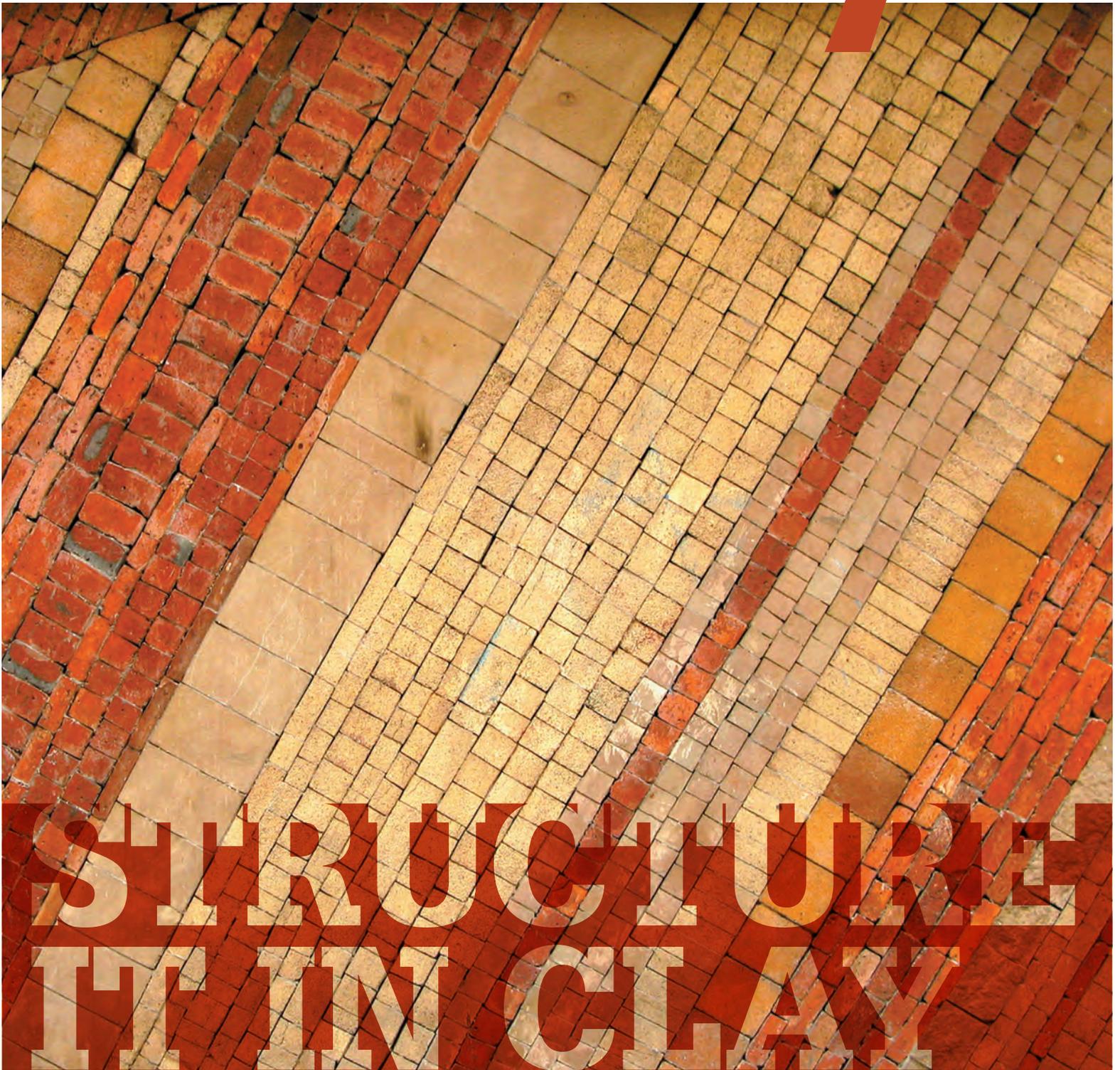


antarya



SPECIAL FEATURE
BRICK IT WITH
WIENERBERGER

MASTER STROKES
SHARAD KEMHAVI



IIID BANGALORE REGIONAL CHAPTER



INSTITUTE
OF INDIAN
INTERIOR
DESIGNERS
Bangalore Regional Chapter



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CHAIRPERSON'S FOREWORD

Dear IIID Bangalore Chapter members,

The last couple of months saw IIID Bangalore Chapter hosting some interesting events. Sponsors Veneta Cucine had a very interesting talk on Current International Colour Trends by Latika Khosla, Founder & Design Director, Colour Marketing Group, from Mumbai and Payal Karumbiah from Veneta Cucine, Bangalore. We hope we can have it as an Annual event to keep all of us abreast of Emerging Trends!

The highly acclaimed, winner of multiple national and international awards, Architect Sanjay Puri enthralled the audience with his extremely creative work which had the Windsor Manor Hall spilling out into the adjacent spaces! Zonasa being in BMS Bangalore, saw IIID BRC along with Asian Paints conducting a workshop for students which was well received.

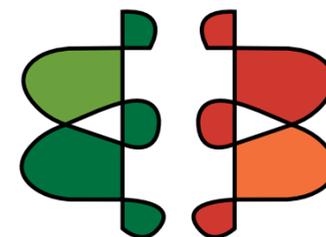
With the holiday and Festive Season in the year end, we took a break in December but are back with a bang in January! An exhibition of Pichwai Paintings and a presentation by Canna Patel is in store for January.

Looking forward to an eventful year! Wishing All you members 'A Happy New Year!'

Gayathri Shetty

Chairperson IIID BRC, 2014 – 16

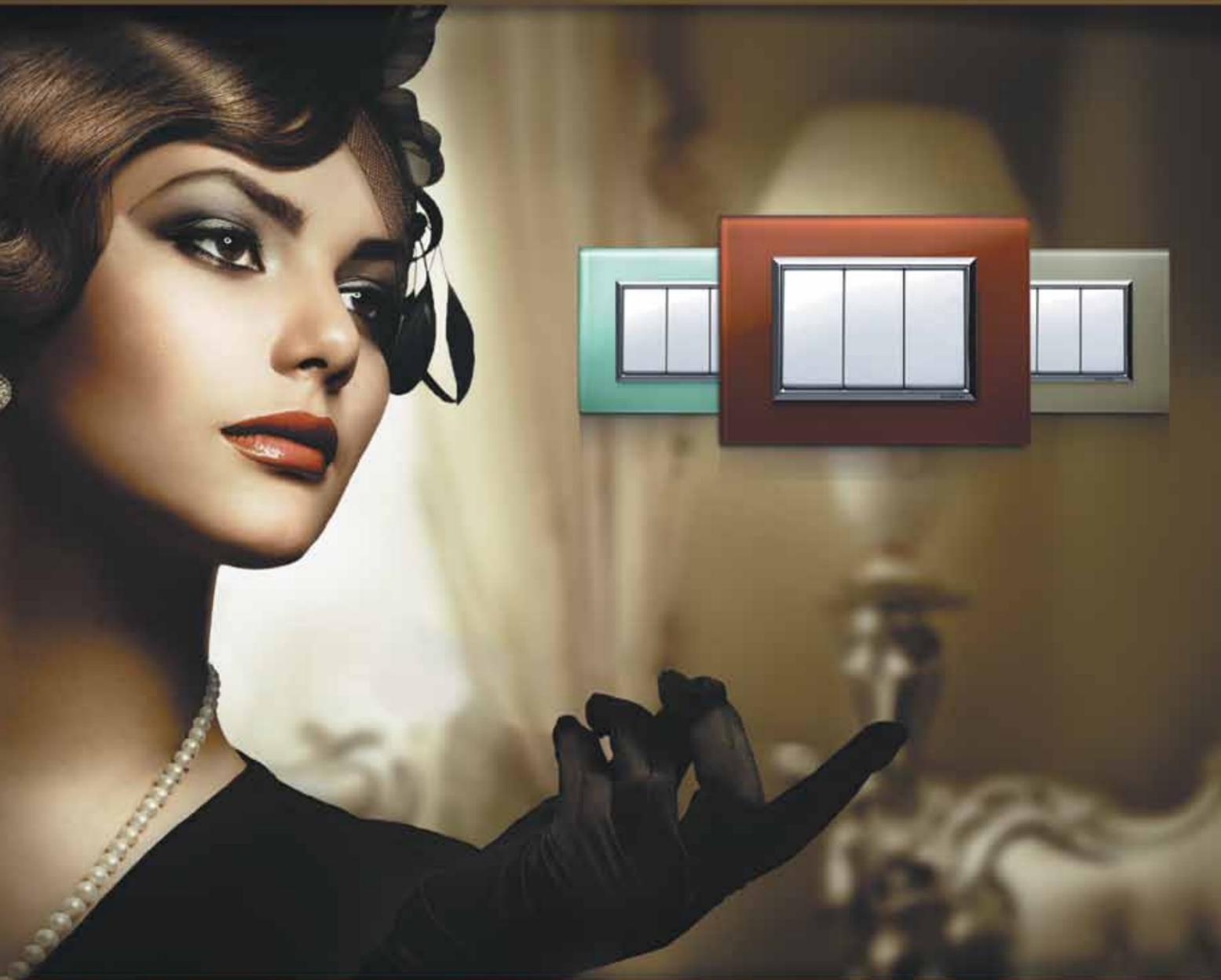
gayathri@gnarchitects.com



IIID Bangalore Regional Chapter Emblem

The letter form B and its mirrored version together form this symbol. The idea is inspired by the forms of Rangoli. Bangalore as a city is a unique combination of the traditional and the contemporary. This coexistence of dual cultures is iconic of Bangalore as it is present in arts/architecture and the general landscape of the city and its culture. Using Rangoli (Traditional) as the basis, we have created letter form B (Modern) and reflected this form to enclose the space in between (Interiors). The colour palette is also representative of the traditional and modern.

Loving beauty is taste. Creating it is art.



Presenting, a collection of awe-inspiring beauties in a range called **Myrah** by GreatWhite.

Now it's easy to get that steely look with **Edge Metal plates** made from real metal.

Or that sheen of real glass with the **Edge Liquid Glass plates**. Or just get the world to appreciate your class with the **Edge Stripes plates**. What's more, every **Myrah** switch comes with a lifetime replacement guarantee, which only makes its beauty eternal.

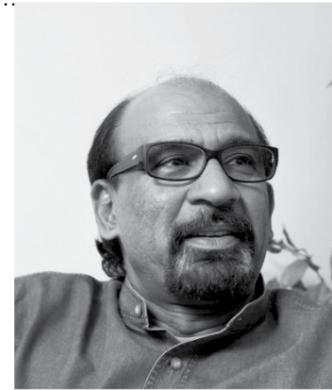
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EDITOR'S NOTE

Right from inception, mother earth has served as the learning bed for humanity. Looking back in time, the evolution of shelters indicates the strong inclination to move towards greater and greater comfort. A material that has sustained and been abundant from the very beginning is earth, whether used as clay, mud blocks, bricks or terracotta. It continues to breathe comfort and spell green in an increasingly eco aware world.

The current issue of Antarya tries to capture this journey of humans and their association with this wonderful material, earth.

Over the last two years, Antarya has served as an active platform for architects and interior designers to showcase their work and also view others, paying accolades to masters and emerging designers alike.

We look forward to continued involvement and interaction from the designer fraternity to help us take Antarya to greater heights in the coming year. I take this opportunity to thank the industry for their continued support in our endeavour, aiding us in this journey.

Wish you all a Happy New Year!

Dinesh Verma
Managing Editor
verma@acegrouparchitects.com

Reviews: Issue 07 Sep – Oct 2014

It is a very impressive magazine by IIID Bangalore Regional Chapter & very good initiative to upgrade all members & Chairpersons of all 26 Chapters about the interior design practicing scenario in Bangalore with wonderful projects published, along with activities by the Chapter. I recommend Bindiji to take this initiative nationally & help all Chapters to formulate such a magazine. Congratulations for the wonderful initiative, I have stored all the magazines in my library, received from Bangalore Chapter.

Hitesh, IIID Baroda Regional Chapter

It was a perfect interior magazine right from the heart of Bangalore started by IIID-Bangalore Chapter under your leadership. Actually very fresh and refreshing and believe me, I honestly used to wait for the next issue as the printing quality too was adorable. Hats off for the nice benchmark put up by your Chapter and very encouraging for all the other Chapters to initiate, "kuch to karo apne centers ke liye".

Arjun Hablani, IIID Indore Regional Chapter



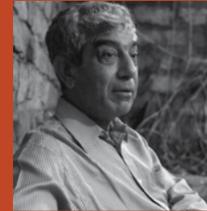


★ 06

COVER STORY
STRUCTURE IT IN CLAY

Nandhini Sundar

Featuring: K Jaisim , Bijoy Ramachandran & Ravindra Kumar



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HAPPENINGS



COMPOSING IT RIGHT

The composition of a brick can range over a variety of materials though the most common ingredient is clay. Clay bricks are normally manufactured using three processes of soft mud, dry press and extruded. Clay bricks have the advantage over stone for being weather resistant, better acid tolerance, pollution and fire. The popularity is also higher with the flexibility of offering in different sizes, shapes, colour as compared to stone. However, a more porous brick is more susceptible to dampness when exposed to water.

Being a mixture of clay, sand and water to create the correct consistency, clay bricks have also included in their composition, lime, ash, organic matter to speed up burning in the kiln. Handmade bricks featured commonly across the UK where the process required leaving the clay, water and additives in a pit for mixing by a wheel, powered by horse power. This clay is coated with sand or water and pressed into moulds by hand. A brick coated with sand, interestingly gives a better texture. These sun dried bricks are then fired in a kiln.

INSULATED INTERIORS

Clay bricks, with their perforations, absorb moisture and heat and release the heat slowly, retaining the ambient temperature within the structure relatively constant. Nights are thus relatively warm and day relatively cool. Its dense structure also provides good sound insulation. The level of sound insulation is dependent on the thickness and density of the brick.



Top Image: **Pattern**, Remy Becher, <https://www.flickr.com/photos/rbecher/2728189019/> ; Bottom Image: **Architect Ravindra Kumar**



AESTHETICALLY PLEASING

The natural and varied grains of colour evident in the burnt clay give a beauty that is lasting, untouched by weathering. Dependent on the clay compositions, firing temperatures and kiln ambience, the colouring of the bricks alters. This indicates a large scope for playing with these natural colour formations which can be customised to cater to individual aesthetic appeal. Instead of focusing merely on load-bearing structure, clay bricks today are also used to enhance aesthetics, featuring as a veneer, where the individual bricks are differently shaped.



RESISTANT TO FIRE

Clay brick walls score the maximum ratings when it comes to duration of the building material resisting fire. Interestingly, the Great Fire of London in 1666 prompted the shift of building material from wood to bricks and stone because of this significant fire resistance property of bricks.



LOW MAINTENANCE

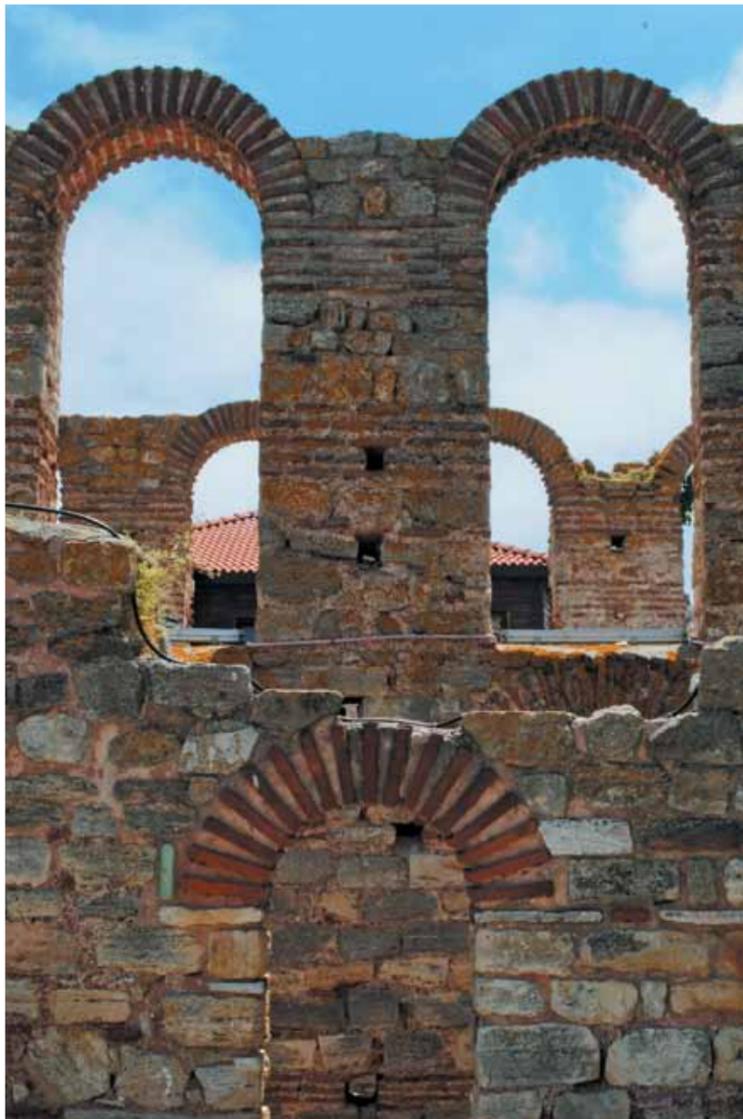
Clay bricks require no painting, the charm evident in the raw exposed state. Besides, bricks raise no concern of rotting, denting, warping, splitting, fading, peeling, rusting or for that matter, termite attack and have an exceptionally long life cycle. They last in the same pristine state as they were built, getting more beautiful naturally as they age. They can also be reused in case of renovation.

Top Image: **Sediment fantasy**, Solveig Osk, <https://www.flickr.com/photos/elements/8016236646> ; Middle Image: **Fireplace in Ruka**, Timo Newton-Syms
Bottom Image: **Nessebar Old Town, Bulgaria**, Vicki Burton, https://www.flickr.com/photos/vicki_burton/9395901198



DESIGN FLEXIBILITY

The modular size and high compressive strength permits the fired clay bricks to be used in a range of structures starting from single storeys to multi-storeys, bridges, historical monuments. The Monadnock Building completed in 1893, the tallest all-brick skyscraper in the world is a classic example of its versatile application. Architect Frank Lloyd used bricks in many of his Prairie style residences. Clay bricks were likewise used for the Empire State Building, the Chrysler Building, popular landmarks in the United States. As for Laurie Baker's brick structures, they are literally a piece of art, each spectacular in design and representation.

