

# **The TAIL rating schemes for offices and schools are the way to reduce carbon emissions and improve IEQ.**

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## **ABSTRACT**

The rating scheme for indoor environmental quality (IEQ) will be presented. It is called TAIL. It creates the framework for rating IEQ and its components: thermal acoustic and luminous environments and indoor air quality. TAIL is an integrated rating first developed for buildings undergoing deep energy renovation. It can now be used for any building, including offices, schools, and hotels. TAIL complements the existing approaches for assessing IEQ and complies with the major certification schemes. All components of the TAIL are treated equally - to achieve a high-quality level, all components of the TAIL must be at a high level, and no compromises are accepted. TAIL is based on measurements of ten parameters, observation of one, and simulations of one; 14 parameters are monitored for schools. TAIL has been used in measuring campaigns and has been shown to be an effective tool for demonstrating indoor environment quality. Because TAIL is a performance metric used in buildings under operation, a tool was developed called predicTAIL allowing estimation of IEQ at the design stage. It uses similar principles as TAIL but can not be used to rate IEQ in the building that is in use. So, it gives an indication of how the design decisions may affect the level of IEQ. Attempts were recently made to supplement the objective measurements with subjective evaluations made by the building occupants to achieve a holistic view of IEQ in a building. The results of these attempts will be presented as well.

## **KEYWORDS**

Thermal Comfort; Acoustic Comfort; Visual Comfort; Ventilation; Benchmark