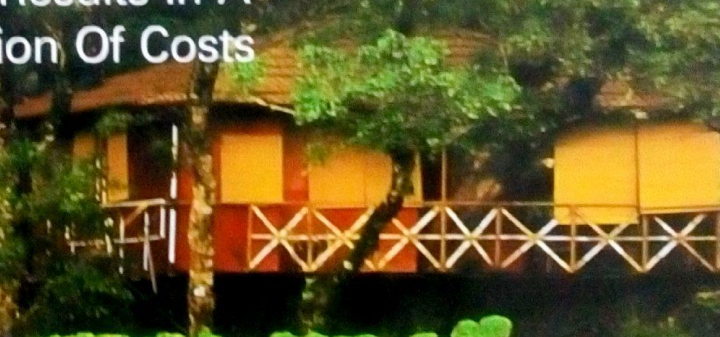


# green by design

YOUR GUIDE TO ECO FRIENDLY LIVING

## VYTHRI RESORTS

A Quest For A Low Intervention  
Green Design Results In A  
Happy Reduction Of Costs



GREEN  
MARKET

MANITOBA  
HYDRO PLACE

VAMPIRE  
POWER





# LIGHT AS AIR

Situated in the rural milieu of western India, is a light as air structure called the 'AR Folly', which literally means 'Structure in the Air' in Portuguese.

TEXT INPUT BY ASHKA NAIK • PHOTOGRAPHS ARTHA STUDIO

THIS SPREAD  
'South Court'  
open window  
creates 'outside-in  
ambiance.

NEAR Kasarwadi, close to the small town of Sangamner in the state of Maharashtra, treading ever so lightly on the environment, the AR Folly was designed as a weekend retreat for a doctor and his family.

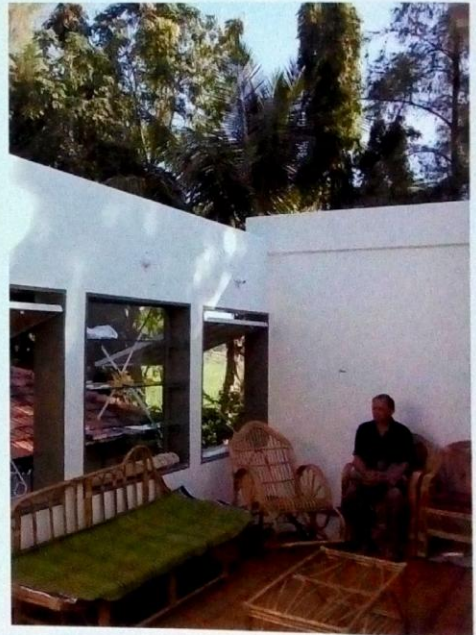
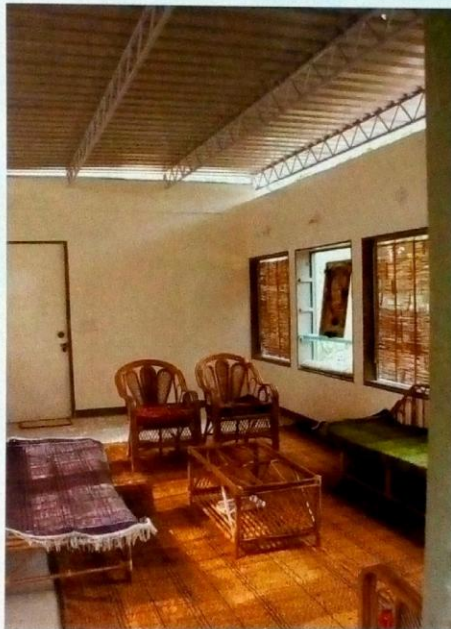
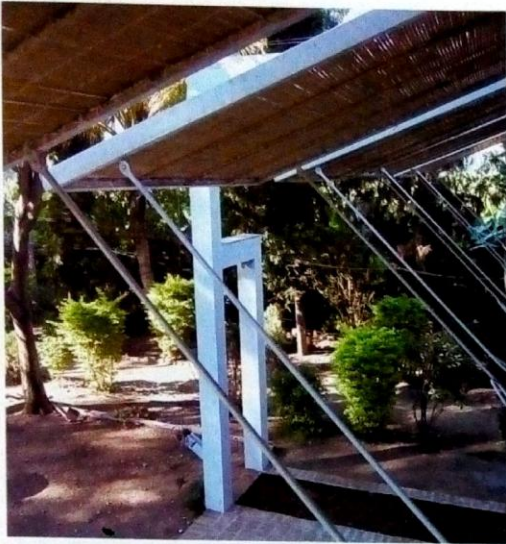
The architectural firm Artha Studio, which was commissioned for the construction of this project is a noteworthy design consultancy founded on the conviction of bringing a constructive transformation in the social and environmental realities, through the practice of sustainable design. The studio's design process is based on thorough inquiry, contextual insight and a comprehensive knowledge acquired through the execution of a wide range of projects in architecture, interiors and urban design. Extensive research, creative acumen and holistic ingenuity are the tools this design firm utilizes in bringing



