



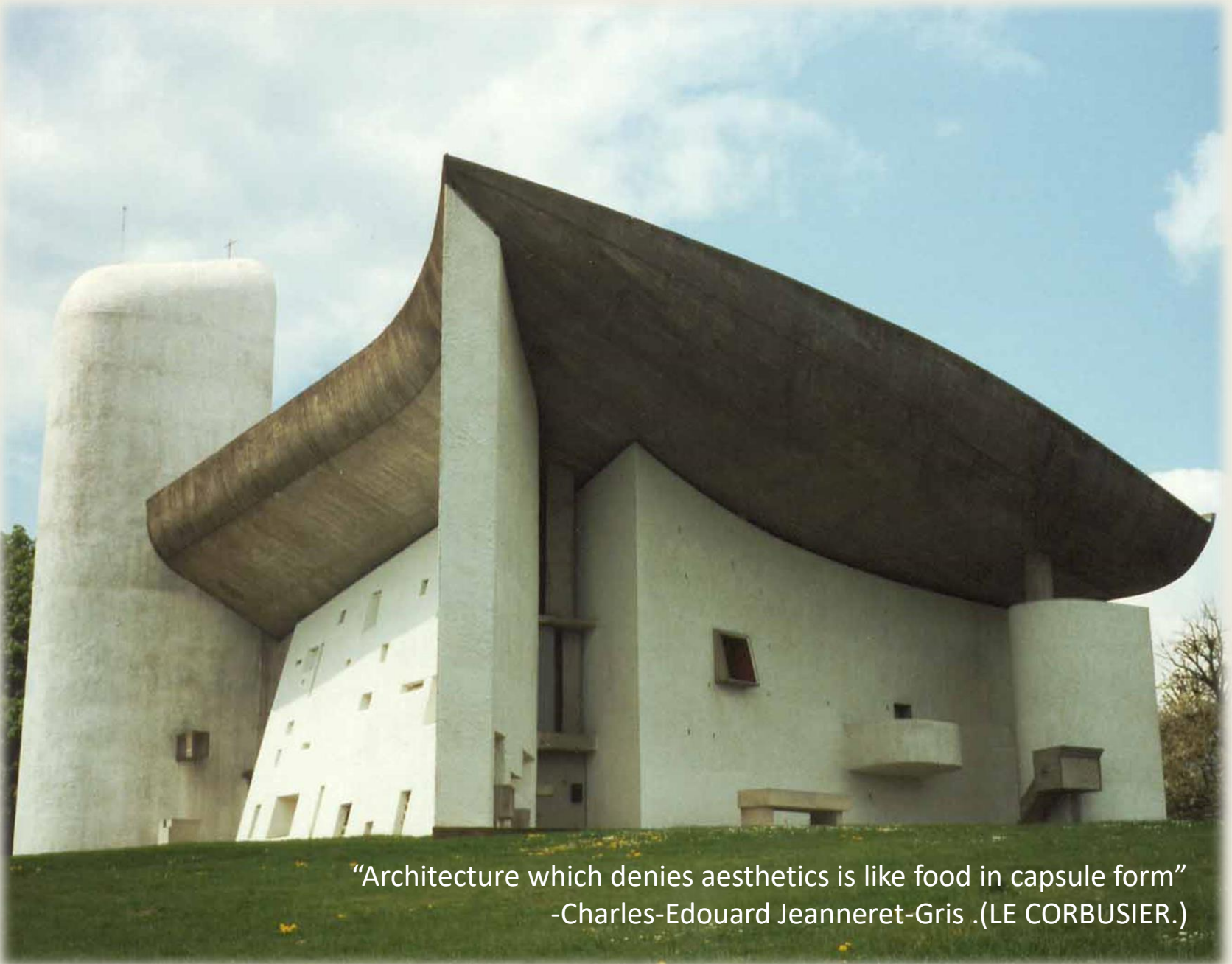
From Theory to Practice....

# Energy and Environment



## Our Inspiration

the people who achieved what we aim even before we realized the impact of energy on the environment.

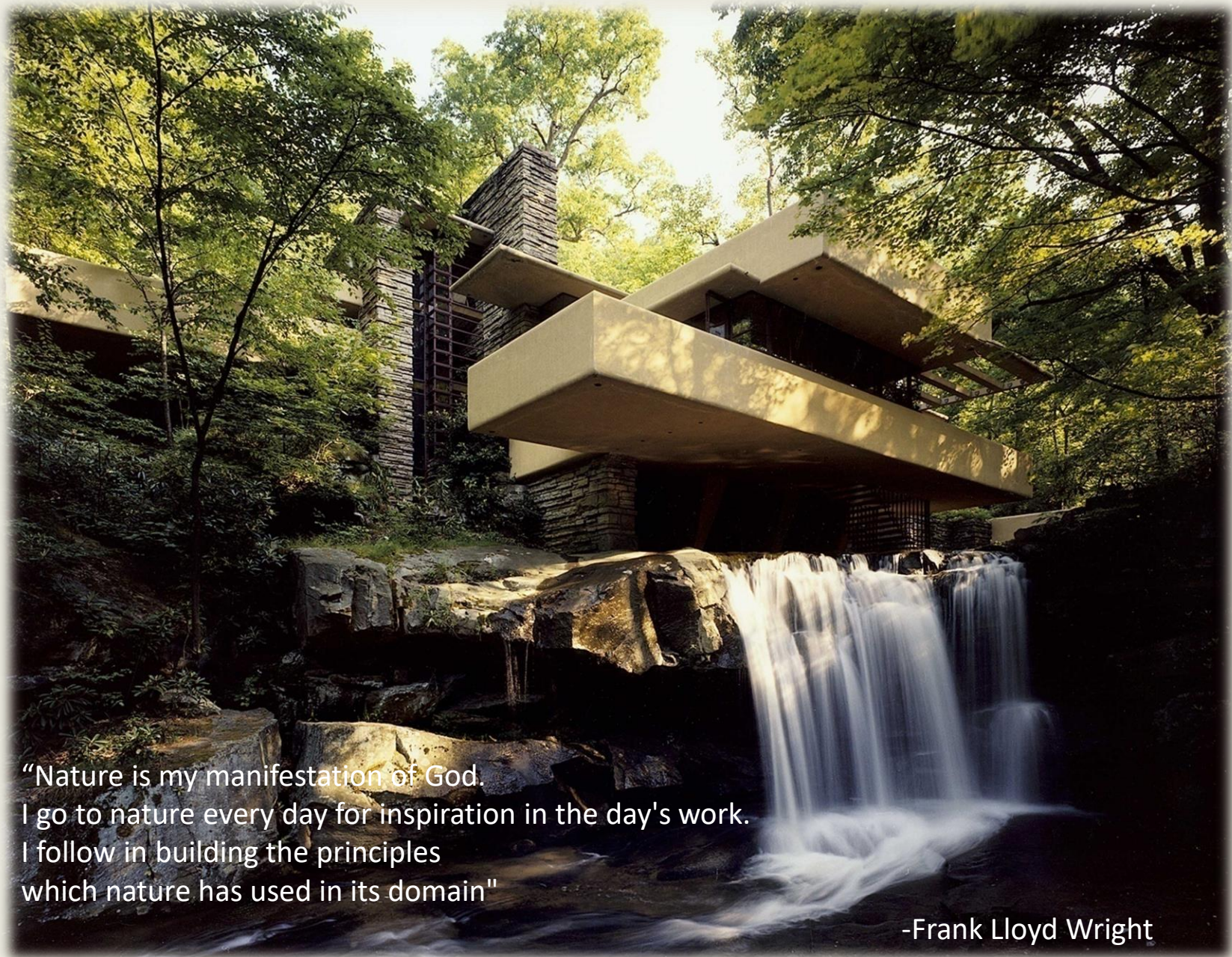


“Architecture which denies aesthetics is like food in capsule form”  
-Charles-Edouard Jeanneret-Gris .(LE CORBUSIER.)



