



Technical Data Sheet

STEPBOARD

Art.-No. 2 05833

Polyester fibred, step sound and neutralizing insulation board

Properties:

- Thickness Strengths: 4 mm, 9 mm and 15 mm
- Stable form
- Pressurised
- Environment friendly
- Protected against rotting
- Sound barrier protection up to 29 dB (acc. To DIN 52210)

STEPBOARD is a simple to handle, high pressure, secure neutralizing and renovation board with excellent stepping sound and atmospherical insulating qualities.

Areas of application:

STEPBOARD can be applied as a permanent solution for the reducing of step sound, to be insulated under ceramic tiles and slabs, natural stone, cast stone, parquet and laminate flooring for interior applications. 9 mm and 15 mm thick STEPBOARDS are suitable for the correct laying of professional insulation boards on Wooden floors of load carrying capacity, such as lobbies, parquet and chipboard. 4 mm STEPBOARDS are suitable for heated flooring (without results of heat loss provided). 9 mm and 15 mm thick STEPBOARDS provide heat insulation qualities (please see important notes). For neutralizing of ceramic tile surfaces of load carrying capacity which have been cracked or damaged, for the covering and re-alignment of Interfering expansion joints in upper layers. Such irregularities in height due to reversed pressure (eg: restoration of old tiles on plastered surfaces) can, therefore, be balanced out and become less cost effective.

Technical Data:

Basis:	Polyester fibres
Colour:	green
Packaging:	4 mm thick board: Box with 15 boards = 9 m ² 9 mm thick board:

Box with 10 boards = 6 m²
15 mm thick board:
Box with 5 boards = 3 m²
In dry storage, layed flat for
atleast two years.

Storage:

For further technical details please see separate table at the end of the Technical Data Sheet!

Surface preparation:

The substrate must be dry, load bearing and free from remaining residues. Suitable substrates for floor surfaces in interior areas are: concrete, cement screed, anhydrite screeds, magnesite screeds and also old, firm ceramic surfaces and natural stone. Surfaces influenced by calcium sulfate (gypsum board and anhydrite) must be dry (less than 0.5% acc. to CM device values for unheated floorings and less than 0.3% acc. to CM device values on heated surfaces), these can be primed with ASO-Unigrund-K (Universal primer) or with UNIVERSAL-GRUNDIERUNG UG-16 (Universal primer). Anhydrite screed surfaces are to be roughened.

Product preparation:

STEPBOARD boards can be cut using a carpet knife (Stanley knife), jigsaw (with wood blade) and hand held circular saw (DA 150 mm hard metal circular toothed blades with 48 teeth or chromed blades with 60 teeth). To protect sound barriers and rigid restrains the STEPBOARD is to be placed leaving a gap of 5 mm to adjacent parts, supports or mounts. For even mineral surfaces or for surfaces with load carrying capacity, a flowing layer using 15 mm thick STEPBOARDS can be layed. This increases the insulation protection considerably. The butt joints in this application can be simply applied using common masking tape (50 mm wide). For laying of STEPBOARDS on compounded constructions (*as given in the following section under "laying of STEPBOARD"), can be carried out by

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applying the thin bed mortar types MONOFLEX or SOLOFLEX.

Here the subsequent top coat work can be carried out after a period of 24 hrs.

To quicken up the construction process the binding can be improved using the rapid hardening, tile bed mortar UNIFIX-FBK-SE or rapid hardening, thin bed mortar SOLOFLEX-SE.

Here the top surface can be covered after a hardening time of approx. 4 to 6 hrs. The above mentioned values are calculated at an ambient temperature of + 20° C and at a relative humidity of 60%. High temperatures reduces the pot life, low temperatures increase.

Laying of STEPBOARD*:

Compounding of surfaces made of concrete, bituminous mastic concrete, cement, Anhydrite and Magnesite screed and on old cast stone, natural stone and ceramic (as step sound and neutralizing boards) STEPBOARDS of 4, 9 and 15 mm thick.

Surfaces which are strongly influenced by calcium sulfate bondings or high absorbing surfaces are to be primed with ASO-Unigrund-K (Universal primer) or with UNIVERSAL-GRUNDIERUNG UG-16 (Universal primer).

On older firm surfaces the coatings are to be cleaned and then pre-coated with ASO-Fliesengrund or MULTI-GRUNDIERUNG MG-17 (multi primer). Uneven areas can be levelled off using ASO-FS 10 (cement bonded), NIVELLERMASSE NM-14 (cement bonded) or with ASO-NM15 calcium sulfate bonding for application on Anhydrite screeds. After the primer has hardened, the levelling mixture can be combed over with the suitable thin bed mortar onto the surface (with trowel and 6 to 10 mm sized teeth). The boards are to be placed into the fresh cement mortar (attention to skinforming!), avoiding cross joints and blunt adjoining.

Finally, the boards are to be knocked into place in such a way that a fully coated and filled foundation is created. It is essential that no remains of cement mortar is left between the joints. After drying of the cement mortar the board joints are to be taped with common masking tape (20 to 50 mm wide).

For binding of wooden surfaces such as lobbies, chipboard and parquet being used as a step sound and neutralizing insulation board (only use 9 and 15 mm STEPBOARD).

Wooden surfaces must be clean, dry and be of load carrying capacity. Damaged lobbies are to be replaced, if necessary re-affixed. Joints between lobby boards are to be sealed with ASO-Dauerlast (permanent load). Woodchip boards are to be bonded, lapped, screwed down and limed. Lobbies and parquet are to be sanded down if necessary and are to be primed with MULTI-GRUNDIERUNG MG-17 (multi primer).

