

# antarya



Bangalore Regional Chapter



## TEXTILE YOUR INTERIORS

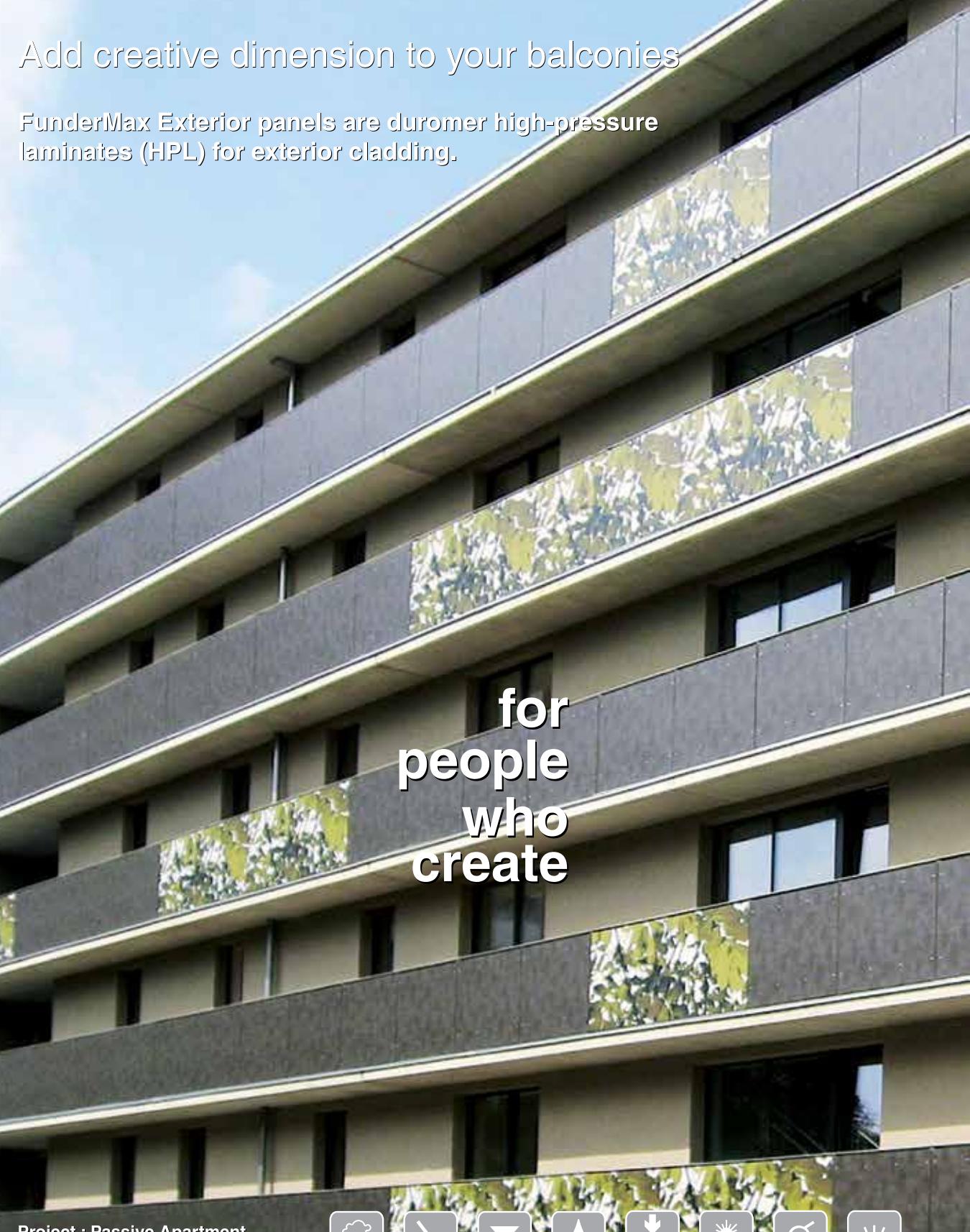
SPECIAL FEATURE  
A JOURNEY OF ELEGANCE WITH D'DÉCOR

MASTER STROKES  
**SHARUKH MISTRY**

CONVERSATIONS  
**B S BHOOSHAN & BIJOY RAMACHANDRAN**

DESIGN SPECTACLES  
**ISLAMIC CEMETERY, VORARLBERG**

# exterior



Project : Passive Apartment  
Location : Austria



Facade Claddings   Balcony Claddings   Partitions   Railings   Fences

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#### CHAIRPERSON'S FOREWORD

Dear IIID Bangalore members,  
Wishing you a happy and festive Diwali!

We recently completed a workshop on "Surfaces" in association with VISTAAR as part of the Continuing Education Program (CEP) program. CEP is designed to assist practicing professionals to master new knowledge and improve their skills to meet changing requirements of the profession and also to responsibly meet the role entrusted by society to designers.

The 'Chapter Exchange Program' is a new initiative by IIID to foster fellowship between constituent Chapters/Centres. The first leg of the first ever Chapter Exchange Program happened when Jaipur & Hyderabad Chapters joined hands to take the IIID flag forward. It is now our Chapter's turn to commence the next leg of this program and Bangalore IIID has decided to host the same in the coming quarter of this year.

Kolhapur Regional Chapter is hosting the 10th National Convention of IIID on 31st Jan, 1st & 2nd Feb 2014. Let us plan in a group to attend this convention on interiors and of course, looking forward to seeing you all in the upcoming events...

#### BINDI SAOLAPURKAR

Chairperson IIID BRC, 2012 – 14  
[iiidbrc@gmail.com](mailto:iiidbrc@gmail.com)

# PASSION CAN TAKE YOU PLACES. FOR US, IT IS THE PINNACLE.

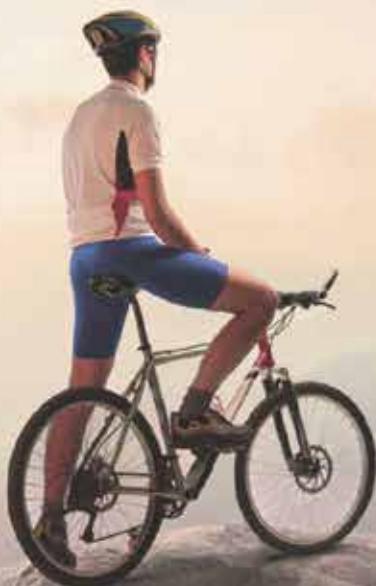
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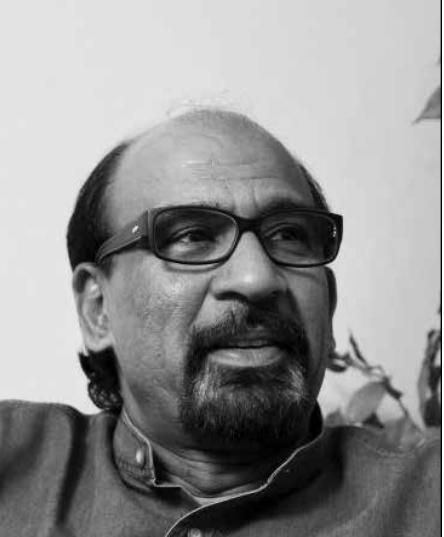
REVIEWS...

"Antarya is distinctive, a visionary, is vibrant and innovative, it is aesthetically technical, serves as a fusion of the past, present and the future." **M.S. Harsha,** Architect and Interior Designer

"Antarya magazine is a glimpse into the Interior Design profession and Industry. It shows how IID functions and helps the professionals to promote their business." **Architect Vinit Agarwal**

"Antarya is a novel approach to design publication. Every issue is a fresh, surprise collage of passionate design, vibrant colours, relevant products and truly amazing talent!" **Architect Prashanth Raj**

"Antarya is one long awaited forum in which work gets noticed and appreciated by peers and experts which really makes a difference. The magazine as such is very tastefully printed and has a certain class which makes people pick it up and read." **Architect Asha Dhyanidhi**



## EDITOR'S NOTE

The dedication continues...

The Antarya team's dedication to come out with special features, interviews, make each issue unique, continues with the current issue focusing on 'Fabric' as the theme turning out to be as exclusive as its predecessors.

The current issue on fabric has evolved after tremendous response from designers and the industry. The issue discusses in finer detail the weaves responsible for designers lending their magic touch to interiors.

The forthcoming issue will focus on 'Glass' as its theme. We welcome members to share their work where they have used Glass in their projects in an innovative manner.

Antarya has improved its circulation and is now directly couriered, besides Industry members, to Green Building Council members, Builders & Architectural Schools. We are also encouraged by the number of enquiries from architects and designers from other cities, requesting for Antarya copies—a pat for our dedicated team for achieving this in such a short span.

Antarya team looks forward to more interaction with the fraternity and will be happy to provide any assistance required to publish good works.

Please address all correspondence to:

## DINESH VERMA

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## COVER STORY TEXTILE YOUR INTERIORS 06

Contributors:

Priya Agarwal, Sadhvi Jawa, Suhana Medappa

Featuring:



Alex Jacob



Husna Rahaman



Pavithra Sri Prakash

## SPECIAL FEATURE

### A JOURNEY OF ELEGANCE WITH D'DÉCOR 14



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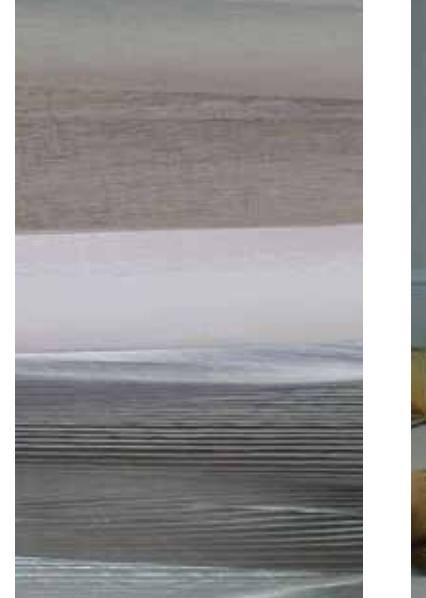
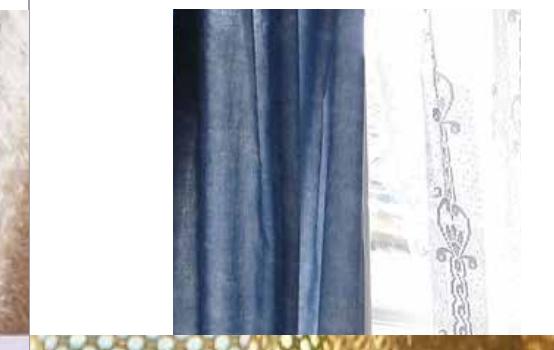
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# TEXTILE YOUR INTERIORS

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The PRINT Journal

Fabric is a medium used for centuries in décor as flowing drapes to lend privacy. Be it as partitions for rooms, windows or for the royal four poster beds, the free flowing spaces of palaces and mansions saw expansive play of fabric draping the interiors. Fabric also found its way in the form of exotic upholstery as well as cushions and duvets, not to mention the exquisite carpets that decorated the floors. Be it Classic, Colonial, Victorian, or Indian style of decor, fabric played a major role. Even the tents erected in the deserts of Arabia were made of fabric.

Modern décor not surprisingly takes a leaf out of this ancient practice to bring in colour and creativity into the interiors. Fabric manifests not just as upholstery, drapes and floor rugs but as wall décor, lighting, stunning partitions, ceiling décor, as acoustics to regulate sound.

## RELATE A STORY

Fabric in a décor is an excellent medium of expression to be used to relate a story, be it the reflections of a farmer in a remote village, an artisan striving to lend a tangible feel to his creativity, or deliver a message through the myriad colours and patterns woven. The patterns and textures displayed in fabric can be effectively used to showcase individuality and innovation, a unique representation that can be both arresting and thought provoking in manifestation.

Interestingly, this story can be related in many ways, be it through intricate embroidery, patch work using waste cloth, shaped like animals or birds, trees to speak a jungle theme, through crochet work, by painting on the fabric.

Just as options are aplenty to display creativity and relate a story, the materials used in fabric too are diverse. It can vary from synthetic to natural fibres such as cottons, silks, brocades, chiffons to jute and banana fibres, the colours both subtle and vibrant, the patterns loud and subdued, each making a unique statement.



## USE BASED ON TEXTURE

With each material offering a different feel, the manner of use too varies. Sheers that are totally delicate, lend to intricate folds and smooth falls, serving as excellent materials for curtains and even as drapes over four poster beds. Banana fibre is exactly opposite, the texture tough, enabling the use as chattaïs or as wall panelling. Brocades and silks, with their rich texture, form excellent materials for wall décor as well as serve as exotic partitions.

Linens, with their softness as well as light permissible texture, serve as wonderful material for a backlit screen. Even more exotic are backlit linen screens with patchwork, creating a stunning pattern when lit. These can create a three dimensional effect on the space by throwing patterns and shadows through the folds and textures.

Fabric, be it silk or cotton, with exquisite embroidery, zari borders, mirror work or beads, can likewise offer a stunning wall art that can be framed to form the highlight zone of the interior. Soft fabrics are best suited for seating, given their comfort feel. Likewise, natural fibres like cottons are excellent material for seating as they breathe easily.

## CREATIVITY THROUGH RIGHT CHOICE

Fabric allows unlimited display of creativity and this can manifest as a blending of different kinds of fabric, through weaving, dyeing, printing, painting, embroidery, patchwork. Natural fibres like banana or jute can also be treated finely to yield a soft fabric that can be dyed and printed to offer an exotic final product. Likewise, the prints on the fabric can be deftly used to create an illusion or portray a theme.

The space in the room could be effectively altered through stripes, horizontal or vertical, giving an illusion of vertical or horizontal expansion. Similarly, the prints used could be tuned to the size of the room, smaller prints in smaller spaces and larger prints for larger spaces so as not to crowd out or become insignificant as the case may be.

The prints or patterns can also be customised to reflect personal messages or experiences and these can be in the form of cushion covers or in pillow covers. They can also be customised to reflect the theme of the room such as a reading room where sheers with poems printed on offer inspiration. These prints or images can be embossed on the fabric through screen printing techniques.

However, to make a statement, these prints can also feature as large elements that are so arresting as to become the focal point of the décor. For instance, in a fairly toned down décor, placing a cushion with the print of petals that are large and physically appear to come alive, can serve as the highlight feature of the décor.

Not only different textures can be integrated to display creativity, varied materials too can be effectively woven in. For instance fabric can be blended with metal fibres, where thin thread-like metal fibres are woven dexterously into the fabric. Gold and silver threads are excellent examples of this. Similar creativity can manifest in floor rugs woven to reflect a theme, story or just individual creativity.



The traffic element in a room however has a role to play in the choice of fabric. Natural fabrics stain easily and wrinkle faster compared to synthetic fibres and hence not highly suited for high traffic spaces. Yet, natural fabrics like silk lend a rich tone but require high maintenance. Likewise, Jacquards and brocades are rich and offer an opulent feel to the décor.

## COLOUR AND PATTERN IT RIGHT

While it is a good idea to confine to three shades rather than multiple shades that can be overpowering on the eye, when blended with multiple patterns, it is better to adopt similar range of colours where the range blends easily and flows.

The kind of colours and patterns adopted in the fabric can effectively set the mood of the décor. The choice of colour, texture and patterns of the fabric would thus have to be chosen based on theme as well as functionality of the room. Neutral shades and toned down patterns are best suited to sleeping sections while vibrant, warm shades go well in living spaces.

Jacquards and brocades, like silk, form excellent wall décor, especially when teamed with zari embroidery and reflect vibrant colours. They serve as stunning highlight zones in large rooms if framed exotically and showcased right. Fabrics can also incorporate colours and loose weave that creates patterns in a subtle manner in the absence of noticeable motifs.

Tying and dyeing is an exotic way of showcasing creativity and use of the same in décor. While these create exquisite unique patterns based on the manner of tying the fabric before they are dyed, they serve as excellent highlights when used in décor in the form of cushion covers, wall hangings and bedcovers. Block prints are likewise excellent showpieces of creative representations when used in décor in multiple ways.

