



# Construction of Infrastructure at Team Location Kolkata of 02 BN NDRF Haringhata, West Bengal



<b>Location</b>	: Kolkata
<b>Site Area</b>	: 3823.15 sqm.
<b>Built up Area</b>	: 1640.294 sqm.
<b>Typology</b>	: Residential building
<b>Rating Category</b>	: SVAGRIHA Rating
<b>Version</b>	: Version 2.2
<b>Year of Award</b>	: 2022
<b>Client</b>	: National Disaster Response Force (NDRF)
<b>Integrated Design Team</b>	: Skematic Consultant Pvt Ltd.
<b>Green Building Consultant</b>	: Agnikrida - Sustainable Building Design Solution

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

#### **Sustainable Site Planning:**

- 58% of the total paved area on site was shaded by trees.
- Native trees were planted on site and grass area was minimized to reduce landscape water demand. Additionally 2% of the site area was covered by kitchen garden.

#### **Energy:**

- 100% of air-conditioners and geysers installed in the project were 5-star rated.
- Clear glass with highly-efficient glass film was installed in all the fenestrations to reduce 66.2% direct heat gain and glare during maximum daylight penetration.

#### **Water Management:**

- Reduction of 38.6% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
- Rainwater storage tank with 15 KLD of capacity was installed on site.

#### **Renewable Energy Technology installed on site:**

- Solar photovoltaic system of capacity 3 kWp has been installed.

#### **Sustainable Building Materials:**

- 100% low-energy materials were used in the building.
- Low VOC paints and adhesives were used in the building.

#### **Waste Management:**

- Multi-colored bins have been provided for segregation of dry & wet waste.
- 100% of kitchen waste were disposed in OWC to convert it into organic fertilizer.

#### **Lifestyle:**

- Watergen was installed in the building to provide drinking water from the air we breathe.
- 100% of housekeeping materials used in the buildings were organic and environment-friendly.