



Project report HAKAfloor: the intelligent drywall component for underfloor heating

Conversion and new construction of office building, HakaGerodur AG, CH 8717 Benken / Giessenstrasse 3

Project description

One existing office building at the Benken site of HakaGerodur AG was demolished and rebuilt from scratch, while the main office building underwent a complete renovation. Underfloor heating was installed in the new building.

Much of the building involved conventional construction with concrete floors and integrated underfloor heating pipes, with visible sealed sub-flooring. (corridor area, WC, cafeteria, etc.)

In offices (e.g. meeting rooms, purchasing, work scheduling) that were fitted with carpeting, the site management opted for HAKAfloor drywall construction. Most of the supply lines to these rooms were via the area of the conventional section of underfloor heating.



Image 1: HAKAfloor is installed directly on the pressure-resistant floor insulation



Image 2: conventional underfloor heating construction with plastic metal composite pipes, installed with staples

Conventional underfloor heating construction

Conventional 16 \times 2.0 metal composite pipes manufactured in our own factory in Gossau were mounted on standard floor insulation. The installation was spiral-patterned, which means that the flow and return are next to each other in the floor and ensure that the area is heated evenly



HAKAfloor – drywall components

The pressure-resistant HAKAfloor EPS panels were installed on a rigid foam panel EPS 40. The surfaces were then completely covered with the aluminium slats and the pipe installed according to the installation plan.

A thin PE film was chosen to ensure a clean separation of the layers and 25 mm Fermacell panels were then installed as the load-bearing layer for the carpet. The Fermacell panels were installed overlapping. A positioning strip was laid around the perimeter at the beginning so that the Fermacell panels could also be laid floating.









Project details

Construction site

Giessenstrasse 3 CH-8717 Benken

Architect

Fuchsbau Architekten AG Bahnhofstrasse 35 8752 Näfels

Underfloor heating planning

En.con-energie.consulting ag Hatelhusstrasse 3 CH-9402 Mörschwil

Underfloor heating installation

Sauter Wärmetechnik GmbH Landstrasse 4 8754 Netstal

HAKAfloor products used – approx. 200 m²

- Power Primer (EPS Kleber)
- EPS installation panels 112x56x2 cm
- Aluminium slats 100x13.6 cm
- Metal composite pipe 14x2 mm
- PE-separation film 0.2mm
- Fermacell screed element 2 x 12.5 mm (installed offset)



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