

Bringing Nature Home



Kamal Sagar, principal architect and chief executive of Total Environment Building Systems Pvt. Ltd., redefined apartment design with his emphasis on minimal walls, water bodies, lush landscaping, flowing spaces, intricate detailing, automation systems, natural materials and finishes, and eco-friendly technologies. His firm's ingenuity has altered the perception of real estate

The year 1996 was a landmark one in the life of Kamal Sagar, principal architect and chief executive of Bengaluru-based Total Environment Building Systems Pvt. Ltd., an award-winning architect-led real-estate design and development firm. The year gave birth to Total Environment and Kamal Sagar Associates, which subsequently changed to Shibanee & Kamal Architects (following his marriage to Shibanee Sagar, his partner, in 1996). Their first project - Cirrus Minor (12 flats spread out on 8,000 sq. ft.) also took off the same year.

Sagar, an enthusiastic learner who graduated from IIT Kharagpur in 1992, admits that the institute's 11-storey library (Asia's largest technical library)

has been his greatest source of learning on architecture. The works of renowned architects like Alvar Aalto, Malcom Gladwell, Mies van der Rohe, Walter Gropius and Frank Lloyd Wright inspired his approach to architecture. He also admires Charles Correa, Laurie Baker, B.V. Doshi and Nari Gandhi for a lot of their design aspects. "A large part of my inspiration has been FLW, with his buildings close to nature, hugging the ground and blending in with the background," he says. He recalls how he frantically searched the entire college library for three hours to find a 1908 journal containing a 65-page article on FLW.

It is precisely this inspiration that outlines Sagar's adept approach to design. He overcame the problem of absence of gardens in apartments (one of the major facets people associate with bungalows) through terrace gardens (with severe layers of waterproofing). By treating every apartment as a bungalow, Sagar redefined apartment design. Minimal walls, water bodies, lush landscaping, flowing spaces, intricate detailing and automation systems are the protagonists in the firm's designs. Exemplary of the same approach is the firm's most famous and ongoing apartment project Windmills of Your Minds (WOYM). This award-winning project is renowned for its slick design, level of detailing, use of smart technology and rich use of materials.

Sagar's passion to create "crazy buildings" in his college days with "trees growing all over" convinced his friends



from Kharagpur to coax him into building houses for them. Following that, Sagar, along with three of his friends, formed Kamal Sagar Associates in 1996. He has also had a work stint with Architects Renu and Sharukh Mistry.

Before 1996, Sagar worked on Poonawalla Stud Farms at Pune, during his career with Pune-based Poonawalla Group. Exposed to extensive international travel for this project, Sagar got it built by literally standing on the site. His venture into real estate evolved from a number of reasons — one of them being involvement with the nuances of construction of Poonawalla Stud Farms. Others included the overcoming of challenges of getting clients to pay architects their fees and the fact that since a project was a contractor's bid the quality of work would be compromised to gain a cheaper contractor. Sagar's search for a one-bedroom flat in 1996 led him to conducting a full sojourn of Bangalore, adding to his zest of venturing into real estate. The emphasis of the firm, however, has always been architecture; the rest being elements and aspects to implement it.

Exterior greenery is as much a part of interiors as is the client's need for detailing everything as per his wishes — the reason why the firm believes in customisation and has developed a software called ebuild. ebuild is an online tool that incorporates customisation of layouts, furniture, materials, textures, light points, automation systems etc; thus giving birth to completely furnished and customised "Dream Homes" that are ready to move in.

As opposed to what many feel, Sagar strongly detests the fact that he is associated occasionally with only "luxurious housing or high-end living". His aim is to create high-quality spaces; the focus is not the clientele, it is on creating a comfortable space. Though the firm dabbles in commercial and corporate projects, its affinity is with residences. Total Environment offers 15 years maintenance on each project. Sagar is quick to add that they "take care" of their projects throughout their lives.

