

Team of façade and energy-system experts solves problem of overheating

The tenants living in an older building in Winterthur began to complain about excessive temperatures in their apartments – both in winter and in summer – soon after the completion of a renovation project that included the installation of a new façade. EBP examined the building and drafted a current-state analysis. The developer profited from an interdisciplinary EBP team that included experts in the areas of façade engineering and home energy systems.

Working on behalf of the developer, EBP analyzed the reasons for the overheating in the building's interior. Using a current-state analysis, we were able to show that the overheating was caused by multiple factors. As it turned out, the façade's ventilation system was inefficient and difficult to control, essentially making it impossible to introduce sufficient quantities of fresh air during overnight cooling periods. In addition to this, the shading system, which is integrated in the façade, was also not being operated properly. Our expert team was able to identify these deficiencies and to provide an intuitive explanation to the building's owner.

In order to optimize the ambient temperature on behalf of the tenants, we defined various corrective measures and submitted estimates of the investment cost for each measure. This targeted advice provided the building owner a detailed basis for making a decision. Ultimately, the building's owner decided in favor of a number of well-calibrated measures designed to optimize the ambient temperature in the building's various apartments.

Client

Private client

Facts

Period	2018
Project Country	Switzerland
Current state	Glass façade
Problems	Exposure to the sun, thermal control
Success factor	Interdisciplina ry team

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