"I have my own principles, which I am unwilling to abandon.  
I dislike falsehood and deceit. A building should be truthful."

- Laurie Baker



"Nature is my manifestation of God.  
I go to nature every day for inspiration in the day's work.  
I follow in building the principles  
which nature has used in its domain"

-Frank Lloyd Wright



## Our Projects

...where we have made  
a humble effort to find a balance between the built and natural environment.

# Whispering Woods



# Residence for Renowned Industrialist





# Police Training School, Tasgao, Dist. Sangli

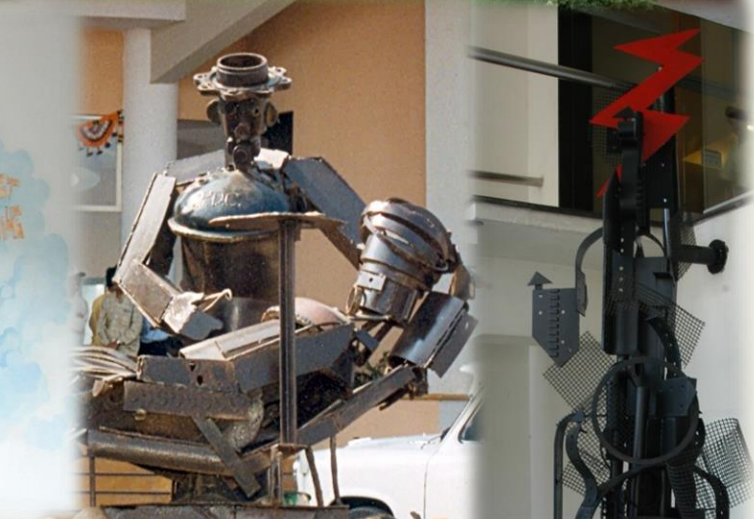
"The Police Training Campus has achieved occupant comfort and eco-friendliness at a relatively modest low budget of Rs 14,000 per sq m."

- Pramod Chaugule,  
Architect.

CONSTRUCTION WORLD MAY 2008



# Other Projects



.... A dream



सु डि ओ  
06-06-06



It had always been my dream to have a studio that would give my clients a picture of what I had in mind for them.

I wanted it to be everything that I had aimed at in my own projects.

But not until January 2008 was my dream realized.

It was in January 2008 that we were aware that while we were doing excellent work in the prevailing conditions, it would be a morale booster for the entire team if the office space be something *par excellence*.

Every staff member was consulted and his/her suggestions were given an honest thought. Everyone had been given an opportunity to contribute to the design.

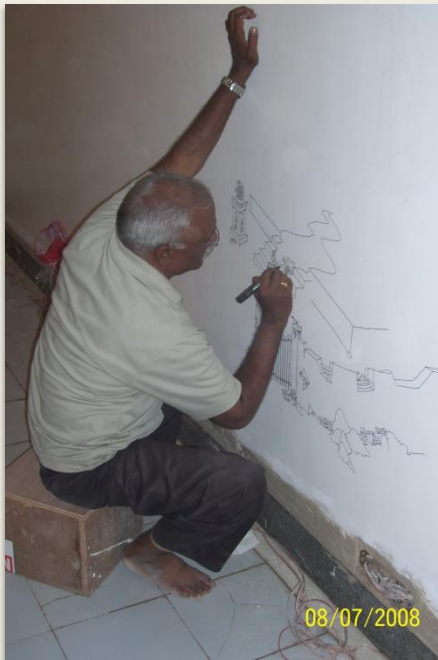
I am proud to say that it is not only me, but my entire team of architects, interior designers, engineers and every other concerned member who has made this dream into a reality.



