Systems for balcony & terrace construction

with large formats: tiles up to 60 x 60 cm & up to 100 x 100 cm Laying and jointing | System structure Tips & Tricks | Products

Tile laying technology



MUREXIN Balcony and Terrace Systems

With two new balcony and terrace systems, Murexin GmbH offers safety when laying large-format tiles and boardsin outdoor areas. Both systems consist of special products, that are frost-resistant and have a decoupling effect.

Content

General	3
Murexin System 60	4
Murexin System 100	6
MUREXIN products	8

Murexin Balcony and Terrace Systems

Stonemasons and tilers are increasingly turning their backs on conventional laying, i.e. the direct bonding of tiles and boards outdoors. With the new balcony and terrace systems, this should change again: with two safe systems, Murexin offer solutions that allow the choice of covering to go back to the tile.

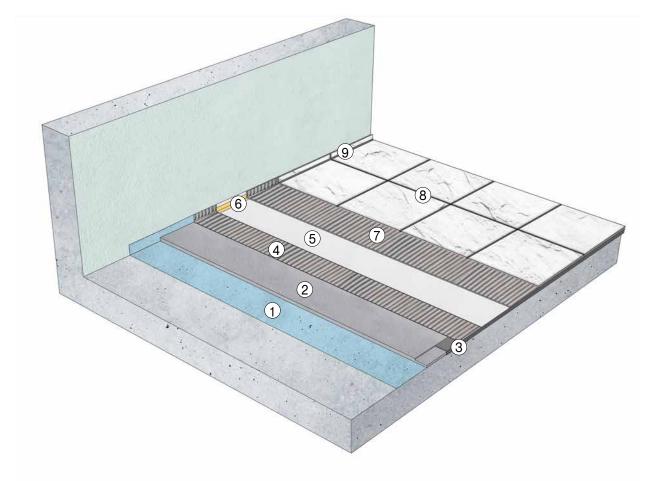


The choice between two systems is based on the different formats: a higher surface tension is to be expected with larger formats than with "smaller" formats (up to 60×60 cm). In any case, the substrate must be able to withstand the expected tension without breaking and therefore requires preparation with appropriate system products. In both systems there are products which are frost-resistant and have a decoupling effect - e.g. through decoupling fleece or building waterproofing membrane as well as decoupling adhesive mortars. In addition a special balcony drainage profile delivers additionally safety for a controlled, secondary drain.



Murexin System 60

Tiling format up to 60 x 60 cm



System construction

- (1) Priming Penetrating Primer LF 1 or LF 15, Super Primer D4 Rapid
- (2) Gradient filling Levelling Mortar Trass Rapid AM 50
- 3 Terrace profile
- (4) Sealing 1st layer Sealing Adhesive Mortar Grey **DKM 95**
- (5) Decoupling Fleece
- 6 Sealing tape
- (7) Sealing 2nd layer and simultaneous Sealing Adhesive Mortar Grey **DKM 95**
- (8) Top covering and grouting Flexfuge Platinum **FX 66** + **Grout emulsion FE 85**, Grout Extreme **FME 80**, or High-strength Grout**HF 80**
- 9 Sealant special sealant X-Bond MS-D81, Natural Stone Silicone SIL 50

Processing instructions for Murexin System 60

1. Priming

Clean the substrate and remove loose pieces and dust. The substrate must be dry, frost-free, solid, load-bearing, dimensionally stable and free of dust, dirt, oil, grease, separating agents and loose parts and must comply with the applicable national and European technical guidelines, standards and "generally accepted rules of the trade". Apply Penetrating Primer **LF 1** or **LF 15** by roller.

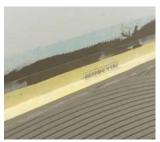
2. Preparation

Fix and, if necessary, mill in the terrace profile. Creating the plane of inclination with levelling mortar Trass Rapid **AM 50**.









3. Sealing

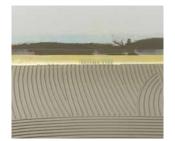
Fixing the sealing tape as well as the associated system components, such as interior and exterior corners.

