

## ★ PAVE IT WITH PAVERS







IIID BANGALORE REGIONAL CHAPTER

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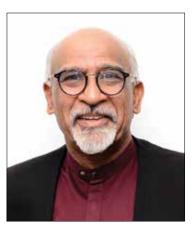
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### From the Chairman and Managing Editor's Desk



**DINESH VERMA** 

#### Dear Members,

Time never stops or looks back – even the worst of the present pandemic could not stop or slow the pace of time – so also at IIID BRC – the relay of Chairpersons retiring and new ones taking over happens on time every time and the Chapter moves ahead with more enthusiasm and vigour to the next era. IIID Bangalore Regional Chapter looks forward to the era of Chairperson Elect Kavita Sastry who will be taking over the reins from September this year.

Paving the way further, in Antarya we discuss and document in this issue the paving solutions of great civilizations and their importance akin to the highways of modern times, providing good and fast communication between kingdoms.

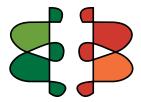
The Romans did it in stone, the Indus Valley in brick and today's modern developers do it in tar or concrete. Civilizations after civilizations have realised the importance of paving the surfaces to establish a better network. Usage of local materials and developing an effective construction technology for making such paved roads can be seen even today in China, Greece and other areas across the world.

This issue of Antarya captures the nuances of Paving from the historical times to modern times. Today architects use paving materials in coordination and consultation with landscape consultants for various elements of design. Cityscapes have seen a new trend in India where paving has become an essential part of redevelopments.

I take this opportunity to thank my entire Star Team who worked selflessly through the past two years and did phenomenal work to raise the standards of IIID BRC under my chairmanship and look forward to the new leadership to carry on the legacy of the Chapter.

#### **Dinesh Verma**

verma@acegrouparchitects.com

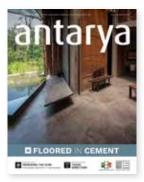


IIID BANGALORE REGIONAL CHAPTER

#### IIID Bangalore Regional Chapter Emblem

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

#### ISSUE 26 JAN-MAR 2021

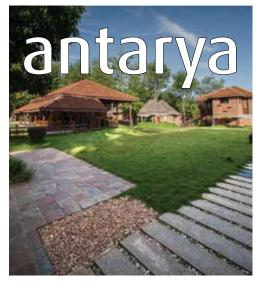


#### REVIEWS

The recent edition of Antarya looks beautiful in all respects. The graphics, the content and the overall presentation is superb. Congratulations to the entire team!

Ar. Adnan Nakhoda | KAN Group Associates –

Antarya looks loaded and lovely features. It is always a pleasure to go through Antarya Ar. Prathima Seethur | Wright Inspires



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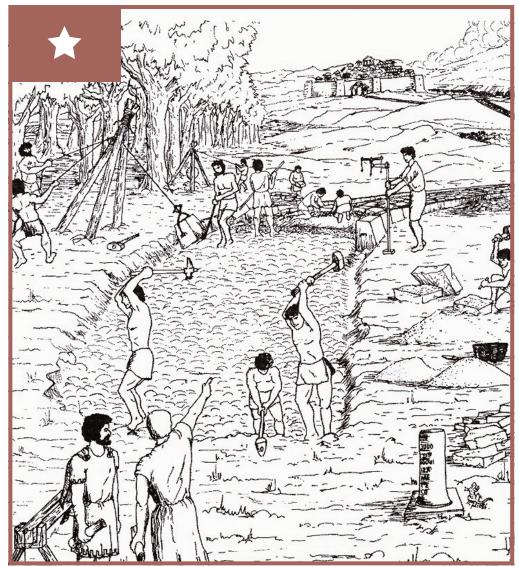
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#### COVER IMAGE

A varied lay of materials articulate the outdoors. Photograph by Mahesh Chadaga



### PAVE IT WITH PAVERS NANDHINI SUNDAR

#### 10 PROJECT FEATURES





CREO

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Ace Group Architects PVT LTD, No. 300, Sankaran Complex, Langford Road Bangalore 560025 | T: +080 22223999, +080 22224000 | E: iiidbrc@gmail.com

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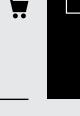
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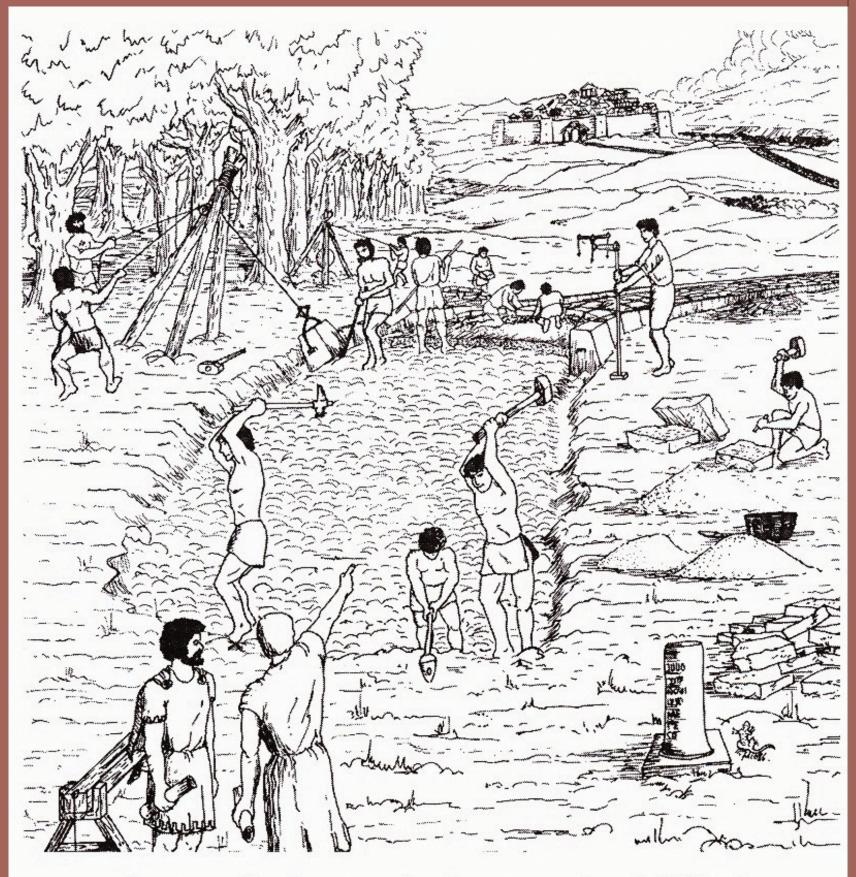


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## PAVE IT WITH PAVERS

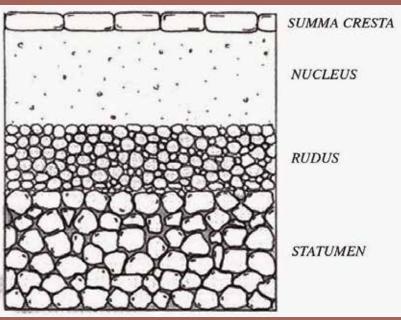
#### **BY NANDHINI SUNDAR**



Construcción de una calzada romana (sg. J. Núñez).

