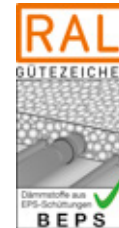


PRODUCT DESCRIPTION

- thermotec® BEPS-WD 160N A2 is a pumpable thermal insulation material with impact sound insulation properties
- Made from new EPS beads and a purely mineral binder
- The product is mixed with water on site and must be processed within 30 minutes

APPLICATION

- Floor insulation under screed (suitable for underfloor heating)
- Insulation of floors with high loads
- For fire protection requirements
- Special applications on request



EN 16025-1 ✓
THERMAL INSULATION MATERIALS FOR HEAT AND/OR SOUND PROTECTION IN BUILDING CONSTRUCTION.

BEB-HINWEISE ✓
FEDERAL ASSOCIATION FOR SCREED AND COVERINGS.



TECHNICAL DATA

BEPS-WD 160N A2

Reaction to Fire classification according EUROCLASS	Class A2-s1, d0 on wooden ceilings 50 mm installation thickness
Nominal value of thermal conductivity $\lambda_{D(23/50)}$	0,065 W/(mK)
Min. installation thickness	From 30 mm
Max. installation thickness (thicknesses over 500 mm must be installed in multiple layers. Application on request.)	500 mm****
Water addition per m ³	55 Liter
EPS Type / max. particle size / dust particles [PS]	N/PS5/D0
Bulk density of the dry mixture [LD]	145 kg/m ³
Density of the fresh mortar [FMD]	200 kg/m ³
Bound EPS Density [DMD]	175 kg/m ³
Water vapour permeability μ [MU]	7
Compressive stress at 10 % strain [CS]	≥ 200 kPa
Compressive stress at 2 % strain [CS (2)]	≥ 80 kPa
Dimensional stability under specified temperature and humidity	≤ 2 %
Compressive creep 10 years at 20 kPa	CC(1,3/1,1/10)20
Dynamic stiffness [SD]	–
Water absorption during short-term, partial immersion	≤ 2 kg/m ²
Content, emission and/or release of dangerous substances	AgBB approved
Chromium VI content HBCDD content	≥ 0,1 ppm free
Application time (open time, 20 °C/60 % rH)	Mind. 30 Min.**
Application temperature min./max.	+5 °/+30 °C
Accessible after	Approx. 24 hours**
Ready for covering (CM measurement) for installation thickness up to 250 mm (23 °C /50 % rH) for installation thickness over 250 mm (23 °C/50 % rH)	≤ 12 M-% Approx. 24 hours*** Approx. 24 hours***
Delivery forms	Mixmobil, thermotec® continuous mixer, 100 liter pre-mixed material
Certifications, licences and laboratory tests	EN 16025-1 approved, free of HBCD, BEB-information sheet*, AgBB approved, ETA-23/0187

NOT FLAMMABLE!

* Notes on the planning and execution of floor constructions for pipes, cables and built-in components on bare ceilings. ** Depending on temperature, humidity and installation thickness. *** The specifications are to be understood as guidelines. A CM measurement is required. **** Depending on live load and load-bearing capacity of the load distribution plate.

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PREPARATION

- The surface must be dry, clean (swept clean) and free of loose parts; openings must be professionally sealed
- If necessary, install a vapor barrier or damp-proofing (as determined by the planner or building physicist)
- thermotec® must not be installed at temperatures below +5 °C and above +30 °C at the installation site

LAYING

- Ensure that the insulation material is compacted without voids before leveling (e.g. with a large aluminum shovel or a large screed board)

AFTER APPLICATION

- Ensure a minimum temperature (+5 °C) until the floor can be walked on
- Avoid draughts in the first 24 hours
- Check accessible for foot traffic (before walking on for the first time)
- Verify accessible for covering (dryness of the insulation layer)
- Rub the surface of the thermotec® insulation with a batten to remove loose and protruding polystyrene beads
- Check the flatness using a lath, laser ...
- Compensate for unevenness/depressions with suitable dry filling and shave/sand down any high spots
- Plan for separating layers, films, and impact sound insulation according to building physics requirements

SPECIAL CONDITIONS

- The installed areas may only be walked on for the installation of underfloor heating and for the construction of the subsequent floor structure
- Before laying the mastic asphalt screed, place the melt protection boards (Fresco from 15 mm)

ATTENTION

- Never install more than ONE suitable insulation layer on thermotec® floor insulation!
- The rules of building physics must always be followed during planning and installation!
- If necessary, establish test areas!
- **Refer to the safety data sheet!**

APPLICATION PRE-MIXED/BAGGED MATERIALS

STORAGE CONDITIONS

- See label

PROCESSING

- thermotec® 100 l bags (approx. 13 - 14 kg), factory pre-mixed EPS dry mortar
- Do not add any additional binders or additives!
- Do not divide the bags! 1 bag = 1 mixture
- Mixing time at least 2 minutes

MIXING EQUIPMENT

- Screed pump (can deliver up to 150 m)
- thermotec® continuous mixer
- Whisk

WATER ADDITION

- 5.5 - 6 liters per bag
- For installation thicknesses under 7 cm, dusty substrates and temperatures above +25 °C, use 0.5 liters more mixing water per 100-liter bags

APPLICATION ON UNFINISHED CEILING

STORAGE CONDITIONS

- Process immediately after mixing; cannot be stored!

PROCESSING

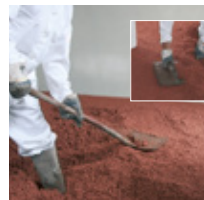
- Processing and application on unfinished ceilings are carried out with microprocessor-controlled Mixmobiles



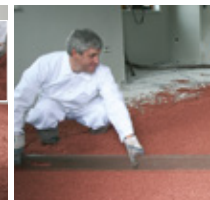
Delivery, mixing and pumping are carried out by the thermotec® Mixmobiles



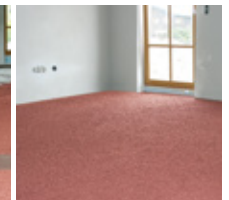
Pour screed (or mortar) into the pockets, compact, and level off.



Rework the connecting edges at the wall and compact the applied surface.



Level off the surface ...



... and done!

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