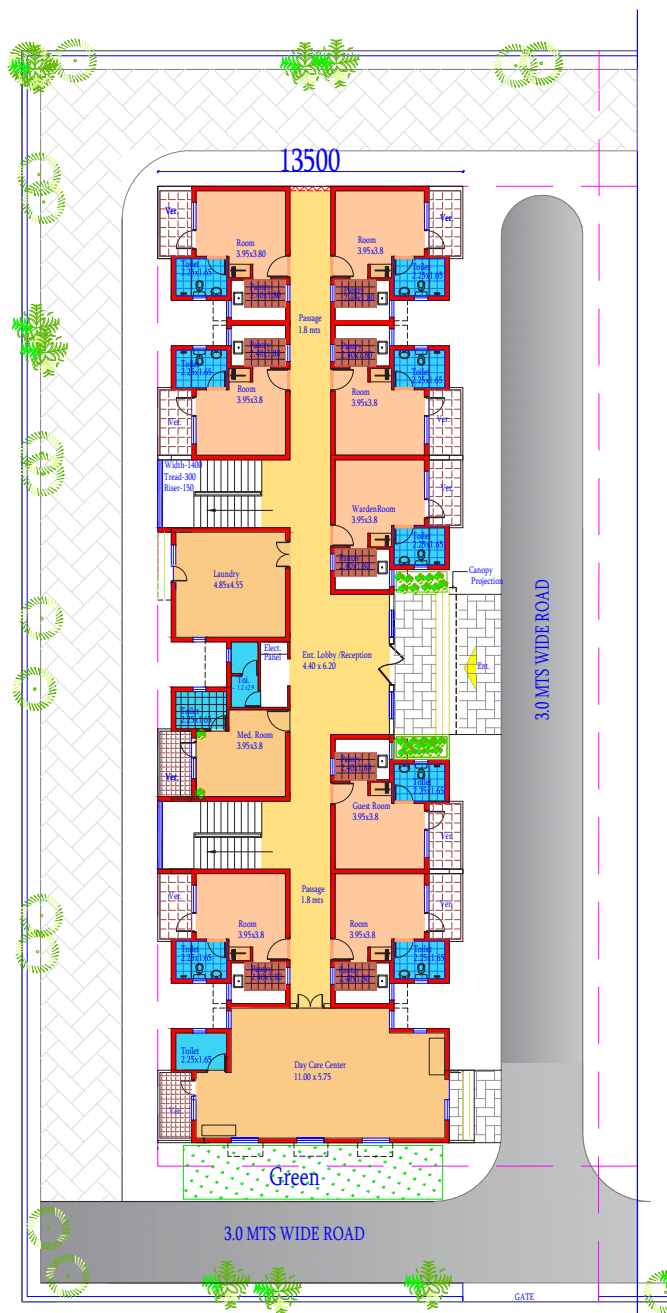
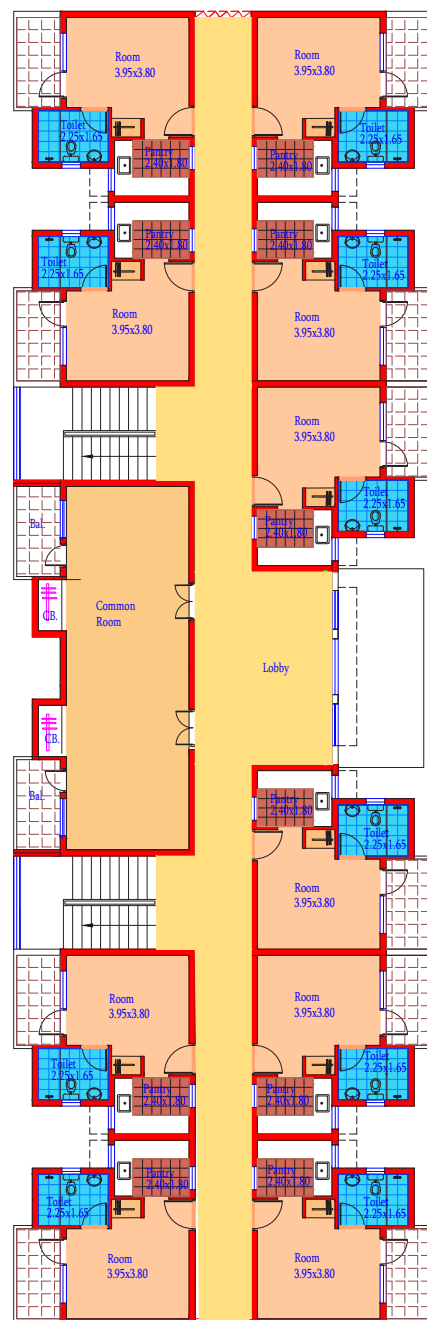


