

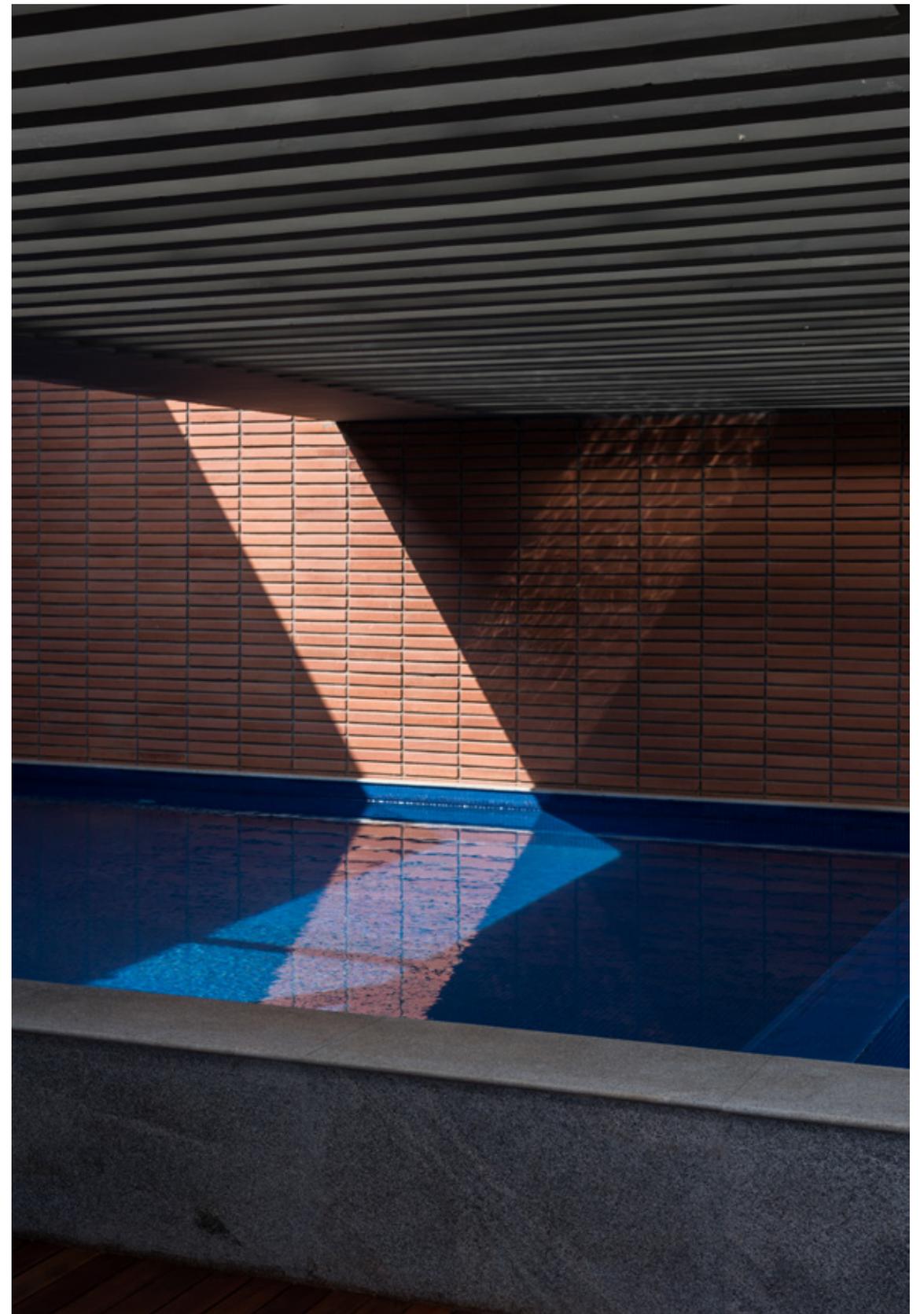
Pursuing a Radical Rhapsody

Words Johnny Rodger
Photographs Gordon Burniston

On first hearing the name of Indian group *Total Environment* it might be easy to mistake them for some specialist type of eco – or sustainability outfit. Such a slight misreading could find a ready alibi in the garden, the greenery, the grass roofs and the open spaces that surround their buildings.

The truth is though, that they are an architect-led firm who realised from set up in 1996 that, in the current economic and cultural climate, if they wanted to provide customised homes as a finished product through optimum design and fine detailing, then they would have to get involved in the total environment of the industry, i.e. in design, development and real estate business.