Making of Studio 8-8-8



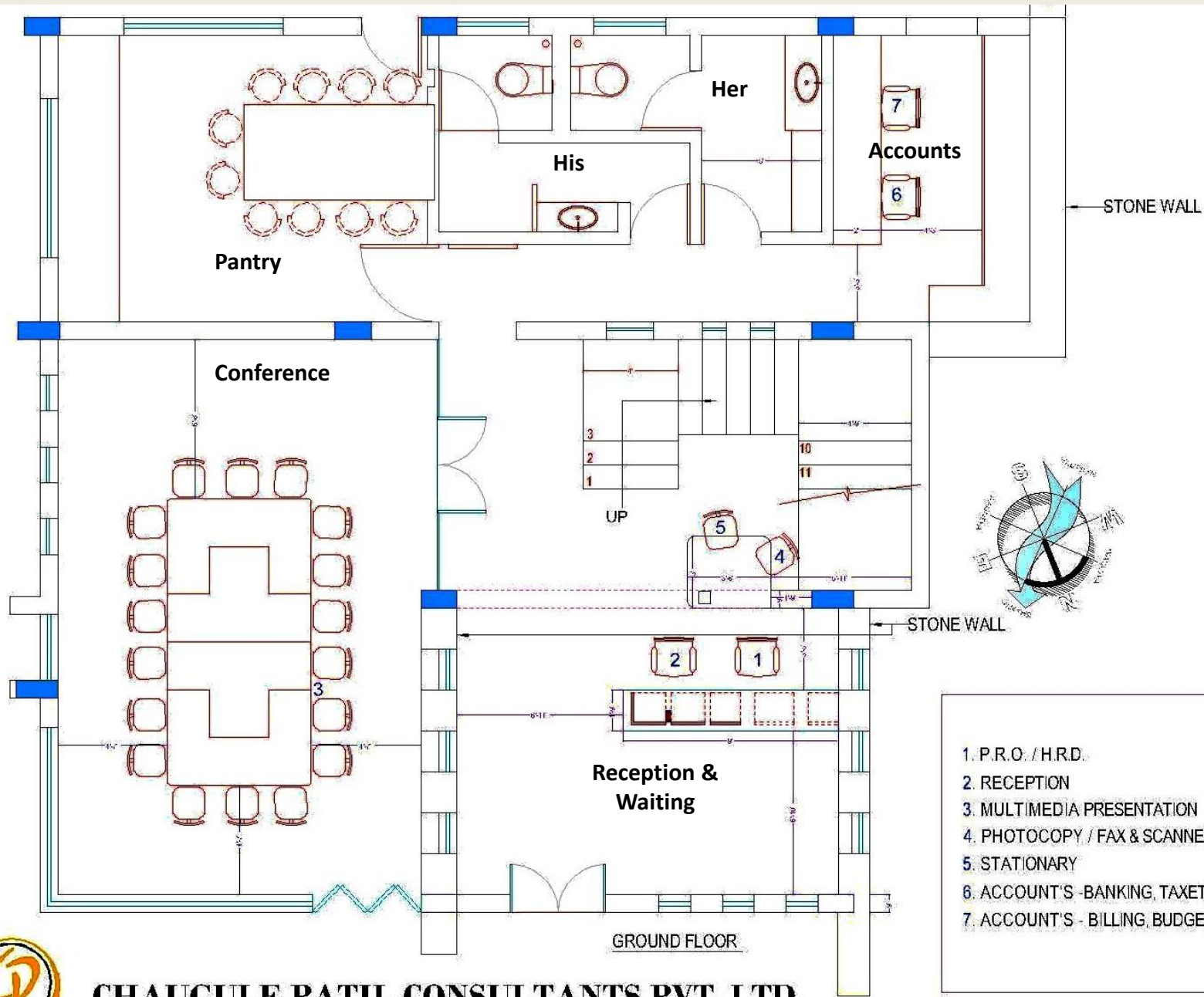








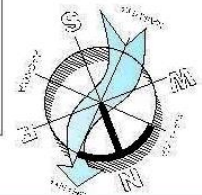
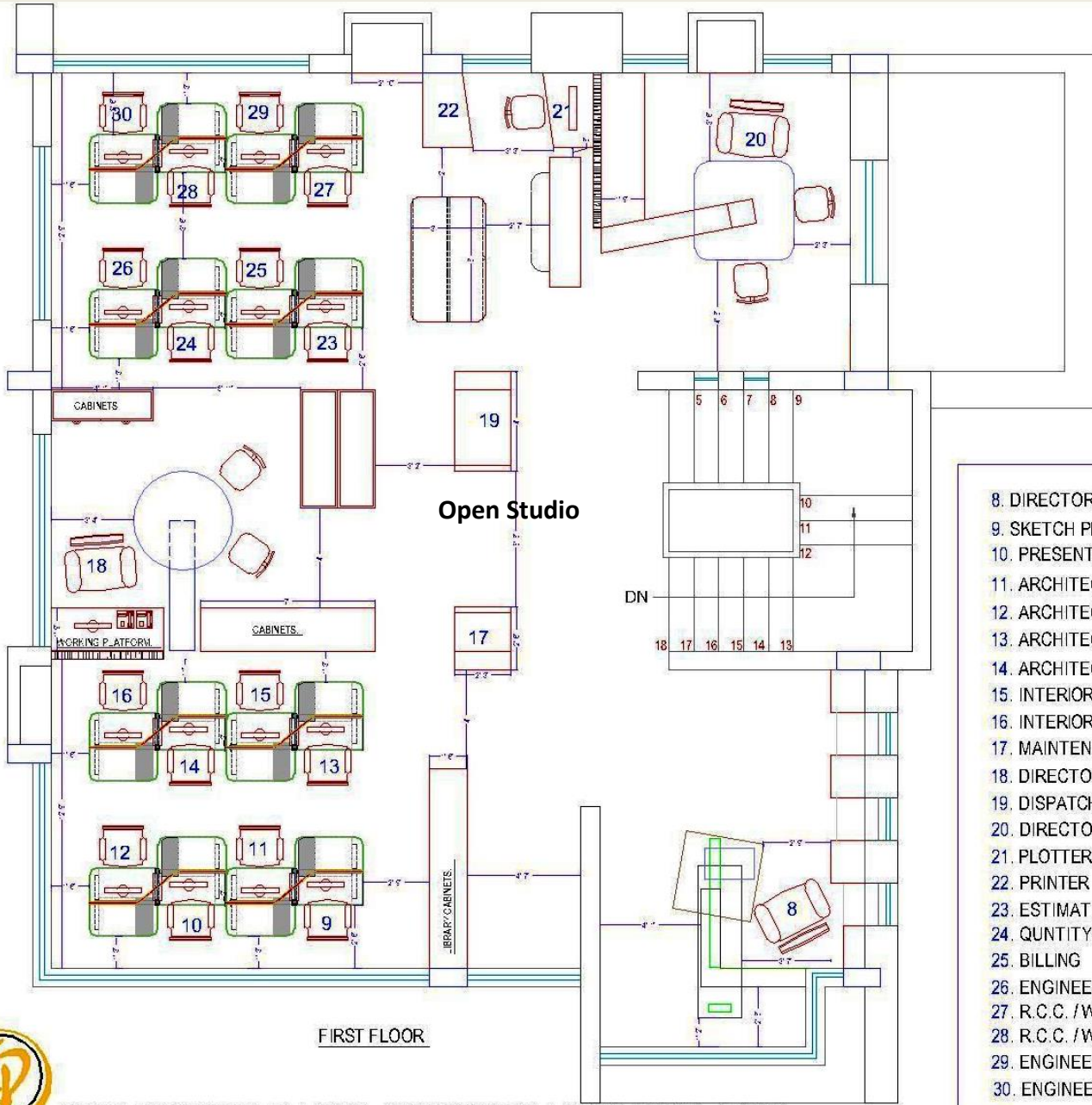
The Design



1. P.R.O. / H.R.D.
2. RECEPTION
3. MULTIMEDIA PRESENTATION
4. PHOTOCOPY / FAX & SCANNER
5. STATIONARY
6. ACCOUNT'S - BANKING, TAXETION
7. ACCOUNT'S - BILLING, BUDGET



**CHAUGULE PATIL CONSULTANTS PVT. LTD.**



- 8. DIRECTOR ARCHITECT
- 9. SKETCH PLANS
- 10. PRESENTATION
- 11. ARCHITECTURAL
- 12. ARCHITECTURAL
- 13. ARCHITECTURAL
- 14. ARCHITECTURAL
- 15. INTERIOR
- 16. INTERIOR
- 17. MAINTENANCE
- 18. DIRECTOR ENGINEERING (IMPLIMENTATION)
- 19. DISPATCH
- 20. DIRECTOR ENGINEERING (DESIGN)
- 21. PLOTTER
- 22. PRINTER
- 23. ESTIMATION / TENDER
- 24. QUNTIY/SURVOR
- 25. BILLING
- 26. ENGINEERING WORK
- 27. R.C.C. /W.D.
- 28. R.C.C. /W.D.
- 29. ENGINEERING INFRASTRUCTURE
- 30. ENGINEERING STRUCTURE

FIRST FLOOR





Studio 8-8-8 nestled in amidst of nature...



Existing plantation protected and utilized to advantage...



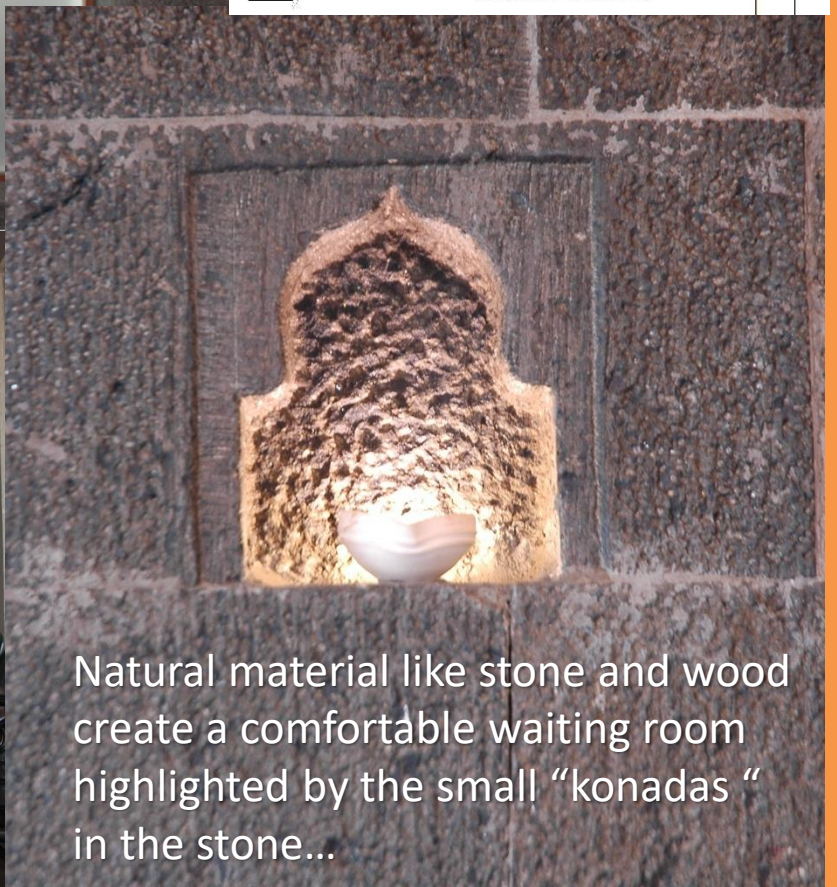
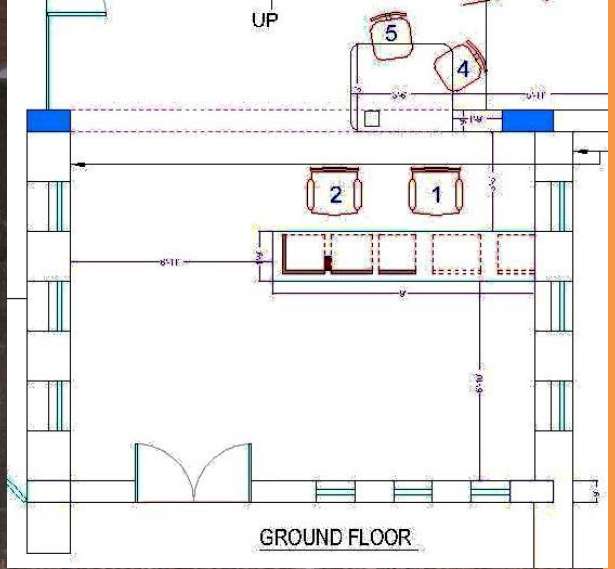
Natural vegetation prevents glare from glass cladding while letting in ample natural light...