## LIGHT IT, PARTITION IT IN FABRIC

Saris are excellent room dividers, especially if they incorporate exquisite colours, prints and rich textures. These can be sandwiched between glass to serve as a stunning piece of décor, especially if the material is rich such as silk, brocades, where the richness and vibrancy of the fabric is showcased. Intricately woven fabric reflecting intense creativity also serve as excellent partitions, especially when there is plenty of play of colours and patterns. Similar creativity can be brought into table runners as well as bed runners and cushion covers.

Natural fibres are excellent materials for lampshades, be it jute, banana or even bamboo fibre. They are also excellent to be used as blinds as well as on walls and ceiling as cladding. It is however best to retain their natural colour instead of dyeing because of their uneven texture. If patterns are desired, it is best to have them printed on.

Transparent fibres like organza, tissue serve as good options for back lit panels or lighting on the ceiling. Even natural fabrics like cotton, linen, silk are excellent for letting the light pass through and hence serve as good options for lampshades. While raw silk may not let light pass through as much cotton or linen, it has a rich texture that is lit up and appears exotic as partitions. They also serve as attractive blinds in a décor displaying Indian theme.



## INNOVATING WITH FABRIC

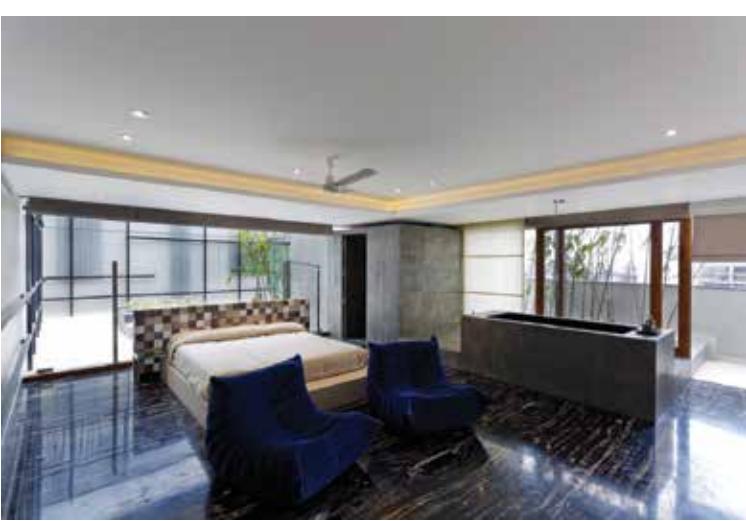
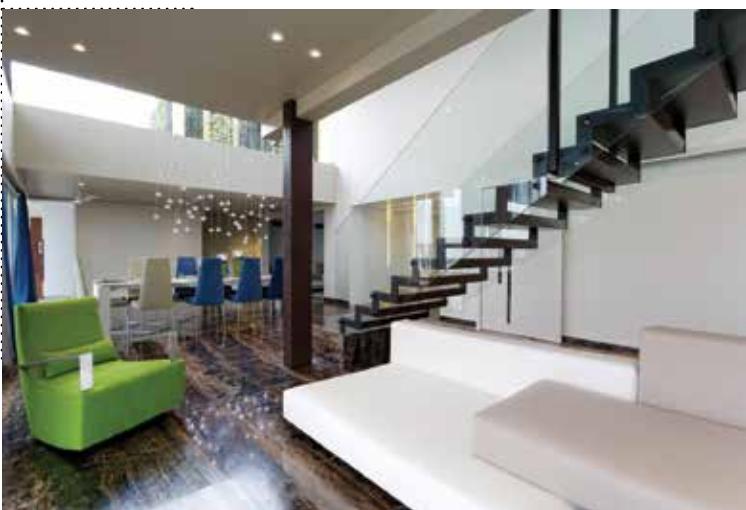
Left: The ceiling reflects a fabulous fabric lighting feature, the chenille fabric serving as an exotic shield for the light above. The fabric light creates interest, serving as a highlight for the space.

Bottom left: The black fabric cladding on the walls with the gold coloured leaf patterns serves as a stunning contrast to the warm wooden interiors in this entertainment room.

Bottom right: The totally pristine white background and furnishings of this space is charmingly broken by the yellow and brown fabric cushions complemented by the contrasting greyish black rug, lending difference and interest to the space.



Architect **Alex Jacob** of **Alex Jacob Consulting Architect** uses fabric innovatively in décor where it is not confined to just upholstery and drapes but extends to ceiling, lighting and cladding on walls. His projects reveal that even a predominantly wood based décor can infuse softer tones by a deft play of fabric, where it can incorporate a large display of drapes or a charming fabric cladding of the walls.

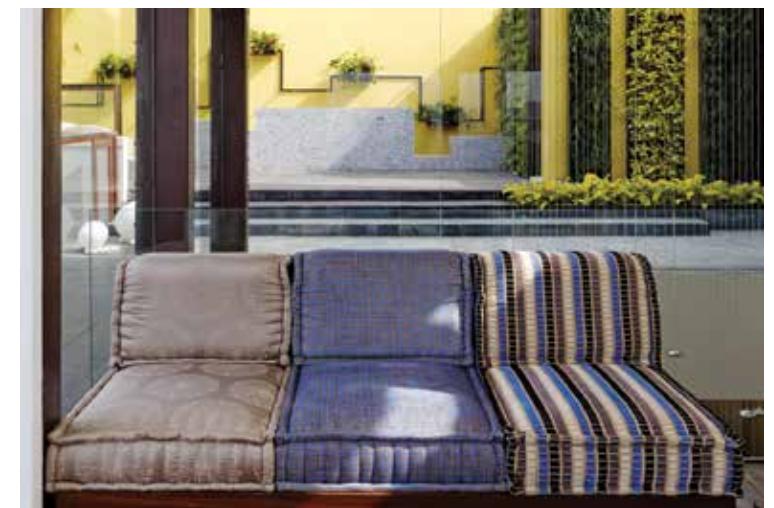


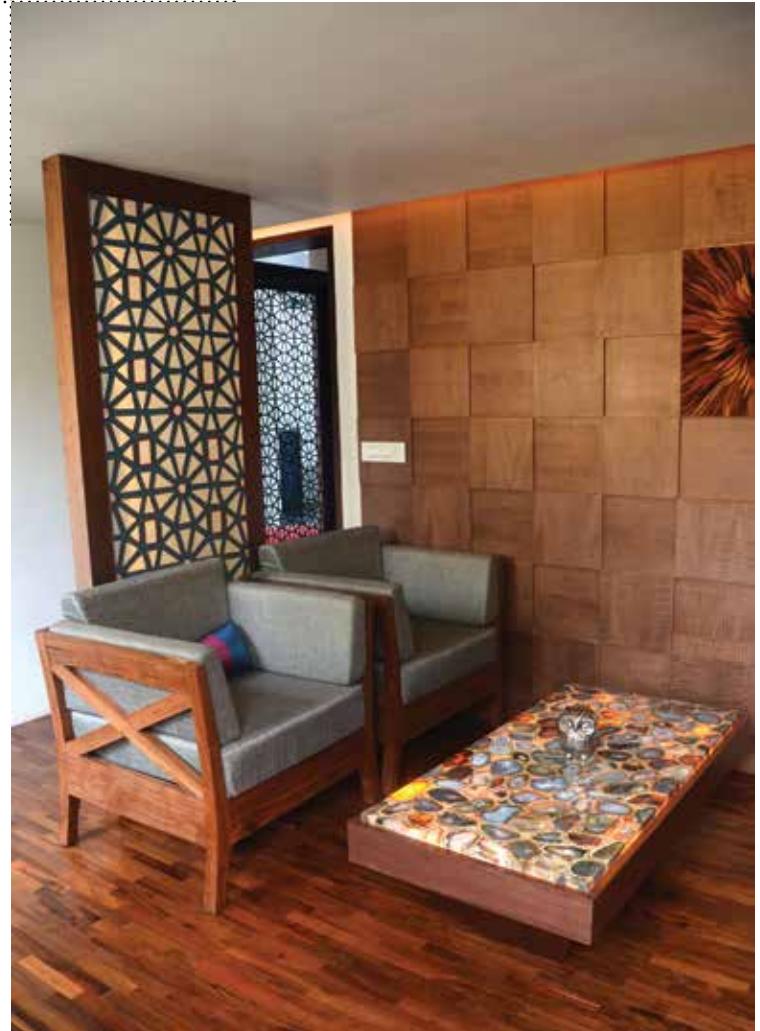
## DIFFERENTIATING WITH FABRIC

Left: The dining space marked by the delicate yet arresting light fixture, complemented by the glass railings and light on the eye metal chairs, appears vibrant and captivating by the play of contrasting colours of fabric used in seating. The velvet fabric lends softness and a feel of comfort amidst the straight lined contemporary setting.

Middle left: The chequered headboard and contrasting deep blue velvet seating bring in all the character to an otherwise toned down spacious contemporary styled bedroom. The fabric headboard displays a combination of three types of materials and colours that are patched together to create the interesting pattern. The velvet feel dark blue fabric in the seating serves as an arresting contrast to the pastel bedcovers.

Bottom left & right: The glass enclosed refreshingly green patio is lent warmth by the play of colours and contrasting patterns embodied in the fabric used for seating. A blend of Eastern sensibilities is evident in the different shades and patterns used along with the mattress design lent to the designing of the seating. While the inspiration of the mattress feel and the conflicting patterns is Eastern, the setting is totally contemporary and modern, reflecting a fine fusion.



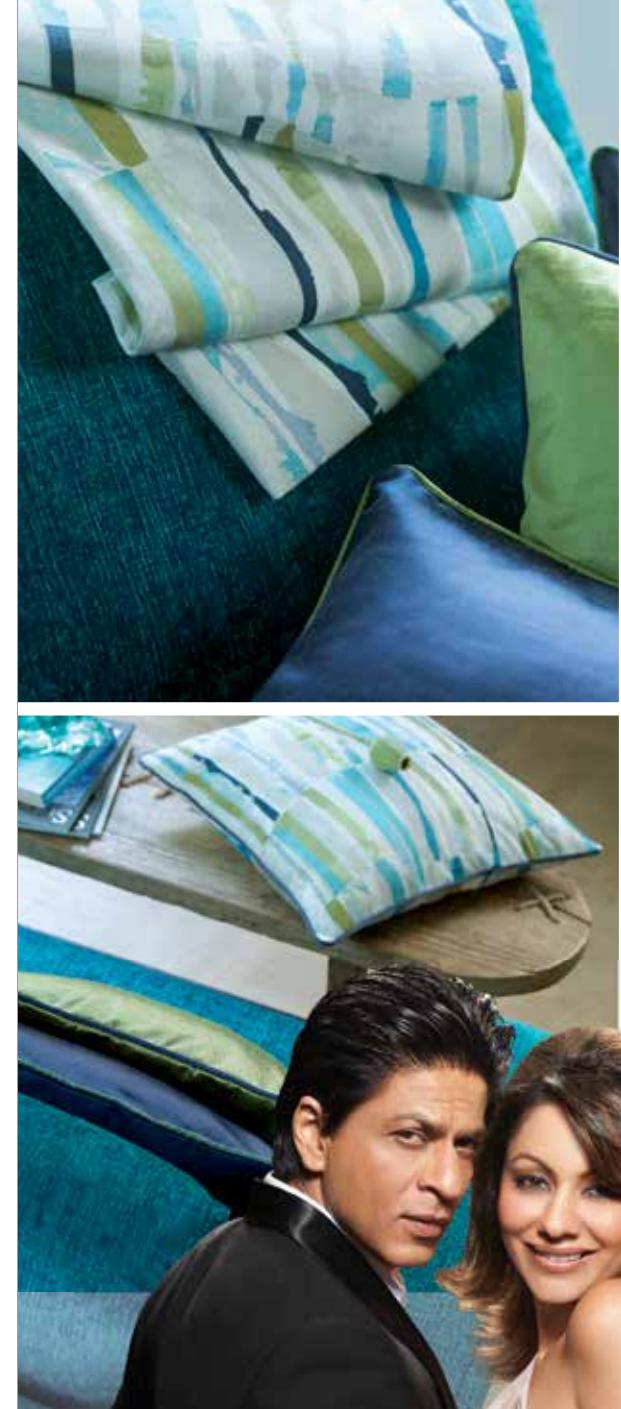


Architect **Pavithra Sri Prakash** of **Shilpa Architects** transforms the ambience of a space through fabric panelling and partitions. Her varied use of patterns and colours on the walls deftly teamed with picture frames lends ample character while the backlit fabric partition addresses both functionality and charm of the space.

## PANELLING WITH FABRIC

**Left:** The backlit fabric partition reflects logo based moushrabieh design that has been recreated through intricate applique work and sequins. While addressing the privacy of the space, the partition also serves as a lighting element in the décor, the back lighting displaying the spectacular work done on the fabric.

**Bottom left & right:** The fabric wall panelling here is a mix of handloom, silk, Khadi and Chenille, the Tussar silk incorporating a block print of traditional Indian art while the Khadi manifests as a vibrant orange border. The carved wooden frames blended with the panelling lend character, dimension and charm.



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# A JOURNEY OF ELEGANCE WITH D'DÉCOR

Fabric in any form, with its colours and patterns has the power to transform even the most mundane of decors. The sheer character and elegance of the fabric used infuses a theme, a story, vibrancy, a cheer that is totally unique, perched on a platform of its own. Be it in the form of upholstery, drapes, partitions or wall décor, fabric can be effectively used to infuse life into a décor, set the mood, alter the visual volume of spaces by creating an illusion of expanse or create a cosy corner.



The Flamenco range

The patterns used, be it plain, stripes, checks, floral, create the desired visual effect on the space by either visually altering the physical dimensions of the space or making it more lively and feminine with floral representations. Elegant silks in plain pastel shades or rich vibrant colours can lend a touch of royalty, richness to the décor while crisp cottons in floral representations bring in the freshness of outdoors. Brighter, contrasting shades of cushions and upholstery impart warmth while the cool blues and similar lighter shades lend a soothing aura.



The Flamenco range

## GLAMOUR IT WITH FLAMENCO

Be it the living room décor, or bedroom, or the family space, the *Flamenco* range from D'Decor allows you to indulge, offering you a stylish combination of cool understated design that is embellished with contemporary stripes, laid out in a rich palette of colours. The contrasting textures offered makes this luxurious range as irresistible to touch as it is to the eye.



The Platinum range

Whether it is to create a bold focal point or a soft subtle finish, a set of natural prints in light floating fabrics, or luxurious heritage patterns in rich embroidered textures, fabric packs it all, offering an interior that can be totally exotic, stunning.

### SAY IT WITH PLATINUM

It is a perfect marriage of natural simplicity with a hint of the ornate, evoking the pure beauty of nature with the ethereal glamour of old world architectural details. *The Platinum* range is rich in detail yet comes to life in light contemporary fabrics that gently stir the fragrant summer breeze.



The Venezia range

D'Decor turns these fabulous features of fabric to its advantage with its stunning range of collection, each packing in exotic patterns and textures fashioned by a range of international master designers, journeying deep into the core of the décor to occupy its soul, creating a totally new name for elegance and beauty.



The Imperial Purple range



The Elmo Black &amp; Grey range



The Elmo Laguna range



## A SPLASH OF COLOURS

Created with deep rich shades and lavish jewel tones to soft serene hues inspired by nature, colour forms the heart of all D'Decor creations. The secret to creating the perfect ambience, colours stir the senses, entice imagination, unlock a home's true beauty.

The *Imperial Purple* range is not only strong, striking and majestic in representation but also makes a great colour statement, serving as the perfect companion to a whole range of other shades that vary from vivid bright shades to calm cool neutral tones, filling the interiors with warmth, vibrancy in true designer style.

The *Green Cosmos* packs in a range of brilliant shades of jade and turquoise, fresh natural greens, vibrant colours that journey through an eclectic range of colour palettes created by mixing and matching stunning tones with a touch of understated calm.

