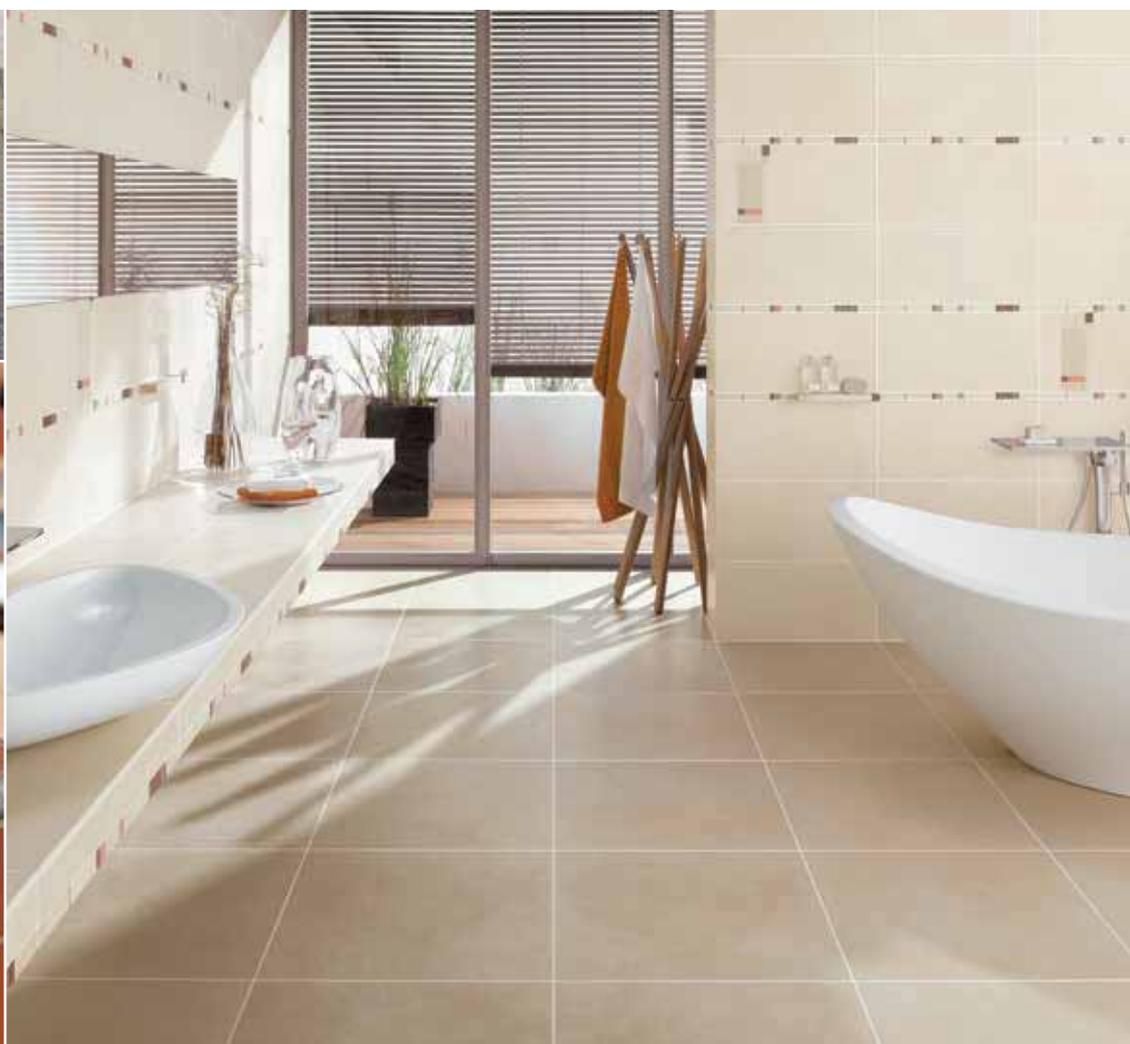


Planning and installation guide for

Tile, natural stone and screed installation





Contents overview

In times in which restoration, renovation and modernisation gain greater significance, it is important to focus on product systems, which are suitable for every conceivable requirement.

At SCHOMBURG you can find all these systems in the form of innovative and the best matched products. This installation guidebook gives you practical help and shows you solutions for each upcoming task. Further information about SCHOMBURG and our product systems can be found at www.schomburg.com.

Competency through systems

- 06 From a specialist in waterproofing to a supplier of complete systems
- 08 Correct preparation of substrates
- 10 Superior product advantages
 - ▶ Fast Technology ▶ Dust Reduced
 - ▶ 4 in 1 ▶ Tile Format XXL
 - ▶ TopTEC ▶ EMICODE®
- 12 Green SCHOMBURG

Installation on various substrates

- 15 Cement-based screed (CT), heated and unheated
- 16 Calcium sulphate screed (CA), heated and unheated
- 18 Poured asphalt (AS) in interior areas
- 20 Magnesite and xylolite screed (MA)
- 21 Green cement-based screeds (CT) and concrete (< 28 days)
- 22 Concrete (> 3 months)
- 23 Concrete (> 6 months)
- 24 Chipboard and floorboards
- 26 Masonry work (lime sand blocks, bricks and aerated concrete)
- 27 Render (mortar group PII and PIII to DIN 18550)
- 28 Gypsum plaster (mortar group PIV to DIN 18550)
- 29 Moisture resistant plasterboard and building boards
- 30 Old tiled finishes
- 31 Metal and stainless steel
- 32 Critical substrates
- 33 Adhesive and paint residues



Waterproofing and installation, interior and exterior areas

- 37 Private bathrooms
- 38 Balconies and terraces
- 39 Balconies and terraces - AQUAFIN®-TBS
- 42 Public showers and swimming pools
- 43 Fountains and swimming pools
- 44 Sauna area
- 47 Brine pools

Waterproofing and installation in special areas

- 49 Commercial kitchens and cool rooms
- 50 Hazardous areas, clean rooms, chemical, pharmaceutical and electronics industry
- 52 Milking parlours
- 53 Wastewater treatment plants

Installation of specific materials

- 55 Large format tiles
- 56 Porcelain tiles
- 57 Synthetic (agglomerated) stone tiles
- 58 Glass tiles and mosaics
- 59 Cotto
- 60 Natural stone

General information

- 64 The correct primer for each application
- 66 The correct adhesive system for cotto, natural and agglomerated stone
- 68 The correct grout for each application
- 71 The correct joint sealant for each application
- 72 The correct adhesive for each application
- 74 Product overview
- 92 Glossary from A to Z



Competency through
systems



TRADITION · EXPERTISE · QUALITY · ASSURANCE · ADVANCEMENT

From a specialist in waterproofing to a supplier of complete systems

The core competency of the SCHOMBURG group is due to over 60 years in the development of effective product systems for structural waterproofing and repair. Through its proximity to main market segments and substantiated research and development of innovative products, SCHOMBURG has advanced to a supplier of complete systems for the installation of tile and stone under a variety of applications. This guidebook gives ideal installation advice for the tiling trade covering a variety of requirements. For alternative solutions consult the "General information" category on page 62.

Priming

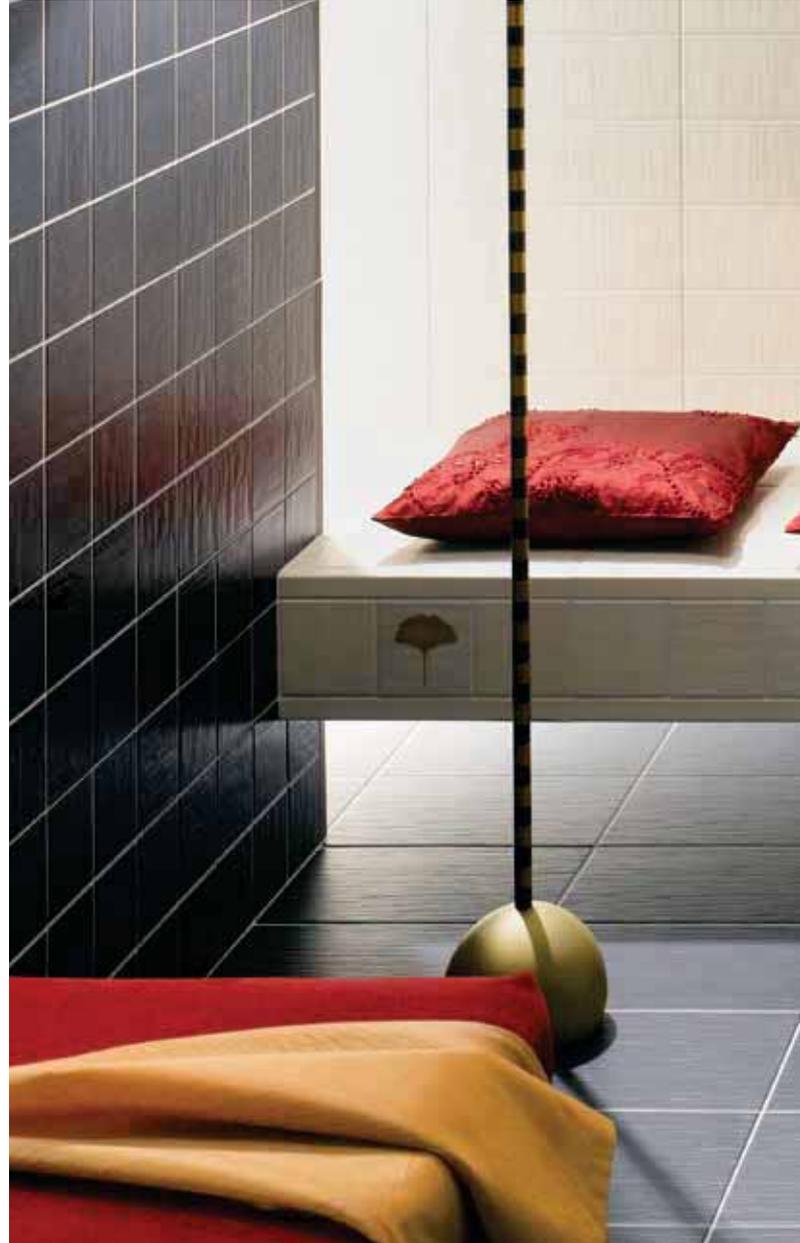
SCHOMBURG offers a wide spectrum to prepare substrates from concentrated primers to two component, flexible waterproofing slurries through one component bonding agents. These primers fulfil many functions: they consolidate the substrate and bind surface dust, they reduce the absorption and guarantee an even setting of smoothing compounds, they protect against damp and provide good adhesion for following products.

Levelling

For levelling wall and floor irregularities, SCHOMBURG offers smoothing and levelling compounds, which fulfill current standards and are suitable for almost all applications. In particular, large format finishes require tight tolerances in flatness. Lipping - height differences of more than one millimetre between the edges of adjacent tiles should be avoided. Smoothing and levelling compounds leave a flat substrate and provide an exceptional basis for following works.

De-coupling/Insulation

SCHOMBURG supplies the product STEPBOARD, a polyester fibre impact sound reducing and de-coupling board available in 4 mm, 9 mm and 15 mm thicknesses. This system is predominantly used beneath ceramic tiles, natural stone, agglomerated stone and laminate in interior areas.



Waterproofing

When waterproofing you can trust in the core competency of SCHOMBURG, grown over more than 60 years. A range of proven waterproofing materials are available for each type of application. PROPERTIES such as impermeability to water, water vapour permeability, chemical resistance as well as resistance to alkalis are but a few of the virtues, which these waterproofing materials offer. SCHOMBURG provides technical solutions through a combination of progressive technology and substantiated technical knowledge.



SCHOMBURG




Tile Installation

Whether tile, natural stone, mosaic, cotto or ceramic. Whether thin-bed, medium-bed or thick-bed. Whether white, strong or smooth – you'll find the correct adhesive for each finish, with reduced dust and harmless to your health. Only with suitable adhesives is a simple and clean installation possible. The use of unsuitable adhesives can even spoil natural stone. SCHOMBURG offers you the correct product for each application.



Grouting

The tiling trade is in luck with the aid of a colourful diversity of grouts and joint sealants. Finish off your project assuredly with SCHOMBURG products – for each material installed and every type of application. Inserting an unsuitable grout can make the value of the entire work questionable.

A tiled finish is only as good as its substrate

Prepare substrates correctly

Testing and preparing the substrate is a fundamental component of technical activity. In accordance with VOB, the contractor is obligated to competently evaluate the substrate. Badly prepared substrates are often the reason for failure in the installed tiled finish. Professionally prepared substrates produce an optimum bond for the tiled finish. The following steps are part of a thorough substrate preparation:

▶ Visual inspection

Through a visual inspection of the surface to which tiles are to be adhered, it is possible to determine existing attached items (dust, mortar droppings etc.), loose crumbly parts, condensation, cracks or large irregularities.

▶ Testing for flatness

Permitted tolerances are described in DIN 18202 "Dimensional tolerances in construction". Testing is carried out with a straightedge and a measuring wedge.

▶ Wipe test

Wiping the flat of the hand over the surface can be used to determine contamination (e.g. dust).



▶ Tap test

Tapping – e.g. with a blunt hammer – permits the presence of hollow areas to be detected through a change in sound.

▶ Wetting test

Applying water – e.g. with a brush – tests the absorption of the substrate. The water must be taken up by the substrate within a short space of time. If this is not the case, then this can be an indication of high moisture content, separating agent residues, cement laitance or similar.



▶ Hammer blow test

The test serves to determine thin, hard layers above soft areas beneath. The hard crust on the surface of the substrate breaks into pieces during the test.

▶ Grid scratch test

The condition of the surface (layers, hardness etc) can be assessed using a diamond shaped scratch on the surface of the substrate using a grid scratch test. At the cut points, there should be no breakage where scoring marks crossover.

▶ Moisture measurement

Moisture measurement is a test to determine the readiness of a substrate. The maximum moisture content for the installation of tiles may not exceed 2.0% for cement-based screeds (unbonded or floating) and 0.5% for calcium sulphate screeds (unheated) and 0.3 % (heated), measured with a CM device (carbide method). Electronic moisture measuring devices can be used to carry out a non-destructive measurement, but they may not be accurate and should only serve as a guide value.



The measures necessary to prepare the substrate are driven by the findings of the substrate assessment. These can be very varied.

Mechanical abrasion methods such as sweeping, sand blasting, shot blasting, high pressure water blasting, planing, scabbling etc. are suitable to remove poorly bonded or non-secure layers such as e.g. dust, dirt, laitance, sinter layers, paints, coatings etc.

Before installing tiles, cracks present must be sealed with a reaction resin. If movement in the crack zone of a floating screed cannot be eliminated, then a movement joint must be brought through to the surface of the tiled finish. If this is not possible due to the way the crack runs, then seal the crack with a reaction resin and cut a nearby joint into the screed to suit the tile layout. In order to restrict the absorption of very absorbent substrates and to also improve the bond with non-absorbent substrates – dependent on the type of application – apply a dispersion-based or epoxy resin-based primer.



Superior

Product advantages

The broad spectrum of products from SCHOMBURG offers superior product advantages for the installation of tile and natural stone, the installation of screeds/floor coatings and structural waterproofing/repair.

The product range excels through outstanding properties, which as defined by the applicators, offer time savings during use and easier working due to greater work comfort. The new environmentally friendly products with progressively reduced dust formulations cope

with demands, which are rising daily. It doesn't matter whether more value is placed on speed, cleanliness, flexibility or particular requirements – one is best equipped with the new "superior" products from SCHOMBURG. Insensitive to moisture, tear resistant and dust free, the new SCHOMBURG products supplied in polythene bags are characterized by their longevity. All of these outstanding working properties are hidden away behind the following logos.





FAST TECHNOLOGY

From 0 to 100 in 4.6 seconds, this can be used to describe FAST TECHNOLOGY from SCHOMBURG. Products labelled with this symbol stand out as the water is bound in a crystalline form, therefore offering protection against curling and discolouration.

Initially FAST products can be applied as normal setting systems but after the pot life is exhausted, they develop their strength quickly. Working time and strength development depends on the temperature. FAST products are however noticeably less sensitive than other rapid setting systems.



DUST REDUCED

Products, which contain the reduced dust formula are identified through this symbol. Here there is a real environmental advantage, as there is less dust released during preparation, which in turn can lead to a lessening of unpleasant dust to be inhaled or contamination of objects and rooms.



4 IN 1

The multi-talented amongst the SCHOMBURG products. Products with this symbol benefit from the newly developed 4 in 1 formula and can be used for the most varied of installation techniques such as thin-bed, medium-bed, thick-bed and flow-bed as well as for smoothing work. Optimum working properties complement their multi-talents.



TILE FORMAT XXL

Products, which are labelled with the "TILE FORMAT XXL" logo are especially suitable for the installation of large format tiles. Current SCHOMBURG adhesive technology makes it possible. Exceptionally strong grab and high deformability guarantees the easy and assured fixing of large format tiles.



TOPTEC

The new TopTEC binder system is the basis for many SCHOMBURG products. Products in the TopTEC family excel through an outstanding combination of special properties such as e.g. rapid reactive hardening, increased assurance through extremely low shrinkage and a resource friendly ecological balance.



EMICODE®

Many SCHOMBURG products also carry the EMICODE® seal. EMICODE® is a trademark protected logo for identifying installation materials, adhesives and construction products. These construction materials offer the best possible assurances against indoor air pollution. The EMICODE® system forms the basis of an exactly defined test chamber determination to EN ISO16000 with strict classification criteria. The tested construction products are free from solvents and hazardous substances.

Distinguished...



Sustainability – not only in restoration but also in environmental protection. The SCHOMBURG group of companies places great emphasis on this. A range of our products has been subjected to strict testing.



Certified safety

From multi purpose primers through levelling compounds, waterproofing products and on to the installation of tiles with the low dust flexible adhesive LIGHTFLEX® and grouting with CRISTALLFUGE PLUS, the range is complete.

ÖKOPROFIT®

Since April 2014 SCHOMBURG has been engaged with the environmental project ÖKOPROFIT® (Ecological Project for Integrated Environmental Technology), which supports companies with environmental and climate protecting measures. Now the East Westphalian construction product specialist has been awarded

the appropriate certificate for its exemplary environmental performance, which documents the success of the measures implemented. This demonstrates that the company sets new benchmarks regarding the requirements for sustainable economies, construction and ultimately also for living.



DGNB and LEED®

The adhesives and waterproofing products selected can now also be found in the Green Building product database at www.greenbuildingproducts.eu. The products listed here contribute towards points in the LEED® and DGNB systems. SCHOMBURG supports its customers with successful building certification to LEED® and DGNB. SCHOMBURG transparently

provides relevant certified information. Standardised LEED® and DGNB declarations can be downloaded from the product database at www.greenbuildingproducts.eu. Product research and documentation is made easier for planners, architects and construction companies.



EMICODE®

In addition, many SCHOMBURG products also carry the EMICODE® seal. EMICODE® is a trademark protected logo for identifying installation materials, adhesives and construction products. These construction materials offer the best possible assurances against indoor air pollution. The EMICODE® system forms the basis of an exactly defined test chamber determination to EN ISO 16000 with strict classification criteria. The tested construction products are free from solvents and hazardous substances. In the

meantime, many SCHOMBURG products also carry the EC1 mark or even EC1Plus. SCHOMBURG purposefully subjected products to the strict tests and requirements, in order to achieve the best protection for applicator and user. In addition, SCHOMBURG products with the VOC France logo have especially environmentally friendly properties. The emissions limits are stricter than the US LEED limits for VOC emissions.



SCHOMBURG sets new benchmarks relating to the requirements for sustainable building and economy. In particular, the health and comfort of the user. This is assured, above all, via the use of low emission products.