However arresting a building may be, the composition of the path leading to it is vital to not only permit seamless transport to the built space but also ensure the building serves to be inviting. For, the manner in which the pathway is laid can add to the beauty, accentuate the exterior structural component of the building or alternatively prove to be a dampener if the path is bereft of order and tidy lay.

The concept of paving units for laying a pathway is incidentally very old, dating back to thousands of years, with the first rough type of segmental pavements having been built by the Minoans in 5000 BC. Yet, systematic, detailed paving came about only during the Roman era, dating back to 2000 years. Interestingly, some of the pathways laid during the Roman era still exists, bearing testimony to the strong pavement construction opted during this period that have withstood heavy traffic and harsh conditions not only during that era but thenceforth, over the succeeding centuries.



onstruction of a Roman Road. **Source:** https://40rutas.blog

oot.com/2015/04/la-roda-y-la-via-romana-complutum.html

#### **COMMENCING IN ROME**

The concept of paving commenced in Rome when the Imperial armies faced hurdles while marching through muddy landscapes. To ease the passage, the civil engineers of that era conceptualised the masonry system of capstones to lay stone pathways. This resulted in the first paved stone pathway being built around 500 BC where the idea of interlocking the stones was used. Based on the usage and significance of each road, the paving was designed, thus successfully accommodating the traffic loads.

The roads were thus segregated into public, private and military, with the military roads being accorded the highest priority and requiring a more complex base structure and surfacing. While the public and private roads invited less engineering skills in laying, all the roads were still designed based on the prevailing sub-soil as well as the materials available.

Incidentally, even to date, the pavement compositions opted bear many striking similarities to what was then adopted, indicating the magnitude of engineering skills that existed during that era. Three distinct layers were adopted by the Romans, the underlying layer, 'Agger' being the foundation which would vary in thickness to facilitate a well-drained base. Depending on the soil thickness, this layer would even be 4 to 5 feet in depth while in others it may be only a few inches. This foundation was chiefly made of rubble with stones to permit drainage of water.

The second or the middle layer, 'Rudus' was finer and well-compacted and laid at times in successive layers. Sand was a main component in this layer to offer resilience to the road. Besides sand, gravel mixed with sand or clay also formed part of this layer. The third or final layer, 'Pavimentum' comprised of large irregular polygonal shaped stones, the Silex, which was the hardest and most commonly found stone in Rome. The six-sided paving stones also aided in cutting down the dust while enabling better wheel movement. The final top surface







would be paved mostly with gravel or else with flint and other small broken stones. Curb stones on either side of the road defined this paved road.

Interestingly, similar cross section is opted in the 21st century segmental paving. A point to note here, the Roman roads structured a base with crushed stone that permitted rainwater to effectively drain into the earth. While the roads were designed based on their designated use and well-constructed, the materials opted were all natural and environment friendly, a factor that could be the key for some of these roads lasting thousands of years. This is especially so as the medieval times saw much neglect, which could have easily ruined them beyond repair.

This intricate interlocking system of roads connected the Roman cities, major towns and military bases, spanning over 4 lakh km, with over 80,500 km of this being paved with stones. A famous Roman road that still exists today, in a remarkably well preserved state, is the 'Appian Way' which





was the widest road of the Roman times, stretching over 500 km from Rome to the port of Brindisi on the Adriatic Coast. The paving stones remain intact, worn smooth over thousands of years of use. Built in 312 BC, the Appian Way was the main route for military supplies, connecting to smaller regions of greater Rome.

#### THE EGYPTIAN PATHWAYS

Though the concept of paving commenced in Rome, interestingly, the oldest paved roads relate to Egypt where the path to

**Top :** Appian Way. Photograph by: **Trish Hartmann** 

Above Left: The Sampietrini pavement. Source: Wikicommons. Photograph by: Alessio Damato

Above Right: Minoan pavements and walls in Knossos, Crete. Source: Wikicommons. Photograph by: Jebulon

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Lake Moeris Quarry Road: World's oldest surviving paved road. Source: **worldkings.org** 

An older Portland Cement Concrete road. This is the Sunset Highway in Washington, paved in 1919. Source: **pavementinteractive.org** 

connect Lake Moeris to the ancient basalt quarry was built over 4600 years back in Giza. The massive stones used to build the temples were transported on sledge through this path which is 6.5 feet wide and 7.5 miles in length. The stretch of road, discovered in 1994, is paved with thousands of slabs of limestone and sandstones.

#### EMERGENCE OF CONCRETE PAVERS

Till the 18th century, roads continued to be paved using clay and natural stones. This is the period when the importance of choosing clean stones for surfacing to create better paved roads was realised, especially by the British. After the World War II, most of Europe required reconstruction, especially the roads. Paving stones were used to rebuild these roads as historically it was proven that these stones could withstand heavy tanks and artillery fire that asphalt and concrete cannot meet.

During the same period, in 1940, Holland faced dire problems with its road conditions, the clay brick streets being damaged by war.



The Beijing Road Ancient Road Ruins, also known as the Millennium Ancient Road Ruins. Located in Beijing Road Commercial Pedestrian Street, Yuexiu District, Guangzhou City, Guangdong Province. Source Wikicommons



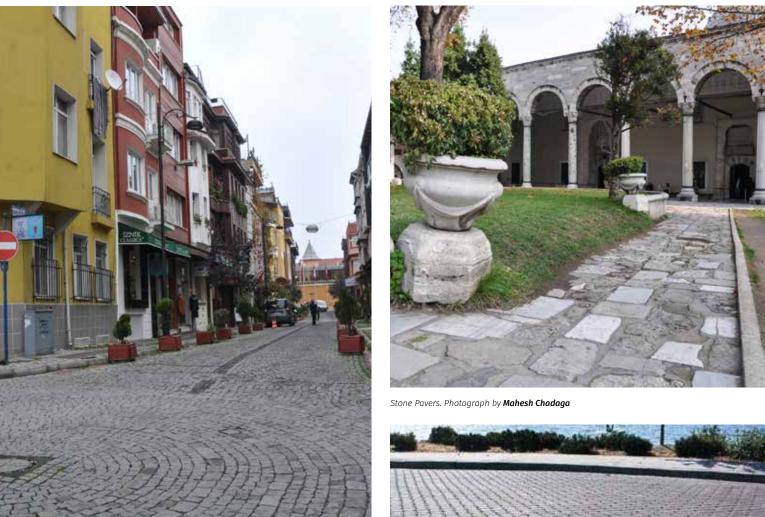
Damaged roads in Holland after World War II. Source: commercial.unilock.com

Also its geography prompted the ground to shift and sink, making poured concrete to strain and crack during such shifts. Stones placed in sand proved to be flexible and more durable than poured concrete.

However, over the period, the use of natural stones to pave became too expensive prompting the shift to manufacturing dimensionally consistent, hand-sized concrete units. This soon heralded the arrival of manufactured concrete pavers, which were referred to as Holland Stones to denote the country where they first originated. These concrete pavers, shaped and sized just like a brick, proved to be much more economical, with excellent pressure resistance.

This is when German Engineer, Fritz Von Langsdorff developed a choice of shapes with multiple colours in the concrete pavers. The very first concrete paving stones were installed in Stuttgart, Germany. This was the beginning of a new revolution in construction of roads. The mass production of the concrete pavers started in 1960, spreading across Europe and later rest of the world over the next decade.