Visual flow of energy and flow of environment throughout the building is evident right from the entrance...

आभाळगाथा

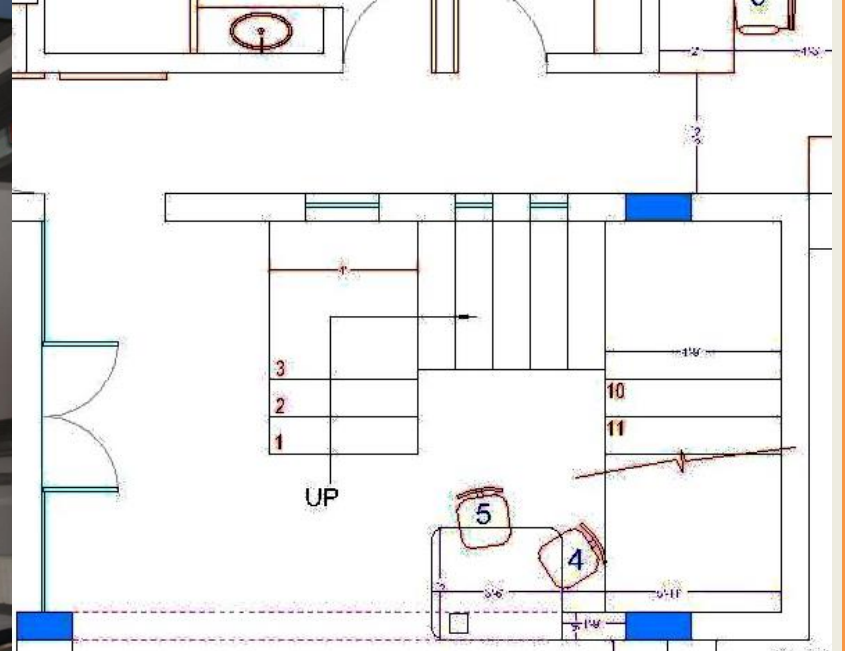
आभाळगाथा



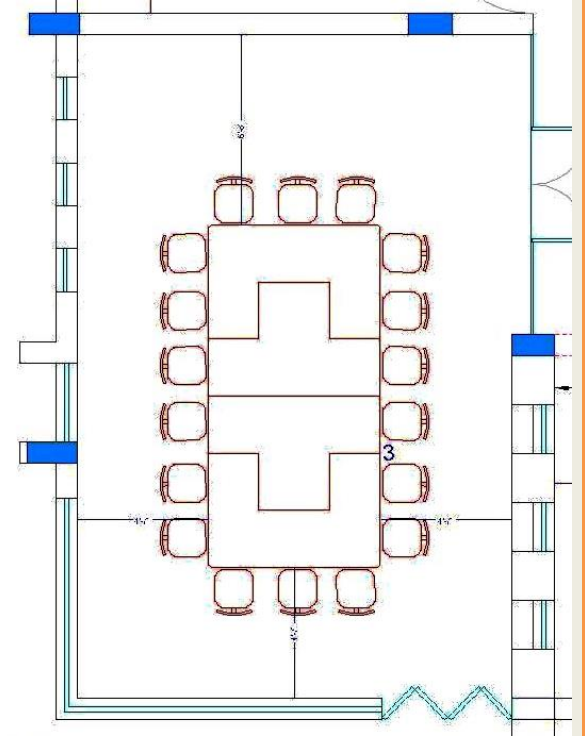
Natural material like stone and wood create a comfortable waiting room highlighted by the small "konadas" in the stone...

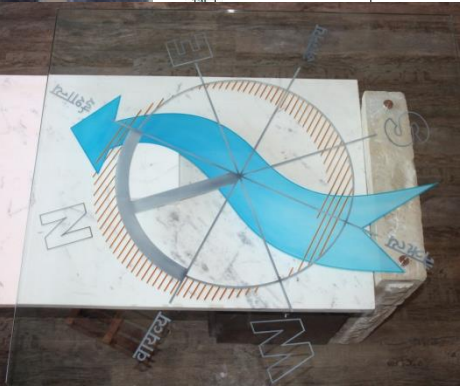
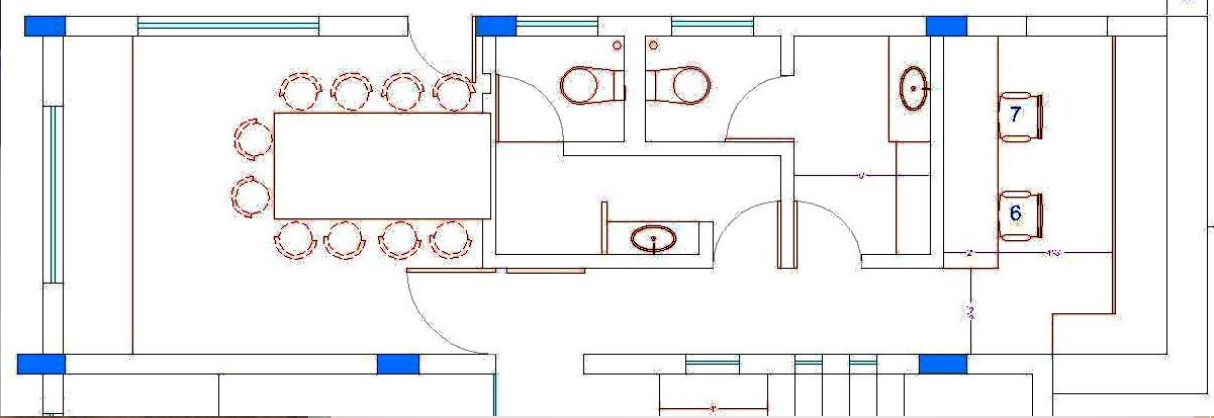


The aquarium with its goldfishes again depicts the flow on energy in the lobby area, while the windows bring in the environment...