Chipboards are to be primed with MULTI-GRUNDIERUNG MG-17 (multi primer) or with 1 part UNIFLEX-B to 1 parts diluted Water. Uneven areas can be levelled off within one work period using HOLZBODENSPACHTEL-MASSE HSM-11, down to 20 mm (Wood floor spackling mass).

After the primer has hardened, the levelling mixture can be combed over with the suitable thin bed mortar onto the surface (with trowel of 6 to 10 mm sized teeth). The boards are to be placed into the fresh cement mortar (attention to skinforming!), avoiding cross joints and blunt adjoining.

Finally, the boards are to be knocked into place in such a way that a fully coated and filled foundation is created. It is essential that no remains of cement mortar is left between the joints. After drying of the cement mortar the board joints are to be taped with common masking tape (20 to 50 mm wide).

Bonding of plaster, concrete and masonry brickwork as a renovation measure on Walled Areas:

For application of STEPBOARD(s) on walled areas eg: for levelling off of reversed pressure under tiles, the surface is to be solid, capable of load carrying capacity, have no old coatings, residues and of suitable base for tile laying. Lightly sanded down surfaces and absorbing surfaces are to be primed with ASO-Unigrund (Universal primer). As soon as the primer has hardened, the suitable thin bed mortar can be combed into the surface using a notched trowel (6 to 10 mm

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wide). The boards are to be placed into the fresh cement mortar (attention to skinforming!), avoiding cross joints and blunt adjoining.

Finally, the boards are to be knocked into place in such a way that a fully coated and filled foundation is created. On the cross sectioned area between the old surface and STEPBOARD, the joint can be filled and covered with the applied thin bed mortar using a Glasgittergewebes-F (lattice).

Subsequent top coatings on STEPBOARD:

After hardening of the cement mortar, the following options for the subsequent coating on STEPBOARD and chosen type of adhesive can be carried out:

In moist rooms (moisture class I and II acc. to ZDB-Data Sheet) a bonding sealant of type SANIFLEX or AQUAFIN-2K/M is to be applied prior to surface work.

Tiles and slabs:

For laying of tiles and slabs made of stone ware, earthenware, ceramic with a minimum of water permeability (less than 0.5% (fine stone ware)), mosaic, bricks and natural stone onto STEPBOARD, we recommend the thin bed mortar types: MONOFLEX, SOLOFLEX and AK7P.

Natural Stone:

For laying of calibrated natural stone and cast stone slabs (please see important notes), we recommend the thin bed mortar types: CRISTALLIT-flex, SOLOFLEX-SE and UNIFIX-FBK-SE

Parquet and Laminate flooring:

Ideal adhesive material for covering and fixing of parquet, ready-to-lay parquet and laminate flooring, we recommend INDU-PK 1065 and INDU-PK 2007

Textile and Elastic Floor surfaces:

Prior to laying of textile and elastic floor surfaces, it is recommendable to apply a 2 mm thick layer of NIVELLIERMASSE NM-14 (levelling mass) and leave to harden. Using this application prior to laying of the

finishing surface, such uneven areas can be avoided. The following adhesives can be used for:

Carpet:

Teppich-Klebstoff TK-42 ÖKO
(Carpet adhesive)

PVC, Rubber layered surfaces:

UNIVERSAL-HAFT-KLEBSTOFF UHK-33
(Universal bonding sealant)

Lino:

LINO-KLEBSTOFF universal LKU-43 ÖKO
LINO-KLEBSTOFF LK-37
(Lino adhesives)

Important advice:

- For the application of rapid hardening, thin bed mortar on the already hardened levelling mass (ASO-NM 15), it is recommended to cover the whole area with the primer type: ASO-Unigrund (Universal primer).
- For laying of natural and cast stones the specific product properties of the surface materials are to be regarded (Discolouring and Key influences). Attention to Manufacturers recommendations is to be made. If in doubt carry out adhesion tests in advance.
- 9 and 15 mm STEPBOARDs contain heat insulating qualities and are, therefore, suitable for heated surface constructions.

Technical Data Sheets covering this specified sealant, plastering mixture, cement mortar such as adhesives and the manufacturers laying instructions are to be strictly adhered to.

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Feature	Unit Measure	STEPBOARD 4 mm	STEPBOARD 9 mm	STEPBOARD 15 mm
Density	kg/m ²	approx. 950	approx. 780	approx. 720
m ² -weight	kg/m ²	approx. 3,8	approx. 7,8	approx. 10,8
Thickness (toleration)	mm	4 ± 0,5	9 ± 0,5	15 ± 0,5
Format (toleration)	cm x cm	60 x 100 ± 0,1	60 x 100 ± 0,1	60 x 100 ± 0,1
Pressured strength (acc. to DIN 53456)	N/mm ²	17	11	11
Bending strength (acc. to DIN 53452)	N/mm ²	5	2	2
Bending E-module (acc. to DIN 53452)	MN/m ²	approx. 240	approx. 100	approx. 100
Tensile strength (acc. to DIN 53457)	N/mm ²	6,7	3,1	1,8
Heat conducting capacity IR (acc. to DIN 52612)	(W/m.K)	0,11	0,10	0,8
Coefficiency of heat transfer U (acc. to DIN 52612)	(W/m ² .K)	28,63	11,46	5,6
Diffusion resistance value m (acc. to DIN 52615)	l	approx. 30	19	19
Coefficiency of linear expansion α _o	K ⁻¹	2,75 x 10 ⁻⁵ K ⁻¹	2,51 x 10 ⁻⁵ K ⁻¹	2,10 x 10 ⁻⁵ K ⁻¹
Impact sound reduction with div. coverings**				
Tiles, STEPBOARD adhered	dB	–	10	13
Tiles, STEPBOARD NOT adhered	dB	–	–	17
Carpet	dB	–	–	29

** Test results according to DIN ISO 712-2