Overview of the „distinguished products“

Our construction materials, labelled with the EMICODE® seal, offer the greatest possible safety in terms of indoor air quality. The EMICODE® system follows the exactly defined test chamber determination to EN ISO 16000 and has strict classification criteria. The construction materials are free from solvents and hazardous substances.

	EMICODE® from the GEV	AgBB <small>Committee for the health related evalua- tion of building prod- ucts, State/Federal board in Germany in accordance with EN ISO16000</small>	French VOC by-law <small>In accordance with EN ISO16000</small>	Emission class <small>In accordance with French VOC</small>	VOC-Belgien <small>In accordance with the royal decree to determine limiting values for emissi- ons from construction pro- ducts in interior rooms specific to the intended occupancy</small>
ADF®-Systemkleber	EC1Plus-R	✓	✓	A+	✓
AK7P	EC1Plus-R	-	✓	A+	✓
AQUAFIN®-2K/M	-	✓	✓	A	-
AQUAFIN®-2K	-	-	✓	A	-
AQUAFIN®-RS300	-	-	✓	A	-
ASODUR®-Design	EC1Plus-R	✓	✓	A+	✓
ASODUR®-EB/L	-	✓	-	A+	-
ASODUR®-LE	-	✓	-	A+	-
ASODUR®-SG3	-	✓	-	A+	-
ASODUR®-SG3-Superfast	EC1Plus-R	✓	✓	A+	✓
ASODUR®-V2250	EC1Plus-R	-	✓	A+	✓
ASO®-Joint-Tape-2000-Sanitary	-	✓	✓	A+	-
ASO®-Joint-Tape-2000	EC1Plus	✓	✓	A+	-
ASO®-Flexfuge	EC1Plus-R	✓	✓	A+	✓
ASO®-Fugenbreit	EC1Plus-R	-	✓	A+	✓
ASO®-Fugenbunt	-	-	✓	A+	-
ASO®-NM15	EC1-R	-	✓	A	-
ASO®-Unigrund-K	EC1Plus	✓	✓	A+	✓
ASO®-Unigrund-GE	EC1Plus	✓	✓	A+	✓
ASO®-Unigrund-S	EC1Plus	✓	✓	A+	✓
CARO-FK-FLEX	-	-	-	A+	✓
CRISTALLFUGE PLUS	EC1Plus	✓	✓	A+	✓
CRISTALLIT®-MULTI-flex	EC1Plus-R	-	-	-	✓
CRISTALLIT®-VARIO-Light	EC1Plus-R	-	✓	A+	✓
ESCOSIL®-2000	EC1Plus	-	✓	A+	-
INDUFLOOR®-IB1270	-	-	✓	C	-
INDUFLOOR®-IB1275	-	-	✓	A+	-
INDUFLOOR®-IB2255	EC1Plus-R	✓	✓	A+	✓
INDUFLOOR®-IB3357	-	-	✓	C	-
LIGHTFLEX®	EC1Plus-R	✓	✓	A+	-
MONOFLEX-XL	EC1Plus-R	✓	✓	A+	✓
REMISIL-SI	EC1Plus-R	✓	✓	A+	✓
SANIFIN	EC1Plus	✓	✓	A+	-
SANIFLEX	EC1Plus	✓	✓	A+	✓
SOLOFLEX	EC1Plus-R	✓	✓	A+	✓
SOLOFLEX-FAST	EC1Plus-R	✓	✓	A+	✓
SOLOPLAN®-12	-	-	✓	A	-
SOLOPLAN®-30	EC1Plus-R	-	✓	A+	-
SOLOPLAN®-FA	EC1Plus-R	✓	✓	A+	✓
SOLOPLAN®-HF	EC1Plus-R	✓	✓	A+	✓
UNIFIX®	EC1Plus-R	✓	✓	A+	✓
UNIFIX®-2K	EC2-R	✓	✓	A+	✓
UNIFIX®-2K/6	EC2-R	-	✓	A+	✓
UNIFIX®-S3	EC2-R	-	✓	A+	-
UNIFLEX®-B	-	-	✓	A	-

VOC = volatile organic substances or compounds · ✓ = documented through test certificates
Abstract of SCHOMBURG products tested



Clean indoor air – for the sake of your health!

Indoor air hygiene is an important topic when choosing installation materials, adhesives and construction products. Settle for the greatest possible protection where health, environment and indoor room hygiene are concerned. Trust the EMICODE® certification.

We are responsible for our environment. Safety, environmental protection and health are priorities in our trade before commercial interests.



Installation on various
substrates

Installation on heated and unheated cement-based screed (CT)

Firstly carry out a moisture test. The CM moisture content may not exceed 2.0 CM% for floating or unbonded screeds. Heated screeds must be commissioned beforehand. With bonded CT screeds, moisture measurements are not necessary.

	PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
	LEVELLING	<ul style="list-style-type: none"> ▶ Smoothing compound from 3 – 30 mm, interior and exterior areas 	SOLOPLAN®-30
	DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm 	STEPBOARD
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane ▶ PU waterproof membrane for heavy duty water exposure and limited chemical exposure 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN® ASOFLEX-AKB
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Creamy consistency flexible adhesive ▶ Grey, highly flexible adhesive for interior and exterior use ▶ Hydrophobic, rapid hardening flow bed mortar ▶ Flexible natural stone adhesive ▶ Hard wearing epoxy resin, two component and solvent free 	SOLOFLEX MONOFLEX-XL ADF®-Systemkleber CRISTALLIT®-flex ASODUR®-EK98
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Hard wearing epoxy resin, two component and solvent free ▶ Chemical resistant fine grain epoxy grout, two component and solvent free ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	ASO®-Flexfuge CRISTALLFUGE PLUS ASODUR®-EK98 ASODUR®-Design ESCOSIL®-2000 ESCOSIL®-2000-ST





Installation on heated and unheated calcium sulphate screed (CA)

With normal residual moisture: CA flow screeds must be abraded, vacuumed and, as with all calcium sulphate substrates, primed with ASO®-Unigrund. Heated screeds must be commissioned to recognised technical regulations before installing finishes. The readiness to receive floor finishes is determined by a CM device (carbide hygrometer). (CA screeds without underfloor heating: 0.5 CM%, CA screeds with underfloor heating: 0.3 CM%).

 PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant ▶ Use when installing large format tiles, broadcast with quartz sand whilst the primer is still wet 	ASO®-Unigrund ASODUR®-GBM
 LEVELLING	<ul style="list-style-type: none"> ▶ Levelling compound for floors, 2 – 30 mm, in interior areas 	ASO®-NM15
 DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm 	STEPBOARD
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN®
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Creamy consistency flexible adhesive ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Flexible natural stone adhesive ▶ Flexible thin-bed adhesive for CA screeds, prevents ettringite formation 	SOLOFLEX SOLOFLEX-FAST LIGHTFLEX® CRISTALLIT®-flex UNIFIX®-AEK
 GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST



With increased residual moisture: CA flow screeds must be abraded, vacuumed and, as with all calcium sulphate substrates, primed with ASO®-Unigrund. The moisture content of a calcium sulphate screed must be determined with a carbide hygrometer before installing finishes. If ceramic tiles are to be laid on calcium sulphate screeds with higher levels of moisture than those given in current regulatory works, a max of 1.5% for unheated screeds and 1.0% for heated screeds can be accepted. In this case the floor finish to be installed must have a minimum of 2% joint content (tile 40/40, joint width 4 mm), which may be less with vapour permeable tiles.

	PRIMING	▶ Solvent free universal primer, water and alkali resistant	ASO®-Unigrund
	LEVELLING	▶ Levelling compound for floors, 2 – 30 mm, in interior areas	ASO®-NM15
	DE-COUPLING/ INSULATION	▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm	STEPBOARD
	TILE INSTALLATION	▶ Flexible thin-bed adhesive for CA screeds, prevents ettringite formation	UNIFIX®-AEK
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST


NOTE

Exclude moisture rising from the substrate. This type of installation does not conform to recognised technical regulations and is to be contractually declared separately.

Interior installation on poured asphalt (AS)

In order to install tiles on poured asphalt, this must be of minimum quality AS-IC 10 and be of minimum 25 mm thickness. The asphalt screed must have from 10 – 15 mm movement joints against adjoining structures, which are to be brought through to the final floor surface. If the screed is newly installed, ensure that it is blinded with quartz sand. If this is not the case, then the substrate must be primed with an epoxy resin such as ASODUR®-GBM broadcast with 0.2 – 0.7 mm quartz sand whilst still wet, before waterproofing or tiling.

	PRIMING	<ul style="list-style-type: none"> ▶ Resin primer based on epoxy resins 	ASODUR®-GBM
	LEVELLING	<ul style="list-style-type: none"> ▶ Applied to a maximum thickness of 10 mm 	ASO®-NM15
	DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm 	STEPBOARD
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Waterproofing material bonded with tiles, for wall or floor as required 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex ASOFLEX-AKB
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Deformable, rapid hardening flexible adhesive for heavy duty areas, also for natural stone, with FAST TECHNOLOGY ▶ Flexible natural stone adhesive 	LIGHTFLEX® UNIFIX®-S3-FAST CRISTALLIT®-flex
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST







Installation on magnesite and xylolite screed (MA)

Direct contact between cement-based tile adhesives and magnesite screeds leads to the destruction of the magnesite screed due to a chemical reaction. Rear moisture permeation from the substrate must be excluded using appropriate measures. Mechanically roughen the magnesite substrate, prime with the epoxy resin ASODUR-GBM and whilst the primer is still wet, broadcast to excess with 0.5 - 1.0 mm quartz sand. Tiles can be installed after waiting a further 12 – 16 hours approximately.

 PRIMING	<ul style="list-style-type: none"> ▶ Water emulsifying seal based on epoxy resins resistant to diluted alkalis and acids, heating oil and petrol 	ASODUR®-GBM
 LEVELLING	<ul style="list-style-type: none"> ▶ Levelling compound for floors, when using on magnesite screeds do not exceed a max thickness of 15 mm 	ASO®-NM15
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN®
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Accelerated hardening flow bed flexible mortar ▶ Flexible natural stone adhesive 	MONOFLEX-FB CRISTALLIT®-flex
 GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineralbased multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST

Installation on green

cement-based screed (CT) and concrete (< 28 days)

Through the use of the highly flexible tile adhesives UNIFIX®-S3 / UNIFIX®-2K, tiles can be installed on green cement-based screeds as soon as they are ready for foot traffic. When installing on green cement-based screeds make allowances for the fact that the binding process of the screed is not yet complete and will consequently have lower strength. No heavy loads may be placed on the substrate.

Laitance layers must be removed before tiling.

When installing natural stone, only use materials which are not sensitive to discolouration or deformation.



WATERPROOFING

- ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas

AQUAFIN®-2K/M
AQUAFIN®-RS300



TILE INSTALLATION

- ▶ Two component, water impermeable, frostproof flexible adhesive for heavy duty tiled finishes
- ▶ Highly deformable flexible adhesive for heavy duty areas to compensate for substrate stresses
- ▶ Highly deformable, rapid setting flexible adhesive for heavy duty areas to compensate for substrate stresses

UNIFIX®-2K

UNIFIX®-S3

UNIFIX®-S3-FAST



GROUTING

- ▶ Rapid hardening flexible grout, 3 – 20 mm joint width
- ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY
- ▶ Silicone sealant for movement joints
- ▶ Silicone sealant for use with natural stone

ASO®-Flexfuge
CRISTALLFUGE PLUS

ESCOSIL®-2000
ESCOSIL®-2000-ST



NOTE

Exclude moisture rising from the substrate. This type of installation does not conform to recognised technical regulations and is to be contractually declared separately.



Installation on concrete (> 3 months)

In accordance with DIN 18157 the installation of tiles to dense concrete is only recommended after 6 months at the earliest. Causes for damage are high shrinkage stresses, which green concrete substrates exhibit. In these named areas, the use of single part flexible adhesives is not represented.

In our experience, when installing to green concrete, only products such as UNIFIX®-2K, UNIFIX®-S3/-S3-FAST or UNIFIX®-2K/6 are to be recommended. These are highly elastic tile adhesives – tested to DIN 12004 and with a deformability of S2 to DIN 12002.

Only a product, which exhibits this type of highly deformable technological profile – reliably dissipating high shear forces – can be used.

Before installing the tiles, it is mandatory to prepare the substrate using shot blasting, high pressure washing or similar techniques in order to remove laitance layers present.



	PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
	LEVELLING	<ul style="list-style-type: none"> ▶ Smoothing compound from 3 – 30 mm, interior and exterior areas ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 20 mm 	SOLOPLAN®-30 SOLOCRET®-15
	DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm 	STEPBOARD
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas 	AQUAFIN®-2K/M AQUAFIN®-RS300
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Deformable adhesive ▶ Deformable, rapid hardening flexible adhesive for heavy duty areas, also for natural stone, with FAST TECHNOLOGY ▶ Highly deformable flexible adhesive for heavy duty areas ▶ Lightweight, low dust flexible adhesive bonded together with de-coupling 	UNIFIX®-2K/6 UNIFIX®-S3-FAST UNIFIX®-S3 LIGHTFLEX®
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST

NOTE

Exclude moisture rising from the substrate. This type of installation does not conform to recognised technical regulations and is to be contractually declared separately.

Installation on concrete (> 6 months)

Before waterproofing and tiling concrete substrates it is mandatory to prepare the substrate using shot blasting, high pressure washing or similar techniques in order to remove laitance layers present.

	PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
	LEVELLING	<ul style="list-style-type: none"> ▶ Smoothing compound from 3 – 30 mm, interior and exterior areas ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 20 mm 	SOLOPLAN®-30 SOLOCRET®-15
	DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm 	STEPBOARD
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN®
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Creamy consistency flexible adhesive ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Accelerated hardening flow bed flexible mortar ▶ Flexible natural stone adhesive 	SOLOFLEX SOLOFLEX-FAST MONOFLEX-FB CRISTALLIT®-flex
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST





Installation of tiles on chipboard and floorboards

Timber substrates must be clean, dry and load bearing. Chipboard must be laid bonded, screwed and glued. Faulty timber/board substrates are to be replaced, loose floor boards are to be professionally fixed (e.g. screws etc). Seal joints between boards, planks. Produce a gap between adjoining structures of min. 5 mm by inserting a self-adhesive edge insulation strip RD-SK50.

 PRIMING	<ul style="list-style-type: none"> ▶ Rapid drying, quartz filled dispersion primer for absorbent and non-absorbent substrates 	ASO®-Unigrund-S
 LEVELLING	<ul style="list-style-type: none"> ▶ Self levelling, fibre reinforced cement-based floor levelling compound for timber substrates 	SOLOPLAN®-FA
 DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 9/15 mm 	STEPBOARD
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN®
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Accelerated hardening flow bed flexible mortar ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Flexible natural stone adhesive 	MONOFLEX-FB SOLOFLEX-FAST LIGHTFLEX® CRISTALLIT®-flex
 GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineralbased multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST



A particularly rapid, easy and water free solution for levelling substrates is offered by the lightweight epoxy screed ASODUR®-LE. When installing large format tiles with an edge length over 40 cm and a surface area over 0.18 m², we recommend the following construction build-up.

	PRIMING	<ul style="list-style-type: none"> ▶ Universal epoxy based primer ▶ In rooms in which AgBB regulations apply, prime with the binder from ASODUR®-LE 	ASODUR®-GBM
	LEVELLING	<ul style="list-style-type: none"> ▶ Lightweight epoxy screed 	ASODUR®-LE
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN®
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Grey, highly flexible adhesive for interior and exterior use ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Polymer dispersion 	MONOFLEX-XL LIGHTFLEX® SOLOFLEX-FAST UNIFLEX®-B
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST



Installation on lime sand blocks, bricks and aerated concrete masonry work

Blocks with binders (e.g. lime sand blocks) must have reached an age of at least 6 months before tiling (6 months after the production of the block) in order to prevent damage to the tiles, which can be traced back to shrinkage stresses.

 PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
 LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm 	SOLOCRET®-50
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN®
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Deformable adhesive ▶ Grey, highly flexible adhesive for interior and exterior use ▶ Flexible natural stone adhesive 	LIGHTFLEX® UNIFIX®-2K/6 MONOFLEX-XL CRISTALLIT®-flex
 GROUTING	<ul style="list-style-type: none"> ▶ Simple to use grout, up to 6 mm joint widths ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	ASO®-Fugenbunt ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST

Installation on render (mortar group PII and PIII to DIN 18550)

All cement-based renders beneath ceramic tiles or natural stone are to be struck off tightly with a straight edge. The surface must remain rough and may not be smoothed or felt boarded. To enable an orderly tile installation, increased requirements for flatness of the render should be stipulated.

	PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
	LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques 	SOLOCRET®-50 LIGHTFLEX®
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN®
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Flexible adhesive with especially good non-slip ▶ Flexible natural stone adhesive 	LIGHTFLEX® SOLOFLEX-FAST AK7P CRISTALLIT®-flex
	GROUTING	<ul style="list-style-type: none"> ▶ Simple to use grout, up to 6 mm joint widths ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	ASO®-Fugenbunt CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST





Installation on gypsum plaster (mortar group PIV to DIN 18550)

All plaster beneath ceramic tiles or natural stone are to be struck off tightly with a straight edge. The surface must remain rough and may not be smoothed or felt boarded. To enable an orderly tile installation, increased requirements for flatness of the plaster should be contractually stipulated. Gypsum plaster is only suitable as a substrate for exposure class A0, i.e. for moderately wet wall areas (e.g. domestic bathrooms).

 PRIMING	<ul style="list-style-type: none"> ▶ Rapid drying, quartz filled dispersion primer for absorbent and non-absorbent substrates 	ASO®-Unigrund-S
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN®
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Grey, highly flexible adhesive for interior and exterior use ▶ Creamy consistency flexible adhesive ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Flexible natural stone adhesive 	MONOFLEX-XL SOLOFLEX LIGHTFLEX® CRISTALLIT®-flex
 GROUTING	<ul style="list-style-type: none"> ▶ Simple to use grout, up to 6 mm joint widths ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	ASO®-Fugenbunt CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST



Installation on moisture resistant plasterboard and building boards

Moisture resistant plasterboard is only suitable as a substrate for exposure class A0, i.e. for moderately wet wall areas in rooms where splash contact and cleaning water is present, e.g. domestic bathrooms. The building board is to be protected against moisture damage with a bonded waterproof membrane.