The popularity of concrete paving stones soon reached Canada in the 1970s and thence to the US resulting in rapid growth of development and production of interlocking concrete pavers which proved to be more efficient and economical. Incidentally, though concrete pavers are now used, the design and construction used by the Romans continues to guide the paving



Circular patterned pavers. Photograph by Mahesh Chadaga

installation procedure to this day, saluting the durability of the historical Roman roads.

It is estimated that currently 1000 pavers are manufactured every second, making available one square foot of paver for every person in the world.

#### **INTERLOCKING CONCRETE PAVERS**

Also referred to as segmental pavers, interlocking concrete pavers emerged in the US, replacing the conventional brick, clay or concrete used earlier for paving. The interlocking concrete paver designed in a manner to lock into the next paver, brings in stronger connection between the individual pavers while being resistant to movement under traffic. The interlocking concrete pavers also come in waterpermeable designs to address the ecology. The pavers come with the advantage of natural water absorption into earth, yet at the same time prevent soil erosion and stagnation of water in the surrounding area. The permeable pavers are also used extensively to harvest rainwater from the pathways in expansive landscapes.

#### **STONE PAVERS**

Stone pavers are high priced given their strength, durability as well as beauty. The stone pavers are mostly made from materials such as limestone, bluestone, basalt, sandstone, granite. Travertine is another stone which is used especially for pool-sides, patios and outdoor



1991 – The permeable pavers, creates small voids to provide drainage. Source: commercial.unilock.com

entertainment spaces. It is popular for its durability and low-porous quality which keeps it cool even in direct sunlight. It is also salt tolerant with a low sunlight reflection.

Granite stone pavers are sought after for their high integral strength and density which make them easy to maintain as well as hardwearing for outdoor use. Limestone pavers, sourced from the sedimentary rocks in the mountainous terrains and sea beds, offer a unique natural colour variation, making them an attractive choice for paving. Sandstone pavers find their way usually on to patios, sidewalks, backyard regions.

While stone and concrete pavers are popular choices to lay the exterior spaces, other paving materials also include asphalt, bricks, tiles, sometimes even wood besides stones such as cobblestone, flagstone, even artificial stone, beaten gravel, depending on the functional requirement and aesthetics sought. For instance, mosaic patterns were evidenced in pavements of ancient Rome, addressing the aesthetics.





1: The semi-open greenhouse, built to house exotic plants, is walled with grass paver blocks to permit the subdued quantum of natural light and air required to nurture the flora.

2: The grass paver blocks come with perforations that are perfect to let in the right amount of air and sunlight.

3: The rustic interiors of the greenhouse, the grass paver block walls complemented by the raw cement paver block wall and natural textures of wood furniture.

4: Flagstone pavers lay the floor, tying in seamlessly with the paver block walls.





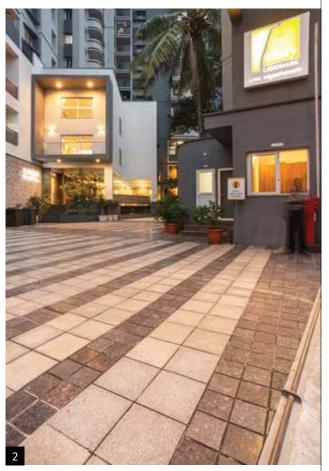


### PAVED GREENHOUSE

A greenhouse need not be structured in just the conventional polycarbonate sheets. Architect Anjan Kumar M of Anjan Design Atrium, uses grass paver blocks to structure the walls of a greenhouse.







1: The red and grey concrete paver blocks along with the grass pavers serve to demarcate the steep 6m gradient pathway, defining its multiple functionality of a walkway, median and driveway.

2: Polished brown and flamed grey granite pavers alternate the pathway to define and offer a plaza like entry to the club house.

3: The two-line dressed granite pavers with their three-inch grass joints soften the angled seating area flanking the long avenue.

4: Grey and black cobble stones define the entrance gateway which serves as the buffer zone between the exteriors and interiors.

5, 6: The alternating red, brown and grey concrete paver strips segregate and define through their colours, the play area, driveway and the pedestrian zone in this shared space.



## PAVED TO DEFINE

An outdoor expanse serves multiple functions that need clear definition. **Architects Sathish Desai and Ganesh Dube of Creo Concepts Architects,** in collaboration with Terra Firma and Dhruva Associates, use pavers to define the landscape functionality.









1: The difference in the sizes and shades of the concrete pavers lend a random feel to the driveway, ushering in a heterogeneous visual character to the space.

2: Grass pavers outline the car park, the demarcating line between the individual slots articulated by regular concrete pavers, the same alternating in the zone leading to the car park.

3,4: The pink stone wall prompts the alternating lay of pink and grey pavers on the pavement leading to the metro station.

5: Pebble beach grass pavers visually soften the driveway, featuring as an aesthetic green band for the stone slabs laying the pathway.



### PAVED HETEROGENEITY

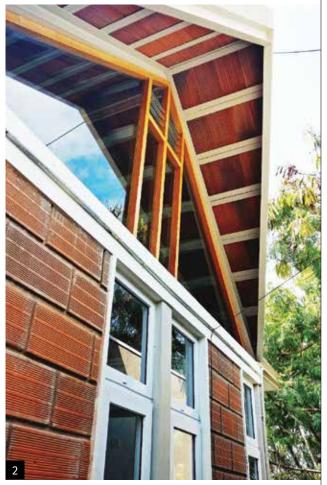
A multi-functional space needs clear demarcation to define each zone.
Architect Prasad G of Dhruva Associates Landscape Architects, brings in a heterogeneous lay of pavers to visually demarcate each functional zone.











1, 3, 4: The cement pavers have been used for the walls, facilitating an innovative sustainable construction technique to house the multiple varieties of pavers in the showroom. The pavers are bonded with special glue and exposed in their raw form to reveal their natural beauty, sans cement and sand.

2: The sloped roof structured with cement paver blocks.