Application of the first sealing level with Sealing Adhesive Mortar Grey

DKM 95, via notched trowel (min. 6 mm) and full area embedding of the decoupling fleece.

4. Laying

Sealing and laying of the upper material with Sealing Adhesive Mortar Grey **DKM 95** in combined process (floating-buttering).









5. Grouting

Grouting the top covering with Flexfuge Platinum **FX 66** + Grout Emulsion **FE 85**, Grout Extreme **FME 80**, or High-strength Grout **HF 80**.



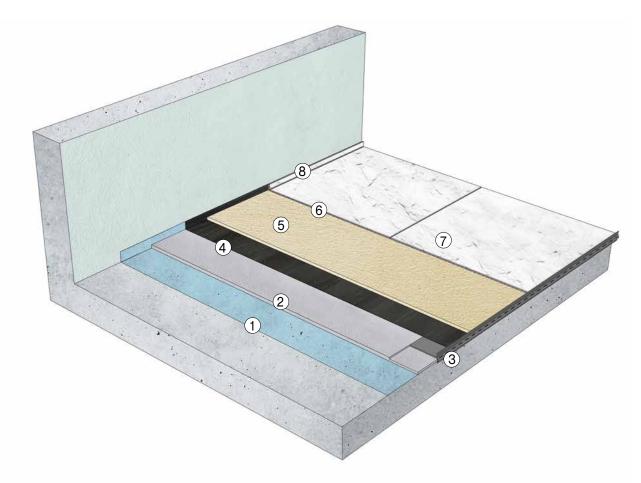


6. Silicone

Production of the expansion joints in the niche area and the covering expansion joints using Special Sealant X-Bond **MS-D81**, Natural Stone Silicone **SIL 50** depending on the type of top covering.

Murexin System 100

Tiling format up to 100 x 100 cm



System construction

- 1) Priming Penetrating Primer LF 1or LF 15, Super Primer D4 Rapid, Epoxy Moisture Barrier 2K EP 170 sanded, Epoxy-based Resin EP 70 BM sanded
- 2 poss. gradient filling Levelling compound Trass Rapid AM 50
- 3 Balcony drainage profile
- (4) Structural sealant structural sealing membrane SK 100 self-adhesive
- 5 Epoxy drainage screed (from 2 cm self-supporting) -
- Epoxy moisture barrier 2K EP 170 or Epoxy-based Resin EP 70 BM + Quartz Sand QS 98 3-5 mm (mixing ratios 1:25 to 1:50)
- 6 Adhesive mortar Epoxy Adhesive Mortar White **EKY 91** (exclusively on the material to be laid)
- (7) Top covering with grouting Plaster Joint PF 30, Flexfuge Platinum FX 66 + Grout Emulsion FE 85, Grout Epoxy FMY 90
- (8) Sealant special sealant X-Bond MS-D81, Natural Stone Silicone SIL 50

Processing instructions for Murexin System 100

1. Preparation

The substrate must be dry, frost-free, solid, weight-bearing, dimensionally stable, free of dust, dirt, oil, grease, release agents and loose parts, and it must comply with the applicable technical national and European directives, standards and "generally accepted rules of the trade". Absorbent substrates are primed with Penetrating Primer LF 1 or LF 15.

Level out substrate or create the plane of inclination with levelling mortar Trass Rapid AM 50.

Mill off the screed or concrete area for the balcony drainage profiles. Prime and sand the entire surface with Epoxy Moisture Barrier 2K EP 170 or Epoxy-based Resin EP 70 BM.

Then glue the balcony drainage profile with Epoxy Adhesive Mortar White EKY 91 or Special adhesive X-Bond MS-K88 Express.





2. Sealing

Lay Structural Sealing Membrane SK 100 self-adhesive and overlap at least 5 cm at the edges, start laying from the rail to the house wall, edges are masked at rails, at temperatures below 15 °C can even be processed with light flame.

Apply Murexin sealing tape with Universal Seal PU 500 in the corner areas, on the house side, as well as on doors and floor-to-ceiling windows. Note: observe the guidelines for balconies, terrace and flat roof waterproofing according to ÖNORM B3691 or ÖNORM B3692.





