Functional Textiles and Trading

Contributing to the prevention of damage to health and reduction of environmental impacts
Development of adhesive-free waterproof sheets



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The urethane coating film waterproofing and ventilation buffer method, a standard method used in rooftop waterproofing, makes use of conventional chloroprene adhesives. This entails a major issue in atmospheric dispersion of toluene, xylene, and other chemicals contained in the adhesives. As these chemical substances are causes of damage to site workers' health and photochemical smog, posing a concern about global warming impacts due to chemical changes in the smog, it is hoped that use of the substances will be reduced or discontinued.

New asphalt self-adhering ventilation buffer sheets developed by TOYOBO STC CO., LTD. can be directly affixed to rooftops with no use of

adhesives. This alleviates concerns over air pollution and significantly reduces construction work manhours as well, enabling reduction of both environmental impacts and construction costs compared to conventional products. Through the development of industrial materials that take the global environment into consideration, we will continue contributing to both business and the environment.



Applying waterproof material coating to

Contributing to the reduction of environmental impacts through high energy efficiency Joint development of energy-saving air conditioner components and materials together with Panasonic



Tatsuaki Sumitani Director Japan Exlan Co., Ltd.

Japan Exlan Co., Ltd. has developed a desiccant rotor using paper coated with fine particles that absorb and desorb moisture through acrylic material. Heat pump-type air conditioning is typically used in buildings and plants. Absorbing moisture from air prior to intake by the heat pump, followed by contact with the refrigerant, eliminates discharge of drain water and enables highly energy-efficient cooling. Providing humidity in winter also enables efficient heating, achieving

significant energy savings compared to conventional heat pump-based air conditioning.

Panasonic evaluated the desiccant rotor, which features quick regeneration at lower temperatures and with low energy usage and adopted for use in its air conditioners in 2022. As a result of achieving industry-leading energy-saving performance through joint system design by Panasonic Corporation and our company, Panasonic Corporation was a recipient of the Energy Conservation Grand Prize in fiscal 2022 and fiscal 2023.





Desiccant rotors adopted for use in