PRIMING

- ▶ Solvent free universal primer, water and alkali resistant

ASO®-Unigrund



WATERPROOFING

- ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas
- ▶ One component flexible waterproof slurry, wall/floor
- ▶ Fabric reinforced sheet style bonded waterproof membrane
- ▶ Brush, roller or trowel applied waterproof coating for walls and floors

AQUAFIN®-2K/M
AQUAFIN®-RS300
AQUAFIN®-1K-flex
SANIFIN®
SANIFLEX



TILE INSTALLATION

- ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques
- ▶ Creamy consistency flexible adhesive
- ▶ Hydrophobic special adhesive for tile installation and for installing the waterproof membrane SANIFIN®
- ▶ Flexible natural stone adhesive

LIGHTFLEX®

SOLOFLEX
ADF®-Systemkleber

CRISTALLIT®-flex



GROUTING

- ▶ Simple to use grout, up to 6 mm joint widths
- ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY
- ▶ Silicone sealant for movement joints
- ▶ Silicone sealant for discolouration-free elastic jointing

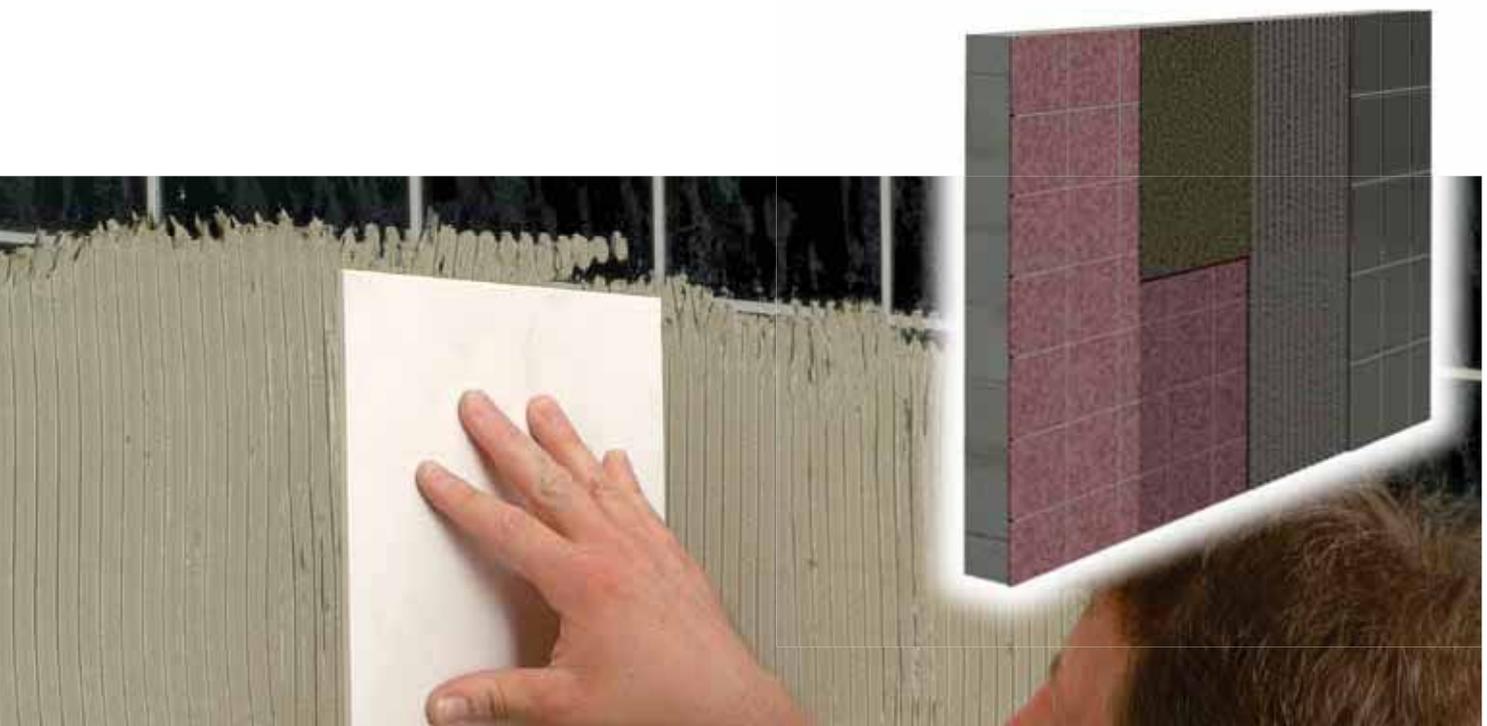
ASO®-Fugenbunt
CRISTALLFUGE PLUS

ESCOSIL®-2000
ESCOSIL®-2000-ST

Installation on old tiled finishes

The existing tiled finish must be sound and load bearing. Remove loose areas and repair with MGIII cement mortar. The substrate must be cleaned and all adhesion inhibiting components such as e.g. lime, grease, dirt etc must be removed. Resin repair cracks in the substrate with a reaction resin. Abrading the old tiling increases the bond of the primer or scratch coat.

 PRIMING	<ul style="list-style-type: none"> ▶ Rapid drying, quartz filled dispersion primer for absorbent and non-absorbent substrates ▶ Flexible mineral-based waterproof slurry as a scratch coat ▶ Elastic system based tile adhesive as a scratch coat 	<p>ASO®-Unigrund-S</p> <p>AQUAFIN®-RS300 UNIFIX®-2K</p>
 LEVELLING	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques 	<p>LIGHTFLEX®</p>
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor ▶ Fabric reinforced sheet style bonded waterproof membrane ▶ Brush, roller or trowel applied waterproof coating for walls and floors 	<p>AQUAFIN®-2K/M AQUAFIN®-RS300 AQUAFIN®-1K-flex SANIFIN® SANIFLEX</p>
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Grey, highly flexible adhesive for interior and exterior use ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Flexible natural stone adhesive 	<p>LIGHTFLEX®</p> <p>MONOFLEX-XL SOLOFLEX-FAST</p> <p>CRISTALLIT®-flex</p>
 GROUTING	<ul style="list-style-type: none"> ▶ Simple to use grout, up to 6 mm joint widths ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	<p>ASO®-Fugenbunt CRISTALLFUGE PLUS</p> <p>ESCOSIL®-2000 ESCOSIL®-2000-ST</p>





Installation on metal and stainless steel

It is necessary to clean the substrate until free from grease and remove any possible existing corrosion. Where necessary the metal must be abraded and primed. Prime structural steel twice with ASODUR®-GBM. Wipe over stainless steel sparingly with ASO®-Primer. Before installing tiles, apply an intermediate flexible layer of ASOFLEX-AKB. Due to the range of metals, we recommend seeking technical advice for the application.

	PRIMING	<ul style="list-style-type: none"> ▶ Primer and adhesion promoter for non-absorbent substrates ▶ Universal epoxy based primer 	ASO®-Primer-2000 ASODUR®-GBM
	LEVELLING	<ul style="list-style-type: none"> ▶ Solvent free, pigmented two component polyurethane resin as a flexible waterproof coat 	ASOFLEX-AKB
	DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm 	STEPBOARD
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Waterproof material as a bonded system with tiles, for wall or floor as required 	ASOFLEX-AKB
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Solvent free two component epoxy resin, very hard, high bond strength and compressive and flexural strengths ▶ Deformable, rapid hardening flexible adhesive for heavy duty areas, also for natural stone, with FAST TECHNOLOGY 	ASODUR®-EK98 UNIFIX®-S3-FAST
	GROUTING	<ul style="list-style-type: none"> ▶ Adhesive and grout with high chemical resistance, for tiles and natural stone, for wall or floor as required ▶ Chemical resistant fine grain epoxy grout, two component and solvent free ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	ASODUR®-EK98 ASODUR®-Design ESCOSIL®-2000 ESCOSIL®-2000-ST



Installation on critical substrates

Mixed substrates, cracked substrates and substrates with too little covering over underfloor heating

When carrying out building conversions or renovation work, one often encounters critical substrates, which have to be levelled, de-coupled and impact sound transmission reduced before installing tiles. Here the impact sound deadening and de-coupling board STEPBOARD can be used. To reliably prevent offsets in level, it is recommended that existing cracks in the substrate are adhesively sealed, e.g. ASODUR®-K900.

	PRIMING	<ul style="list-style-type: none"> ▶ Rapid drying, quartz filled dispersion primer for absorbent and non-absorbent substrates 	ASO®-Unigrund-S
	LEVELLING	<ul style="list-style-type: none"> ▶ The selection depends on the substrate and demands of the area in use 	ASO®-NM15 SOLOPLAN®-FA SOLOPLAN®-30
	DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm 	STEPBOARD
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ Waterproofing and de-coupling membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 ADF®-Balkonfolie
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Accelerated hardening flow bed flexible mortar ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Flexible natural stone adhesive 	LIGHTFLEX® MONOFLEX-FB SOLOFLEX-FAST CRISTALLIT®-flex
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST

Installation on substrates with adhesive and paint residues

Water soluble paints and adhesive residues must be removed. Lacquers or oil based paints must be abraded as necessary. Prevent or impede rising damp from the substrate.

	PRIMING	<ul style="list-style-type: none"> ▶ Rapid drying, quartz filled dispersion primer for absorbent and non-absorbent substrates ▶ Universal primer based on epoxy resins 	<p>ASO®-Unigrund-S</p> <p>ASODUR®-GBM</p>
	LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm ▶ Smoothing compound from 3 – 30 mm, interior and exterior areas 	<p>SOLOCRET®-50</p> <p>SOLOPLAN®-30</p>
	DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm 	STEPBOARD
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ One component flexible waterproof slurry, wall/floor 	<p>AQUAFIN®-2K/M</p> <p>AQUAFIN®-RS300</p> <p>AQUAFIN®-1K-flex</p>
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Flexible natural stone adhesive 	<p>LIGHTFLEX®</p> <p>SOLOFLEX-FAST</p> <p>CRISTALLIT®-flex</p>
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for discolouration-free elastic jointing 	<p>ASO®-Flexfuge</p> <p>CRISTALLFUGE PLUS</p> <p>ESCOSIL®-2000</p> <p>ESCOSIL®-2000-ST</p>





Waterproofing and installation,
interior and exterior areas



Our competency in swimming pool construction

Whether swimming pools, brine pools or saunas – with SCHOMBURG you can fall back on intelligent systems for ideal installation and waterproofing solutions. Due to perfectly matched individual components, you will achieve the best quality and save considerably in time and costs.



Waterproofing and tiling in private bathrooms

Due to the joints, tiled finishes are not impermeable to water. Therefore in wet duty areas they require waterproofing in order to protect the substrate against moisture.

	PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
	LEVELLING	<ul style="list-style-type: none"> ▶ Smoothing compound from 3 – 30 mm ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm 	SOLOPLAN®-30 SOLOCRET®-50
	DE-COUPLING/ INSULATION	<ul style="list-style-type: none"> ▶ Dimensionally stable and compression proof de-coupling board with impact sound deadening properties in 4 mm, 9 mm and 15 mm thickness 	STEPBOARD
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Brush, roller or trowel applied waterproof coating ▶ Fabric reinforced sheet style bonded waterproof membrane ▶ One component flexible waterproof slurry, wall/floor ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ Waterproof tape for bridging bay edge joints and connections 	SANIFLEX SANIFIN® AQUAFIN®-1K-flex AQUAFIN®-2K/M AQUAFIN®-RS300 ASO®-Joint-Tape-2000
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Flexible adhesive with especially good non-slip ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Hydrophobic thin-bed adhesive ▶ Flexible natural stone adhesive 	AK7P LIGHTFLEX® ADF®-Systemkleber CRISTALLIT®-flex
	GROUTING	<ul style="list-style-type: none"> ▶ Water- and dirt-repellent grout, up to 6 mm joint widths ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	ASO®-Fugenbunt ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST





System for work under time constraints

Waterproofing and installation in exposure class B0 Balconies and terraces

The selection of a suitable system is very important for the sound installation of stone and ceramic on balconies and terraces. Due to different expansion of the materials used, stresses occur in the build-up of the layers, due to the temperature changes experienced. These must be permanently compensated for so that there is no break within the build-up of the layers. Furthermore, dependent on the temperature exposure, the length of edges in the tiled bays should be restricted from 2 – 5 m. The aspect ratio of the tiled bays should be as squat as possible from up to 1:2.

 PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
 LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cementbased, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm ▶ Water repellent, rapid hardening screed mortar with high strength 	SOLOCRET®-50 ASO®-EZ4-Plus
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Waterproofing and de-coupling membrane ▶ Waterproof tape for bridging bay edge joints and connections 	ADF®-Balkonfolie ASO®-Joint-Tape-2000
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Hydrophobic thin-bed adhesive 	ADF®-Systemkleber
 GROUTING	<ul style="list-style-type: none"> ▶ Cementbased, water impermeable grout with improved mechanical and chemical resistance for joint widths from 3 – 20 mm ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Silicone sealant for movement joints 	HF05-Brillantfuge ASO®-Flexfuge ESCOSIL®-2000



System with the highest safety factor proven over decades

10 year WARRANTY*
* Under the terms of the warranty

Assured waterproofing and tiling of terraces and balconies

AQUAFIN®-TBS

Decades of experience has led to the development of an assured system for waterproofing and installing ceramic tiles on terraces and balconies. AQUAFIN®-TBS is backed up with a 10 year warranty. The individual components are available as a rapid setting and normal setting version.

	PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
	LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm ▶ Water repellent, rapid hardening screed mortar with high strength 	SOLOCRET®-50 ASO®-EZ4-Plus
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ Waterproof tape for bridging bay edge joints and connections 	AQUAFIN®-2K/M AQUAFIN®-RS300 ASO®-Joint-Tape-2000
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Highly deformable flexible adhesive for heavy duty areas ▶ Deformable, rapid hardening flexible adhesive for heavy duty areas, also for natural stone, with FAST TECHNOLOGY 	UNIFIX®-S3 UNIFIX®-S3-FAST
	GROUTING	<ul style="list-style-type: none"> ▶ Cement-based, water impermeable grout with improved mechanical and chemical resistance for joint widths from 3 – 20 mm ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	HF05-Brillantfuge ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST



The brand – the system

AQUAFIN®-TBS

With the AQUAFIN®-TBS system, comprising the products AQUAFIN®-2K/M / UNIFIX®-S3 or AQUAFIN®-RS300 / UNIFIX®-S3-Fast, SCHOMBURG offers a constructive, sustainable solution for waterproofing and tiling balconies and ground level terraces. The bonded waterproof membrane is positioned directly below the tiled finish. The screed no longer gets soaked. In this way, calcium carbonate efflorescence in the joints as well as frost damage – and the resultant tile de-lamination – is prevented.

In combination with UNIFIX®-S3 / UNIFIX®-S3-Fast, shear forces, within the waterproof membrane and adhesive layer from temperature variations, are absorbed. Due to their mineral-based structures, AQUAFIN®-2K/M / AQUAFIN®-RS300 and UNIFIX®-S3 / UNIFIX®-S3-Fast are related to the screed and concrete so that temperature influences are dissipated. In addition, the installation system absorbs almost no water.

The adhesives UNIFIX®-S3 / UNIFIX®-S3-Fast are optimally formulated for the conditions on balconies and terraces. With more than 30 mm deformation possible, these adhesives far exceed the values in DIN EN 12002.

**10 year
WARRANTY***

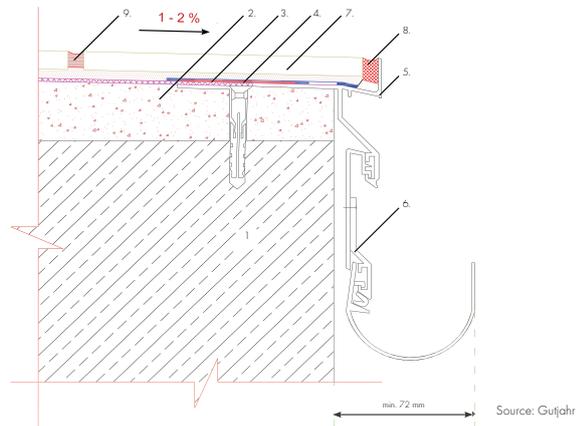
*Under the terms of the warranty





System assurance!

1. Cantilevered concrete balcony slab
2. Bonded screed laid to falls, e.g. ASO®-EZ2-Plus
3. Waterproofing with AQUAFIN®-2K, AQUAFIN®-2K/M or AQUAFIN®-RS300
4. Incorporating ASO®Joint-Tape-2000
5. E.g. Watec Fin RA tile end profile, Gutjahr
6. E.g. Watec Fin RT gutter facing plate, Watec Fin gutter bracket, Watec Fin BR balcony gutter
7. Ceramic tiles bonded with UNIFIX®-S3
8. ESCOSIL-2000 sealant
9. Grouting with ASO®-Flexfuge or HF05-Brillanfuge



The system components for bonded waterproofing (AQUAFIN®-RS300 and UNIFIX®-S3-Fast are shown).



Incorporating the system's waterproof tape ASO®Joint-Tape-2000-S into AQUAFIN®-RS300 on a balcony end profile.



Sliding the tiles into the adhesive bed using the floating-buttering method.



Grouting the tiles with ASO®Flexfuge.



Elastic jointing with a suitable closed cell backing strip and sealing with ESCOSIL-2000.



Waterproofing and tiling in public showers and swimming pools

In commercially used wet areas, a particular type of waterproofing is necessary due to the large amounts of water present. The use of bonded waterproof membranes (including the adhesive for the tiles) protects all building components. All inserts (pipe penetrations, floor drains, shower fixtures etc) must be technically correctly integrated into the waterproof membrane.

 PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
 LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm ▶ Water repellent, rapid hardening screed mortar with high strength ▶ Smoothing compound from 3 – 30 mm 	SOLOCRET®-50 ASO®-EZ4-Plus SOLOPLAN®-30
 WATERPROOFING	<ul style="list-style-type: none"> ▶ One component flexible waterproof slurry, wall/floor ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ Fabric reinforced sheet style bonded waterproof membrane ▶ Waterproof tape for bridging bay edge joints and connections 	AQUAFIN®-1K-flex AQUAFIN®-2K/M AQUAFIN®-RS300 SANIFIN® ASO®-Joint-Tape-2000
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Mineral-based, flexible adhesive ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Accelerated hardening flow bed flexible mortar ▶ Flexible natural stone adhesive ▶ Hydrophobic thin-bed adhesive 	SOLOFLEX LIGHTFLEX® MONOFLEX-FB CRISTALLIT®-flex ADF®-Systemkleber
 GROUTING	<ul style="list-style-type: none"> ▶ Cement-based, water impermeable grout with improved mechanical and chemical resistance for joint widths from 3 – 20 mm ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints ▶ Silicone sealant for use with natural stone 	HF05-Brillantfuge ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL®-2000 ESCOSIL®-2000-ST

Waterproofing and tiling in fountains and swimming pools

In order to impede the penetration of bathing water in the levelling layer and the concrete construction of swimming pools, suitable and approved waterproof systems bonded with the tiled finish are used. Before installing tiles or stone, the pool tank structure is to be tested for watertightness. The test is carried out during a 14 day constant test fill with chlorinated water up to the upper level of the pool edge detail.



