHTUNG 1K, a cove must be produced at all ascending components beforehand with R&R HOCHLEISTUNGSMÖRTEL.

Rough surfaces must be prepared with a levelling and cavity compound with HAFTGRUNDIERUNG.

An adhesion test must be carried out on all unknown substrates (see adhesion test on page 3 for further information).

Substrates and preparation (continued)

Adhesion test

Description of performance:

- | Coat a test area measuring 30 x 30 cm with MULTIFUNKTIONS-ABDICHTUNG 1K PRO and ABDICHTUNGS-VLIES (same procedure as described in the processing instructions). Leave approx. 10 cm of the ABDICHTUNGS-VLIES exposed as a gripping surface.
- | After hardening for 7 days, test the adhesion to the substrate by manually pulling on the exposed gripping surface.
- | The material may only be processed on the test substrate if there is sufficient adhesion.
- | Depending on the substrate material and its characteristics, the adhesion test should be carried out directly with the respective necessary priming or also parallel (HAFTGRUNDIERUNG and HAFTGRUNDIERUNG KUNSTSTOFF). (see table: suitable substrates).

Processing (sealing)



1 Thoroughly stir the compound with a slowly operating stirrer or paddle mixer into the corners of the tub, avoiding air inclusion.

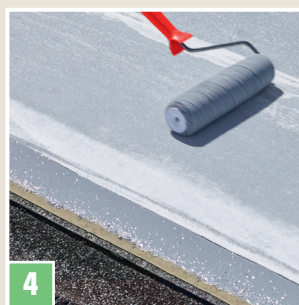


Basic application

Evenly apply at least 2.0 kg/m² onto the substrate using a roller or a squeegee or spreader.



3 Roll the ABDICHTUNGS-VLIES immediately into the fresh compound without wrinkles before skin formation, and roll out the fleece.



4 Roll the ABDICHTUNGS-VLIES with a dry roller without cavities and free of bubbles and press down / embed. Ensure that complete, full saturation takes place. Saturation has taken place when a dark colour change occurs in the ABDICHTUNGS-VLIES.



Top coat

5 Apply MULTIFUNKTIONS-ABDICHTUNG 1K PRO fresh in fresh onto the fleece before skin formation with a uniform thickness of at least 1.3 kg/m².



6 Apply MULTIFUNKTIONS-ABDICHTUNG 1K PRO onto the substrate 5 mm to 10 mm beyond the ends of the fleece. A neat finish is achieved by masking with adhesive tape. This must be removed whilst the material is still fresh.



Overlapping laying

1 Overlap subsequent sheets on the fleece by at least 5 cm. To do this, apply at least .6 cm of MULTIFUNKTIONS-ABDICHTUNG 1K PRO in the overlap area as before using the same quantity. Carefully roll out the surfaces and the seam area.



Alternative joint laying

2 Lay STOSSFUGENBAND into the fresh coating and make fleece joints on top of it fresh in fresh in the middle. Carefully roll out the surfaces and the seam area.

Further processing instructions

- | Prepare fleece or fleece pre-cuts in accordance with the situation. Have other installation parts such as INNEN- UND AUSSENECKEN at the ready.
- | Mask terminating edges or adjacent areas.
- | Work in sections. If application is taking place over a wide area, we recommend working within a fleece width.
- | Structural joints that are present in the substrate must be taken over in the MULTIFUNKTIONS-ABDICHTUNG 1K PRO.
- | Fleece webs glued end to end must be laid in the flow direction of the water.
- | Fleece coverage of 10 cm must be provided on third-party substrates.
- | MULTIFUNKTIONS-ABDICHTUNG 1K PRO may not be diluted, and must be protected from direct sunlight in the fresh condition.
- | Surfaces sealed with MULTIFUNKTIONS-ABDICHTUNG 1K PRO can be walked on for maintenance and cleaning purposes. However, sealed areas are not a wear surface, and must not be walked on for long periods. In order to do this, apply a wear layer of FLÜSSIGBESCHICHTUNG 1K.

Please note

- | Minimum incline of roof surfaces: 2 %.
- | Connections to ascending components must be formed at least 15 cm high.
- | Lack of fall towards the drain can cause damaging algae growth, puddles and water back-up.
- | Do not process if rain is likely.
- | Protect from direct sunlight in fresh condition.
- | Seal the package so that it is airtight in the event of long work interruptions.
- | At the point in time of application, the surface temperature must be 3 °C above the dew point.
- | The consumption is determined by the average layer thickness of the application depending on the type of surface.

