Abstract

Increasing the energy effectiveness among existing block of flats is a very important part in achieving future demands on reduced energy consumption in the society. To increase the acceptance for and encourage to make block of flats more energy-saving one apartment building from the 19th century have been chosen for transformation to more energy-saving. Four essential aspects are treated throughout this paper for each construction part within the climate shell. These aspects are Caution, Energy, Moisture and Profitability. By taking constructional measures it is proven that today’s demands on the climate shell and significant decrease of the specific energy use can be achieved. This is reached without distorting the important historical characteristics of the house by a high consideration of demands for caution. Furthermore chosen measures are evaluated, if they have a negative effect on affected construction parts from a moisture point of view. Finally it is shown that many of the measures taken are profitable.

Keywords: initial study, object description, measures, climate shell, caution, energy, moisture, “pay-back times”