The importance of a built environment for human health in multi-criteria certifications of existing buildings – Summary

The study identifies elements of the built environment that affect human health and well-being. The scope of work has been limited to solutions included in multi-criteria certifications of existing buildings. . The theoretical part describes how the importance of health was developing in the history of architecture and urban planning, and shows the legal provisions that designers currently have at their disposal.

The green construction market in Poland is also mentioned, as well as market trends, proportions related to the type of certified building or system selection. The main part of the work, however, identifies the features of a healthy building among contemporary trends in sustainable construction. It includes a detailed description of pro-health strategies in multi-criteria certifications that have been grouped according to scopes such as: urban structure, external environment, socio-sociological and psychological factors, building management and factors affecting the user.The practical application of these solutions is demonstrated by case studies of various types of audit (LEED EB: O + M, BREEAM In-Use, DGNB and LEED for Cities) and facilities (office buildings, commercial facility, city) showing a wide spectrum of certification of existing buildings.

There was a user survey conducted in one of the buildings, to identify defects, architectural features and management elements that can reduce employee comfort and have bad influence on their health. It's goal was also to obtain three LEED certification credits and implement recovery plan to improve employee comfort.

As a result the substantive content analyses of the systems, two design tools were created. They contain catalog of solutions for designers. One of them, is a list of loans of selected certifications related to the health and well-being of users. The second, is the supplementation of the table in the form of matrix of individual point interdependence. On this basis, in the next part of the study, a critical analysis of systems was described, showing the deficiencies and substantive gaps, indicating further the risks associated with the complex process of existing buildings certification. Gaps identification was a base to identify areas for further research, showing the possibilities of healing the environment that was built in Polish reality by providing examples of their sounds. The summary is a chapter devoted to the directions of sustainable construction development in the form of the description of pilot or innovative steps.