

Resilient Housing

Make it **Simple** yet elegant

The idea behind this project is very simple yet closely attached to our hearts, we intend to develop a sustainable resilient house in our local context where people are even deprived of basic housing needs, we intend to create a prototype to invest the idea in the heads of people that one can always enjoy an aesthetic luxurious life within being the available means like utilizing local materials in an contemporary approach.

"Design is thinking made visual"

Saul Bass



Lahore beholds rich architectural perspective that stems from its diverse historical cultural heritage providing an abundant repository of locally available materials for construction; from traditional clay bricks and limestone to sustainable bamboo and recycled materials, the region presents a wide array of eco-friendly options. The site rests in Park view city with a sandwiched plot from three ends as we're aiming to create prototype for the common person who will not always get the golden opportunity of attaining a golden corner plot, the size is 24'x54' acquiring 120 sqm.

Ground Floor Plan

Socializing Zone



- 1. Entrance
- 2. Foyer
- 3. Sehan
- 4. Dining
- 5. Kitchen
- 14. Reading corner
- 15. Bridge
- 16. Balcony

First Floor Plan

Intimate Zone



- 7. Bedroom
- 8. Toilet
- 9. Patio
- 10. Garden
- 11. Living
- 12. Stairs
- 13. Wardrobe
- 17. Home Studio
- 18. OHWT
- 19. OHWT
- 20. Panel Canopy
- 21. Roof Terrace

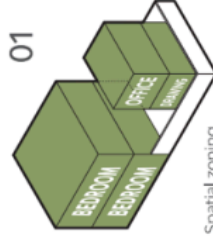
Roof Plan

Party Zone



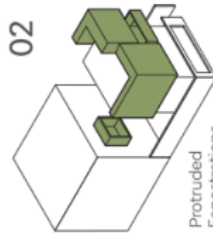
- 13. Wardrobe
- 21. Roof Terrace

01



Spatial zoning

02



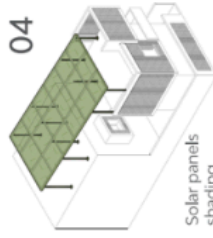
Protruded Fenestrations

03



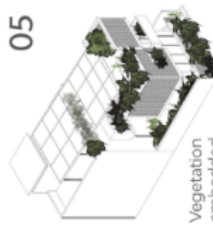
Jali element emphasized

04



Solar panels shading

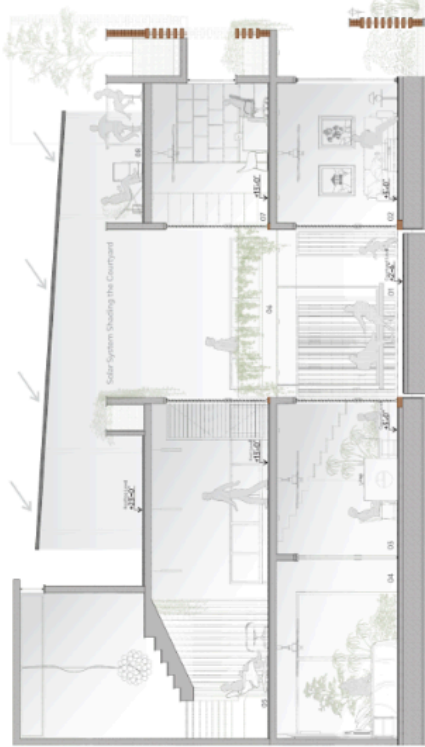
05



Vegetation embedded

Section Spaces

- 01. Courtyard
- 02. Living
- 03. Dining/Kitchen
- 04. Bedroom
- 05. Reading Space
- 06. Bridge
- 07. Office
- 08. Rooftop Terrace



Section AA



Section BB

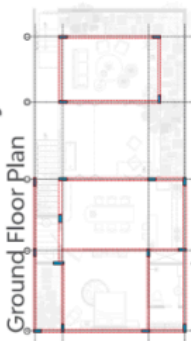
Scale 1'-0" = 3/16"

Material Specifications

The product is compatible with the building type as we intend to use all zero carbon factor materials within, it is carefully selected imagining the life cycle analysis of the material.