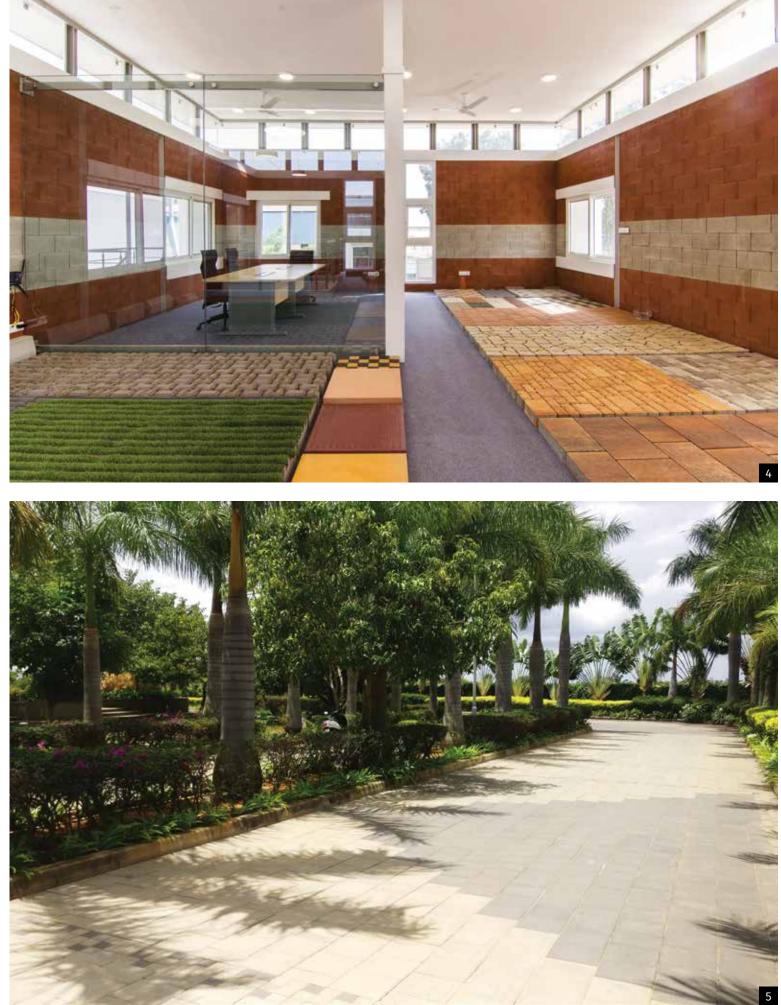
5: The grey and black square paver blocks laid in a staggered pattern, define the path in the gated complex.



### PAVED VERTICALLY

Pavers need not necessarily be laid horizontal. Architect Prakash Selvaraj of Genesis Architecture brings in a vertical expanse of pavers to create a sustainable structure for housing their multiple varieties.











1: Rough granite pavers with grass joints soften the pool deck while simultaneously connecting to the language of the hilly forested setting.

2: Large granite slabs inlaid amidst cobbled granite pavers, bring in the sense of direction to the pathway.

3: The concentric circular patterned cobbled granite pavers highlight the roundabout, complemented by the grass pavers that soften as well as highlight the edges.

4: The circular patterns articulated by the grey granite slabs and red Agra sandstone cobbles create visual interest while highlighting the entry points to functional spaces in the landscape.

5: The granite mosaic pavers with their seating options create an informal, relaxed and charming outdoor dining space.

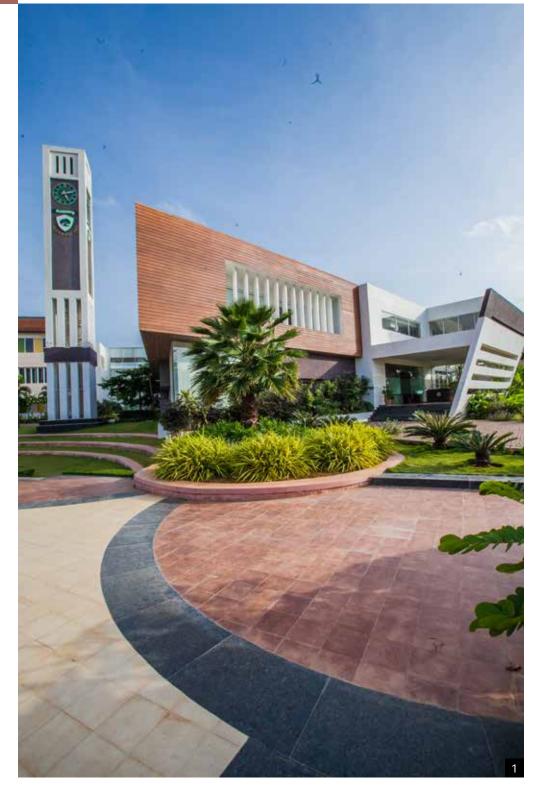


### PAVED TO ARTICULATE

Expansive exteriors fusing in multi-functional zones require articulation. Architect Rohit Marol of Terra Firma, uses appropriate choice of pavers to articulate the multi-functional landscapes.









1, 4: The circular lay of black, red and grey cement tiles visually segregate the Amphitheatre from the soft grass and hard granite paved walkways.

2: Coloured cobble stone pathway flanked by greenery marks the entry to the building.

3: Circular stone pavers define the large expanse of open area in front of the building.





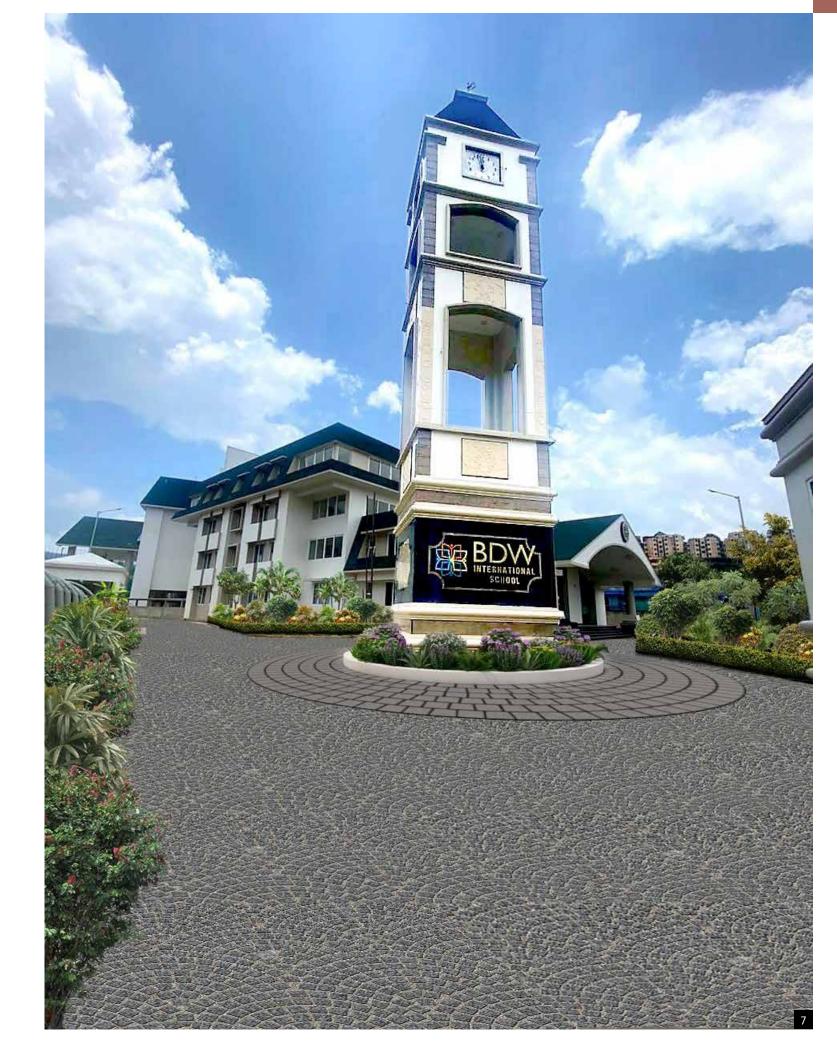


## SEGMENTED PATHWAYS

Exteriors serving multiple activities require visual segmentation of functional zones to facilitate usage. Architect Dinesh Verma of ACE Group Architects segments the exteriors through colours and varied materials, bringing in the visual segregation.

<image>





5: Eco-friendly grass pavers cover the parking area, permitting rainwater to percolate.