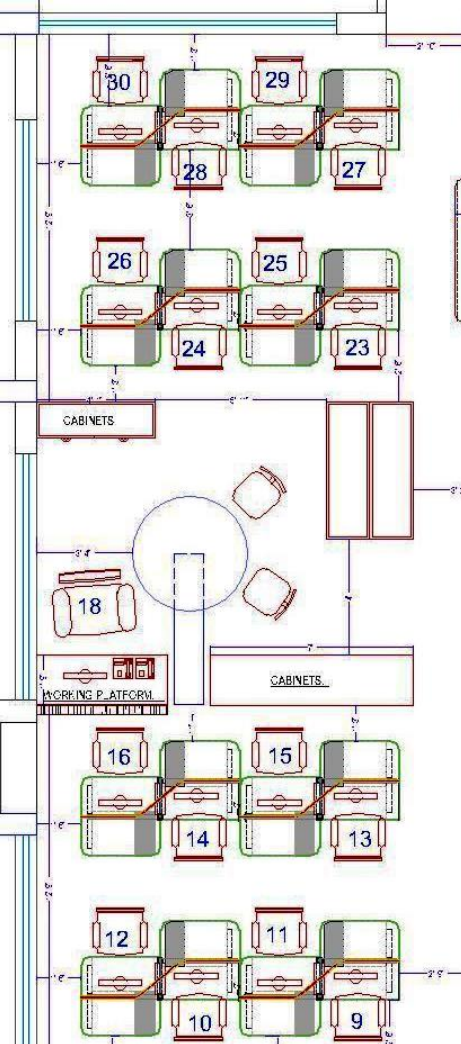


Ample natural light makes it possible to zero the electricity usage during the day...



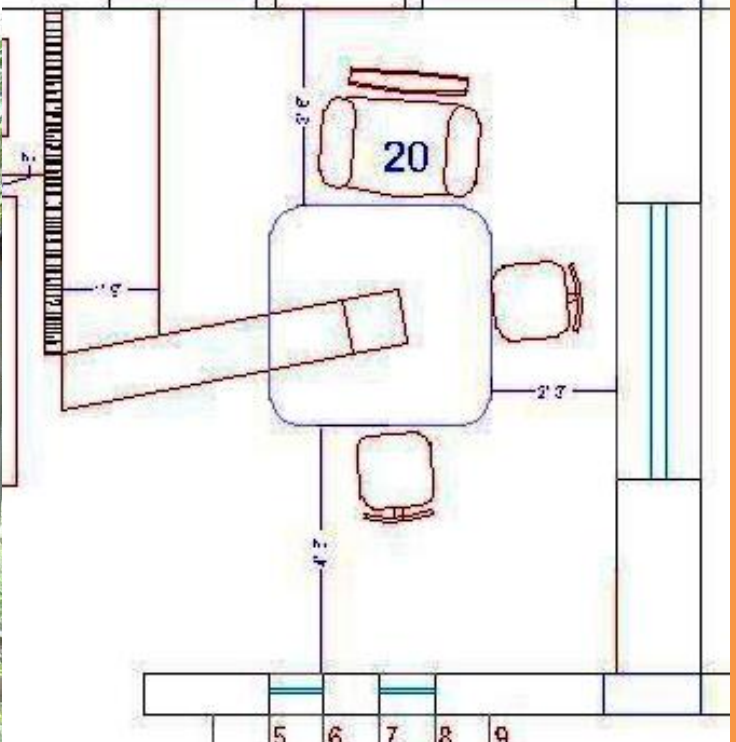


Colors and flooding sunlight makes the working as well as the recreation area a place to be energized...

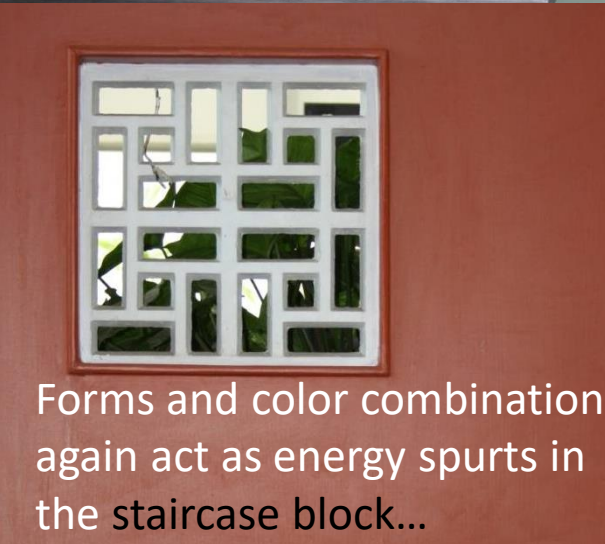
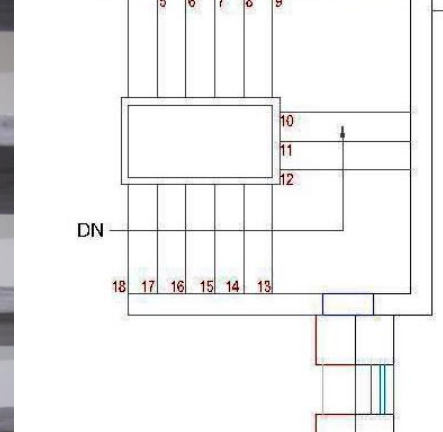


The studio alive with action against the backdrop of nature flowing in from the huge windows increases the performance level of all the team members...



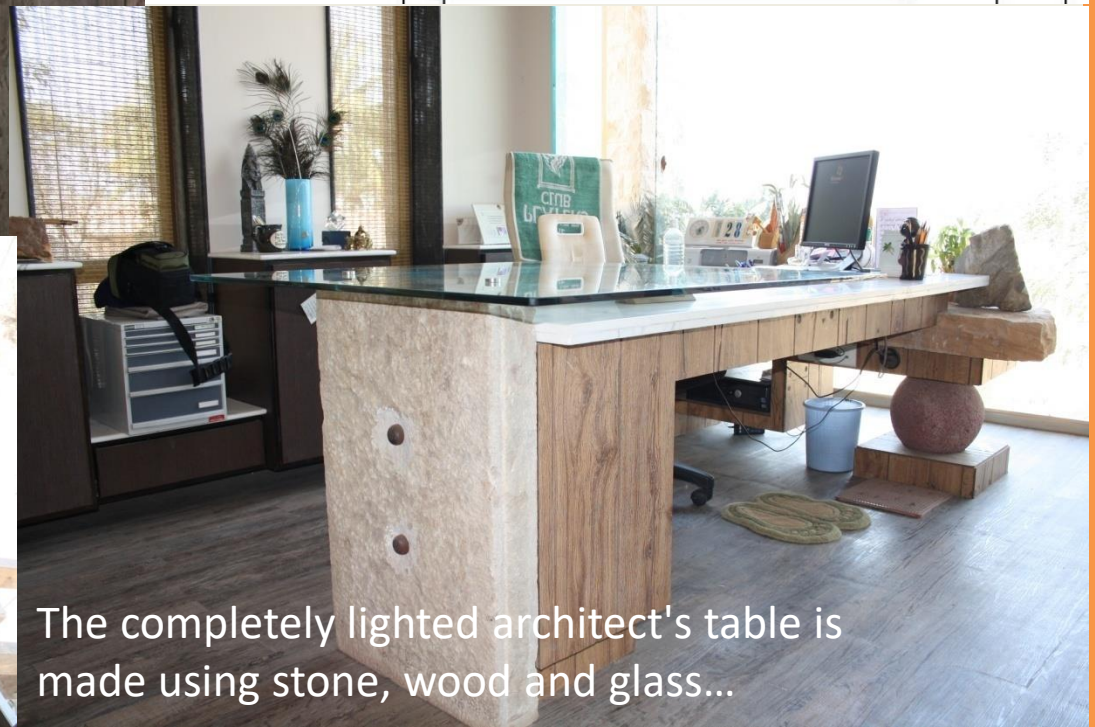
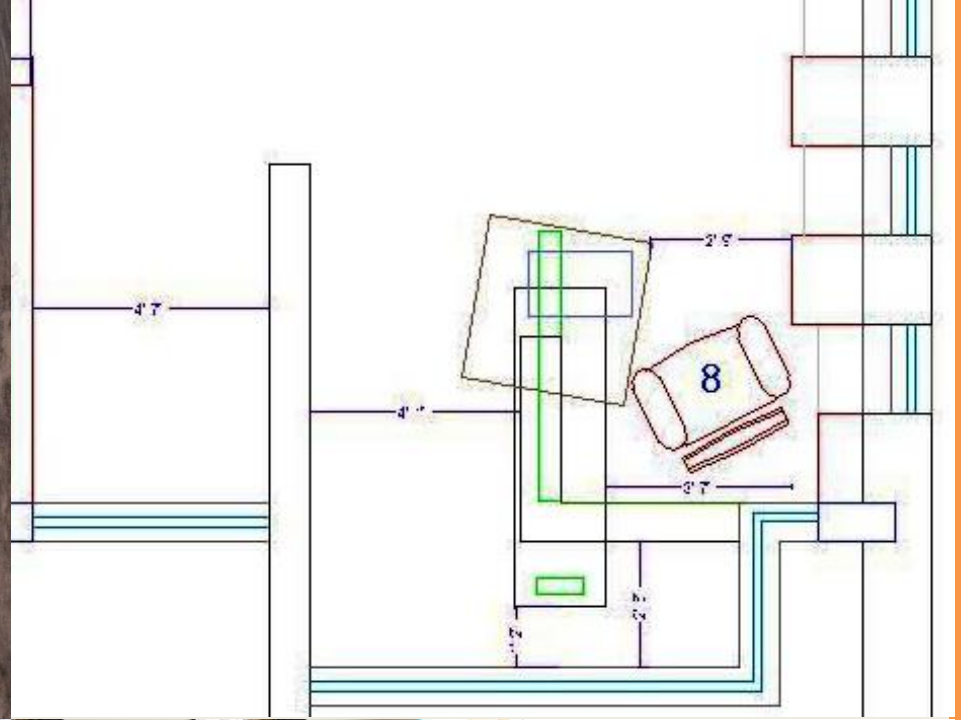


