

The 3R Pavilion explores the opportunities of reducing, reusing and recycling of materials in buildings.

The clients wanted us to develop a multi-purpose area adjoining a swimming pool. They wanted to use unconventional materials and were even OK if the structure failed! We based our approach on the 3R principles: Reducing, Reusing and Recycling of materials. The project adopts a range of conventional and unconventional materials and construction practices and delivers a building that is sustainable, exploring the materiality of



View of Pavilion



Evening view of Pavilion from Pool

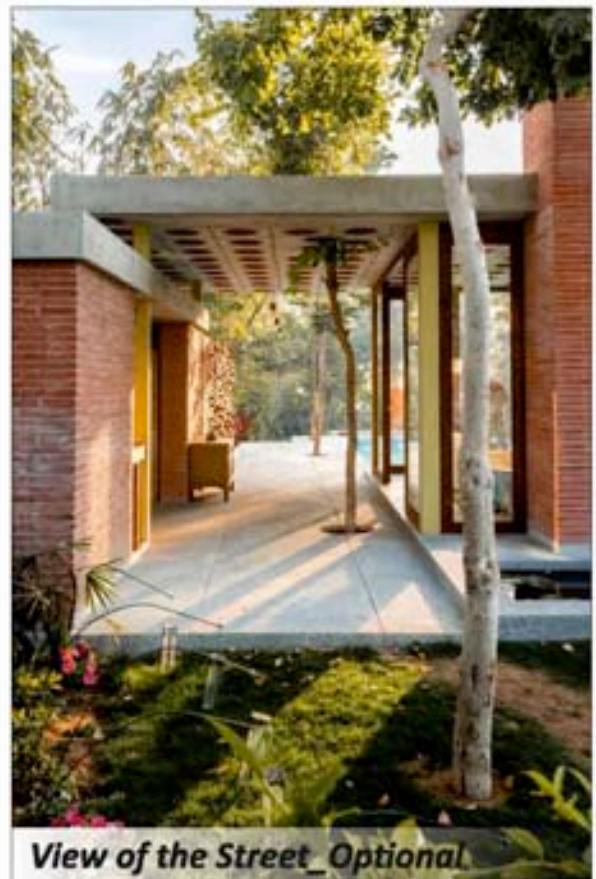


The Beer Bottle wall the Tree and the Filler Slab_RA5766

architecture, attentive to detail and sublime in its setting, modern in its language and yet rooted in its regional context, and in spirit bohemian- a reflection of the clients themselves!

The amount of steel and concrete was reduced by using filler slabs with earthen pots that were made by a local potter. Unburnt bricks comprising of surkhi (red brick) waste and lime mortar made out of ceramic waste were used for masonry. Waste stone chips were sourced for in-situ terrazzo flooring with brass strips. Reclaimed glass beer bottles were reused as fillers in concrete walls which transformed into a backlit screen in evenings. Pallet wood from the packaging industry was used to create a screen along the pool edge.

Double glazing and over-deck insulation were provided to reduce heat gain and the need for active cooling. The structure was designed to accommodate all existing trees. Doors and windows were reclaimed (and restored) from demolition of old houses. The age-old technique of linseed oil polish was employed, retaining the as-it-is character of the local 'valsadi' teak wood. The project was able to achieve a level of finesse and quality through its level of detailing. This is evident in the grooves obtained through



View of the Street_ Optional



the use of 12mm teak wood strips along the grid lines of the filler slab and the 12mm rubber strips around the earthen pots. The same technique was used in the RCC wall with beer bottles. Overall, there was a conscious effort to remove the layering of material finishes that is so widely used in recent times. Furthermore, the attempt was to support and generate employment for the handful of craftsmen left who have the skills to use the traditional methods of lime construction and in-situ terrazzo flooring.

About PVDRS

Patel-Vadodaria Design Research Studio (PVDRS) is multi-disciplinary architecture, interior design and landscape design practice based in Ahmedabad, India. The founding partners, Dr Keyur Vadodaria and Megha Patel-Vadodaria have worked in the UK for ten years on a range of international projects before returning back to India in 2013 to start PVDRS. PVDRS works at a variety of scale, ranging from the design of a door handle to buildings and its surroundings. Through their research-led design approach, PVDRS addresses a multitude of parameters that include client requirements and aspirations, place and culture, materials and texture and light and wind. Central to the design approach is the focus on Sustainability with the aim of reducing the environmental impact of building.