3. Drainage screed

Produce drainage screed with Epoxy-based Resin EP 70 BM or Epoxy Moisture Barrier **2K EP 170** mixed with 3-5 mm guartz sand in mixing ratios 1:25 to 1:50. Pulling aids (e.g. water pipes = high points) are to be carried out as for loose laying in a bed of chippings.





4. Tiling

Lay tiles with Epoxy Adhesive Mortar White EKY 91 in Variant A: buttering process (only rear side of the material to be laid). Variant B: Epoxy moisture barrier 2K EP 170 or Epoxy-based

Resin EP 70 BM with guartz sand 0.6 - 1.2 mm in mixing ratio 1:25 with half-moon toothing of 15-25 mm depending on the format of the tile. Wetting the rear side with Epoxy-based Resin EP 70 BM or Epoxy Moisture Barrier 2K EP 170 by foam roller is absolutely essential!

Joint width is at least 5 mm!

For natural stone coverings, moisten and wet the floor covering before grouting. Grout the joint with a joint planer or by hand (skirting board or step area)









The products

Preparation



Penetrating Primer LF 1

High quality synthetic resin dispersion with very good penetration properties and simple control due to blue colouration. Indoors and outdoors as adhesive bridge for all adhesive mortars, levelling and smoothing compounds, and compound seals for absorbent substrates. Suitable in accordance with ÖNORM B 3407 W1 - W2.

Consumption: approx. 150 g/m²





Penetrating Primer LF 15

Solvent-free, water-dilutable, high-quality priming concentrate based on acrylate mixed polymers with very good penetrating properties. Simple control thanks to blue colouration. Indoors and outdoors as adhesive bridge for all adhesive mortars, levelling and smoothing compounds, and compound seals for absorbent substrates.

Consumption: approx. 150 - 200 g/m²





Super Primer D 4 RAPID

Adhesion-enhancing, solvent-free, single-component, ready-to-use, very quick-drying primer based on special dispersion. A non-slip surface is achieved after drying. Indoors and outdoors for wall and floor surfaces. For preparing absorbent and non-absorbent substrates. Suitable both before filling and before tiling; especially for the renovation area of tile on tile. Super Primer D4 Rapid can be used as a primer on anhydrite screeds up to tiling sizes of 10,000 cm² (e.g. 100 x 100 cm) (more details in technical data sheet). Suitable in accordance with ÖNORM B 3407 W1 - W2.

Consumption: 100 - 150g/m² depending on the substrate





Levelling Mortar Trass Rapid AM 50

Trass-containing, highly tempered, water and frost-proof, very guick hardening, hydraulically setting levelling mortar. Due to special additives, the mortar hardens without tension up to 50 mm and demonstrates very good processing properties. Indoors and outdoors for levelling uneven wall and floor areas before tiling in living rooms, showers, on balconies, terraces, garages, swimming pools, commercial wet rooms and facades.

Consumption: approx. 1.6 kg/m² per mm layer thickness





Epoxy Moisture Barrier **2K EP 170**

Very low-emission, two-component epoxy resin system for blocking increased residual moisture of cement screeds and concrete up to 6 CM %. As a compound sealant, as well as for priming and bonding indoors and outdoors. Not suitable as a barrier against pressurised water.

Consumption: depending on the application: 200 -600 g/m²,

as moisture barrier: 450 g/m²,



.3 kg/m² per mm layer thickness Π 碗



Epoxy-based Resin EP 70 BM

Low-viscosity, modified, solvent-free, unpigmented, epoxy resin hardening system in two components for universal application in construction (indoors and outdoors). The material is low in emissions and can be filled with fire-dried quartz sand on site as required.

Consumption: as primer approx. 0.3 kg/m² per coat as scratch filler approx. 0.7 kg/m² per mm at MR 1:1 to 1:2 with QS 0.1 - 0.2 mm / 0.1-0.5 mm / 0.3 - 0.8 mm as coarse mortar approx. 2.5 kg/m² per cm, MR 1:8, QS 0.063 - 3.5 mm

as vapour barrier approx. 0.45 kg/m²



Quartz Sand QS 98

QS 98

Multiply washed, fire-dried quartz sand. For sanding primer, vapour brakes and seals. For the production of scratch coatings and synthetic resin mortar. For filling epoxy and polyurethane resins as well as mineral fillers.

