

Thermozell
WÄRMEDÄMM-LEICHTBETON



Frequently asked questions

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Product types

Thermozell levelling compound

Used to compensate for height tolerances, as well as covers the installation and drainage pipes, which are usually laid directly on the raw ceiling.

Thermozell thermal insulation lightweight concrete enables screed and tile layers to produce a floor structure quickly, economically and in compliance with norms.

In case of dismantling, coherent parts can be taken out and crumbled back into grains due to the material's property.

The material is not self-leveling and is pumpable max. 60-80 m (depending on the machine technology).

Depending on the applications, you can choose from the following types:

Thermozell 160

For applications where good thermal insulation is required, such as attic insulation, sloped concrete, basement insulation or as insulation for walls in contact with the soil.

Thermozell 250

For applications where good thermal insulation is required, such as attic insulation, sloped concrete, basement insulation or as insulation for walls in contact with the soil.

Thermozell 400

For applications with higher pressure loads, such as subfloors for industrial halls and frost cases (from 20cm) for roads and parking lots. Thermozell 400 is non-combustible and complies with fire class A2 according to DIN EN 13501-1.

Thermozell 600

For applications with high pressure loads, such as road construction and industrial halls. Thermozell 600 is non-combustible and complies with fire class A2 according to DIN EN 13501-1.

What is Thermozell eco?

Thermozell eco is a factory-premixed, cementitious levelling compound with the addition of refined EPS granulate in an 80 liter bag. Only the addition of water creates a load-bearing levelling compound with excellent insulating properties.

What is Thermozell pro?

Thermozell pro enables fast, standard-compliant and economical production of a floor structure and consists of refined EPS granulate in 200 liter bags. Mixing with the addition of cement and water takes place directly at the construction site.

What is the difference to speed?

The difference lies in our various additives. In the case of eco/pro, these lead to readiness for covering after approx. 10 days. With eco speed/pro speed, this occurs within approx. 24 hours (depending on installation thickness, ventilation and ambient temperatures).

Processing and installation

Which cement can be used for Thermozell pro/pro speed?

By adding different amounts of cement, the product types Thermozell pro speed and pro 600/400/250/160 with their respective properties and application possibilities arise. Commercially available cement (e.g. CEM 42.5 N/R, CEM 32.5 N/R) or special cement or binders for the production of bonded levelling compounds can be used for mixing.

Does Thermozell need to be compacted?

Thermozell does not have to be compacted.

The mix only needs to be levelled with a levelling rod.

1 m³ of Thermozell results in 1 m³ of finished levelling compound.

When properly installed, there is no post-compaction or settlement.

What is the minimum fill height required?

The nominal thickness (planning thickness) of 30mm must be arranged at every point according to approval: Z-23.11.266 so that it is not fallen short of at any point.

When is Thermozell ready for covering?

Before installing the rest of the floor structure, the levelling layer must be sufficiently dry.

To determine the residual moisture, the CM measurement has proven itself. The residual moisture should not exceed 12 %.

Ready for covering is achieved with:

- eco speed or pro speed after 1-2 days
- eco or pro after 10 days

How can the residual moisture be determined?

In practice, the CM method has proven itself: The initial weight is 10 g from the entire cross-section. At a pressure indication of max. 1.2 bar, readiness for covering is given.

This means a residual moisture of 12 %.

On our product pages of the eco-series and pro-series you will find detailed instructions on how to do the CM measurement:

- <https://thermozell.hirsch-gruppe.com/eco/>
- <https://thermozell.hirsch-gruppe.com/pro/>

Can ThermoZell be used in combination with metal pipes?

Aluminum-laminated pipe insulation is not suitable for use in cement-bound fills. The valid DIN 4140 (corrosion protection) must be applied and observed accordingly.

... and with plastic pipes?

We are not aware of any adverse effects with plastic pipes.

How long is the processing time?

eco speed/pro speed can be processed for at least 15 min (at 20 °C).
eco/pro can be processed for at least 30 min (at 20 °C).

What processing temperature is required?

The processing temperature (based on air and object temperature) must be at least 5 °C (and maximum 30 °C).

Can ThermoZell remain in the component after a water damage?

After water damage with fresh water, the ThermoZell levelling compound can be dried with ventilation dryers. However, if wastewater should have entered the levelling layer, you are faced with contamination and for hygienic and health reasons the levelling layer would have to be built back in a generous radius, in the affected area.

Which mixing devices are suitable?

Screed pump, truck mixer, compulsory mixer, drum mixer, free-fall mixer, mechanical mixer, mixing truck

Is ThermoZell suitable as impact sound insulation?

ThermoZell lightweight concrete has compressive strength properties and therefore does not have properties that affect impact sound. In case of appropriate requirements, an impact sound insulation board can be installed on ThermoZell in the further construction.

How to lay tiles/flooring on Thermozeil?

If tiles/floor coverings are to be laid on Thermozeil Type 400 must be used as a minimum requirement. To lay tiles/floor coverings, the Thermozeil layer must be prepared as a level surface using a commercially available leveling/troweling compound. (The manufacturer's instructions must be considered.)

Is Thermozeil free from...?

Thermozeil is free from HBCD (hexabromocyclododecane).
Thermozeil is free from CFCs, HCFCs and HFCs.

Storage and disposal

How should I store Thermozeil?

The bags must be stored in a dry place. The maximum storage time for Thermozeil eco speed/eco (ready-mix) is 6 months. Thermozeil pro speed/pro can be stored for up to 1 year.

Where can I dispose of Thermozeil?

For the disposal of Thermozeil lightweight concrete, please contact a recycling center/a waste collection point in your area.

**If you have any questions not found,
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