PRIMING

- ▶ Solvent free universal primer, water and alkali resistant
- ▶ Special epoxy based primer
- ▶ Universal epoxy based primer

ASO®-Unigrund
ASODUR®-SG2
ASODUR®-GBM



LEVELLING

- ▶ Sprayable, cement-based patching mortar, 5 – 40 mm, wall/floor
- ▶ Water repellent, rapid hardening screed mortar with high strength

ASOCRET-FM40
ASO®-EZ4-Plus



WATERPROOFING

- ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas
- ▶ Trowellable, chemically resistant bonded polyurethane based waterproof membrane
- ▶ Special waterproof tape for heavy duty exposure and highly demanding areas

AQUAFIN®-2K/M

ASOFLEX-AKB

ASO®-Joint-Tape-2000-S



TILE INSTALLATION

- ▶ Mineral-based, flexible thin-bed adhesive
- ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques
- ▶ Deformable adhesive
- ▶ Epoxy resin-based, chemical resistant thin-bed mortar
- ▶ Chemical resistant fine grain epoxy grout, two component and solvent free

SOLOFLEX
LIGHTFLEX®

UNIFIX®-2K/6
ASODUR®-EK98
ASODUR®-Design



GROUTING

- ▶ Cement-based, water impermeable grout with improved mechanical and chemical resistance for joint widths from 3 – 20 mm
- ▶ Epoxy resin-based, chemical resistant thin-bed mortar
- ▶ Chemical resistant fine grain epoxy grout, two component and solvent free
- ▶ Silicone sealant for underwater areas

HF05-Brillantfuge

ASODUR®-EK98
ASODUR®-Design

ESCOSIL®-2000-UW

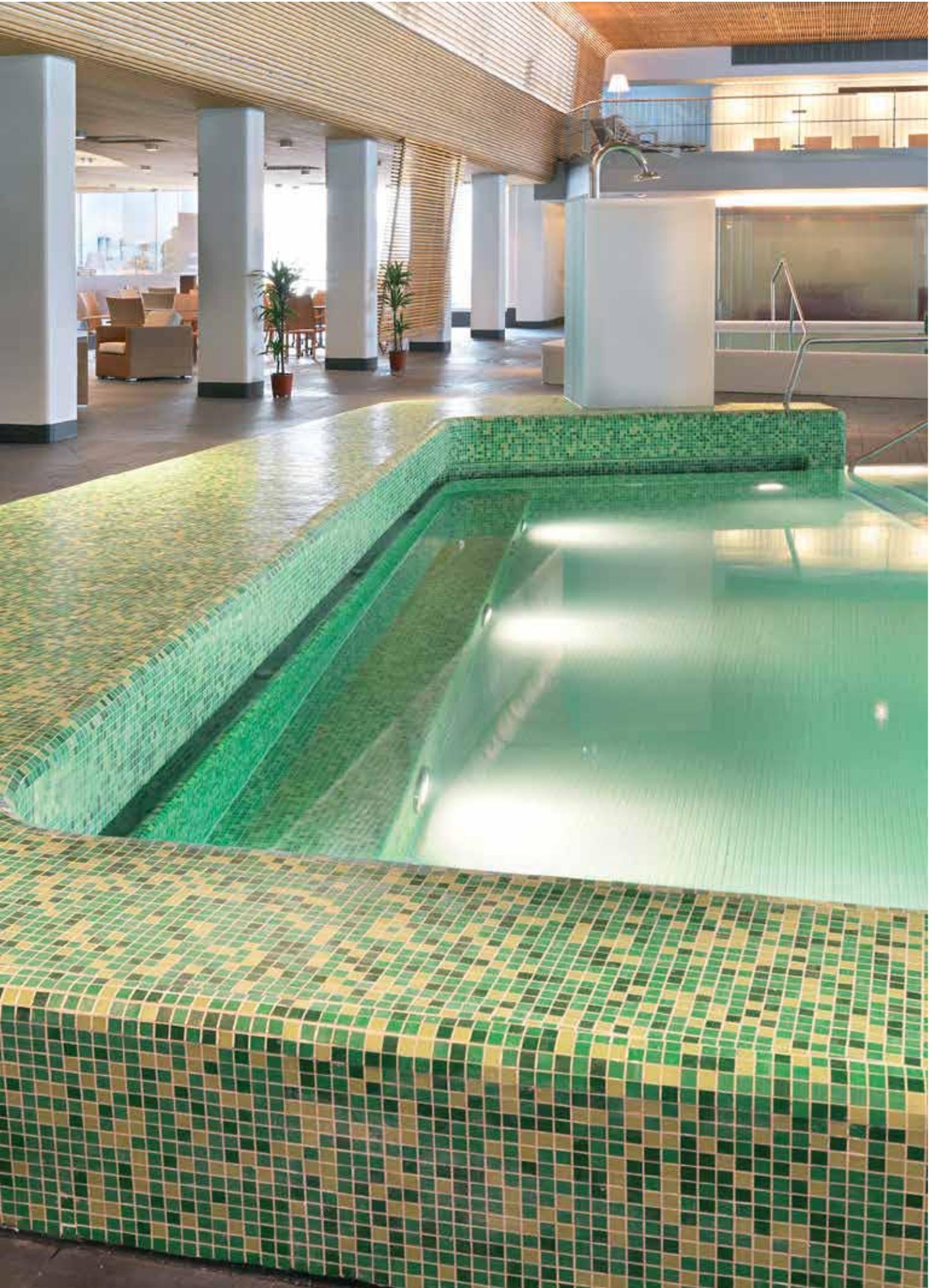
Waterproofing and tiling in sauna areas

Sauna landscapes have different areas (e.g. dry saunas, steam saunas, showers and other wet rooms), which are subject to different exposure. The waterproofing and installation systems must be matched with the prevailing conditions for each area. Due to high levels of exposure to steam in a steam sauna, the waterproofing and installation system must additionally have a vapour barrier function in order to protect moisture sensitive substrates, such as building boards made from polystyrene, from saturation from steam. This can only be fulfilled by reaction resin systems. In the more usual areas, where exposure to steam is not high, mineral-based waterproofing and installation systems may be used.

 PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant ▶ Special epoxy based primer ▶ Universal epoxy based primer 	ASO®-Unigrund ASODUR®-SG2 ASODUR®-GBM
 LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cement-based, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm ▶ Cement-based patching mortar, 5 – 40 mm, wall/floor ▶ Water repellent, rapid hardening screed mortar with high strength 	SOLOCRET®-50 ASOCRET-FM40 ASO®-EZ4-Plus
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ Trowellable, chemically resistant vapour barrier bonded polyurethane based waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 ASOFLEX-AKB
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Epoxy resin-based, chemical resistant thin-bed mortar ▶ Chemical resistant fine grain epoxy grout, two component and solvent free 	LIGHTFLEX® ASODUR®-EK98 ASODUR®-Design
 GROUTING	<ul style="list-style-type: none"> ▶ Cement-based, water impermeable grout with improved mechanical and chemical resistance for joint widths from 3 – 20 mm ▶ Epoxy resin-based, chemical resistant grout ▶ Chemical resistant fine grain epoxy grout, two component and solvent free ▶ Silicone sealant for movement joints 	HF05-Brillantfuge ASODUR®-EK98 ASODUR®-Design ESCOSIL®-2000









Waterproofing and tiling in brine pools

In addition to pools, which are filled with bathing water of drinking water quality to DIN 19 643, brine pools and their surrounds are subjected to chemical exposure from minerals and salts. The waterproofing and installation systems used in these areas must be resistant to these. As a rule, the concrete construction as well as the mineral-based levelling layers are protected against water aggressive to concrete, by these waterproofing and installation systems.

The optional use of a conductive strip and conductive lacquer between primer and the waterproofing membrane gives the possibility of a non destructive test for watertightness of the membrane using a spark coil test to DIN 55670 under high voltage. The time consuming and costly test via a 14 day trial fill of the pool with water can be dispensed with.

	PRIMING	<ul style="list-style-type: none"> ▶ Special epoxy resin based primer for damp substrates and as protection against moisture penetration from the rear ▶ Universal epoxy based primer 	ASODUR®-SG2
	LEVELLING	<ul style="list-style-type: none"> ▶ Sprayable, cement-based patching mortar, 5 – 40 mm, wall/floor ▶ Water repellent, rapid hardening screed mortar with high strength 	ASOCRET-FM40 ASO®-EZ4-Plus
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Self adhesive copper conductive strip (for conductive control, optional) ▶ Aqueous epoxy resin based conductive lacquer (for conductive control, optional) ▶ Special waterproof tape for heavy duty exposure and highly demanding areas ▶ Trowellable, chemically resistant bonded polyurethane based waterproof membrane 	ASO®-Leitband ASODUR®-V1 15W ASO®-Joint-Tape-2000-S ASOFLEX-AKB
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Epoxy resin-based, chemical resistant thin-bed mortar ▶ Chemical resistant fine grain epoxy grout, two component and solvent free 	ASODUR®-EK98 ASODUR®-Design
	GROUTING	<ul style="list-style-type: none"> ▶ Epoxy resin-based, chemical resistant grout ▶ Chemical resistant fine grain epoxy grout, two component and solvent free ▶ Silicone sealant for underwater areas 	ASODUR®-EK98 ASODUR®-Design ESCOSIL®-2000-UW



Waterproofing and installation in
special areas

Waterproofing and tiling in commercial kitchens and cool rooms

In commercial kitchens and cool rooms with surfaces to be clad in stone or ceramic, there are considerations, dependent on the area, related to exposure to aggressive media such as for example lactic acid, fatty acids, blood, cleaning materials etc. The choice of waterproofing and installation systems is geared towards chemical exposure. The exposure group according to the ZDB technical sheet (A or C) applicable to the relevant area is to be defined by the planner. In areas exposed to group C, areas with chemical exposure, may only use epoxy resin based waterproofing and installation systems.

The optional use of a conductive strip and conductive lacquer between primer and the waterproofing membrane gives the possibility of a non destructive test for watertightness of the membrane using a spark coil test to DIN 55670 under high voltage. The time consuming and costly testing of the waterproofing measures via a trial fill of the waterproofed area with water can be dispensed with.

	PRIMING	<ul style="list-style-type: none"> ▶ Special epoxy based primer ▶ Universal epoxy based primer 	ASODUR®-SG2 ASODUR®-GBM
	LEVELLING	<ul style="list-style-type: none"> ▶ Cement-based patching mortar, 5 – 40 mm, wall/floor ▶ Water repellent, rapid hardening screed mortar with high strength 	ASOCRET-FM40 ASO®-EZ4-Plus
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Trowellable, chemically resistant bonded polyurethane based waterproof membrane ▶ Special waterproof tape for heavy duty exposure and highly demanding areas ▶ Fabric reinforced sheet style bonded waterproof membrane ▶ Hydrophobic thin-bed adhesive for the installation of SANIFIN® 	ASOFLEX-AKB ASO®-Joint-Tape-2000-S SANIFIN® ADF®-Systemkleber
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Epoxy resin-based, chemical resistant thin-bed mortar 	ASODUR®-EK98
	GROUTING	<ul style="list-style-type: none"> ▶ Epoxy resin-based, chemical resistant grout ▶ Chemical resistant fine grain epoxy grout, two component and solvent free ▶ Silicone sealant for movement joints 	ASODUR®-EK98 ASODUR®-Design ESCOSIL®-2000





Conductive installation in hazardous areas, clean rooms, chemical, pharmaceutical and electronics industry

Electrostatic charge must be prevented in many sensitive industrial and medicinal areas. Vapours, gases or dust can ignite as a result of electrostatic discharge. In addition, electric fields can accumulate due to electrostatic charge build-up, which can destroy or damage electronic components. Therefore a conductive finish is always mandatory in petrol stations, laboratories, chemical and electronics industries, computer areas, clean rooms and operating theatres etc. The goal is to reduce the resistance to earth to such a level that electrostatic charge can be dissipated in non-critical areas. The use of conductive tiles or those with a conductive glaze is a prerequisite. Mineral-based systems, which cope with all demands can be found within the SCHOMBURG product range.

 PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant 	ASO®-Unigrund
 LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cementbased, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 20 mm ▶ Accelerated pre-blended mortar with high strength ▶ Smoothing compound from 3 – 30 mm, interior and exterior areas 	SOLOCRET®-15 ASO®-EZ2-Plus SOLOPLAN®-30
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Self-adhesive conductive earthing strip in a < 4 x 4 m grid ▶ Conductive dispersion for pre-mixing with the gauging water for the mineral-based tile adhesive ▶ Grey, highly flexible adhesive for interior and exterior use ▶ Accelerated hardening flow bed flexible mortar 	ASO®-Leitband ELEKTRON-PLUS MONOFLEX-XL MONOFLEX-FB
 GROUTING	<ul style="list-style-type: none"> ▶ Conductive dispersion for pre-mixing with the gauging water for HF05-Brillantfuge ▶ Silicone sealant for movement joints ▶ Polyurethane sealant for heavy duty movement joints 	ELEKTRON-PLUS HF05-Brillantfuge ESCOSIL®-2000 INDUFLEX-VK6060



Waterproofing and installation in milking parlours

Milking parlours when correctly installed to suit demands should help a smooth continuous and efficient milking process to be carried out. The use of anti-slip tiles, which are safe underfoot meets the intense requirements for cleaning and hygiene. The bonded tiled system must also be highly resistant to chemicals and mechanical stresses.

 PRIMING	<ul style="list-style-type: none"> ▶ Special epoxy resin based primer for wet areas and to protect against moisture penetration from the rear ▶ ASODUR®-GBM can be used as a universal primer, sealer and mortar resin at residual moisture levels less than 4% 	ASODUR®-SG2-thix ASODUR®-GBM
 LEVELLING	<ul style="list-style-type: none"> ▶ When levelling is required a cement replacement system can be used together with a bonding agent ▶ Alternatively a bonded screed together with a bonding slurry can be installed 	ASOCRET-FM40 ASO®-EZ4-Plus
 WATERPROOFING	<ul style="list-style-type: none"> ▶ The waterproofing is carried out with different colours of the chemically resistant polyurethane waterproof membrane ASOFLEX-AKB with ASO®-Joint-Tape-2000-S. The last coat is sanded with quartz sand. 	ASOFLEX-AKB ASO®-Joint-Tape-2000-S
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Epoxy resin-based, chemical resistant grout 	ASODUR®-EK98
 GROUTING	<ul style="list-style-type: none"> ▶ Epoxy resin-based, chemical resistant grout ▶ Chemical resistant fine grain epoxy grout, two component and solvent free ▶ Polyurethane sealant for heavy duty movement joints 	ASODUR®-EK98 ASODUR®-Design INDUFLEX-VK6060



Waterproofing and tiling in wastewater treatment plants

Concrete surfaces in wastewater treatment plants are permanently subjected to chemical, biological and mechanical stresses. Areas with vehicular traffic are also subjected to heavy duty stresses and as a rule fitted with wearing tiles. For this reason, there are intense demands on the waterproofing and installation systems.

	LEVELLING	<ul style="list-style-type: none"> ▶ Cement-based patching mortar, 5 – 40 mm, wall/floor ▶ Mineral-based corrosion inhibitor and bonding agent ▶ Water repellent, rapid hardening screed mortar with high strength ▶ Bonding agent for bonded cement-based screeds 	<p>ASOCRET-FM40 ASOCRET-KS/HB ASO®-EZ4-Plus</p> <p>ASOCRET-HB-flex</p>
	WATERPROOFING	<ul style="list-style-type: none"> ▶ Use flexible, mineral-based vapour permeable waterproof slurries for increased demands in interior and exterior areas with ASO®Joint-Tape-2000-S in movement joints and wall/floor junctions 	<p>AQUAFIN®-2K/M AQUAFIN®-RS300 ASO®-Joint-Tape-2000-S</p>
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Deformable adhesive ▶ Mineral-based thin-bed adhesive UNIFIX®-AEK with enhanced sulphate resistance or SOLOFLEX mixed with the polymer dispersion UNIFLEX®-B at a mix ratio of 6:1 by weight 	<p>UNIFIX®-2K/6 UNIFIX®-AEK SOLOFLEX UNIFLEX®-B</p>
	GROUTING	<ul style="list-style-type: none"> ▶ Cement-based, water impermeable grout with improved mechanical and chemical resistance for joint widths from 3 – 20 mm ▶ Epoxy resin adhesive and grout with high resistance to chemicals and mechanical stresses, available as wall or floor consistency ▶ Chemical resistant fine grain epoxy grout, two component and solvent free ▶ Polyurethane sealant for heavy duty movement joints 	<p>HF05-Brillantfuge</p> <p>ASODUR®-EK98</p> <p>ASODUR®-Design</p> <p>INDUFLEX-VK6060</p>





Installation of particular
materials

Installation of large format tiles

A prerequisite for the installation of large format tiles is a flat substrate. The larger the tiles, the flatter the substrate needs to be. A substrate, which conforms to the requirements of DIN 18 202 for producing surfaces, is not always adequate for the installation of large format tiles. Levelling of uneven areas and irregularities during tile installation is almost impossible with large format tiles. Render and screeds must therefore be largely flat. If this is not the case then a levelling coat will be needed. Various levelling materials are suitable such as SOLOPLAN®-30, ASO®-NM15 (self-levelling) or SOLOCRET®-15 (non sag).

Above a format of 40/40 cm, apply a contact layer to the rear of the tiles. If this contact coat is not adequate to fully cover the rear of the tile, then use the floating buttering method. When an adequate bond between the material installed and the substrate is achieved, then any stresses, which occur can be reliably dispelled and cracks in the finish prevented.

Any residual moisture present beneath the tiling e.g. from the concrete slab, screed and adhesive, can only very slowly dry out through the small number of joints. Where substrates are sensitive to moisture, this can lead to damage. The appropriate primer should be used to afford adequate protection.



PRIMING

Calcium sulphate screeds:

- ▶ Universal epoxy based primer

Cement-based screeds: solvent free primer for interior and exterior use

*

ASODUR®-GBM
ASO®-Unigrund



LEVELLING

Calcium sulphate screed: levelling compound up to 30 mm

Cement-based screed: smoothing compound up to 30 mm for interior and exterior use

- ▶ Slump resistant, rapid hardening patching mortar up to 50 mm
- ▶ Lightweight, low dust multi-purpose adhesive and smoothing compound up to 15 mm

*

ASO®-NM15
SOLOPLAN®-30

SOLOCRET®-50
LIGHTFLEX®



WATERPROOFING

- ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas

*

AQUAFIN®-2K/M
AQUAFIN®-RS300



TILE INSTALLATION

- ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques
- ▶ Grey, highly flexible adhesive for interior and exterior use
- ▶ Accelerated hardening flow bed flexible mortar
- ▶ Highly deformable flexible adhesive for heavy duty areas
- ▶ Deformable adhesive
- ▶ Deformable, rapid hardening flexible adhesive for heavy duty areas, also for natural stone, with FAST TECHNOLOGY
- ▶ Flexible natural stone adhesive
- ▶ Flexible natural stone adhesive

LIGHTFLEX®¹⁾

MONOFLEX-XL¹⁾
MONOFLEX-FB¹⁾
UNIFIX®-S3
UNIFIX®-2K/6
UNIFIX®-S3-FAST

CRISTALLIT®-flex¹⁾
CRISTALLIT®-MULTI-flex¹⁾



GROUTING

- ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY
- ▶ Rapid hardening flexible grout, 3 – 20 mm joint width

CRISTALLFUGE PLUS

ASO®-Flexfuge

* Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".

¹⁾ With cement-based thin-bed adhesives we recommend the addition of polymer dispersions such as UNIFLEX®-B to compensate for stresses between substrate and ceramic tile.

Installation of porcelain vitrified tiles

Porcelain tiles are designated as tiles with water absorption $\leq 0.5\%$. This concerns a dry pressed fully vitrified material with an extremely high density. These properties impart frost resistance and high abrasion resistance and tensile strength. For these reasons they can be installed in heavy duty areas with intense use.

To install porcelain tiles, polymer modified adhesives are needed in order to produce an optimum bond to the very dense surface of the tile. For grouting porcelain tiles, grouts with accelerated setting are suitable as the joint edges offer no depot effect, where water once given up can be retrieved during the time of hydration.

	PRIMING	Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".	
	LEVELLING	Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".	
	DE-COUPLING/ INSULATION	▶ Thermally insulating impact sound deadening and decoupling board, 4/9/15 mm	STEPBOARD
	WATERPROOFING	Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".	
	TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Lightweight, low dust flexible adhesive for thin, medium and thick bed installation techniques ▶ Grey, highly flexible adhesive for interior and exterior use ▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use 	LIGHTFLEX® MONOFLEX-XL SOLOFLEX-FAST
	GROUTING	<ul style="list-style-type: none"> ▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant for movement joints 	ASO®-Flexfuge CRISTALLFUGE PLUS ESCOSIL-2000





Installation of synthetic (agglomerated) stone tiles

Synthetic stones are agglomerates from natural stones, which are bound with cement or resin. These synthetic stones enjoy growing popularity, as the range of designs due to optical versatility in form and colour appears to be endless. This high quality material excels as a rule through high levels of durability. A few of these materials have pronounced expansion, so that long term exposure to moisture can lead to so-called "curling". As a rule they can be laid with a highly polymer modified thin-bed adhesive with rapid crystalline water binding technology. A few of these materials, especially those with high serpentinite components can "curl", which can only be prevented by installing with a reaction resin adhesive. Our technical department is available for individual advice.



PRIMING

Preparatory work depends on the type of substrate and its condition, followed by waterproofing appropriate to the wet duty exposure class. * Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".



