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SCHOMBURG Building Product Systems

Technical Data Sheet

SOFTSTEP

Art.-No. 205975

Impact sound deadening and isolation

Description:
SOFTSTEP is used for permanent reduction in impact sound and isolation beneath tiles, natural stone, laminate and parquet.

Primary Uses:
SOFTSTEP is used for a permanent reduction in impact sound and for isolation beneath ceramic tile, natural stone, synthetic stone, parquet and laminate finishes in interiors. SOFTSTEP is suitable for laying onto load-bearing and properly installed wooden floors such as parquet and chipboard. SOFTSTEP isolates ceramic finishes over damaged and cracked, yet load-bearing, substrates.

Advantages:
- Very good impact sound reduction
- Low installation height
- Stable under compression
- Can be laid loose beneath laminate and floating parquet
- Bridges cracks in the substrate

Typical Properties:

Colour:	antique white
Thickness:	3 mm
Degree of impact sound Improvement:	up to 17db in accordance with DIN EN ISO 140-8
Acceptable loading:	3.5 kN/m² in domestic buildings, high dynamic loading such as from continuous vehicular traffic are excluded

Substrate Preparation:
The substrate must be dry, load-bearing and sufficiently flat. Eliminate height variations in the substrate and penetrating moisture. Level out uneven substrates appropriately before installing SOFTSTEP. Levelling can be carried out with SOLOPLAN-30, NIVELLIERMASSE NM-14-Öko, ASO-NM15 or HOLZBODENSPACHTELMASSE-HSM-11 dependent on the area of application. Suitable interior floor substrates are e.g. concrete to DIN 1045, cement-based screeds, anhydrite screeds, magnesite screeds to DIN 18560, chipboard as well as all well bonded ceramic finishes and natural stone. They must have a largely closed surface and the surface condition and strength must be appropriate for their type. Porous and lightly sanded substrates are to be primed with ASO-Unigrund prior to any bonding. Substrates based on calcium sulphate binders must be mechanically abraded, vacuumed and, as with all calcium sulphate based substrates, primed with ASO-Unigrund (see advice). Heated screeds must have been commissioned in accordance with the approved technical regulations before any finishes are laid. To determine whether a substrate is ready to receive floor coverings, carry out a moisture measurement with a carbide hygrometer (CM device).

These moisture measurements may not exceed:
- CT (cement-based screeds) 4.0 CM%
- CA (calcium sulphate screeds) without underfloor heating 0.5 CM%
- CA (calcium sulphate screeds) with underfloor heating 0.3 CM%

Wooden substrates such as chipboard and parquet must be clean, dry and load-bearing. The residual moisture of wooden substrates (measured by kiln drying or with a suitable moisture measuring device for timber products) may not exceed 6-10% equilibrium moisture content. Prime chipboard with MULTI-GRUNDIERUNG MG-17. The chipboard must be a minimum of 22mm thick, screwed and glued along tongue and grooves with staggered joints. The distance between installed rust resistant screws may amount up to 40 cm and up to 5 cm from the edge. Avoid cross joints and butt joints between the supports. Secure loose, springy or squeaky

boards with more screws. Leave a perimeter gap of a minimum 15 mm. Where room lengths or widths exceed 7.5 m, the perimeter gap must be at least 2 mm for every metre. The perimeter joint is to be filled with insulating strips that permit movement and ventilation. The substrate must conform to the load-bearing requirements for the bearing load in accordance with DIN 1055 and must be secured adequately resistant to flexing.

The flexing under maximum load must be less than 1/300 of the span.

E.g. With a span of 36cm and a dead load of 2kN with a multi-layered board a board thickness of 25 mm is necessary.

The impact sound deadening on timber floors is generally lower and more dependent on the sub-construction.

The recommendations of the development association for timber construction "timber products in civil engineering, part 2 construction" are to be followed.