Its range, *Elmo Black & Grey* offers woven and chenille fabric that are striking and warm, speaking a story of elegance and style.



The Avallon range

## INSPIRED BY BAROQUE

The latest collection *Avallon* is an inspiration from the 17th Century Baroque style of Italy. Made from the rich Chenille fabric that is known for its sheen, it is complimented with intricate shiny patterns. The colours midnight blue, ocean and dusk flatter the interiors, creating a celebratory ambience. In short, it is glamour with a hint of magic to enhance the festive spirit. The bold beautiful designs incorporate intricate weaves with clear easy flowing detail that produce grandeur, exuberance and élan, expressing a dramatic style with elegance.



D'Décor is renowned both in the domestic as well as international market for its creativity, innovation and a broad spectrum of designs and colours. With exports reaching to over 65 countries across the globe, D'Décor has carved a niche in home furnishings, featuring the designs of some of the top international design studios. Spearheading this success story is its Creative Head, **Simone Arora**, who shared her views on the company's designs and innovative ventures with Antarya

### **What makes designs of D'Décor unique as compared to rest of the market?**

Our artworks are personally selected from designs and trends displayed at the international arena, where we collaborate with the best of the art studios across Europe. These artworks are varied in handwriting displaying a broad spectrum of designs and styles, varying from florals, damasks, paisleys, eekats, stripes, ethnic, geometrical, modern and architectural textures with some customised to suit specific individual needs.

### **Is there free flow of thought and creativity permitted in finalising the designs or is it confined to meet specific criteria?**

A very large part of our artwork is sourced internationally where the international designers offer their unhindered creativity and innovation. While some are also tuned to suit specific customer requirements, the main accent is on colour, the offering being a unique and eclectic range to suit a broad spectrum of customer needs. The designs sourced are stored digitally in our archives and modified by changing the colours and yarns, thus creating a totally new product every time.

### **What draws the customer, design, quality or innovation?**

It is the superior quality, design and colour offered at affordable rates. Our product is also innovative which makes it attractive, besides addressing unique requirements such as fire resistance, outdoor use of the fabric. We have a separate range of fabric that can be used for outdoors where it can be exposed to rain, sun and all weather conditions without getting

damaged. Our colourways, totalling close to a hundred across the world, too are very varied and specific to suit different market conditions. The range of colour offered in North America would be different from what is offered in the Middle East or Europe as well as back home in India. The designs again are totally varied, ranging from international, modern motifs to ethnic leanings, giving a wide choice to the customer.

### **How versatile is your product in blending different yarns, patterns, colours, prints?**

It is a broad spectrum of chenilles, velvets, sheers, linens, poly cottons, textures, digital prints and patterns to suit different applications. The artwork is totally versatile, being sourced at international exhibitions, from leading international design studios.



BY NANDHINI SUNDAR

# DESIGNING SENSITIVELY FROM THE HEART

Boyish enthusiasm, a sensitivity that stems from deep within, a charm that pervades the room the minute he enters, imagination, creativity, designs that literally take your breath away, yet one that is totally grounded, pinned down to earth to elements that speak the language of green, all of which leaves you at the end asking for more. Meet **Architect Sharukh Mistry**, Principal Architect, Mistry Architects, not just a master designer but a human being who speaks the language of love, sharing, bonding and of course sustainability.

The first thing Sharukh, the young architect from Mumbai who moved to Bangalore in 1980 and made the city his home, tells you on calling him for a feature is that there is no "Mistry but Mistris". For, he reiterates, his four decades of spectacular work in the field of architecture is the product of his team and not a single person. "You need to feature all the thugs who have been part of this team and I am the biggest thug of them all", he says with his big grin.

Since featuring all the "thugs" was beyond the purview of this section, he reluctantly settled to the "Mistry" feature. Then emerged some mind boggling designs where the structure and products were created from the most mundane, discarded elements, where an apparent disadvantage was turned into a design feature.

Thus, in his projects you will not be surprised to see discarded Bandlis, the iron bowls used to carry construction material, converted into

outdoor lampshades or junked iron tanks turned into boards. Likewise, when a crack developed on a large stone that flanked the entrance door in his residence project, The Tandon House, Sharukh decided to take the crack through the door too, turning it into a stunning design feature.

When his wife Architect Renu, received a request from the Air force to design a lounge bar at an unbelievable price of Rs 3 lakhs, which incidentally included the 10 per cent design fee too, the Mistris took up the challenge. And design they certainly did, well within the budget by simply scouting around their junkyard, turning discarded parts of old aircraft into design elements in the project. Thus, the seating came from the aircraft, broken shards of glass were used as wall cover, shards of metal were set into the floor, the aircraft wing became the bar counter, the missiles became the bar stools, the fuselage was turned into a light receptacle, cluster bombs became light fixtures that offered

an amazing lighting effect, the nose of the aircraft was turned into a decorative piece at the entrance while a pair of old boxing gloves served to bring colour to the walls where the paint was punched on to cut down on the quantum used.

Even when frustrated at not landing at the right design can bring up a spectacular design if Sharukh's projects are to go by. The Bangalore International Exhibition Centre is a classic example of that. The roof in this project is nothing but a design element that emerged when Sharukh shook his interlinked palms over his head in frustration, only to realise that he had landed with the perfect structure for his project. The roof of BIEC reflects the linking of palms in its intertwined metal frame.

Sensitivity not just to environment and nature, but to the people addressed, the ultimate occupants of his projects, reflects strongly in all his work and designs. His design of the SOS villages in various parts of the country



Kovai Villa



Prana

is a case in point. With misty eyes Sharukh explains the way his designs needed to approach this project.

"Every extra rupee that I spend is a rupee taken away from the destitute mothers and children. I had to keep this totally in perspective and come up with a design that addresses the needs of the children and mothers yet is cheap without compromising on the aesthetics of the architecture."

And thus emerged some arresting design features in the SOS village where local materials were used, simple walkways and internal spaces marked the campus, décor elements through local craftsmanship was brought in like the metal handicrafts of the Bastar Tribe in Raipur. Little details that satisfy the curiosity of the growing years too were addressed in the form of peeping holes on walls at the child's level. "Children love to peep through walls and often many line up to do so", says Sharukh with his charming smile.

Likewise, little verandas with seating were created outside the individual homes where children can sit, study and relax and interact with their peers. Small internal courtyards were also created in some of the villages to bring in a sense of openness to the spaces.

Interestingly this sensitivity and human aspect that deeply characterises him is further evident in the community and education centre, Drishya Kallika Kendra, which he designed on a garbage dump next to a Nala in one of the slums in Bangalore along with his wife Renu. "This is essentially a brainchild of Renu and my daughter Arzu along with the rest of the Mistry team that includes my son-in-law Jackson who took this involvement beyond the building to the children addressed here."

His project Agasthya which houses a rural learning centre in Kuppam in Andhra Pradesh is another case in point of his penchant for doing the unconventional, delivering the extraordinary.

Incidentally, his sensitivity extends not just to the not so fortunate sections of the society but also to those who choose to make a difference in the community but fail to have the means to realise that dream. "The Rangashankara project took us eleven years to complete because we had the land but not the funds to erect the theatre and community centre", says Sharukh.

Ultimately however, funds did trickle in and what emerged was a stunning design where the theatre housed no acoustics on walls but the mere design element ensured that the speaker on stage could be heard in the last row without aid of a mike.

While all of Sharukh's designs are not only unique and arresting, each telling its own individual story, his projects are universally green, using mainly natural materials and leaning heavily towards sustainable features. His experimentation with natural elements starts from his very first project when he experimented with lime plaster instead of cement.



Ashwini



SOS, Raipur

"The experience was very interesting as in the first instance we were not aware of the mode of construction when lime is used in place of cement. The vertical wall had been erected the previous day with a lot of satisfaction only to find the next day the whole thing had slumped like a pack of cards. We were not aware that the method of construction here is linear moving in the horizontal direction and not vertical", says Sharukh, grinning.

But the journey that started with his wife Renu, from "the dining table where our initial designs were made and later moved to our garage", has certainly been enriching, adds Sharukh.

His intense leaning towards sustainable architecture, which incidentally started way before any talk of sustainable construction methods emerged, is similarly evident in the manner of handling his projects as well as the materials used and the way they were represented. And this leaning towards sustainability extends beyond his hallmark of natural stones and materials, exposed concrete and brick work, recycled features, abundant natural light and ventilation, free flowing spaces that blend in the green outdoors effortlessly.

For instance, his BIEC project had two 60-year old Peepal trees transplanted, the process itself taking a period of two months. "It involved a sequence of understanding the tree, the shocks it can take", says Sharukh. The project also saw an abandoned mud quarry being turned into a charming water body, which in turn served to revive the water table in the entire region besides acting as a rainwater harvesting source.

His passionate green sense and uncompromising leaning towards sustainable options prompted Harvard Business School to carry a case study of his work to assess how sustainable methods in architecture need not preclude success; it can indeed deliver some mind boggling designs, some of which can prove to be iconic.

Sums up Sharukh contemplatively, "While design and architecture needs to be socially relevant, there is always the language of the land. If you go into a project without baggage but with a sense of reverence, you develop communication and receive information from the land." Certainly true I thought, viewing his



Elm Park



Rangashankara



Aste Bar

designs, trying to understand the way his mind worked when he placed his pen on paper to produce his master strokes.

With the interaction over, I left his office, as you can imagine, happy, his infectious smile catching on to me, my tread light on the ground, yet, not satisfied. For just like every other person who has interacted with him, I too was asking for more.

## The man from the perspective of his colleagues...

*It's hard to sum up what Mistry is all about in a single word or phrase. Each project encompasses a wide range of emotions & experiences bonding us to them & forging relationships that transcend beyond business.*

*A core value that drives the Mistry philosophy is one of sensitivity, be it ecological, like transplanting trees rather than cutting down; cultural, like encouraging traditional art & craft across the country and even social, like helping to rebuild lives and communities along the tsunami battered East coast.*

*Another aspect is the big heart with which we approach our projects - respect for people and environment is an integral part of the design approach. To us each site tells a story, and we want to make sure the story continues. We see ourselves as custodians, not owners, of the environment and our responsibility to preserve for future generations.*

*We love our architecture and we make sure we have fun doing it. The office is more like an extended family than a collection of individuals. Our Family Tree (the log at the reception) has kept a faithful record of everyone who has passed through the office over the years. We work as a family and we play as a family. The numerous trips we have undertaken have brought us closer together. This bond has helped us to take the good with the bad, the sadness with joy, the highs and lows; everything that life can throw at us and stand the test of time as a firm and family.*



## NAVEEN GEORGE JOSEPH

He is all of 28 years but the urge to start off on his own manifested right after graduating from RV School of Architecture and entering the practical world of design. But Architect Naveen George Joseph of deSquare decided to bide his time for a few years before venturing out on his own. Thus, his year and a half old design studio had to wait for over three years after graduation to find tangible manifestation. Yet, his three years of work experience in notable design firms gave him the much needed training and insight into the practical working side of architecture.

# DISPLAYING THE RIGHT DIMENSION

Naveen lost no time in putting together this valuable experience resulting in him signing up for over 8 projects within a span of one year, a couple of which are now almost completed.

One of his first projects, Rajeev Thalwar Residence was a renovation and extension of an existing small 30 year old structure on contemporary lines. The one bedroom, living and kitchen with a small garage was transformed to include three bedrooms, living, dining, family room along with a dry and wet kitchen. An old tree that existed on the site was cleverly retained even though it came in the midst of the structure. Thus, the building was designed to enable the tree to go through the roof with the rest of the spaces flowing freely around it.

The green sensibilities did not stop at just saving the tree but extended beyond in the tenor of the design adopted, with an existing set of windows opened along with a significant portion of the walls, into the garden space. Louvers were opted wherever possible to bring in plenty of natural ventilation while cutting down the heat ingress without sacrificing natural light. Introduction of skylight further added to the presence of copious amounts of natural light.

Plenty of natural stone, brick, exposed concrete ensured the design remained earthy as well as rustic. Bamboo screen in the patio provided the much needed privacy while bringing the outdoor space into the interiors. Stone pathways to the entrance foyer, interspersed with greenery enhanced the picturesque contemporary exterior while the existing traditional varieties of furniture in the interiors lent the internal spaces a step back in time.

His project Pramod Residence has a valley on one side and hill on the other where he used the views to his advantage while designing the structure. The entrance of the residence as well as the family room affords a spectacular view of the valley while the master bedroom overlooks the hill. The contemporary style is broken down by the earthy feel of brick walls and exposed concrete while plenty of natural light and ventilation mark the interiors, lending it a refreshing feel.

Naveen also worked on another renovation which incidentally was an eight year old traditional European style house that required a stronger contemporary leaning. The Prakash Residence soon got a new elevation that included a classic contemporary sloped roof with a sheer glass wall opening on to the green expanse.

Says Naveen, "While the original stone clad façade was retained, the house was given a blend of contemporary with the vernacular style, the Sadarhalli stone wall standing in stark contrast to the glass wall." A similar fusion of the contemporary with the vernacular is seen in the Kollam House where laterite stones vie for attention in the totally straight lined décor.

The Raju Residence packs in a simulated wood façade, the geometric boxes in the elevation lending dimensions. The vertical expanse of the elevation is further cut by opting for multi-levels, while the extruding balconies add an interesting element. The simulated wood façade too stands in stark contrast to plain white walls adding another dimension to the elevation.

Infusing multi-level gardens happens in Dawn House where the open basement is decorated by a picturesque sunken garden which is in turn connected to a raised garden that is incidentally five feet above the ground level. "The difference in height between the two garden spaces is ten feet even though both remain connected", says Naveen. A third level of garden space manifests on the terrace to complete the green picture of this traditional European house.



Residence for Pramod



Renovation for Rajiv Talwar Residence



Raju Residence



Noufel Residence



Renovation for Prakash Residence





## SAQIB KHAN

It is barely three years since he graduated, yet his firm is already two years old. What is more, at 26, he has nearly 30 projects to his credit, some completed while others are in construction stage. Meet Architect Saqib Khan of Enif Designs, a student of the prestigious RV School of Architecture. His range of projects includes apartments, villas, individual residences, along with commercial interior designs.

# STYLING IT TO REQUIREMENT

The Vaastu Hillview, one of the half of a dozen apartment projects that he has handled accommodates a series of geometric boxes, displaying harmony in scale and form, the dimensions cutting down on the vertical expanse. The glass patio railings further add lightness to the concrete structure while the interiors afford plenty of natural light and ventilation through clever designing and free flowing spaces. The stone clad compound walls further lend a natural element to the contemporary style.

Similar depth and dimensions in elevation are seen in his other apartment projects too, be it as varied contours in the structure or through fine blending of colours, cladding, even play of greens.

Clever designing is again seen in the manner of his handling the Resalath Residence which is on a 30x40 site. Here the expanse of outer wall is textured, interspersed with louvers, depths and projections in the façade. Given the smallness of the site, the setbacks are deftly brought into the structure with the compound wall serving as a picturesque elevation. The railings of the balcony host louvers, where the open space is also weaved into the interiors.

His clever handling of the design in a small plot is further brought to the fore in Sahil Residence which is housed on a 20x30 site, yet accommodates three bedrooms, living, dining and study. Incredible as it may seem given the smallness of the site, Saqib has cut down visually on the steep vertical elevation that the structure invariably is by merely playing with the angles and colours portrayed in the elevation. Thus, besides incorporating the setbacks effectively into the interiors, the compound once again becomes part of the elevation. The stone clad balconies and texture painted walls further give a horizontal illusion and character to the structure.

Plenty of character and charm mark the Brahmanand Villa with plenty of wood as well as simulated wood marking the façade amidst the stone clad and expansive white walls. The stone columns and Mangalore tile roof further accentuate this earthy charm with the compound wall too reflecting similar cladding in stone.