DHP AT PANCHKULA, HARYANA

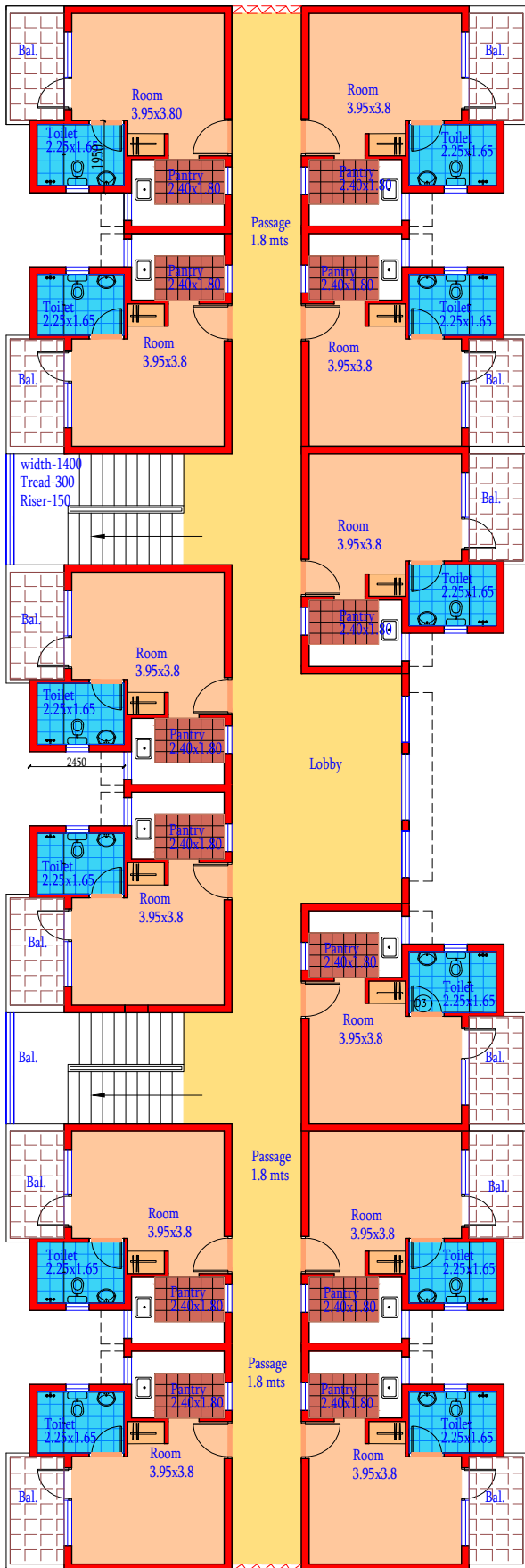
State Urban Development Authority, Panchkula, Haryana allotted land measuring 1412 sqm. in Sector 27, Panchkula owned by Municipal Corporation, Panchkula for the construction of Demonstration Housing Project to be used for working women hostel. Municipal Corporation Panchkula approved plan of Working Women Hostel consisting of 40 units along with common area / Dining area, day care centre, care taker room etc. was finalized. The DHP is in G+3 configuration and constructed using LIGHT GAUGE STEEL STRUCTURAL SYSTEM - Light Gauge Steel Framework System (LGSF) with Cement Fibre board on both side of walls and infill of mineral wool.



