

**New product launch:
"High-Performance Energy Recovery Ventilator Core" utilizing CNF
-Realization of improved air quality and energy saving by
its excellent airtightness and total heat exchange efficiency-**

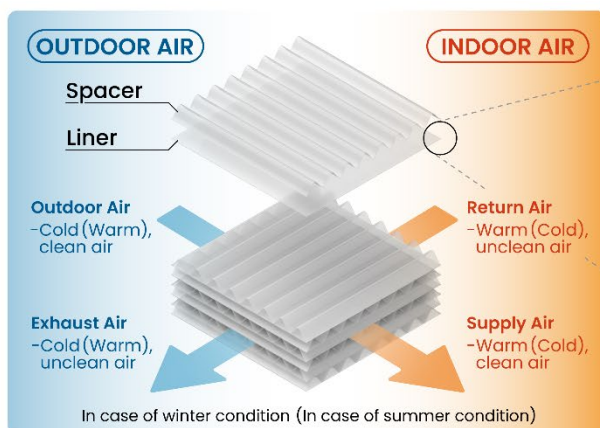
Oji Industrial Materials Management Co., Ltd. (President: Akio Hasebe, Head Office: Tokyo), a group company of Oji Holdings Corporation (CEO: Hiroyuki Isono, Head Office: Tokyo), announces new Energy Recovery Ventilator Core (a component in Energy Recovery Ventilation system)*¹ utilizing CNF(Cellulose Nanofiber), material derived from wood.

In recent years, the demand of Energy Recovery Ventilation system is increasing by the increasing awareness of IAQ (Indoor Air Quality)*² and energy conservation. In response to these needs, we have developed a new Energy Recovery Ventilator Core that utilizes phosphorylated CNF, made by the Oji Group using wood as raw material. This product realizes improved IAQ by its excellent airtightness and energy saving by enhanced total heat exchange efficiency.

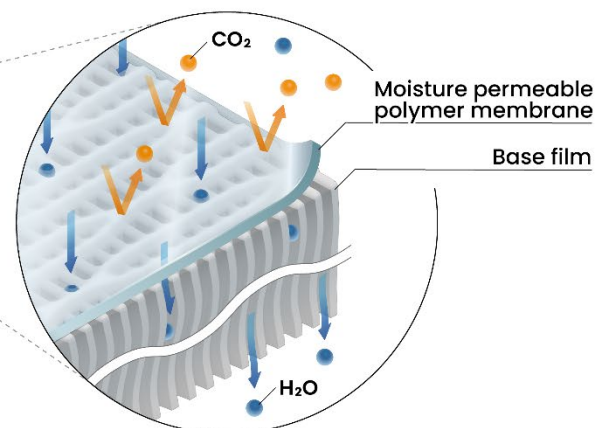
This product utilizes a newly developed membrane (liner) in which CNF is applied as an extremely thin membrane (moisture permeable polymer membrane) on top of the base film (base material) by technology. Heat and moisture (sensible and latent heat) are exchanged through this liner.

This moisture permeable polymer membrane is extremely dense. This feature makes membrane to be extremely thin while maintaining a high level of airtightness which does not allow the CO₂ and unclean air. Also, CNF has high hydrophilicity. It makes the moisture permeability of liner to be significantly higher than any other liners. By making both moisture permeable polymer membrane and base material extremely thin, it realizes excellent total heat exchange efficiency. As a result, clean indoor environment is realized while saving energy simultaneously (see figures below).

Figure: Mechanism of Energy Recovery Ventilator



Enlarged image of newly developed membrane (liner)



Our product above is installed in the Energy Recovery Ventilation system for the North American market.

Our group will continue to contribute to the realization of a sustainable society by developing and providing various air conditioning products to meet our customers' needs.

*1): A component, primarily used in high-efficiency ventilation fans, which is made by stacking spacer and liner. It collects the thermal energy lost in ventilation and reduces energy to operate air conditioning and other HVAC equipment.

*2): Evaluation of the air quality inside the building from health and comfort point of view by measuring the composition of gas and quantifying their amount.

Contact
Filter Business Division Global Sales Department, Oji Industrial Materials Management Co., Ltd. Phone: +81-3-5550-3038 Public Relations and Investor Relations Department, Corporate Governance Division, Oji Holdings Corporation Phone: +81-3-3563-4523 E-mail: oji-holdings@oji-gr.com