But the icing on the cake is his villa project which he is currently working on, targeting the high end market featuring ultra-luxury amenities. Not only opulence marks the design and the entire development, character and charm are layered thick in this aesthetically designed project. Set on 42 acres, each villa comes with its own gym and private pool that is large enough to house a pool party besides opening on to a canal, reminiscent of Venice. The canals, bordered by jogging tracks, are connected to a large artificial lake in the heart of the development, thus ensuring there is free flow of water through the natural slopes besides addressing the requirements of rainwater harvesting.

The villa project also comes with a mini forest to complement the expansive landscaping in the common areas as well as the extensive greens of the individual villas. Needless to say, each of the contemporary styled villas, displaying plenty of abstract form, are designed in the most opulent and aesthetic manner with each housing a charming courtyard with an aquarium, the expansive interiors opening seamlessly on to the outdoor green spaces.

Says Saqib, "We did not want the presence of an expansive landscape to preclude the option of a large kitchen garden. Hence a massive kitchen garden space has also been incorporated to enable the residents to indulge, grow their own vegetables if so be their fancy."



Mahesh's Residence



Vaastu Dewflower, Whitefield



Muneer Residence



Bobby's Residence



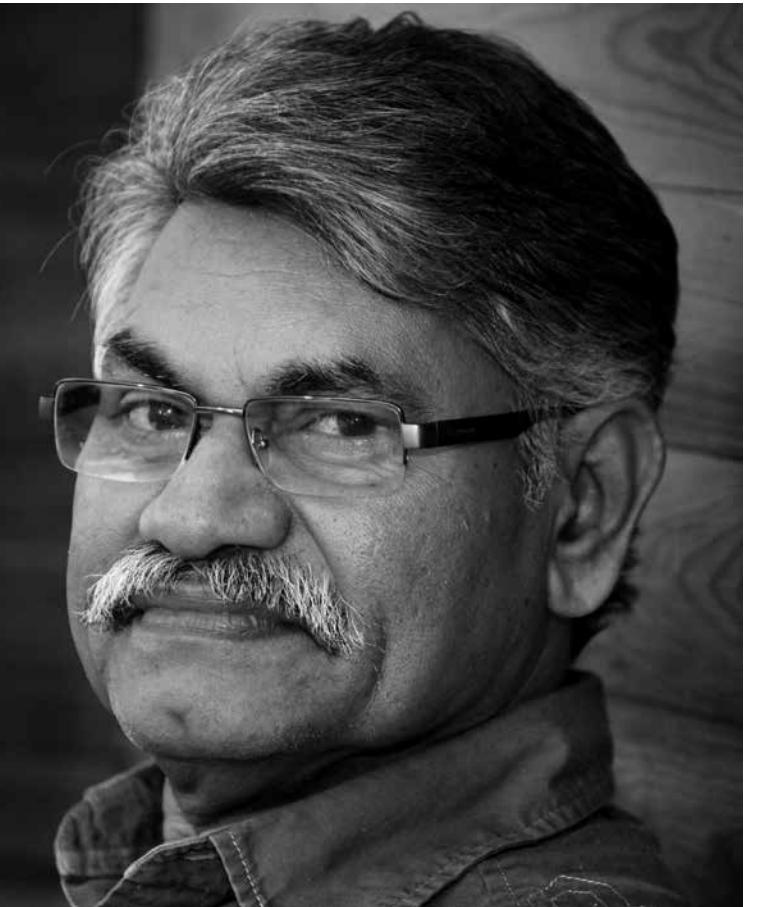
Brahmanand Villa



Resalath Residence

NO 'SHOULD'  
IN DESIGN

## IN CONVERSATION WITH



# B S BHOOSHAN

Architect Shashi Bhooshan of B S Bhooshan & Associates in his lengthy chat with Antarya, discusses issues of sustainability, design elements and manner of imparting design education in the country. While contending that there is no 'should' in design, Bhooshan avers that an inept insipid functionally deficient building is bad architecture however sustainable the construction may be.



**Q. Your style displays strong inclination towards curved or vaulted roofs. Is it because vaulted roofs reduce heat ingress or is it merely an aesthetic inclination?**

No single criterion has influenced our work. My early work had been on low cost housing and an aesthetic search for a critical regional vocabulary and to that extent, used roof as a strong element. Vault came as an extension of this search as well as our preoccupation with cost reduction in construction. With the use of filler slab using hollow blocks, I found vaulting and shells with such blocks attractive in more than one way; in reducing heat transfer, in making partially precast RCC vaults possible thus avoiding centering, etc.

**Q. There is plenty of experimentation with materials in your construction and design. Has this innovation enhanced the sustainable feature of your structures?**

To start with it was a preoccupation with reduction in cost. To be frugal in construction. That led to use of stabilised mud blocks, uncommon timbers like coconut wood, tile roofs, stone, exposed bricks and hollow blocks. Later that developed into an affinity to experiment with materials aesthetically, to a materiality and a revolt against machine produced smooth surfaces. But now, we use industrial products as an alternative too. Industrially produced smooth surfaces also have material surface quality and it contrasts with natural materials effectively. Sustainability was an added extra, a part of our evolution. We did work on eco-sensitive architecture without being overtly conscious of it.

**Q. What should be the primary factor of focus in design, aesthetics, sustainability or functionality?**

Personally, I don't like to put a greater stress on any one factor. Many valences should coexist equally if you want to call anything as a work of architecture. But any factor could be a point of departure to start with in developing a design philosophy. An inept insipid functionally deficient building is bad architecture however sustainable its construction is.

**Q. How popular is sustainable architecture? Do you think architects are moving more towards sustainable elements now as compared to**



**"THE SKILL TO LEARN ENDLESSLY AND THAT TOO SELF LEARNING, NOT WAITING TO BE SPOON FED, IS A CRITICAL PRIME QUALITY AND IMPARTING THAT SHOULD BE THE PRIORITY TODAY IN EDUCATION"**



**earlier, not to earn a green tag but because they truly believe in it?**

Yes and no. I am really not sure. Firstly, sustainability is a debateable concept. I would like to use 'eco-sensitive' as a phrase to denote that kind of architecture. Even Green has different meaning and shades. Some architects are genuinely interested and experiment with green architecture sometimes with a missionary zeal, some may be working for a tag. Some segments of green brigade in the construction sector are trying to exploit the commercial appeal that the word sustainability has generated recently. Some are just jumping on to the band wagon.

Eco-sensitive architecture is evolving as a response to escalating environmental damage. To that extent, it has the promise of the future, but I strongly feel that eco-architecture or eco-tecture if you want to call it, should start from an eco-lifestyle and ecological settlements and cities. This can happen only if an eco-economics takes root. Until then sustainability may be construed or manifest as a 'style statement'; a tag.

**Q. Would tweaking traditional or localised modes of design and construction to suit present functional sensibilities be a better option for sustainability than expensive recyclable options and parameters specifically tailored to earn a green tag?**

Tricky. No simple answer to this. If you mean craft level technologies by traditional ones, I do not agree. For one thing, the social economic and demographic parameters on which earlier technologies developed is no more valid. We are much too large in numbers, resources are more strained, densities are much higher and cities growing endlessly. Our economy is no more organised by traditional technologies. How can building sector alone make a change? I think we need a rethink of settlement organisations, how to redeploy populations and policy directions on city growth, transport and other technologies. More importantly we need a rethink on how we organise our ever stratified societies within the cities. There is no easy formula on this. So I will not vote for one type of technological reverse march as a panacea, nor the recycling element alone.

**Q. Should innovative iconic designs also address sustainable elements and not focus merely on producing mind boggling designs, the way many do at present?**

To me there is no 'should' in architecture or design. The very idea of iconic building is to push forward an idea; a strong statement. To that extent, it is valuable as a media. But that happens only rarely and comes out from masters. But if one makes 'iconicity' as a design style and if many vie to claim a niche, our cities will be more chaotic and incoherent than they are now. Yet, I don't like the idea of controlling architectural

priorities. Our architectural education today is on a mass production mode without adequate investment on the pedagogies of design teaching. It is just happening without a debate or a plan. We are also not sure what minimum skills to expect at the end of the curriculum.

What is the core capability of an architect/designer? Is there anything like that? The studio education today, modelled after early European models, is trying to create maverick artist individualistic architects most often unsuccessfully. We cannot hope



expression by simplistic tags or even processes. This can be counterproductive. Iconic cannot be the primary aim in design to produce quality architecture.

**Q. Design schools, specifically in India, focus on academic knowledge rather than blending learning with practical experience. Should this change with practical exposure offered from the beginning and through the entire course?**

I don't think that all schools are focussing on academic knowledge enough. Or any kind of critical knowledge. The studio training which architectural schools followed is based on practical design from the beginning. But if you mean construction practices as practical exposure, we are on thin ice. That means training youngsters to meet the demands of real estate market, which often has lopsided

to train a genius. That cannot be aim of education. There is need for diverse skills; collective team working skills, management and entrepreneurial skills, thinking and social skills along with technological skills – design, service and construction, for the design sector.

Instead of cramming all this into one individual, should we develop differently skilled specialised architects for the future? Those who come out of schools should be able to fit into an organisation or firm in different capacities, some could go into small scale sectors and some to higher specialisations. Whatever be the choice or route, all would have to be equipped to work in teams with other architects or with other disciplines.

## IN CONVERSATION WITH



# BIJOY RAMACHANDRAN

Architect Bijoy Ramachandran of Hundredhands, in his chat with Antarya discusses the current design practices and the urgent need to look at age old principles of being prudent and responsible. He extends this need for right approach to not just practicing architects but design schools too where the future generation is trained.



**Q. What is the essence of a good design? Are current designs veering away from sensible workable structures to create iconic yet impractical buildings?**

A Good design is essentially sensitive and appropriate in approach. It takes cues from what exists and contributes positively to the environment in terms of aesthetic issues like scale, proportion and typology and practical issues like resources/skills available, local conditions. It is also accessible and honest in approach with the detailing being consistent and logical. Its response to conditions is direct and obvious, the plans simple with clear formal compositions. Given the crunch on resources, it should be clever and inventive, be it in construction, materials, building systems or detailing. In short, it should be one that emerges from careful observation as well as wild speculation.

As for current structures veering away from sensible designs, I would say it is dangerous to generalize. In a city like Bangalore, lot of

sensitive work has been done though most of these have been on the margins. As a profession, we have unfortunately not been able to articulate effectively the benefits of good design to the community at large. This lack of engagement has resulted in breakdown of urban design and architecture.

**Q. Should design focus towards spectacular structural form or lean towards green sensibilities in traditional manner that are aesthetic but not unique.**

I am not sure these are mutually exclusive. Every project carries with it its 'nature' the way Kahn would describe it. Some projects are really about the background and some need to be statements. To come to a project with an a priori agenda is probably not right. Traditional architecture or the vernacular has examples of both, the heroic and the quotidian. And this predilection to now make a distinction between green and non-green architecture is flawed. Good architecture is green, the adjective is unnecessary.

**Q. Your structures lean towards local materials, skills and local conditions. Would such strong leaning towards local sensibilities and environment make green ratings redundant?**

The current fad of getting buildings rated is dangerous if this becomes the only yardstick by which to evaluate design. It reduces what we do to a simple list of items to be checked off for points.

We are working on a project in Coorg. The client was keen to get a green certification and we had to meet with a 'sustainability' consultant. She had a long list of questions - Did we have air conditioning? Of course not, was my immediate reply and she shook her head, disappointed, because if we did have air conditioning and used the right kind of air conditioner we could have had an additional point. Did we have carpeting? No chance. She was despondent. If only we had carpeting and used the right kind of adhesive - two points were assured.



We did maximize on some of the questions though - she was thrilled we had windows and that they were operable, and that there was sufficient daylight inside the building. We scraped through, getting a basic 'certified' stamp. This was four years ago and the rating systems have improved to reflect the fact that we are not building in Minnesota. But fundamental to appreciating design and innovation is the idea of creatively interpreting the challenges and finding new ways to overcome them.

The Ahmedabad based architect, Sri B.V. Doshi in our 2009 movie, Doshi, says, "I think architecture is a matter of transformation - transformation of all odd situations into a favourable condition". This essence of creativity cannot be checked off a list, and in our age of the quick-fix, where careful consideration has given way to expedient evaluation the rating systems is a Godsend. If as per our current rating systems, Antilla, is platinum rated then there is fundamentally something wrong in how we define sustainability.

**Q. Your style is inclined towards a blend of rustic with earthy and contemporary elements, a not so oft seen feature. Does this make your designs more unique?**

This just shows our own aesthetic preferences. We love buildings that do this successfully. IIM Bangalore is one such project which successfully evokes at once an archaic, 'Indian' essence and a modern, contemporary language. We hope to produce work which transcends style and seems inevitable. Geoffrey Bawa's work also comes to mind, where the 'hand of man' is almost invisible.

**Q. Abundant natural light, volume and free flowing spaces mark your designs with louvers appearing as a signature. How can play of natural light in interiors be used to accentuate aesthetics?**

We are blessed with incredible light in India. We need to work around the glare and louvers, screens do a great job. In all projects our attempt is to create a sense of generosity using light and volume.

**Q. Colours you have used are predominantly represented by exposed concrete, wood and shades of rust with others conspicuously absent. Do you feel stronger colours dominate or preclude the earthy character?**

I am terrible with colours and this is the safe route - white for all plastered walls and all other materials in their natural state! We are trying to break free from this - but the incredible legacy of modernist architecture is tough to shake off!

**Q. Are design schools addressing incorporation of green elements in a traditional manner or is it focus only on iconic designs?**

Schools cannot be places of ideology anymore. They need to expose students to all kinds of architecture and theory. They should be like fountainheads. Teaching someone to be an architect is impossible. One can only try to instill a curiosity and an interest in the field. We all find our own way to express our ideas. It is important nonetheless to establish some values one must have as practitioners. The rest is open.

The other huge disservice schools do is to look at design as an individual endeavour, often celebrating the idiosyncratic. The practice of architecture requires a deep rooted collaboration with our clients, consultants and contractors. For something nice to be produced we all have to work together.

**Q. Are software tools taking the direction of designs away from traditional green sensitivities?**

No they do not. Software tools do not have an agenda! They help immensely in analysing and evaluating the impact of buildings on our environment.



**"WE ALL FIND OUR OWN WAY TO EXPRESS OUR IDEAS. IT IS IMPORTANT NONTHELESS TO ESTABLISH SOME VALUES ONE MUST HAVE AS PRACTITIONERS. THE REST IS OPEN"**



# LETTING BUILDINGS BREATHE



His design philosophy is about allowing the structure to breathe. Eco-friendly design to him is not just about how to build but more about how to live. Quiet, almost self-effacing personality when he is not called upon to espouse his views on what is green and what is not. Vocal in his support of everything that is green, going beyond the purview of architecture. After all, as he states, be it a laptop, a sophisticated electronic gadget or a product that is totally reflective of nature, every item comes from and goes back to mother earth.

Meet **Architect Sathya Prakash Varanashi**, of Sathya Consultants, an ardent supporter of green structures and green practices; a man who lives by what he propagates, right from his attire to attitude. His designs and structures not surprisingly are totally green, adopting end to end sustainable features and elements that require no green rating to host a tag but have the tangible structure standing tall and so evidently green.

His structures display the vibrancy of bricks, the strong muscular tones of natural stone, the freshness of naturally ventilated and lit interiors, the charm of local traditions and building practices, the local skills and locational pertinence in design, the sustainable elements that assure the preservation of mother earth.

Typically his designs adopt free flowing spaces that let in copious amounts of natural light and ventilation, the tall windows and doors placed strategically to ensure this. Interestingly, the free flowing spaces and large French windows are also aligned in a manner where there is sequential privacy, where vantage partitions appear without disturbing the free flow of spaces.

The interiors flow effortlessly into outdoor green spaces and water bodies to bring in the freshness of outdoors. This design style coupled with an inclination towards a higher ceiling and hot air vents automatically reduces the ambient temperature of the interiors by three to four degrees, keeping it naturally cool.

