



## Construction of Shopping Complex for Mahalaxmi Jagdamba Mata Mandir

<b>Location</b>	:	Koradi, Nagpur
<b>Site Area</b>	:	7,668.21 m <sup>2</sup>
<b>Built up Area</b>	:	2,013.69 m <sup>2</sup>
<b>Typology</b>	:	Commercial
<b>SVAGRIHA Rating</b>	:	4 Star Rating
<b>Year of completion</b>	:	2021

The following strategies were adopted to reduce building impact on the natural environment:

- 📍 **Landscape:**
  - 80 new native trees have been planted on site.
- 📍 **Architecture & Energy:**
  - 99.72% of the total living area is day-lit.
  - LPD of the project is 1.70 W/m<sup>2</sup>, which is lower than the ECBC specified limit of 10.80 W/m<sup>2</sup> for commercial buildings.
  - Thermal efficiency of the building envelope is 114.39 W/m<sup>2</sup>, which is less than the final benchmark of 135 W/m<sup>2</sup>.
- 📍 **Water and Waste:**
  - Reduction of 100% from the SVAGRIHA base case has been demonstrated in the landscape water demand.
  - Reduction of 55.07% from the SVAGRIHA base case has been demonstrated in building water demand by installing low-flow plumbing fixtures.
  - Rainwater storage tank of 25,000 litres capacity has been constructed on site.
- 📍 **Sustainable Building Materials:**
  - PPC has been used for 100% structural concrete, masonry mortar and plaster.
  - Low VOC and lead free paints have been used to maintain good indoor air quality.
  - Reduction of 23.45% from the SVAGRIHA base case has been demonstrated in embodied energy by using flyash bricks for constructing external and internal walls
- 📍 **Lifestyle:**
  - Dedicated resting room and toilets have been provided for service staff.
  - Basic amenities such as grocery store, ATM/Bank, pharmacy, restaurant, community center, metro station are located within walkable distance from the site.
  - Environmental awareness signage's have been displayed at various locations.
  - Electric charging point has been provided to encourage the use of electric cars and reduce carbon emission.
- 📍 **Waste Management:**
  - Multi-colored bins have been provided for segregation of dry and wet waste.
  - Central waste collection area has been provided for storage of segregated waste on site.
  - 100% of the organic waste shall be treated through vermi-composting.

### Integrated Design Team:

<b>Client</b>	:	M/s. Vijay Construction
<b>Principal Architect</b>	:	Bhiogade & Associates, Nagpur
<b>Green Building Consultant</b>	:	Gadin Consultancy and Co.