Quartz sand

Sealing



Universal Seal PU 500

Elastic, solvent-free, water-impermeable, thixotropic, permanently elastic, seamless and jointless two-component compound seal based on polyurethane. For indoor and outdoor sealing on both horizontal and vertical surfaces. Can be used under a wide variety of ceramic surface coverings in accordance with EN 14891, ÖNORM B 3407 W1-W6, DIN 18534 for water exposure class W0-I to W3-I, DIN 18531-5 (balconies, loggias, etc.) and DIN 18535 (swimming pools and tanks), as well as in accordance with the test principles for issuing a general test certificate from the building authorities. Can be used in swimming pools, large kitchens, industrial wet rooms, showers, bathrooms, etc.

 $\label{eq:consumption:approx. 1.9 kg/m^2 per mm layer thickness$



MURICH SK 100 3 Be

Structural Sealing Membrane SK 100

Structural Sealing Membrane SK 100 is a cold-adhesion bitumen sealing membrane with HDPE carrier film. The product is tested according to the requirements of DIN 18195. Structural seal SK 100 is used for single-layer sealing of components in contact with the ground (cellar exterior walls, floors, foundations etc.) against ground moisture and non-standing seepage water (DIN 18195-4), against non-pressing water (DIN 18195-5) as well as for sealing wet rooms (bath, shower). Width: 1 m



Gully Sealing

Fleece laminated on both sides and very elastic sealing mat with perforated edge zones for optimum water impermeable embedding in Murexin compound seals. Chemically resistant to diluted acids, lyes, and saline solutions. System components for sealing gullies and floor outlets in conjunction with sealing systems.



Decoupling fleece for parquet laying

Stress-relieving reinforcement fleece for laying parquet, tiles and natural stone, especially on problematic substrates. Can be used as a reinforcing underlay under solid parquet and ready-to-lay parquet as well as on all conventional substrates that are ready for laying. Especially for use on poor, low-strength substrates and in the renovation sector for dry screeds, chipboard and mastic asphalt.





Sealing Adhesive Mortar Grey **DKM** 95

New type of hydraulically setting, water impermeable but still vapour-permeable, cementitious, flexible, single-component sealing AND adhesive mortar. Indoors and outdoors for creating seamless and jointless seals in wall and floor areas directly under ceramic tiles and slabs (in accordance with EN 14891 and ÖNORM B 3407 W1-W6) as well as for bonding ceramic coverings in floor areas subject to high thermal or mechanical loads, e.g. balconies and terraces (especially when bonding fine stoneware), etc. Sealing and bonding must be carried out in two steps!

Consumption: as compound seal: approx. 1.5 kg/m² per mm as adhesive: approx. 3 kg/m² depending on tile format



Adhesion



Epoxy Adhesive Mortar White EKY 91

White, food-safe, waterproof, frostproof, solvent-free, temperature-resistant, bacteriostatic, aging-resistant and chemical-resistant, 2-component epoxy resin adhesive mortar for laying in thin-bed process in wall and floor areas. Indoors and outdoors for laying and grouting of ceramic tiles, boards and mosaics. Especially suitable for use with aggressive waters, plant-based or animal fats and chemicals, as well as in drinking water containers. GIS Code: RE 1

Consumption according to toothing:

approx. 1.5 kg/m² at 4 mm toothing approx. 2.9 kg/m² at 6 mm toothing approx. 3.5 kg/m² at 8 mm toothing approx. 4.5 kg/m² at 10 mm toothing



Adhesion



Sealing Adhesive Mortar Grey **DKM** 95

New type of hydraulically setting, water impermeable but still vapour-permeable, cementitious, flexible, single-component sealing AND adhesive mortar. Indoors and outdoors for creating seamless and jointless seals in wall and floor areas directly under ceramic tiles and slabs (in accordance with EN 14891 and ÖNORM B 3407 W1-W6) as well as for bonding ceramic coverings in floor areas subject to high thermal or mechanical loads, e.g. balconies and terraces (especially when bonding fine stoneware), etc. Sealing and bonding must be carried out in two steps!