Courtyards and verandas feature in plenty in Varanashi's designs, a philosophy adopted by traditional buildings. His sustainable, earthy, totally functional focused designs that do not compromise on aesthetics, also find setbacks cleverly woven into the interiors as extended green spaces.

Varanashi's structures extensively use hollow clay blocks that pack in more strength than the conventional bricks and are also used to form columns with the steel and mortar packed within. Their exposed brick texture besides adding to aesthetics reduces the use of cement for plaster as well as paint, offering an eco-friendly option. Mud blocks, rammed earth, laterite, Chapadi stones, random rubble are other commonly used materials in his buildings.

Given his leaning towards adopting traditional methodologies in construction, many of his structures see an absence of columns, with the hollow bricks serving as load bearing elements. Even where columns are required in these structures, they feature as hollow brick columns. Traditional inclinations are apparent in the materials used for flooring too where there is a total absence of vitrified or ceramic tiles. Instead, red oxide, yellow oxide, Athangudi tiles feature in interior flooring while terracotta tiles are used in semi-open spaces.

Further, locally available natural stones like Sadarhalli, Kota, Chapadi find their way in plenty in his structures. Not only the walls, but the lintels over doors and windows see the use of natural stone or clay blocks replacing RCC, with stone arches featuring in quite a number of his structures. The roofs extensively feature the locally available Hundi tiles which permit versatile representation such as curving or angles which Mangalore tiles do not afford. The heat ingress is also significantly lower in Hundi tiles as compared to Mangalore tiles, thus keeping the interiors cooler. In the absence of use of Hundi tiles, the roofs increasingly feature filler slabs, which again reduce heat ingress and also reduce the use of RCC.



His structures also display composite masonry, with two materials fused into the wall like stone and clay blocks or clay blocks and bricks to reduce heat ingress as well as increase the load bearing capacity and aesthetics in elevation.

A firm believer in open wells as compared to bore wells, Varanashi's projects effectively harness rainwater for self-dependence while composting of wet waste is done through the earthy option of clay pots.

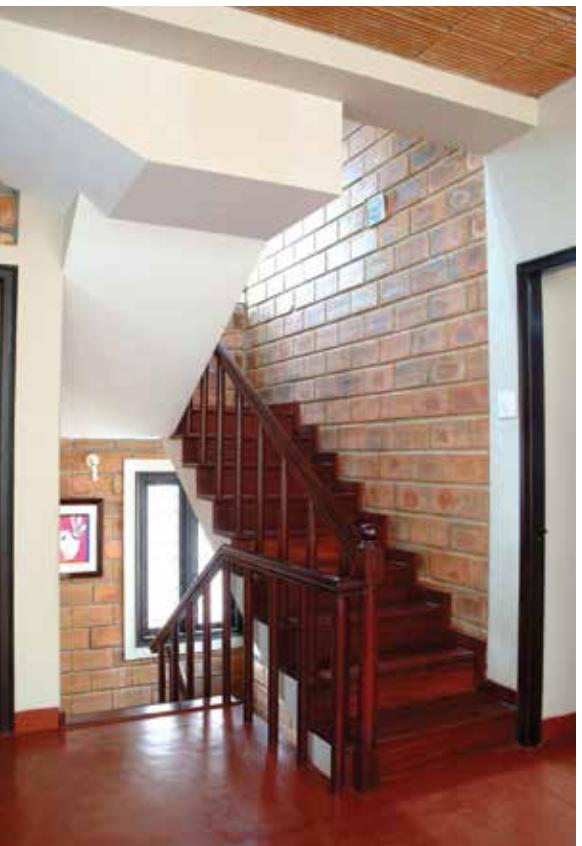
Given his penchant for natural methods of construction as well as designing in tune with nature, the structure of his designs too reflect this philosophy where the natural surroundings are kept in tune and made the best use of. The Marla farm house built against the backdrop of a hill effectively displays this inclination. Raised on stilts to get a spectacular view of the lake, the house is reached by a ramp while sheer glass wall on the upper level offers an unhindered view of the valley. Hollow clay blocks, rammed earth and Hurdi tiles mark the construction of this house, with the earthy textures accentuated by a traditional chimney dotting its roof.

Varanashi's residence marks similar green sensibilities with the exposed clay blocks and red oxide floors exuding an earthy charm while the free flowing interiors with their sequential privacy, open out to green spaces from all sides.

The Sharathchandra residence is an "all stone" house, the entire structure raised with stone. The design style was an inward looking house, the pattern fashioned from a typical village house that have public areas in the front and an open cowshed in the centre and residential spaces in the rear. The central areas here saw the presence of skylight with the front mass of the house delinked from the rear by the large double height space, linked only by a connecting bridge. Beneath the bridge and in the central space features an indoor lush garden with the terracotta tiles and pink stone floors accentuating the earthy expressions.

Speaking on his designs and structures, while making it very clear the tangible product that is seen is the result of team effort and not his alone, Varanashi says, "No single structure can be totally cost-effective, eco-friendly and at the same time unique and creative. One may preclude another. Yet, an attempt is always made to centralise eco-friendly ideas and integrate them into the process of design."

Yet, he is quick to add that Vernacular representations of verandas, courtyards, climate friendly roofs, semi-open spaces are very relevant even in the current context. "Traditional architecture displays a certain scale, form, massing and spatiality that prove a fine building need not be the result of complex 3D software or be an iconic structure. Time tested elements and designs can be effectively used to influence present ideas so that the final evolution is one of a sustainable future."



**This article delves with a subtle restraint into the created built spaces exploring and examining the explanations that beholds the journey. K JAISIM**

As any writing worth the generic world, one shall with conscious reflections comprehend the abstraction by examining the details. It is like appraising a work of Art.

Interior design is a positive definitive. Especially when one explores the creation of an architect and with understanding adds value to the inner spaces as without dusting the original form.

I shall in this article take a firsthand personal journey through one of such spaces that I have recently explored exploited and expressed. Any project requires a client with a wish list of his visions which demand to be metamorphed into live built expressions. These translations of a vision into an idea that can by imaginative interplay of the elements create an expression that make the senses rejoice.

The Human mind demands to be excited to gain attention. This is paramount in interior design. Here again there is a wide spectrum of design approach. Why and what for does one want to obtain an attention. And by whom for who and when does this attention need to happen.

Here the environment of function becomes important. From a residence to a commercial retail space the spectra meter fluctuates. And even in these defined spaces the variation in the micro sense is very observant.

Let us confine ourselves to a more complex but compact space, the medical or the domain of health. Here again if I restrain to define and design a specific area, the challenges are mind boggling.

# DOWN THE INNARDS

Take the chair on which the patient is examined! Yes, we do not design the chair; they are a production we procure. But from the upholstery to the handle to the color and texture, every single aspect demands attention. And this is in relation to the environment that one has designed. Now which takes over what? What is the objective – this depends on the brief, which is again in consultation. What an oxy-moron. The consultant depending on the consultant!

But this is where lies the magic and mystery of Human emotions ruled by a rational aspiration to realize. This realization is the designer's dream of playing the elements to create the defined environment. This is no easy task.

A clinic as understood is to examine human patients. Humans are a bundle of emotions. They react. Now the doctor wants the patience of the patient to be stimulated by responding to the environment around in such a manner that his/her task is made more positive in all factors. This mood creation is where the designer's creative abilities come in.

The designer is not there in person but his design must now perform. In this clinical space drama must happen, this drama in time is the interplay of spaces and elements with senses. Thus perception creates an atmosphere that invokes both the patient and the doctor to play their roles to a composition that supersedes sheer function by fusing form from the expected to a state beyond mere awareness.



## CONVERT CONTAINERS INTO HOMES

STEEL SHIPPING CONTAINERS, OFTEN SEEN AS RUSTING HULKS STACKED HIGH UPON THE DECKS OF CARGO SHIPS AND PORTS ARE INCREASINGLY BEING CONVERTED INTO HOMES AND BUILDING BLOCKS, SAYS ARCHITECT SIDDHARTH RAMESH.

The notion of living in 8 feet by 20 feet box is enough to stop a potential homebuyer in his tracks; at least, so it would seem. Yet, the rise of innovative green architecture has created an increasingly in-vogue practice: and that includes re-jiggering, stacking and linking rugged and versatile freight shipping containers and transforming them into fully inhabitable homes.

Serving as an excellent mode of reuse given that there are currently more than 300 million shipping containers lying empty at ports across the world, these shipping containers can be used to build full and part-time single-family homes. Even in the most basic form, recycled shipping containers can serve as a quick and inexpensive solution to emergency housing needs. And when these are stacked sky-high, can also become intriguing dormitory complexes.

Inter-modal construction applies many methods, in most cases unconventional ones,

for both housing and commercial construction. It chiefly involves recycling materials for reuse as building components. Over half a century back, the U.S. converted steel shipping containers into portable command centers and medical facilities in Korea. Interestingly, architects, designers, planners as well as homeowners are increasingly displaying renewed interest in these inter-modal steel building units (ISBUs) in their pursuit for affordable, sustainable housing.

Steel shipping containers can be used for affordable individual housing units or as building blocks for larger homes or structures. These units are designed to carry everything from vases to Volkswagens across the world. They are sturdy, manufactured to international standards, easy to transport, readily available and a great cure for urban shortfalls and requirements.

Containers make structural sense. They are manufactured with heavy-gauge Corten steel to

make them strong and fairly impervious to the elements. These ISBUs come in two standard sizes of 40 x 8 x 8 feet and 20 x 8 x 8 feet. They are ideal building blocks and can be stacked up to nine rows without compromising their structural integrity.

Two interesting examples come to mind where shipping containers were converted to fabulous buildings.

First is the store for a renowned footwear and apparel brand designed by NYC/Napoli based office LOTEK, a practice that has been doing an interesting job by reusing containers. This triple-level, 11,000-square-foot store, known as Puma City, is made of 24 refurbished shipping containers and can be fully dismantled to be shipped anywhere. Currently traveling around the world, the store was completed in September 2008.

With a painted logo on the outside and complete renovation on the inside, the shipping



containers' past life is well-disguised. While the structure of the shipping containers is evident in the multiple frames created by the knocking down of the shipping containers' walls, the open and well-lit environment makes the industrial aesthetic seem almost intentional. Additionally, built-in details, such as the two decks located on the upper floors and recessed lighting, give the store a greater sense of permanence and appears less like a prefabricated structure that can simply be folded up and moved.

The second example is a housing development consisting of 100 apartments made out of old shipping containers located in Le Havre, France by Cattani Architects. This is the result of the transformation of old containers in modular housing units equipped with every comfort. Mounted on a metal grid, the containers have given shape to a four-story building that houses 100 apartments of 24 square meters each.

The building designed by the metal structure is spread over four floors, which are distributed on the 100 studios. The first level is raised from the ground. This allows the units to enjoy the same privacy afforded to units on upper floors. All the apartments overlook a garden and feature glass walls to permit natural lighting of spaces.

To ensure maximum heat and sound insulation, the exterior walls of the container and the ones



dividing the different units have been coated with fire walls in reinforced concrete and come with layers of rubber to dampen vibrations. The external facade is designed by the combination of old "boxes" that has retained the undulations and repainted in metallic gray. The inside spaces feature white walls and wooden furniture. Each studio has a bathroom and kitchen.

Container-built homes are now increasingly featuring in design competitions, urban planning sessions, and university housing discussions worldwide because of their

readymade character, consistency, strength and availability. This pre-fab architecture is likely to continue as a trend, helping to house homeless and displaced populations, build without eating up valuable land and create easy, modernist expressions for urbanites and nature lovers alike.

# THE ACTIVATED NEIGHBOURHOOD

BY ARCHITECT YAMINI KUMAR



Front view of The Saturated Network (Student work done at Columbia University).



Atlantic Yards, New York, USA [www.archdaily.com](http://www.archdaily.com)



Chinatrust Commercial Bank Headquarters, Taipei, Taiwan - NBBJ [www.nbbj.com](http://www.nbbj.com)

Successful architecture arises when everything ties in, right from the big idea and urban strategies, down to the detail of a door knob. As Bernard Tschumi suggests in his book, Event-Cities 3, there is no architecture without the complex and productive triangulation of concept, content and context.

The primary context for architects today is the space crunch. The need of the hour is a combination of 'out of the box' thinking, embracing technology, experimenting with new, high performance materials and using our local materials in different contexts in order to achieve sustainability, investing in infrastructure, tying in with a building's urban context, yet maintaining a strong connection with our architectural heritage. Innovation must happen at the junction of architecture and urban design. Architecture in India, China and the world over is moving in this direction.

India is on the brink of rapid urbanization. Cities are growing much faster than their infrastructure can keep up with. Explosive population growth and migration from rural areas demand large scale developments with livable, walkable, civic environments. Mixed Use is a good strategy for creating these developments.

Mixed use developments today are springing up across the world, especially in China, and are catching on in India. When carried out well, it results in the maximising of a city's resources, and creating a self sustained, vibrant community. It also results in a safe community, since the mix of different programs result in the complex being activated twenty four hours a day. A mix of cultural, entertainment, educational, sports facilities and park spaces need to be integrated with retail, office and residential uses. When these developments are transit oriented, it adds to the complex's efficiency.

One such example of an upcoming mixed use development is the 'Atlantic Yards' project in Brooklyn, New York, which leverages pre-fabrication and digital technology, and participates in a dialogue with Brooklyn's brownstone neighbourhood. Atlantic Yards, which used to be an unsightly conglomeration of railway tracks, is undergoing a transformation by the new developments rising around the Barclays Center, which has given the neighbourhood a voguish new identity. The neighbourhood is no longer dreary, but is a hub for sports and

concerts. When completed, Atlantic Yards will include 17 buildings, comprising 6 million sq ft of residential space, an entertainment arena, Barclays Center, retail and office space and 8 acres of publicly accessible open space. The plan, which was designed by Frank Gehry, will also include the expansion of the Atlantic Terminal Transit Hub.

For the Barclays Center, SHoP executed an undulating latticework "wrapper" made of 12,000 unique prefabricated, pre-weathered steel panels, no two panels being alike. The panels were modelled on CATIA, which enabled them to be produced using computer numerically controlled equipment, thus eliminating shop drawings. The weathered panels are meant to fit into the context of Brooklyn's brownstones.

Also being designed by SHoP are three new residential buildings cradling the Barclays Center. One of the buildings, the 32 storied B2 will be the tallest modular building in the world. It is being designed with a variety of colours, materials and fabrication techniques. The towers will be integrated with shopping and storefronts at ground level, thus activating the streetscape.

A mixed use project that I designed during the fall semester of my graduate studies at GSAPP, Columbia University called 'The Saturated network', unlike the typical stacked section where building programs remain autonomous, works on the principal that programs are jumbled with each other, creating unexpected chance encounters, where each program is made aware of its coexistence with the others. Two ramp systems, one private and the other public, criss-cross each other, providing access to the various programs, in addition to the conventional circulation system which caters only to stacked levels.

Architectural giants such as Gensler, KPF, SOM, HOK and NBBJ to name a few, are dotting the horizons with mixed use and transit oriented developments all across Asia. Their architecture is driven both by efficiency and form. Employing the latest digital technology and construction techniques enables high rises and large developments to be built at a fast pace. Developing a combination of large urban inserts and public facilities, and small, compact living spaces is the direction that global metropolises are moving towards today.

# EDUCATING 'THINKING' ARCHITECTURE

BY ARCHITECT JAFFER KHAN DIRECTOR  
MARG INSTITUTE OF DESIGN AND ARCHITECTURE  
SWARNABHOOMI, CHENNAI



Architecture is autodidactic. This has been so for centuries and will continue to be in the future. Approach to architectural education has been a topic of discussion for long and continues at different levels today. Evolution of modern architecture as a profession is a relatively new phenomenon particularly in India, demanding a different educational approach and pedagogy. Today the profession is pro-western in approach because our education system lays less importance to cultural identity.



Hence the underlying tension between modern and tradition remains to be resolved through aspirations integrally woven into the education philosophy. Most schools in India have not come to grips with this problem and the pedagogical structure that arrived from the West continues to dominate architectural education.