Although *Total Environment* have built offices, restaurants, a brewery, night clubs and a technical college (whose curved brick walls are something to behold!), their main business is the building of homes. They have built millions of square feet of homes in some of the finest complexes in India – and it is important to see why they would always call these structures ‘homes’ and not just ‘housing’. Created as holistic design, almost *gesamtkunstwerk*, they build completely furnished, decorated and individually customized spaces for clients who share their passion for good living.



The Magic
Faraway Tree
Bengaluru

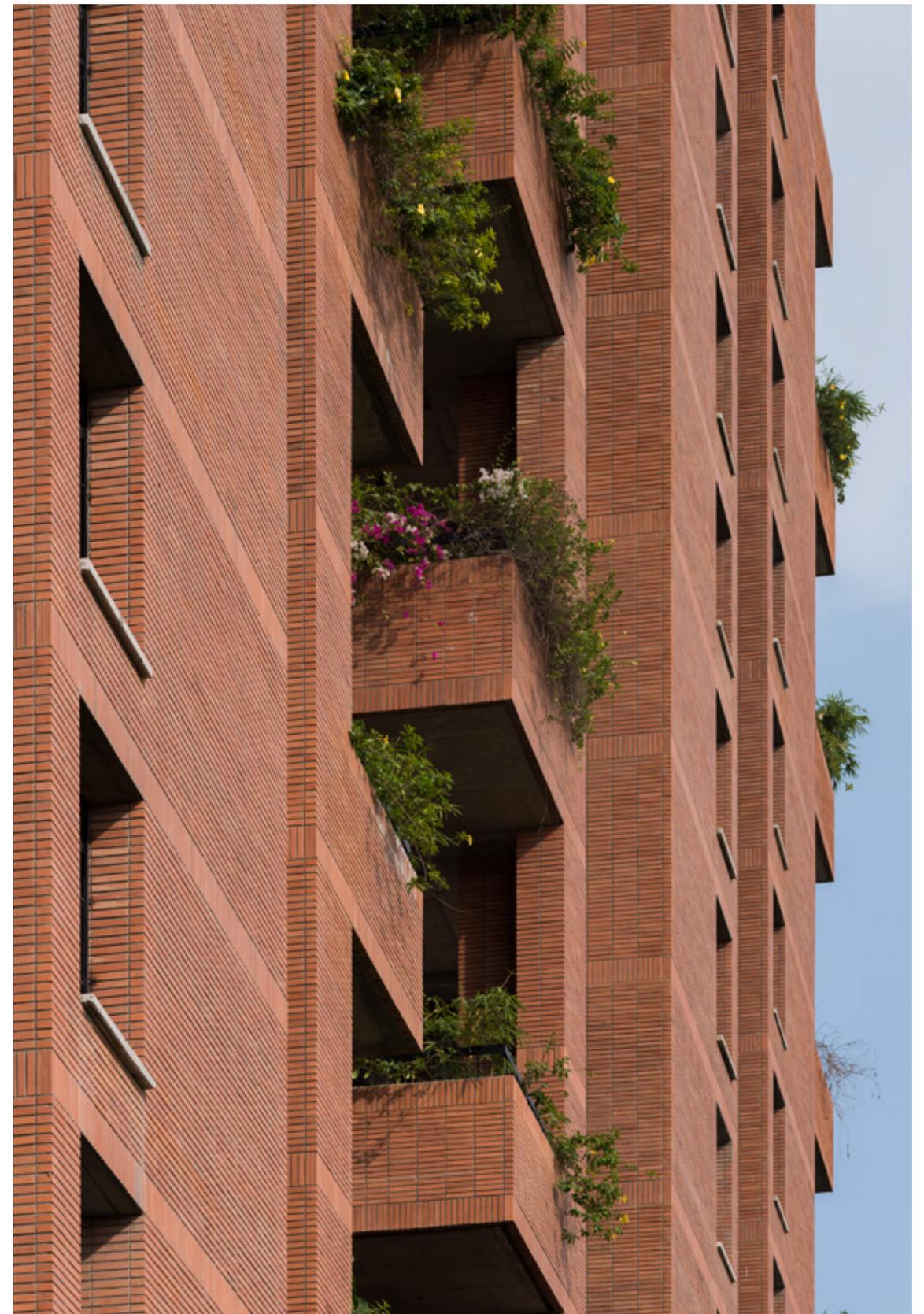
Kamal Sagar, principal of the firm, refers to their architectural approach as a type of 'product design', whereby he means that they are designed and built with special and calculated care for the movements, actions and needs of actual residents almost in terms of ergonomics. Hence the addressing of such micro-design notions as *how should the wardrobe be opened, or how can the bed be best placed according to the fall of light in the room, and so on...*

In the design of their houses, the firm takes special care with two aspects which make their works most immediately striking – nature and craftsmanship.

