

Report from the Construction site



Kind of insulation: Floor insulation

Construction: Mion-AG, Neuhausen am Rheinfall / CH, Architect: Rolf Lüscher, Schaffhausen / CH

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VIP-product: Porextherm Dämmstoffe GmbH - ZZWancor / CH

Location: Historic court house in Schaffhausen / Switzerland

Date of realization: August 2002

Funding: -----

Description of the construction:

The task was to transform an unheated room in an old court house, built in the 17th century, into a heated and therefore usable space.

Two problems had to be solved:

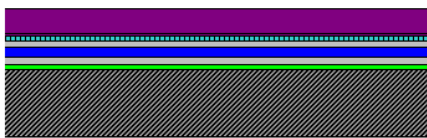
1. This part of the building had a cellar underneath
2. Space and height were limited due to the fact that it was not possible to install new doors. The old historic doors as well as the doorframes were too low to install thick floor insulation. To achieve acceptable floor insulation values against the cold coming from the cellar without adding too much height, the only solution was to use Vacucomp® (ZZWancor's trademark) vacuum insulation panels. This insulation problem was solved by using a three layer system of 5 mm Dow "Ethafoam SD", 10 mm VIP and again 5 mm Dow "Ethafoam SD" without ruining the historic character of the building.



Aufbau und U-Werte mit Vacupor

Unterlagsboden

U-Werte: mit 15 mm Vacupor 0.30 W/m²K



Aufbau von Innen nach Aussen

-  Unterlagsboden 40 mm (Anhydrit oder Maxit) (Bauseits)
-  PE Folie (Bauseits)
-  Ethafoam SD 5 mm (Extrudierter PE-Schaumstoff)
-  Vacucomp 15 mm
-  Ethafoam SD 5 mm (Extrudierter PE-Schaumstoff)
-  Dampfsperre 3 mm (Bauseits)
-  Stahlbeton 200 mm
-  Innenputz 10 mm

Total Aufbauhöhe mit Vacucomp 15 mm über Beton 70 mm

Figure 1: Entrance area of the historic court house in Schaffhausen / Switzerland. The doors inside the building originate from the 17th century as well and had to be retained.

Figure 2: Mounting the vacuum panels according to an assembly plan. VIPs with irregular, slanted sides had to be specially supplied for the edges of the room. All the VIPs were numbered according to the plan.

Figure 3: Typical floor construction with Vacupor® - Vacuum Insulation Panels.