During a recent visit to MIDAS, a Spanish architect interviewed a few students and came to the conclusion that the students lacked knowledge. The students questioned were incidentally from second semester B.Arch. and the query raised was on Tadao Ando and his philosophy; a topic that was yet to be dealt with for the second semester, given the lower insistence on History, Theory and Criticism though this would be taken up later at a different level. Interestingly, when the Spanish architect was asked about Mimar Sinan, the 16th Century Ottoman architect and a contemporary of Michelangelo, he was clueless though he had plenty to speak on Michelangelo.

The point here is should the focus be on learning Ando or their own cultural identity- a question all schools in India should pose. We need to bridge a link which is forgotten since we fell into the trap of so called "isms". At MIDAS our main philosophy is to base the educational approach with a strong foundation in the spirit and essence of Indian culture and translate this to support the ideals of contemporary society using technology appropriately. In short, "think architecture" and not just "do" architecture. Historical and Cultural studies play a significant role but at what layer of history and culture we reach is something that needs address.



A few decades back there were hardly a few institutions imparting architectural education. These institutions were committed and a select few interested candidates would join with the primary criteria being to possess ability to sketch and draw. Drawing as the language of the architect was essential to express ideas and visions. If one sees the original drawings of Frank Lloyd Wright, referred as the father of Modern architecture, one would be amazed to see the detailing in a simple pencil sketch.

Wright got a commission from his favourite client Edgar J Kaufmann Sr. in Pennsylvania, 50 miles south of Pittsburgh. Kaufmann had commissioned this work to Wright but had forgotten about it and so did Wright. One fine day Kaufmann called Wright and enquired about his project and Wright promptly replied the designs were ready. Kaufmann



then indicated he would be visiting in 30 minutes. This left Wright just half hour to ready the sketches. But the drawings Wright made in that 30 minutes became history, creating what is called the "Falling Water", the Kaufmann House.

Architects like Wright were not just architects but creative genius; they were artists, sculptors, musicians and even writers and poets. Le Corbusier another eminent French architect who was responsible in designing modern Chandigarh is well known for creating one building and writing ten books on projects, both built and those that did not pass design stage.

"I call architecture frozen music", said Johann Wolfgang Von Goethe. His description of architecture has been the most lasting. It is a quote with many interpretations, most directly reflecting the predominant style of Goethe's time-Baroque style of architecture.

Today, the advent of software has changed the world of design. While we can't dispense with them, we need to be aware that even people have limitations in innovation. Frank O Gehry a well-known contemporary iconic architect drew inspirations from his nightmares and translated the same into iconic designs, taking advantage of the software which supports his ideas and visions.

When I started my profession as a teacher in the School of Architecture and Planning in the year 1983 and especially took interest to teach

the 1st year B. Arch students on subjects like Basic Design and Theory of Architecture, I was not just a teacher but a student among students. Every day was an innovation with a quest and hunger to do something different and interesting. I also taught geometry, both extrapolation and interpolation based on the principles and theories of Prof. Arthur Loeb of MIT Harvard.

With no internet to browse from, I used the American Consulate and the British Council Libraries extensively to source information to build experimental projects for students. It was hard work yet the final result was amazing. I had the finest students in my class and they still remember the year they spent in school with me. There has been no looking back since, giving lectures on invitation in some of the best schools across the world. The basics thus matter most and the first two years are crucial in the education process.

Architectural education in India is incidentally monitored and controlled by the Council of Architecture (COA) under the purview of The Architects Act of India 1972. There are about 180 schools as independent institutions and as departments in engineering colleges across India. Due to the surge in real estate market since the early 90s', architecture schools have mushroomed all over the country. It has thus become a difficult task for institutions to find suitable faculty.

Faculty in any architecture school plays a significant role in building a strong base and platform of learning. The faculty should possess ability to understand, develop and execute good teaching practice to continuously learn; and to continuously renew one's professional knowledge. Together with the ability to share and communicate such learning, the faculty can construct and implement an inspirational vision of architectural education, which will encourage, support and nurture talent. This ability to harness talent will make the school a place of innovation in architecture.

Educating architecture is not as simple as many may think, but needs continuous innovation and experimentation in the subject. Students need to be exposed to an intellectually vibrant environment with extraordinary infrastructure where talent is nurtured and leadership inculcated. Most importantly the faculty should practice and have ability to earn a teaching position by producing innovative work and such work should be publishable works of design, theory, history or criticism.



# FROM THE EYES OF A DESIGN SCHOOL GRADUATE

**CHARUTA PHALKE**, A FORMER STUDENT OF SRISHTI SCHOOL OF ART, DESIGN AND TECHNOLOGY, BANGALORE, SHARES HER EXPERIENCES ON LEARNING TO DESIGN FROM THIS PRESTIGIOUS SCHOOL. GIVEN THE THEME OF THE CURRENT ISSUE BEING FABRIC, CHARUTA RELATES HER EXPERIENCES THROUGH THIS MEDIUM

When I joined Srishti I was not really clear about what design or area I wanted to specialize in. But the first two years helped me amply in making the right choice. The first year was spent in learning basic skills such as drawing while the second year focused on developing core skills, imparting in-depth knowledge and advanced training in respective segments. Introduction to various disciplines too happened during this time to enable the selection of the field of specialization.

My choice was textile design where the program extended over two years taking the student through the intricacies of weaving, printing, dyeing, surface manipulation, embroidery. The courses offered during this span, besides offering in depth knowledge of the particular subjects, also made it possible to understand the nuances of each medium based on which further specialization would take place.

The course involves, on selection of the field of specialization, a mandatory internship. This internship happens during the second half of the four year course. My internship was with Satya Paul in New Delhi. The print oriented internship involved developing ideas for prints with a specific theme in mind.

The final two years of specialization is then capped by a diploma project. My project involved the use of non-conventional materials into the weaving of a sari, retaining the traditional skill of the weaver, yet adding an element of fun, funk and newness.

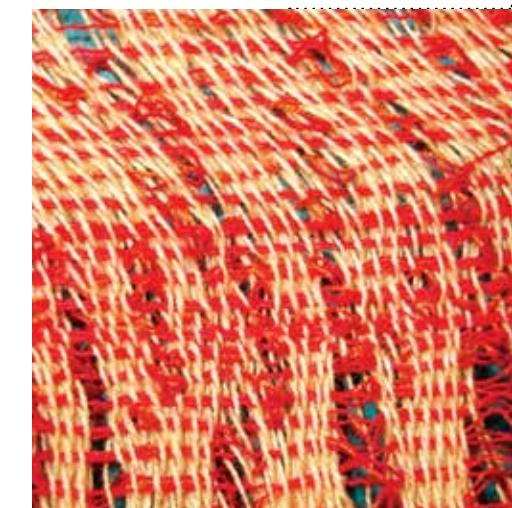
Thus, the medium of handloom weaving was combined with new materials based on research on 'Techno textiles' and fabrics created by various textile artists as well as contemporary designers such Issey Miyake, Junichi Arai. This was then narrowed down to metallic and moldable fabrics and stretchable garments. The final work delivered involved creations of desk looms, frame looms and knit samples with a combination of materials like copper, lycra, elastic bands, cotton, silk, stainless steel wires, ribbons, leather sequence and so on.



Copper wire and sequence.



A weave with ribbons.



Weave exploration using spandex.



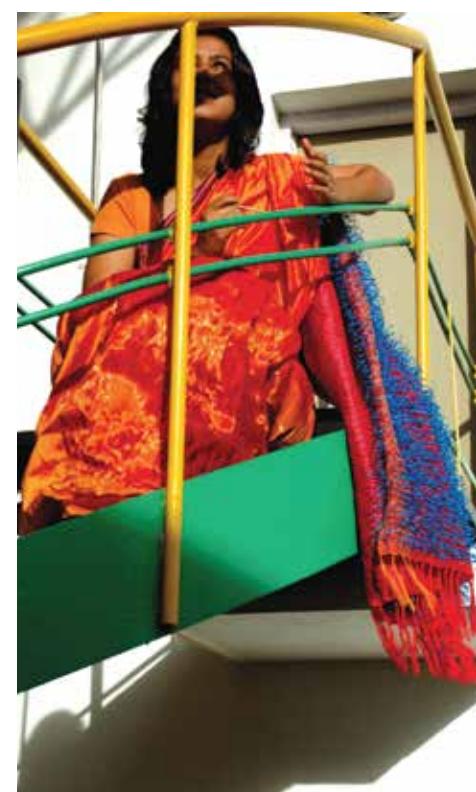
Spandex and ribbon palin weave.



Copper and sequence twill weave.



Copper and ribbon woven together.



Copper and blue ribbon sari.



Mouldable copper sari with ribbons and sequences.



Ribbon sari.



# ISLAMIC CEMETERY, VORARLBERG

OF THE FIVE WINNING PROJECTS OF THE 2013 AGA KHAN AWARD FOR ARCHITECTURE IS THE ISLAMIC CEMETERY IN VORARLBERG, AUSTRIA DESIGNED BY BERNARDO BADER ARCHITECTS OF LOCAL ORIGIN. SITUATED IN THE MUNICIPALITY OF ALTACH, IT SERVES ALL ISLAMIC COMMUNITIES FROM THE DIFFERENT TOWNS AND CITIES OF VORARLBERG, SETTING AN IMPORTANT EXAMPLE OF COEXISTENCE IN AUSTRIA BETWEEN HOSTS AND IMMIGRANTS.

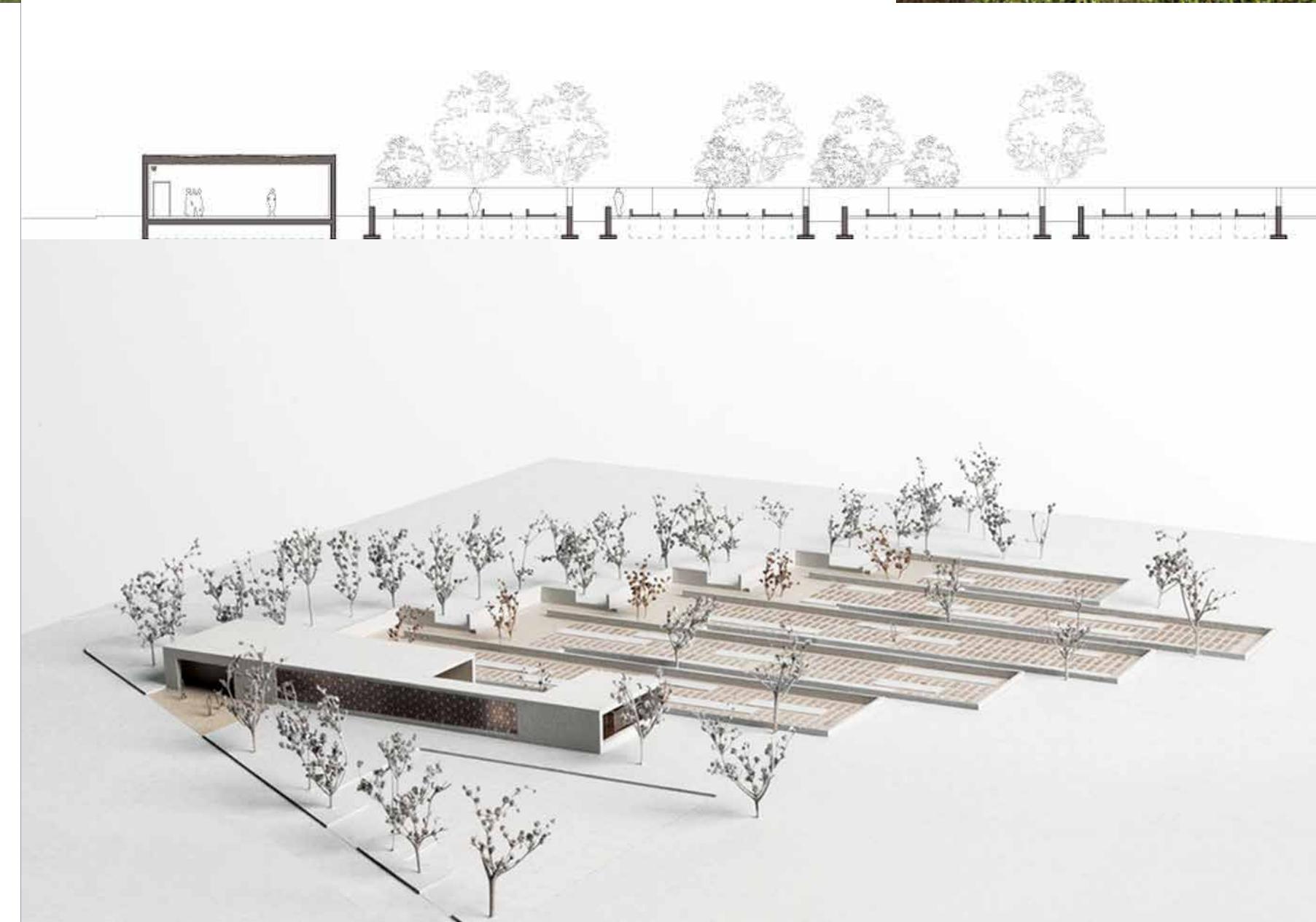
BY ARCHITECT PRITI KALRA

The design ideology is based on the beliefs and funeral rites of the people, which in turn are a reflection of their understanding of nature and relationships. The basic concept arises from the idea of cemetery as a primordial garden. In essence, creating a garden begins with demarcating an area of land separate from the wilderness. In accordance with this principle, the Five Graveyards are arranged like the fingers of a hand, a system of concrete walls of varying heights separating them. These walls create distinct spaces oriented towards Mecca and allow for implementation in stages. The grave fields are lined up at the back of the building and contain trees, benches and patches of grass.

The visitor enters a semi-built space large enough to hold a congregation. This space opens out onto a private courtyard and features lights set into circular recesses in the ceiling. A lively play of light and shadow enhances the quality of this space, which is characterized by an ornamental wall bearing an octagonal motif of Islamic tradition. This acts as a subtle filter between the seemingly continuous indoor and outdoor.

The prayer room at the far end has a prayer niche (mihrab) with a window oriented towards Mecca. Located in front of a whitewashed wooden wall and the window is the Qibla wall, which has been constructed in the form of three curtains of stainless steel mesh. Gold-plated wooden shingles have been woven into the mesh to spell out the Arabic words Allah and Mohammed in Kufic calligraphy. Six prayer rugs in different shades of brown indicate the prayer rows and lend depth to the space. These features have been detailed by interior designer Azra Aksamija.

Overall, the plan is beautifully open in its arrangement and the concept is very well laid out. Symbolic interpretation of religion has been kept to a minimum. The interaction with the surrounding nature has been strengthened to create a serene, dignified place for contemplation and mourning. The design is simple and practical.



# DIVYASREE 77° EAST

**DESIGNED BY**  
**FOUNTAINHEAD DESIGN**  
**SANCTUARY**  
**FULCRUM STUDIO**  
**AANDH**

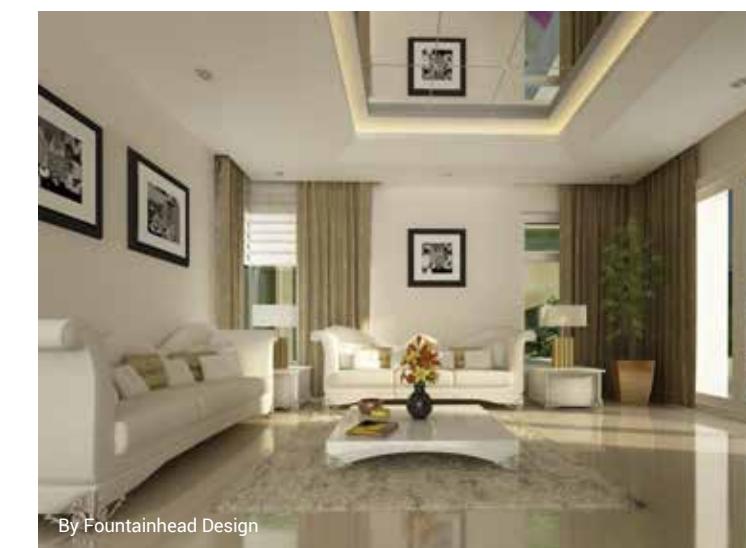
The structure is totally Colonial, the imposing columns housing the expansive porches, the ambience a reminder of the British era set in modern tones. The 18 acre development is residence to 85 villas, the interiors featuring varied themes, each spectacular and opulent yet warm and cosy, packing in all the charm and beauty that a home should encompass.



