

Report from the Construction site



Kind of insulation: Wall heating system in a former church

Construction: Werner Haase, Architect

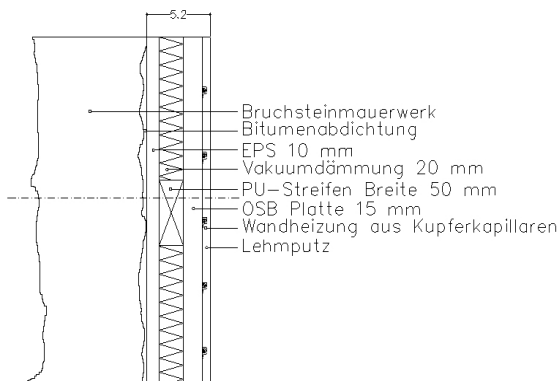
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VIP-product: va-Q-tec AG, Wuerzburg, Germany

Location: Former church in Wernfeld / Main

Date of realization: May 2003

Funding: Bavarian State Ministry of Economics, Infrastructure, Transport and Technology



Description of the construction:

Thick, conventional insulation was not permitted as the building is classified as an historical monument. Nevertheless, efficient insulation was necessary to reduce the heat loss through the natural-stone solid wall. VIPs measuring 0.5 x 1.0 m² were mounted onto polystyrene boards with dispersion based mortar. To prevent moisture from inside the room getting into the wall, the gaps were closed with tape. 5 cm high polyurethane strips were installed between the rows of VIPs. To fix the wall-heating system, oriented strand boards OSBs were screwed onto the polyurethane strips in front of the VIPs. Heating pipes were fixed on these panels and plastered over with loam.



Figure 1: Photo of the wall before the OSBs were mounted over the VIPs.

Figure 2: Cross-section of the wall.

Figure 3: Photo of the wall after the copper heating pipes were installed.