The structural designer's table is a structure in itself... you can actually feel it pulsating...



Forms and color combinations again act as energy spurts in the staircase block...





The completely lighted architect's table is made using stone, wood and glass...



## Key Design Features

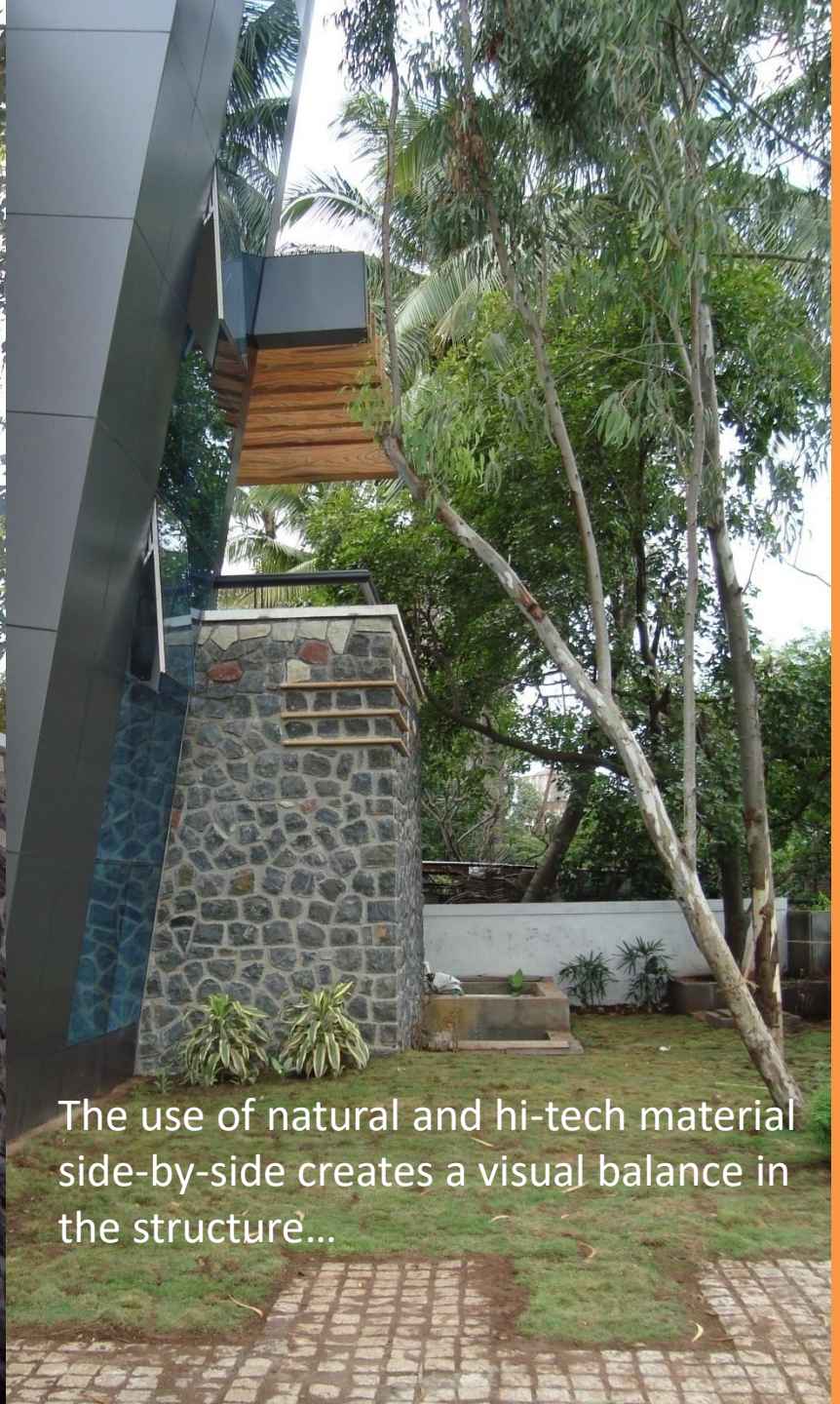




The environment and energy merge in the landscaping to create a dynamism...



A variety of material has been used in various ways to make every element unique...



The use of natural and hi-tech material side-by-side creates a visual balance in the structure...

The compound wall had been done using recycled material...





The nature is very much a part of the interiors as much as the surroundings...



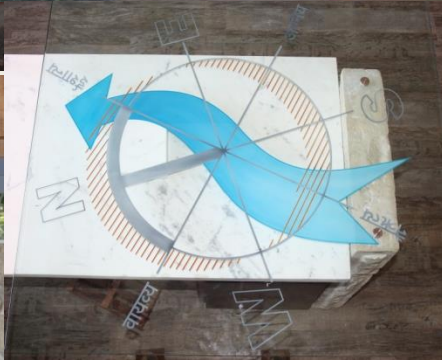
The ceiling with the innovatively applied design technique refreshes the minds of the old teammates while inspiring the new ones...