By Fountainhead Design



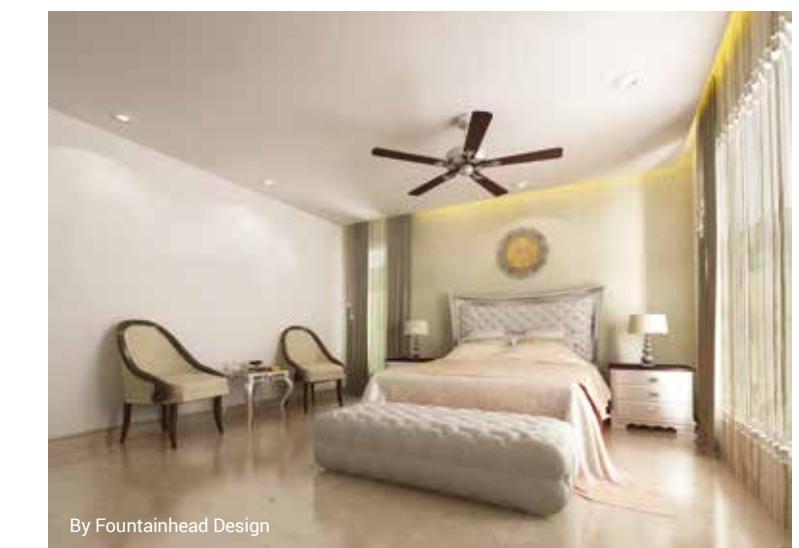
By Fountainhead Design



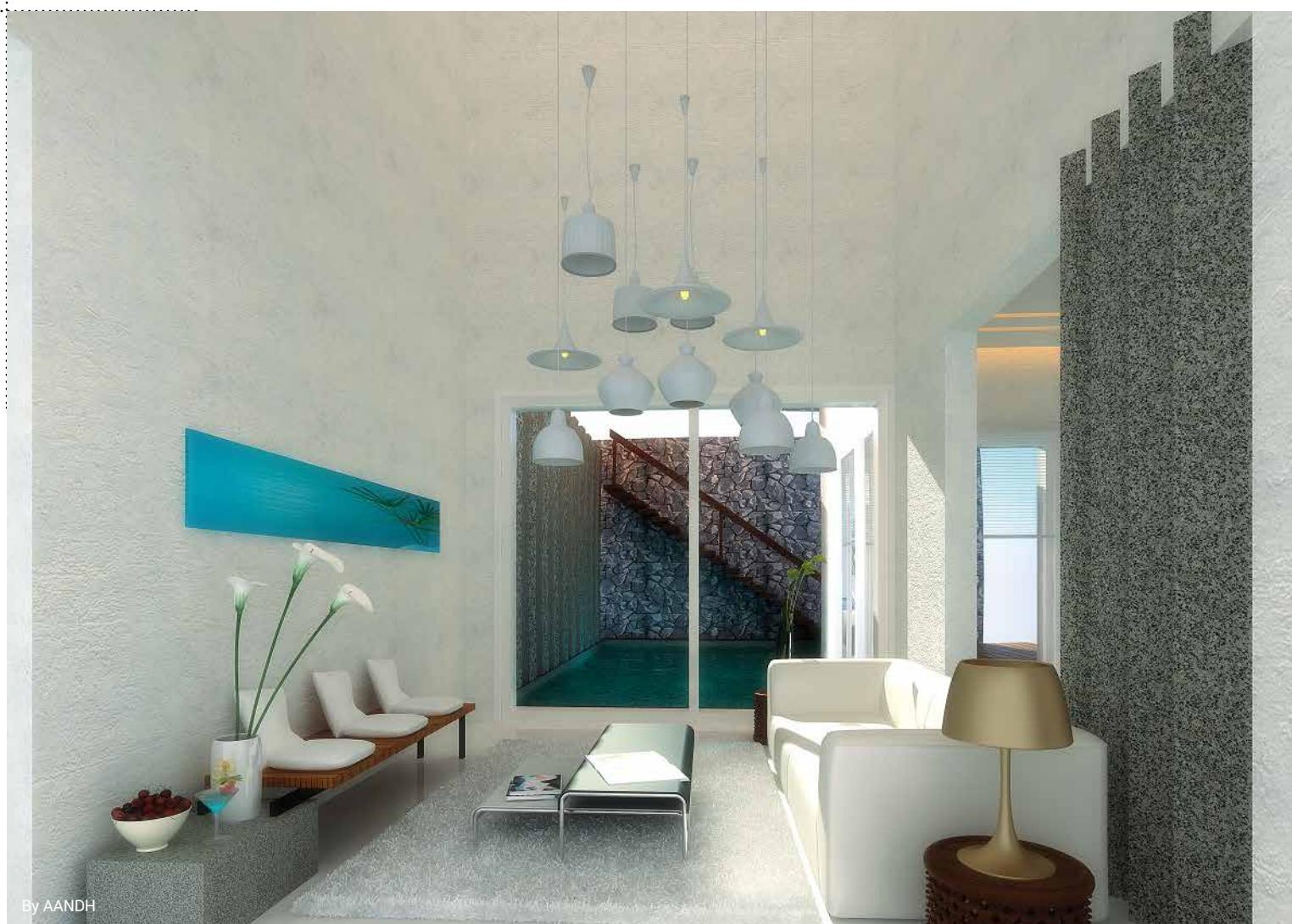
By Fountainhead Design

Each of the villas designed by **Fountainhead Design** incorporate four bedrooms, a media room and a family room with some also accommodating a swimming pool and an open to sky Jacuzzi. While the spaces are expansive with their double height ceiling and free flowing interiors, the outdoors blend in seamlessly with unhindered views of the green landscape. Copious natural light adds to this blending while the thematic interiors lend individual character to the spaces.

While the exterior façade is blatantly Colonial, the interiors are totally straight lined and contemporary, yet ease to fuse in the particular theme adopted. Thus, the Classic Residences, the interiors designed by **Fountainhead Design**, blends in modern lifestyle with traditional grandness, displaying a fusion of beauty and functionality, a re-creation of an old world in a modern setting, an interesting play of romance in presence of royalty. Subtle yet warm and cosy palette marks the interiors with an abundant presence of nature in the form of unhindered views from indoors.



By Fountainhead Design



By AANDH



By AANDH



By AANDH

The Modern residences, designed by **AANDH**, pack in sleek, stylish, minimalist sensibilities, with futuristic leanings that connects the clean lined spaces effortlessly with the outdoors. The abundantly naturally lit interiors house a charming open to sky Jacuzzi, blending the experience of nature with luxury.



By Fulcrum Studio



By Sanctuary Architects



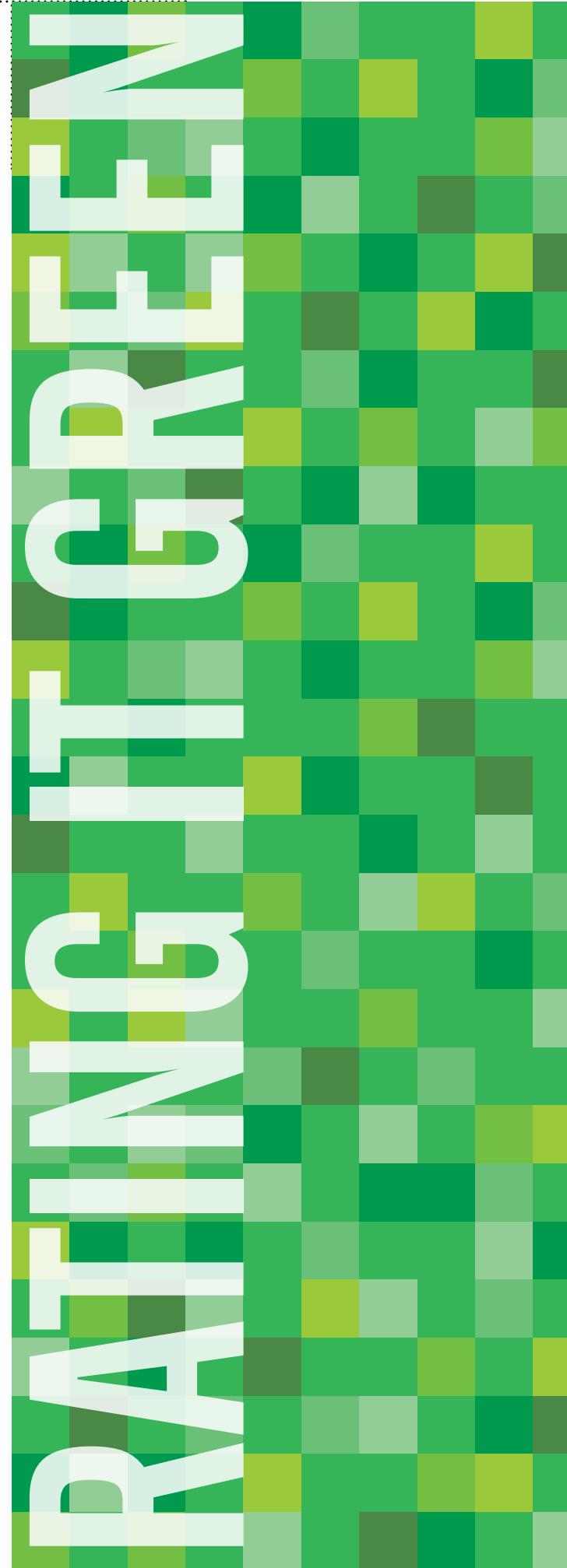
By Fulcrum Studio

While the Spa Residences, designed by **Fulcrum Studio** reflect a home conjured up from the intangible, light, air, space, mood and thoughtful magic with the tones totally minimalistic, enhancing the efficient utilisation of spaces.

The Timeless residences designed by **Sanctuary** serve to be truly timeless. The various elements and materials used in the space have been carefully balanced to achieve harmony, bringing in physical interaction and visual connection between spaces while retaining the privacy of the individual sanctuaries. The residences, coming with a charming pool on the second level, fuse in vibrant colours with subtle and warm palettes, lending energy and distinctive character to the individual spaces.



By Sanctuary Architects



**SHOULD THE GREENNESS OF A BUILDING BE BASED ON A RATING SYSTEM? OR SHOULD IT BE JUDGED BASED ON ITS DESIGN AND CONSTRUCTION METHODOLOGIES. THE LEED RATING SYSTEM HAS THROWN UP MANY QUESTIONS, OPENING UP A DEBATE ON ITS PERCEIVED RELEVANCE. NANDHINI SUNDAR SPEAKS TO ARCHITECTS TO GET THEIR PERSPECTIVE.**

Global warming, carbon emissions have certainly made industry thinking about processes and sustainable alternatives. The construction industry is no different in this; neither is it alien to sustainable practices. For, sustainable modes of construction is as old as buildings themselves, the materials used being natural and local, lending themselves as shields against the prevailing harsh climatic conditions of the location.

The traditional buildings were thus naturally sustainable, cool, natural in décor and construction, each creative and aesthetic, reflecting the culture and life styles of the region they emerged in. If traditional modes of construction were naturally green and sustainable, then how relevant is the green rating system that offers the sustainability tag to a building? Is it merely a measuring tool to gauge the performance of a building or is it an avenue to increase marketability, sport the sustainability tag that offers just brownie points and nothing more?

That brings us to the next question of what does a green building essentially do? It minimises environmental impact, improves indoor air quality and environment, conserves water, reduces waste, conserves and restores natural resources, reduces operating costs and overall improves the quality of life.

But to achieve this, you do not need to have the latest in smart grid technology, expensive recycled materials or manipulation of LEED scores to achieve the green rating. A dip into traditional building methodologies and designs would open up ways in which our ancestors designed to maximise air flow, reduce impact on local environment while offering comfortable residence.

For instance, in a hot region, thick walls would insulate and keep the interiors cool. A courtyard in the centre of the house would throw out hot air while allowing the cool air to flow in through the shaded interior open space. Balconies with moveable louvers would allow air to circulate freely while keeping the heat out. Likewise, rooms with multiple uses, elimination of load bearing walls and beams would reduce the building material required for the structure.

Rammed earth that has been traditionally used by Native Americans, serves as insulation against scorching summers and chilly winter nights. Rammed earth has become quite popular in India, with leading architects using and popularising the technique.

The Indian traditional buildings are similarly tuned to meet local climatic conditions and lifestyles while using locally available materials and building techniques. In a hot place like Rajasthan, traditionally the buildings incorporated smaller windows and plenty of Jaalis that allowed air flow but reduced heat ingress. The designs were also tuned to address the harsh desert climate as well as the dust storms that marked the summer months.



In a bitterly cold place like Ladakh, the houses are more sheltered, almost like an ant hill, with thick walls and roofs, small windows, all designed to keep out the cold. In a place like Kerala that receives copious rain, the structures were cleverly designed to handle this downpour. The roofs here are traditionally sloping, with plenty of timber coming into play. Incidentally, the local materials are not only sustainable options in terms of local availability, their presence in the structure also enables the local climatic conditions to be tackled effectively.

If traditional modes of design and construction are naturally green and sustainable, where is the relevance of a green rating? And why does the green rating incorporate features such as glass, air coolers, energy saving light fixtures?

Why are traditional materials and features like the courtyards and verandas reducing the heat and increasing air flow, thus eliminating the need for an air-conditioner not addressed? A large interior that affords plenty of natural light needs no artificial lighting and hence may not be able to fulfil the energy saving requirements expected by the rating system. Why are such spaces not given the green points for their sustainable design?

These are questions that are oft asked by architects; fingers pointed at the IGBC for not bringing in an effective rating system that addresses local conditions and sensitivities and traditional inclinations.

Says Architect Sathya Prakash Varanashi, Principal Architect, Sathya Consultants, "The green rating helps in quantification of the magnitude of savings in energy consumption and carbon emissions, besides spreading awareness on being sustainable in design and construction. But the new age buildings are large, ensconced in glass, requiring artificial ventilation and lighting. Air coolers generate heat besides pushing up the level of energy consumption. The buildings here are rated based on the green points that they attract but the crux of the issue is the design that calls for glass and artificial lighting and ventilation which is certainly not green or sustainable."

He further adds that the green element of local technologies and local materials are not successfully addressed by the green rating system. "A totally traditional building that is sustainable in construction methodology and design will fail to pass the green test under the rating system because it does not satisfy some of the criteria set that incidentally fall outside the purview of traditional design."

Says Bijoy Ramachandran, Principal Architect, Hundredhands, "If the rating system is the only yardstick to evaluate design, it can prove to be detrimental as creative endeavours cannot be checked off a list.

Features such as air-conditioning, carpeting can earn points in the rating system and the absence of the same can make one lose points! While the rating systems have improved considerably over the years, there is still need to creatively interpret the challenges and find ways to overcome them."

Says Architect Sanjay Mohe, Principal Architect, Mind Space, "The language of design should be sustainability where the sensitivities of nature are effectively addressed just as the traditional buildings did. Traditional buildings incorporated features such as wind tunnelling, solar path which allowed the buildings to breathe. Not allowing the building to breathe but adopting designs that do not address local conditions and later resorting to technology to make the structure green such as insulated glass, energy saving air conditioners, is not the right approach."

