

## **Closed Urban Block versus Open Housing Estates Structures: Sustainability Surveys in Brno, Czech Republic**

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**Abstract :** A prominent place in the spatial arrangement of Czech as well as other post-socialist, Central European cities belongs to 19th century closed urban blocks and the open concrete panel housing estates which were erected during the socialism era in the second half of 20th century. The characteristics of these two fundamentally diverse types of residential structures have, as we suppose, a different impact on the sustainable development of the urban area. The characteristics of these residential structures may influence the ecological stability of the area, its hygienic qualities, the intensity and way of using by various social groups, and also, e.g., the prices of real estates. These and many other phenomena indicate the environmental, social and economic sustainability of the urban area. The proposed research methodology assessed specific indicators of sustainability within a range from 0 to 10 points. 5 points correspond to the general standard in the area, 0 points indicates degradation, and 10 points indicate the highest contribution to sustainable development. The survey results are reflected in the overall sustainability index and in the residents' satisfaction index. The paper analyses the residential structures in the Central European city of Brno, Czech Republic. The case studies of the urban blocks near the city centre and of the housing estate Brno - Vinohrady are compared. The results imply that a considerable positive impact on the sustainable development of the area should be ascribed to the closed urban blocks near the city centre.

**Keywords :** City of Brno, closed urban block, open housing estate, urban structure

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