LEVELLING



WATERPROOFING



TILE INSTALLATION

- ▶ Epoxy resin-based, chemical resistant mortar
- ▶ Deformable, rapid hardening flexible adhesive for heavy duty areas, also for natural stone, with FAST TECHNOLOGY
- ▶ Flexible natural stone adhesive, modified with 2.0 – 4.2 kg UNIFLEX®-B
- ▶ Polymer dispersion

ASODUR®-EK98
UNIFIX®-S3-FAST

CRISTALLIT®-flex

UNIFLEX®-B



GROUTING

- ▶ Mineral-based multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY
- ▶ Rapid hardening flexible grout, 3 – 20 mm joint width
- ▶ Silicone sealant for use with natural stone

CRISTALLFUGE PLUS

ASO®-Flexfuge
ESCOSIL®-2000-ST



Installation of glass tiles and mosaics

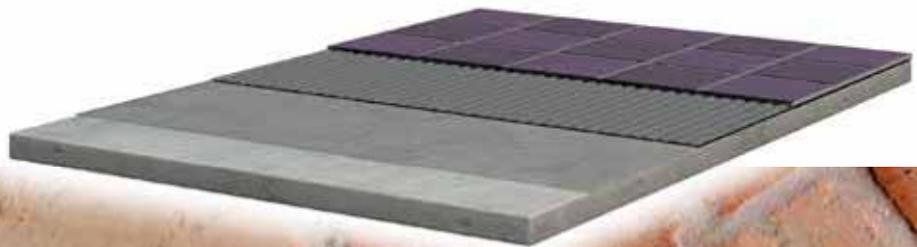
Glass tiles and mosaics are translucent or transparent with a coating to the rear. Without a rear coating the adhesive is visible. Selecting a white adhesive intensifies the colour of the glass tile or mosaic. ASODUR®-Design can be used for the installation and grouting of translucent glass mosaics for equal colour. To achieve good adhesion to the glass, a highly modified adhesive should be used. Optimum results are achieved, as a rule with epoxy resin based adhesives, which can also serve as the grout for glass tiles and mosaics.

 PRIMING	<ul style="list-style-type: none"> ▶ Solvent free universal primer, water and alkali resistant ▶ Special epoxy resin based primer ▶ Universal epoxy based primer 	ASO®-Unigrund ASODUR®-SG2 ASODUR®-GBM
 LEVELLING	<ul style="list-style-type: none"> ▶ Non-sag, cementbased, rapid hardening, polymer modified, low shrinkage and creamy smoothing compound, 2 – 50 mm ▶ Smoothing compound from 3 – 30 mm ▶ Water repellent, rapid hardening screed mortar with high strength 	SOLOCRET®-50 SOLOPLAN®-30 ASO®-EZ4-Plus
 WATERPROOFING	<ul style="list-style-type: none"> ▶ Flexible, mineral-based, vapour permeable waterproof slurry for areas with increased demands in interior and exterior areas ▶ Trowellable, chemically resistant bonded polyurethane based waterproof membrane 	AQUAFIN®-2K/M AQUAFIN®-RS300 ASOFLEX-AKB
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ White flexible adhesive for installation in thin-bed techniques ▶ White, rapid hardening flexible adhesive for installation in thin-bed techniques ▶ Chemical resistant fine grain epoxy grout, two component and solvent free 	SOLOFLEX-white¹⁾ UNIFIX®-S3-FAST²⁾ ASODUR®-Design
 GROUTING	<ul style="list-style-type: none"> ▶ Mineralbased multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Chemical resistant fine grain epoxy grout, two component and solvent free ▶ Silicone sealant for movement joints 	CRISTALLFUGE PLUS ASODUR®-Design ESCOSIL®-2000

Installation of cotto

Cotto is an elaborate production process from fired clay material with a quite particular charm. Particular care and practical knowledge is needed to install. Installation on damp screeds can quickly lead to efflorescence. In order to keep drying times short, a thin or medium bed adhesive with rapid crystalline water binding technology should be used. Before grouting, it is recommended to impregnate the dry tiles in order to ease the wash-off process during grouting. Once hardened the tiles must be carefully acid washed. This is still necessary with a cleanly washed surface to remove the tiles own lime. The tiled finish must then thoroughly dry out before the final treatment with cotto wax or oil is applied.

	PRIMING	Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".	
	LEVELLING	Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".	
	DE-COUPLING/ INSULATION	▶ Thermally insulating impact sound deadening and de-coupling board, 4/9/15 mm	STEPBOARD
	WATERPROOFING	Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".	
	TILE INSTALLATION	▶ Rapid hardening, highly slump resistant flexible adhesive for interior and exterior use ▶ Flexible natural stone adhesive	SOLOFLEX-FAST CRISTALLIT®-MULTI-flex
	GROUTING	▶ Rapid hardening flexible grout, 3 – 20 mm joint width ▶ Cleaner for removal of cement or lime contamination ▶ Silicone sealant, neutral curing, free from plasticizers	ASO®-Flexfuge ASO®-StoneCleaner ESCOSIL®-2000-ST





Installation of natural stone

Natural stone offers fascinating variations in structure and surfaces that make the whole area unique. The atmosphere of a room is especially enhanced by natural products. The use of unsuitable adhesives and grouts can certainly destroy this picture. An assured and effective alternative is offered by the CRISTALLIT® natural stone range. This is produced with high quality white cements. The mix water is quickly bound in a crystalline way and is only in contact with the stone material for a very short time.

 PRIMING	Dependent on the substrate, as a rule with: <ul style="list-style-type: none"> ▶ dispersion concentrate *	ASO®-Unigrund-K
 LEVELLING	Dependent on the substrate and area of application e.g.: <ul style="list-style-type: none"> ▶ Smoothing compound up to 30 mm in interior and exterior areas for cementitious substrates ▶ Levelling compound for floors up to 30 mm in interior areas for calcium sulphate substrates *	SOLOPLAN®-30 ASO®-NM15
 WATERPROOFING	Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".	
 TILE INSTALLATION	<ul style="list-style-type: none"> ▶ Universal flexible natural stone adhesive with long working time, up to 10 mm mortar bed thickness with FAST TECHNOLOGY ▶ Flexible natural stone adhesive ▶ Grey thin-bed and medium-bed adhesive with rapid crystalline water binding, FAST TECHNOLOGY 	CRISTALLIT®-flex CRISTALLIT®-MULTI-flex SOLOFLEX-FAST
 GROUTING	<ul style="list-style-type: none"> ▶ Mineralbased multi-function flexible grout for tiles, natural stone and other finishes from 1-10 mm joint widths with FAST TECHNOLOGY ▶ Silicone sealant, neutral curing, for natural stone 	CRISTALLFUGE PLUS ESCOSIL®-2000-ST

* Also refer to the index "Installation on various substrates" and "Waterproofing and installation, interior and exterior".





General information



The correct primer for each application

Priming prior to the installation of tiles without a waterproof membrane	ASO®-Unigrund-GE	ASO®-Unigrund-K	ASO®-Unigrund-S	ASODUR®-GBM	ASODUR®-SG2	ASODUR®-SG2-thix	ASODUR®-V360W
	Substrates floor areas						
Concrete	■	■	■	■	■	■	■
Cement-based screed	■	■	■	■	■	■	■
Calcium sulphate screed ⁴⁾	■	■	■	■			■
Calcium sulphate flow screed ^{1) 4)}	■	■	■	■			■
Xylo-lite / magnesite screed				■			■
Asphalt			■	■	■		
ASODUR®-LE epoxy resin screed				■			■
Terrazzo or stone floor ²⁾			■	■	■	■	
Existing tiled finish			■	■	■ ³⁾	■ ³⁾	
Substrates wall areas							
Concrete	■	■	■	■	■	■	■
Aerated concrete	■	■	■				■
Lime-cement render and cement render	■	■	■	■	■	■	■
Gypsum plaster	■	■	■				
Moisture resistant plasterboard	■	■	■				
Existing tiled finish			■	■		■	
Chipboard			■	■			

■ particularly suitable
■ limited suitability

- 1) Calcium sulfate screeds must be abraded and be ready to apply finishes.
2) Terrazzo and stone flooring must be free from separating layers.
3) Lightly abrade tiled finishes with 20 or 40 grit paper.
4) When fixing large format tiles, prime with ASODUR®-GBM.

NOTE

- ▶ When using ASODUR® primers, broadcast quartz sand on to the primer whilst it is still wet.
- ▶ Refer to the technical data sheets of the products used.



The correct adhesive system for

cotto, natural and agglomerated stone

SCHOMBURG adhesive systems for cotto, natural and agglomerated stone				<ul style="list-style-type: none"> ▶ Rapid setting ▶ Rapid crystalline water binding technology ▶ White 	
				Adhesive bed thickness	
				3–10 mm	3–15 mm
Rock				CRISTALLIT®-flex	CRISTALLIT®-MULTI-flex
Igneous rocks	Intrusive igneous rocks (plutonite)	Granite	Rosa Beta, Imperial Red, Baltic brown, Lausitz, Waldstein yellow	■	■
		Granite	Padang Crystal, Padang light, Bianco Sardo	■	
		Diorite	Fürstensteiner, Nero Tijuca	■	■
		Gabbro	Impala, Nero Impala, Star Galaxy	■	■
		Syenite	Cardinal, Blue pearl	■	■
		Foyaite	Azul Bahia, Namibia Blue	■	■
	Extrusive igneous rocks (vulcanite)	Rhyolite/Porphry	Trentine Porphyry, Porfiris, Porfido	■	■
		Basalt lava	Basaltino, Rhine basalt lava	■	■
Sedimentary rocks	Sedimentary rock	Lime breccia	Breccia Aurora	■	■
		Serpentine breccia	Rosso Levanto		
		Sandstone	Red Main sandstone, Ruhr sandstone, Abtswind sandstone (Schilfsandstein), Weser sandstone	■	■
		Lime sandstone	Anröchte lime-sandstone	■	■
		Tonschiefer	Porto slate, Korling slate, Mustang, Papagaios Black	■ 1)	
	Chemical sedimentary rocks	Limestone	Trani, Jura yellow, Jerusalem stone, Botticino, Solnhofen limestone, Travertine fine limestone, Onyx, Bad Cannstatt, Bad Langensalza	■	■
			Moleanos	■	
			lacustrine limestone, Blaubank-Kernstein, Kernstein, Belgian granite, Nero Marquina, Kleinziegenfeld, Dolomite	■	■
Transformed rocks (metamorphic rocks)	Marble	Thassos, Bianco Carrara, Estremoz, Arabescato, Namaqua	■	■	
		Palisandro, Norwegian Rose	■	■	
	Gneis	Soglio, Onserone, Maggia	■	■	
		Rio Branco, Kashmir White, Imperial White, Juparana Gold, Sarizzo	■	■	
	Quartzite	Verde Spugla, Azul Imperial, Quartzite yellow, Azul Macaubas, Pacific Blue	■	■	
	Muscovite quartzite	Alta Quartzite	■	■	
	Slate	Peacock, Multicolor, Otta slate, Theuma Fruchtschiefer	■ 1)		
	Serpentinite	Verde Alpi, Verde Naoussa, Verde Tino, Rosso Levanto, Tinos Green			
Agglomerate stone	Cement binder	Artificial stone	Breccia Aurira, Alpine marble beige, Carrara white, Quarella series: „Bianco Arco Iris“	■	■
	Resin binder	Without serpentine content	Arabescato, Granite 90, Quarella series: fantasia, Millennium, cromatica, granitica, pastelli, luciente Omnistone series: starlight and others Objekt-Stone: Micronit series and others Prossimesuperfici series: Luce, Cristallo, Oriente	■ 1)	
		With serpentinite content	Veltro 90; Quarella: Verde Tirreno, Rosso Asiago, Verde Levanto		
	Cotto		Several types	■	■

■ particularly suitable
■ limited suitability

1) 25 kg of adhesive modified with 2 kg UNIFLEX®-B.

2) Treat the rear of the stone with AQUAFIN®-2K/M-white before installing using thick-bed techniques.



NOTE

- ▶ Where there are larger variations in stone thickness, use traditional installation methods with the screed mortars ASO®-EZ4-Plus or ASO®-EZ6-Plus.
- ▶ Generally install un-calibrated natural stone tiles using medium-bed methods.
- ▶ Please contact the Technical Services Department for detailed information.

Installation using thin-bed and medium-bed method			Installation using thick-bed method	
▶ Water free ▶ Reaction resin	▶ Highly deformable ▶ Rapid setting ▶ Rapid crystalline water binding technology ▶ White	▶ Rapid setting ▶ Rapid crystalline water binding technology ▶ Grey	▶ Interior area ▶ Exterior area	▶ Interior area
up to 5 mm	up to 5 mm	3–15 mm	15–50 mm	15–50 mm
ASODUR®-EK98	UNIFIX®-S3-FAST	SOLOFLEX-FAST	ASO®-EZ4-Plus	ASO®-EZ6-Plus
■	■	■	■	■
■				
■	■	■	■	■
■	■	■	■	■
■	■	■	■	■
■	■	■	■	■
■	■	■	■	■
	■		■ 2)	■ 2)
■				
■		■	■	■
		■	■	■
■	■ 1)	■ 1)		
			■ 2)	■ 2)
		■	■ 2)	■ 2)
			■ 2)	■ 2)
			■ 2)	■ 2)
■		■	■	■ 2)
		■		
■	■	■	■	■
■	■	■ 1)		
■				
■	■	■	■	■
■	■			
■				
		■		

The correct grout for each application

Grouts for each area of application	HF05-Brilliantfuge Joint width 3 – 20 mm	ASO®-Flexfuge Joint width 3 – 20 mm	ASO®-Fugenbreit Joint width 4 – 20 mm	ASO®-Fugenbunt Joint width 1,5 – 6 mm	CRISTALLFUGE PLUS Joint width 1 – 10 mm	ASODUR®-EK98-Wall Joint width 3 – 10 mm	ASODUR®-EK98-Floor Joint width 1 – 15 mm	ASODUR®-Design Joint width 1 – 7 mm
Basis	Cement	Cement	Cement	Cement	Cement	Epoxy resin	Epoxy resin	Epoxy resin
Classification in accordance with EN 13888	CG 2 WA	CG 2 WA	CG 1	CG 1	CG 2 WA	RG	RG	RG
Interior areas	■	■	■	■	■	■	■	■
Exterior areas	■	■		■	■	■	■	■
Under water areas	■	■			■	■	■	■
Wall areas	■	■	■	■	■	■	■	■
Floor areas	■	■	■	■	■	■	■	■
Medium chemical resistance	■	■			■	■	■	■
High chemical resistance	■					■	■	■
High mechanical resistance	■	■			■	■	■	■
Water and stain repellent	■	■		■	■	■	■	■
Tiles with high water absorption White/red bodied earthenware		■		■	■	■	■	■
Tiles with low water absorption Vitrified tiles, clinker	■	■	■	■	■	■	■	■
Porcelain, agglomerated resin-bonded stone tiles	■	■		■	■	■	■	■
Natural stones		■			■	■	■	■
Cotto		■	■		■			
Glass mosaics and glass tiles					■	■	■	■

■ particularly suitable
■ limited suitability



NOTE

Refer to the specific product properties of the tiles.





The correct joint sealant for each application

Joint sealants for each application	ESCOSIL®-2000	ESCOSIL®-2000-ST	ESCOSIL®-2000-UW	INDUFLEX-VK6060	ASODUR®-EP/FM
Material-Basis	Silicone acetic cure	Silicone neutral oxime cure	Silicone neutral oxime cure, silicone oils	1 comp. polyurethane	Epoxy polyurethane
Interior areas	■	■	■	■	■
Exterior areas	■	■ 1)	■ 1)	■	
Under water areas		■ 1)	■ 1)		■
Wall areas	■	■	■	■	
Floor areas	■	■	■	■	■
Restricted chemical exposure	■	■ 1)	■ 1)	■	■
Heavy duty chemical exposure					
Heavy duty mechanical stresses				■	■ 3)
Tiles	■	■	■	■	■
Tiles with surface coating, e.g. Ceramicplus	■ 1)	■ 1)	■ 1)	■	■
Artificial stone		■ 1)	■ 1)	■	
Natural stone		■			
Sandstone		■ 3)			
Cotto		■			
Glas, glass mosaics and glass tiles	■	■	■ 1)	■	
Mineral substrates, such as e.g. concrete, plaster, masonry	■ 1)	■ 1)	■ 1)	■ 1)	■
Concrete stone, Cement tiles		■ 1)		■	
Stainless steel	■ 1)	■ 1)	■ 1)	■	■ 2)
Cast iron		■ 1)	■ 1)	■	■ 2)
Iron, abraded		■		■	■ 2)
Aluminium untreated	■	■	■ 1)	■	■ 2)
Aluminium, anodised	■ 1)	■	■ 1)	■	■ 2)
Copper		■*		■	■ 2)
Brass		■*		■	■ 2)
Zinc	■ 1)	■ 1)	■ 1)	■	■ 2)
Tinplate	■ 1)	■ 1)	■ 1)	■	■ 2)
Wood, glazed	■ 1)	■		■	
Melamine resin	■ 1)	■ 1)	■ 1)	■	
Plastic profiles	■	■	■	■	■ 2)
PVC	■	■	■	■	■ 2)
PE, PP, Teflon					

■ particularly suitable
■ limited suitability

*Possible reaction with non-ferrous metal ("tarnishing")

1) Prime beforehand as necessary
2) Prime with ASO®-Primer-2000
3) Prime with ASODUR®-GBM

The correct adhesive for each application



NOTE

- ▶ Refer to the technical data sheet for the specified products.
- ▶ The recommendations do not replace any technical advice given.