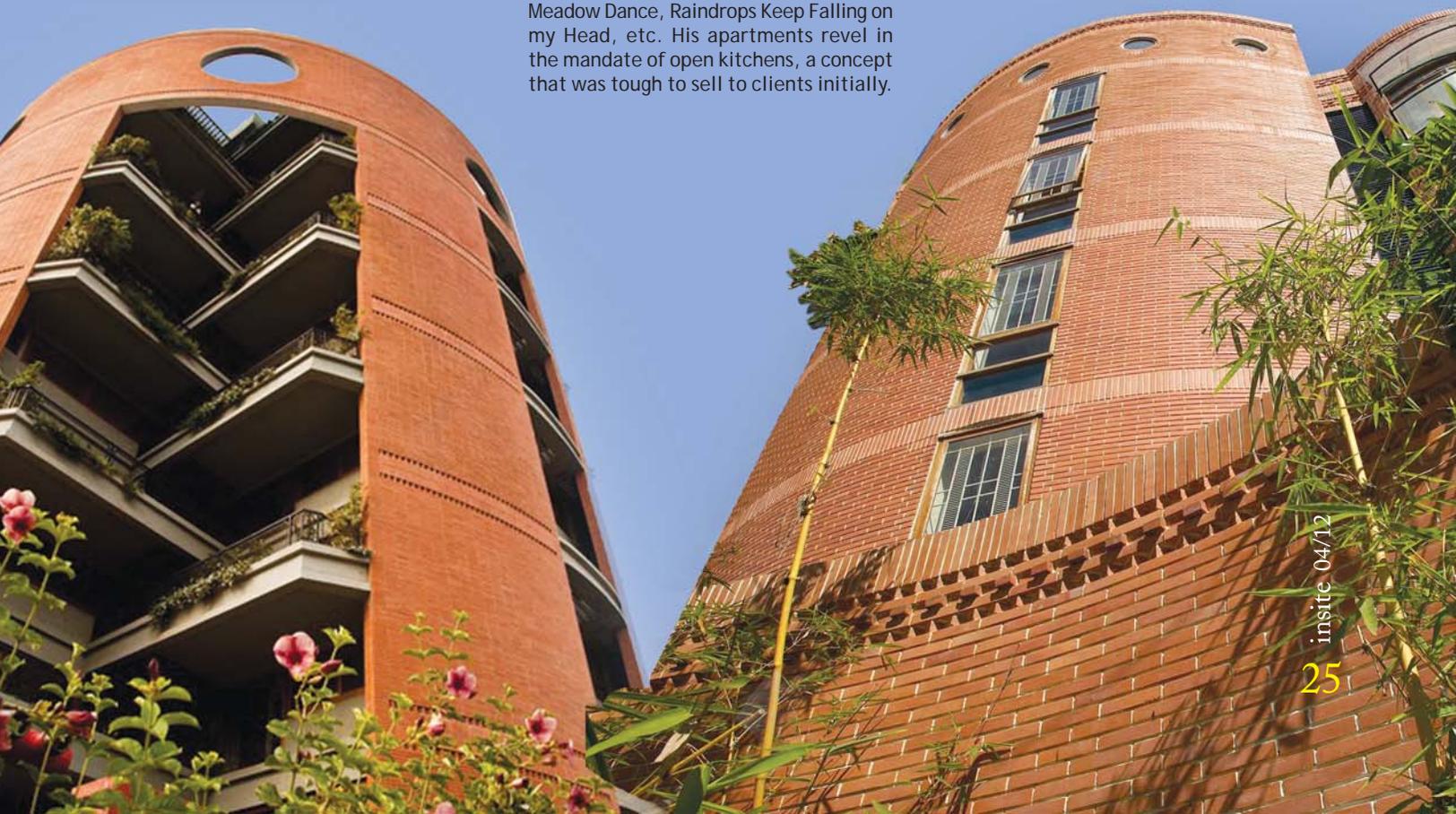
Sagar's designs today are recognisable everywhere, thanks to the elements he has patented and made famous — apart from his terrace gardens and water bodies, the "doka system" of shuttering (which leads to a form finish for RCC work), wire-cut bricks made in Calicut with their symbolic layout in a straight line (which require no plastering and painting, hence no maintenance), earth-covered villas, smart homes and use of natural materials. His office exemplifies the firm's philosophy of associating with green. In lush green surroundings with workspaces/cabins enjoying the visual greenery, the office is rejuvenating. Sustainability is fundamental to the firm's design process. Apart from focusing on attaining maximum natural light and ventilation, the firm replaces aluminium with wood for doors and windows. The affinity to natural materials (which absorb less heat) is devoted to the fact that "they age beautifully with time", the reason you won't find plaster and paint in the firm's projects. Elements like flush walls and occupancy sensors are also regular fixtures.

Sagar's passion for music is well reflected by the names of the apartments he designs — Windmills of Your Mind, The Meadow Dance, Raindrops Keep Falling on my Head, etc. His apartments revel in the mandate of open kitchens, a concept that was tough to sell to clients initially.

But he also managed to convince his clients about Kota stone, a soft and non-slippery stone that ages well with time. The only disadvantage of Kota, he says, is that being dark green in colour, it cannot be used in bathrooms where a lighter shade is required. He maintains that traditional Indian marble is relatively porous and harder than Italian marble for which he has visited specific hills in India to discover them.

Sagar has his own prolific team, which ensures the best of every aspect of building, thus ensuring the quality of workmanship. He joins hands with manufacturers for lighting, and has invested in Bengaluru-based Quetzal Designs for furniture. He works with a lot of craftspeople from Gujarat, Rajasthan, West Bengal and Maharashtra. His soft side is visible when he mentions that a school for children of these construction labourers has been made on the WOYM site (managed with support from the Azim Premji Foundation). The firm's upcoming projects include The Magic Faraway Tree and Van Gogh's Garden in Bengaluru; The Meadow Dance in Hyderabad; and the Orange Blossom Special and the BHAU Institute at College Of Engineering in Pune.

Sagar's modesty leaves an indelible impression. It stems from his belief in his work, even if it meant paying from his own pocket for patented concepts his clients didn't agree with initially. It also germinates from his clarity of intent and focus. He's candid enough to mention that "The customer is right even if he is wrong" and "It is ok to swallow your ego and ignore an incident to win over the customer".

