

Energy saving by recovering air-conditioning energy at the time of ventilation.

High-efficiency Total Heat Exchange Element

Feature

- A new type of cellulose membrane with high-level moisture permeability and gas barrier performance.
- A new total heat exchange element of non-corrugated cross-flow type with an effective heat transfer area of 80% or over with low pressure loss.
- An approximately 4/5 reduction in the consumption of cooling and heating power, equivalent to a reduction of approximately 1.3 tons of CO₂ emission annually in the case of a standard residence (with a total floor area of 150 m² and a ventilation rate of 200 m³/h).

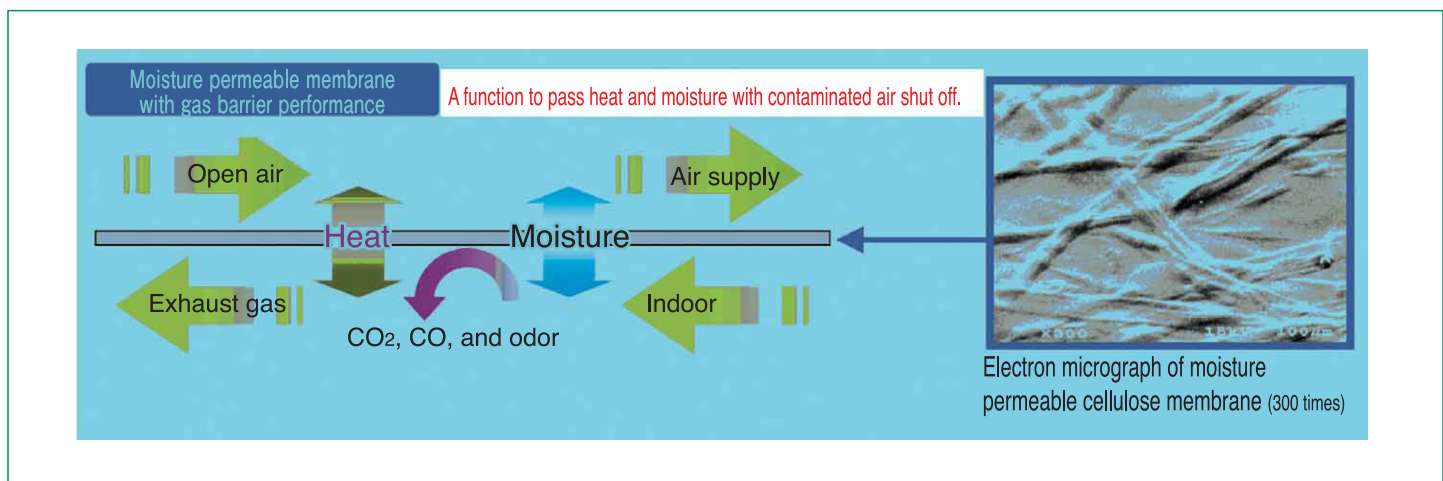
Overview

(Technical principles, actions, etc.)

This product is a total heat exchange element to be built into air conditioners or ventilators. The element performs ventilation through a partition membrane, thus recovering sensible heat and latent heat simultaneously. Along with rib form optimization, this newly developed cellulose-made partition membrane that ensures high-level moisture permeability and gas barrier performance maintains an effective heat transfer area of 80% with a reduction in static pressure loss. As a result, the product achieved the industry's top-class performance with a total heat exchange efficiency of 75% and an effective ventilation efficiency of 95% or over with a static pressure loss not in excess of 40 Pa.



Non-corrugate element



Moisture permeable membrane

Applicable field
Construction of special areas, Air conditioning systems and systems of air-conditioning systems
High efficiency total heat exchangers in office buildings and chemical factories, air conditioning systems and others

Water

Energy saving/Energy recovery

Energy storage/Energy creation

New energy

Waste disposal/Recycling/Resource saving

Air

Soil

Other