6: Grass pavers are separated by a strip of granite in the midst to facilitate an easy walk through.

7: Circular lay of cement pavers segment and highlight the clock tower amidst an expanse of stamped concrete.

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#### **TECHNO ARCHITECTURE**

PROJECT Belaku, 2020

**BUILT UP AREA** 7000 sq ft

**DESIGN TEAM** Architect Rajesh Shivaram

#### AWARDS

Arch Daily shortlisted project for the World Building (Residence), 2020.

South Zone IIID winning entry (1st place) award 2019 for Multi-dwelling Residential Interiors category.

Archdais International Awards 2020-Best Standalone Residential Interiors (Honourable mention)

MATERIAL Concrete, Wood, Corten Steel, Glass, Cement Tiles

PICTURE CREDITS Shamanth Patil

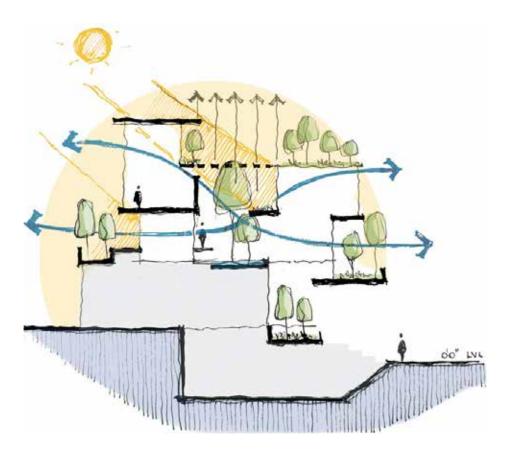
When it is a tight fitted urban site measuring 60x40, the first casualty or so it seems, appears to be the natural lighting and ventilation. This is especially so when the structure is a multi-storey to accommodate not one residence, but two. Yet the challenge of the natural Belaku has been craftily handled by Architect Rajesh Shivaram of Techno Architecture to offer a structure that comes with expansive, copiously lit interior spaces which appear far from being

crammed in a small urban site.

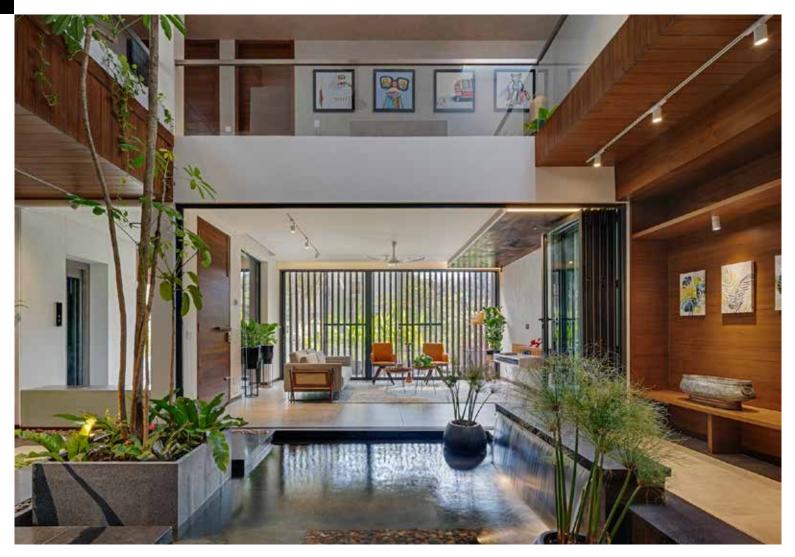
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## A PLAY OF LIGHT

#### BY NANDHINI SUNDAR | FEATURING AR RAJESH SHIVARAM



The brief had been very clear; a practical dwelling on one level to cater to aged parents while the second dwelling would be diametrically opposite in design intent and space management to meet the requirements of a young entrepreneur. "Both the residences needed to be fused into a 2400 Sq ft site where they do not appear as two different houses but as one seamless unit", states Rajesh. "We had the added challenge of ensuring the inevitable steep vertical expanse did not feature on the elevation."





Copious natural light with an infusion of water and greens.

#### INCORPORATING THE FIVE ELEMENTS

Given the brief and the challenges it entailed, Rajesh set about addressing two critical factors first; the elevation and the flow of natural light into the interiors. The design concept opted was Wabi Sabi, the Japanese concept of bringing perfection amidst imperfection. "This idea came about as the accent was on celebrating nature and nature is beautifully perfect in its imperfection", smiles Rajesh. The structure was thus designed to bring in the five elements of nature, ensuring the presence of ample sunlight and natural ventilation along with an infusion of water and greens against the back drop of a rustic, earthy palette.

In keeping with the design concept, the materials opted were all natural, portrayed in their raw textures and minimalist leanings. The ground features a stilt car park akin to a Senate house, with the utilities packed in. The first level incorporates a basic house that meets the practical requirements of an aged couple. "The design



Waterbody and greens bring in the freshness of outdoors.

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Horizontal and vertical visual connect in the interiors.



The master bedroom.

for the first level was more in keeping with what earlier prevailed before the existing structure was demolished to build the new residence", states Rajesh.

#### MULTI-DIMENSIONAL FACADE

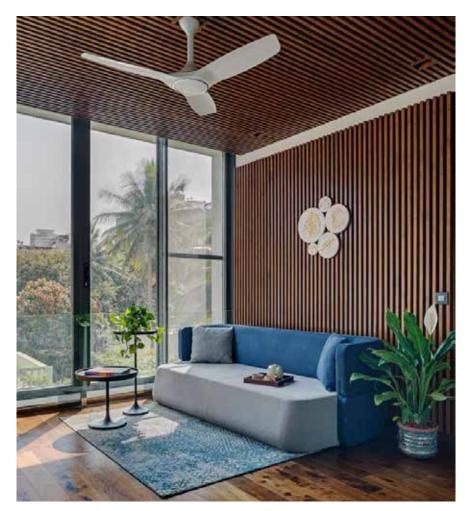
With old residences conventionally accommodating a sizeable presence of solid Teakwood, Rajesh salvaged the same to use it on the façade as vertical ribs to complement the Corten steel cladding on the exterior wall. The façade plays out as a combination of varied boxes placed strategically to bring forth a multi-dimensional elevation that camouflages the presence of two residences, while breaking the steep triple storeyed vertical expanse. The retention of an existing tree further disrupts the visual vertical expanse, blending cheerfully with the solid wood vertical reapers and sprinkling of greens in the balconies.

#### WATER. GREENS AND SUNLIGHT

The materials evidenced on the exteriors, find their way into the interiors, the spaces of the second house reflecting plenty of wood, greens and water against the beautiful raw textures of cement. The concept of light and shadow is dramatically incorporated through the vertical solid Teakwood ribs that replace the East facing wall in the living area. Through the day, the light patterns filtering in through the vertical ribs alter with the sun's movement, creating drama even as they soak the interiors in abundant natural light.



Open bridge overlooking the living space below.



The expansive terrace lounge doubling up as quest bedroom.

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A large 120 Sq feet four feet depth waterbody features under a double height skylight, with the dining and kitchen featuring on one side and the living area on the other. The large ornamental tree fused into this waterbody, leans towards this skylight, ushering in the freshness of greens against the backdrop of a large waterbody.