Substrate preparation/application	Advice on substrate preparation	Priming
Classification to DIN EN 12004		
Wall cladding in interiors and exteriors		
Renders PG I/III to DIN 18550	Remove projecting render	ASO®-Unigrund
Masonry work to DIN 1053, part 1	Masonry work flat and flush pointed, apply reinforced render to mixed masonry work, masonry work in stone with binder min. 6 months old	ASO®-Unigrund
Minimum age 6 months 4) 5)	Remove laitance layers as necessary using e.g. shot blasting, high pressure washing	ASO®-Unigrund
Minimum age 3 months 4) 5)	Remove laitance layers as necessary using e.g. shot blasting, high pressure washing	ASO®-Unigrund
Minimum age 28 days 4) 5)	Remove laitance layers as necessary using e.g. shot blasting, high pressure washing	
Dry lining boards e.g. moisture resistant plasterboard to DIN 18181, gypsum fibre boards, mesh reinforced polystyrene	Adequately load bearing and suitable as a substrate for tile installation	ASO®-Unigrund
Ceramic finishes, natural and agglomerate stone well bonded load bearing	Clean and degrease, abrade as necessary	ASO®-Unigrund-S or scratch coat with AQUAFIN®-2K/M
Paint and coatings well bonded, load bearing	Remove emulsion paints, abrade lacquers and oil paints. We recommend a test bond. Exclude rising damp from the substrate.	ASO®-Unigrund-S or scratch coat with AQUAFIN®-2K/M
Styrofoam e.g. bath panels	Contact coat with MONOFLEX, LIGHTFLEX®, SOLOFLEX	
Timber substrates, load bearing e.g. chipboard on rigid studwork	Additional screws as necessary, test for suitability	ASO®-Unigrund-S, lay STEPBOARD 9 or 15 mm
Floor finishes interiors		
Unheated cement-based screeds to DIN 18560, unbonded or floating, minimum age 28 days and residual moisture < 2.0% by the carbide CM method	Adhesively seal cracks present with ASODUR®-K900 and broadcast with sand	ASO®-Unigrund
Heated cement-based screeds to DIN 18560, unbonded or floating, minimum age 28 days and residual moisture < 2.0% by the carbide CM method	Follow the commissioning process	ASO®-Unigrund
Green cement-based screed 1) unbonded or floating heated and unheated, will take foot traffic (min. 3 days old) to DIN 18560, load bearing	Non sanded, follow commissioning process after tiling	
Calcium sulphate screeds to DIN 18560 and calcium sulphate bound substrates e.g. levelling compounds, unheated	Abrade screed. Residual moisture < 0.5% by the carbide CM method, exclude rising damp from the substrate	ASODUR®-GBM, ASO®-Unigrund-S, ASO®-Unigrund-GE
Calcium sulphate screeds to DIN 18560 and calcium sulphate bound substrates e.g. levelling compounds, heated	Abrade screed. Residual moisture < 0.3% by the carbide CM method, exclude rising damp from the substrate	ASODUR®-GBM, ASO®-Unigrund-S, ASO®-Unigrund-GE
Calcium sulphate screeds to DIN 18560 and calcium sulphate bound substrates e.g. levelling compounds, heated and unheated with a residual moisture < 1.5% or < 1.0% by the carbide CM method.	Abrade screed, exclude rising damp from the substrate	ASO®-Unigrund-K, mixing ratio 1:3 or ASO®-Unigrund-GE ASO®-Unigrund-S
Minimum age 6 months, concrete to DIN 1045 4) 5)	Remove laitance layers e.g. grit blasting	ASO®-Unigrund
Minimum age 3 months, concrete to DIN 1045 4) 5)	Remove laitance layers e.g. grit blasting	ASO®-Unigrund
Minimum age 28 days, concrete to DIN 1045 4) 5)	Remove laitance layers e.g. grit blasting	
Magnesite screeds heated to DIN 18560	Exclude rising damp from the substrate	ASODUR®-V360W, broadcast with 0.2 – 0.7 mm quartz sand
Magnesite screeds unheated to DIN 18560	Exclude rising damp from the substrate	ASODUR®-V360W, broadcast with 0.2 – 0.7 mm quartz sand
Poured asphalt screeds of hardness class IC10 to DIN 18560	Only for interiors, screeds must be rubbed down with sand, prime shiny screeds with ASODUR®-GBM as necessary	ASODUR®-GBM, broadcast with 0.2 – 0.7 mm quartz sand
PVC flooring well bonded, load bearing	Clean with wax remover, abrade / roughen	Scratch coat with UNIFIX®-2K
Timber substrates load bearing e.g. chipboard, parquet, floorboards	Prime timber substrate with ASODUR®-GBM and lay ASODUR®-LE whilst primer is still wet Additional screws as necessary, seal joints between floorboards etc with Tagomastic Build-up with 9 or 15 mm STEPBOARD de-coupling board	ASODUR®-GBM ASO®-Unigrund-S, ASODUR®-GBM
Ceramic finishes, natural and agglomerate stone well bonded, load bearing	Clean and degrease, abrade as necessary	ASO®-Unigrund-S or scratch coat with AQUAFIN®-2K/M
Dry lining boards e.g. gypsum fibre boards, mesh reinforced polystyrene	Do not use gypsum based joint fillers	ASO®-Unigrund
Exterior floor finishes without insulation		
Minimum age 6 months, concrete to DIN 1045 4) 5)	Remove laitance layers e.g. grit blasting or high pressure water blasting	ASO®-Unigrund
Minimum age 3 months, concrete to DIN 1045 4) 5)	Remove laitance layers e.g. grit blasting or high pressure water blasting	ASO®-Unigrund
Minimum age 28 days, concrete to DIN 1045 4) 5)	Remove laitance layers e.g. grit blasting or high pressure water blasting	
Cement-based screed will take foot traffic (min. 3 days old) to DIN 18560, load bearing 1)	Not sanded	
Ceramic finishes, natural and agglomerate stone well bonded, load bearing	Clean with universal cleanser or abrade	ASO®-Unigrund-S
Tiled finishes		
Tile installation earthenware tiles		
Tile installation vitrified tiles		
Tile installation porcelain tiles (ceramic tiles with water absorption < 0.5%)		
Agglomerate and natural stone installation, thin-bed (up to 5 mm adhesive bed), interiors 2)		
Agglomerate and natural stone installation, medium-bed (> 5 mm adhesive bed), interiors 2)		
Glass mosaics and glass tiles 2)		
Large format tiles 2)		
Cotto 2)		

Product overview



PRIMING

ASO®-Primer-2000

Primer / adhesion promoter for non-porous substrates

PROPERTIES

- ▶ One component primer for non-porous substrates on joint edges.
- ▶ As a substrate preparation for floor drains with subsequent application of bonded waterproof membranes.



ASO®-Unigrund-GE

Ready-to-use primer

PROPERTIES

- ▶ Solvent-free primer - pigmented green for the identification of primed areas.
- ▶ Primer for use beneath solvent-free surface applied waterproofing materials and tile adhesives.
- ▶ For interior and exterior use.
- ▶ Very low emissions - GEV EMICODE EC1 PLUS.
- ▶ Fulfills the AgBB scheme requirements.



ASO®-Unigrund-K

Primer concentrate

PROPERTIES

- ▶ Solvent-free, colourless primer for porous and lightly sanded substrates such as render/plaster, concrete, screed and similar, prior to the application of waterproof membranes or fixing tiling.
- ▶ Very low consumption and multi-purpose application.
- ▶ For interior and exterior use.
- ▶ Very low emissions - GEV EMICODE EC1 PLUS.
- ▶ Fulfills the AgBB scheme requirements.



ASO®-Unigrund-S

Special rapid adhesion promoting primer

PROPERTIES

- ▶ Solvent free, ready to use primer for improving the adhesion on absorbent and non-absorbent substrates in interior and exterior areas - prior to the installation of ceramic finishes with cement-based or dispersion-based thin-bed or medium-bed SCHOMBURG adhesives.
- ▶ For reducing the absorption of the substrate and for protecting moisture sensitive substrates from the water within the adhesives.
- ▶ Very low emissions - GEV EMICODE EC1 PLUS.
- ▶ Fulfills the AgBB scheme requirements.



ASODUR®-GBM

Priming, sealing and mortar resin

PROPERTIES

- ▶ 2 component, solvent free, low viscosity, highly fillable epoxy resin resistant to chemicals and weathering.
- ▶ For priming and sealing of concrete and cement-based screed surfaces. Furthermore as a binder for producing smoothing mortars and screeds / mortars e.g. in production areas, warehouses and loading ramps.



ASODUR®-SG2

Special primer

PROPERTIES

- ▶ 2 component, low solvent epoxy resin.
- ▶ Moisture tolerant and impermeable to water vapour.
- ▶ Excellent bond to damp substrates.
- ▶ For producing capillary breaking joints in swimming pools.
- ▶ For priming oil contaminated, previously cleaned concrete surfaces.
- ▶ As a rigid, retrospectively applied waterproofing coat for matt damp cementitious substrates subjected to negative water pressure.
- ▶ For horizontal surfaces.
- ▶ Certified radon barrier.

**ASODUR®-SG2-thix**

Special primer - thixotropic

PROPERTIES

- ▶ 2 component, solvent-free epoxy resin.
- ▶ Moisture tolerant and impermeable to water vapour.
- ▶ Excellent bond to damp substrates.
- ▶ As a rigid, retrospectively applied waterproofing coat for matt damp cement-based substrates subjected to negative water pressure.
- ▶ For vertical surfaces.

**AQUAFIN®-RS300**

Rapid setting hybrid waterproof membrane

PROPERTIES

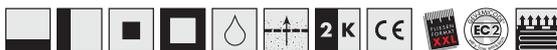
- ▶ For an efficient application in construction waterproofing and as a bonding membrane beneath tiles.
- ▶ Highly flexible, crack-bridging and multi-functional.
- ▶ Hydraulic cure and self cross-linking.
- ▶ Very low loss on drying.
- ▶ Rainproof, traffickable and ready to overcoat after only 3 hours on surfaces with falls.
- ▶ Vapour permeable and resistant to frost, UV and ageing.
- ▶ Rapid reactive through drying.
- ▶ Suitable for all load-bearing substrates conventional to construction.
- ▶ Easy and very smooth application.
- ▶ Can be brushed, trowelled or sprayed with suitable equipment.
- ▶ Solvent free.
- ▶ High sag resistance.
- ▶ Bonds to matt-damp substrates without priming.

**UNIFIX®-2K**

Flexible tile adhesive, water impermeable, frost resistant

PROPERTIES

- ▶ Tested to DIN EN 12004 and DIN EN 12002, C1 TE S2.
- ▶ For interior and exterior use.
- ▶ With high deformability.
- ▶ UNIFIX-2K is used as a thin-bed adhesive for vitrified tiles, earthenware tiles, ceramic tiles with low water absorption $\leq 0.5\%$ (porcelain), clinker, mosaic and natural stone that is not transparent or prone to discolouration.
- ▶ For critical surfaces and heavy duty applications.
- ▶ Especially suitable for swimming pools, balconies and terraces.
- ▶ Very low emissions - GEV EMICODE EC2 R.
- ▶ Fulfills the AgBB scheme requirements.





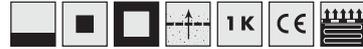
LEVELLING

ASO®-EZ2-Plus

Accelerated pre-blended mortar with high strength

PROPERTIES

- ▶ Fibre reinforced special cement-based screed for producing screeds on insulation, separating layers or bonded screeds.
- ▶ Traffic after approx. 6 hours. For „wet in wet“ applications or as a screed which can be tiled after approx. three days.
- ▶ Heated screeds can be commissioned after only approx. 3 days in accordance with recognised technical regulations.
- ▶ Classification: CTC60F7-A9.



ASO®-EZ4-Plus

Water repellent accelerated pre-blended mortar

PROPERTIES

- ▶ Fibre reinforced screed and thick bed mortar.
- ▶ Rapid hardening pre-blended mortar for producing cement-based screeds on insulation or separating layers and heated screeds in interior and exterior areas.
- ▶ Especially suitable for the installation of uncalibrated natural stone.
- ▶ Mortars produced with ASO-EZ4-Plus offer protection against moisture and frost damage as capillary action is eliminated.
- ▶ For interiors and exteriors.
- ▶ Foot traffic after approx. 6 hours. For „wet in wet“ applications or as a screed which can be tiled after three days.
- ▶ Heated screeds can be commissioned after approx. 3 days in accordance with recognised technical regulations.
- ▶ For levelling substrate irregularities.
- ▶ Classification: CTC50F6-A9.



ASO®-NM15

Floor levelling compound - interiors up to 30 mm

PROPERTIES

- ▶ Tested to DIN EN 13813, CA-C20F7.
- ▶ Self-smoothing, calcium sulphate based, polymer-modified levelling mortar, low-stress and rapid-hardening.
- ▶ For thicknesses between 2 and 30 mm.
- ▶ For smoothing, evening-up and filling of holes.
- ▶ Suitable for heated screeds.
- ▶ Very low emissions - GEV EMICODE EC 1 R.



ASOCRET-FM40

Repair mortar for concrete structures

PROPERTIES

- ▶ Tested to DIN EN 1504-3.
- ▶ Cement-based, chloride free re-profiling mortar of mortar group M2 for vertical and horizontal surfaces.
- ▶ Impedes the penetration of CO₂.
- ▶ Water impermeable.
- ▶ Water vapour permeable.
- ▶ Resistant to frost and de-icing salts.
- ▶ Used for horizontal, vertical and „over head“ areas as an anti-sag re-profiling mortar for defects from 5 - 40 mm.
- ▶ Thicknesses up to 20 mm are possible as a single layer.
- ▶ For the repair of concrete surfaces (e.g. concrete parapets, swimming pools etc).
- ▶ Can be trowel applied or sprayed with suitable equipment.



ASOCRET-HB-flex

Contact and bonding slurry

PROPERTIES

- ▶ Especially suitable as a contact and adhesion promoting slurry for the installation of tiles and slabs using traditional sand cement bedding.
- ▶ As a bonding agent for bonded cement-based screeds.
- ▶ Polymer modified, heavy duty use.
- ▶ ASOCRET-HB-flex is particularly matched to the special screed cements from the ASO®-EZ series.



ASOCRET-KS/HB

Mineral-based corrosion inhibitor and bonding agent

PROPERTIES

- ▶ Cement-based polymer modified fine mortar.
- ▶ Tested to DIN EN 1504-3.
- ▶ As a corrosion inhibitor for bare and shot-blasted metal reinforcement and as an bonding agent in concrete renovation.

**ASODUR®-LE**

Lightweight epoxy resin screed

PROPERTIES

- ▶ 3 component, solvent free, epoxy resin-based lightweight aggregate mix.
- ▶ As a substrate to receive finishes used over old timber floor boards before fixing ceramic floor tiles, parquet, PVC and carpet.
- ▶ Especially lightweight and stable.
- ▶ From a minimum application thickness: 15 mm.
- ▶ Fulfills the AgBB scheme requirements.

**ASOFLEX-AKB-Floor**

Two component waterproof membrane

PROPERTIES

- ▶ 2 component solvent-free, pigmented polyurethane resin. Elastic with excellent crack bridging capabilities and good chemical resistance.
- ▶ Building regulations approved within the DENSARE®-2002 system for wet duty classes A, B and C as waterproofing beneath tiles.
- ▶ For producing capillary breaking layers at the poolside edge of swimming pools.

COLOURS

blue (RAL 5013), grey (RAL 7038)

**ASOFLEX-AKB-Wall**

Two component waterproof membrane

PROPERTIES

- ▶ 2 component solvent-free, pigmented polyurethane resin. Elastic with excellent crack bridging capabilities and good chemical resistance.
- ▶ Building regulations approved within the DENSARE®-2002 system for wet duty classes A, B and C as waterproofing beneath tiles.

COLOURS

blue (RAL 5013), grey (RAL 7038)

**LIGHTFLEX®**

Multi-functional flexible adhesive

PROPERTIES

- ▶ Tested to DIN EN 12004 and DIN 12002 as C2 TE S1.
- ▶ For interior and exterior use.
- ▶ Reduced dust.
- ▶ Fulfills the required criteria in the information sheet „Flexible adhesives“.
- ▶ Due to its deformability, LIGHTFLEX® is suitable for the installation of large format tiles.
- ▶ LIGHTFLEX® is used as a thin-bed, medium-bed or flow-bed adhesive for the secure fixing of vitrified and earthenware floor tiles and ceramic tiles with low water absorption $\leq 0.5\%$ (porcelain), clinker and mosaic and natural stone material which are neither prone to discolouration nor translucent.
- ▶ Low consumption.
- ▶ As a repair mortar for thicknesses up to 15mm in one application.
- ▶ Very low emissions - GEV EMICODE EC 1-R PLUS.
- ▶ Fulfills the AgBB scheme requirements.



SOLOCRET®-15

Sag resistant levelling mortar up to 20 mm - rapid hardening

PROPERTIES

- ▶ Low stress, pre-blended mortar with very good application properties. For interior and exterior use.
- ▶ For filling, levelling and smoothing of uneven, cement-based wall, floor and ceiling surfaces that are to be waterproofed or tiled.
- ▶ Can also be used in swimming pool construction.
- ▶ Can be felt boarded or smoothed with a float.
- ▶ For thicknesses from 2 to 20 mm in a single application.

**SOLOCRET®-50**

Anti-sag smoothing compound up to 50 mm - rapid hardening

PROPERTIES

- ▶ Polymer modified, special binder for rapid setting anti-sag smoothing compound with very good application properties for interior and exterior use.
- ▶ For levelling, filling and smoothing mineral-based wall and floor areas with following AIV and/or ceramic stone finishes.
- ▶ Ideal for producing falls and rapid construction progress.
- ▶ High yield and simple application via lightweight fillers.
- ▶ Can be felt boarded or smoothed.
- ▶ For thicknesses from 2 - 50 mm in one application.

**SOLOPLAN®-30**

Levelling compound up to 30 mm

PROPERTIES

- ▶ Tested to DIN EN 13813, CFC30F7.
- ▶ Self levelling polymer modified smoothing compound.
- ▶ For smoothing, levelling and filling of holes in interior and exterior applications.
- ▶ For thicknesses from 3 to 30 mm.
- ▶ Very low emissions - GEV EMICODE EC1-R.
- ▶ Conforms to DIN EN 13892-7 classification RWFC-550.
- ▶ Suitable for heated screeds.

**SOLOPLAN®-FA**

Self levelling, fibre reinforced floor levelling compound

PROPERTIES

- ▶ Fibre reinforced and low shrinkage.
- ▶ Suitable for heated screeds.
- ▶ For interiors.
- ▶ For thicknesses from 3 to 20 mm.
- ▶ Rapid hardening.
- ▶ Highly polymer modified.
- ▶ Self levelling.
- ▶ Very low emissions - GEV EMICODE EC1 Plus R.
- ▶ Fulfills the AgBB scheme requirements.





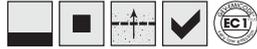
DE-COUPLING/INSULATION

STEPBOARD

Impact sound reduction and de-coupling board

PROPERTIES

- ▶ Very high dimensional stability of the board.
- ▶ Very high compressive strength.
- ▶ Rot proof.
- ▶ High level of improvement in impact sound reduction.
- ▶ With thermal insulating properties.
- ▶ STEPBOARD is an easy to install, high compressive strength de-coupling and renovation board with exceptional impact and sound deadening properties.
- ▶ Very low emissions - GEV EMICODE EC1 PLUS.



WATERPROOFING

ADF®-Balkonfolie

Waterproofing and decoupling membrane

PROPERTIES

- ▶ Waterproofing membrane for balconies and terraces and for bonded waterproofing in combination with tiling in wet areas.
- ▶ Furthermore as a decoupling membrane for substrates which are at risk of cracking.

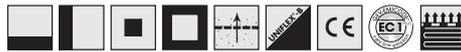


ADF®-Systemkleber

Special hydrophobic adhesive

PROPERTIES

- ▶ For bonding ADF® balcony membrane and SANIFIN.
- ▶ Very low emissions - GEV EMICODE EC1-R PLUS.
- ▶ For interior and exterior use.
- ▶ Tested in accordance with DIN EN 12004 C1 TE.
- ▶ Fulfills the AgBB scheme requirements.



ASO®-Joint-Tape-2000

Waterproof tape for standard applications

PROPERTIES

- ▶ High quality composite material, elastic, tear-proof, waterproof, water vapour permeable. Ensures quick drying of water-containing tile adhesives and waterproof membranes, highly resistant to aggressive substances.
- ▶ For forming waterproof expansion and connection joints within waterproof coatings produced with SANIFLEX, SANIFIN, AQUAFIN®-1K-flex, AQUAFIN®-2K, AQUAFIN®-2K/M, AQUAFIN®-RS300 and ASOFLEX-AKB.
- ▶ ASO®Joint-Tape-2000 is for use in bathrooms and kitchens, in living areas, private and public sanitary areas as well as balconies and terraces (wet duty exposure classes AO, BO, A).
- ▶ Technically approved as a system with the waterproofing materials.
- ▶ Very low emissions - GEV EMICODE EC1 PLUS.
- ▶ Fulfills the AgBB scheme requirements.



ASO®-Joint-Tape-2000-S

Special waterproof tape for more demanding situations and heavy duty use

PROPERTIES

- ▶ High quality composite, elastic, extremely tear-proof, waterproof, vapour permeable. Ensures the quick drying of water containing tile adhesives and waterproof coatings, high resistance to aggressive materials.
- ▶ For the watertight construction of expansion and construction joints within waterproof coatings produced with e.g. SANIFLEX, SANIFIN, AQUAFIN®-1Kflex, AQUAFIN®-2K, AQUAFIN®-2K/M, AQUAFIN®-RS300 and ASOFLEX-AKB e.g. in swimming pools, subterranean car parks and areas in contact with the ground.
- ▶ ASOJoint-Tape-2000-S is for use in wet duty exposure classes A0, B0, A, B, C e.g. in bathrooms, kitchens, in living areas, private and public sanitary areas, balconies and terraces, swimming pools (pool tank and surround) underground car parks, in areas in contact with the ground as well as for structural joints.
- ▶ Technically approved as a system with waterproofing materials.