Structural Layout



Legends:

- Structural Column
- Beam
- Pickup Column
- Column Place on Roof
- Grid

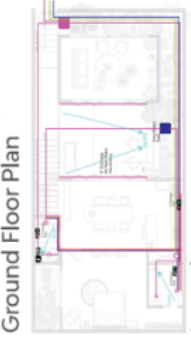
Electrical Layout



Legends:

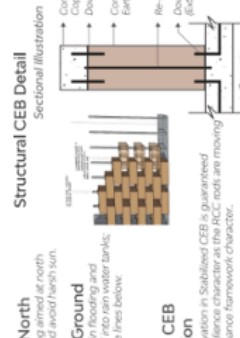
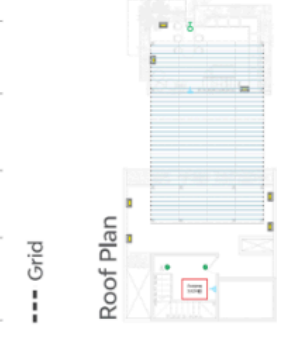
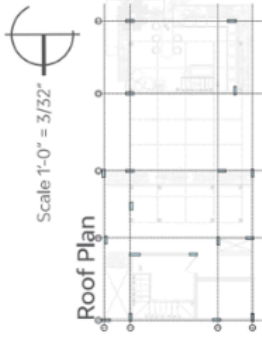
- Ceiling Fan
- Ceiling Light
- Wall Light
- Pendant
- Light Switch

Plumbing Layout



Legends:

- Drain Lines
- Gas Lines
- Cold Water Lines
- Hot Water Lines
- Floor Drain
- Tank Top



05 Roof Terrace

03 Kitchen, Dining & Seham Area

02 Living Room Area Overflowed with daylight

01 Affluent Flow of open and closed spaces

Scale 1/32" = 3/32"

Roof Plan

First Floor Plan

Ground Floor Plan

Roof Plan

First Floor Plan

Ground Floor Plan

Solar Panels
Facing south, are capable to power the whole house. When calculated these are producing more kWh rate than required when calculated thoroughly.

Canopy Structure
Designed to shade open courtyard from direct sunlight, enables air.

Clerestory Windows
Enables natural daylight into the staircase tower.

Batteries
Keep inside tower for power in-house and shaded as well.

O.H.W.T
Placed in connection with rain water & underground tank.

Rain Water Harvesting
The 4" wide drainage lines collect direct water from outside (i.e. rain or any other drainage).

Traditional 'Seham'
The courtyard recirculates hot air from the rooms inside and reduces heat island effect. This feature has been adapted from regional architectural inspirations and interpreted in a contemporary method as per the scale of house.

Grey Water Filtration
Filtered and used for vegetation as well.

Traditional Brick Bond
Structured in a way to hinder visual penetration of daylight and ventilation thoroughly.

Passive Cooling Jalis
These jalis are used as interesting element throughout design to ensure cool breeze into the home. The pattern judiciously incorporates jalis to bring in daylight and ventilation throughout.

Watering
Roof top
Passively cooled
Interiors
Outside
Hot air

Planter Integrated Jali
The planter is especially designed in a way that while watered, the water will be filtered through the brick bar with which then terminates into the garden, letting no water being wasted and raining around the sides of the planter. This feature helps in carbon sequestration and ensures that rain in turn cools the breeze into rooms.

Material Palette
Wood
Brick
Concrete
Glass

Exploded Axonometric
The following diagram is intended to enhance details of this design in a way that how each element overlies into one another forming a complete picture of the building's structure, planting and architectural on garages.

Structural CEB Detail
Sectional Illustration
Concrete
Coping
Dowels
Compressed Earth Block
Re-bar (staggered)
Concrete
Formwork

Structural CEB construction
Structural innovation in Stabilized CEB is guaranteed to enhance residence character as the RCC nodes are moving sections to enhance framework character.

Glazing at North
Maximum Glazing aimed at north to intake light and avoid harsh sun.

Pebbles in Ground
To absorb water in flooding and access is drained into rain water tanks through drainage lines below.

South Sun Utilized

Hot Water Lines

Cold Water Lines

Floor Drain

Tank Top

Roof top Terrace
Carved between the green peripheral boundary, the terrace enjoys north light and become a small go-to spot.

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