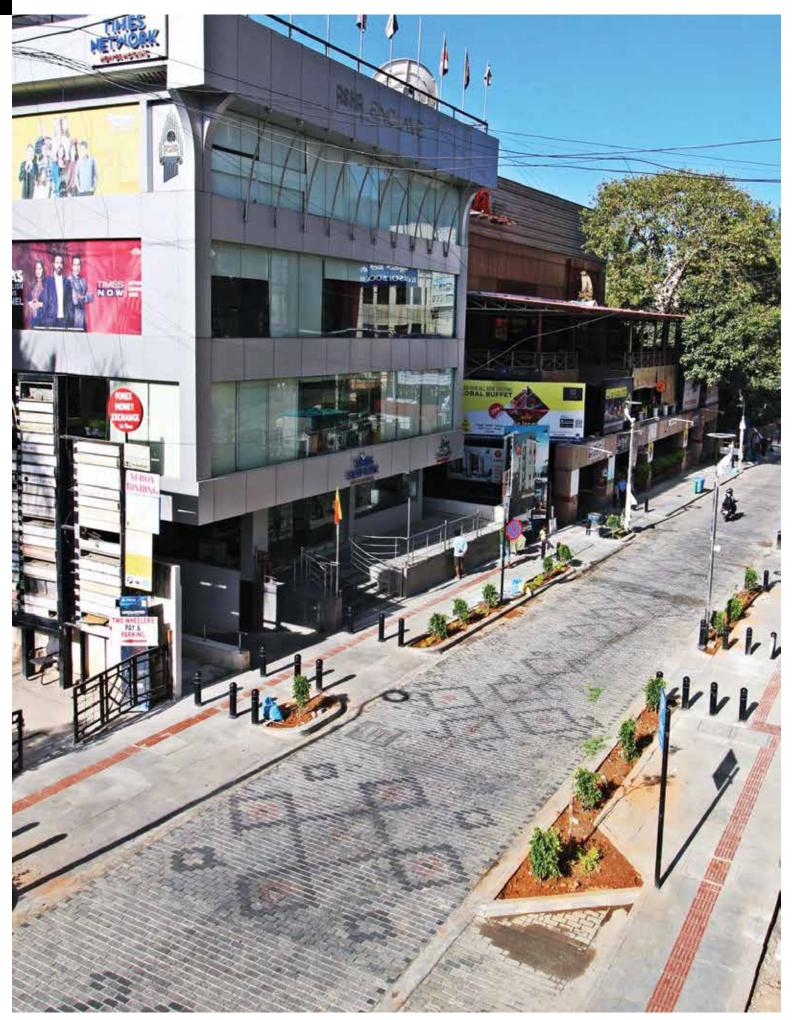
The sound of flowing water in the presence of greens amidst the 45x18 feet expansive living and dining area infuses an energy that is both refreshing as well as calming, transforming the ambience to breathe the aura of a rejuvenating exterior. "Given the minimal waste mandate, an automatic water controller with a built-in UV filter was opted to permit the same water to be recycled without the possibility of bacteria and foul smell in the water", adds Rajesh. A step out terrace from the living area permits outdoor relaxation and interaction, whenever solicited.

#### VISUAL CONNECT

An arresting sculptural staircase leads to the second level where a bridge over the waterbody connects the two bedrooms and a family space, creating a visual link between the two levels. The Jharokha featuring in the master bedroom to overlook the water feature, further connects the master bedroom directly with the living area. While a library space has been carved out on this bridge, the family area is structured as a dramatic box that thrusts out of the building, lending the unique dimension to the façade. Floor to ceiling sheer glass windows serve as its outer wall, connecting the interiors seamlessly to the outdoors even as the presence of glass breaks the heaviness of concrete on the façade.

#### NATURAL AND MINIMAL

With the design accent of the interiors being not only natural but also minimal, bare white walls contrasted with raw exposed concrete and cement tiled flooring decorate the spaces. "Utmost care was taken to ensure no material was over used", adds Rajesh. The minimalist leanings have been extended to wardrobes too, their presence totally tucked out of sight, accessed through a recessed door. The warmth in the spaces is chiefly created, besides the presence of water and greens, through the copious presence of wood in the interiors.



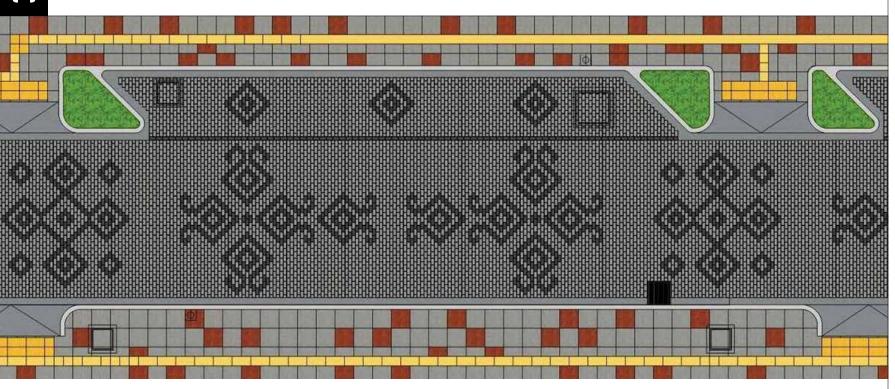
An aerial view of the Church Street Bengaluru.





Existing and Redeveloped plan

Narrow streets, broken pavements, potholed roads, congested, pedestrian-hostile motorways have marked the Bengaluru urban scene for many years. It is not surprising that this also characterised the geography of one of the busiest, most frequented stretch in the heart of the Central Business District (CBD) till a couple of years back when the scene diametrically altered with the involvement of designers and socially inclined citizen groups. We are talking about Church Street, a 750m stretch running between Brigade Road and St Mark's Road, parallel to MG Road.



Design incorporating the traditional Kasuti motifs.

The erstwhile Bengaluru, before the advent of BBMP, encompassed narrow streets dotted with single dwelling units, the utilities of each area planned to accommodate merely the needs of these dwellings. Church Street was no different with its combination of residences and multiple commercial establishments. With the spiralling urban development and onslaught of heavy motor traffic, this peaceful fabric of the street was tattered at the core, the existing utilities stretched beyond the point of accommodation.

Being one of the busiest and high revenue earning stretch of the city, Church Street needed urgent address of its prevailing infrastructure as well as a serious makeover to revoke this civic apathy. For, a walk through this pathetically dismembered street spoke a story of utter neglect and scant regard for its place in both the history of the city as well as its revenue earning potential. Worse, what was seriously ignored was the important place that pedestrians occupied in the street, initiating 70 per cent of the business interaction in the 750m stretch.

It was clear that an intervention and solution was long awaited, a solution that was seriously pedestrian. That is when like-minded socially inclined citizens and groups came into the picture to find an answer. Non-governmental organisations like Janaagraha, Architects like Naresh Narasimhan of Venkatraman Associates, played the key role in transforming the street to what it is today; a pride of Bengaluru, to be replicated in other areas.