Architect Sharukh Mistry, Principal Architect, Mistry Architects, who is also the former Chairman, IGBC Green Homes, has an interesting assessment and explanation of what green rating is all about. Says Mistry, "IGBC's rating system is a dynamic document that gets updated on a regular basis. Misconceptions however prevail regarding the rating system, with many confusing it, be it LEED or GRIHA, with sustainable designs. However, these systems are merely tools for measuring performance, with meaningful green design going beyond the brownie points of any rating system."

He further adds, "The soul of a green building movement can never be in a rating system; it has to be in issues of emotion, culture, context, playfulness, empathy, story, meaning, community, intuitiveness and all the right attributes. While all these are integral to a good design, they are intangible and not easy to measure. For instance, we are yet to understand the true value of our rivers, forests, mountains and oceans."

It simply means that in the natural world the principles of green are in perpetuity, he says. He sums up stating, in the human endeavour of sustainability, it cannot be a one-stop shop but an everlasting one.



## WINDMILLS OF GREEN

Building it green is the philosophy of **Total Environment** promoted by its chairman **Architect Kamal Sagar** and the projects of the firm reflect this philosophy in plenty. The project Windmills of your Mind is a classic example of the ample manifestation of such green sensibilities. The project incorporating a combination of villas and apartments features green elements in the form of materials, orientation, design, water and energy consumption techniques besides others. The extent of green scape in the project interestingly amounts to 102 per cent of the site area.

The villas and clubhouse have earth covered roofs to cut down on heat ingress, the curved roofs with their layer of soil and grass ensuring a slower rate of water runoff. The flat roof sections have been converted into vegetable gardens. The apartments likewise feature water bodies and landscaped balconies which again cut down on heat ingress along with better indoor air quality. The rooftops of the apartment blocks too feature extensive green cover to further reduce heat ingress. These green spaces are further complemented by extensive landscaping and plantation of local plants and trees in the common areas of the development, with most of the existing trees on the site being retained.

Conservation of water likewise features on top of the list in this project. Recycled water is used for flushing and landscaping, with the sewage treatment plant located at the lowest level of the site, the gradient facilitating wastewater to flow naturally. Conservation of fresh water is done through dual plumbing lines along with water saver flow regulators and aerators that reduce water consumption. Landscape too incorporates similar water conservation techniques in the form of sprinklers and drip irrigation while the storm water flows naturally through the slope into the rainwater harvesting vents.

Energy conservation techniques adopted range from incorporating right orientation that brings in ample natural light and ventilation while cutting down on heat ingress that invariably happens from a Western orientation. The apartment blocks are thus oriented towards North or South while large ceiling to floor sliding glass panels bring in ample natural light without heat. The hollow brick blocks used for the exterior walls again adds to the



heat reduction. The design orientation that includes vertical fins to cut down on the direct sun glare effectively reduces power consumption in the form of lighting and cooling by 10 percent.

Further energy consumption is achieved through CFL external task lighting and timer based circuit in common areas. Internal spaces use occupancy sensors to control lights while solar water heating panels add to this reduction in electricity consumption. The air conditioners further come with Variable Refrigerant Volume to offer more comfort at lower running costs.

Natural materials find their way into the structure in plenty with exposed wire cut bricks and concrete ensuring no plastering or painting. Since these bricks absorb less water during rain and dry very quickly, the load on the structure too is effectively reduced. The locally available Sadarahalli stone is used extensively in the façade, adding charm while addressing green sensitivities. The driveways likewise feature cobble stones made from locally available black granite, while Kota and Jaisalmer stone floors mark the interiors. Wastage from materials as well as recycled materials like drainage cells too have been used effectively in the landscaped areas.

# OCEAN SPRAY

BY NANDHINI SUNDAR

It is literally an oasis, the expansive greens flanking the meandering water bodies, the picturesque cottages lining the canals appearing like a perfect picture postcard. Come darkness, the place comes alive with the enchanting lights lending a fairy tale look to the scene. It is then time for some romantic candle lit dinners either in the lotus shaped floating restaurant or a cosier one in the little boats drifting in the lagoon.

Welcome to Ocean Spray, a stunning green resort in the city of Pondicherry, designed by Architect Siraj Hasan of Siraj & Renu-Architects & Interior Designers. Set on a sprawling 23 acre campus, the site was initially a barren piece of land with no evidence of trees. "All the coconut trees seen in the resort are seven to eight year old trees transplanted", says Siraj, speaking about the presence of thick greenery, grown in a short span of 3 years when the resort was opened to the public.

"The water bodies too are man-made fresh water canals, created to blend in the greenery with water while giving a floating feel to the resort", adds Siraj. The winding pathways through the twisting canals are equally picturesque with quaint wooden bridges. Stone clad embankments with green creepers accentuate the presence of multiple varieties of trees and vegetation ranging from the omnipresent coconut trees to areca palms, casuarina, bougainvillea, plumeria, bamboo, to name a few.

Geese, Turkey, Guinea Hen, Peruvian Fowl, loitering gaily amidst green landscape, bring in the presence of fauna into this enchanting resort. Lazy hammocks hang under the trees inviting the guests to put up their feet and sink into a blissful reverie. Little islands amidst the winding canals that spread over 5 acres, have equally inviting gazebos to sit back on a lazy afternoon and contemplate on the sheer beauty of nature, prompting you to not just drop all your stress but literally leave your world behind.

Each of the villas open on to the canals, each hosting an independent pier extending on to the canals. And that is not all, the luxurious bathtubs in these villas open on to a private garden while the royal villas incorporate a private pool with three sides of the villa enclosed by water. The individual suites too come with a luxurious open to sky Jacuzzi from where the sunrise and sunset can be captured along with a distant view of the sea over the expanse of green.

Not only is presence of water omnipresent in the residence and relaxation zones, it is evident in the areas earmarked for satisfying an exacting palate too. Be it in the form of a spectacular view of the greenery and water bodies from the interiors of the classic old world charm coffee shop or in the floating restaurant Lotasas with its transparent flooring exposing the rippling water beneath and bamboo clad ceiling, dining too is an equally royal affair.

The Lotasas restaurant is designed as five individual circular spaces in the water, each connected to the central space and each incorporating a tiled sloped roof. The central space houses the kitchen while the four individual circular floating rooms serve as eating spaces, totally open to the water body and greenery. The whole structure appears like a lotus flower when viewed from above.

Greenery and water pervades into the expansive open lobby too, with the interiors flowing seamlessly to blend in the landscape. The décor of the lobby is totally natural and refreshing, featuring antique looking classical chandeliers, clocks, natural elements such as wicker for



Photographs by Mahesh Chadaga



seating, the double height sloped roof structure incorporating stone walls, plenty of wood in the form of rafters on ceiling and cladding on walls. The interior walkways leading to the rooms too similarly spill on to the green spaces.

The resort also features large conference halls that again display classical and Colonial leanings with their double height ceiling, extensive wood on walls and sloped ceilings, along with expansive outdoor party areas, be it on the green lawns or beside the large pool placed amidst the picturesque canals and thick green setting. While a state of the art gym and a Thai Spa tempting one to indulge are part of the facilities offered, a scintillating bar inviting you to turn tipsy as well as an entertainment zone in the form of games too exist for those willing to indulge.



# COOLING IT RIGHT

B H RATHI

Ventilation has taken on new tones with technological advancements as well as greater awareness about orienting the structure right for it to be naturally ventilated. While the green leanings are towards natural ventilation, the role and presence of an air conditioner cannot be wished away in a building.

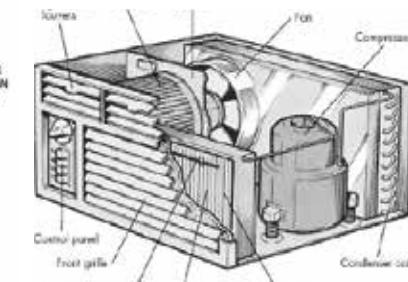
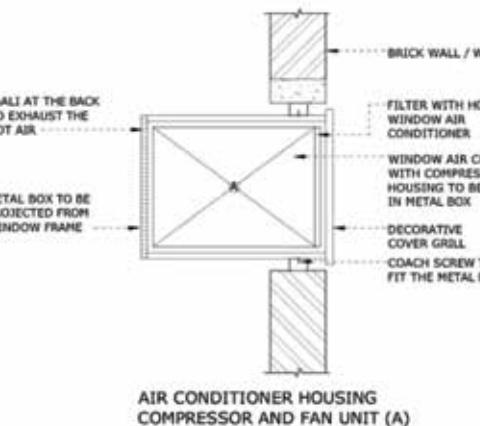
Be it cooling or heating, the air needs to be conditioned to afford comfort while living as well as working. The final version of air conditioning adopted depends on requirement, cost while the methodology of the system adopted stems from manner of usage and relevant equipment needed.

Air conditioning systems and technologies fall into seven categories, viz window air conditioners, split units, cassette units, tower units, fan coil units (FCU), ductable systems which include ceiling suspended, DX system/air cooled and chilled water system and finally, specialized air conditioning.

## WINDOW AIR CONDITIONERS

These have two main parts, compressor and fan, both housed in a single unit/box as indicated in the sketch. The compressor which cools the warm air is part of the unit that creates noise and switches on and off depending on the temperature regulated by thermostat. The copper tubes through which the refrigerant gas is circulated, prevent rusting. The fan that circulates the cool air is installed with certain static pressure enabling air throw to an approximate distance of 12-13'. More the static pressure, greater the throw.

The thermostat acts as a regulating element, the temperature set at a predefined level and the compressor activated in accordance. This increases efficiency while cutting down on the



high power consumption of the compressor. The outer enclosure or cover grill through which the air circulation occurs, serves to enhance the aesthetics of the unit. Filters placed behind the cover grill likewise avoid fine dust particles in air from entering the unit. These need periodical maintenance.

While window units are available from a range of 0.5 to 3 tons, the power requirement is roughly 1.3 kw per ton. The tonnage required for a space can be calculated with a thumb-rule of 150 sqft to 200 sqft area per ton depending on the geographical location.

## SPLIT AIR CONDITIONERS

In contrast to window units, these have compressor and fan in two separate parts. The compressor, referred here as outdoor unit, is isolated here to reduce noise. The refrigerant pipe, approximately a 1/2" dia copper pipe that carries refrigerant gas Freon, enables the cooling of air by heat absorption method. The pipe here forms a loop between the indoor and outdoor unit, connecting both. Hot air from outdoor unit cools down while travelling into the indoor unit, this process being continuous. The distance between indoor and outdoor unit should maximum be 25' as the gas gets heated up if the length of the refrigerant pipes is long. This in turn affects the unit's performance.

The electrical cables fitted between the indoor and outdoor units should be weather proof to avoid problems of performance later. A PVC drain pipe is connected to the indoor unit to drain water and prevent leakage due to condensation within the indoor unit. The PVC pipe is terminated at the closest drain point which could be a nahani trap or a rain water pipe. The pipe is best provided with a U bend before termination to create a water seal. This avoids any foul smell from entering the pipe and reaching the unit.

The indoor units are normally available from 1 to 3 tons and fixed on the wall above 7'. It is important to pre-define the outdoor unit location as the refrigerant pipe and cable require to be connected between the indoor and outdoor units. The refrigerant pipe needs mandatory insulation. The outdoor unit should not be installed at more than 25' from the indoor unit.

While the outdoor units can be placed anywhere outdoors, it should always face an open area without obstruction in front as it throws out hot air. The back surface of the unit should be at a minimum 1' away from the wall. This would enable air to be sucked in and pushed through the coil covering refrigerant gas. This automatically cools the gas going back to the indoor unit. The outdoor unit should always be mounted on brick or concrete pedestal, MS Frame or bracket and placed at a minimum 1' above floor level to avoid rain water entering the unit. A point to be noted is split units tend to re-circulate the same air and this at times leaves a musky smell in the interiors.



## TRACING THE ROUTE FROM THREAD TO CLOTH

INTERIOR DESIGNER MAHESH CHADAGA TRACES THE FABRIC ROUTE IN THREE DIFFERENT REGIONS, OF MAHESWAR, BAGRU AND BELGAUM, SHOWCASING THEIR FASCINATING EVOLUTION FROM THE THREAD TO THE FINISHED PRODUCT, THE END RESULT VIBRANT AND STUNNING.



*Maheshwar*, in Central India, the centre of handloom weaving since the 5th Century is home to one of India's finest handloom fabric traditions. The colourfully hand woven Maheshwari cotton saris renowned for their unique weave, display distinctive designs involving stripes, checks in the body, leaf and floral patterns in their mat borders, besides a reversible border known as bugdi.

The origin of Maheshwari saris is traced to Rani Ahilyabai of Indore who introduced it to Maheshwar 250 years back. This dying textile tradition was again revived by the Rehma Society founded by the Holkars 1978. The weaving centres thus feature inside the courtyard of the Ahilya Fort that is situated on the banks of river Narmada.

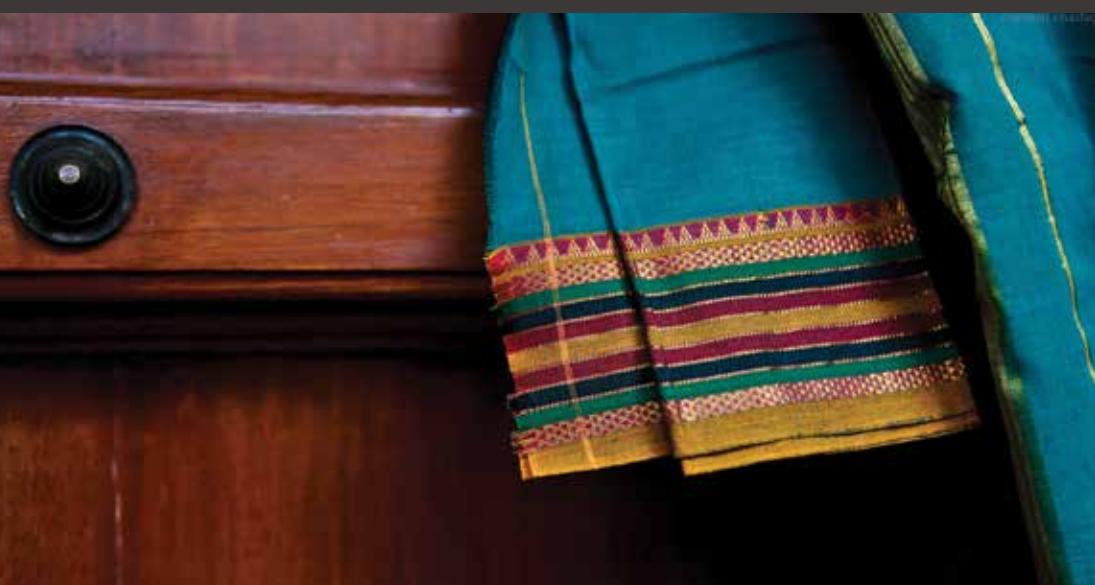




For over 350 years, the Chippa community in *Bagru*, Rajasthan, has been using vegetable dyes to hand block-print fabrics. The two main colours used for the block prints are red and black using natural ingredients. The red dye is made from jaggery mixed in iron soaked water that has absorbed the rust. The kora fabric that is used for block printing is pre-washed to remove all remnants of starch, dust or oil and then 'yellow' dyed in a harda solution to allow the natural dyes to be absorbed and become colourfast.

The sun dried fabric is then ready for block printing which involves the use of wooden blocks in the desired prints and colours being stamped on. The block printed fabric is allowed to dry for a few days before washing. After another drying process the fabric is boiled in a large copper pot with a mixture of natural ingredients that includes alum and various flowers. A final drying process in hot sun happens after starching of the fabric before it is ready for sale.

A major textile centre, *Belgaum*, Karnataka, has over 50,000 power looms with most forming part of the residence. The Belgaum saris, coming in khadi, cotton as well as silk, each displaying exquisite designs, command a notable export market. Areas such as Vadagaon, Khasbagh, Shahpur have most residences engaged in weaving, the power looms forming an integral part of their house. The pictures show a typical street in Vadagaon where the residences house the power looms, with men working hard to create the colourful cotton and silk saris the place is famous for.





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