

Report from the Construction site



Kind of insulation: Outside floor/ceiling renovation with vacuum insulation

Construction: BaunitBayosan GmbH & Co. KG (Bad Hindelang) and Prill & Schurr Architects

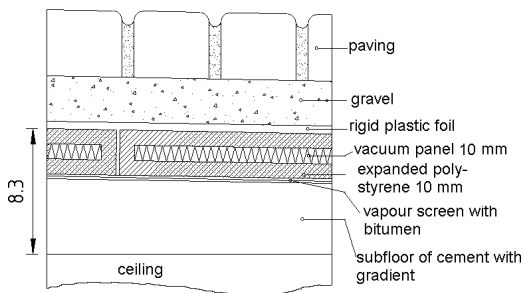
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VIP-product: WACKER CERAMICS, Kempten

Location: Allgäu Energy and Environment Centre (eza! house), Kempten

Date of realization: 2001

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



Description of the construction:

The cellar ceiling was insulated from the outside (part of the cellar is beneath the outside entrance area). 3 cm thick polystyrene-encased VIPs were installed underneath the paving, therefore insulating the ceiling below. The encased elements measured 50 cm x 50 cm x 3 cm, whereby the VIPs inside measured 48 cm x 48 cm x 1 cm. The advantage of the encased VIPs is that they are easy to handle, but when fully encased, the VIPs can no longer be visually checked for flaws. The polystyrene edging also increases the U-value - 0.28 W/(m²K) in the centre of the element and 0.35 W/(m²K) for the total area.



Figure 1: View of the eza! house. Photograph: may.schurr.architekten, Bad Wörishofen

Figure 2: Insulation design.

Figure 3: Installing the polystyrene-encased VIPs. The border between the floor and the house was filled with pieces of polystyrene. Photograph: may.schurr.architekten, Bad Wörishofen