



## Corona Optus, Gurgaon, Haryana



<b>Location</b>	: Gurgaon, Haryana
<b>Site Area</b>	: 5,546.45 m <sup>2</sup>
<b>Built up Area</b>	: 9,836.07 m <sup>2</sup>
<b>Typology</b>	: Residential
<b>Rating Category</b>	: GRIHA Provisional Rating
<b>Version</b>	: Version 2015
<b>Year of Award</b>	: 2023
<b>Client</b>	: Mr. Vijay Gupta, Corona Housing Private Limited
<b>Integrated Design Team</b>	: Ar. Bhupendra Saha, Saha & Associates
<b>Green Building Consultant</b>	: Udit Gaurav

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

### Site Planning & Construction Management:

- 50.69% of the site surfaces that are visible to sky have been treated through soft paving, shading through trees and high SRI tiles have been applied at the rooftop.
- Insolation analysis for summer months demonstrating 99.80% reduction against the base case.
- Total 800 m<sup>3</sup> soil was excavated and same was reused on site for landscaping.

### Energy:

- EPI reduction of 30% from the GRIHA base case has been demonstrated through the integration of high-performance systems.
- Astronomical timer control has been provided for 100% of the outdoor lighting system.
- Solar photovoltaic system of capacity 40 kWp has been installed.

### Occupant Comfort:

- 65% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by SP 41.

### Water:

- Reduction of 52.44% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
- Reduction of 40.30% from the GRIHA base case has been demonstrated in the landscape water demand by installing efficient irrigation systems such as micro drip irrigation and sprinklers.
- Moving Bed Biofilm Reactor (MBBR) type STP of 700 KLD capacity has been installed on site.

### Sustainable Building Materials:

- 11% reduction in the embodied energy of the project by using AAC blocks in masonry.
- Vitrified tiles, kota stone, granite, FSC certified wooden flooring and ceramic tiles have been used as flooring materials in the project.

### Solid Waste Management:

- Dedicated space for storage of segregated waste has been provided in the project.