#### INITIATING TENDERSURE

It all started when Swati Ramanathan, Co-Founder, Janaagraha realised that any talk or action on altering the connectivity in the city first requires the roads to be addressed. "Unless we fix the state of our roads, which is the fundamental requirement, no change in infrastructure and connectivity can occur", she points. "It also does not limit to fixing the surface of these roads but goes beneath to address the subterranean services as the complexity of these services, their outdated state as well as the varied service providers makes it imperative that these are mapped and designed to cater to changing times and long term needs."

Her observation and deep concern soon manifested in her connecting with the concerned governing bodies and coming up with reams of drawings and mappings of these services. "We were staring at a scenario where there was no alignment of design or execution between the multiple contractors who worked individually on different utilities on each stretch where each measured less than a kilometre."

Soon, the mapping, design and process of rectifying the subterranean services were in place in the form of over 600 pages of drawings that detailed every aspect of the roads, the utilities underneath and the manner in which each needed to be altered, re-laid. "The challenge here was to ensure the new infrastructure was fully in place before dismantling the existing outdated old set of utilities as the dwelling units cannot suffer the loss of service even for a short period", states Swati.

The second challenge Swati faced was to get the sanction for relaying not just select stretches of roads but an entire network of roads in the city. "There is no point in merely altering the structure of few select roads and leaving the rest to decay. Once the system is in place and the design and process is approved, the implementation would need to be across a complete network of roads, irrespective of which stretch is the starting point."

Her perseverance paid dividends, culminating in initiating the TenderSURE roads across the city. "We started first with St Mark's Road and the intervention then spread across all the arteries and



Kasuti patterns and cycle pods.

feeder roads that were identified in the CBD, garnering praise from not only residents of Bengaluru but across the country. Many engineering and municipal teams from across the country have visited to inspect and replicate this in their respective states under the Smart Roads project", adds Swati.

#### **CHURCH STREET: OVERCOMING THE CHALLENGES**

An inspection of the 750m stretch of the historic Church Street, which was next picked for redevelopment using similar design principles opted under TenderSURE for the underground infrastructure, revealed an uneven width of the street, variation in its elevations, dangerously dilapidated, broken pavements and inadequate, outdated subterranean services. Rectifying these called for interacting and negotiating with multiple stakeholders. Existing system of street lighting showed multiple dark spots. As for noise levels, it was uncomfortably high and at times acute, to put it mildly.

The solution involved correcting these serious deficiencies step by step before putting in place an effective, aesthetic pedestrian solution. To start with, the entire street was divided into four different character zones where each came with its distinct identity and specific user group. The next step was to come up with a design vision for Church Street which rested on the key parameters of safety, mobility, pedestrian accessibility, liveability, sensitivity to local context and creative use of street space. **{~}** 

"This design vision was drawn up on the premise that the street should be safe for all users, especially for pedestrians who need to be given high priority", says Architect Naresh Narasimhan, who worked on redeveloping Church Street. This meant that the entire street will need to alter its composition to become a slow zone for all users. The footpaths would need to be continuous with the grade difference between the safe pedestrian way and mobility zone for vehicular traffic being minimal.

A slow zone is also characterised by strong liveability, corroborated by the presence of adequate street lighting, street furniture, landscaping and tree lines that encourage and accommodate relaxation and interaction, complemented by vending activities. Locational sensitivities play a strong role in determining the pattern of local activities as well as pedestrian movement and these need to be factored in along with the land use patterns to ensure the design vision bears sensitivity to local context.

Parking zones form an integral part of a street design. While this takes up precious space of the street, the same can be altered to become a creative use of street space if interspersed with 'break-out' spaces comprising of street vending or street furniture.

#### **DESIGN IMPLEMENTATION**

Given the pedestrian-centric design vision, the first step involved



Streamlined footpaths and pedestrian friendly paved street

rationalising the carriageway and increasing the width of the pedestrian pathways. This meant that the footpath would need to maintain a width of more than 2m at all points so as to permit an uninterrupted pedestrian movement along with the presence of trash cans, street furniture, street lights and other relevant services at regular intervals.

Besides the presence of streamlined footpaths, the existing subterranean services also required mapping and redesigning so as to offer an efficient long term service. Given the multiple stakeholders involved, the entire redesign vision required working closely and in sync with all where the planning and final execution is both inclusive and participatory.

Just as the subterranean services need mapping, redesigning, relaying, parking forms a key part of the street. The traffic composition of the street was mapped based on the existing parking patterns of two wheelers and cars through the day and also on the adjoining feeder roads. With the 'Pedestrianisation' concept being the focus of the design, attractive cycle parking pods at strategic points formed part of the design intervention.

#### **REVISITING THE CHALUKYAS**

When the focus is on pedestrians, it is but natural to look for a paved solution rather than tar or concrete. It is thus not surprising that the people behind the conceptualisation of a pedestrian Church Street sought pavers to lay the 750m stretch. What then ensued was a street paved with patterned pavers that brings forth the cultural

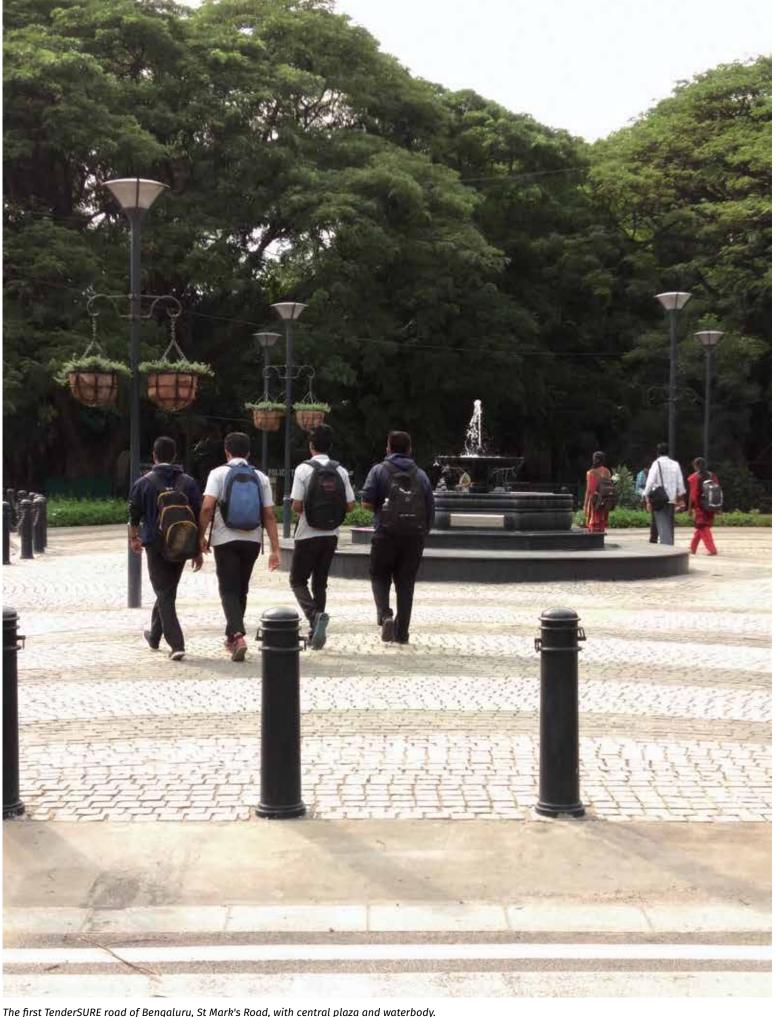
heritage of the State. "This is the first street in the city to be paved with patterned granite cobble stones that promote local culture", points Naresh.

