

SCHÖNOX® TT FLEX DUR

Flexible floor tile adhesive for high loaded areas

for resistant laying of ceramic coverings and natural stones in exterior and highly loaded areas like industrial floors. Based on the SCHÖNOX CLIMATRIX®-technology which makes the adhesive exceedingly resistant to thermal load and wetness. Component of the SCHÖNOX BALTERRA®-system. For floors in interior and exterior areas.

Product characteristics

- fulfills the C2 E S1 requirements according to EN 12004
- water-proof according to EN 12004
- frost resistant according to EN 12004
- component of the SCHÖNOX BALTERRA®-system
- contains SCHÖNOX CLIMATRIX®-technology
- ideal for exterior use and high loaded areas
- flexible
- pourable
- compact mortar structure
- high durability against thermal stress
- fast development of strength of the mortar
- high internal strength
- hydrophobe
- optimized w/c-value
- high early strength
- suitable for levelling uneven substrates
- suitable for application on subfloor heating systems
- synthetic resin-modified
- low in chromate according to REACH

Applications

SCHÖNOX TT FLEX DUR is suitable for setting with an almost complete surface wetting of the tiles as far as possible with the thin-bed-method according to DIN 18 157 part 1 of:

- ceramic coverings
- coarse-ceramic
- fully vitrified tiles
- cotto
- natural, artificial and concrete stone slabs not sensitive to deformation
- natural-, artificial- and cast stone tiles not sensitive to discolouration
- ceramic tiles on balconies and terraces
- ceramic tiles in swimming pools
- on highly loaded industrial areas

Substrates

SCHÖNOX TT FLEX DUR is suitable on:

- concrete (at least 3 months old)
- cement and rapid cement screeds
- calcium sulphate based screeds
- mastic asphalt screeds (completely sanded) IC 10 and IC 15 according to EN 13 813
- magnesia screeds
- dry screeds
- old ceramic coverings
- SCHÖNOX water membranes
- On floors in exterior areas, and in combination with bonded sealings and/or thin-bed drainages (e.g. SCHÖNOX 2K DS RAPID, SCHÖNOX EP DRAIN or SCHLÜTER DITRA-DRAIN) adhesive layer thickness max. 5 mm for floating- or floating- and the buttering-floating-method. Regarding the BALTERRA®-combination with SCHÖNOX EP DRAIN: SCHÖNOX Q12, SCHÖNOX Q6, SCHÖNOX Q6 W and SCHÖNOX TT S8 are recommended.
- The mid-bed or thick-bed method in the BALTERRA®-combination is recommended with SCHÖNOX MSE, SCHÖNOX Q6 und SCHÖNOX Q6 W. For supporting the functionality of the drainage in the joint area, the buttering-method has to be used.
- The product data sheets of the system-products have to be respected.

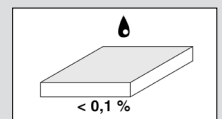
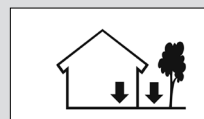
Requirements of substrate

- Adequate dryness, strength, bearing strength, evenness and dimensional stability.
- Free of residues which reduce adhesion, e.g. dust, dirt, oil, fat, wax, cleaning agents and loose particles.
- Surface treatments or any "friable" areas of the subfloor must be mechanically removed and the subfloor repaired with SCHÖNOX levelling compounds as required.

Technical data

- Pot life: approx. 90 minutes at +20 °C
- Open time (EN 1346):¹ approx. 30 minutes
- Ready for foot traffic: after approx. 16 hours
- Ready for grouting: after approx. 24 hours for absorbent body or absorbent substrate
- Application temperature: not below +5 °C
- Temperature resistance: completely cured -20 °C to +80 °C
- Material consumption (powder): with 6 mm notched trowel approx. 2,6 kg/m²
with 8 mm notched trowel approx. 2,9 kg/m²
with 10 mm notched trowel approx. 3,2 kg/m²

¹The open time is subject to temperature- and building site related variations. Therefore check the wetting properties of the applied tile adhesive with the finger.



- Substrate should fulfill the requirements of DIN 18 202, tolerances in building constructions.
- The requirements of DIN 18 157 are applicable.
- With subsequent installation of ceramic coverings, cement screeds are required to be at least 28 days old, match strength class F4 and to display a residual moisture reading of ≤ 4.0 CM-% (heating screeds ≤ 2.0 CM-%), calcium sulphate screeds should have a reading of ≤ 0.5 CM-% (heating screeds ≤ 0.3 CM-%).
- Laying on concrete after 6 months.
- If used on above mentioned substrates in moist or wet rooms, an additional SCHÖNOX bonded sealing has to be performed. The corresponding product data sheets of the SCHÖNOX bonded sealings in combination with the thin-bed mortar in the corresponding moisture loading classes should be followed.
- Prepare calcium sulfate screeds following the BEB leaflet „Hinweise zur Beurteilung und Vorbereitung der Oberfläche von Anhydritestrichen“.
- For laying on heating screeds pay attention to the leaflet ceramic tiles and slabs, natural and concrete stones on heated and unheated cementitious floor constructions as well as EN 1264, part 4. We recommend for heated floor constructions to pay attention to the professional information "Schnittstellenkoordination bei beheizten Fußbodenkonstruktionen" of the BVF.

