Technical Information
Decoupling and impact sound insulation board
Steptherm 800 - 9 mm

Steptherm 800 – 9 mm is used for decoupling and impact sound insulation on mineral substrates.

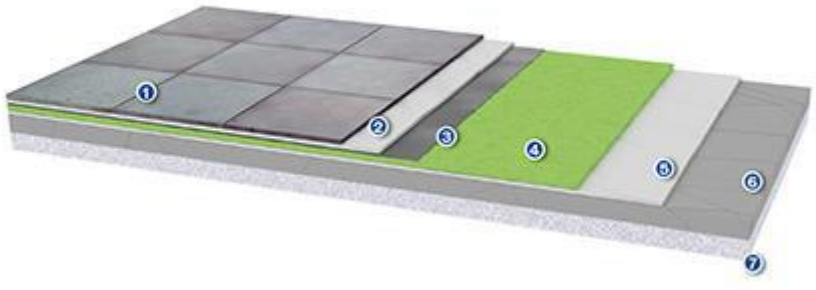
Steptherm 800 – 9 mm is a 9 mm thick polyester fibre board with high tensile and compressive strength and can be laid in conjunction with conventional, polymer-modified adhesives and adhesive mortars and be used with all types of top surfaces.

Properties and application area: Steptherm 800 – 9 mm is suitable as decoupling and sound insulation substrate for all types of top surfaces such as ceramic, natural stone, parquet and, after smoothing, also for carpets and synthetic surfaces. This board can be used on screed, smoothed concrete surfaces and old / hard surfaces. Its high compressive strength allows use under traffic load conditions of up to 5.0 kN/m².
Due to its low total thermal resistance, **Steptherm 800 – 9 mm** can be laid on top of hot water underfloor heating in particular in cases of to low pipe covering.
The decoupling effect is due to the reduction of shear stresses from a cracked substrate or a substrate with unwanted moving joints by ductile deformation within the board.
Besides the restoration of critical substrates, **Steptherm 800 – 9 mm** can be used to reduce considerably the often visually distracting moving joints in rigid surfaces.

Technical data:

Layer thickness	9 mm ± 0.5 mm	
Format	1000 x 600 mm ± 1.0 mm	
Surface weight	6.3 kg/m² ± 5%	
Compressive strength	10 N/mm²	DIN 53 456
Bending strength	2 N/mm²	DIN 53 453
Tensile strength	6.0 N/mm²	DIN 53 457
Traffic bearing load	5.0 kN/m²	
Thermal conductivity	λ = 0.10 W/mK	
Thermal transfer coefficient	U = 11.1 W/m²K	
Fire behaviour	class E(fl)	DIN EN 13 501-1
Application area	inside	
Impact noise insulation with ceramic top surface	approx. 9 dB*) glued approx. 16 dB*) loose	*) Test bench value as per DIN ISO 10140 (complete test assembly)

System structure using example of tile surface on top of a cracked floor screed on insulating layer:



1. Flexible joint mortar and tiles
2. C2 tile adhesive
3. Composite sealing (if required)
4. **Steptherm 800 – 9 mm**
5. C2 tile adhesive
6. Floor screed
7. Insulation

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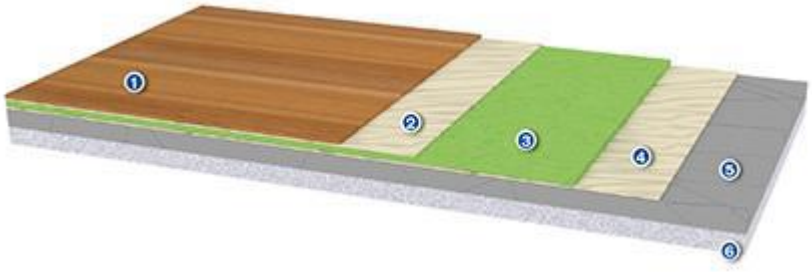
System structure using example of solid parquet on top of a cracked floor screed on insulating layer:



1. Parquet
2. Parquet adhesive
3. **Steptherm 800 – 9 mm**
4. Parquet adhesive
5. Floor screed
6. Insulation

Working with the boards:
Steptherm 800 – 9 mm boards are bonded on the substrate. The boards are laid in a half-bond pattern. Maintain sufficient edge distance to all rising structural members such as supports and walls. An edge insulation strip is recommended.
Boards can be cut with a good cutter knife or with a cut-off wheel, with diamond, for the angle grinder.
Substrate: The laying substrate must be capable of bearing load (load capacity > 1.0 kN/m² as per DIN 1055) and be even as defined by DIN 18 202 Table 3 Line 3.
Bonding: The **Steptherm 800 – 9 mm** boards are inserted onto the C2 tile adhesive, preferably with 6mm notch spacing, applied onto the adhesion-friendly substrate. The top surface can be applied once the laying mortar has hardened.

Overlaying with top surfaces:
Ceramics, natural stone and parquet can be laid directly onto the **Steptherm 800 – 9 mm** with all conventional, polymer-modified laying materials. Tiles must have a minimum area of 200 cm², natural stone a minimum thickness of 10mm. In damp and wet areas, a composite seal matching the recommendations of the current ZDB (central association of the German construction industry) data sheet on “Composite seals” is applied with the top surface.
Smoothing over the **Steptherm 800 – 9 mm** boards to create a substrate free of butt-joints is recommended prior to laying carpet and synthetic surfaces such as linoleum, PVC and CV. A cement-bonded, polymer-modified filling compound (observe product information) can be installed on **Steptherm 800 – 9 mm**. Before filling over, the treat the boards with a primer according to the instructions of the manufacturer of the filling compound. The readiness of the overlay is dependent on the drying period of the filling compound, itself dependent on environmental conditions. It is not negatively impacted by the board.
Because of the good thermal insulation characteristics, electric underfloor heating on **Steptherm 800 – 9 mm** attain a considerable increase in efficiency – the ideal compliment below ceramic and natural stone surfaces.

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Deliverables:
Steptherm 800 – 9 mm boards are manufactured to a size of 1000 x 600mm. 100 boards (= 60 m²) are stacked on one Euro palette.

Safety when working:
No specific protective measures are necessary when laying **Steptherm 800 – 9 mm** boards correctly.

Disposal:
Dispose of product remains as construction waste (waste code 170701).

Attention! Important Note:
Above information are based on best present knowledge of current technology, but do not guarantee faultless processing of our products. The information is based on practical results of our tests, but is not binding and does not constitute warranties of characteristics in terms of Federal Supreme Court jurisdiction. Our information does not constitute a legally binding assurance of certain properties or suitability for a specific purpose. Supplementary information by our specialists are merely recommendations, for which no liability is accepted.
Due to the many possible applications of our products, we recommend subjecting the project to a thorough suitability test on original materials before release for further application.
Since our information are non-binding we do not warranty their correctness. For this reason we accept no liability for possible improper processing based on information submitted by our employees.
This technical data sheet replaces all previous versions and is valid until a new version is issued, or until Dec. 31, 2026. Please request the latest version after Jan. 01, 2027.

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