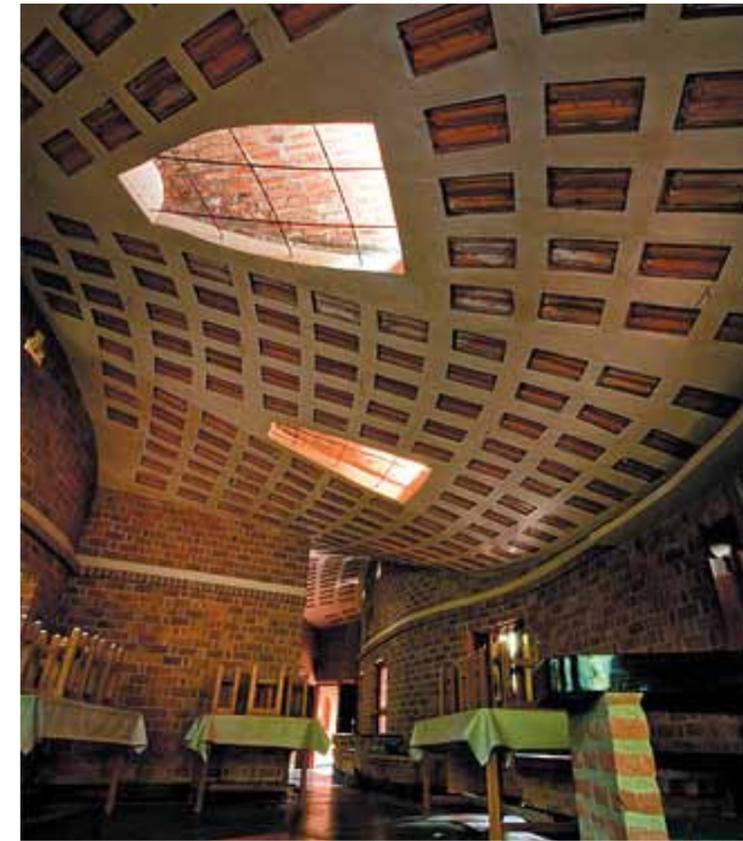


TERRACOTTA IN ARCHITECTURE

The use of terracotta as a structural element, in its unglazed form, became popular in the 1860s in England and in the 1870's in the United States where it was used to supplement clay bricks of similar colour in late Victorian buildings, manifesting more as a piece of art in the designs implemented. Germany saw its use from 1824 with the construction of the St Stephen and All Martyrs' Church almost exclusively in terracotta. The Natural History Museum London saw extensive use of terracotta by Architect Alfred Waterhouse, the final evolution a spectacular piece of art and architecture.

Terracotta in its unglazed form however packed some disadvantages such as high maintenance where they blackened with smoke, permitted the growth of naturally seeded plants and small trees in their nooks, prompting them to go out of fashion after the 1890's. They were then replaced by glazed terracotta which does not attract grime and is easier to clean, opening the way for a more colourful architecture.

Top Image: **Earthly and Airy**, Seema Krishnakumar, <https://www.flickr.com/photos/seemakk/303562597>;
Bottom Image: **Nessebar Old Town, Bulgaria**, Vicki Burton, https://www.flickr.com/photos/vicki_burton/9393150247



FLOORED IN CLAY

Ceramic clay tiles date back to 4000 BC, their presence first being in Egypt where they were used as decorative elements. Ceramic clay tiles, popular in the tile mosaics of Spain, Portugal, the floor tiles of Renaissance Italy, were used everywhere, on floors, walls, ceilings, fireplaces, murals, exterior cladding. They were hand-made and hand painted, with each tile thus becoming a work of art.



Top Image: **Laurie Baker Centre for Habitat Studies**, Seema Krishnakumar, <https://www.flickr.com/photos/kkseema/4714733301>; Middle Image: **France-Centre Aisle of Sainte-Eugénie Church**, Dennis Jarvis, <https://www.flickr.com/photos/archer10/15119830544>; Bottom Image: **Dustudio, Auroville**, Dharmesh V Jadeja;

ROOFING IT IN CLAY

Clay roof tiles can be traced back to China to around 10,000 BC and the Middle East a short while later, spreading thence to Europe and Asia. Be it Egyptians, Babylonians, Greeks, Romans, the roofs saw the use of clay tiles, the practice still in place in Europe in an evolved form. This roofing tradition soon found its way to America through the European settlers, with buildings as early as the 17th Century displaying them. The Colonial period in America saw the popularity of clay roofing tiles spiralling, especially after the Great Fire of London, the clay tiles preferred for their durability, easy maintenance and lack of thermal conductivity. By the 1830s this popularity however waned only to be revived again after the Mid-19th Century with the Romanesque Revival style of architecture.



MODERN AVATAR

Terracotta continues to find its place in modern architecture, both in the Victorian Gothic revival as well as in other styles, finding widespread application as exterior cladding as well as in interior spaces, the warm colours and textures of clay bringing in an earthy charm to the spaces. Terracotta is used in the form of roofing tiles, in flooring, wall décor, finding its space along with stone, exposed concrete, wood, to offer a contrast and artistic feel to the design elements.

The language of bricks



Top: The interiors reflect an intense play of bricks, displaying sensitivity to all the shastras of Indian architecture, addressing all the five elements as well as the five senses in the process. The vertically laid bricks usher in the aesthetics, creating a cosmic space that illuminates the seasons, the climatology expressed in the expansive brick work.

Right: The brick covered pergolas offer a roofless living space, opening to the sky, as a charming extension of the covered living area. They bring in a welcome bouquet of shades and shadows complementing a professional space.



Architect **Prof. K Jaisim** of Jaisim Fountainhead shows how the language of a space can be altered through the manner of use of bricks in the design. His intensive use of bricks in the structure brings in the sensitivity to senses, the shastras, the climate, tuning the communication of the space to nature.

Below: The sun dried bricks, placed in an enchanting varying pattern on a circular space, connect fluidly with the dripping green to create a language of green integration with frozen movement.

Bottom: The stone pillars appear as timeless sentinels to an exquisite brick laid dome that serves as an abode of discovery.





Setting the tone with bricks



Top & Top Right: The exposed bricks teamed with concrete, distressed timber and railway sleepers, gives the bar a ramshackle industrial ambience, reminiscent of downtown Manhattan pubs. It replicates the pubs that were fashioned by converting large unused warehouses and lofts where the plaster is normally stripped off the walls and a rustic décor brought in place.

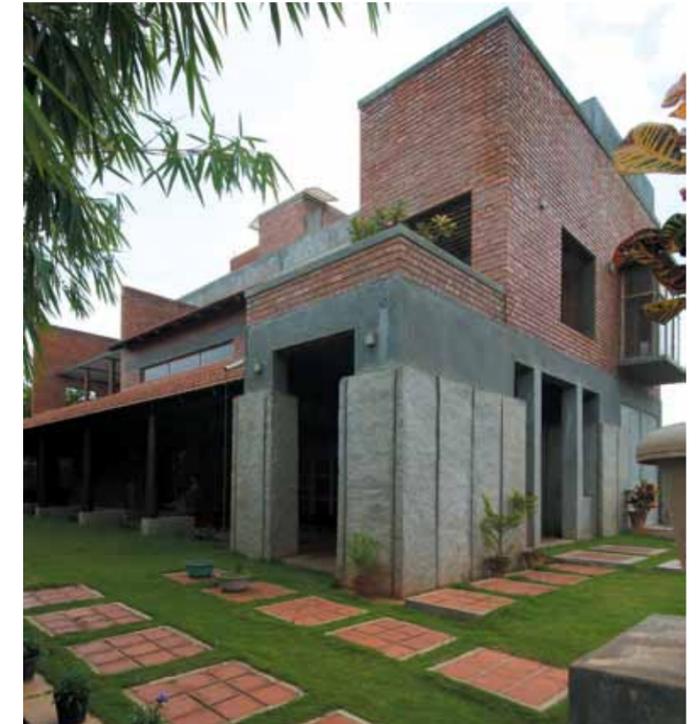
Right: The hollow bricks used here insulate the interiors from external sounds while preventing the internal sound in the studio permeating outside. The shape of the studio, besides offering a musical note, also has a functional side. The absence of parallel walls and corners eliminates echo thus improving the sound quality in the interiors. The presence of glass contrasts with the curved wall, the shadow of the guitar evident on the floor through the light filtering in.



Architect **Bijoy Ramachandran** of Hundredhands shows how bricks can be used to set the tone of a space, be it in the functional form or in the language the space purports to convey. He effectively uses bricks to address a specific functionality as well as bring forth a theme while keeping aesthetics firmly in place.



Conforming to nature



Top Left: Three kinds of clay blocks were used in this residence that was primarily designed to address vernacular sentiments in a modern framework. The semi-covered space reveals clay tiled arched roof where the vaulted roof received no support during construction. The arresting vaulted terracotta roof contrasts with the flat terracotta ceiling prevailing in the interiors.

Top & Left: It is a décor revealing brutal sensibilities, the totally natural materials prevailing in their raw textures. The rough stone floors contrast with the extensive use of bricks in exposed form while the staircase with the natural stone steps and minimal steel inserts along with the exposed concrete complement the décor. The play of geometry in the space further accentuates this raw beauty.



Architect **Ravindra Kumar** of Pragrup uses terracotta in tune with other natural materials like stone to offer a structure that is in conformance with nature. He displays how a structure can be effectively designed with natural materials to address aesthetics while leaving the least footprint on the ecosystem.

BRICK IT WITH WIENERBERGER

Stepping into this arena and offering a material that has been resorted to for millennia in construction, is **Wienerberger**. Its range of clay bricks and tiles starting from extraction of raw material, production to the finished product, place immense value on the conservation of resources with high emphasis on environmental tolerance in the entire production process.



NR Greenwood

The charming sight of brick clad walls dotting a lush green landscape can be a virtual treat to the eyes, the earthy colours and textures serving to be both soothing and rejuvenating. The earliest use of bricks as building material goes back to over 6000 years with the first usage having been traced to Mesopotamia. Looking back in time, these bricks have not only lent character to the locations they featured in, the pride of an entire civilization has been expressed through these brick clad walls, to be recalled in posterity.

While construction materials and methodologies have varied over the ages and have transformed to their current state, bricks continue to retain their unique space in aesthetic display, lending an earthy character that is hard to surpass. From the environment and as well as economic perspectives, clay bricks and roof tiles serve to be an efficient construction material.

The blocks for building constructions produced today cannot be compared with bricks in past, although the main basic natural component, namely clay, remains unchanged. Fired clay blocks can be considered as high end masonry units, which are optimized according to the technical and economical requirements. It is necessary to meet requirements of mechanical stability, thermal and sound insulation and furthermore fire resistance. Modern standards and codes are becoming more and more challenging.

NATURE'S MATERIAL

Bricks and clay tiles are traditionally made from the elements of earth, fire and air and the excavated sites can easily be restored through a process of re-cultivation. Interestingly, the raw material earth can also be sourced from the immediate vicinity of the site, keeping the transport cost minimal. The material sourced from clay breathes naturally, offering healthy living conditions.

WHY WIENERBERGER

Being the world's largest producer of terracotta building bricks and leading in the clay roof market of Europe, Wienerberger, with its two century heritage, state of the art manufacturing, processing and quality testing facilities, has carved a niche for itself as the final destination for building solutions in clay. Its footprint spanning over 221 plants in 30 countries, Wienerberger offers varied clay solutions in bricks, roof tiles, cladding and pavers to discerning customers across the globe.

The high degree of environment address in the production process as well as the environment tolerance displayed by the finished products, not surprisingly make it a sought after clay solution. The quality of the raw material used is ensured through stringent methodologies such as initial assessment by experienced geologists, leaving the layers of stockpiles of excavated clay exposed for about a year to guarantee consistency. Making its presence through Wienerberger India, the Vienna based company has opened offices in the entire region of South India.



Doddabalapur (Independent House)



Doddabalapur (Independent House)



India School of Business, Hyderabad

NOT JUST ANOTHER BRICK: POROTHERM

The walling solutions offered through Porotherm Smart Bricks are environment friendly, cost effective, easy to use, to address non-load bearing new age construction methodologies. Under Smart Bricks, Wienerberger offers a range of products including Porotherm HP (Horizontally Perforated Clay Bricks), Porotherm VP (Vertically Perforated) Load Bearing, Porotherm VP Tongue & groove and Porotherm Thermobrick. Porotherm HP, is lauded for being 60 per cent lighter than conventional walling materials, resulting in lower structural cost due to the reduction in the dead load. Given its perforation, the thermal insulation properties are almost 100 per cent more than conventional walling materials. Fired at 1000 degrees in the kilns, the bricks also enjoy a fire rating of F240 for 240 minutes.

BREATHING COMFORT

The strategically placed pores is an integral design component of the bricks, either placed horizontally or vertically depending upon the product, permitting exchange of humidity between indoor and outdoor environments while buffering heat gain through the built in holes. Porotherm Clay walls absorb solar energy, storing the heat and releasing it at a later point such that the temperature fluctuations remain balanced, enabling the interiors to remain comfortably warm in winter and pleasantly cool in summer. The thermal insulation properties also ensure the room side surface temperatures remain higher, offering superior thermal comfort.

EARTHQUAKE RESISTANT

Wienerberger has developed the Porotherm VP Load Bearing which are,

among other aspects, also earthquake resistant clay bricks especially for those regions where earthquake-proof constructions are a central theme, like Kerala. Walls made from these clay bricks have shown themselves to be substantially stronger than regular clay bricks. This allows the safe, economic and durable construction of buildings even in regions prone to earthquakes. Porotherm VP Load Bearing Bricks can be used for construction of buildings permitting up to G+3 without RCC frames, with savings ensured in the structural cost too as the concept eliminates columns. Not surprisingly, it also results in faster construction, potentially doubling the output at site, besides offering excellent thermal and sound insulation.

ECONOMIC SENSE

The construction time required for the Porotherm block system is much shorter with lower mortar use besides others. The solid masonry of the clay blocks also entails lower maintenance costs while the higher thermal protection and wind-tightness saves on energy.

GREEN SENSE

The production process involved in manufacturing the clay bricks is acutely environment sensitive, with efforts taken to ensure the product delivered is green in production methodologies as well as its ensuing functional qualities. Wienerberger views sustainability as an integral part of its business and an important factor for success. For these reasons, we have firmly anchored sustainability in our corporate strategy. A house made of Wienerberger building materials is an investment for coming generations. The core of our sustainability strategy is the long service life of our products. At the same time,

Wienerberger implements measures to reduce the environmental impact of our production processes. Our activities are focused not only on reducing energy consumption, but also on improving our ecological footprint by using fewer raw materials and increasing the use of recycled products.

Right from procuring raw materials, to the production methodology and the products offered, they are bound by principles of sustainability. Some of the initiatives in this respect include:

- Distilling of Clay Tanks
- Use of locally available products
- Use of waste products from other industries
- Efficient use of Biomass & other environmentally friendly fuels in manufacturing

Apart from these, we continuously recycle heat & energy in the production process

and systematically adopt various conservation projects in our plant on a regular basis.

The focus being on reducing carbon footprint, the clay here is sourced from de-silting of dead water tanks with only natural additives like coal ash, rice husk and saw dust used.

Wienerberger's commitment to sustainability is reflected in the continuous improvement of its production processes. A central engineering department for bricks is working, above all, on projects to reduce energy consumption. Drying and firing comprise a significant amount of the Energy requirements for our production and many assignments therefore concentrate on optimization in this area. Other focal points of our research include resource conservation in production and the responsible processing of raw materials.

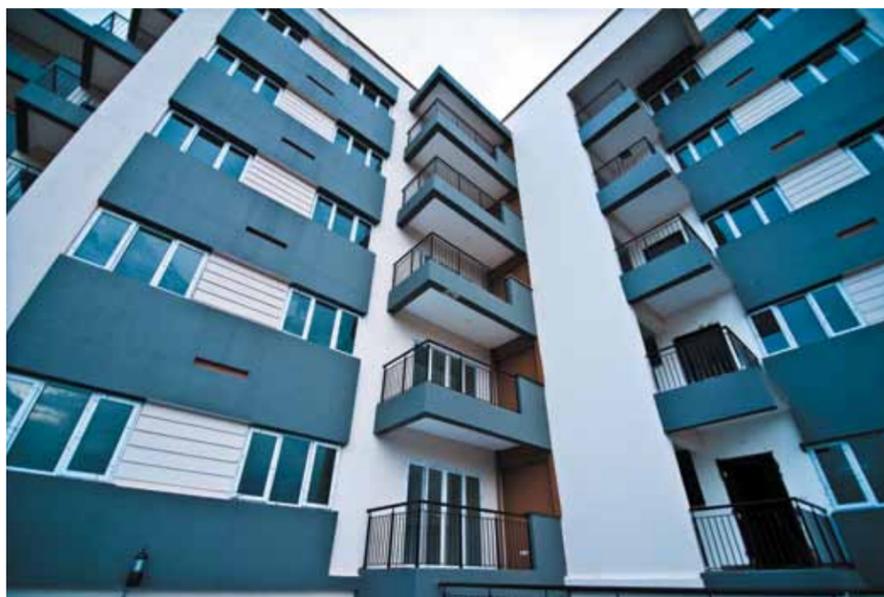
THE LATEST ADDITION

Taking masonry construction to a new level is the Porotherm Vertically Perforated Tongue and Groove (VPT&G), the smart brick proving to be the strongest brick in the market that is 100 per cent natural. While the high compressive strength of the bricks is greater than 10N/mm², the interlocking design brings in stronger bond between the bricks lending greater strength to the wall. According to Mr. Monnanda Appaiah, MD, Wienerberger India, "The VP T&G bricks are not only the strongest in-fill masonry products available on the market. They provide also thermal insulation, are 100 per cent natural and light weight. The Dryfix.System - to be specifically used with VP T&G bricks - is a quick-fix adhesive system that clears up with conventional construction practices, enabling faster construction and significant cost savings. This is an ideal solution to achieve optimal labor utilization and promote less dependence on dwindling natural resources like sand and water. In addition this solution ensures a clean and dry construction site".

FIXING IT QUICK

A quick fix system that does away with conventional mortar, enabling faster construction and savings in cost, Wienerberger's latest introduction - Porotherm Dryfix.System is a specially formulated adhesive available in combination with Porotherm VP Tongue & Groove Clay Bricks. It resolves all masonry issues like unavailability of sand, fluctuating cement prices while keeping the construction site spotlessly clean. It is ready to use and easy to transport, speeding the construction process where conduiting, chasing and plastering can begin the very next day. Besides reducing the use of sand and water, requiring no curing, it also enhances thermal protection.

Wienerberger is the market leader in clay building products globally, offering a range of walling products, roof solutions and clay facades for the Indian market, thus becoming a more holistic building material solution provider for the market. The Koramic Range of Clay Roof Tiles and Argeton Clay Façade Tiles are both manufactured in Wienerberger's European factories and are imported for the Indian market.



NR Greenwood



Legacy Dimora



Kodaikanal: ACTUA 10 Nobel Graphite

ROOFING IT RIGHT: KORAMIC

The sustainable clay roof tiles under the Koramic brand comes in a wide range of shapes, colours and surface structures with each roof tile coming with its own identity and rich tradition. Putting in more than a century of experience of know-how into the manufacturing of its clay tiles, the Koramic brand uses carefully selected raw materials, optimised mixtures and compositions with a 30-year guarantee on frost resistance as standard offer for all its roofing tiles.

GOING MODERN: ACTUA10

A feast for modern architecture, Actua10 comes in crisp clean lines with simple division by a large sliding roof area. It offers a modern colour spectrum along with variable batten spacing.

A CONTEMPORARY WAVE: MADURA

With its large format contemporary wave profile, Madura packs in an aesthetic curve that fulfils the functionality of a complete roof. The pan, which gives the roof a wavy appearance, comes with double roof and variable batten spacing.

COMBINING AESTHETICS WITH ECONOMICS: ALEGRA10

Aesthetically designed while keeping economy firmly in focus, Alegra10 comes with a top edge of large displacement range from 330 to 375mm. Providing a simple division in the case of

roof renovation as well as new construction, Alegra10 comes with variable batten spacing.