Priming

- **normal absorbent substrates such as:**
 - cement screeds
 - rapid cement screeds
 prime with SCHÖNOX KH (1:5) or SCHÖNOX KH FIX .
- concrete
- water-proof concrete
- prime with SCHÖNOX KH (1:3) or SCHÖNOX KH FIX .
- **non-absorbent, smooth, sound substrates such as:**
 - mastic asphalt screeds

- mastic asphalt screeds, insufficient sanded
- ceramic coverings, stable, thoroughly cleaned and if necessary abraded

■ calcium sulphate substrates such as:

- calcium sulphate screeds
- prime with SCHÖNOX KH (1:1) (drying time at least 24 hours) or SCHÖNOX KH FIX (drying time at least 1 hour).

■ magnesia screeds:

- prime with SCHÖNOX GEA and sand.
- Instead of sanding, SCHÖNOX GEA can be primed with SCHÖNOX SHP.

Mixing ratio

- For 25 kg SCHÖNOX TT FLEX DUR approx. 7,25 l water

Recommended method of working

- Using a clean receptacle, add SCHÖNOX TT FLEX DUR to cold clean water to form a homogeneous mixture. Use of a mixer with 600 rpm is recommended.
- Do not mix more material than can be handled within 90 minutes.
- The mortar is to be applied and combed off using a suitable notched trowel. The material to be laid is inserted and pressed into the fresh bed of adhesive while it is still wet. Remove mortar residues.
- Unevenness up to 10 mm can be levelled with SCHÖNOX TT FLEX DUR.
- We recommend SCHÖNOX floor levelling compounds for full-surface levelling.
- Material that has already been set cannot be re-mixed with additional water or powder.
- Immediately after use clean tools with water.
- SCHÖNOX TT FLEX DUR is especially suitable for the application on high loaded floors and is able to substitute the buttering-floating method according to DIN 18157.
- SCHÖNOX TT FLEX DUR is suitable for application with the floating-, the buttering- and floating-buttering method according to DIN 18 157.

- For large-sized fully vitrified tiles it can be necessary to apply a thin contact layer on the backside of the tiles with SCHÖNOX TT FLEX DUR.
- In case of laying highly absorbent Chinese granite (e.g. Padang) irreversible discolouration can appear. We recommend a test bonding.
- For exterior areas use only suitable natural stones.
- For laying natural stones sensitive to discolouration we recommend depending on the substrate and the covering: SCHÖNOX Q9 W.
- The laying of ceramic tiles and slabs and natural stones on hollow floors without a screed as additional burden-sharing layer, should not be done without the approval of the planner for the hollow floor and the designated covering. It is to use a thin-bed mortar of the category C2 S1 with the buttering-floating method or a TT-floor adhesive of the category C2 S1 with flowing consistency. For sizes from 40/40 cm respectively from 60/30 cm also with TT-floor adhesives it is necessary to apply a contact layer on the backside of the tiles.
- For laying large-sized tiles and slabs, pay attention to the valid basic rules and standards.

Grouting

For grouting of ceramic tiles with absorbent shards we recommend in case of joint width:

- from 1 to 6 mm SCHÖNOX WD FLEX
- from 1 to 12 mm SCHÖNOX UF PREMIUM

For grouting of ceramic tiles with low absorbent and nonabsorbent shards we recommend in case of joint width:

- from 1 to 12 mm SCHÖNOX UF PREMIUM
- from 2 to 20 mm SCHÖNOX SB FLEX
- from 3 to 15 mm SCHÖNOX SU
- from 2 to 40 mm SCHÖNOX XR 40

For grouting of natural stone tiles we recommend in case of joint width:

- from 1 to 12 mm SCHÖNOX UF PREMIUM
- from 3 to 15 mm SCHÖNOX SU

SCHÖNOX® TT FLEX DUR

Product data sheet

For grouting with chemical resistant joint filler we recommend in case of joint width:

- from 1 to 10 mm SCHÖNOX CF DESIGN
- from 1 to 10 mm SCHÖNOX CON BODEN
- from 2 to 40 mm SCHÖNOX XR 40

For building movement joints and field definition joints we recommend:

- SCHÖNOX ES respectively
SCHÖNOX MES

Follow the relevant product data sheets.

Packaging

- 25.0 kg paper sack

Storage

- Storage life of 1 year
(in closed packaging).
- Opened bags should be closed immediately and used up as soon as possible.

Disposal

- Empty packaging of all trickles and dispose of in accordance with the regulations.
- For the disposal of product residues, waste water and containers with adherent product residues please follow the local governmental regulations.

GISCODE

- ZP1 - cement products, low in chromate

Instructions

- All values are approximate and are subject to local climatic fluctuations.
- SCHÖNOX TT FLEX DUR contains cement. Alkaline reaction when it comes in contact with moisture, therefore protect skin, eyes and respiratory system. Do not breathe in dust. In case of contact rinse immediately with plenty of water. In case of contact with eyes seek additional medical advice.
- Please follow the relevant product data sheets when using complementary products. If in doubt, we recommend obtaining further information from the manufacturer.
- Protect SCHÖNOX TT FLEX DUR during the working process from high ambient temperatures, direct sunlight and

draughts because the open time will strongly interacted. Observe skin formation.

- For working in exterior areas basically the atmospheric conditions must be stronger considered. Protect the work against imminent rainfalls with a suitable roofing.
- High temperatures accelerate, low temperatures decelerate the working and curing process.

The applicable recommendations, guidelines, DIN regulations and safety data sheets are to be observed, together with the recognised architectural and engineering regulations. We guarantee that our products leave the factory in perfect condition. While our recommendations for use are based on tests and practical experience, they can only provide general guidance without any assurance as to product characteristics, since we have no influence over the conditions on site, the execution of the work or the method of processing. This product data sheet supersedes all previous editions.



The Sika management system is certified to ISO 9001 and 14001 by SQS

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