Product application:

Installation of SOFTSTEP:

Roll out SOFTSTEP and cut with a carpet knife. The residual stress of the trimmed material disappears when the cut pieces are laid flat over one another for a short period of time at room temperature. Lay the individual strips with butt joints with the required perimeter gap. Offset cross joints. SOFTSTEP is laid beneath tiles in combination with the existing substrate construction. Bonding is carried out with a flexible thin bed adhesive free from cavities and voids. Thoroughly press the SOFTSTEP firmly into the adhesive bed with a trowel or roller. Overlay butt joints with a minimum 2cm wide commercial adhesive tape. Lay the strips with the side facing outwards to the bottom. The printed side is then on the top. In order to avoid restraint lay the SOFTSTEP with a minimum 10 mm gap from adjoining building components.

Beneath parquet and laminate:

Lay loose onto flat level substrates or lightly fix with UNIVERSALFIXIERUNG UF-41 ÖKO. In order to avoid restraint install the floating laminate or parquet with a minimum 15mm gap from adjoining building components.

Evenly spread the UNIVERSALFIXIERUNG UF-41 ÖKO onto the substrate with a suitable roller or trowel (see consumption). Allow to dry for approx. 30 minutes (the adhesive film turns transparent but is still tacky) and bed in the SOFTSTEP within the next 30 minutes and fully smooth down. Only allow to dry for approx. 15 minutes on porous substrates. Then bed the SOFTSTEP into the tacky adhesive within the next 20 minutes and thoroughly smooth down. It is especially important to smooth out and roll again at the ends and joints.

Bonded to concrete, poured asphalt of hardness classes IC 10 and IC 15, cement-based, anhydrite and magnesite screeds and existing ceramic, synthetic and natural stone finishes:

Once the primer is dry spread the appropriate thin bed adhesive with a 4 – 8 mm notched trowel onto the substrate. Lay the strips into the wet adhesive bed (pay attention to the open time).

Bonded to chipboard and parquet:

Once the primer is dry, bond the SOFTSTEP with the thin bed adhesive. The rapid setting products SOLOFLEX-SE, UNIFIX-FBK-SE, CRISTALLIT-flex should be used to ensure the least amount of moisture enters the substrate.

Following surface finishes on SOFTSTEP:

Once the adhesive bed has hardened or once the fixing adhesive has dried out the following finishes can be subsequently laid on SOFTSTEP with the appropriately selected thin bed adhesive. The use in wet duty classification area I according to the ZDB information sheet)* is possible if waterproofing (to example LV 3.20) is provided.

Tiles and slabs:

For laying white-bodied biscuit, red-bodied biscuit, vitrified tiles and slabs and tiles with low water absorption of <0.5% (fully vitrified), clinker and natural

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stone not sensitive to discolouration onto SOFTSTEP the following thin bed adhesives can be used: UNIFIX-2K, MONOFLEX, LIGHTFLEX, SOLOFLEX, AK7P, UNIFIX-AEK, SOLOFLEX-SE, UNIFIX-FBK-SE.

• Natural stone:
For the installation of sensitive natural and synthetic stone tiles (see advice) the following thin bed adhesives can be used: CRISTALLIT-flex, CRISTALLIT-MBK-flex.
Mix the thin bed adhesives and spread a skim coat over the mat. Subsequently comb out the thin bed adhesive with a minimum 8 mm notched trowel and lay the tiles as far as possible in a solid bed to DIN 18 157. The finishing material must have a minimum surface area of 100 cm^2 and a minimum breaking strength of 1500 N. On wooden substrates the tile size may not exceed 900 cm^2. Grouting of the finish is carried out with ASO-Flexfuge once it is ready to receive foot traffic.