Width: Dependent on the customer's needs, special sizes from 50 cm to 100 cm wide can be produced in the factory.

**ASO®-Leitband**

Conductive (earthing) strip

PROPERTIES

- ▶ Pure electrolyte copper, electrically conductive
- ▶ Self adhesive on one side
- ▶ Thickness: 35 µm.

**ASODUR®-V115W**

Conductive lacquer based on epoxy resin

PROPERTIES

- ▶ 2 component solvent-free, pigmented polyurethane resin. Elastic with excellent crack bridging capabilities and good chemical resistance.
- ▶ Building regulations approved within the DENSARE®-2002 system for wet duty classes A, B and C as waterproofing beneath tiles.
- ▶ For producing capillary breaking layers at the poolside edge of swimming pools.

**ASOFLEX-AKB-Floor**

Two component waterproof membrane

PROPERTIES

- ▶ 2 component solvent-free, pigmented polyurethane resin. Elastic with excellent crack bridging capabilities and good chemical resistance.
- ▶ Building regulations approved within the DENSARE®-2002 system for wet duty classes A, B and C as waterproofing beneath tiles.
- ▶ For producing capillary breaking layers at the poolside edge of swimming pools.

COLOURS

blue (RAL 5013), grey (RAL 7038)

**ASOFLEX-AKB-Wall**

Two component waterproof membrane

PROPERTIES

- ▶ 2 component solvent-free, pigmented polyurethane resin. Elastic with excellent crack bridging capabilities and good chemical resistance.
- ▶ Building regulations approved within the DENSARE®-2002 system for wet duty classes A, B and C as waterproofing beneath tiles.

COLOURS

blue (RAL 5013), grey (RAL 7038)



AQUAFIN®-1K-flex

Waterproofing slurry, flexible

PROPERTIES

- ▶ One component flexible cement-based waterproofing slurry.
- ▶ For interior walls and floors.
- ▶ Water vapour permeable.
- ▶ For new and existing constructions beneath tiled finishes.
- ▶ Technically approved for waterproofing beneath tiles in wet duty classifications A and AO in accordance with the ZDB technical sheet „Bonded waterproof membranes“.

**AQUAFIN®-2K**

Flexible mineral-based waterproofing slurry

PROPERTIES

- ▶ 2 component flexible cementitious, mineral-based waterproofing slurry against ground, seepage and backwater.
- ▶ For new and existing structures in civil engineering (above and below ground) on concrete and masonry work for interior and exterior use as well as beneath tiles. Also for sewers and manholes as well as for swimming pools.
- ▶ Structural waterproofing material to DIN 18195, part 2, tables 7 and 8.
- ▶ Tested according to German building regulations for waterproofing (AIV) beneath tiles in wet duty classifications A and B (DIN 18195, part 7) and for wet duty classifications AO and BO in accordance with the ZDB technical sheet „Bonded waterproof membranes“ as well as for structural waterproofing.
- ▶ Tested for resistance to liquid manure.

**AQUAFIN®-2K/M**

Elastomeric waterproofing slurry

PROPERTIES

- ▶ 2 component, flexible, cementitious mineral-based waterproofing slurry against ground, seepage (fluctuating) and backwater.
- ▶ For new and existing buildings in the building and civil engineering sector, for interior and exterior use as well as beneath tiles. Also for use in channels, manholes and swimming pools.
- ▶ Structural waterproofing in accordance with DIN 18 195, part 2, tables 7 and 8.
- ▶ Tested according to German building regulations as a bonded waterproof system (AIV) for use beneath tiles in wet duty classifications A and B (DIN 18195, part 7) and for wet duty classifications AO and BO in accordance with the ZDB technical sheet „Bonded waterproof membranes“ as well as for structural waterproofing.
- ▶ Tested for water impermeability to DIN 4030 against water aggressive to concrete up to XA2 level of attack.
- ▶ Tested for resistance to liquid manure.
- ▶ Fulfills the AgBB scheme requirements.

**AQUAFIN®-RS300**

Rapid setting hybrid waterproof membrane

PROPERTIES

- ▶ For an efficient application in construction waterproofing and as a bonding membrane beneath tiles.
- ▶ Highly flexible, crack-bridging and multi-functional.
- ▶ Hydraulic cure and self cross-linking.
- ▶ Very low loss on drying.
- ▶ Rainproof, traffickable and ready to overcoat after only 3 hours on surfaces with falls.
- ▶ Vapour permeable and resistant to frost, UV and ageing.
- ▶ Rapid reactive through drying.
- ▶ Suitable for all load-bearing substrates conventional to construction.
- ▶ Easy and very smooth application.
- ▶ Can be brushed, trowelled or sprayed with suitable equipment.
- ▶ Solvent free.
- ▶ High sag resistance.
- ▶ Bonds to mott-damp substrates without priming.



SANIFIN

Waterproof membrane

PROPERTIES

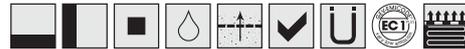
- ▶ Waterproofing beneath tiles in wet areas and wet rooms as well as commercial kitchens. Can be used on all wall and floor construction materials suitable for wet duty applications.
- ▶ For waterproofing surfaces that need to be tiled quickly.
- ▶ Technical approval for wet duty classifications A and C and for class A0 in accordance with the ZDB technical sheet „Bonded waterproof membranes“.
- ▶ Very low emissions - GEV EMICODE EC1 PLUS.
- ▶ Fulfills the AgBB scheme requirements.

**SANIFLEX**

Waterproof membrane - brush, roller or trowel applied

PROPERTIES

- ▶ Ready-to-use, solvent-free, viscous, waterproofing material that once cured is elastic, watertight, but vapour permeable, and can be tiled directly with polymer-modified adhesives.
- ▶ Seamless, jointless waterproofing beneath tiles in damp areas where water impermeability is required e.g. in residential bathrooms and kitchens, private and commercial washrooms.
- ▶ SANIFLEX is suitable for wall areas in wet duty class A1 according to building regulations test criteria and wet duty class A0 according to the ZDB data sheet „Bonded waterproof systems“.
- ▶ Very low emissions - GEV EMICODE EC1 PLUS.
- ▶ Fulfills the AgBB scheme requirements.

**COLOURS**

ochre, grey

**TILE INSTALLATION****ADF®-Systemkleber**

Special hydrophobic adhesive

PROPERTIES

- ▶ For bonding ADF® balcony membrane and SANIFIN.
- ▶ Very low emissions - GEV EMICODE EC1-R PLUS.
- ▶ For interior and exterior use.
- ▶ Tested in accordance with DIN EN 12004 C1 TE.
- ▶ Fulfills the AgBB scheme requirements.

**AK7P**

Flexible tile adhesive

PROPERTIES

- ▶ Flexible tile adhesive to DIN EN 12004, C2 TE.
- ▶ Creamy consistency and easy to use.
- ▶ Long open time.
- ▶ Particularly good non-slump.
- ▶ For interior and exterior use.
- ▶ Tested with bonded waterproof membranes SANIFLEX, AQUAFIN®-2K/M, AQUAFIN®-2K with technical test certificate.
- ▶ Very low emissions - GEV EMICODE EC1 Plus R.



ASO®-Leitband

Conductive (earthing) strip

PROPERTIES

- ▶ Pure electrolyte copper, electrically conductive
- ▶ Self adhesive on one side
- ▶ Thickness: 35 µm.

**ASODUR®-EK98-Floor**

Adhesive and grout

PROPERTIES

- ▶ Tested to DIN EN 12004 - R2.
- ▶ For joint widths from 1.5 to 10 mm.
- ▶ 2 component, solvent-free, pigmented, water emulsifiable epoxy resin.
- ▶ Withstands heavy mechanically and chemically demanding situations.
- ▶ For fixing and grouting ceramic tiles by the thin bed method on surfaces such as concrete, screed, render, plaster, existing tiled areas as well as the DENSARE®-2002 system e.g. in breweries, commercial kitchens, laboratories, salt water pools, swimming pools.

**ASODUR®-EK98-Wall**

Adhesive and grout

PROPERTIES

- ▶ Tested to DIN EN 12004 - R2T.
- ▶ For joint widths from 3 to 15 mm.
- ▶ 2 component, solvent-free, pigmented, water emulsifiable epoxy resin.
- ▶ Withstands heavy mechanically and chemically demanding situations.
- ▶ For fixing and grouting ceramic tiles by the thin bed method on surfaces such as concrete, screed, render, plaster, existing tiled finishes as well as the DENSARE®-2002 system e.g. in breweries, commercial kitchens, laboratories, salt water pools and swimming pools.

**ASODUR®-Design**

Fine finish epoxide grout and adhesive

PROPERTIES

- ▶ Tested to DIN EN 12004, R2 T.
- ▶ Smooth application fine epoxide grout and adhesive with excellent wash-off properties for a fine closed joint finish with an attractive appearance which is robust against cleaners.
- ▶ For bonding mosaics and grouting ceramic tiles as well as glass mosaics to concrete, screed, render and old tiled substrates.
- ▶ Tested with the bonded waterproof membranes AQUAFIN®-RS300, AQUAFIN®-2K/M, AQUAFIN®-2K, with building authorities certificate.
- ▶ For joint widths from 1-7 mm.
- ▶ Available in 18 colours, additional glitter effect by mixing with gold or silver glitter.
- ▶ Very low emissions - GEV EMICODE EC1-R PLUS.
- ▶ Fulfills the AgBB scheme requirements.

**CRISTALLIT®-flex**

Flexible natural stone adhesive

PROPERTIES

- ▶ Tested to DIN EN 12004 - C2FT.
- ▶ For interior and exterior use up to 10 mm thick.
- ▶ Water and frost resistant.
- ▶ For applications under time pressure, through the efficient binding of the gauging water discolouration of natural stone is avoided.
- ▶ Also for use on substrates subject to slight deformation and on heated screeds.
- ▶ Especially suitable for light coloured and translucent natural stone materials as well as agglomerate stone.



CRISTALLIT®-MULTI-flex

Thin, medium bed and natural stone flexible adhesive

PROPERTIES

- ▶ Tested in accordance with DIN EN 12004 and DIN EN 12002, C2FT S1.
- ▶ For interior and exterior areas.
- ▶ Water and frost resistant.
- ▶ Suitable for adhesive bed thicknesses up to 15 mm.
- ▶ Fulfills the requirements of the technical sheet „Flexible adhesive“.
- ▶ For work under time pressure, the rapid binding of the mix water prevents discolouration and efflorescence on the natural stone.
- ▶ Can be used as a repair and patch mortar beneath tiles.
- ▶ Especially creamy application.
- ▶ Good slump resistance.
- ▶ Very low emissions - GEV EMICODE EC1 Plus R.

**ELEKTRON-PLUS**

Conductive dispersion

PROPERTIES

- ▶ For producing electrically conductive cement-based thin-bed adhesives and grouts.
- ▶ Use together with conductive tiles or glazes.
- ▶ Electrically conductive.
- ▶ Easy to use.

**LIGHTFLEX®**

Multi-functional flexible adhesive

PROPERTIES

- ▶ Tested to DIN EN 12004 and DIN 12002 as C2 TE S1.
- ▶ For interior and exterior use.
- ▶ Reduced dust.
- ▶ Fulfills the required criteria in the information sheet „Flexible adhesives“.
- ▶ Due to its deformability, LIGHTFLEX® is suitable for the installation of large format tiles.
- ▶ LIGHTFLEX® is used as a thin-bed, medium-bed or flow-bed adhesive for the secure fixing of vitrified and earthenware floor tiles and ceramic tiles with low water absorption $\leq 0.5\%$ (porcelain), clinker and mosaic and natural stone material which are neither prone to discolouration nor translucent.
- ▶ Low consumption.
- ▶ As a repair mortar for thicknesses up to 15mm in one application.
- ▶ Very low emissions - GEV EMICODE EC1-R PLUS.
- ▶ Fulfills the AgBB scheme requirements.

**MONOFLEX-FB**

Flexible flow-bed adhesive

PROPERTIES

- ▶ Tested to DIN EN 12004, C2E.
- ▶ For interior and exterior use.
- ▶ Deformable, good adhesion.
- ▶ Can be grouted after only 6 hours.
- ▶ Fulfills the required criteria to the „flexible adhesive“ data sheet.
- ▶ Use for the solid bedding of tiles in one application.
- ▶ For the secure installation of earthenware and vitrified floor tiles and those with low water absorption $\leq 0.5\%$ (porcelain), clinker tiles and mosaics.
- ▶ Tested with the bonded waterproof membranes SANIFLEX, AQUAFIN®-2K/M, AQUAFIN®-2K with approved technical test certificate.



MONOFLEX-XL

Modern flexible adhesive with high yield

PROPERTIES

- ▶ Very high yield, deformable flexible C2TE S1 adhesive for the installation of large format porcelain tiles, vitrified and earthenware tiles and others.
- ▶ Fulfills the requirements of the technical sheet „Flexible adhesive“.
- ▶ Extremely good slump resistance with the best application properties.
- ▶ Very long installation times.
- ▶ For interior and exterior use.
- ▶ On heated screeds.
- ▶ Very low emissions - GEV EMICODE EC1-R PLUS.
- ▶ Fulfills the AgBB scheme requirements.



SOLOFLEX

Flexible thin-bed and medium-bed tile adhesive

PROPERTIES

- ▶ Tested to DIN EN 12004, C2 TE.
- ▶ For interior and exterior use.
- ▶ Medium bed adhesive up to 10 mm thickness.
- ▶ SOLOFLEX is used as a thin-bed adhesive for vitrified tiles, earthenware tiles, ceramic tiles with low water absorption $\leq 0.5\%$ (porcelain), clinker, mosaic and natural stone that is not translucent or prone to discolouration.
- ▶ Flexible adhesive in bathroom construction.
- ▶ Smooth application.
- ▶ Tested with the bonded waterproof membranes SANIFLEX, AQUAFIN®-2K/M, AQUAFIN®-2K with technical approval.
- ▶ Very low emissions - GEV EMICODE EC1 Plus R.
- ▶ Fulfills the AgBB scheme requirements.



SOLOFLEX-FAST

Flexible thin and medium bed adhesive - rapid hardening

PROPERTIES

- ▶ Tested to DIN EN 12004, C2F TE.
- ▶ For interior and exterior use.
- ▶ Sag resistant.
- ▶ For installations under time pressure, can receive foot traffic early.
- ▶ For the installation of tiles to walls and floors, also onto substrates subjected to slight deformation.
- ▶ High early strength also when the ambient temperature is low.
- ▶ Up to 1.5 mm bed thickness.
- ▶ Very low emissions - GEV EMICODE EC1 Plus R.
- ▶ Fulfills the AgBB scheme requirements.



SOLOFLEX-white

Flexible thin bed tile adhesive, white

PROPERTIES

- ▶ Tested to DIN EN 12004, C1 T.
- ▶ In combination with UNIFLEX®-B, C2TE S2 according to DIN EN 12004.
- ▶ For interior and exterior use.
- ▶ Simple and smooth application.
- ▶ High initial grab.
- ▶ Good resistance to slip.
- ▶ SOLOFLEX-white is used as a thin-bed adhesive for vitrified tiles, earthenware tiles, porcelain tiles (ceramic tiles with low water absorption $\leq 0.5\%$), mosaic and natural stone that is not translucent or prone to discolouration. For fixing glass mosaic when modified with UNIFLEX®-B.



UNIFIX®-2K

Flexible tile adhesive, water impermeable, frost resistant

PROPERTIES

- ▶ Tested to DIN EN 12004 and DIN EN 12002, C1 TE S2.
- ▶ For interior and exterior use.
- ▶ With high deformability.
- ▶ UNIFIX-2K is used as a thin-bed adhesive for vitrified tiles, earthenware tiles, ceramic tiles with low water absorption $\leq 0.5\%$ (porcelain), clinker, mosaic and natural stone that is not transparent or prone to discolouration.
- ▶ For critical surfaces and heavy duty applications.
- ▶ Especially suitable for swimming pools, balconies and terraces.
- ▶ Very low emissions - GEV EMICODE EC2 R.
- ▶ Fulfills the AgBB scheme requirements.

**UNIFIX®-2K/6**

Flexible tile adhesive, frost resistant

PROPERTIES

- ▶ Tested to DIN EN 12004 and DIN EN 12002, C2 TE S2.
- ▶ For interior and exterior use.
- ▶ With high deformability.
- ▶ UNIFIX®-2K/6 is used as a thin-bed adhesive for vitrified tiles, earthenware tiles, ceramic tiles with low water absorption $\leq 0.5\%$ (porcelain), clinker, mosaic and natural stone that is not transparent or prone to discolouration.
- ▶ For critical substrates and heavy duty applications.
- ▶ Suitable for swimming pools, balconies and terraces.
- ▶ Very low emissions - GEV EMICODE EC2 R.

**UNIFIX®-AEK**

Tile adhesive for calcium sulphate screeds

PROPERTIES

- ▶ Tested to DIN EN 12004, C1 T.
- ▶ Flexible tile adhesive especially suitable for laying ceramic tiles onto heated and unheated calcium sulphate screeds and calcium sulphate flow screeds.
- ▶ For the thin bed fixing of earthenware, vitrified and fully vitrified tiles, twin tiles, floor clinker slabs, mosaics etc.

**UNIFIX®-S3**

Highly flexible thin-bed adhesive

PROPERTIES

- ▶ Tested to DIN EN 12004, C1 TE S2.
- ▶ For interior & exterior use.
- ▶ With especially high deformability.
- ▶ UNIFIX®-S3 is used as a thin-bed adhesive for vitrified and earthenware tiles, ceramic tiles with low water absorption $\leq 0.5\%$ (porcelain), clinker, mosaics and non-translucent natural stone not prone to discolouration.
- ▶ For difficult substrates and heavy duty areas.
- ▶ Permits the fixing of tiles to 8 day old screeds.
- ▶ Suitable for the installation of fully vitrified tiles in exterior areas.
- ▶ Especially suitable for swimming pools, balconies and terraces.
- ▶ Water impermeable.
- ▶ Deforms up to 30 mm.
- ▶ Very low emissions - GEV EMICODE EC2 R.



UNIFIX®-S3-FAST

Flexible adhesive - rapid setting

PROPERTIES

- ▶ Tested to DIN EN 12004 C2 FTE S2.
- ▶ For interior and exterior use.
- ▶ With especially high deformability.
- ▶ UNIFIX®-S3-FAST is used as a thin-bed adhesive for vitrified and earthenware tiles, ceramic tiles with lower water absorption $\leq 0.5\%$ (porcelain), clinker, mosaic and non-translucent natural stone material not prone to discolouration.
- ▶ For difficult substrates and heavy duty applications.
- ▶ Enables tiles to be fixed to green screeds.
- ▶ Especially suitable for swimming pool surrounds, balconies and terraces.
- ▶ Water impermeable and rapid setting.

**UNIFLEX®-B**Polymeric additive
(B-Component from AQUAFIN®-2K,
UNIFIX®-2K and UNIFIX®-S3)**PROPERTIES**

Component B for producing:

- ▶ highly deformable flexible adhesives with SCHOMBURG tile adhesives, such as e.g. UNIFIX®, CRISTALLIT® and SOLOFLEX for an elastic tiling bond to difficult and also deformable substrates.
- ▶ AQUAFIN®-2K with AQUAFIN®-1K (component A) for crack-bridging flexible surface waterproof membranes.
- ▶ The combined products can be used in interior and exterior areas.
- ▶ As a polymeric additive for various SCHOMBURG tile adhesives.