STUNNINGLY MEDITERRANEAN: ROMANE

A combination of a strong curve with technical performance, Romane brings in a stunning Mediterranean touch. Coming with double groove and head interlocking joints, it permits optimum water flow through the longitudinal design. Romane is offered in special finishes of antique and ochre.

A HARMONIC WAVE: VHV

A Flemish tile that comes with a curved chute and merges into a harmonic wave, the VHV is offered in variable finishes such as natural, weathered, glazed and engobed. With its ideal size to fit into various parts of the roof, VHV has variable spacing and interlock for water tightness.

AESTHETICALLY MODULAR: MODULA

A specialised large format modular ceramic tile that combines aesthetics with functionality, Modula is offered in an innovative design with double Romane. Modula is a new generation 30 cm working width clay tile with a design philosophy built upon the desire to combine high performance with ease and speed of tile laying.

FOR A GRAND FAÇADE: ARGETON



Holiday accommodation, Lozenec/Bulgaria

A back ventilated façade cladding from clay way back in the 1980's, ArGeTon has metamorphosed into a timeless modern façade with the unmistakable character of clay. Marked for its quality, aesthetics and creativity, ArGeTon reflects a systematic future oriented product development and quality assurance, teamed with service oriented sales. Combined with steel, glass and wood, the elegant, natural and timelessly perfect character ensures the ArGeTon facades retain their looks for decades.

Features such as a clever water runoff system avoid accumulation of dirt while the ceramic colours remain constant and strong even when exposed to tough weather conditions. The fire resistant tiles have a joint profile that protects against their lateral shift, thus preventing the penetration of rain as well as rattling in case of strong winds. This precise joint grid is achieved by ensuring exact dimensioning of the tiles through a special calibrating facility. ArGeTon was the first ceramic tiles to pass the test for ball-throwing safety compliance with DIN 18032-3. Besides their high strength, the ArGeTon tiles have the new B/85 fixing clips which can be attached to the carrier rails without

additional tools. Their easy maintenance feature also makes them highly suitable for public spaces such as schools. The ArGeTon ceramic tiles come in a wide range to suit varied tastes and requirements.

THE CLASSIC TAMPA

With its clear and simple form, sans grooves, Tampa range offers a classic façade that gives a clean cut appearance to the façade of the building.

PATTERNING DIFFERENTLY WITH TERZO

Available in three different features, Terzo creates a varied look on the façade. While Terzo comes in strips or small straps, where a special impression is created by two false joints, Terzo 2 has two false joints of different width in the surface to create an interesting façade. Terzo 3, as the name indicates, comes with a unique joint pattern created by three false joints in the surface.

THE LINEAR LINEO

The Lineo 4 range creates a stylish horizontal linear structure with its four 3mm deep grooves while Lineo 9 comes with nine grooves in the surface to bring about an accentuated and unusual façade.

SHADOW PLAY WITH DANZA

The overlapping of the individual panels in the Danza range creates a spectacular play of shadow depending on the angle in which light falls on the building façade.

PERFECTING WITH ARGELITE

With its simple and secure assembly, ArGeLite creates a perfect look and is well suited for building refurbishments given its optimised weight.

SHADING WITH SUN SCREEN BARRO

Besides functioning as an architectural design element, the brick bar effectively functions as a sun shade and screen.

OPENING UP WITH ELLIPTIC BARRO

While proving to be effective as sun shade and screen, the Elliptic Barro opens up the façade to lend a unique design feature.

CURVING TO PERFECTION WITH CURVED BARRO

Stunning in visual appeal by incorporating varied design ideas, the Curved Barro comes rounded in inner and outer corners to address concave and convex façade areas, offering the round cladding of a bay.

DETAILING WITH FULL CERAMIC CORNER

It is a case of perfect detailing, addressing every corner to offer a straight line, clean cornered, perfect terracotta façade that is stunning in aesthetic appeal.



Prestige Delta, Bangalore



Office building and hotel, Klaipeda/Lithuania

SPEAKING THE LANGUAGE OF VERSATILITY

BY NANDHINI SUNDAR



IGP Office Gulbarga



Institute Of Naturopathy at Gadag



Graduating from the prestigious JJ College of Architecture way back in 1966, **Kembhavi** worked in Hubli, North Karnataka, before taking up a job in the UK with the architecture firm H G Clinch Associates. Two years down, the urge to come back to his hometown was strong and thus began his architectural journey in the country with his practice set up in Hubli in 1972.

Quiet, introverted, soft spoken; that is Architect Sharad Kembhavi of Kembhavi Architecture Foundation, a master designer, his master strokes spanning over four decades. He prefers to let his designs speak rather than himself. As for his designs, extensive as they are, spanning a diverse range, their versatility is arresting, ranging from a totally contemporary set of strokes to those that are stunningly earthy and vernacular.

Graduating from the prestigious JJ College of Architecture way back in 1966, Kembhavi worked in Hubli, North Karnataka, before taking up a job in the UK with the architecture firm H G Clinch Associates. Two years down, the urge to come back to his hometown was strong and thus began his architectural journey in the country with his practice set up in Hubli in 1972.

Given that Hubli was a small town and the awareness of design was not significant, Kembhavi had to content with his firm working for the first 7 years as an NGO educating people on architecture along with its design functions. "It was a case of breaking the mind-set of people during that period in relation to architecture", he says. The first public recognition of his work was when he won the competition for the ITDC building in 1978 though the project did not see the light of day.

With the opening of the School of Architecture in Hubli in 1983, the third college in entire Karnataka, the scale towards architecture tilted favourably. Kembhavi soon participated in the competition for the Indira Gandhi National Centre for Arts, offering a thematic design, Samutra Mantan, which represents the churning of the ocean to extract nectar and not surprisingly won recognition. Interestingly, students of the architecture college were roped in to participate in the design so as to educate them with practical experience as well as expose them to such competitions.

His designs that addressed residences in the beginning, soon expanded to cover a wide range, from religious buildings to hospitality, health centres, to modern bus terminals, railway stations to housing complexes. Kembhavi incidentally takes the credit for designing the first green building of the country, the police district headquarters at Gulbarga in the 1990's.

This district police headquarters was completed at a very low cost of Rs 850 per Sq ft. The gold rated green building has an ambient temperature that is 14°C less than the outside temperature, a feat achieved by incorporating wind towers and courtyards, China mosaic roof top and stone walls. "The air from the wind tower is passed through wet walls where sprinklers are activated by the wind mills in the site. This cooler moist air is filtered for dust by a charcoal grating before flowing into the interiors", explains Kembhavi.

Designing the police commissioner's office in Hubli later, he brought in a totally new concept to the police department, of openness, where glass prevailed extensively on the façade, with many of the interior cabins too designed to remain open to facilitate better interaction.

His design of the Ashraya homes in Gadag, addressing over 8000 homes, won him a national award for offering the individual units at a cost as little as Rs 25000 per 210 Sq ft. "The cost was drastically cut by opting for filler slabs in the ceiling, introducing corbelling, building the concrete blocks on site with the waste fly ash from the neighbouring areas and doing away with lintels", says Kembhavi.

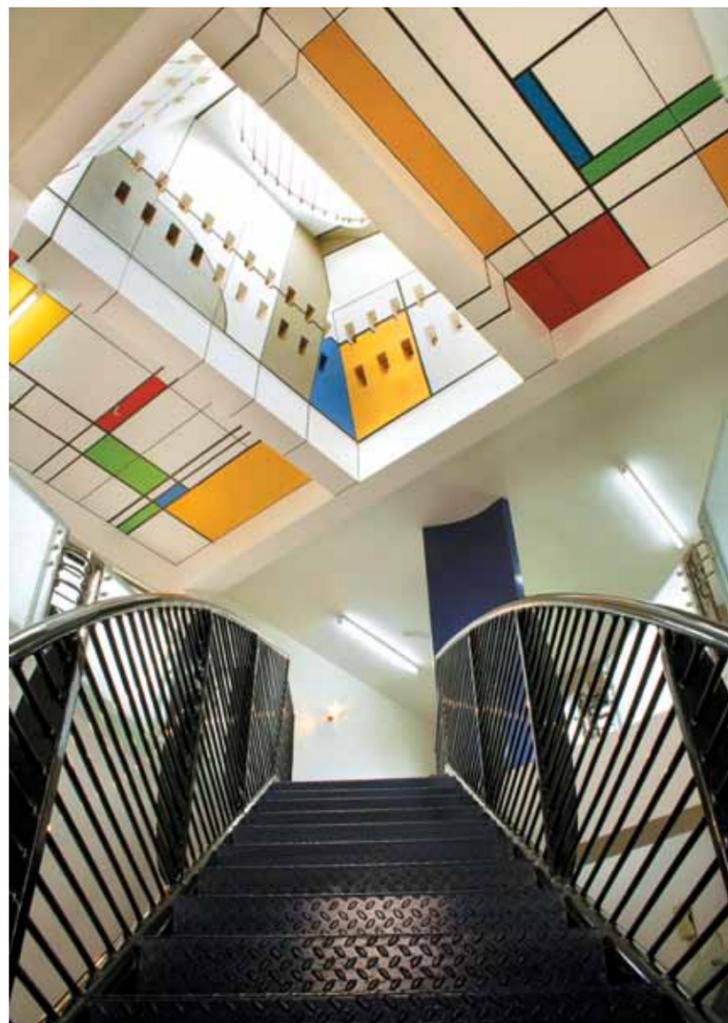
The Institute of Naturopathy near Gadag reflects Kembhavi's inclination to bring in vibrancy and a vernacular touch in keeping with the demands of the functionality of the building. The



Ramakrishna Vivekananda Ashram at Hulkoti



Jain School, Aurangabad



KAF Studio, Hubli



Luxury Apartment 'Vertica' for Landmark at Chennai



Apartments 'January' for Akshaya Group at Chennai

local styles of architecture, the design being an inspiration of the Durga temple in Aihole. Interpreting it in a contemporary context, the influence was reflected in shape of the walls while plenty of exposed bricks and stone find their way equally into the structure.

The influence of cave architecture on his design is evident in the Jain International School in Aurangabad where frescos seen in the Ajanta and Ellora caves are brought on the glass façade while vaulted roofs and arched openings reflect the caves.

His office in Hubli, reflecting a contemporary style, goes green by using waste metal bars of reinforced concrete to create an artistic base for tables. While an expansive courtyard throws out the hot air and keeps the ambient temperature within a few notches lower, colour and cheer are brought in with patterns and paints on the ceiling.

The Kalburgi residence, placed in an area where the local architecture displays a colonial influence, reflects a Tudor style. Plenty of stone, tiled roof and courtyard prevails in this residence fashioned as a cottage. Old barrels of wood find their way extensively into the interiors.

Local styles and locational sensibilities are again strongly reflected in the Landmark Vertica project where the presence of the thousand lights mosque has influenced the style of design. Thus, the nearly 80 m tall high rise building has glass pinnacles with laser lights

throwing light akin to the mosque. *Jaalis* of the mosque too have been replicated in the foyer while traditional fire lit torch lights illuminate the roof top swimming pool.

Earthy, artistic, vernacular inclinations and locational influences are the not only ones that dictate Kembhavi's master strokes. His residential apartment project Akshaya January bears ample evidence to his versatile design inclinations. With its European type of architecture, exposed brick façade and fabulous sculptural club house, the apartment complex reflects a live building that brings together aesthetically a varied basket of styles. Walls made from different kinds of metals, play of aluminium and glass in unique shapes together give a stunning contemporary interpretation to the whole form.

Similar unique play of metal in the façade is seen in a single 42 storey sea facing residential tower that he conceptualised though the project did not materialise. Here, Kembhavi came up with the concept of mobile string like metal structures that literally moved in the breeze lending fluidity to the façade, emulating the waves of the ocean.

location being rich in varied colours of stones, the design incorporates an extensive presence of these local stones while the wide walls house deep inset windows to complement aesthetically the presence of the brightly coloured Kumbhis and helical spirals reminiscent of Vedic tradition as well as reflecting the rustic style of North Karnataka.

"The stones were painstakingly sourced from various villages around the region to bring in the varied colours into the façade", adds Kembhavi. The presence of stones work towards reducing the ambient temperature within 10°C to 12°C, with the central courtyard and use of filler slabs in the ceiling adding to this.

The Ramaskrishna Ashram in Gadag reflects similar vernacular sensibilities and the strong influence of prevailing



PURSuing A PASSION

DEEPAK SD, SUSHANT D S, GUNASHEKAR G

It is a team of three, all graduating from the prestigious RV College of Architecture in year 2009; their shared passion- design. **Deepak SD, Sushant DS, Gunashekar G**, all 28 years old, decided in February 2011 that having their own design firm would be the best way to give vent to their unquenchable passion for design, allow their creativity to manifest unhindered, pave the way to leave their indelible lines on the skyline in the coming decades.

Thus was born Black Box Design Studio, which now boasts of over 45 projects commissioned over the last four years with 18 of them having been completed. Contemporary with minimalist leanings being their strong inclination, the trio also firmly believe in incorporating green sensibilities to the maximum extent possible.

Interestingly, all three had dabbled in design informally even while being students, lending their design ideas to those who sought. It was thus not surprising that they were impatient to start a firm of their own where they could be the design masters.

One of their early projects is Gear International School where the existing building had to be restructured. The trio came up with a design where each activity was assigned a separate space with the classrooms built around a green belt. To prevent crowding, the classrooms were divided into clusters buffered in between by green spaces, *Jaali* walls and semi-transparent wall panel. The buffer space was assigned as activity centres for the classrooms.

"We recalled our school experiences and came up with a design that negated the common issues and problems that many schools face based on their design", says Deepak. Thus, ramps and lifts were provided for handicapped students with special toilets designed to address the needs of the physically challenged. The green element was brought in through use of stabilised mud blocks with the earth sourced from the site.

The basement, which conventionally calls for artificial lighting, was designed as a lower ground with the open courts bringing in natural light while open steps lead to the spaces. Interest on the façade was brought in by using the classroom grids as alternate solids and voids which also create interactive spaces.

The Sathish Residence is a contemporary structure, the interiors being white and pristine, exuding minimalist charm. Plenty of play of levels is evident while glass and wood find their way significantly in the interiors. Greenery prevails inside along with a Zen garden and water bodies with the living and bedroom spaces opening on to a sky lit courtyard. Visual connectivity between spaces is strong while the pristine white interiors along with the presence of glass lends a free flowing feel to the spaces, contrasted warmly by a fair infusion of wood.

The Krishna residence is a contemporary twist to a traditional thought process reflected as an inspiration from the Mysore Palace in terms of the water cascades, the segregation of public and private spaces. The play of materials in



Farqooia multi-speciality hospital

the façade and the presence of grandeur in the interiors again are reminiscent of the décor inclinations of the palace.

A suspended staircase prevails in another residential project, Kishan House. The beauty of the suspended staircase is accentuated by opting for Jaisalmar stone steps, contrasted with exposed concrete ceiling. Plenty of play of wood is evident in the interiors with the free flowing spaces teaming with a skylight and expansive open spaces to bring in natural light and ventilation. An element of shadow play is also brought in through the incorporation of trellis.

Natural elements and low cost materials find their way into another residential project, Elnathan residence. The contemporary styled four bedroom house is inspired from the local materials found in Kolar. Thus, Kota and Cuddapah stone find their way extensively to complement the earthy leaning of the décor.

The hospital project, Farqooia Institute Mysore, is designed to ensure high functional efficiency without sacrificing aesthetics. The spaces are expertly designed to ensure clear demarcation of



Kishan residence



Krishna residence



Elnathan residence

services while the flow of these services follows a logical pattern in the plan of the spaces. Thus, the emergency care unit has direct access from the road while consultation service areas are given secondary access. Each unit of service is aesthetically separated by a lush green landscape to bring in cheer as well as ensure a healthier interior with plenty of natural light and ventilation.



Sathish residence



DESIGNING BY FEEL

KIRAN NAYAK

A gold medallist in his final year of graduation, Kiran firmly believes “projects are more about the feel of the space rather than merely aesthetics.” While his style is strikingly modern, with clean lines and simple forms, the influence of traditional Indian architecture is unmistakable. Interestingly, his own house proved to be his very first project where he had a free hand to implement his design inclinations unhindered.

This young architect is just 28 years old, yet already has over four years of independent practice to his credit with over 25 projects handled during this time that include residences, commercial spaces and hospitals. **Kiran Nayak** from the University School of Design Mysore, graduated in 2009 and took up his first job in Venkatraman Associates. Barely eight months into his job the urge to start working independently became too strong, with Kiran soon finding himself setting up his firm Architecture & Research Laboratory.

His residence, the Veranda House, built with comfort and green sensibilities in mind, incorporate expansive 15 feet verandas on two sides of the built structure where they open on to a lush one acre garden. “The residence is 5000 Sq ft of which the verandas corner 1200 Sq ft”, says Kiran. “Their presence not only evokes traditional imagery and context but also acts as a buffer against the rain and sun.”

The bold yet simple white structure is enveloped with attractive creepers to lend charm while solar and wind power reduces dependence on the grid. With an expansive rainwater harvesting facility, the house is also totally self-sufficient in its water requirements. The free flowing interiors bring in a sky lit courtyard to infuse the unhindered flow of air and light.

His project Bhooma is essentially a renovation effort where Kiran has brought in contemporary style while retaining a touch of traditional elements to make the transformation from old to new seamless. Kiran here proposed a design intervention that brought in larger spaces, reorienting the interiors towards a garden. The old, closed kitchen was turned into an interactive dining area opening on to a patio. To bring in a bit of history and nostalgia as well as enhance the aesthetics of the foyer, Kiran fitted a 120 year old ornately carved frame to the entrance door while an arresting Krishna idol complements the décor on entering.

While the renovation involved plenty of restructuring to give the current frame, Kiran relied heavily on materials and textures to bring in a drastic transformation to an old residence. The orange textured wall sits in charming contrast to the wood flooring and contemporary furniture in the living area while the wallpaper with the traditional hues acts as the balancing factor between contemporary and traditional sentiments.

The backyard which was dull and fairly unused was given a fresh lease of life through clay tiled roof and clay artefacts while the front façade was lent warmth with exposed bricks and traditional open benches.



Bhooma



TREA Diagnostic Center



Penthouse



Clover Fields

Health centres are invariably white and pristine, exuding a stark aura. Kiran decided to change this scene in his project addressing women’s health centre. A splash of colours was introduced in the form of seating and a mauve highlight wall, with a wood flooring to lend warmth.

When he landed another renovation project involving a penthouse, Kiran transformed the disused terrace into a luxurious penthouse for an artist and his family. The 900 Sq ft space features a living room and central terrace, a bar, pantry and an independent bedroom. While the exposed brick wall and ceramic terracotta flooring brought in warmth, the old sky light area was turned into an elegant spiral staircase, where both utility and infusion of light was brought in. The load on the existing structure was reduced by introducing a light weight structural system of steel girders and insulated roofing panels.

