

Unitherm Heat Distribution & Decoupling Board



- > Optimized heat distribution for underfloor heating systems
- > Stress-relieving underlay
- > Reduces impact sound
- > Aluminium layer rapidly spreads heat across the finished floor surface

Product description

Heat-distributing, decoupling and impact sound-reduction board for installation with underfloor heating systems in internal areas. It forms a stable, heat-conductive receiving surface for ceramic tiles, natural stone, parquet and engineered wood flooring.

The 4.5 mm board is particularly suited to renovation and refurbishment projects where build-up height is restricted. Installed over the prepared UFH surface, the integrated aluminium layer spreads heat evenly across the floor, helping to reduce temperature variation and improve heat transfer to the final covering. The board also provides a decoupling layer between the heated substrate and the floor finish. An impact sound reduction of up to 14 dB was achieved in the tested ceramic tile build-up described under Technical data.

Delivery format

Container	Outer packaging	Pallet
200 STK / STK	-	200 STK

Storage

Store flat, cool and dry in the original unopened packaging. Protect from moisture, direct sunlight and damage. Shelf life: unlimited when stored correctly.

Processing

Processing

UniTherm is designed for installation with underfloor heating systems. The receiving surface must be firm, level, dry, load-bearing and suitable for bonding.

In combination with ceramic tiles and natural stone:

Tile laying technology

Apply a suitable MUREXIN C2 S1 flexible tile adhesive to the prepared receiving surface using a 4 mm or 6 mm notched trowel. Place the UniTherm boards into the fresh adhesive bed and press, tap or rub them firmly into position to achieve full-surface contact without voids.

Install the boards with staggered joints and ensure that no cross joints are created. The edges of adjacent boards must remain separated and must not be connected by adhesive. Maintain all existing structural and movement joints through the complete floor build-up. Install suitable perimeter isolation strips at walls, columns and other fixed elements.

Once the adhesive beneath the boards has cured, ceramic tiles and natural stone may be bonded directly to the UniTherm surface without additional priming. Use a suitable MUREXIN C2 S1 flexible tile adhesive and select the notched trowel according to the covering type and format.

In combination with parquet and engineered wood flooring:

Apply a suitable MUREXIN MS parquet adhesive to the prepared receiving surface using the appropriate notched trowel, selected according to the substrate and adhesive instructions. Place the UniTherm boards into the fresh adhesive bed and press, tap or rub them firmly into position to achieve full-surface contact without voids.

Install the boards with staggered joints and ensure that no cross joints are created. The edges of adjacent boards must remain separated and must not be connected by adhesive. Install suitable perimeter isolation strips at walls, columns and other fixed elements.

After the adhesive beneath the boards has cured, apply a compatible MUREXIN MS parquet adhesive directly to the UniTherm surface using the appropriate notched trowel for the selected parquet or engineered wood flooring. Install the floor covering in accordance with the adhesive and floor-covering manufacturers' instructions.

In areas subject to water exposure:

Incorporate UniTherm within a suitable MUREXIN waterproofing or tanking system appropriate to the intended use. The board itself does not provide a waterproof barrier. Contact MUREXIN Technical Services for advice on wet rooms, showers and other areas exposed to frequent or prolonged water.

Technical data

Certificates/test reports/class
achieved
Format
Thickness
Tolerances
Thermal conductivity λ_{10}
according to DIN EN 12667

DIN EN ISO 717-2:2021-05 - Impact sound level reduction
14 dB
60 x 120 cm
4.5 mm
Cutting dimensions: ± 1.0 mm, Thickness: ± 0.5 mm
0.0792 m²K/W

Substrate

Suitable substrates

Concrete
Cement or calcium sulphate screeds above wet UFH
Concrete and cement screed
Calcium sulphate (anhydrite) screed
Mastic asphalt
Suitable tile backer and gypsum fibreboards
Prepared wood-based panels
Smooth formwork concrete
Aerated concrete

The substrate must be dry, frost-free, firm, load-bearing and dimensionally stable, and must be free from dust, dirt, oil, grease, release agents and loose particles. It must comply with the applicable national and European technical guidelines and standards, as well as the “generally accepted rules of technology.”

Product and processing instructions

Material information:

- When working outside the ideal temperature and/or humidity range, the material properties may change significantly.
- Temper materials accordingly before processing!
- To retain the product properties, no foreign materials may be mixed in!
- Water dosing amounts or thinning specifications must be precisely kept!
- Check coloured products before use for colour accuracy!
- Colour consistency can only be guaranteed within a batch.
- The colouring is significantly influenced by the environmental conditions.

Environmental information:

- Do not process at temperatures below + 5 °C!
- The ideal temperature range for material, substrate and air is +15 °C to +25 °C.
- The ideal relative air humidity range is between 40% to 60%.
- Increased humidity and/or lower temperatures delay, lower air humidity and/or higher temperatures accelerate drying, setting and hardening.
- Ensure sufficient ventilation during the drying, reaction and hardening phase; avoid draughts!
- Protect from direct sunlight, wind and weather!
- Protect adjacent components!

Tips:

- We recommend using a test surface first or a small area for initial, small-scale testing.
- Observe the product data sheets of all MUREXIN products used in the system.
- Keep a genuine original container of the respective batch for later repair work.

The information provided reflects average values that were obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual deliveries may vary slightly without impacting the product suitability.

Safety instructions

This leaflet is based on extensive experience, is intended to convey the best of our knowledge, is not legally binding and does neither constitute a contractual legal relationship nor a subsidiary obligation resulting from the bill of sale. The quality of our materials is guaranteed within the framework of our general terms and conditions. Our products may be used by professionals and/or experienced and accordingly technically skilled persons only. Users are not released from inquiring in case of uncertainties or from rendering professional workmanship. We recommend using a test surface first or a small area for initial, small-scale testing. Naturally, it is not possible to describe or foresee all possible current and future uses and peculiarities. Information that is assumed to be familiar to experts has been omitted.

Tile laying technology

Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt.

This version is rendered invalid if a new version is released. The most recent data sheets, safety data sheets and the terms and conditions are available online at www.murexin.com.