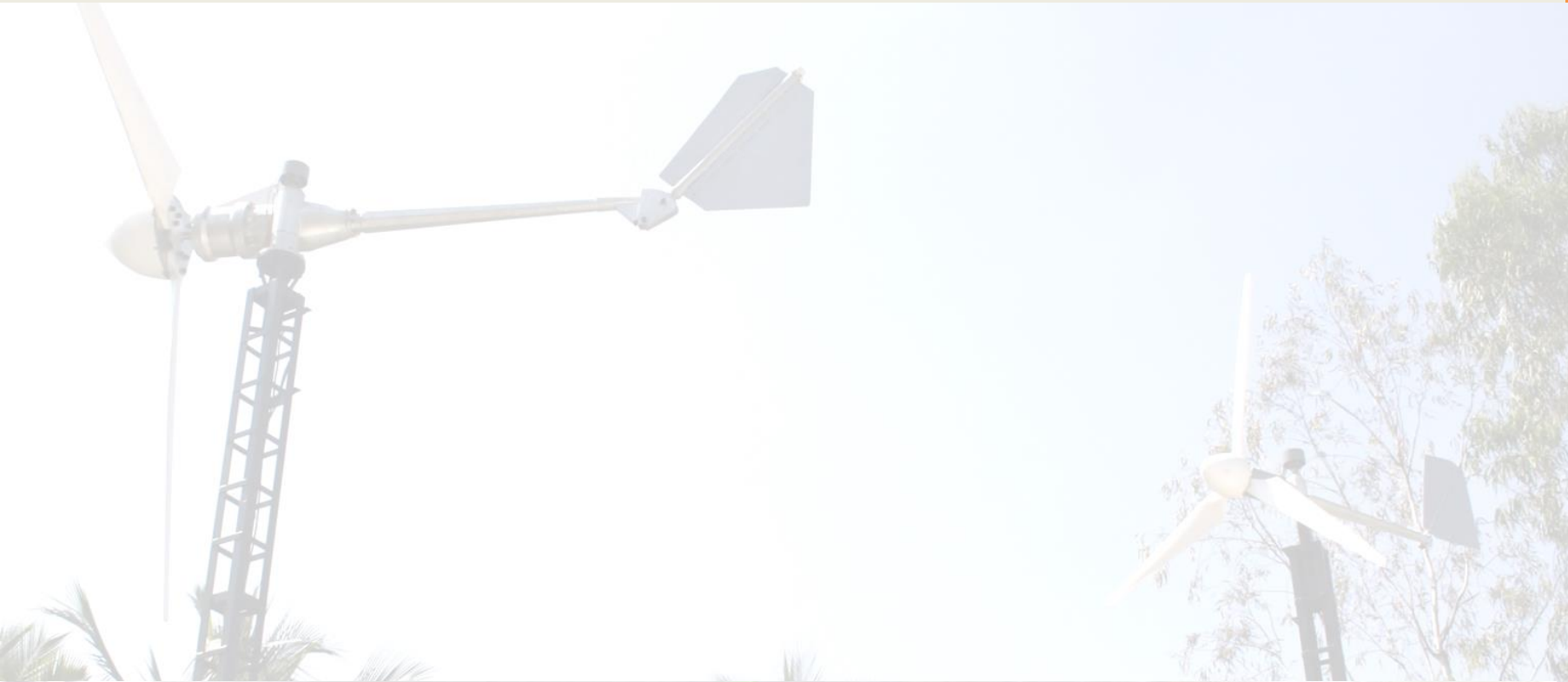
The appealing flow of light into the interiors creates an energetic environment in itself...



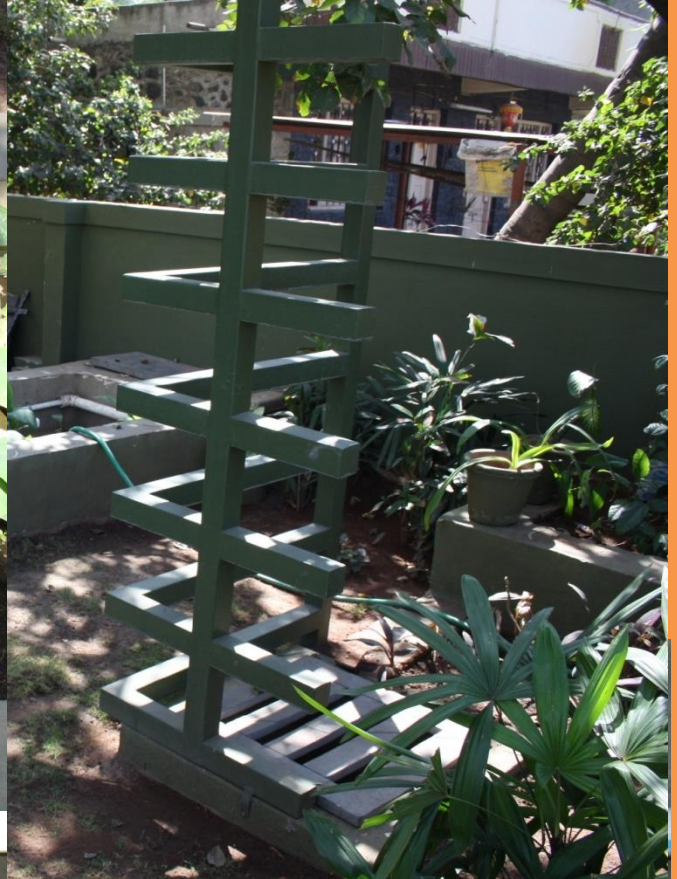
Various elements that facilitate the flow of energy through the building...







# Services and Systems



Waste water is recycled and is used for garden...  
Earth tunnel is provided to cool air inside the building...



3kW windmill is used to generate electricity for the building...





A small bamboo hut on the terrace feels like nest of nature itself!!!



**LEED - INDIA**

LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN



**Green Building Rating System**

# Project Checklist

## Sustainable Sites

13 Possible Points

Prerequisite	Erosion & Sedimentation Control	Required
Credit 1	Site Selection	1
Credit 2	Development Density & Community Connectivity	1
Credit 3	Brownfield Redevelopment	1
Credit 4.1	Alternative Transportation, Public Transportation Access	1
Credit 4.2	Alternative Transportation, Alternative Fuel Refueling Stations	1
Credit 4.3	Alternative Transportation, Parking Capacity	1
Credit 5.1	Reduced Site Disturbance, Protect or Restore Open Space	1
Credit 5.2	Reduced Site Disturbance, Development Footprint	1
Credit 6.1	Stormwater Design, Quantity Control	1
Credit 6.2	Stormwater Design, Quality Control	1
Credit 7.1	Heat Island Effect, Non Roof	1
Credit 7.2	Heat Island Effect, Roof	1
Credit 8	Light Pollution Reduction	1

Points Obtainable : 11

## Water Efficiency

6 Possible Points

Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
Credit 2.1	Water Efficiency in Air-conditioning System: Reduce by 50%	1
Credit 3	Innovative Wastewater Technologies	1
Credit 4.1	Water Use Reduction, 20% Reduction	1
Credit 4.2	Water Use Reduction, 30% Reduction	1

Points Obtainable : 6

## Energy & Atmosphere

17 Possible Points

Prerequisite 1	Fundamental Building Systems Commissioning	Required
Prerequisite 2	Minimum Energy Performance	Required
Prerequisite 3	CFC Reduction in HVAC&R Equipment	Required
Credit 1.1	Optimize Energy Performance, 20% New / 10% Existing	2
Credit 1.2	Optimize Energy Performance, 30% New / 20% Existing	2
Credit 1.3	Optimize Energy Performance, 40% New / 30% Existing	2
Credit 1.4	Optimize Energy Performance, 50% New / 40% Existing	2
Credit 1.5	Optimize Energy Performance, 60% New / 50% Existing	2
Credit 2.1	Renewable Energy, 2.5%	1
Credit 2.2	Renewable Energy, 5%	1
Credit 2.3	Renewable Energy, 7.5%	1
Credit 3	Additional Commissioning	1
Credit 4	Ozone Depletion	1
Credit 5	Measurement & Verification	1
Credit 6	Green Power, 50%	1

Points Obtainable : 15



## Materials & Resources

		13 Possible Points
		Required
Prerequisite 1	Storage & Collection of Recyclables	
Credit 1	Building Reuse	3
Credit 2	Construction Waste Management	2
Credit 3	Resource Reuse	2
Credit 4	Recycled Content	2
Credit 5	Local/Regional Materials	2
Credit 6	Rapidly Renewable Materials	1
Credit 7	Certified Wood	1