**GROUTING****ASO®-Flexfuge**

Polymer modified flood grout - rapid setting

PROPERTIES

- ▶ Polymer-modified, frost-resistant and water-repellent. Easy to use, rapid-hardening. Ready for foot traffic after approx. 2 hrs.
- ▶ For grouting porcelain, vitrified and earthenware tiles, synthetic and natural stone slabs etc. in bathrooms, showers and living areas, on terraces, on facades, in swimming pools, also on heated and flow screeds.
- ▶ Fulfills the requirements for CG2 WA in accordance with DIN EN 13888.
- ▶ For joint widths from 3 to 20 mm wide.
- ▶ Very low emissions - GEV EMICODE EC1 Plus R.
- ▶ Fulfills the AgBB scheme requirements.

COLOURS

medium grey, cement grey, graphite

**ASO®-Fugenbunt**

Fine grout

PROPERTIES

- ▶ Cement-based tile grout. Easy to apply. Vapour permeable.
- ▶ Can be washed soon after installation.
- ▶ For grouting wall and floor finishes based on earthenware, vitrified tiles and vitrified mosaics.
- ▶ Colour matched with the silicone ESCOSIL®-2000 system.
- ▶ Fulfills the requirements of CG1 in accordance with DIN EN 13888.
- ▶ For joint widths from 1.5 mm up to 6 mm in interior areas.

COLOURS

white, manhattan, silver grey



ASO®-StoneCleaner

Organic acid based concentrated cleaning agent - cleaner for clinker

PROPERTIES

- ▶ Solvent free, concentrated clinker and tile cleaner, removes cement film residues.
- ▶ To remove efflorescence and residual lime, cement and mortar.
- ▶ For wall and floor surfaces, interior and exterior use, exposed masonry work (sand/lime blocks, brick, hard-burnt brick, clinker, brick slips, facing brick) concrete areas and ceramic tiles.

**ASODUR®-EK98-Floor**

Adhesive and grout

PROPERTIES

- ▶ Tested to DIN EN 12004 - R2.
- ▶ For joint widths from 1.5 to 10 mm.
- ▶ 2 component, solvent-free, pigmented, water emulsifiable epoxy resin.
- ▶ Withstands heavy mechanically and chemically demanding situations.
- ▶ For fixing and grouting ceramic tiles by the thin bed method on surfaces such as concrete, screed, render, plaster, existing tiled areas as well as the DENSARE®-2002 system e.g. in breweries, commercial kitchens, laboratories, salt water pools, swimming pools.

**ASODUR®-EK98-Wall**

Adhesive and grout

PROPERTIES

- ▶ Tested to DIN EN 12004 - R2T.
- ▶ For joint widths from 3 to 15 mm.
- ▶ 2 component, solvent-free, pigmented, water emulsifiable epoxy resin.
- ▶ Withstands heavy mechanically and chemically demanding situations.
- ▶ For fixing and grouting ceramic tiles by the thin bed method on surfaces such as concrete, screed, render, plaster, existing tiled finishes as well as the DENSARE®-2002 system e.g. in breweries, commercial kitchens, laboratories, salt water pools and swimming pools.

**ASODUR®-Design**

Fine finish epoxide grout and adhesive

PROPERTIES

- ▶ Tested to DIN EN 12004, R2 T.
- ▶ Smooth application fine epoxide grout and adhesive with excellent wash-off properties for a fine closed joint finish with an attractive appearance which is robust against cleaners.
- ▶ For bonding mosaics and grouting ceramic tiles as well as glass mosaics to concrete, screed, render and old tiled substrates.
- ▶ Tested with the bonded waterproof membranes AQUAFIN®-RS300, AQUAFIN®-2K/M, AQUAFIN®-2K, with building authorities certificate.
- ▶ For joint widths from 1-7 mm.
- ▶ Available in 18 colours, additional glitter effect by mixing with gold or silver glitter.
- ▶ Very low emissions - GEV EMICODE EC1-R PLUS.
- ▶ Fulfills the AgBB scheme requirements.



CRISTALLFUGE PLUS

Mineral-based multi-function flexible grout 1 - 10 mm

PROPERTIES

- ▶ Innovative C+ grout formula for completely filled joints.
- ▶ Smooth to apply multi-function flexible grout for grouting earthenware, vitrified, porcelain and glass tiles and mosaics, sensitive natural stone and agglomerated stone tiles.
- ▶ Long pot life and rapid crystalline water binding technology.
- ▶ Ready to receive foot traffic after only 2 hours.
- ▶ For joint widths from 1 mm to 10 mm.
- ▶ Fulfills the requirements for CG2 WA in accordance with DIN EN 13888.
- ▶ Protected against bacterial and fungicidal attack.
- ▶ Water and dirt repellent.
- ▶ Very low emissions – GEV EMICODE EC1 PLUS.
- ▶ Available in 13 colours, matched to the system silicone sealants ESCOSIL®-2000 and ESCOSIL®-2000-ST.

COLOURS

silver grey, white, jasmine, pergamon, beige, caramel, jura beige, brown, nut brown, grey, medium grey, titan grey, graphite



ELEKTRON-PLUS

Conductive dispersion

PROPERTIES

- ▶ For producing electrically conductive cement-based thin-bed adhesives and grouts.
- ▶ Use together with conductive tiles or glazes.
- ▶ Electrically conductive.
- ▶ Easy to use.



ESCOSIL®-2000

Silicone sealant

PROPERTIES

- ▶ High-quality, elastic, single component joint sealant, based on silicone-rubber, acetic cross-linking and contains a fungicide.
- ▶ For expansion joints and heavy duty connecting joints for use in sanitary applications.
- ▶ After application the material reacts with humidity forming an elastic, watertight sealant resistant to weathering, UV and ageing with good chemical resistance.
- ▶ Very low emissions - GEV EMICODE EC1 Plus.

COLOURS

transparent, white, manhattan, silver grey, pergamon, cement grey, graphite, titan grey, pearl grey, beige, nut brown, grey, jasmine, caramel, jura beige, brown, medium grey



ESCOSIL®-2000-ST

Natural stone silicone sealant

PROPERTIES

- ▶ High-quality, elastic, single component joint sealant based on silicone-rubber, oxime cross-linking, plasticizer free and contains a fungicide.
- ▶ For the stain-free, elastic jointing of expansion, connecting and construction joints in marble and other natural stone, such as e.g. granite, gneiss, sandstone etc. No risk of migration of plasticizers or other substances that may cause discolouration to the edges of natural stone.
- ▶ After application the material reacts with humidity forming an elastic watertight sealant resistant to weathering, UV and ageing.

COLOURS

pearl grey, white, pergamon, beige, nut brown, silver grey, grey, titan grey, slate grey, black, jasmine, caramel, jura beige, brown, medium grey, graphite



ESCOSIL®-2000-UW

Underwater silicone sealant

PROPERTIES

- ▶ High-quality, elastic, single component joint sealant, based on silicone-rubber, oxime cross-linking and contains high levels of fungicide.
- ▶ For the elastic jointing of expansion joints and structural joints for use in underwater areas such as e.g. swimming pools, containers etc.
- ▶ Not suitable for drinking water applications or for aquariums.
- ▶ After application the material reacts with humidity in the air to form an elastic, watertight sealant resistant to weathering and ageing with good chemical and chlorine resistance.

COLOURS

cement grey, medium grey

**HF05-Brillantfuge**

High strength, flexible, cementitious tile grout

PROPERTIES

- ▶ High abrasion resistance, reduced water absorption, polymer modified, frost resistant and water repellent. Easy to use, foot traffic after 6 hours.
- ▶ For grouting fully vitrified, vitrified and synthetic stone tiles etc. in swimming pools, bathrooms, showers and living areas. For use on balconies and also on heated screeds and flow screeds.
- ▶ Fulfills the requirements for CG2 WA in accordance with DIN EN 13888.
- ▶ For joints from 3 - 20 mm wide.

COLOURS

medium grey, cement grey

**INDUFLEX-VK6060**

Elastic 1-component polyurethane joint sealant for movement joints in floors

PROPERTIES

- ▶ Good chemical and mechanical resistance.
- ▶ Low sensitivity to knocks.
- ▶ High resistance to tear propagation.
- ▶ Approved total deformation: 25%.
- ▶ Used for the elastic sealing of joints in: multi-storey car parks, exposed exterior concreted areas, sewage works and waste water treatment plants with communal effluent, commercial kitchens.
- ▶ Suitable for indirect food contact.



Explanation of icons

	for walls		EMICODE: EC1 certified
	for ceilings		EMICODE: EC1-R certified
	for floors		EMICODE: EC1-Plus certified
	for interior use		EMICODE: EC1-Plus-R certified
	for exterior use		EMICODE: EC2-R certified
	waterproof		FAST TECHNOLOGY
	UV resistant		DUST REDUCED
	root resistance		3 IN 1
	vapour tight		4 IN 1
	vapour permeable		TILE FORMAT XXL
	for use beneath tiles		antibacterial
	suitable for underfloor heating		TopTEC INSIDE
	ready to use		Radon barrier
	1 component		C+ Grout Formula
	2 component		100% Smooth & Full
	Can additionally be modified with UNIFLEX-B		
	Tested according to German building regulations		
	CE certified		
	WTA certified		

From A to Z

Glossary

B Bay defining joints

Expansion joints in finishes, which are to be positioned as bay defining joints, are joints to be formed through to the load supporting substrate or waterproof membrane.

Buttering-Floating method

A method to guarantee, as far as possible, a void free installation. The adhesive is applied to the substrate as well as to the back of the tile.

C Calcium sulphate screed (anhydrite screed)

Screeds of this type are produced with calcium sulphate (anhydrite) as the binder, water and, as necessary other aggregates and are very sensitive to moisture.

Classification of adhesives to DIN EN 12004;

Definitions:

C = Cement-based adhesive

D = Dispersion-based adhesive

R = Reaction resin-based adhesive

1 = Adhesive with normal specification

2 = Adhesive with enhanced specification

F = Rapid hardening adhesive (Fast)

T = Adhesive with reduced slip (Thixotropy)

E = Adhesive with extended open time (Extended)

S1 = Deformable thin-bed adhesive S1 deformation
2.5 mm < t < 5 mm

S2 = Deformable thin-bed adhesive S1 deformation
2.5 mm < t < 5 mm

CM device (carbide method)

CM measurements (calcium carbide method) serve to determine the water content (residual moisture) of a substrate and are based on the reaction between the water in the sample and calcium carbide. To test, a sample is taken from the screed, finely ground, weighed and placed into the pressure vessel (CM device) and reacted with the calcium carbide. Upon completion of the reaction, the water content by percent in weight can be read off the device's own manometer using the conversion tables.

Connecting joints

Connecting joints can be necessary between the tiled finish and adjacent building units, also between fixed interruptions in the structure. As a rule, these are inserted to the depth of the tiled finish but may if required, extend to the installation surface.

Crack inducing joint

Arranged separating joints at a predetermined crack point in the freshly installed screed, serve to alleviate shrinkage in the fresh screed resultant from the construction materials. As a rule, these produced joints are cut into the screed to a maximum depth of half the screed thickness and filled with an injection resin following the end of the shrinkage process. These joints don't need to be considered when installing the floor finish.

Crystalline water binding technology

Adhesives with crystalline water binding technology are characterized by a high setting speed. The water is bound in a crystalline form and therefore offers protection against curling and discolouration with natural stone.

D Dispersion-based adhesive

As a rule, ready mixed and highly deformable adhesives, which are mostly used with the thin-bed method in the interior of buildings.

Dry screed board / dry screed flooring

Following the modular design principle, a dry screed is produced from pre-finished boards, which are glued or screwed together along grooves. The elements consist mostly of two or three layers. The advantages of this simple sub-floor construction are that no moisture is brought into the house (compare household damp) and they are immediately traffickable. Consider with gypsum based systems, that due to their sensitivity to moisture, their use is restricted in wet duty areas (only with a bonded waterproof membrane) and prohibits their use externally.

E Ettringite

Applying cement-based adhesives on gypsum in the presence of moisture promotes the formation of the mineral ettringite. The resultant considerable increase in volume leads to a loss of adhesion at the bond interface.

J Joint width

An important criterium when choosing joint width is the nature and the accuracy of the ceramic tile.

M Medium-bed method

This method still permits small irregularities within the substrate to be levelled in comparison to the thin-bed method (1 – 5 mm). Using the medium-bed method the adhesive thickness is between 5 – 15 mm. In comparison to traditional thick-bed techniques (15 – 50 mm) considerable weight is saved.

Movement joints

External influences such as stresses and the varying behaviour of materials during temperature fluctuations cause strain between the materials used. This strain can be reduced to a damage free level by suitably incorporating movement joints.

O Open time

The time, within which, the tile must be laid into the adhesive bed, after spreading, in order to guarantee optimum adhesion. Called adhesive open time or bedding time.

P Perimeter joints

At wall transitions as well as with building components, which penetrate the tiled finish, perimeter joints are necessary. These are formed in the same way as bay defining joints.

Pot life

Pot life indicates the maximum working duration of the mixed material.

R Rapid set adhesive

These adhesives have a rapid setting behaviour. The adjustability time is generally shorter as a rule but the water is quickly bound. This is above all advantageous with natural stone types with a tendency to discolour or where there are time constraints.

Reaction resin-based adhesives and grouts

These mostly two component systems are used where there are particularly high requirements for chemical resistance or there are heavy duty mechanical stresses such as in industrial and commercial areas or swimming pools.

Readiness to receive finishes

If hard finishing materials such as ceramic tiles or natural stone are to be installed on to green load spreading layers, which are laid floating, there is a high risk of damage due to shrinkage and deformation. For this reason the excess water in a floating screed must have diffused out as far as possible before installation is carried out with hard finishes. Assessing the readiness of a load spreading layer is carried out with the aid of the carbide (CM) method. The values necessary to determine the readiness to tile depends on the type of binder in the load spreading layer and the intended finish.

Residual moisture

Whether screed, tile adhesive or grout, all hydraulically setting materials contain a certain amount of water even after their installation. The so-called residual moisture. A cement-based screed on a separating membrane or on insulation is, for example, only ready for tiling when there is still 2% or less

residual moisture measured. The remaining water evaporates slowly over many years up to a small amount (household moisture). The associated loss in volume is noticeable in the form of shrinkage and dimensional change.

S Shrinkage

Shrinkage is understood to mean the shortening of a building material during its hardening/drying phases.

Sound bridge

Direct contact between building sections (wall, ceiling, floor etc.) can promote the spread of sound. In order to avoid such occurrences, characterized as sound bridges, sound generating building sections are separated by insulation. For example edge insulation strips are incorporated between a screed and the wall at the junction to prevent the transmission of impact sound.

Structural joints

Building joints are continuous through all load supporting and non-load supporting building components and must be formed in the same location in the tiled finish and to a width as defined in the building design plans.

T Test certificates

Test certificates serve as proof for the warranted material properties via the manufacturer and compiled by official material testing institutes to valid standards and test guidelines. Advice on available test certificates can be found in the technical data sheets for the products.

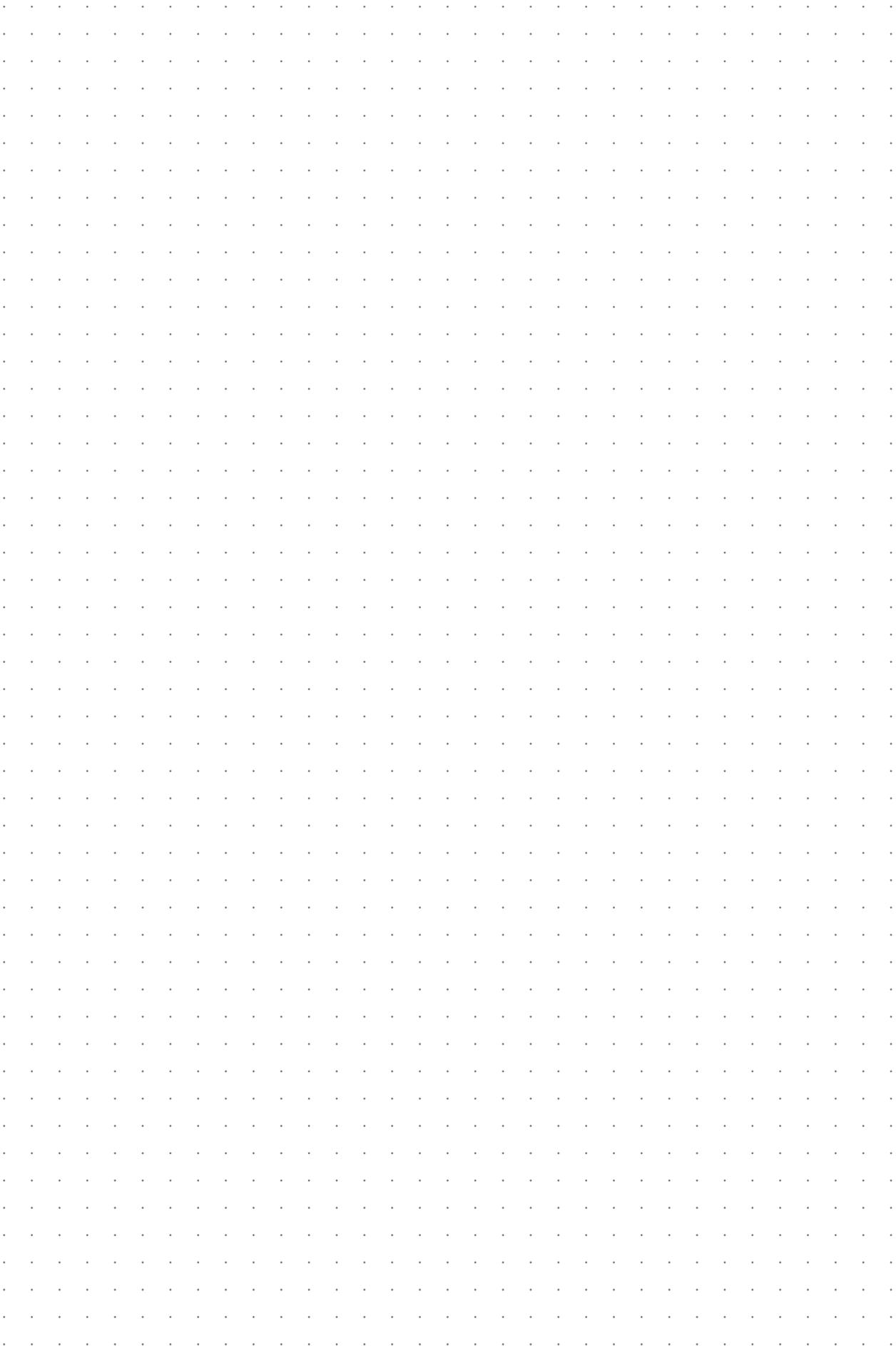
Thick-bed method

The dampened tiles are laid on to a thick layer of cement-based mortar, whereby the mortar compensates for irregularities in the substrate. The mortar thickness is from 15 – 50 mm.

Thin-bed method

Here the tiles are laid into a maximum of 5 mm of adhesive. The adhesive can be a hydraulic thin-bed adhesive, a dispersion-based adhesive or an epoxy resin-based adhesive. The method certainly requires a flat substrate, as the thin bed only allows for light levelling. The bed is combed through with a notched trowel with the size of the notch being dependent on the size of the tile.

Notes



The SCHOMBURG Group develops, produces and markets high quality building product systems for

- Construction waterproofing
- Construction restoration
- Tiles/natural stone installation
- Screed installation
- Civil engineering
- Surface protection
- Concrete technology

SCHOMBURG is recognised for its development competency and is distinguished both nationally and internationally with over 75 years in the market. System based construction products from its own production plants are held in high esteem throughout the world.

Industry professionals value the level of service provided by the SCHOMBURG Group, along with our large range of high quality products.

In order to stay at the forefront of a continuously advancing market we are always investing in research and development of new and current products. This guarantees high quality products, which in turn leads to customer satisfaction.



SCHOMBURG GmbH & Co. KG
Aquafinstraße 2 - 8
D-32760 Detmold (Germany)
phone +49-5231-953-00
fax +49-5231-953-108
www.schomburg.com