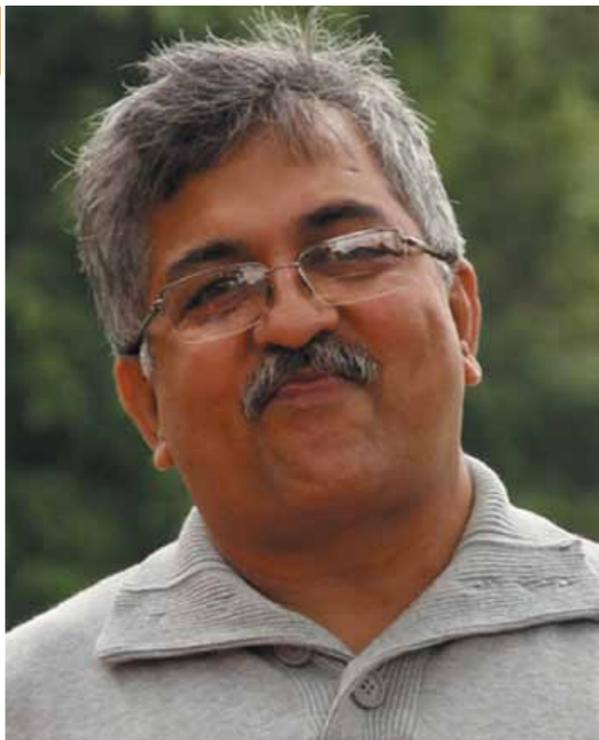
The D’Cruz residence was an architectural project, giving Kiran scope to exercise his design skills and inclinations unhindered. The style opted marks an evolution in Kiran’s design abilities, a totally contemporary style sitting along with a touch of rustic and earthy elements to lend an interesting contrast.

Given his leanings towards green elements, he left an expanse of green on either side of the building to let in copious natural light

and ventilation into the interiors while also opening the spaces seamlessly to the outdoors through the presence of verandas flanking on two sides. Stabilised mud blocks made from earth sourced from the site were used for the internal walls while exposed concrete, Cuddapah and Sadarahalli stone marked the exterior walls. The Sandstone used partly for the internal walls along with Jaisalmar and Kota stone for the floors, add vibrancy to the interiors. The bedroom floors feature recycled plywood.

His project Viaah Consulting was done on a shoestring budget, calling upon him to garner his skills to make the space charming with a constant eye on the purse. Subtle colours were used with suspended lights where the wiring was left exposed to give a rustic touch, a black board brought in to exercise creativity, while the central space was left totally open. Kiran also created a small cafeteria where colour was used to highlight as well as define individual spaces.

His latest renovation of an apartment at the National Games Village is yet again an ambitious project that was done on an extremely tight budget. “The project has to be challenging and exciting. It is the hurdles that make each project so unique and special while proving to be satisfying too”, adds Kiran.



Vernacular sentiments and local contextual requirements can be infused into a contemporary structure by choosing the right elements in design, avers **Architect Milind Nulkar of Centre for Design Excellence**. In his lengthy chat with **Antarya**, Nulkar dealt with a range of issues from architecture, students' practical experience to place of glass in contemporary commercial structures.

DESIGNING CONTEXTUALLY



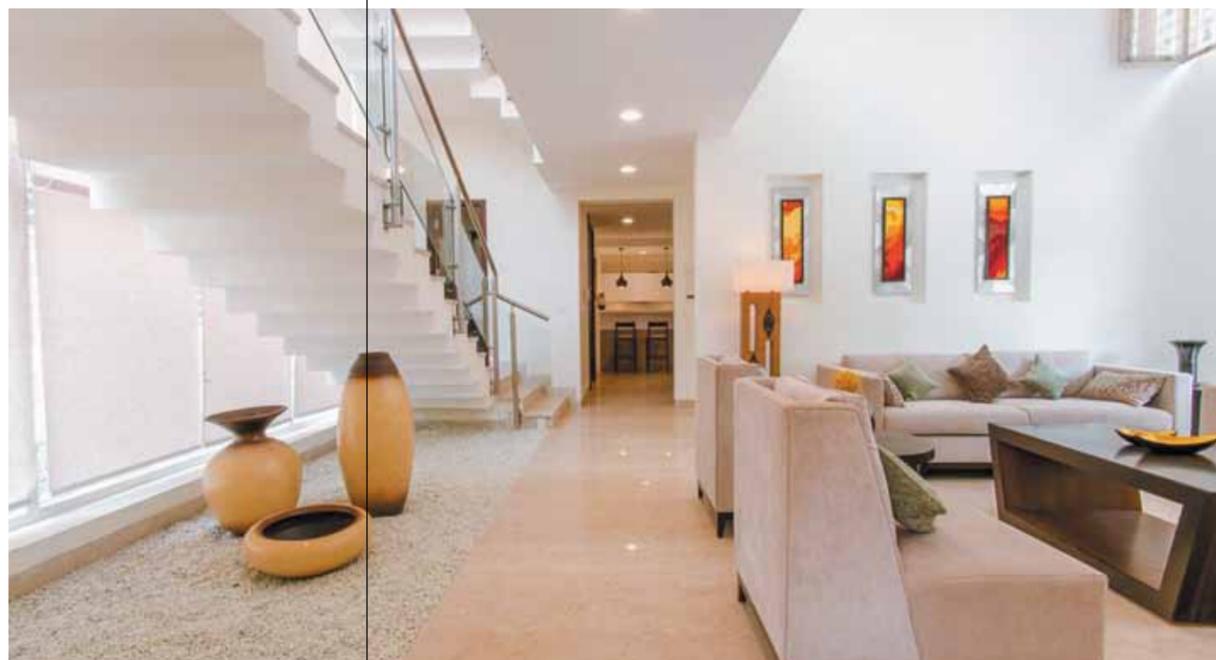
Q. Contemporary structures, especially commercial buildings find extensive play of glass and steel which bring in heat ingress requiring artificial cooling systems to be in place. What alternative design techniques can be opted to circumvent this?

Use of glass façade not only increases the ambient temperature within the building but also impacts the micro climate of its location through heat radiation in the exteriors, pushing up the temperature in its immediate surroundings by 2°C to 3°C. One way of addressing this heat radiation within and outside is to opt for deep projecting roofs, pergolas that would cast a shade on the façade. Providing a green cover also effectively reduces the heat gained and emitted. Opting for lower use of glass and designing larger openings that permit more natural ventilation as well as natural light is an effective solution. Similarly, opting for curtain wall *Jaalis* enclosing the façade can reduce the heat gain by several notches without sacrificing the infusion of natural light and ventilation. This is so even if the *Jaalis* feature 60 to 90cm from the glass façade.

Interestingly, our sites are so small and sandwiched that the outside view is anything but picturesque. The point of opting for glass to offer a view is thus negated. Besides, we still don't have effective housekeeping solutions that can provide professional cleaning of the glass façade. The solutions currently available have their own shortcomings, leaving the façade mostly unclean.

Q. Vernacular structures, by virtue of their designs and materials used, veered effortlessly towards being eco-friendly. While their design style may not be a popular option in a contemporary setting, especially in commercial spaces, how can their essence be incorporated into a contemporary styled structure?

The same *Jaali* concept can be opted here too. Traditionally the walls used were two feet thick with small apertures. The small apertures compressed the air, cooling it before letting in, thus serving as a natural cooling agent. Now walls are thinner and apertures larger but these can still be addressed for heat gain by using *Jaalis*. Likewise, the materials used earlier are not effective in current building styles and some are not available too. The alternate option would be to bring in greenery in the form of pergolas and creepers that cast shadows on the facade, greening the terraces in place of clay tiles, have cut-outs in intermediate floors and incorporate courtyards that throw out hot air and let in cool air.



Model Villa - VDB Willowfarm



Windflower Spa – Coorg

Q. Courtyards were omnipresent in many vernacular structures, bringing in light and ventilation. These are conspicuous by their absence in current buildings. Do you think we should revisit this design, especially in commercial spaces? If so, how can we incorporate them, yet not lose on functional spaces?

Courtyards are essentially a function of the floor plan, the larger the floor plate the greater the possibility of incorporating a courtyard. Functionality does not get impacted by introducing a courtyard, be it in a retail or office space. Courtyards in fact bring in indirect light that is conducive for use of computers, avoiding the glare on screens, besides ventilating the place naturally. Unfortunately, from the commercial perspective, opting for a courtyard brings down the floor space as it sacrifices the vertical spaces over it. This has a significant influence especially in locations where there is restriction on vertical expansion. In such cases, courtyards cannot be introduced due to paucity of space.

Q. While offering an iconic design, the need to be contextual is often not addressed. The emerging design, though arresting, can be non-conforming to local design patterns or even in variance to local climatic requirements. Would you endorse such designs?

This is unfortunately true and we certainly do not endorse such designs. Yet, when you look at iconic buildings per se, they essentially serve as landmarks in terms of the design sensibilities. There is a sense of euphoria about it, a larger than life image that you want to portray and quite often while doing so, you lose sight of the context. The design and materials then sometimes go beyond local sensibilities, the building only having a landmark impact but not rooted to the local context. Still, they have their own position in the design arena.

Q. Young architects are increasingly lacking in exposure to local skills and design sensibilities that can be incorporated into their creations. Would you advocate a rethinking on these lines by design schools so that designs by emerging architects are locational sensitive and naturally green?

Currently practical experience is lacking amongst students. We need finishing schools to introduce the students to real life scenario where they can physically experience the building concepts that they have learnt. Architecture students are now disconnected with reality, tuned as they are to computer generating designs and methodologies. Even simple eye level

assessments or measurement of angles by the naked eye and rudimentary geometry which was taken for granted earlier is currently lacking amongst students. There needs to be at least a few weeks of on-site training where basic material knowledge and practical construction methodologies are taught. The versatility of different materials needs to be understood and physically experienced and these need to be introduced into the curriculum. A similar approach needs to be adopted in terms of local materials and designs too.

Q. What would your advice be for emerging architects?

Visit sites; get first-hand knowledge of materials, techniques and styles, what is locally practiced. Only a visit to the site will make clear what else can be done with various materials. There needs to be knowledge of materials and construction techniques that are suitable for specific cultures, climate and local conditions; how these can be infused into the design to create simple yet effective structures.



Almost omnipresent in vernacular architecture was the feature of courtyards. These served as interactive as well as breathing spaces for the structure, throwing out hot air, letting in light and the cool breeze. **Architect Shimul Javeri Kadri** speaks to **Antarya** on the reinterpretation of courtyards across typology and context.

SPEAKING THROUGH COURTYARDS

Q. Courtyards have formed an integral part of historical structures. They are also a constant element in your designs. How does the infusion of courtyards transform the language of a space?

The simple spatial construct of a courtyard is often the backbone of our design as opposed to a later infusion. Its dual function - as an effective climatic device to eliminate warm air and set up a convection current and as a congregational space makes it an important player particularly in the language of tropical architecture.

Q. Vernacular architecture invariably incorporates a courtyard in the design. But not so in contemporary structures. How can we infuse it into our contemporary designs without affecting style or functionality of the space?

The courtyard, fortunately is a spatial device not necessarily a stylistic one, which allows its use across

history, context and style. From the more classical piazzas and forums to the temple courtyards of Kerala to the modern day interpretations wherein asymmetrical light wells to street forms to staircases assume the role of the courtyard – it is an extremely versatile device. It need not be a square with colonnades on all sides – in fact the reinterpretation of the courtyard across typology and context is what I attempted to showcase through my talk in Bangalore. The Nirvana film building which uses the idea of the staircase as a courtyard and the leaf house wherein the old existing trees and their continued presence created a pause between public and private pods and generated a spatially amorphous courtyard, are examples of contemporary interpretations, without conforming to vernacular typologies.

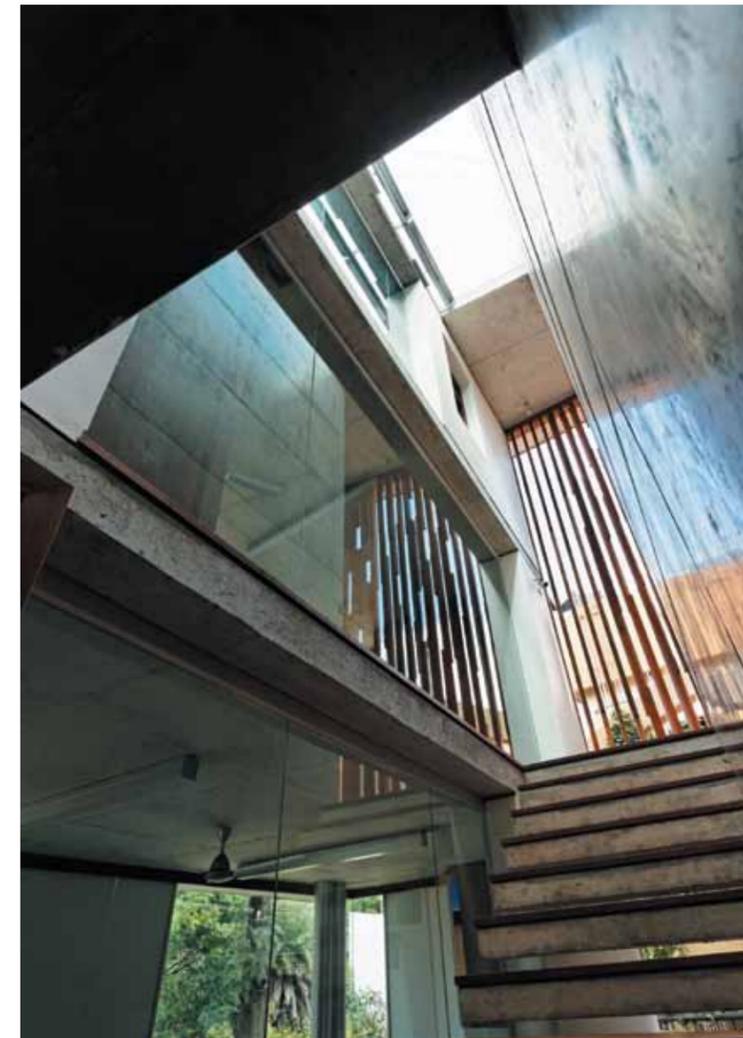
Q. Commercial spaces invariably have an extensive presence of glass and steel to lend an expanse of

space and bring in natural light. How can courtyards be introduced here instead to bring in light and ventilation without losing functional spaces.

We have attempted to demonstrate this in the Ambattur Clothing Company office building wherein the workspaces are airconditioned but all transition and connecting functions happen through and around a courtyard – so that the journey from one department to another, or from ones workspace to the toilet or the cafeteria is through a green open space reiterating the human connection to nature, climate, and other people. Smaller courtyards, and light wells within each glass enclosed workspace provide diffused light and a verdant natural relief from the line up of workstations

Q. Courtyards have served as connecting units between private and common spaces in vernacular architecture. How can this concept be used in commercial spaces and institutions where they serve as interactive zones while addressing climatic requirements?

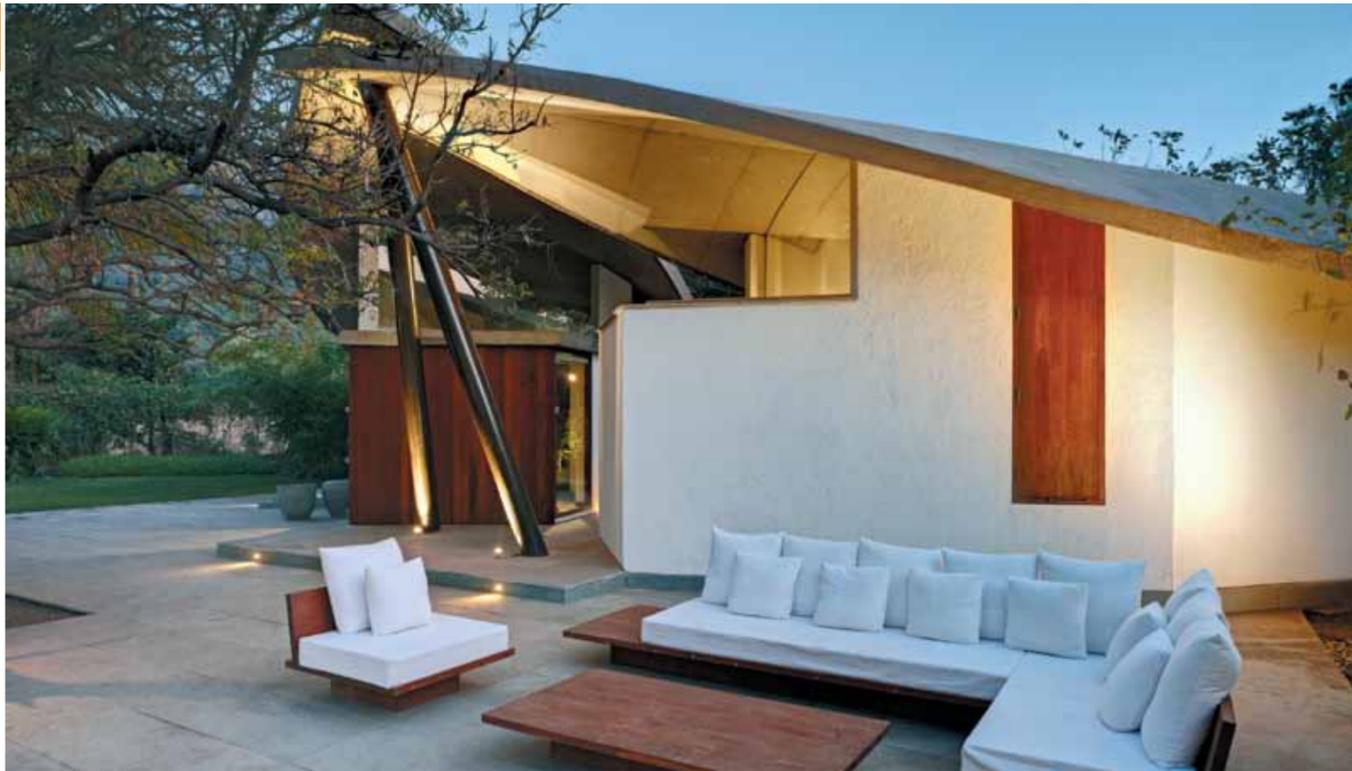
We used the idea of shaded streets to create linear courtyards around which an entire school functions in Warangal. The streets vary between 20 to 35 feet in width and create an inside out school, bringing wind and light into the classrooms as well as the experience of the outdoors to live and learn from – this becomes a political statement giving children more play space than academic space and forcing them into the outdoor streets for all common activities and



Nirvana



Leaf House



Leaf House



Ambattur

transitions between classes. The hardscape has been designed to incorporate potential outdoor classrooms, sundials etc so that the interaction between climate, nature, biology, physics and free play is encouraged.

The Jain Museum in Ahmedabad, where we were required to address the air quality and security requirements of a museum

without the use of air conditioning, uses the internal courtyard with the existing neem tree shade as the medium for bringing in shaded light and ventilation. The museum has then been raised off the ground floor on stilts leaving the entire ground level free for public interaction, loitering and access to the serenity of the courtyard waterbody. This expands the role of the museum in the community to include recreation, spontaneous talks, outdoor



Warangal School

exhibitions – and ensures that the institution stays relevant and accessible to the public at large.

Q. Courtyards in contemporary structures, especially residences, are invariably sealed with glass and this brings in heat ingress while shutting out natural ventilation. How can they be left open without unduly affecting functionality?