As far as the incorporation of nature and natural effects into the design are concerned the flourishing of greenery and gardens has always been very important in and around the Total Environment buildings. Even in their early apartment designs, from the *Windmills of Your Mind* in Bengaluru project in 1996, they incorporated a garden for every apartment on every floor. They began building 10x10 private gardens for the 1200sq ft apartments and that concept has now spawned duplex and double height gardens in their designs as well as some 100-1400sq ft individual gardens in some apartment buildings. Of course these are houses for the well-off in India and as such a certain key note of luxury is at a premium. Nonetheless their inspiration for this ubiquitous provision of access to nature in their designs, can be traced to the influence of both traditional Indian architectural forms and modern western architecture too.

In published discussions of their work the ancient concept of Vaastu has arisen. Vaastu Shastra is the traditional Hindu system of architecture which describes principles of design, layout, measurements, space arrangement and spatial geometry in a way which integrates architecture with nature. *Total Environment* adopt traditional features like the courtyard in the traditional Hindu architecture, where architectural functions like shade and protection and air circulation are provided and cultural activities such as music, dance and games can take place. In the *Total Environment* single dwelling designs, these courtyard features are turned into a green oasis, with the spatial planning characterised by an open layout with minimum walls, and where every interior space has an opening and an access to the green outdoors.

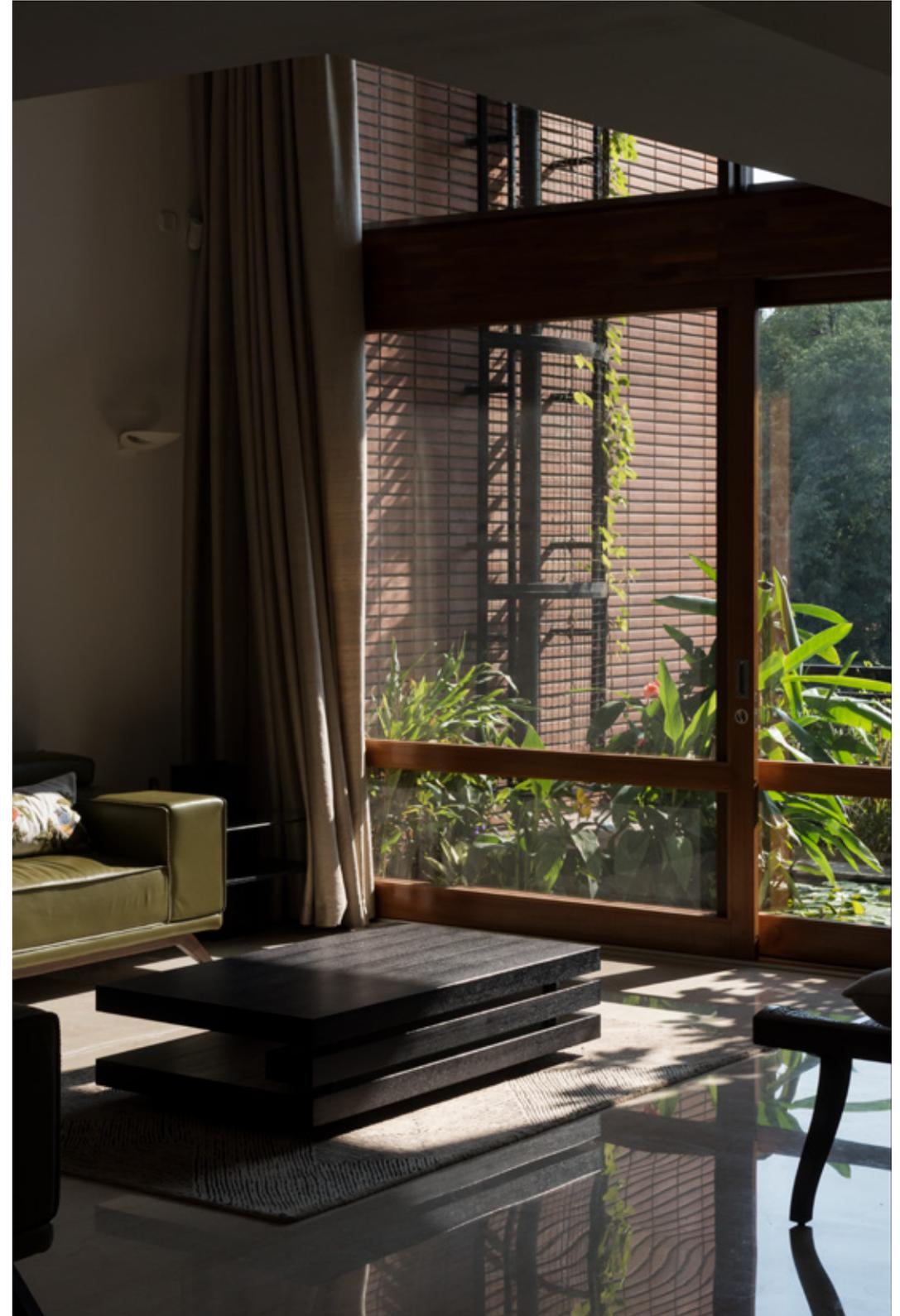
Sagar also calls on the influence of a more recent and modern architecture. The firm's *After the Rain* project in Bangalore is noted for its cutting-edge sustainable features like the grass roofs for rainwater harvesting with their cantilevered concrete brise-soleils, while in other projects they have developed earth-sheltered designs, flush walls which control waste of water in the toilets, and they have also been working on projects with National Geographic and Cleveland Zoo to protect wildlife. Avatars they cite as influence in their opening up of their projects to nature and allowing nature to flow in and out, and around their built projects include such western modern classics as Frank Lloyd Wright's *Falling Water*, and Mies van der Rohe's *Farnsworth House*.



