

# Contemporary Technology & Conventional Ideologies

**Minerat house**, Noida, Chaukor Studio

Located in the nub of a dense urban environment, the Minaret house gets revitalised, while sustaining the ecology, culture, heritage with present-day applied design.

An identity which was lost in transition, an identity that resided in the streets, trees, houses, squares and many other elements that formulated the essence, soul, individuality and distinctiveness of the home town in Rajasthan. The recollection of the cool touch of the thick stone walls, the wind through the Jharokhas, the complete family cooking and eating together in the courtyard, sleeping under the stark night sky and many such memories evoked the feeling of a home. As the construction activity is on the rise, it becomes crucial that the contextual setting serves as a strong background. Being the first residence built in the development, Minaret house also serves as a strong and defining precursor to all new constructions to follow.

**DESIGN IDEA:**

The Minaret house is perceived as an amalgamative representation of modern technologies and traditional ideologies. With the architectural heritage disappearing rapidly, it has now become crucial to revive it and re-interpret these traditional systems to meet the modern day needs. India with its rich architectural heritage offers deep insight in the formation and evolution of physical spaces; this has served as the fundamental part of design process used for the Minaret house.

**REINTERPRETING SOCIAL PATTERNS AND CULTURAL HERITAGE:**

The Minaret house is designed to capture and reinterpret the traditional elements to create a distinctive identity rooted in culture and traditions. The

planning of the minaret house is also guided by the social patterns governing the way the family interacts and co-exist in the client's cultural context.

**REFLECTION OF SIMPLICITY:**

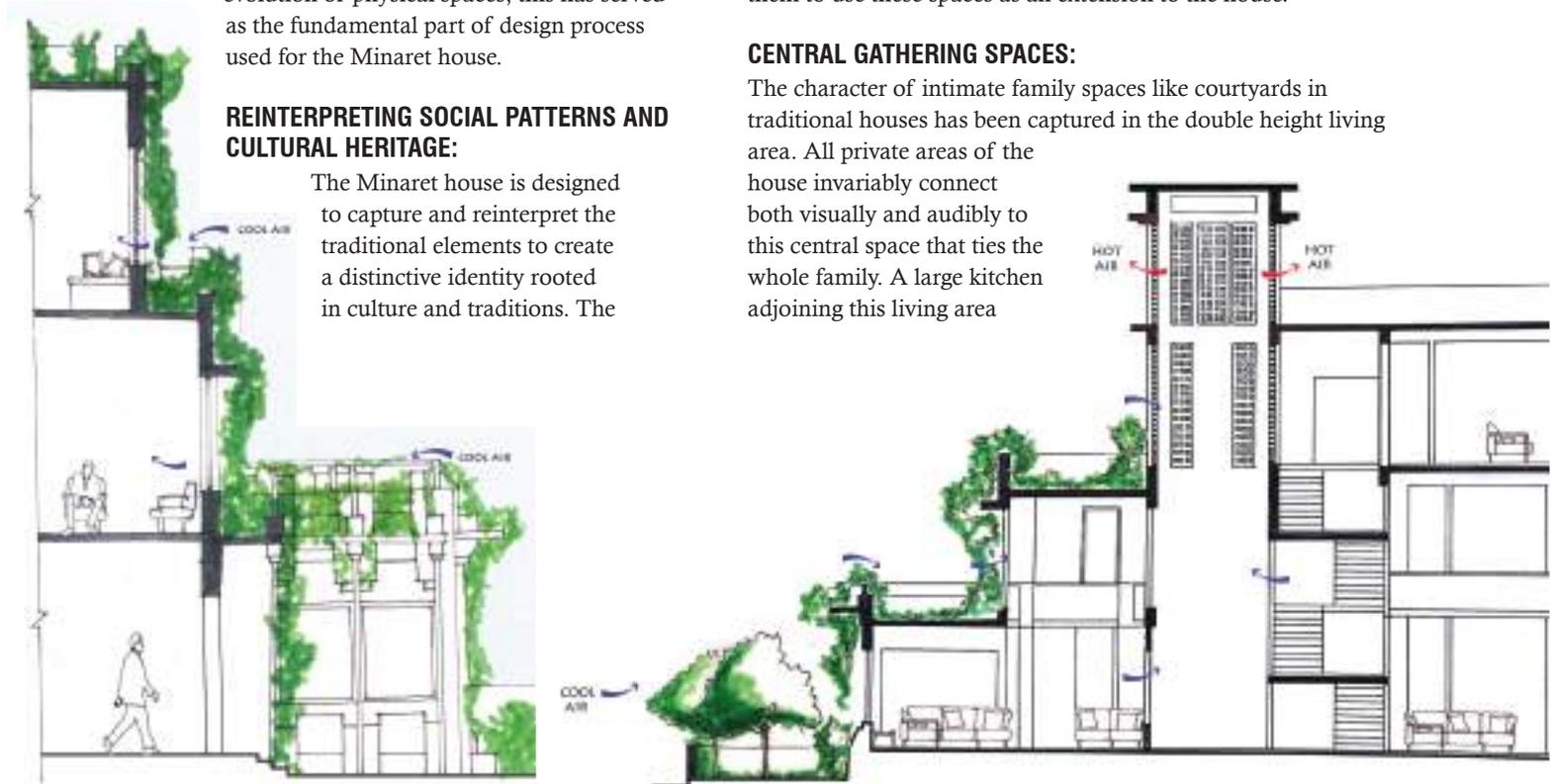
Due to availability of specific building materials the built elements of the traditional cities were generally monochromatic, binding them together in one unified fabric. Capturing this essence of unity, all external elements like façade, boundary walls, parapet walls, and porch were finished using a plaster of Jaisalmer dust, white cement and stone aggregate rendering a golden yellow colour to all exterior elements. The roughness in texture provides both depths in perception as well as distinctive unevenness of hand crafting.

