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Retrofitting Measures for Existing Housing Stock in Kazakhstan

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Abstract : Residential buildings fund of Kazakhstan was built in the Soviet time about 35-60 years ago without considering energy efficiency measures. Currently, most of these buildings are in a rundown condition and fail to meet the minimum of hygienic, sanitary and comfortable living requirements. The paper aims to examine the reports of recent building energy survey activities in the country and provide a possible solution for retrofitting existing housing stock built before 1989 which could be applicable for building envelope in cold climate. Methodology also includes two-dimensional modeling of possible practical solutions and further recommendations.

Keywords: energy audit, energy efficient buildings in Kazakhstan, retrofit, two-dimensional conduction heat transfer analysis

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