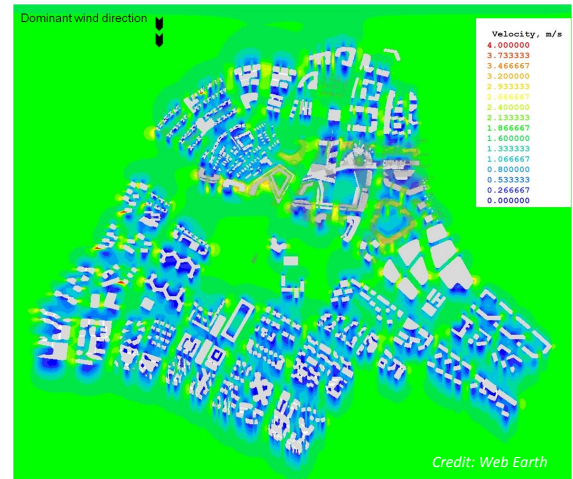# ////// VENTILATION ANALYSIS (CFD)

ABOUT WEB EARTH.

Web Earth are leading consultants in environmentally sustainable design, providing holistic solutions to create resilient and cost-saving buildings and infrastructures.

Established in 2011, Web Earth's environmental design team grew within acclaimed engineering firm Web Structures and we enjoy direct access to our parent company's world-class expertise. Our international diversity—in our team members' qualifications and the countries where we work—provides fertile ground for innovative solutions.
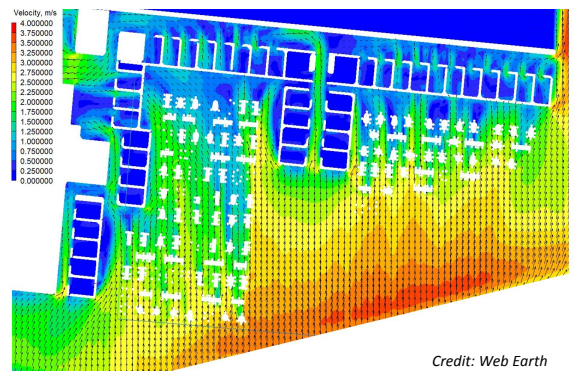
Visit our website at: www.webearth.com.sg

MAXIMISING NATURAL VENTILATION.

Designing buildings for effective natural ventilation requires detailed planning from conceptual stages. Modern buildings often have complex forms and floor plates, and are constructed within a dense urban environment.

Through early stage computational fluid dynamics (CFD) simulation Web Earth are able to work around these constraints to provide thermal comfort whilst limiting the need for air conditioning, reducing energy consumption and operational emissions.
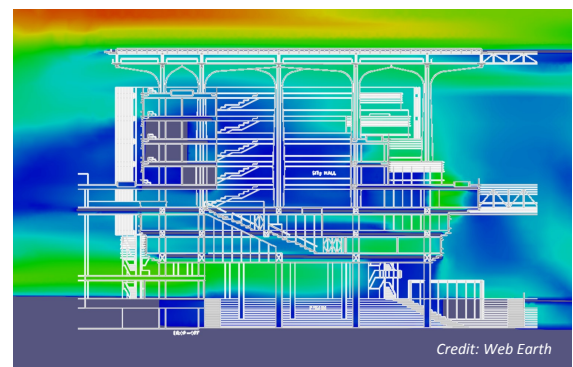
A TOOL FOR EVERY STAGE.

CFD simulates how fluids such as air and water interact around buildings and sites, within pipe or ducts, or when subject to heat or movement.

CFD analysis can be used throughout the design process, from the conceptual stage of a development to aid with masterplanning, or during detailed design of air conditioning and mechanical ventilation (ACMV) equipment and placement.

Web Earth's detailed studies of the control mechanisms required for each development, in combination with its local microclimate, provide the optimum solution for occupant comfort and energy savings.

For more information, please contact Ms Jessie Tan, Director-Projects: jessietan@webstruc.net

Credit: Web Earth

Airflow study around buildings

Credit: Web Earth

Natural ventilation study for public seating area

Credit: Web Earth

Airflow study through the building
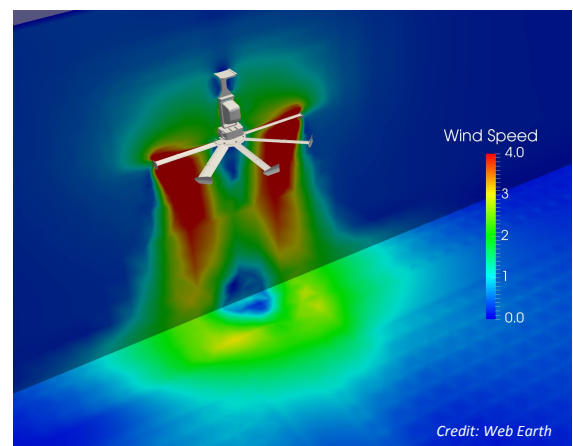
Credit: Web Earth

Thermal comfort study: Simulation for Fan air flow