Simple design tools like sunshades and louvers coupled with better hardware increase the versatility of the courtyard more than ever before. The Nirvana building has inverted the idea of walls and windows wherein walls are glass and windows are solid. The windows are tall acrylic polymer louvers which open to varying degrees with the movement of one handrail for every four louvers. This operation makes it easy to bring in the winds at the angle needed. Similarly the acrylic and wood *jaali* in the staircase area, despite being 16 foot tall, opens completely and allows light and wind as needed.

Q. Would you advocate a greater exposure to students in design schools on local architecture, skills and design sensibilities so as to incorporate a more locally sensitive

style that is naturally green?

Local skills and sensitivity is wonderful and imperative for architects to function in the ethos they are building for. However, the merging of global ideas and technologies with local skills is critical for low on energy and high on design solutions. Several local skills rely on regular labourious upkeeps that are valid in an agrarian society. Gobar floors, country tiles, mud plaster, require annual replenishment. The craft of building for today must technologically improve on these solutions using the significant leaps in research on chemicals and hardware and create for longevity that uses the sun and the wind to its advantage, and synergises with nature for its beauty and sustenance.

Q. What would be your advice to emerging architects?

That formal education is over rated. It's a wonderful tool for skill development but taken too seriously, it can blunt creativity. India at this moment is over designing and trying too hard to be "global" while global is trying hard to be "local". That each individual brings a unique voice to the table of design ingenuity – follow that voice rather than coffee table books.



STYLING IT TO NATURE

BY NANDHINI SUNDAR

Winner of multiple awards, both national and international for their spectacular work, the duo's twin projects, Arts and Media Centre at the Doon School and Cliff House Kerala were on the 2011 Shortlist at the World Architecture Festival (WAF) Barcelona.



It is a case being sensitive to nature, the local environment, a deep concern for the carbon footprint left; a design inclination that veers around being part of the landscape where the flavour seeps into the structure, in ambience as well as the physical feel. It is a case of conforming to the elements of nature while reinterpreting the same to suit contemporary sensibilities. It is a case of incorporating tropical leanings with the use of local materials and concepts.

Meet Architects Sandeep Khosla and Amaresh Anand of Khosla Associates, whose designs serve as a tangible manifestation of nature in its heightened best, filling in the structure, its stunning beauty captured not just to address the aesthetics but also to offer a green abode. Winner of multiple awards, both national and international for their spectacular work, the duo's twin projects, Arts and Media Centre at the Doon School and Cliff House Kerala were on the 2011 Shortlist at the World Architecture Festival (WAF) Barcelona.

The design of the Cliff House speaks amply of their design sensibilities, perched as it is on the edge of a cliff, 200 feet above an expansive stretch of green along the Arabian Sea coast. Its asymmetrical sloping roof set against the backdrop of the coconut plantation along with its skewed 45m long sheer concrete wall that supports the lightweight triangulated canopy roof, serve as a striking feature even as the residence opens out to the landscape, the warm sea breeze flowing in unhindered, in gay abandon. The raw rustic contours of the polished cement, concrete and rough slate walls rub shoulders cheerfully with the warm eco-friendly timber and natural Kota stone to accentuate the natural feel of the décor.

The residence with its largely uncluttered interiors was designed keeping in focus the 180 degree panorama of the sea, thus offering a bold almost dramatic structure that brings the sea, air and the sky inside, sans barriers. Thus, only half of the 1,400 Sqm of the built area is defined by four walls with the rest kept permeable with louvered wooden sliding and folding shutters. While ample overhangs prevail on the main roof to protect against the fierce western sun and monsoon rain, the walkway at the Northeast entrance is flanked by lush tropical water bodies that add to the coolness while serving as a visual treat. The open voluminous entrance foyer extends all the way to the rear deck, inviting you to wade into the 420 Sqm infinity pool. Built to address climate sensitivities, the residence affords plenty of natural light and ventilation, ensuring even in the height of summer with temperatures soaring to 43° C, the interiors remain comfortable without the need for air conditioners.

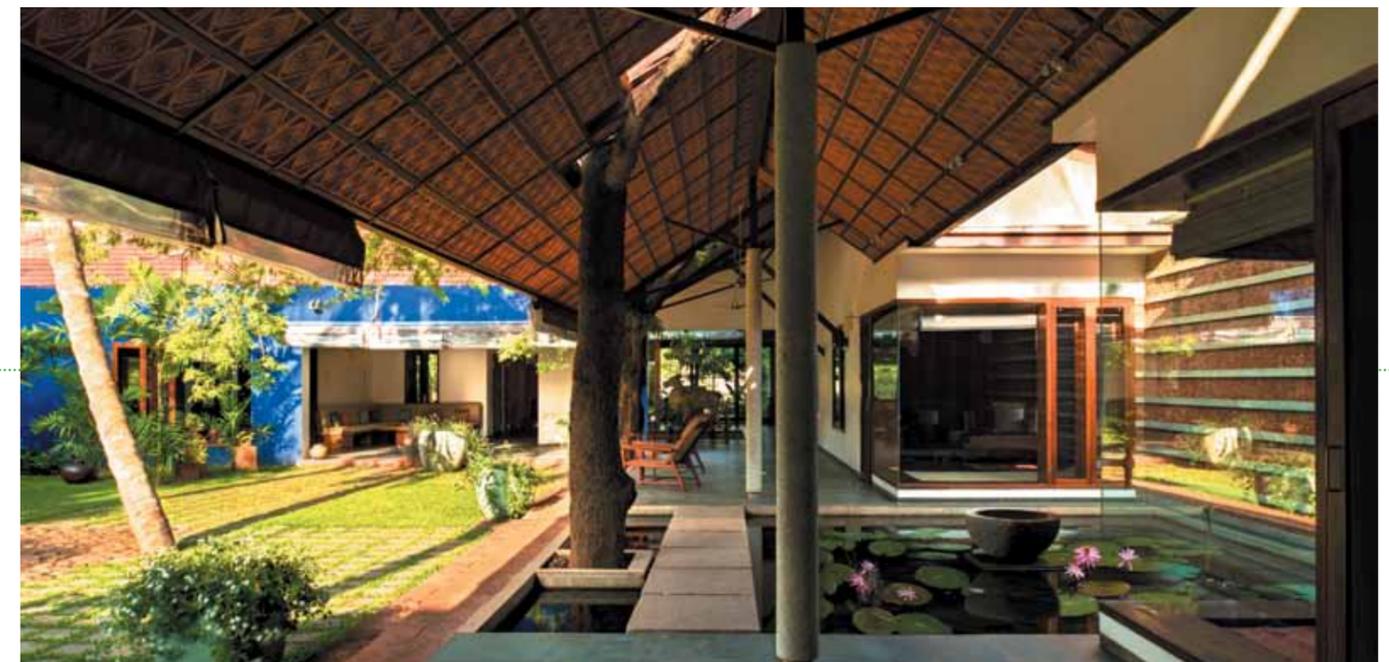


The Bellad House

The Bellad House set on a one acre site filled with Gulmohar trees is a yet another space created keeping in mind the locational sensitivities and weaving the same into the design of the structure. Says Khosla, "The site was overflowing with old Gulmohar trees and peacocks and we decided to build a residence that brought in minimal disturbance to the existing elements." The chief requirement they had to address in the design was the presence of large open spaces with the privacy of a central courtyard. Vernacular sloped terracotta tiled roofs was designed for a low slung structure that housed a horizontal expanse that included within it an unusually large 3000 Sq ft open core. This central courtyard is flanked by rooms with a 12 ft deep veranda acting as a buffer between the indoor and outdoor spaces. Copious greenery, flowering plants and water lily pools arrest the presence of heat and dust that mark the local climate.

The entrance portico displays an imposing red laterite wall that alternates with horizontal ribs of local Sadharahalli stone. While the connection between the built and unbuilt environment has been made seamless, the material palette used is predominantly local natural stone, wood, terracotta, broken occasionally by the Neel blue walls in the central court. "The objective is to bring in harmony between the built environment and nature where the demarcation is blurred, entailing constant dialogue between the two", contends Khosla, commenting on the invariable leaning of their designs towards bringing in nature effortlessly into the interiors.

Given that the local climate offered hot summers and humid monsoons, the ambient temperatures within was successfully reduced by 4-5 degrees using techniques of insulation and ventilation through active consultation with TERI (The Energy and Resources Institute). Vents were placed in bedrooms, bathrooms, even closets to throw out hot air while thick walls to the South and West kept the heat out effectively. Double tiled roofs supported by angled wall braces in the veranda enable the rainwater to run off into harvesting pits. Dormer windows in the North bring in soft daylight into the bedrooms which incidentally come with high sloped ceilings. Insulation also prevails in the roof slabs through a layer of polystyrene and an expanse of clay tiles.





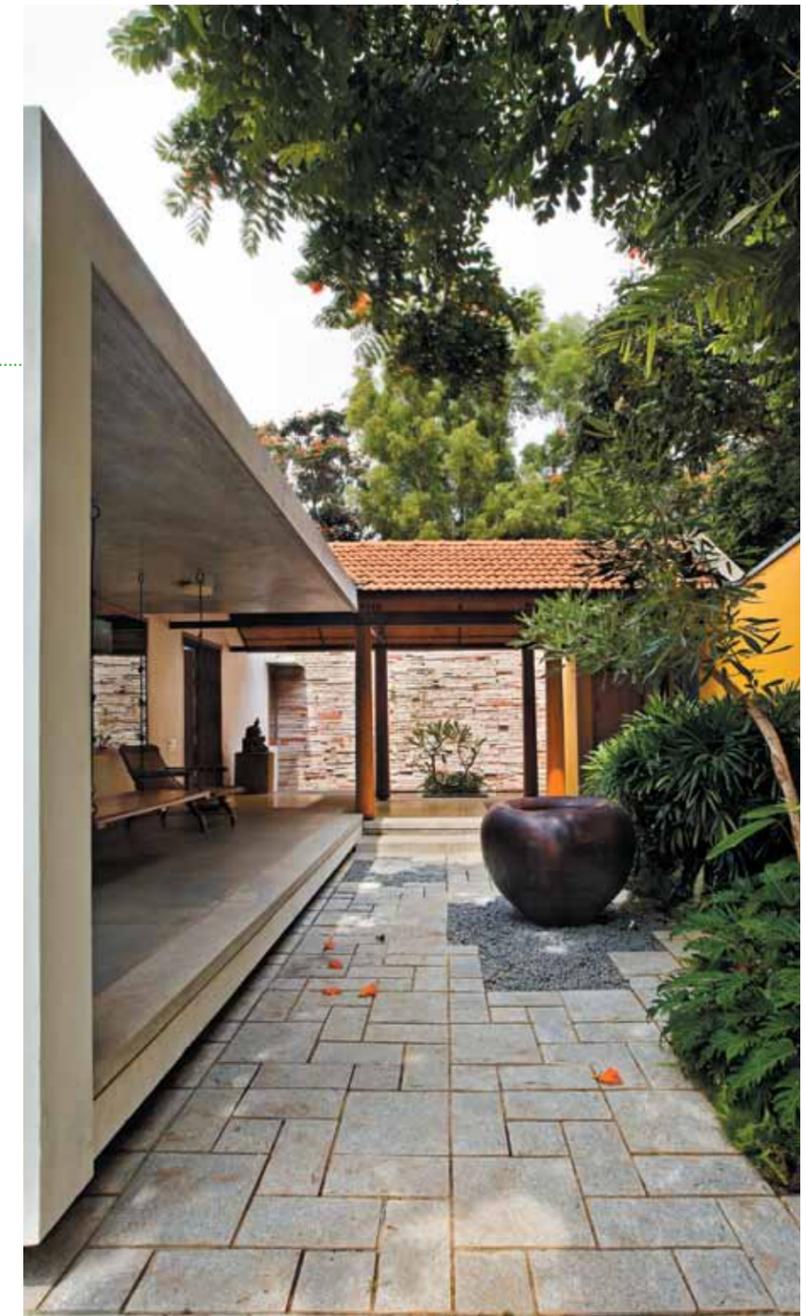
The Library house, a residence designed for a family of three who are avid readers, is off the grid for all its lighting requirements, relying on the 5Kw of solar power generated. A massive sump stores rainwater for use in the expansive garden. "The one lakh cubic feet of water collected takes care of six to eight months of its water requirements", says Khosla.

The design opted is in total sync with the courtyard and landscape dotted with tropical plants and charming stone sculptures. The spaces reflect an eclectic blending of the old and new, the global and Indian while the abundant natural light and ventilation combined with the seamless connect of the interiors with the landscape, lends serenity to the space.

The residence, giving ample importance to the presence of a library that spans 750 Sq ft of space with a 25 ft high gabled roof, uses materials that are largely hand crafted and local. The yellow Jaisalmer stone is a predominant material seen in the interiors with Mangalore and Kerala tiled roofs bringing in texture in combination with patterned colonial tiles, teak wood frames and columns.



The Library House

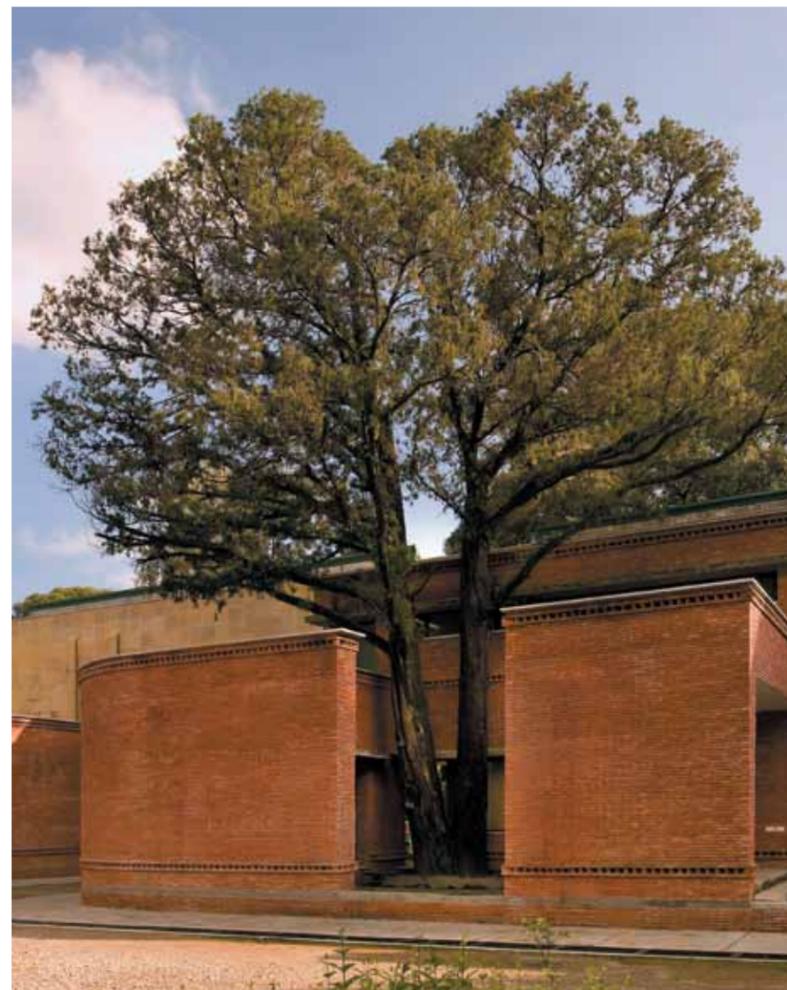




Their design of the Arts of Media Centre at the Doon school is based on the concept of the journey taken by the artist, interpreted as a central spine that runs east-west along the entire length of the site to eventually dissolve into massive landscaped garden. While the twin buildings of the art school are connected by an internal bridge, the structure appears as a composition of abstract sculptural form of varying materials and textures emerging from the central spine. All the studios open on to the courtyard, permitting ample light and ventilation while connecting the inner spaces with the outdoors.

The building is contextual in terms of its orientation and materials used even as it complements the century old English Renaissance theme in the main building of the school. Exposed brick tiles sit comfortably with olive coloured corrugated metal sheets and glass in a background of yellow slate. Local stone finds its way abundantly in the courtyards, while the grey Kota stone in the internal flooring contrasts aesthetically with the green outdoors.

With a TERI Griha Green rating, the building is also climate sensitive, the design ensuring the North light through the long spine reduces use of artificial light to the minimum while the ambient temperature within is controlled between 16° C and 27°C depending on the season. Hot air and humidity in peak summer is flushed out effectively by using a stack effect even as the large overhangs on the South and West shield against the harsh sun.



The Doon School



As against this, the DPS Kindergarten was totally different in terms of requirements, yet was planned to accommodate their design sensibilities. Faced with a short time span and efficient cost module to work with, Khosla and Amaresh came up with the design of a modular system that could be used as building blocks. The basic module of 700 Sq ft classroom could thus be repeated horizontally, stacked on top of the other. The classrooms flank a single loaded corridor that leads to central sky lit courtyard. Corrugated metal walls were added on all corridors to facilitate the speed of construction, yet be durable to handle the wear and tear of a school corridor. Patterns and tropical colours find their way on to these corrugated sheets along with other contextual references such as terracotta *Jaalis*. The presence of the *Jaalis* especially on the western side has cut down on the harsh sunlight while the incorporation of two different patterns on the *Jaalis* used in the exteriors creates interesting patterns depending on the time of the day.

The building, like all their other projects, is climate sensitive, energy efficient with the added tag of being cost effective. The use of electricity is minimal during the day, given the abundant natural light and ventilation that the interiors afford.



The DPS Kindergarten

RECYCLE TO RESIDE

BY ARCHITECT PRITI KALRA

American folk singer and activist, Pete Seeger, once said, "If it can't be reduced, reused, repaired, rebuilt, refurbished, refinished, resold, recycled or composted - then it should be restricted, redesigned or removed from production." As he rightly points out, the array of opportunities is large. Unfortunately, the minds willing are few. Even so, the trend today seems to be moving slowly but steadily towards reducing wastage, and designers are coming up with innovative ways to recycle the old and furnish the new. Here are two proposals in which old existing buildings have been reused in such a way that they may be the solution to the housing shortage many countries face.

Architecture charity, Building Trust, organized a competition asking participants to identify an urban area of a developed country and use it to offer a solution for shortage of affordable single-occupancy dwellings. Levitt Bernstein, a London-based firm, proposed to turn disused parking garages into tiny pop-up homes. In high-density areas, the land prices are always high and continuously rising. Their basic concept was to make use of spaces in these areas which are not utilized to their maximum. In the London borough of Hackney, in the neglected garages of housing estates, the proposal found its site. The structure would consist of low-cost pre-fabricated components which would be delivered to site as a DIY kit of sorts. The idea was for the structure to be easy to assemble (as well as dismantle) and insert into the garages. Note that the homes were to be temporary in nature, and to be looked at as an interim housing solution for people transitioning to better lives. The



project was titled HAWSE - Homes through Apprenticeships With Skills for Employment. The firm recommended starting an apprenticeship initiative which would teach the construction techniques of the pop-up homes to the future dwellers. In this way, the project aimed at tackling homelessness in a holistic manner, by offering not only a home but an education and an opportunity for employment as well. At an urban level, the proposal attempted to refurbish street frontage by giving a new look to the run-down garages.

As part of the Hong Kong Shenzhen Bi-city Biennale, Affect-T (a Hong Kong-based firm) proposed to the government the idea of installing a series of bamboo micro homes in abandoned factory buildings as a solution to their housing crisis. The proposal takes advantage of the changes in the city zoning regulations - deeming industrial zones fit for residential use. The number of people living in illegal structures lacking security, sanitation, light and ventilation is constantly on the rise.

