

Interior insulation when modernizing old buildings

(The property at Sodastraße 40 in Ludwigshafen, Germany)

Product: **Neopor**®

Application:

Interior insulation



An old building, more than 100 years old, has been turned into an innovative low-energy home. One of the most modern low-energy homes in Ludwigshafen has been created at the BASF "Alte Kolonie" company housing scheme. The use of innovative technology means that the building now uses 85 per cent less primary energy.

The property at Sodastraße 40 is part of a classic turn-of-the-century BASF company housing scheme in the Friesenheim district of the city. The scheme is listed in the Ludwigshafen register of historical monuments under the name "Alte Kolonie".

The first buildings were erected in 1872 to house workers and foremen. Other types of building were added between 1895 and 1939. The intention behind the pilot project is to carry out energy renovation as a model for buildings that have a historic façade or are listed monuments. The clinker brick façade has to be preserved to avoid altering the character of the housing scheme. The main focus of the renovation work is therefore on improving the thermal protection provided by the façade by means of interior insulation with Neopor® made by BASF, high-quality insulation for the basement ceiling and the roof – again using Neopor® - and replacing the windows and front doors. The roof truss will be replaced with a wooden framework with full fill between the rafters and a tiled roof. A controlled ventilation system with heat recovery will be installed in each flat. A condensing gas boiler will be put in to cover the remaining heat requirement. Water heating will be assisted by a solar-thermal energy system.

