



Construction of Multi Level Car Parking (MLCP) with Integrated Commercial at Chennai Airport, Chennai, Tamil Nadu



Location	: Chennai, Tamil Nadu
Site Area	: 18,503.33 sq.m.
Built up Area	: 30,411.81 sq.m.
Typology	: Commercial
Rating Category	: GRIHA Provisional Rating
Version	: Version 2015
Year of Award	: 2025
Client	: Meenambakkam Realty Private Limited
Green Building Consultant	: L&T Construction

The following strategies were adopted by the project team to reduce the building impact on the environment:

Sustainable Site Planning:

- Air pollution control measures such as site barricading, wheel washing facility and water sprinkling on unpaved road were strictly adhered to during construction.
- 25.28% of the hard paved areas was treated using a combination of strategies of shading of hard paved surfaces by trees and high SRI finishes.

Energy:

- EPI reduction of 21.46% from the GRIHA base case has been demonstrated through the integration of high-performance systems.
- Solar photovoltaic system of capacities of 20.1 kWp and 15.075 kWp have been installed in the East and West blocks.

Occupant Comfort:

- More than 25% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by NBC 2005.
- Low-VOC paints, containing less than 50 g/L of volatile organic compounds and free from lead, have been utilized in the project.

Water Management:

- Reduction of 50% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
- Moving Bed Biofilm Reactor (MBBR)-based Sewage Treatment Plant (STP) with capacities of 160 kLd and 115 kLd, respectively, has been installed in the project.

Sustainable Building Materials:

- Pozzolana Portland cement with more than 25% fly ash content were used in plaster and masonry mortar.
- AAC blocks with more than 60% of fly ash content have been used for walling in the project.

Waste Management:

- Centralized waste collection facility has been provided in the project.
- Multi-colored bins have been provided for segregation of various types of waste.