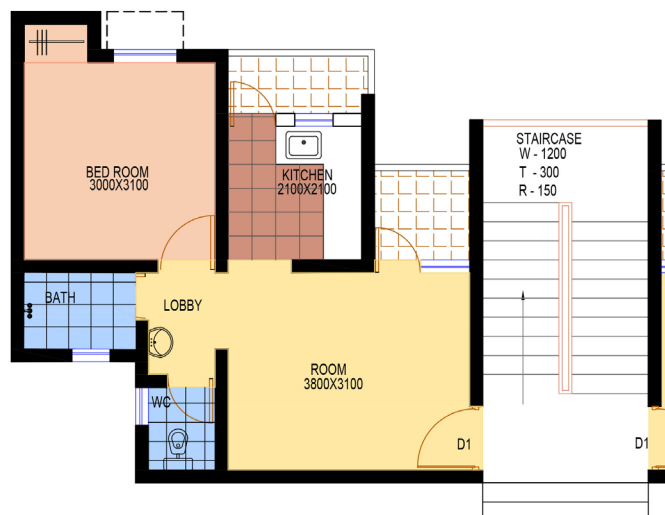
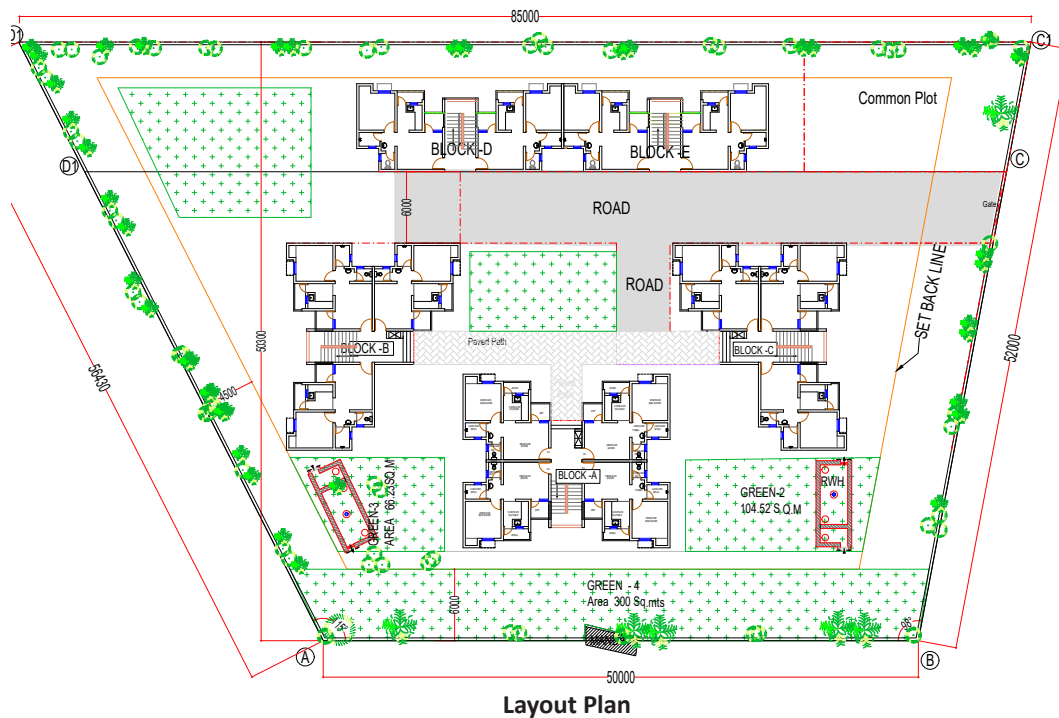


## DHP AT AHMEDABAD, GUJARAT

The Affordable Housing Mission, Ahmedabad, Gujarat allotted a land measuring 3400 sqm. owned by Gujarat Housing Board at Vivekanand Nagar, Hathijan, Ahmedabad for construction of Demonstration Housing Project to be allotted to PMAY(U) beneficiaries. The Ahmedabad Municipal Corporation approved the layout, plans, sections etc. of the project. The DHP will consists of 40 dwelling units in G+2 configuration using new technology namely PRECAST CONCRETE CONSTRUCTION SYSTEM - Integrated Hybrid Solution-One. The project is partially funded by Ministry of Housing & Urban Affairs as per the guidelines of PMAY(U) and remaining share is contributed by State and beneficiaries.