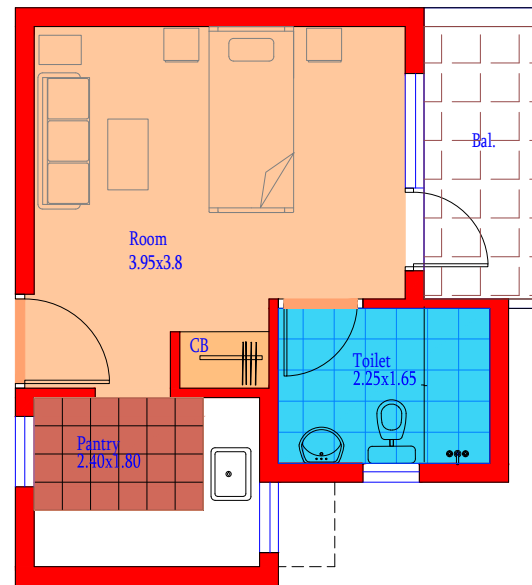
Layout Plan



First Floor Plan



Typical Floor Plan



Typical Unit Plan



Project Profile

- Location: Sector 27, Panchkula, Haryana
- State Level Nodal Agency : State Urban Development Authority, Panchkula
- Land Allotted by: Municipal Corporation, Panchkula
- Usage : Working Women Hostel
- Plot area of project : 1412 sqm.
- No. of houses : 40 (G+3); Other provisions includes Guest Room Medical Room, Care Taker Room, Daycare Centre, Common Room/Dining Room and Laundry.
- Carpet area of each unit : 26.57 sqm.
- Built up area of each unit : 31.51 sqm.
- Total built up area : 2016 sqm.
- Technology Used: LIGHT GAUGE STEEL STRUCTURAL SYSTEM
- Each Unit consists of One living room, pantry, combined Bath & WC and balcony.
- Includes Earthquake Resistant Features.
- Infrastructure facilities : CC Road, pathways with concrete pavers, water supply work, UGT, septic tank, horticulture work, boundary wall, drainage & disposal and external electrification using solar panels, rain water harvesting, fire fighting system, etc.
- Year of completion : May 2021
- Cost per sqft. without infrastructure : Rs.2199
- Cost per sqft. with infrastructure : Rs.2401

About the Technology

Light Gauge Steel Framed Structures (LGSF) is based on factory made galvanized light gauge steel components, designed as per codal requirements. The system is produced by cold forming method and assembled as panels at site forming structural steel framework of a building of varying sizes of wall and floor. The assembly is done using special types of screws and bolts. LGSF is a well-established technology for residential construction in North America, Australia and Japan and is gaining ground in India.

LGSF is typically ideal for one to three storey high buildings, especially for residential and commercial buildings. Due to its flexibility, fast construction and durability, this technology has great potential for countries like India. LGSF can be combined with composite steel / concrete deck resting on light steel framing stud walls.

In this project, the total thickness of wall is



124mm having 89mm thickness of LGSF and 9mm & 6mm thick fibre cement board with vapour barrier on outside wall and 8mm thick fibre cement board with 12mm gypsum board inside of wall. Mineral wool have been used as infill material.

Technologies/Specifications for Demonstration Houses

Foundation

- o Isolated RCC column foundation with Plinth beam

Walling

- o Light Gauge Steel Framework System (LGSFS) with Cement Fiber board on both side of walls and infill of mineral wool.

Floor Slabs/Roofing

- o Light Gauge Steel roof truss with MS deck sheeting resting on web joist and concrete screed with false ceiling of gypsum board.

Door frame/shutters:

- o Pressed steel door frame with flush shutters
- o PVC door frame with PVC Shutters in toilets.

Window Fame/ 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 Anti skid tiles Flooring in Common area.
- o Granite stone on Staircase steps.

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 IIT Roorkee and project have been technically evaluated by Punjab Engineering College, Chandigarh.

