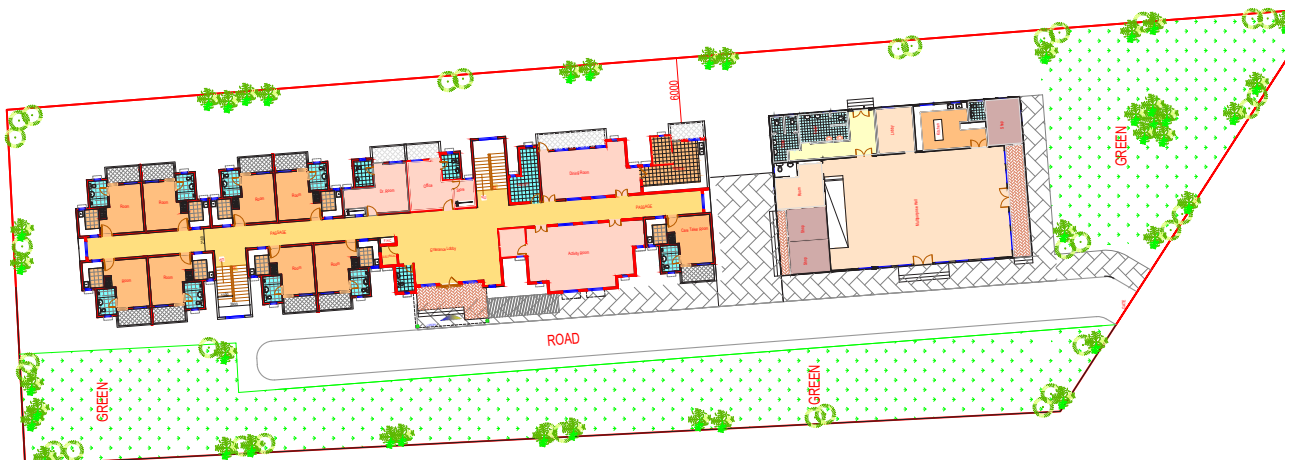
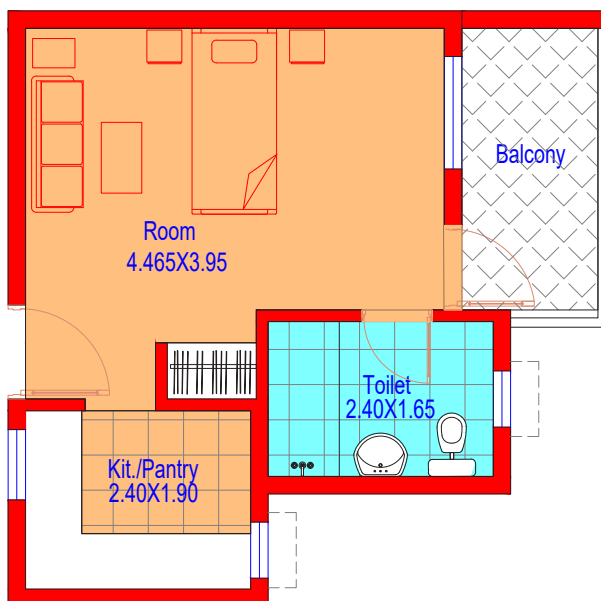