Similar to the Bernstein proposal, this project aimed to build transitional communities for people who cannot afford housing - vacant industrial spaces being the selected sites. They may live here for durations ranging from six months to seven years, which is the general waiting period on the public housing front in Hong Kong.

A 1:1 scale prototype was presented, constructed from bamboo which is cheap and readily available in the region. Additionally, the strength to weight ratio of bamboo exceeds steel and it can be used for structural purposes as well as screening. The unit was to be a three-metre wide structure held together by a customized system of bolts and fasteners (which would ensure quick and easy assembly). Units could be modified to house single occupants, couples, families or even senior citizens. Units could also be grouped together to form communities of up to 50 homes. Communal facilities (electricity, water supply, waste disposal, etc.) would be cheaper, as compared to individual use.

In both cases, the overarching theme is the same - to recycle existing structures to cater to social needs. The genius lies in the fact that the overall structure, enclosure and infrastructure already exists, thereby allowing the units introduced within to be flexible, modular, inexpensive and easy to maintain. These ideas find relevance for people living in substandard conditions across the world, including in our own cities.

Image & Information credits:

<http://www.dezeen.com/2012/10/25/pop-up-housing-in-garages-by-levitt-bernstein/>

<http://www.dezeen.com/2014/05/06/bamboo-micro-homes-affect-t-hong-kong-factories/>

STACKING IT MODULAR

BY SIDDHIKA SARDA

Habitat 67 is a great example of 'Modern Architecture' since it uses innovative architecture to solve the problem of urban living.

Architects: Moshe Safdie (Israeli-Canadian architect)
 Location: Montreal, Quebec, Canada
 Project type: Multi Family Housing
 Construction type: Stacked Modular Units | Style: Modern
 Client: Canadian Corporation for the 1967 world exhibition
 Size: 22,160 sq m | Cost: C\$ 17 million



The major theme of the exhibition in the 1967 World Exposition in Montreal was Habitat 67. Habitat 67 is a great example of 'Modern Architecture' since it uses innovative architecture to solve the problem of urban living.

Habitat is a model community and housing complex using pre-fabricated modular units. Originally conceived as his Master's thesis in Architecture at McGill University, which he later built as a pavilion for Expo 67, Architect Moshe Safdie wanted to explore two main possibilities.

- Reduce housing cost.
- Developing a new housing typology that could combine qualities of suburban homes into an urban high-rise.

The housing complex comprises of 354 pre-fabricated identical grey-beige cubes arranged in various combinations and connected by steel cables. The apartments vary in shape and size since they are formed from one to four linked concrete units of 600sqft cubes in different configurations. There are 15 different housing types. These cubes create 158 residences reaching up to 12 stories in height. The sizes of these residences range between 600 Sq ft one-bedroom to 1800 Sq ft four-bedroom dwellings.

Since the development was designed to incorporate benefits of suburban homes, all units are connected to at least one private terrace and all apartments are accessed through a series of pedestrian streets and bridges. There are three elevator cores providing vertical circulation through the complex. Every fourth floor is a pedestrian street creating horizontal lines of circulation; the apartments are accessed directly from them. These corridors are open on one side and the user passes through spaces such as large plazas, children's play area, streets and suspended terraces.

Information credits:

Canadian Architecture Collection, McGill | National Academy Museum files | www.inhabitat.com

Image credits:

<http://www.habitat67.com/home.html>

<http://www.msafdie.com/>

<http://inhabitat.com/>

<http://cac.mcgill.ca/safdie/habitat/>



The aerial spaces, skylights of different angles and openings add to the living experience. The multiple openings 'Frame Views' of the housing complex, nestling between the river and city. Service and parking facilities are located on the ground floor.

Each cube weighed 90-ton and was prefabricated on site. The basic shape of standardized unit was formed using four large moulds. The reinforced steel cage was dropped into the mould and concrete was poured around it. After curing, the concrete box was removed from the mould and moved to an assembly line for inserting electrical and mechanical systems as well as windows.

After installing kitchens and bathrooms in the modules, it was lifted by a crane and put into its designated position on the building. The square shape got transformed into rectangles since the cubes were either placed face-to-face or interlocked from edge-to-edge. The units, pedestrian streets as well as the elevator cores are all load carrying members. They are connected to each other by high tension rods, steel cables and welding to form a continuous suspension structure.

These boxes were stacked in a staggered fashion to break the conventional form of high rise buildings. Each cube was placed a step back from its neighbour so as to provide maximum natural light and ventilation in each apartment as well as a roof garden that could be accessed from an external street.

This housing complex combined the concept of streets and open spaces in suburban areas which act as meeting and interacting spaces while offering privacy and identity in an urban high-rise environment.

AN ARCHITECTURAL PILGRIMAGE

BY PROF. DR. M N CHANDRASHEKAR, DEAN, SJB SAP
PROF. SMITHA M B

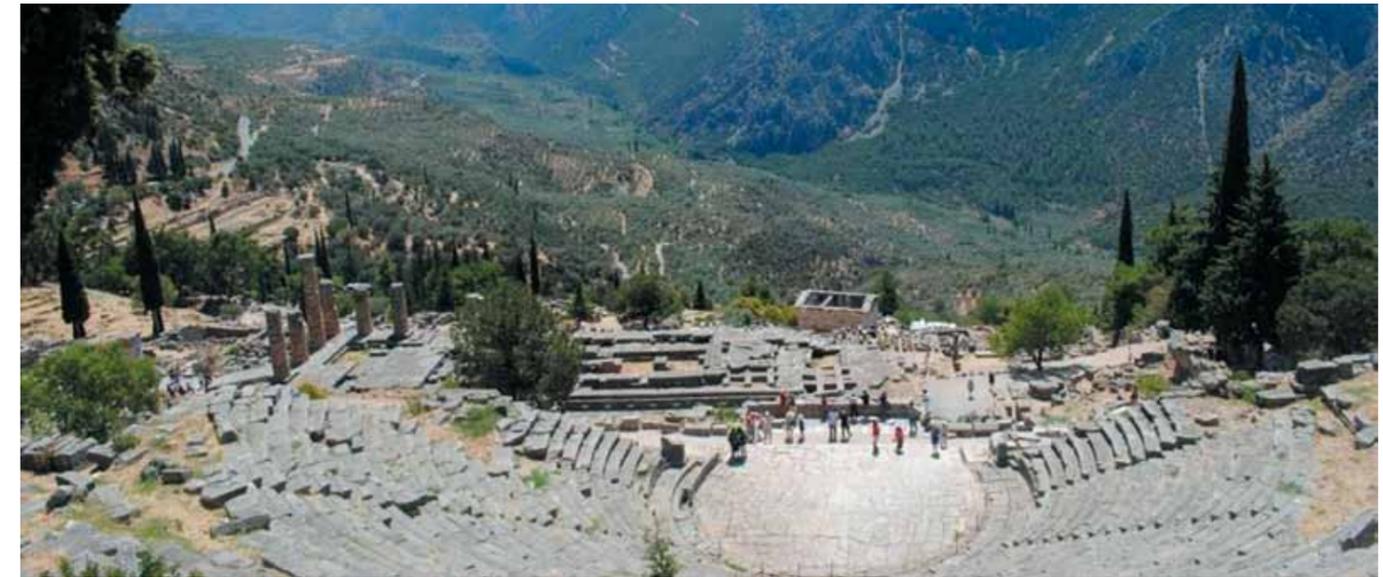
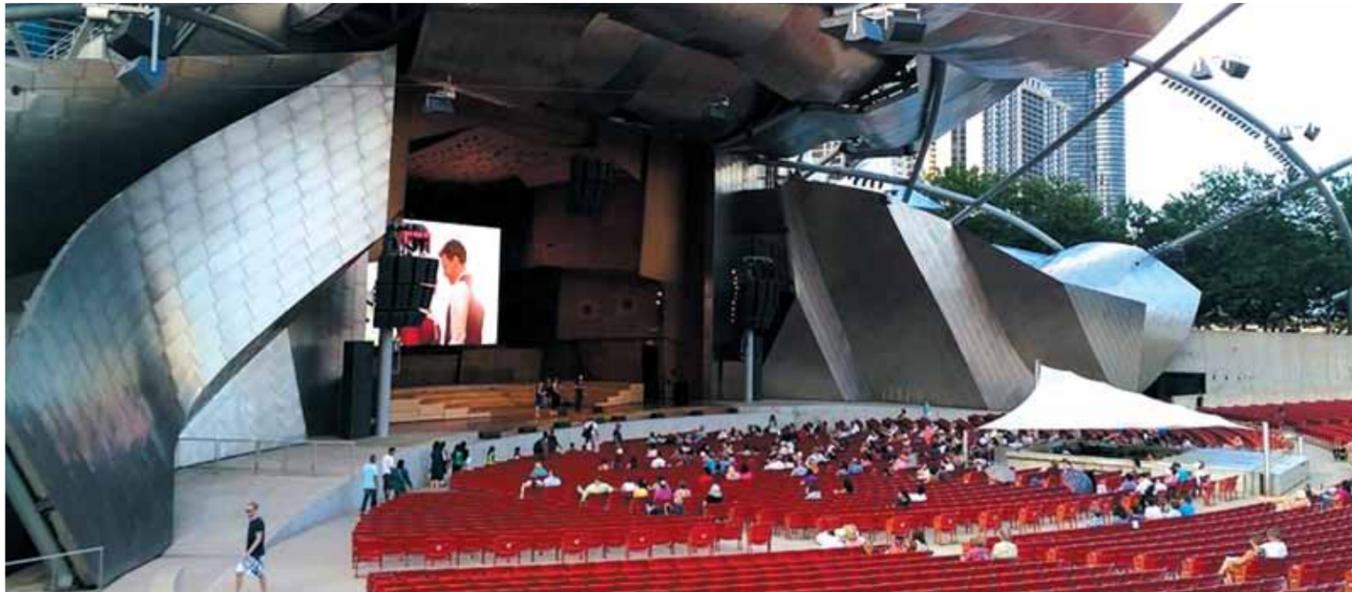


Art and Architecture have never failed to draw crowds. The traveller constantly looks for such inspiration to start him on a journey when his pursuit is beyond nature. It is then not surprising to expect an architect to evince a deep partiality to those destinations which promise him both, a learning curve as well as a visual treat. The advent of the internet has opened up vistas even further and the architecture student is no exception. Videos, pictures of monuments as well as masterpieces of renowned architects lure the student to venture out, explore and feel the tangible mass in a real world as against a virtual scene.

Interestingly, these virtual walkthroughs, be it on the internet or in a video, of iconic projects such as Falling Water, Villa Savoye, have made the task of explaining the intricacies to students far easier for architecture professors. In fact, in the current scenario, documentaries on various empires from Egyptian to Roman times along with walkthroughs of various architectural monuments, both contemporary and historical, have become mandatory in all History of Architecture classes.

Given the curiosity and the intense need that every architecture student as well as a graduated architect feels to tour the places seen virtually or those read about, SJB SAP set about making possible travel for architects and students both affordable as well as intensive where the focus is purely on an architectural pilgrimage.

The traveler constantly looks for such inspiration to start him on a journey when his pursuit is beyond nature.



Thus was born the 'Faculty Led Architectural & Cultural Appreciation Tours – June & July 2014' in January 2014 with the objective of meeting the firm belief that the timing for Indian students to explore architectural monuments is now and this could be better achieved by roping in more students from different schools in the same city or state to reduce per head cost of travel. It was also decided to involve in this exercise multiple professional bodies and trusts who would benefit the participants.

Support to SJB SAP came from professional bodies such as IIID-BRC and IIA-Karnataka Chapter to open up tours to both students and practicing professionals. The initial tour choices offered were USA-Hong Kong and Italy-Greece-Istanbul. Twenty six participants with students from three different colleges opted for the USA-Hong Kong trip while 28 participants with students from 6 schools opted for the European tour. The European tour, with its 12 hour lay-over in Istanbul permitted a free day tour covering the famed Hagia Sophia and Blue Mosque.

The tour to Italy focused on detailed tours of famed monuments with the Rome tour beginning with the underground before stepping on to the monument viewing. The exercise interestingly gave participants a deep insight into the layers of history the city is famous for.

Greece commenced with a day long trip to the world's first stadium pre-dating the Olympic stadia seen in other parts of the country. A day long three-island cruise showcased the delicately balanced habitation possible in the Greek archipelagos. Apart from the ancient monuments, students visited the Bernard Tschumi designed Acropolis Museum of Archaeology at Athens.

The USA-Hong Kong tour was conceived to give students an experience that would be contrasting in space, culture and density. The trip started by identifying various discounts that students enjoy such as the annual memberships of Chicago Architects Foundation (CAF) and FLW Trust.

The tour began with Chicago Architectural river cruise organized by CAF. The timing of the trip couldn't have been better as the students, with a request from SJB SAP were offered a free entry to any one session of the American Institute of Architects (AIA) Conference that was being held then. Students visited the famed Oak





Park buildings designed by the legend, organized by the FLW Trust. A visit to the famous Illinois Institute of Technology, focus on works of MVD Rohe in association with Mies Van Der Rohe historical society and additions to Chicago Art Institute by Renzo Piano were other highlights of the Chicago trip.

The icing on the cake for students was of course the visit to Falling Waters. The second highlight was visiting Washington DC on 4th July to witness the parades, fireworks and grab a piece of American History. Another was tour of the University of Pennsylvania, noting their effort to become the most sustainable campus in the US and a similar effort on a regional scale by the Delaware Valley Regional Planning Commission. The trip included visit to the Guggenheim Museum at New York, while a reserved slot at Department of City Planning, New York City to learn about sustainability efforts and re-densification in the last decade had to be given a miss.

Way back home via Hong Kong, students visited Hong Kong University, learning about ongoing efforts to reinvent the city, with a visit to successful examples like Sha-Tin new town. Students returned home with glimpses of the vast American plains and the land starved Hong Kong with lessons learnt that would aid them in the coming semesters.

Image credits:

USA: Ar. Thulasi Ram

Europe: Santosh Swaminath, USD, Mysore

Looking into the future

Universities in the west have traditionally used resources during summer to attract students to Summer Schools in various fields including Architecture. Typically here, a series of lectures would be organized, visit to various Architectural monuments both old and new and sometimes a small design exercise to be attempted in two weeks.

SJB SAP is shortly offering 'India Winter School in Architecture', where students and practicing architects from around the world may visit monuments like Taj Mahal to ruins of Hampi and study the IT driven contemporary architecture in cities like Bangalore or experimental architecture of places like Auroville, coupled with lectures and presentations by eminent Architects. It is proposed to conduct the Winter School by tying up with a School each in NCR and places such as Goa and Kerala.

TRAINING THE ARCHITECT

BY PROF JAFFER AA KHAN RIBA

In 1937, Walter Gropius wrote, "Training the Architect" for his presentation as the Chairman of the Department of Architecture of Harvard University. It reinvented his experience in Bauhaus, between 1919 and 1928, and became the pedagogical program for the new Modern Paradigm of architectural education. At that moment, the Beaux-Arts system was being reevaluated and the American schools of architecture intended to approach the university through a scientific and technological curriculum.

Walter Gropius revolutionized the American modern architecture through the manifesto of "Training the Architect" through integrating architecture by seeking a relationship between Art and Science. The concept of "Learning by Doing" was already underway as part of democratic education.

Between the years 1937 and 1952, Gropius carried out an architect's education based on the co-operation of three departments of the Harvard Graduate School of Design (GSD) – Architecture, City Planning, Landscape Architecture – aiming to bring closer the student's projects to the real problems of society, thus endowing the architect's education with the ambitious technical ability and tools to integrate the various specialties in the project.

Thus the Modern curriculum and the methodology of collaboration, not between arts and crafts as in the Bauhaus, but between landscaping and planning received international acknowledgement. Gropius managed to make GSD international with students from all around the globe through a nuclear curriculum and a collaborative studio,

founded in teamwork and in "methods more than skills", therefore generating "the greatest innovations of the century in project teaching".

During the CIAM congress in 1947, Gropius created the Education Commission to debate the training of the Modern architect and underlined the following principles for a new architectural education.

- In an age of specialization, method is more important than information.
- Three- dimension conception is the basic architectural discipline.
- In the first year, basic design-and-shop practice combined should introduce the students to the elements of design – surface, volume, space and color. Simultaneously the elements of construction and building to be taught.
- In the second and third year, the design and construction studio, supplemented by the field experience during summer vacations and by activities in a laboratory.
- Construction to be taught as a part and parcel of design.
- Students should be trained to work in teams.
- History studies should begin in the third year rather than in the first, to avoid intimidation and imitation.
- Teachers should be appointed after sufficient practical experience.
- Schools of small size are more efficient than large sizes (100-150)
- The efficiency of teaching depends on the number of students per teacher (12 to 16).

The above principles almost became a benchmark globally and most of the schools particularly in India adopt these

principles. But over the decades much of it has diluted and the content needs a relook and revision. The architectural education in the country is presently at crossroads, we may cross more than 500 schools very soon. With this rapid growth as well as the dilution of the curriculum, which does not propose a strong "Foundation Course", the situation in the future seems to be a more difficult task to train a "good architect".

At the Marg Institute of Design and Architecture Swarnabhoomi (MIDAS), it has been our constant endeavor to combine the artistic role of the architect with the technical and social interface.

Gropius once wrote: "The architect of the future should act as a coordinating organizer of broadest experience, who in starting out from social conceptions of life, succeeds in integrating all social, formal and technical problems of our time into organic relationship"

It is time that we review the foundations of our architectural education. MIDAS has taken an effort to call eminent academicians, professionals and industry leaders to debate critically on the architectural design education in the country during NASA 2015. It needs to be seen, how the debate goes and the white paper becomes an effective document to relook and "transform" the architectural education here.

SUSTAINABLE SENSUALITY

BY PROF. K JAISIM

The dances of the senses with elements are a pleasure to witness, watch and experience.

A commentary on today's scenario of interior design and decor as practiced-not necessarily by the professionals. The Role of Interior Designers and the interpreting Decorators to the experiencing performers, both animate and inanimate, these interactive elements of life havocking the architectural spaces is a drama by itself.

Why design? Can't one just open a door, look out of a window, use the loo and wipe the bottom! Are these actions? Bathrooms galore! The new agenda on the scene, Marilyn Monroe on the wall, above the lever – does that delight the user! To lure the mind, to provoke the body into a spiritual stance to do an act that anyway has to be done!

Today's hospitality interiors amaze a sensuality that defies kamasutra. Sutra in many ways is a story stitching many episodes in one's life, daily or over a period to fulfill many thrills of the imagined and acted. The sheer poise of delicate beauty overwhelms the audacity of space related to time and human sensual movement. As the eye wanders and the ears prop up and the nostrils swish, the skin twinges a few spaces and the body is swirled by the mind into a spiritual transition soon leading to the lounges of ecstasy. The senses have been won and buried.

Ninety percent of interiors is all about decoration. With a sense of tongue in cheek humour, one very often walks through invited spaces hoping a glass of champagne will somehow make you stalk these spaces. Today's so called super star hotels and other interiors of stars, both on and off the stage, makes one shiver like a beggar walking on streets of gold. As was presented on popular television media recently, disciplined professional design is only a few drops in

the bucket of presentation. Glamour always triumphs. It is not how you score but how much you score. A sore tale with a tail in many ways tucked between the legs.