### **Project Profile:**

- Location: Vivekanand Nagar, Hathijan, Ahmedabad
- State Level Nodal Agency : Affordable Housing Mission, Ahmedabad
- Land Allotted by: Gujarat Housing Board
- Usage : PMAY(U) Beneficiaries
- Plot area of project : 3400 sqm.
- No. of houses : 40 (G+2)
- Carpet area of each unit : 35.78 sqm.
- Built up area of each unit : 51.42 sqm.
- Total built up area : 2179 sqm.
- Technology Used: PRECAST CONCRETE CONSTRUCTION SYSTEM - Integrated Hybrid Solution-One
- Each Unit consists of living room, bed room, lobby kitchen, bath, WC, verandah and separate wash area.
- Includes Earthquake Resistant Features.
- Infrastructure facilities : CC Road, pathways with concrete pavers, water supply work, UGT, septic tank, horticulture work, drainage & disposal and external electrification using solar panels, rain water harvesting, fire fighting system, etc.
- Status of project : Completed.





## About the Technology:

Load bearing 200mm thick interlocking blocks manufactured with special machines, having strength of  $75 \text{ kg/cm}^2$  made out of cement, coarse sand and flyash. The blocks shall be laid without mortar. Intermediate floor / roof shall be in precast R.C. Planks & joists, system. The planks shall be precast with moulds on vibrating table and pallets in M-25 concrete. The planks shall have 3 nos. 6mm dia main bars and 6mm dia at 200mm c/c distribution bars. The RC planks shall have haunches which shall be filled with M-25 in situ concrete. The joists shall be 150mm wide. The depth and reinforcement shall be as per design and shall be partially precast with M-25 concrete. The RC planks shall be placed on wall to joist, joist to joist and joist to wall. After placing the RC planks, 6mm dia extra bars will be placed through the haunches (2 nos. in each RC plank across the joists) providing temporary supports below the joists before laying in-situ concrete. Within 24 to 72 hours of laying slab, in-situ concrete a course/ layer of ferrocement 12mm thick with mesh reinforcement shall be laid, mixed with water proofing compound on the slab including the walls area. Thus the total thickness of the effective slab shall be 72mm.



## Technologies/Specifications being Used

### Foundation

- o Strip foundation with plinth band

### Walling

- o Load bearing interlocking blocks (Hydra Form Blocks)

### Floor Slabs/Roofing

- o Precast RC Planks and Joists System with concrete screed.

### Door frame/shutters:

- o Pressed steel door frame with flush

shutters

- o PVC door frame with PVC Shutters in toilets.

*Window Frame/ Shutter:*

- o uPVC frame with glazed panel and wire mesh shutters.

*Flooring:*

- o Vitrified tile flooring in Rooms & Kitchen
- o Anti-skid ceramic tiles in bath & WC
- o Kota Stone Flooring in Common area and Staircase

*Wall Finishes:*

- o Weather Proof Acrylic Emulsion paint on external walls
- o Oil Bound distemper over POP on internal walls

*Others:*

- o Electrical fixtures such as ceiling fans, LED tube lights, exhaust fan; wooden shutters in cupboard and under kitchen cabinet

The structural design of DHP has been vetted by Faculty of Engineering and Technology, Jamia Millia Islamia, Delhi and Technical evaluation is being carried out by CEPT University, Ahmedabad.