DHP AT AYODHYA, UTTAR PRADESH

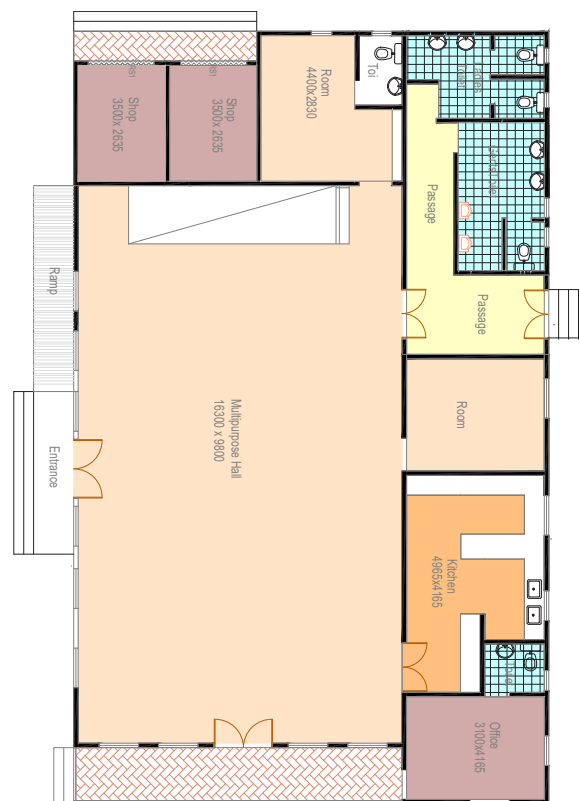
State Urban Development Authority (SUDA), Lucknow allotted land measuring 3600 sqm. at Village Malikpur, Pargana Avadh, Tehsil Sadar, Janpad, Ayodhya, Uttar Pradesh owned by Mahila Kalyan Vibhag/Siksha Vibhag, Ayodhya to be used as Destitute Widow Ashram and Orphanage for construction of DHP. The layout plan, architectural plans, etc. were approved by the Ayodhya Development Authority, Ayodhya. The DHP is in G+2 configuration with other provisions and a community centre (G) and being 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 rock wool.



Layout Plan



Typical Dwelling Unit Plan



Community Centre Plan

Project Profile:

- Location: Village Malikpur, Pargana Avadh, Tehsil Sadar, Janpad, Ayodhya
- State Level Nodal Agency : State Urban Development Authority (SUDA), Lucknow
- Land Allotted by: Mahila Kalyan Vibhag/Siksha Vibhag, Ayodhya
- Usage : Destitute Widow Ashram and Orphanage
- Plot area of project : 3600 sqm.
- No. of houses : 40 (G+2); Other provisions includes Dining Hall with Kitchen & store, Common Room with toilet, General office, Medical Room with toilet, Care Taker Room, Activity Rooms and Laundry
- Community Centre having built up area of 342 sqm. consist of Single storey Multi-purpose Hall with Kitchen, office, green room, shops and toilet.
- Carpet area of each unit : 29.47 sqm.
- Built up area of each unit : 34.34 sqm.
- Total built up area : 2661 sqm. including community centre
- Technology Used: LIGHT GAUGE STEEL STRUCTURAL SYSTEM - Light Gauge Steel Framework System (LGSFS)
- Each unit consist of a room with attached toilet, pantry and balcony
- Includes Earthquake Resistant Features.
- Infrastructure facilities : CC Road, pathways with concrete pavers, water supply work, UGT, septic tank, horticulture work, boundary wall, tube well, drainage & disposal and external electrification using solar panels, rain water harvesting, fire fighting system, etc.
- Status of project : Completed.

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 frame-



work 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 185mm having 150mm 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. Rock wool have been used as infill material.

Technologies/ Specifications being used

Foundation

- Isolated RCC column footing / Pile Foundation with Plinth beam

Walling

- Light Gauge Steel Frame structure with cement fiber board and rock wool as infill.

Roofing

- Deck sheet over Light Gauge Steel Structure with Screed Concrete.

Joinery & Finishing

- Flush door shutters fitted in pressed steel door frames
- PVC door frames & shutter in toilets
- uPVC window frame with glazed panel and wire mesh shutter in rooms and toilet



Flooring

- Vitrified tile flooring in Rooms, Pantry & Balcony
- Marble stone on pantry/kitchen counter
- Anti-skid ceramic tiles in toilet
- Kota stone Flooring in common areas and staircase



Wall Finishes

- Weather proof paint on external walls
- Oil Bound distemper over Putty 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 BHU (IIT) Varanasi and Institute of Engineering & Technology, Dr. Ram Manohar Lohia Avadh University, Ayodhya has been approached for Technical evaluation of the DHP.