 $\label{eq:consumption:as} \begin{array}{c} \mbox{Consumption: as compound seal: approx. 1.5 kg/m^2 \ \mbox{per mm} \\ \mbox{mm} \end{array}$

as adhesive: approx. 3 kg/m² depending on tile format



Grouting



Grout Extreme FME 80

Powdery, water and frostproof, chemical and steam jet resistant grout for wall and floor areas. Indoors and outdoors for grouting ceramic coverings of up to 10 mm joint width. For use in drinking water containers, commercial kitchens, car washes, terraces, as well as in industrial and commercial areas.

Consumption: approx. 0.5 kg/m² depending on the tile format and the joint width





High-strength Grout **HF 80**

Powdery, food-safe, frost and de-icing salt resistant, waterproof, tempered, hydraulically setting grout with trass additive for the prevention of efflorescence. Indoors and outdoors for grouting 4 to 50 mm joint widths of concrete, natural stone, plaster and clinker coverings in bonded construction. Also well suited to processing with jointing machines. Suitable for usage categories up to N3 according to ZTV road construction.

Consumption: depending on stone format, joint width and joint depth. The precise consumption is to be determined using a test area.



Grouting



Flexfuge Platinum FX 66

Powdery, food-safe, water and frost-proof, supersmooth, high-strength and flexible grout with pearl effect. Easy application into the joint and uniformly fast setting of the joint sealant, especially with non-absorbent laying material, enables quick and easy installation and further work without delay. Moreover, the low water consumption of the highly abrasion-resistant grout reliably prevents the formation of stains. Indoors and outdoors on wall and floor surfaces for grouting joint widths from 1 to 10 mm. For water and dirt-repellent grouting of ceramic tiles, boards and mosaic, as well as natural stone and fine stoneware. Suitable for underfloor heating systems in living areas, as well as for wet rooms, terraces and balconies.

Consumption: 0.2 - 0.9 kg/m² (depending on the tile format and the joint width) consumption calculator at www.murexin.com





Grout Emulsion FE 85

Plastic dispersion to increase the elasticity, water repellency and chemical resistance of Murexin grouts on non-absorbent or very slightly absorbent substrates (e.g. fine stoneware). Indoors and outdoors hardener for Murexin grouts with increased static or thermal loads to better dissipate stress or to absorb it, such as when laying on underfloor heating systems, terraces, balconies, facades etc. as well as for use in swimming pools, thermal baths, seawater and brine baths, large kitchens, carwashs, terraces, as well as in industrial and commercial areas.

Consumption: depending on grout





Grout Epoxy FMY 90

Food-safe, waterproof, frost-proof, solvent-free, bacteriostatic, temperature, ageing and chemical resistant, 2-component epoxy resin-based grout. Grouting of ceramic tiles, panels and mosaics in interior and exterior wall and floor areas. Especially suitable for use with aggressive waters, plant-based or animal fats and chemicals, as well as in drinking water containers. The Grout Epoxy FMY 90 is also suitable for adhesion and levelling.

Consumption: approx. 1 kg/m², depending on the joint format





Grouting



Plaster Joint PF 30

Single-component, oxygen-hardening, ready-to-use plaster grout with high and permanent water permeability (resistant to weathering). Slurry application recommended! In outdoor areas from a minimum joint depth of 30 mm and a width of 8 mm, whereby the minimum joint width can be 5 mm with very well compacted grout. For grouting footpaths and garden pathways, terraces, large areas for natural stone and concrete paving stones, as well as board and clinker surfaces. Suitable for pedestrian traffic and also for light loads from cars, e.g. private driveways. The substrate must be permanently water permeable! Pre-wet the surface heavily and rewet more often if necessary!

Consumption: the consumption depends on the stone format, the joint width and the joint depth. The precise consumption is to be determined using a test area. For more detailed information, refer to the technical data sheet or folder.





