

# The Choice and Justification of a Method for Cleaning Air from Carbon Oxide (II) in Urban Environmental Buildings

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**Abstract:** An experimental setup for cleaning the supply air in the outer wall of the building using various sorbents and chemisorbent is presented. Field studies were carried out to select and validate the best way to purify supply air from carbon monoxide (II) in buildings of the urban environment, and empirical dependences of carbon monoxide (II) concentration on time were obtained using various options for cleaning the supply air. The research results showed that the best options for cleaning outdoor air from carbon monoxide (II) is shungite + silica gel + manganese dioxide + zeolite, the cleaning efficiency was 95.35%, the second most effective cleaning was shungite, with the cleaning efficiency of 86.5%. In this regard, studies have shown that it is effective to use several stages of cleaning outdoor air in buildings of the urban environment. The results can be used to clean the indoor air of buildings with inlet valves along the facade height.