

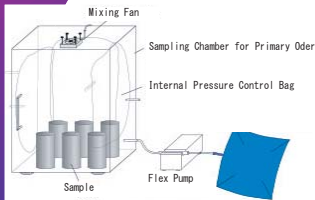
Built Environment and Building Service Research Group

Course of Architectural Engineering,
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Osaka University

Oder Environment of Health and Comfort Sensory Evaluation of Oder from Building Materials



Sensory Evaluation by Oder Bag Method



Sampling Method of Oder

We are dealing with bulding environment like heat, air, light, and sound from the viewpoint of utilization of **natural energy**, **energy saving**, and designing occupied spaces of **comfort** and **health**.

Our research field is spreading from Human to Building and they are categorized as follows

- 1) Environmental Psychology and Physiology
- 2) Built Environment Engineering
- 3) Building Services

Evaluation of Comfortability in Urban Area Survey for Visitors to Open Space



Survry for Visitors



Physical Environment Measurement

Design of School Building for Energy Conservation Ventilation Performance of Staircase Chimney



School Building with Staircase Chimney

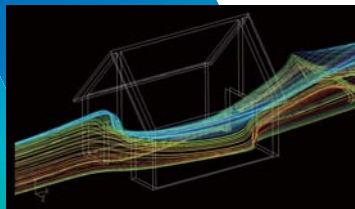


Natural Ventilation System through Staircase Chimney

Basic Research for Utilization of Wind Prediction of Cross-Ventilation Rate



Wind Tunnel Test for Detached House

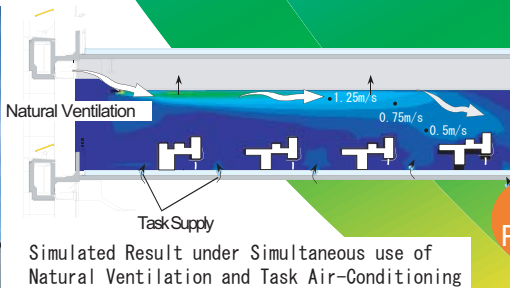


Simulated Result of Flow

HVAC System to utilize Natural Energy Task Ambient Air-Conditioning with Natural Ventilation

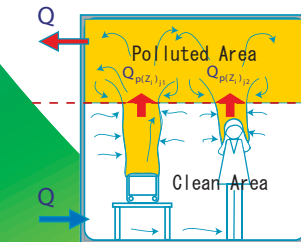


41 Stories High-Rise Office Building using This System

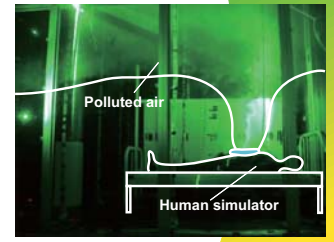


Simulated Result under Simultaneous use of Natural Ventilation and Task Air-Conditioning

Ventilation System for Clean Air Environment Displacement Ventilation System for Sickroom



Displacement Ventilation

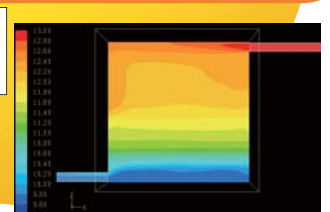


Experiment assuming Sickroom

Energy Efficiency of Building Services Performance Evaluation Thermal Energy Storage HVAC



Building with Thermal Energy Storage (TES) Tank



Temperature Distribution in TES Tank

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