

Energy Saving, Heritage Conserving Renovation Methods in Case of Historical Building Stock

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Abstract : The majority of the building stock of Budapest inner districts was built around the turn of the 19th and 20th century. Although the structural stability of the buildings is not questioned, as the load bearing structures are in sufficient state, the secondary structures are aged, resulting unsatisfactory energetic state. The renovation of these historical buildings requires special methodology and technology: their ornamented facades and custom-made fenestration cannot be insulated or exchanged with conventional solutions without damaging the heritage values. The present paper aims to introduce and systematize the possible technological solutions for heritage respecting energy retrofit in case of a historical residential building stock. Through case study, the possible energy saving potential is also calculated using multiple renovation scenarios.

Keywords : energy efficiency, heritage, historical building, renovation

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