An architect of worth plays with spaces in time and motion, creating them with an intensity that defies, denies and yet makes life worth living. The dances of the senses with elements are a pleasure to witness, watch and experience. And as these come to fruition, in stalks the interiors with glitter sparkling all over, clothing them like a shroud – only mummies can keep awake. But they win, in all ways. Years of slogging by the architect sent to slaughter in hours if not in minutes but by a sweet milking presentation!

Reminiscing, one's memory flourishes with thunder and lightning of the days and experiences one explored in the built environment. Standing aside and shifting a pot or even a branch with that elusive subtle savour, an interior came to life. And that was design. No additional decor was required. The angle of the window and the movement of the sun through the years across the floor and the walls, creating mysterious nuances made every day a new day. Life had meaning.

That sensuality which defies and duets with space and time, making every movement and moment an exploration of the spirit into the divinity of the human mind and body, that is and will always be Design!

Design is inspiration.
Kitchens inspired by **Häcker**
kitchen.germanMade.

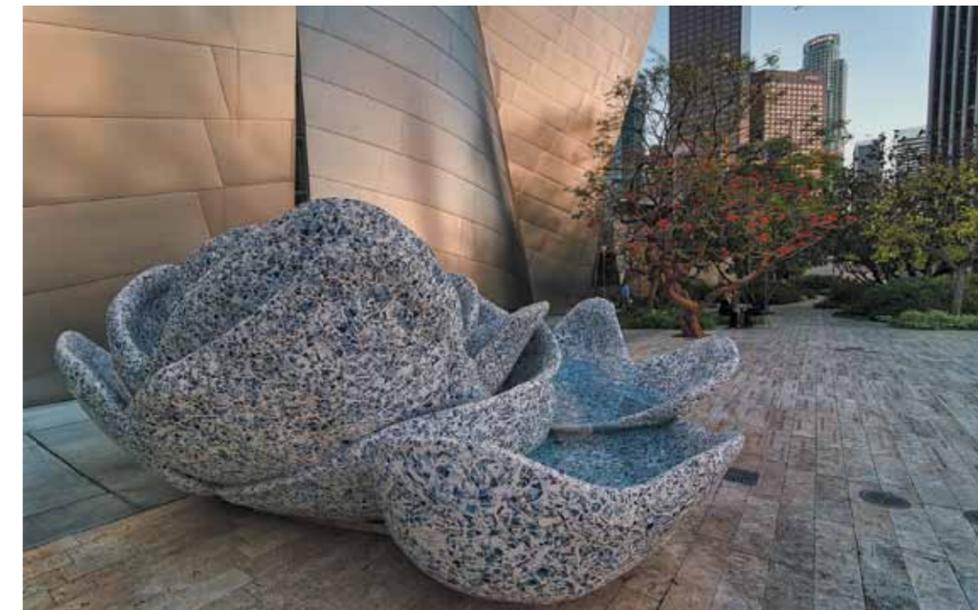
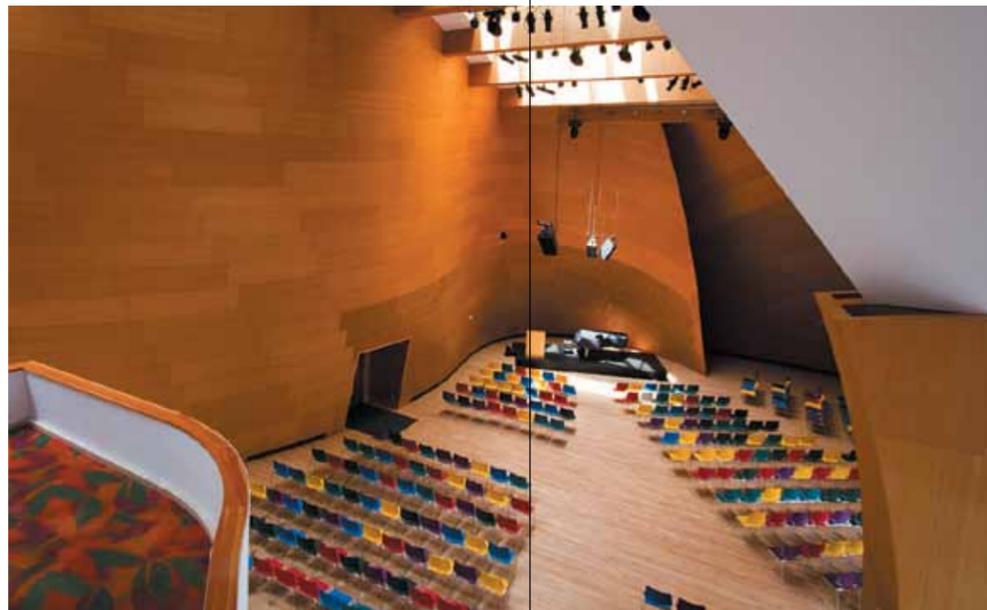


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GEHRY – QUESTIONABLE DESIGN?

BY ARCHITECT YAMINI KUMAR

The Walt Disney Concert Hall has often changed an architect's perspective of Frank Gehry. Known for his whimsical style, Gehry was recently in the news for stating that "98 per cent of everything that is built and designed today is pure shit." However, this is the also same man who is considered by many, to be the 'worst living architect'. The elite architectural fraternity seldom has anything positive to say about his architecture and it is often not intellectual to admire his buildings.

However, the Disney Concert Hall often changes an architect's perception of his work; it most certainly changed mine during my visit. Home to the LA Philharmonic, it is located in Downtown Los Angeles and is one of LA's most famous iconic buildings. Lillian Disney wanted the concert hall to be one of the finest in the world, to serve as a tribute to her late husband. She donated \$50 million in honour of Walt Disney, to reflect his love of music. Frank Gehry was selected from among 80 candidates during a design competition the following year. He presented his design in 1991, but the project faced many challenges; lack of funding, design disagreements, construction delays and cost overruns pushed back the timeline, enabling it to open only in 2003.

The building has a diagonal entrance, preceded by a plaza that opens on to the junction of two busy roads, softening the boundary between the building and the side-walk. Its sweeping stainless-steel surfaces are known to be a part of

Gehry's signature style. Its undulating forms symbolize musical movement. The custom curvature demanded a highly specific steel structure, including box columns tilted forward at 17° on the building's North side. The curved panels reflect sunlight during the day and city lights at night. The metallic forms appear to hover above an asymmetrical band of glazing at the building's base. Glass fissures in the facade bring light into the lobby, reading as a grand entryway through the otherwise opaque facade.

At the corner of the building is a staircase leading to an elevated park, the Blue Ribbon Garden, which wraps around the rear of the building, enabling people to get a sense of the quirkiness of the dramatic exterior. The garden features a rose fountain designed by Gehry that pays tribute to the late Lillian Disney and her love for Delft porcelain and roses. The combination of the steel facades, lush foliage and the mosaic covered fountain, forms a very interesting space—one that people are surprised to find themselves in, in the midst of Gehry's chaos.

Disney Hall, which exhibits exceptional acoustics, has been brought to life by numerous orchestra performances and concerts. Even the concert organ which stands in the hall has been specially designed by Gehry, in consultation with the organ consultant, to concur with the language of the building. The concert hall's partitions and the curved, undulating ceiling, act as part of the acoustical system while subtly referencing the sculptural language of the exterior.

It is an example of a building where the interiors and exteriors are perfectly in sync with each other.

Despite its feats, the concert hall had its share of controversy. Soon after its completion, concentrated heat spots were noticed. Blinding glare affected drivers passing the building. Nearby residential buildings noted an increased use and cost for air conditioning. Using computer models and sensor equipment, officials determined that specific highly-polished panels on certain curved areas were the source of the glare and heat. They had to be dulled to become less reflective, by a sanding process. The rectifications effected in 2005 reportedly cost as much as \$90,000.

Visitors can glimpse the structure and complexity of the building through a skylight in the pre-concert room. Its volumes create drama and elements of surprise, in combination with pockets of sunlight that stream through the windows and skylights. It is an example of a building where the interiors and exteriors are perfectly in sync with each other.

Whatever a person's opinion may be, Gehry accomplishes what he sets out to do. He makes people stop, pause and stare and gives them a fantastic sensory experience inside his masterpiece. I for one was delighted with my visit.

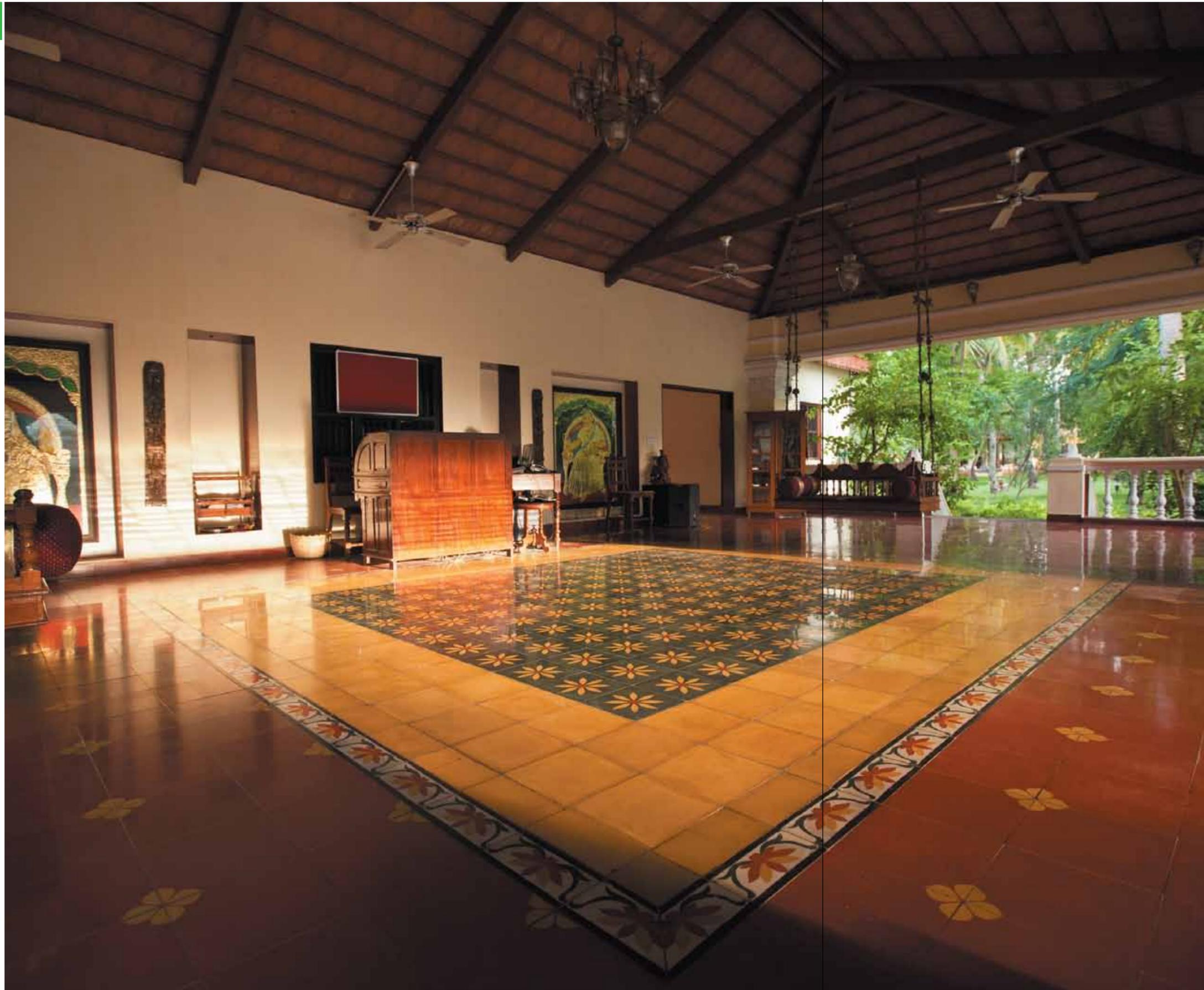
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TRADITIONAL FARE IN ABOUNDING GREENS

BY NANDHINI SUNDAR
PHOTOGRAPHY BY MAHESH CHADAGA

Set amidst 12 acres of coconut and banana trees along with innumerable fruit bearing and flowering trees, Mantra Veppathur replicates South Indian traditional architecture, the design addressed to the minute detail, using salvaged tiles, windows and doors in the structure.

It was early morning when we got off the train at Kumbakonam Station. It was raining quite heavily as we got into the car to drive to the resort. The roads were muddy, slushy, dotted with small houses and shops. Where can a lush green resort prevail in this location, my companion wondered aloud. May be we are heading in the wrong direction, he muttered again. No sooner had he mumbled the car took a turn into a narrow path between lush green fields. We were soon driving through the fields with no sign of habitation except the copious greens. Where is this place, my companion again asked, this time aloud.

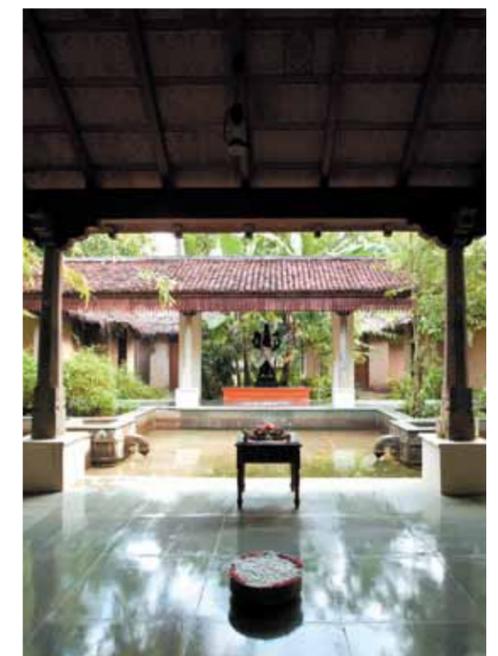


Mantra Veppathur is tucked away right in the heart of an expanse of green, the route passing over a quaint narrow bridge built over the stream carrying the Cauvery. The entry to the resort was grand, the gates resembling the erstwhile palaces, massive in its carved manifestation. The totally traditional theme of the reception, parked opposite a large water body with a small temple in the midst, a modern interpretation of the tanks in ancient temples, gives a taste of the bygone era, leaving a nostalgic feeling.

Set amidst 12 acres of coconut and banana trees along with innumerable fruit bearing and flowering trees, Mantra Veppathur replicates South Indian traditional architecture, the design addressed to the minute detail, using salvaged tiles, windows and doors in the structure. Says Architect Krithika Subramaniam who designed the resort, "The site had 550 coconut trees and since the objective was to retain all the trees, the resort was planned around the existing trees. This gives the resort the truly natural feel of residing amidst an expanse of coconut and fruit bearing trees."

According to her, only 10 trees were cut and 30 trees were transplanted among the 550 coconut trees. "Since we cannot replicate temple architecture in a resort, extensive research was done on the design of the houses in the Thanjavur belt. These were authentically replicated in the designs to offer the ambience of the old villages of South India." Every window, door as well as the roof tiles and the rose and teakwood pillars were all salvaged from old houses that were renovated, with some of the windows and doors being old enough to be categorised as antique. "Even the sculptures used in the resort are old, sourced from various places", adds Krithika.

Besides using Athangudi tiles that were sourced directly from Athangudi, skilled labour was sourced from Kerala to lay the red oxide flooring in various parts of the resort including the reception. Essentially the design being a brain child of Subbramaniam, CEO of Mantra Veppathur, the resort is green not just in the visual form but also in the concept, materials and design adopted.





The individual cottages are designed with the traditional verandas flanked by wooden pillars and clay tiled roof while the ambience within is totally authentic traditional fare, be it the décor or the elements used right from the brass taps and buckets in the bathrooms to the shape of the cots. The lavish cottage Pannaiyar Illam, with its living, dining and twin bedrooms literally gives the feel of going back in time, the design elements and décor of an original Pannaiyar's residence replicated in various detail.

The cottages are placed in a row replicating a village street with a lengthy canal winding its way in between. Extensive greenery in the form of flowering plants, coconut and fruit bearing trees sit in harmony on either side of these canals, giving the entire place a rich aura of stepping into another era where time literally takes a pause. The antique fashioned reclining chairs dotting every veranda invite you to stretch your legs, close your eyes and slip into a reverie where stress and reality take a back seat, almost fading into the horizon like a distant dream.

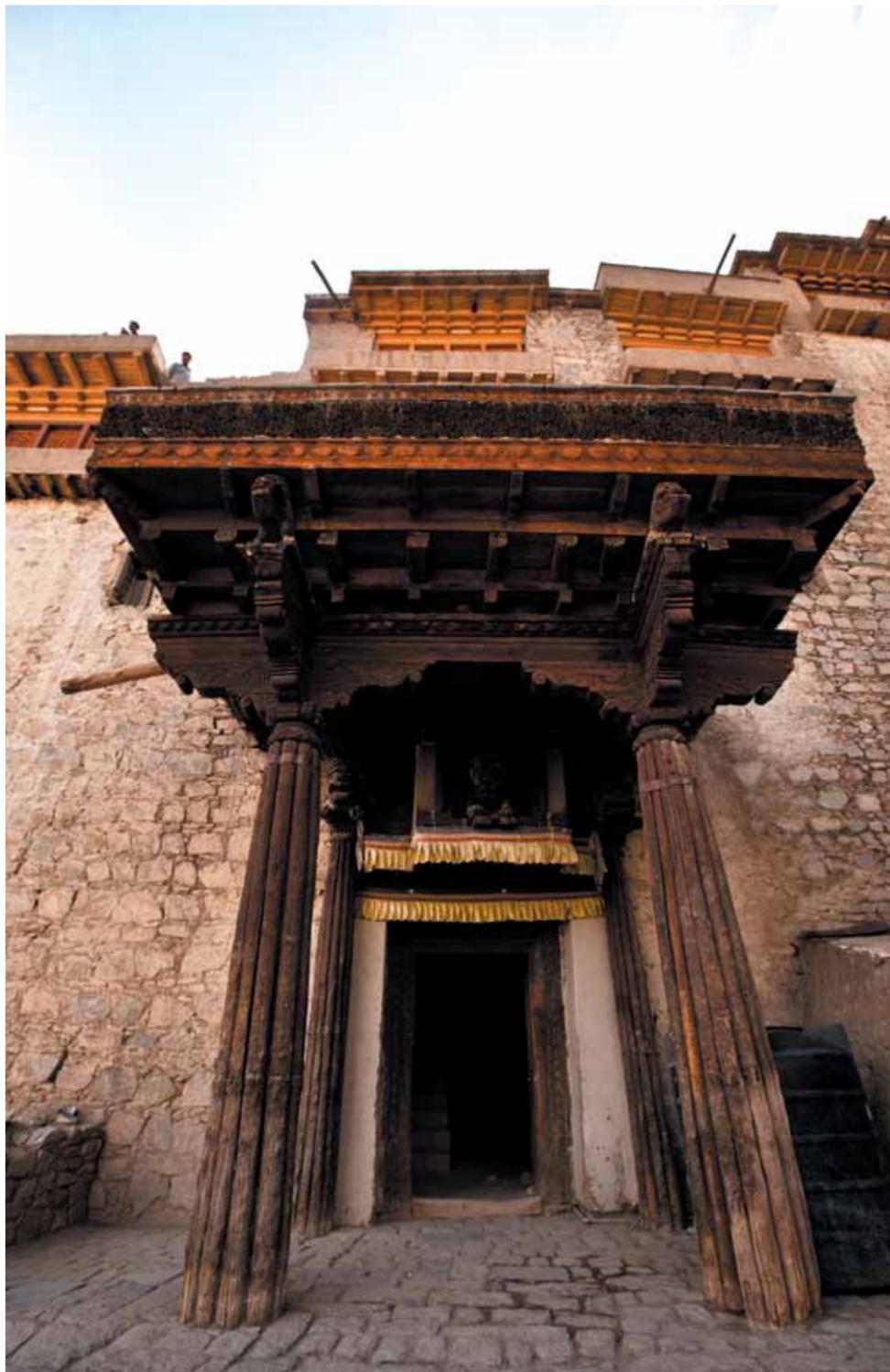
As if the spectacular ambience of the resort is not enough to soothe the tired nerves, a magnificent spa awaits to physically relax those tired muscles and rest the chattering mind. Having been so pampered, the dining waits to indulge you further with mouth-watering traditional cuisine. The special Maharaja Thali served at lunch time certainly needs an empty stomach to do justice to the expansive range of dishes served.