each project to a successful culmination. At Artha Studio, there is an all pervasive endeavor, to create sustainable design solutions for the multifarious design challenges; they are faced with from time to time.

The region where AR Folly was to be built is hot and dry, with a seasonal monsoon which tends to be moderately heavy. The site was located in the family farm, next to an existing pitched roof structure. The requirement was for a space with an emphasis on relaxation; a haven far away from an urban life with strong attributes of peace and reverence to all nature. These principles then became the keystones for the development of the project. Stemming from this idea, the concept evolved into a Folly accommodating polyvalence of functions with an ardent respect for the environment.

THIS PAGE  
'Retractable roof' in  
different positions,  
'protruding beams',  
'supporting columns',  
'winch-pulley-cable  
mechanism' on  
columns.



**THIS PAGE TOP  
LEFT & RIGHT**

'Pivoted windows' as 'chajja' knitted with 'bamboo mats' when opened gives rhythm and order.

**THIS PAGE BOTTOM  
LEFT & RIGHT** 'Core room' secured with roof 'Retractable roof' creates open to sky 'patio' surrounded by trees.

The primary space of the Folly, surrounded by trees, was elevated from the ground to a height of 2.4 meters. The raising of the structure above the ground helped create a permeable pavement on the ground level. The exposed pavement was constructed with clay-bricks, which would help reduce storm-water runoffs, facilitating the absorption of rainwater in the aquifers. Additionally, the elevated structure provided a certain degree of privacy, as all around it ran a circumventing jogging track. The adjacent pitched roof structure that was used by the caretaker's family was also effectively kept out of view.

This core usable space was equipped with a sliding roof that would mechanically slide on the tracks created on the beams protruding from the structure. Opening the roof in this way served two purposes; the enclosed space immediately transformed into an 'al fresco' area, and simultaneously a complementary double volume space was created at the ground level. This interior space with a sliding roof on the first floor was also astutely designed to optimally harvest natural light and ventilation. Meanwhile, the consequential, semi-covered double volume space at the ground level could be used for various social gatherings and family events.

On the south and the north facades of the structure, horizontally pivoted steel frame



windows were knitted with cane and bamboo. This design allowed for a cross-ventilation and filtration of natural light inside the core space, even when the roof-assembly was closed. The overall ingenious design was further propagated and the windows were fitted with humid khus panels which, in summertime would provide for an effective passive cooling. The two fixed windows in the north façade were utilized to accommodate book shelves, and also become a source of natural north light for the interior space. The glass of the toilet window was sandwiched with actual flower petals to not only provide for a translucent screening but to also imbue an organic touch.

The design team strictly adhered to the principles of sustainability throughout the design and construction processes of this project. To incorporate natural, local and renewable materials such as bamboo, cane and clay-bricks, as well as to select a mechanical roofing system over an electrical one, were just a few of the many sustainable decisions taken by the design team. Conscious effort was made at every stage to evaluate and examine available materials and technologies for their environmental performances. Such thorough inquiry has always been the key to effectively integrate sustainability in all their projects.

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Staircase commencing from jogging track; enclosed seats on the brick paved court.