## Indoor Environmental Quality

15 Possible Points

Prerequisite 1	Minimum IAQ Performance	Required
Prerequisite 2	Environmental Tobacco Smoke (ETS) Control	Required
Credit 1	Outdoor Air Delivery Monitoring	1
Credit 2	Increased Ventilation	1
Credit 3	Construction IAQ Management Plan	2
Credit 4	Low-Emitting Materials	4
Credit 5	Indoor Chemical & Pollutant Source Control	1
Credit 6	Controllability of System	2
Credit 7	Thermal Comfort	2
Credit 8	Daylight & Views	2



Points Obtainable : 12

## Innovation & Design Process

5 Possible Points

Credit 1	Innovation in Design	4
Credit 2	LEED™ Accredited Professional	1

Points Obtainable : 5

## LEED – India Certification Levels

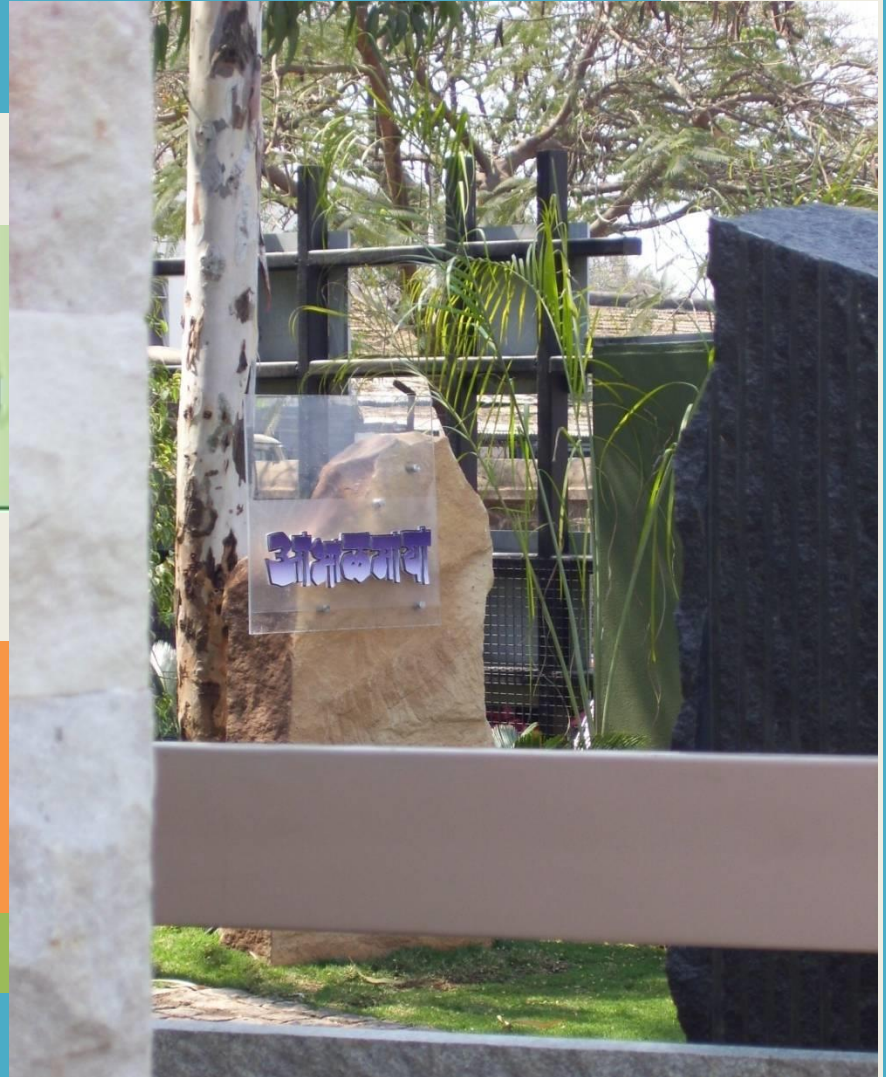
Rating	Points
LEED – Certified	26 – 32
LEED – Silver	33 – 38
LEED – Gold	39 – 51
LEED – Platinum	52 – 69

Total Points Obtainable : **61**

Certification : **Platinum!!!**



Green Rating for Integrated  
Habitat Assessment



Criteria 1: Site Selection		Partly mandatory
	1	
Criteria 2: Preserve and protect landscape during construction /compensatory depository forestation.		Partly mandatory
	5	
Criteria 3: Soil conservation (post construction)		4
	4	
Criteria 4: Design to include existing site features		2Mandatory
	2	
Criteria 5: Reduce hard paving on site		Partly mandatory
	2	
Criteria 6: Enhance outdoor lighting system efficiency		3
	3	
Criteria 7: Plan utilities efficiently and optimize on site circulation efficiency		3
	3	
Criteria 8: Provide, at least, minimum level of sanitation/safety facilities for construction workers		2Mandatory
	2	
Criteria 9: Reduce air pollution during construction		2Mandatory
	2	
Criteria 10: Reduce landscape water requirement		3
	3	
Criteria 11: Reduce building water use		2
	2	
Criteria 12: Efficient water use during construction		1
	1	
Criteria 13: Optimize building design to reduce conventional energy demand		6Mandatory
	6	
Criteria 14: Optimize energy performance of building within specified comfort		12
	12	
Criteria 15: Utilization of flyash in building structure		6
	6	
Criteria 16: Reduce volume, weight and time of construction by adopting efficient technology (e.g. pre-cast systems, ready-mix concrete, etc.)		4
	4	

Criteria 17: Use low-energy material in interiors	4	
Criteria 18: Renewable energy utilization	5	
Criteria 19: Renewable energy based hot-water system	3	
Criteria 20: Waste water treatment	2	
Criteria 21: Water recycle and reuse (including rainwater)	5	
Criteria 22: Reduction in waste during construction	2	
Criteria 23: Efficient waste segregation	2	
Criteria 24: Storage and disposal of waste	2	
Criteria 25: Resource recovery from waste	2	
Criteria 26: Use of low - VOC paints/ adhesives/ sealants.	4	
Criteria 27: Minimize ozone depleting substances	3	Mandatory
Criteria 28: Ensure water quality	2	Mandatory
Criteria 29: Acceptable outdoor and indoor noise levels	2	
Criteria 30: Tobacco and smoke control	1	
Criteria 31: Universal Accessibility	1	
Criteria 32: Energy audit and validation		Mandatory
Criteria 33: Operations and maintenance protocol for electrical and mechanical equipment	2	Mandatory
Total score	100	
Criteria 34: Innovation (Beyond 100)	4	
<b>Total score</b>	<b>104</b>	



Points Scored	Rating
50-60	One Star
61-70	Two Star
71-80	Three str
81-90	Four Star
91-100	Five Star

Total Points Obtainable :

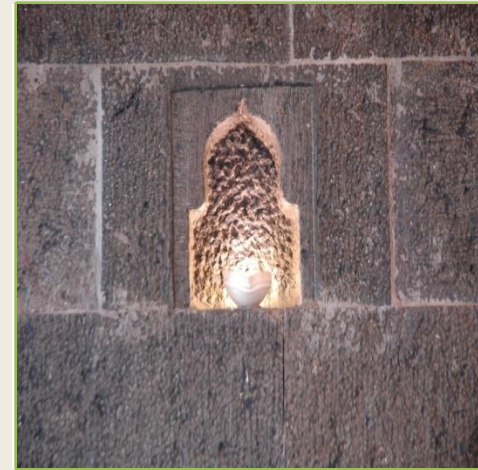
**98**

Certification : **Five Star!!!**



Lets us be the bridge that connects energy to nature...





*Thank You*