



Embracing Traditional Ideologies

Minaret House

Chaukor Studio has designed a house that goes back to traditional practices for addressing the challenges of the local climate and context.

Drawings & Images: Chaukor Studio
Text: Sahiba Gulati

Architect's Note: The house is designed through a holistic design process; architectural design of a building is a physical manifestation of the social, cultural, political and geographical patterns of that region. The Minaret house not only embodies the climatic principles but also the social patterns that the architectural heritage offered.

In the world of today for many people it is hard to imagine living without a holistic dependence on air conditioners and heating systems, especially in areas such as the National Capital Region of India that experiences very hot summers and equally extreme winters. However, with our all embracing or perhaps dependent attitude towards today's technology, our usage of traditional ideologies had taken a backseat. It was possible to live without air conditioners in an earlier age; were the temperatures considerably lower; were our bodies accustomed and adapted to the heat intake; or were we just more intelligent in our methods of dealing with the situation? There still are thinkers and professionals who wish to take the load that we put on our natural resources off by going back to those traditional ideologies that achieved the desired affects.

One such architectural practice is Chaukor Studio. They have designed a house in Noida that is based on their philosophy of regenerative architecture. In the studio's own words, "regeneration describes processes that restore, renew and revitalize original source of energy

and materials, creates sustainable systems that integrate the needs of society while safekeeping nature's integrity. We specifically aim at generating holistic building habitats. By integrating traditional formal expressions and design subtleties with present day technologies, we strive to create ecologically sound and elegant building environments."

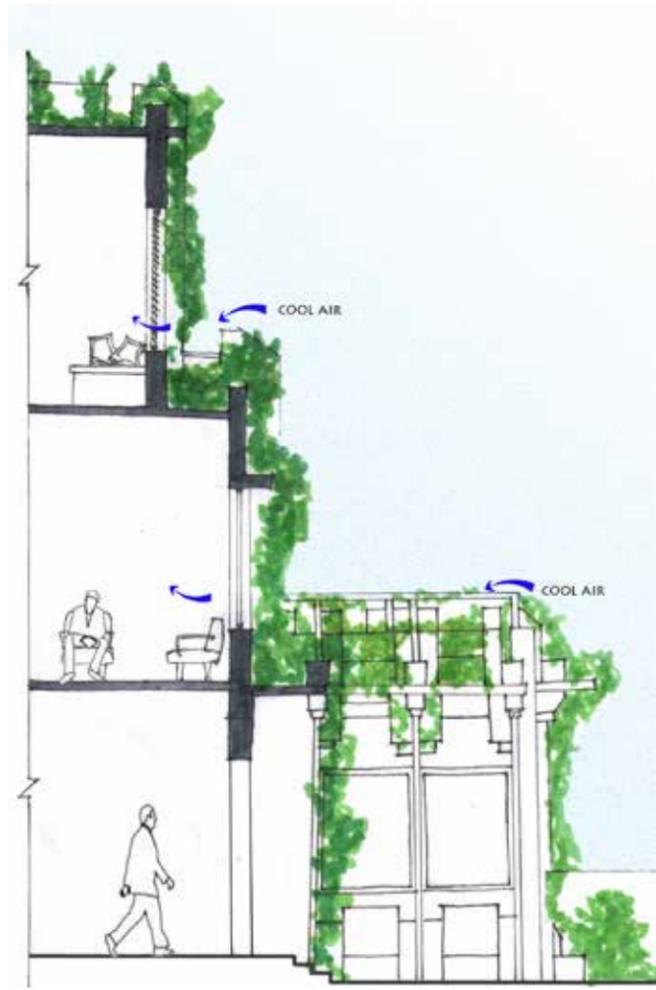
The site was surrounded by high density housing development and the house was to be the first residence in the area. It is located adjacent to a large golf course in a plotted development. With this the studio defined it as their priority and responsibility to make the house a strong and defining precursor for all further development that would take place. "With the architectural heritage disappearing rapidly, it has now become crucial to revive it and re-interpret the traditional ideologies 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."



↑ Exterior View.



↑ Inter-shading facade.



↑ Detailed Section - Planters.



↑ Intimate gathering space.