Communal
Clubhouse
Windmills
of Your Mind
Bengaluru



Windmills
of Your Mind
Bengaluru

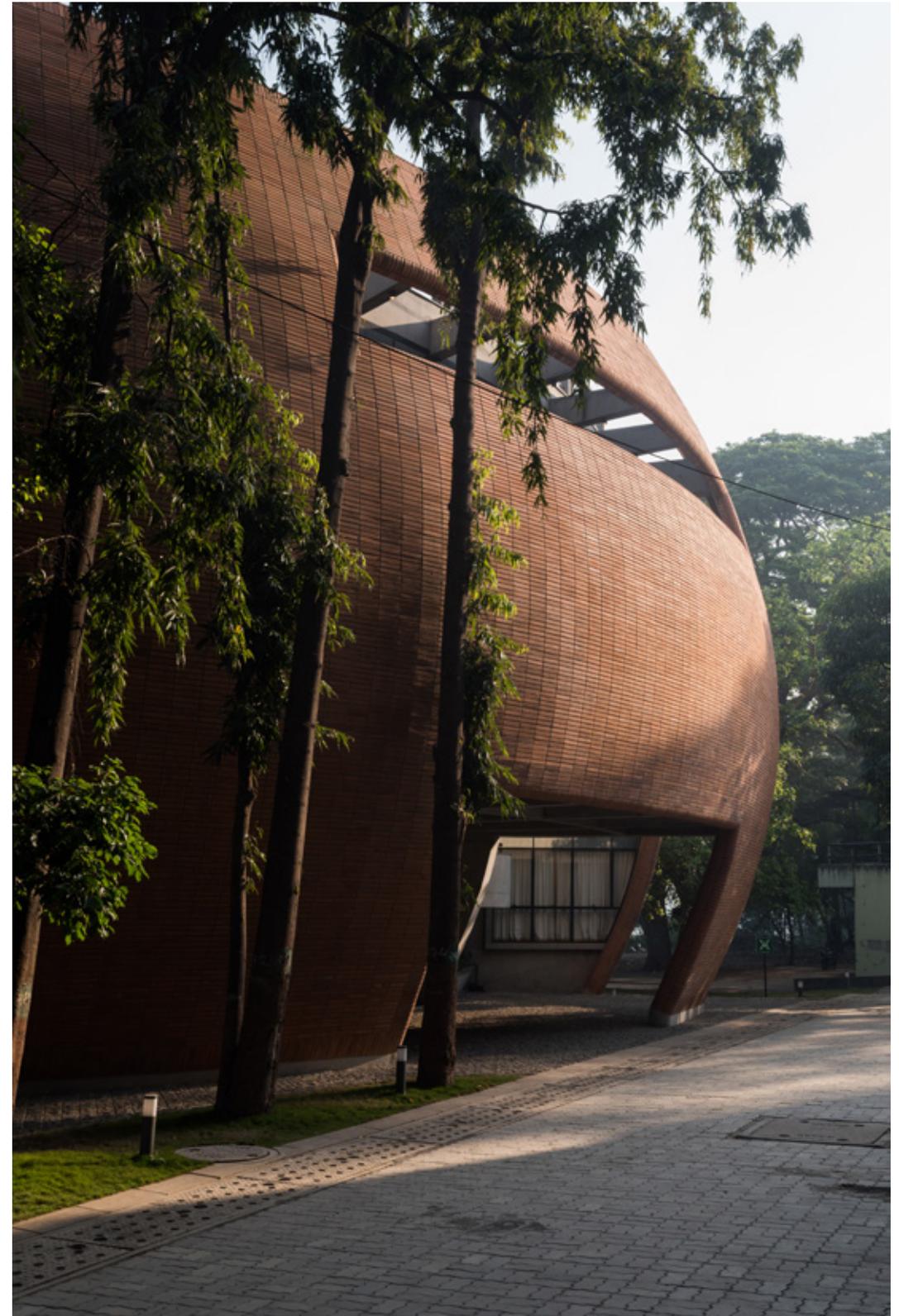
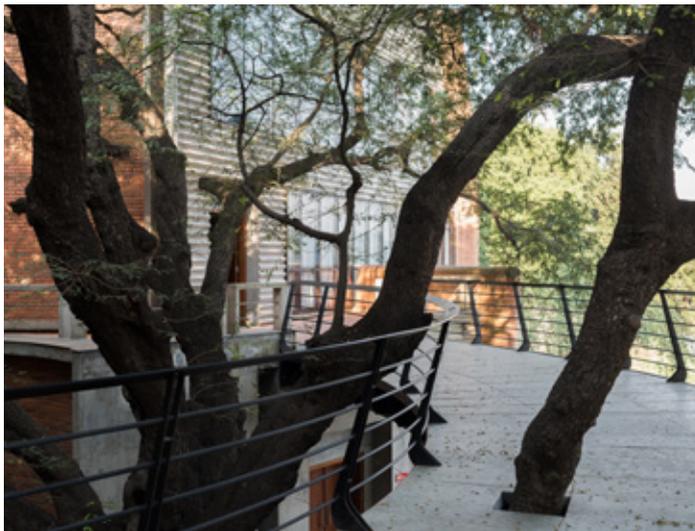


