Latest Trends and Technologies of Energy Recovery Ventilators in Japan

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ABSTRACT

With the COVID-19 epidemic starting in Dec 2019, ventilation has become more important to our lives than ever before. At the same time, efforts toward a sustainable society, as seen in the SDG's, are also becoming more important. In the midst of these major changes, the use of Energy Recovery Ventilators "ERV" is being promoted in Japan as a way to solve the conflicting issues of securing a reliable ventilation volume and energy conservation in air conditioning and ventilation systems. In this report, we discuss about ERV, including the automatic control operation of ERV utilizing CO_2 sensors, which has recently been increasingly adopted, the implementation of ERV in existing buildings (especially nursery schools and schools), and ventilation efficiency of ERV to the SERS-CoV-2 as a countermeasure, will be introduced.

KEYWORDS

Energy Recovery Ventilators "ERV", CO_2 sensors, Automatic control operation of ERV, ERV in existing buildings, Energy saving, Load of Air-conditioner, Ventilation Load of Air-conditioner, Decentralized system, Centralized system