Special Sealant X-BOND MS-D 81

Single-component, solvent and silicone-free, odourless, UV and weather-resistant, waterproof, MS polymerbased sealant. Perfectly suited for grouting large format panels outdoors. Resistant to fungi and bacteria. Can be used indoors and outdoors for closing expansion joints and wall and floor niches in ceramic coverings, as well as closing joints between tile covering and foreign materials.

Consumption: 1 cartridge is sufficient for approx. 10 linear metres with a 5 mm joint width





Natural Stone Silicone **SIL 50**

Single-component, UV-resistant, waterproof, up to 20% permanently flexible sealing mass based on neutral silicone. Suitable for indoors and outdoors. In contrast to conventional silicone sealants on contact with Murexin Natural Stone Silicone SIL 50, no edge contamination (discolouration) takes place. Also suitable for use in swimming pools and wetrooms.

Consumption: 1 cartridge is sufficient for approx. 10 linear metres with a 5 mm joint width



Accessories



Terrace profile

Angular, powder-coated aluminium profile with drip nozzle for the edge trim. For an elegant finish of open fronts of balconies and terraces. The mounting leg length for all versions is 70 mm. Colour: light grey.



Terrace profile corner connector

For an attractive corner design. Colour: light grey



Terrace profile connector Colour: light grey



Balcony drainage profile

High quality, drainable, grey powder-coated aluminium profile for the edge finish of tiles, boards and natural stone coverings. Optimum flow of moisture is ensured by the drainage holes. For elegant closure of open fronts of balconies and terraces when using drainage screeds, mortars and other drainage system or also for gravel aggregate. Covering height: 60 mm, total height: 115 mm, colour: grey

Balcony drainage profile external corner

Powder-coated aluminium profile, covering height: 60 mm, total height: 115 mm, colour: grey



Balcony drainage profile connector

Powder-coated aluminium profile, covering height: 60 mm, colour: grey



Balcony drainage profile connector reinforcer

Galvanised metal. Thickness 0.8 mm

MUREXIN GmbH

A-2700 Wiener Neustadt, Franz von Furtenbach Straße 1 Tel.: +43/2622/27 401-0, E-Mail: info@murexin.com

Deutschland: Murexin GmbH D- 63165 Mühlheim am Main, Industriestraße 25-27 Tel.: +49/6108 7099-2000 E-Mail: info @murexin.de

Ungarn: Murexin Kft. H-1103 Budapest, Noszlopy u. 2-6. Tel.: +36/1/262 60 00 <u>E-Mail: m</u>urexin@murexin.hu

Tschechien: Murexin spol. s. r.o. CZ-664 42 Modřice, Brnênská 679 Tel.: +420/5/484 26 711, E-Mail: murexin@murexin.cz Slowakei: Murexin spol. s. r. o. SK-831 04 Bratislava, Odborárska 52 Tel.: +421/2/492 77 224 E-Mail: murexin@murexin.sk

Slowenien: Murexin d.o.o. SLO-9201 Puconci, Puconci 393 Tel.: +386/2/545 95 00 E-Mail: info@murexin.si

Rumänien: MUREXIN SRL RO-077045 Chitila, Catted Business Park Chitila Tel.: +4/021/252 62 51 E-Mail: info@murexin.ro Frankreich: Murexin France Sarl, FR-67100 Strasbourg, 28 Rue Schweighaeuser Tel.: +33/607 262 438 E-Maii. info@murexin.fr

Kroatien: Murexin d. o. o. HR-10255 Donji Stupnik, Stupničke Škipkovine 4b E-Mail: info@murexin.hr

Schweiz: Murexin AG CH-8303 Bassersdorf, Hardstrasse 20 Tel.: +41/44/877 70 30 E-Mail: info@murexin.ch

Vertrieb für Italien:

Murexin GmbH, A-2700 Wiener Neustadt, Franz von Furtenbach Straße 1, Tel.: +43(0)2622/27 401-0, E-Mail: info@murexin.com

Subject to typesetting and printing errors. Edition: 01/2024. We would like to point out that the photos used are only symbolic photos and that these objects do not require our products but only demonstrate areas of application, unless they are explicitly mentioned as reference objects.