GROUND FLOOR PLAN

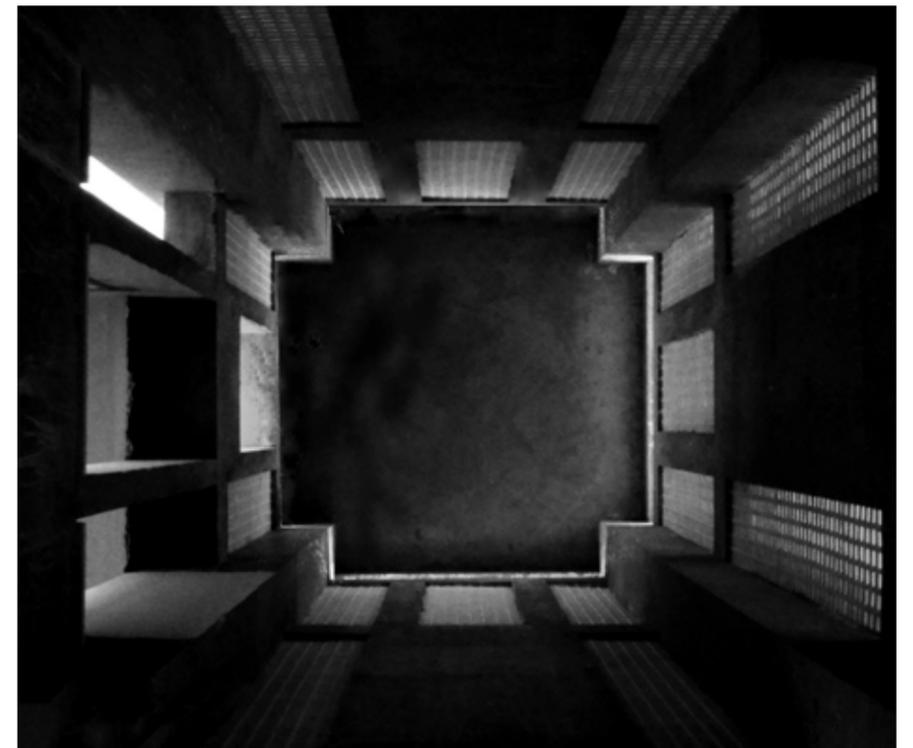


FIRST FLOOR PLAN

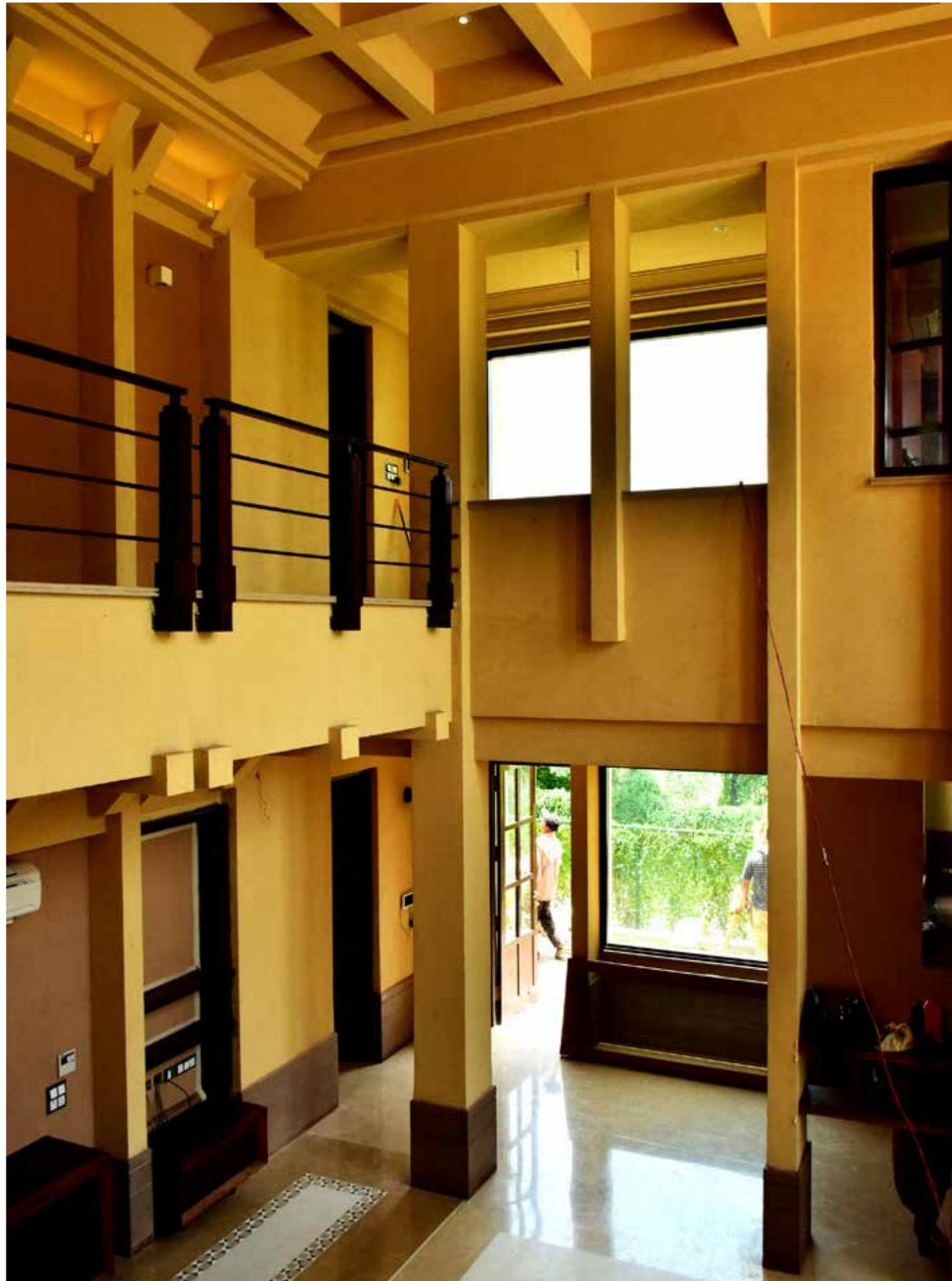
- LEGEND
- 1. ENTRANCE
 - 2. LIVING ROOM
 - 3. PUJA ROOM
 - 4. CARE TAKER'S ROOM
 - 5. FAMILY DINING AREA
 - 6. BEDROOM
 - 7. KITCHEN
 - 8. KIDS BEDROOM
 - 9. PANTRY
 - 10. MASTER BEDROOM
 - 11. GUEST BEDROOM
 - 12. MULTI-FUNCTIONAL AREA



↑ Terrace Parapet Details.



↑ Interior of Minaret House.



↑ Varied spatial volumes in public and private area.



↑ Multi - Functional Family Room.



↑ Master Bedroom Ceiling (Large).

Over the centuries various techniques for passively cooling buildings in hot-dry climates have been developed. One such technique of a minaret, or a wind tower, whose physical embodiment in buildings was developed in ancient Egypt, has been employed here.

Located centrally, the minaret faces the South-West side with its exposed facade. This causes the air to heat up rapidly inside the tower and therefore, a negative pressure at the top forces the hot air out, creating a continuous flux of air inside the house. Large window openings face green terraces at the front and the golf course at the rear end, allowing cool and clean air to enter all habitable rooms at the periphery. "The forced air circulation created by the Minaret lowers the indoor temperature phenomenally and helps in reducing energy loads."

Not being a sole perpetuator of this phenomenon, the minaret is accompanied by an intricate building facade that is used to shade exterior walls, thereby reducing heat gain.

The architects have delved further into the traditional manner of building by also reinterpreting traditional social spaces. A distinct character has been provided to public and private zones of the house. Strict planning and placement of functions and segregated circulation patterns with varied spatial volumes can be seen. ■

FACT FILE:

Project	: Minaret House
Location	: D-11, Sector 128, Jaypee Wishtown, Noida
Architect	: Chaukor studio
Team	: Nilesh Bansal, Tejashwi Bansal, Manisha Nimish, Tarini Sharma
Client	: Mr. Mukesh Sharma
Project Area	: 8000 sq. ft
Structural Engineer	: EBI India
Acoustics contractors	: Edge acoustics
Automation	: SmartBus
Civil contractors	: AJA Brick & Mortar Co.(P) Ltd.
Project Estimate	: 1.5 Crore
Initiation of Project	: October 2014
Completion of project	: May 2017