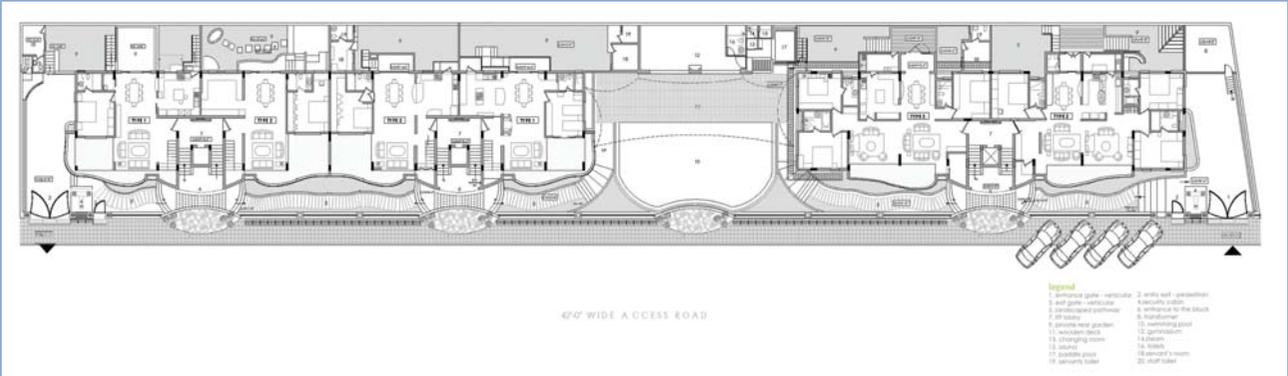


Orange Blossom Special, Pune (Ongoing)

The firm's first residential property in Pune has an interesting plan and accommodates 44 apartments (1,500 sq. ft. each) in a 11-storey tower. The massing of the blocks catches your attention at the first go. In the basic form of a circle, the central core is reserved for services while the four corner arches have been converted into cantilevered customised terrace gardens staggered at alternate levels and attached to built-up units that now assume a L shape. Car parking has been accommodated in the basement and stilt floor. Filtered light and airflow is ensured in apartments and the central service core by connecting pergolas between adjacent apartments at alternate levels on the North-South and East-West direction — this also offers an interesting play of light and shade. Eight circular openings at the top of the exterior facade punctuate the calmness of the verticality of the tower. The building pulls together a rich set of materials — composite brick wall comprising table-moulded bricks on the inside, exposed wire bricks on the outside, Kota stone and Jaisalmer stone, windows and French windows in polished wood.

The temperance with brick is of note in this project. While shear walls are clad with exposed bricks, bands (at the same level as the pergolas) have been designed with soldier bonds and vertical bonds with wire-cut bricks. Natural light and ventilation is at its maximum through large French doors and windows while terrace overhangs ward off direct glare.





Time, Bengaluru (2004)

Located in one of the most posh areas of Bengaluru, Time is hard to miss. Total Environment's first lifestyle project, it consists of 16 apartments, with the firm's trademark customisation and furnishing. The project covers a total area of 24,180 sq. ft. and comprises two blocks on four levels with amenities provided between them. The apartments range from single, duplex to triplex units covering diverse areas. The exterior curved facade with full-length windows and wooden louvers is hard to miss. An interesting chajja detail in the form of twin-walled polycarbonate sheets replaces the usual pergolas. The swathing vertical creeper panels in mild perforated sheets are also conspicuous.



A wooden deck between the pool and the gym has two layers with sections placed at different spacing to ensure that the water falling on the surface doesn't remain stagnant and is washed away. Continuing with design philosophy, all apartments have openings on three sides and are awash with natural light and greenery. Terrace gardens have literally been made a part of the living and dining spaces.



Webb India, Bengaluru (2001)

Built on a two-acre site elongated on the North-South axis, the corporate campus of Webb India Limited has a exterior facade in a combination of hand-dressed granite masonry and wire-cut brick masonry in soldier bond. Intermediate rows of glass bricks that have been incorporated using a steel frame and provide diffused light over the workspace. The slickness is furthered by wooden louvers in specially treated rubber wood, which provide ample light, concurrently keeping heat at bay.

An eye for detail has been the architect's forte and this project brings this to light. One such highlight is noticeable in the green courtyard, marked by a series of glass fins, each crafted with computerised numeric controlled mechanism.

Natural lighting and ventilation are ample in the form of skylights at regular intervals in each bay. A beautiful interplay of light and shade keeps the aesthetic quotient high. The visual verticality and the scale of the building have been controlled with the planting of large earth berms on the south of the office block and to the east of the workshop.

A complete manufacturing unit in the workshop for conveyor systems for automotive assembly lines has been planned in a layout that ensures an efficient workflow. The workshop columns, covered with ipomoea creepers, mark a soothing contrast to the green grass on the earth berm and the bold stone masonry in granite. 

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