(" Advice for carrying out waterproofing when combined with ceramic tiles and slabs in interior and exterior areas)

Estimating & Supply:

Packaging:	7m rolls (5.25 m^2)
Weight:	approx. 2.5 kg/m^2
Width:	75 cm

Substrate preparation before bonding SOFTSTEP

Substrate	Primer	Adhesive
Concrete to DIN 1045	ASO-Unigrund-GE ASO-Unigrund-K (mix ratio 1:4) MULTI-GRUNDIERUNG MG-17	UNIFIX-2K, MONOFLEX, LIGHTFLEX, SOLOFLEX, AK7P, SOLOFLEX-SE, UNIFIX-FBK-SE
Cement-based screed, rapid setting cement-based screed to DIN 18560, unheated calcium sulphate screed CM moisture ≤ 0.5%, heated calcium sulphate screed CM moisture ≤ 0.3%	ASO-Unigrund-GE ASO-Unigrund-K (mix ratio 1:4) MULTI-GRUNDIERUNG MG-17	UNIFIX-2K, MONOFLEX, LIGHTFLEX, SOLOFLEX, AK7P, SOLOFLEX-SE, UNIFIX-FBK-SE, UNIFIX-AEK
Calcium sulphate screeds, CM moisture ≤1.5% Heated calcium sulphate screeds, CM moisture ≤1.0%	ASO-Unigrund-GE ASO-Unigrund-K (mix ratio 1:4)	UNIFIX-AEK
Well bonded ceramic tiles	ASO-Fliesengrund	MONOFLEX,LIGHTFLEX
Magnesite screeds	ASODUR-D2 + sand broadcast, AK7P, SOLOFLEX-SE, UNIFIX-FBK-SE	MONOFLEX, LIGHTFLEX, SOLOFLEX,
Poured asphalt of class IC10 or IC 15	Not necessary	MONOFLEX, LIGHTFLEX, SOLOFLEX, AK7P, SOLOFLEX-SE, UNIFIX-FBK-SE
Wooden substrates	MULTI-GRUNDIERUNG MG-17	SOLOFLEX-SE, UNIFIX-FBK-SE, CRISTALLIT-flex

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Important advice:

- Keep movement joints empty for elastic sealing with ESCOSIL-2000.
- Follow the technical data sheets for the waterproofing materials, smoothing compounds, adhesives as well as the manufacturer's installation instructions for the finishing products.
- When installing natural and synthetic stone observe the product specific properties of the finishing materials (risk of discolouration, curling etc.) and the installation recommendations of the manufacturer. If unsure carry out a trial area.
- To avoid curling due to water absorption we recommend using the epoxy adhesive ASODUR-EK98 when installing serpentine, slate or conglomerate/synthetic.
- To avoid the formation of ettringite with calcium sulphate substrates UNIFIX-AEK is suited for installation on these substrates up to a residual moisture content of 1.0% for heated screeds and 1.5% for unheated screeds (CM method – carbide hygrometer).
- Direct contact between cement-based tile adhesives and magnesite screeds leads to destruction due to a chemical reaction. Rear penetrating moisture from the substrate must be excluded using appropriate means. Mechanically abrade the magnesite substrate and prime with the epoxy resin ASODUR-D2 with maximum 5% water as necessary (approx. 250 g/m^2). After a waiting time of approx. 12 hours to 24 hours at +20° C apply a second coat of ASODUR-D2 (approx. 300 – 350 g/m^2). Broadcast quartz sand of particle size 0.5 – 1.0 mm to excess into the wet second coat. After waiting a further 12-16 hours the installation work may commence.
- Follow the appropriate current regulations. E.g.
  - DIN 18157
  - DIN 18352
  - DIN 18560
  - DIN 68771
  - DIN 68763
  - DIN 68800 part 2
  - DIN 1055
- The ZDB information sheets distributed by the Professional Association of the German Tile Industry:
  - Advice for the implementation of waterproofing in combination with ceramic tiles in interior and exterior areas.
  - Movement joints in tiled cladding and finishes.
  - Ceramic tiles, natural stone tiles and synthetic stone on calcium sulphate based screeds.