Total Environment stress their use of traditional craft material and of traditional craft skills in building these customised homes. They speak about creating the 'warmth of a home' and how that calls for simple natural materials like stone, brick and timber, and they attempt to avoid use of synthetic materials such as aluminium and plastic. Again there are echoes of another modernist master builder of beautiful houses here – the Finnish architect, Alvar Aalto, who famously said that 'steel and chromium surfaces are not satisfactory from the human point of view.'

Things are not quite so straightforwardly simple and natural as they might appear at first though, for *Total Environment's* cutting edge homes there is, despite all their crafted delight, an admitted 'powerful partnership of craftsmanship and technology.' While the curved timber ceilings, panelled walls and hand built furniture display a crafted virtuosity in these made-to-measure homes, it was only possible to source, cut and prepare these excellent timbers for use by the craftsmen by using the most up-to-date digitised computer technologies in special – and expensive – factories.

One of the most immediately striking aspects of the crafted characteristics of their buildings – which is visible from both from outside and in – is the use of brick. The most distinctive feature of this brick work is the emphasis put on the individual brick itself. While this brickwork is a highly crafted feature, it is a decidedly cutting edge one. Unlike the traditional British bond, or indeed the Indian one with its flush pointing, the bricks are stacked one above the other with steel space bars used to strengthen them, thus allowing for an emphasis of the form of each brick on its own. Instead of functioning in a tendency to combine as a mass surface – as Louis Kahn would claim for brickwork in its desire to be an arch, the single dimensions and materiality of each fired clay cuboid is stressed, giving the walls a textured and crafted particularity.

College of
Engineering
Pune



Total Environment in their generous and considered spatial planning and in their care for materials and sustainability have set themselves high standards which could be difficult to maintain. At a small scale of housebuilding these standards of craft and sustainability are perhaps easier to nurture and to manage. But as *Total Environment* has grown, and continues to grow to building projects of 4000 homes and towers of 38 stories, how does that pan out for the firm? Can they keep the standards up?

Sagar stresses that they have kept comparatively low the number of projects they have on the drawing board at any one time so that the level of attention to detail could be controlled and maintained. Besides, he sees their work evolving and developing with the advent of new technologies like 3D printing that will enable them to take even more care of those specialised and customised details for which they have become known.