Processing (use of BESCHLEUNIGER 1K PRO)



Add all of the BESCHLEUNIGER 1K PRO into a package of MULTIFUNKTIONS-ABDICHTUNG 1K PRO..



Stir the compound homogeneously with a slowly running stirrer or paddle mixer. Avoid the inclusion of air.


Product data

Consumption	Total layer at least 3.3 kg/m ² . Basic application: 2.0 kg/m ² , top layer: 1.3 kg/m ² . As preliminary grouting prior to subsequent application of FLÜSSIG-BESCHICHTUNG 1K 600g – 750 g.
Viscosity	Highly viscous, thixotropic.
Minimum layer thickness, dry	2.1 mm with fleece.
Colour	Window grey (based on RAL 7040).
Density	1.4 g/cm ³ .
Processing temperature	+5 to +40 °C.
Processing time	approx. 90 minutes. With BESCHLEUNIGER 1K PRO: approx. 30 minutes.
Substrate temperature	+5 to +60 °C (at least 3 °C above the dew point).
Rainproof	after approx. 1 hour. with BESCHLEUNIGER 1K PRO: after approx. 30 minutes.
Can be walked on / reworked (Subsequent coating)	after approx. 12 hours. with BESCHLEUNIGER 1K PRO: after approx. 4 hours. Clean and roughen after 24 hours with MULTIFUNKTIONS-REINIGER (sanding material with grain size of 40–60).
Load-bearing	after approx. 72 hours.
Temperature resistance	-30 °C to +90 °C.
Ingredients	Plastics, preservation materials, flameproofing materials, fillers, pigments, org. additives.
Ecology	Very low emissions (EMICODE EC 1 ^{PLUS}).
Fire behaviour DIN EN 13501- 1	class E.
Resistance to flying sparks DIN EN 13501-5	Class B _{Roof} (t1).
Storage life	in original packaging, usable until: see label. Store in a dry, frost free, airtight and cool location. Protect from the sun.
Disposal	Allow residual contents to harden and dispose of as domestic waste or building site waste. Recycle empty packaging.

All time information is based on 20 °C and 65 % rel. humidity

Test certificates

- | The declaration of performance can be downloaded from the Internet at www.lugato.de.
- | ETA-23/0647 - Polyurethane-based roof sealant to be applied in liquid form in accordance with EAD 030350-00-0402
- | Resistant to roots.
- | Building sealant PG-FLK (P-1202/812/20 MPA-BS)

 Deutsches Institut für Bautechnik (DIBt) ETA-23/0647 on the basis of EAD 030350-00-0402	
LUGATO GmbH & Co. KG Großer Kamp 1, D-22885 Barsbüttel, Germany 23 6700	
EAD 030350-00-0402 LUGATO PROTEKT Multifunktions-Abdichtung 1K PRO Polyurethane-based roof sealants to be applied in liquid form ETA-23/0647	
Exposure to fire from outside Fire behaviour Water vapour permeability μ Waterproofness Substances classified as Carc. /Muta./Repr. 1A and/or 1B Release scenarios with regard to BWR 3 Resistance to mechanical damage (perforation) Fatigue resistance Temperature resistance Ageing resistance UV resistance with moisture Resistance to plant roots Resistance to wind loads Affects of deviations of the construction components and processing at 5 °C Affects of deviations of the construction components and processing at 50 °C Effect of work interruptions (day joints) Anti-slip protection	B _{Roof} (t) Class E \approx 2095 passed The construction kit does not contain any of these hazardous materials. S/W 2 P1 to P4 W3 TL4 (-30 °C) TH4 (90 °C) W3 (25 years) M and S NPD \geq 50 kPa for crack- resistant substrates Maximum tensile strength 4.9 MPA Tensile elongation 35.4 % Dynamic pressure P4 Maximum tensile strength 4.8 MPA Tensile elongation 41.1 % Dynamic pressure P4 $>$ 50 kPa NPD

Please note

Health & safety: Not subject to marking in accordance with GHS. Contains Trimethoxy(vinyl)silane, 2-Octyl-2H-isothiazol-3-one. May cause allergic reactions. Attention! Dangerous droplets which can be inhaled can occur when spraying. Do not inhale aerosol or mist. Safety data sheet available by request.

Was Sie nicht können, können Sie fragen!

Einfach anrufen. Sie erreichen die LUGATO Experten unter: (040) 6 94 07-222.



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