SHOPPING MALLS CAN CUT ENERGY COSTS: MELAWATI MALL

NON-RESIDENTIAL NEW CONSTRUCTION [NRNC]

OWNER/APPLICANT

SIME DARBY PROPERTY CAPITALAND (MELAWATI MALL) SDN BHD

PROJECT ADDRESS

MELAWATI MALL, 355, JALAN BANDAR MELAWATI, PUSAT BANDAR MELAWATI, 53100 KUALA LUMPUR.

PROJECT DESCRIPTION

Melawati Mall, a 13-storey mall consists of more than 250 retail shops spread over 8 levels, is located in Taman Melawati, Kuala Lumpur. An iconic feature in Melawati Mall is the green vertical walls that wrap the base of the mall. The mall has recently achieved the Green Building Index Certification rating in April 2021.

Achieving a building energy intensity (BEI) for retail building of 337 kWh/m²/yr is impressive for a multi-storey city mall. Improving the bottom line is easy when cutting down on energy consumption and Melawati Mall has made a significant reduction from its base energy consumption.

This is enhanced by the façade performing an Overall Thermal Transfer Value (OTTV) of the building as low as 32.2 W/m² for its building envelope as compared to the Malaysia minimum standard of 50 W/m².

Energy Management System including leak detection and Maximum Demand Limiting Program are installed to achieve a good efficiency for the building. Digital power meters are installed throughout the building for effective energy monitoring and facility scheduling management. Energy management systems not only provide the energy consumption data for the entire mall, but segmented data as well. Knowing exactly where energy is being used can help to identify inefficiencies and implement immediate rectifications.

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The strategy for this mall to go green took a tiered approach from the ground up. About 35% of the construction materials were from recycled materials. Water efficient fittings also contributed to water savings by an average of 24,467 m^3 per year or approximately 64% annually.

Other innovative sustainable features for the buildings are Fire System Water Recycling during regular testing, Parking Guidance System advantageous to consumers of the building, Vacuum Degasser Cleaning System, Non-Chemical Water Treatment System, Dynamic Balancing Control Valve System, and Regenerative Lifts. This city mall has been carefully designed with environmental objectives from design stage up to tenant occupancy.

green building index
CERTIFIED
COMPLETION & VERIFICATION ASSESSMENT