Eating the sumptuous meal in the open dining area, with the breeze softly rustling my hair, the greenery soothing the tired eyes, all I needed was a cup of coffee in their tea shop that authentically replicates in structure and décor the village tea shops. Sipping the coffee along with my companion, I certainly felt life couldn't be better and more peaceful. When it was time to leave, it was certainly with reluctance that we left, wowing to return yet again to soak into its lush green traditional fare.

Image credits:
Mahesh Chadaga

ON A TRAIL OF MUD

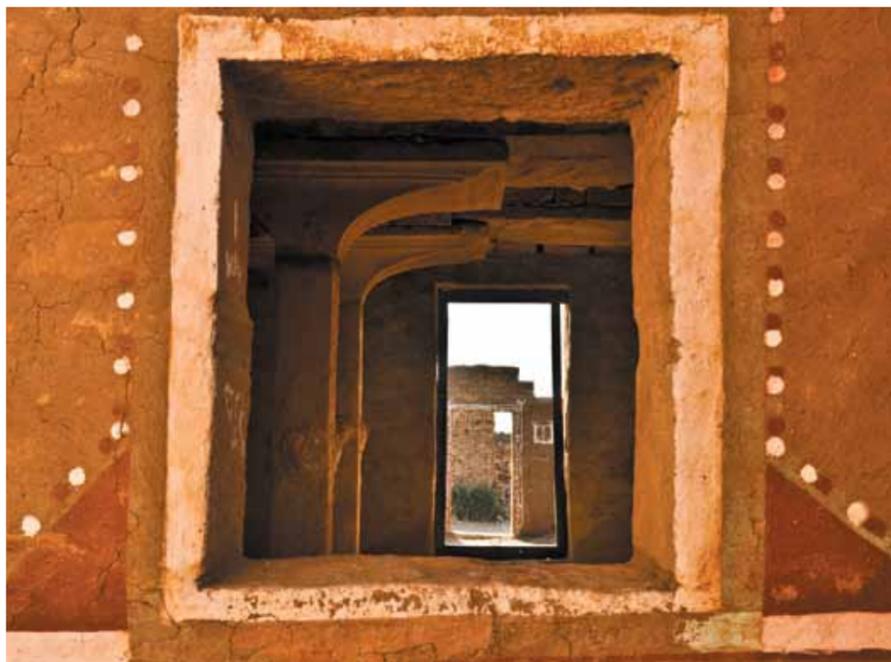
Mud has formed the basis of structures from time immemorial, be it in the form of mud blocks, sun-dried bricks, fired bricks, clay tiles or mud plaster. Interior Designer **Mahesh Chadaga** traces the use of mud in structures from the exotic Kashmir to the tip of India ending in Kerala.



This palace in Leh, built around the 15th Century has stood the test of time and not buckled to landslide or inclement weather. A spectacular depiction of the strength and beauty of mud, built with stone, mud bricks, mud mortar and plaster locally called Mar-kalak, poplar wood and wooden rafters and reaching nine storeys.



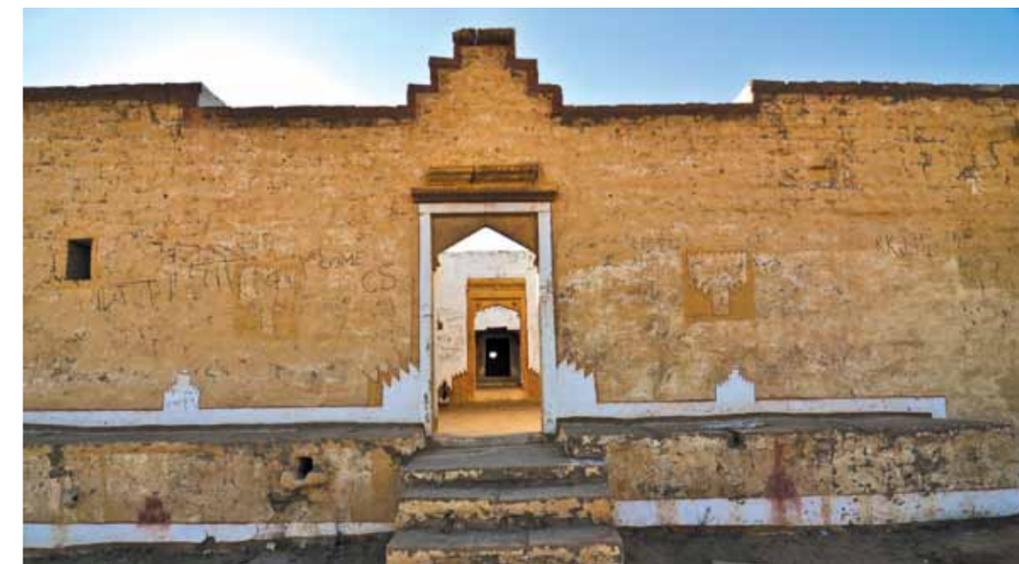
An array of structures in bricks and wood, plastered in mud, with some of them built using purely mud, lending a spectacular earthy appeal in a remote village of Kashmir.



It is a predominance of mud bricks, mud and lime plaster or purely mud in the structures, with some displaying detailing too, in this remote village of Rajasthan. The forts too reflect similar use of mud in the structures, successfully winning the battle with extremes of weather over the centuries.

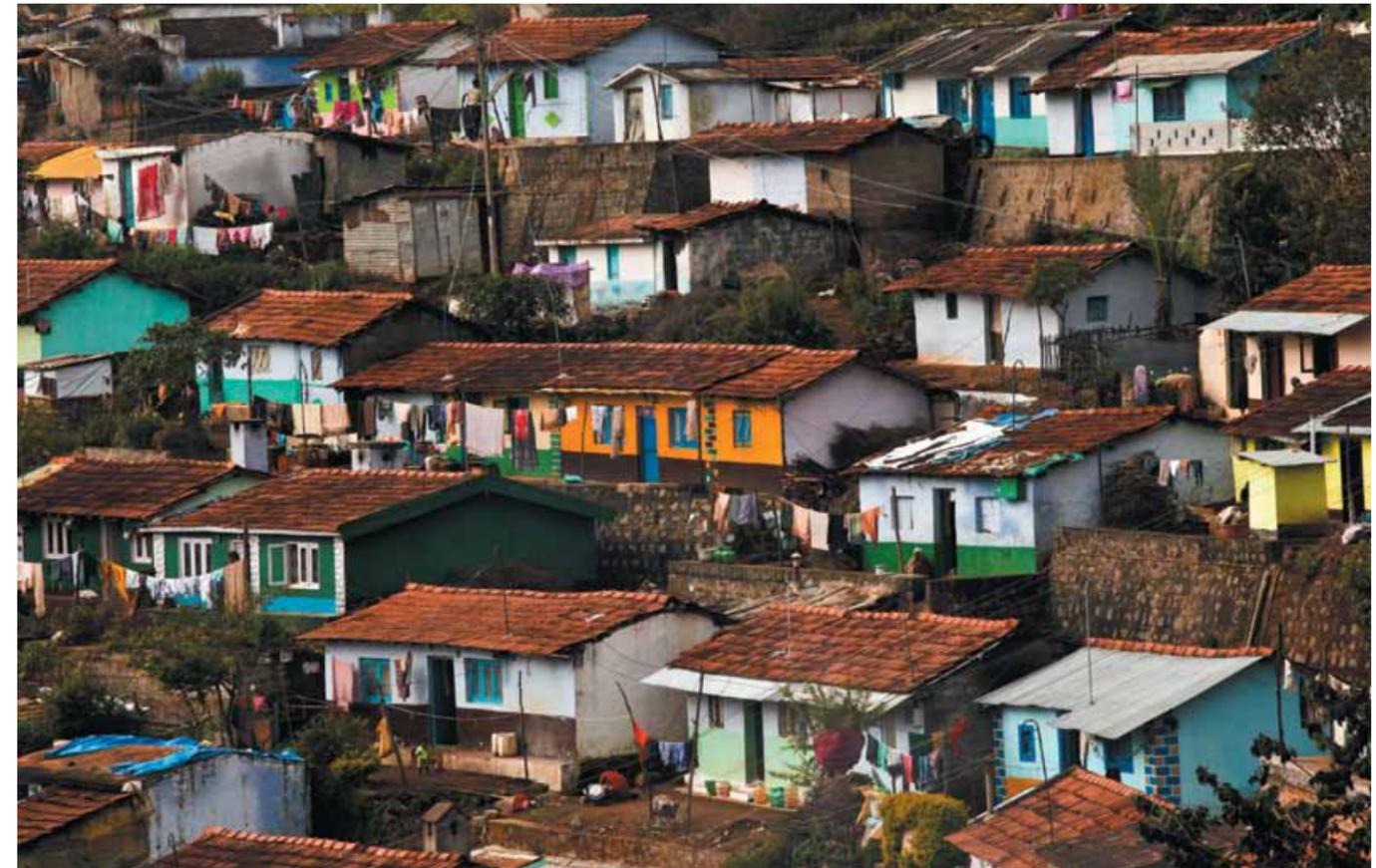


The ruins of an abandoned village in Rajasthan, famous for the beautiful stone and mud structures that continue to enchant the curious tourist.





Goan architecture with its Portuguese influence shows abundant use of mud in the form of bricks, clay tiles though the structures are more refined and neatly defined.



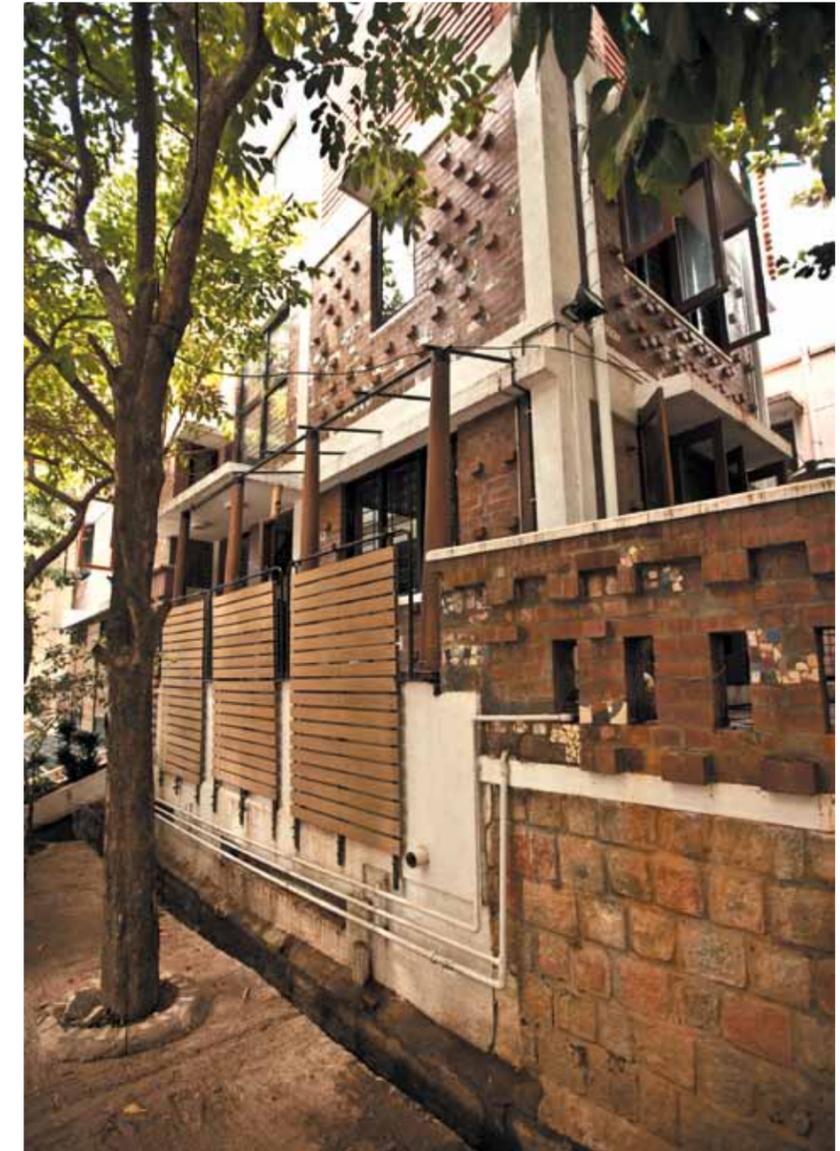
A hamlet in the slopes of the Western Ghats in Tamil Nadu, displaying an interesting array of clay tiled roofs contrasted by richly coloured walls. The remote villages again display a predominance of mud walls and clay tiled roofs.



Clay tiles, contrasted richly by the copious presence of wood, mark the structures of Kerala. The clay tiles serve as excellent rainwater run off design to handle the heavy monsoons of the State.



Clay in its modern depiction comes in the form of exposed bricks, bringing with it a raw beauty that is unmatched.



HAPPENINGS IN BRC : OCTOBER TO NOVEMBER 2014

Presentation: Trending the colours for the coming year

Colours make all the difference to a space, be it outdoors or indoors, the textures and materials complementing the same, infusing a theme and style that tells a story, creates an ambience that can alter the mood, the inclinations, making it romantic, serene, cheerful or simply nostalgic. Interestingly, the colour palette does not remain the same year after year but undergoes a transformation that is influenced by multiple aspects, starting from the economic aspects, the natural trends, the classic sensibilities, the primitive leanings to the manifestation of the exotica.

Speaking on colour, its myriad avatars, emerging trends, forecast for the coming year was Latika Khosla, Founder & Design Director, Colour Marketing Group, USA at an event hosted by the IIID BRC. Stating that multiple aspects influence colour choices and it is not easy to project colour trends as the nerve and pulse of the people need to be captured, Latika averred that mainstream trends find a diverse expression and stay for a long time. "Colour trends do not just happen but you need to analyse based on various aspects."

She added that there is both masculine and feminine entity in colour choices and the interiors are multi-textural with lots of materials working together as in a street space. Classic sensibilities too have their role to play in trends according to Latika where the connect happens backwards, reinterpreting a legacy to suit modern sensibilities. The traditional patterns prevail with the presence of materials that are old and precious as in silks, semi-precious stones, old wood along with the presence of colours such as deep blue, toxic yellow, English green and oxblood red.

The Palaeolithic influence on design offers unusual textures leaning towards fossil aesthetics, unfinished surfaces, primitive tones, with the colours veering towards stone, fur and hide, stated Latika. "The escape to the exotic manifests as details of the old resting comfortably with the luxurious modern elements, the colour palette being muted and timeless."

Payal Karumbiah of Veneta Cucine India detailed the trend cycles, the various categories and elements of influence, the manner of trend forecasting and formula used in such forecasting.



Architect Presentation: Revolutionising the experience of a space



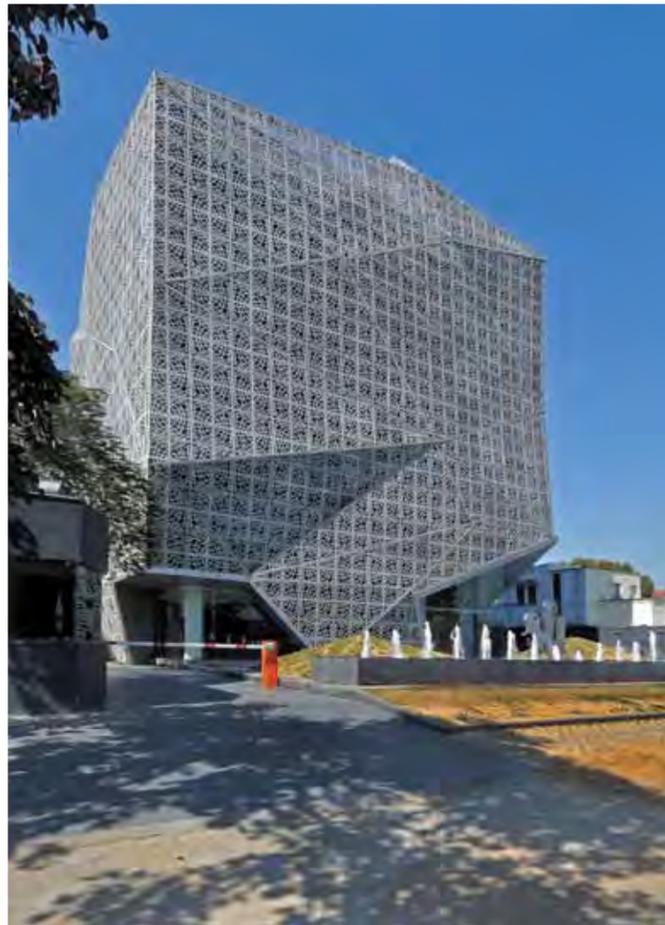
49 international awards and 63 national awards including three Architizer A+Awards in New York 2014; that is the score card of Architect Sanjay Puri of Sanjay Puri Architects. Incidentally, his designs were the only Indian projects included in this year's winners of Architizer A+Awards. In Bangalore recently to present his work in an event hosted by IIID BRC, Puri spoke extensively on his innovative designs where sustainability and contextual relevance form the key planks. He explained at length the manner in which contextual elements were used to bring in natural light and ventilation while offering a unique feel to the space through the differential design techniques. "The idea is to create spaces that revolutionise the experience of them", said Puri.

His work on the famous Courtyard House in Rajasthan was on a site that was totally bare but for the cement factory in its neighbourhood.

“The open unhindered site permitted a free flow of design that brought in natural light and ventilation”, says Puri. He infused expansive courtyards into the structure, thus eliminating the need for artificial cooling while every room was designed on an independent scale, permitting a connect to both internal and external courtyards. The multiple angles of the structure enabled every room to have a different view of the outdoors.

In stark contrast, his award winning 72 Screens Jaipur project displayed how a smaller footprint structure going totally vertical,

in a densely crowded space can be effectively designed to be contextual, sustainable and yes, iconic. Since “Use of glass façade in Jaipur would be shocking”, Puri set about wrapping the façade with *Jaalis* that are so much in tune with local design sensibilities. “The *Jaalis* reduced heat ingress by 30 per cent while simultaneously cutting down on external noise”, states Puri. The *Jaalis* also served to offer some interesting shadow play during different times of the day, adding to the interest of the space.



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