**RETAINING THE CONNECT:**

In spite of being spread across three floors, the built form is fragmented and stepped to create large terraces adjoining all family areas to recapture the feeling of the ground connection. It facilitates the family to reconnect to the cultural way of always being in semi-outdoor spaces like courtyards, streets and allows them to use these spaces as an extension to the house.

**CENTRAL GATHERING SPACES:**

The character of intimate family spaces like courtyards in traditional houses has been captured in the double height living area. All private areas of the house invariably connect both visually and audibly to this central space that ties the whole family. A large kitchen adjoining this living area





*Chaukor Studio has been involved in practising and evolving the idea of Regenerative Architecture since its inception. 'Regeneration' describes processes that restore, renew and revitalize their original source of energy and materials. Create sustainable systems that integrate needs of society with integrity of nature. Nilesch Bansal is the Principal Architect at Chaukor Studio, he has applied his architectural prowess to create sustainable alternatives that can be used in place of existing construction methodologies. A graduate of School of Planning and Architecture, New Delhi, he has also*

*written research papers on re-using waste and scrap as building material and on the existence of psychological aspects of architecture as way to promote alternate construction techniques.*



further enhances its usage as the family gathering space.

#### **SCALE OF INTIMACY:**

Small intimate spaces with low ceiling heights, narrow entryways and small external windows are planned adjoining large family spaces and other public spaces for providing the requisite comfort, privacy and scale that exist in the traditional houses of Rajasthan. These small intimate spaces, varying in character and physical manifestation helps in retaining the feeling of intimacy at home.

#### **REINTERPRETING ECOLOGICAL SENSIBILITY:**

Ecological sense of traditional buildings provide insights in the challenge of creating a comfortable home with minimal environmental damage. Buildings in hot-dry climate have existed over centuries; in-numerous construction technologies have evolved over the time to passively cool the interior spaces. A natural ventilation system has been implemented in the house with the use of a Minaret. The forced air circulation created by the Minaret lowers the indoor temperature phenomenally and helps in reducing energy loads. Wind towers have been in use for many centuries in various desert regions around the world.

#### **THE MINARET**

The Minaret (Wind Tower) has been integrated centrally with its exposed façade towards the south-west side. With this exposure the air heats up quickly inside the tower, thus forcing itself out and creating a continuous airflow inside the house. This has been used in combination with openings towards green terraces that surround the house and that towards the golf course. This creates a continuously self-existing cycle of cool and fresh

air from the greens to enter in the house and ultimately pushed upwards from the wind tower. This forced air circulation created by the Minaret lowers the indoor temperature phenomenally and helps in reducing energy loads.

#### **INTER-SHADING FAÇADE:**

The embellished façade of the building, especially towards the south west side, also serves an alternate purpose than creating a reflectance of a traditional façade. The detailing of the façade is designed to precisely inter-shade the exterior façade of the building to reduce the direct heat gains. The openings in the façade towards this side are also kept small and planned in deep recesses to further reduce heat gains.

#### **PLANTATION FOR COOLING:**

Large planters are planned even high up on the external façade of the building to allow creepers to gradually blend to become an integral part of the house. Such plantation shall further shade the external façade of the building and reduce heat gains. The planters also deliver fresh air through multiple louvered windows in to various internal spaces of the house.

Minaret house is designed through a holistic design process. It not only embodies the climatic principles but also the social patterns that the architectural heritage offered. This is done through strict planning and placement of functions, segregated circulation patterns and varied spatial volumes. The process of regeneration in the 'Minaret house' through ecological and cultural means has somewhat tried to capture the essence of tradition and provide a base to imminent architecture. ▲



#### **fact file:**

Location	: D-11, Sector 128, Jaypee Wishtown, Noida
Area	: 8000 Sq ft
Client	: Mukesh Sharma
Principal Architect'	: Nilesch Bansal
Team	: Nilesch Bansal, Tejeshwi Bansal, Manisha Nimesh, Tarini Sharma, Gauri Prakash
Commencement year	: 2015
Completion year	: 2017
Structure	: EBI India
Acoustics	: Edge Acoustics
Automation	: Smartbus
Photographers	: Mohammad Javed, Tejashwi Bansal, Gauri Prakash