The patterns opted reflect the almost forgotten art, Kasuti, which is a traditional folk embroidery of Karnataka dating back to the Chalukya period. This intricate art form has been dwindling and nearing extinction for want of a market and sustained funding. "The Kasuti work is so intricate that at times it involves fusing in 1000s of stitches by hand. This exquisite traditional art form needs revival and what better way to bring this to public notice and celebrate our cultural heritage than patterning the street with its motifs", Naresh adds.

#### A CULTURAL WALK-WAY

The redesigned and redeveloped Church Street transformed to not only become the forerunner for more such pedestrian alleys to come up in some of the other historic streets marking the CBD, but the freshly laid 750m stretch also evolved to serve as a cultural walk-way, connecting the present with its historic past, dating back not just to the British period and its erstwhile cantonment but to centuries, dating back to the Chalukyas.

The 'Pedestrianisation' of Church Street has been followed with the 'Pedestrianisation' of yet another equally historic street, the Commercial Street. The recently redeveloped Commercial Street with its paved pathway welcomes shoppers to stroll at leisure and enjoy the enhanced shopping experience.





The hand embroidered arched entrance inviting the buyer to step in and explore.

## DESIGNING TO THE **PSYCHOLOGY** BY NANDHINI SUNDAR | FEATURING AR RAJA ARJUN

#### **OFFICE OF** COGNITIVE DESIGN

PROJECT Fizzy Goblet

**BUILT UP AREA** 400 sq ft;

LOCATION Bengaluru

**DESIGN TEAM** Architect Raja Arjun, Akshara Verma, Neha Vikram

PICTURE CREDITS Office of Cognitive Design

Not surprisingly the ensuing design of the **Fizzy Goblet** focused on capitalising on this factor, structuring the space to bring in the aesthetics while subtly connecting to the fundamental fabric of the product and the mind-set of the buyer. Thus, the artistic element pronounced in the handcrafted ethnic footwear can be seen impressed upon the varied components in the store while the layout and design connects to the psychology of the buyer.



Display offering 360° view of the handcrafted pair.

When a retail space is sought to be designed, there is the element of psychology of the consumer that comes into play. At least, that is the approach **Architect Raja Arjun of Office of Cognitive Design (OCD)** firmly believes in addressing and adopting when executing the design. A shoe store is no different, the psychology factor equally significant in wielding its influence on the ultimate sale.



Arched metal mirrors connect with the design of the juttis.

#### **BEGINNING WITH THE ENTRANCE**

It starts with the façade which reveals the absence of an entrance door. A magnificently hand embroidered arched entrance invites the buyer to step in and explore. The colours and the hand embroidery found on the footwear is translated on to the arch, with copper and brass etchings marking the edges, very similar to the embroidery along with the copper detailing evident in the high end varieties.

"A closed door psychologically stops an entry. So we began to address the design right from the door step, replacing the entrance door with an artistic arch that resonates with the hand embroidered juttis. Since the brand is all about the work of the artisan and his hand crafted product that relate to the traditional juttis, the décor reflects this art and hand crafting in the elements brought in", explains Arjun.

The arched entry and the intricate embroidery tune in with the shape of the juttis and its embroidered fabric, points Arjun. "The colours too connect with the juttis, the same peach, pink and blue colours used on the entrance arch." In many cases, the intricate embroidery featuring on the footwear may fail to be noticed.

"By using the same motifs on a larger scale on the arch, attention is drawn to the finely crafted pieces waiting inside the store", adds Arjun.

#### **RELATING TO THE YOUNG**

In keeping with the psychology of the present day young buyers, a major portion of the footwear is displayed at the centre of the store to facilitate the customer to walk around it and receive a 360° view of the handcrafted pair. The right type of lighting is essential to enhance the beauty of the product and translate it into a purchase. Sensitive to this, Arjun opted for the centralised display feature with a carousel lighting focusing on it.

#### **BLENDING TRADITION WITH MODERN**

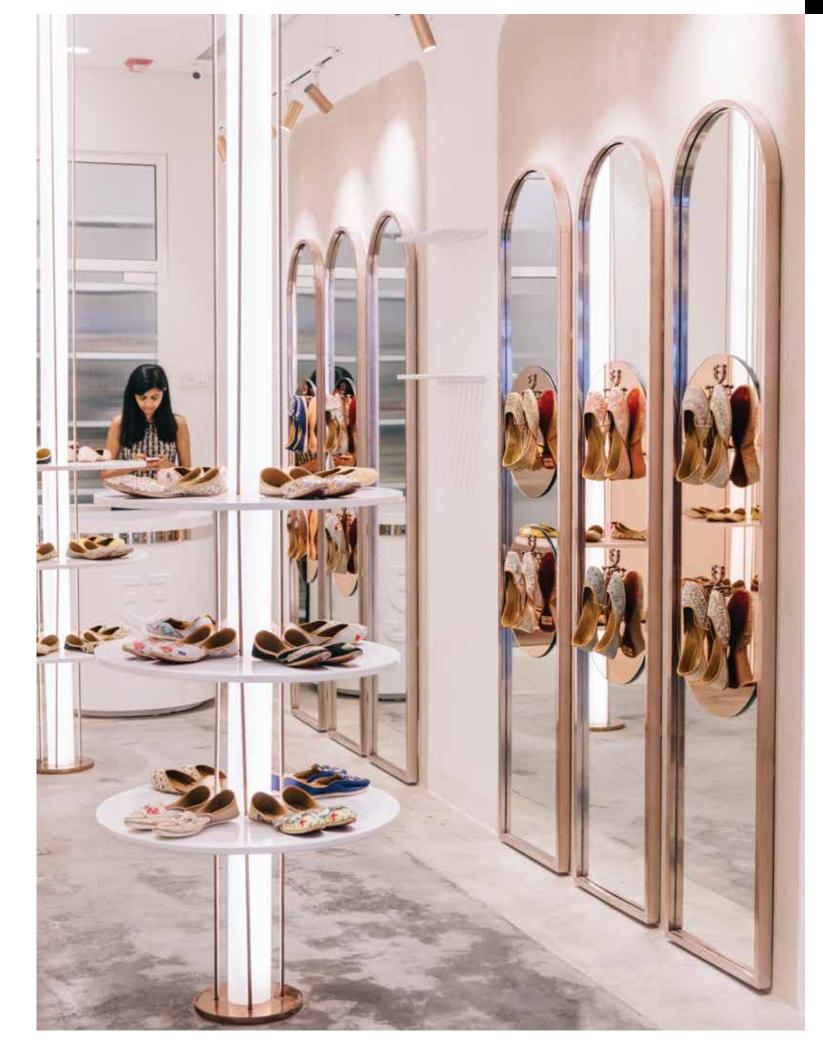
The footwear, though designed on the traditional lines, is softer than the original juttis. "This is the contemporary interpretation of the traditional juttis", says Arjun. In keeping with this combination of modern with the traditional design sentiments, the décor of the retail space reveals similar mix of modern with the traditional.

The walls are mounted with arched metal mirrors where the arches and metal connect with the design of the juttis. The handcrafted metal mirrors display a modern finish, the smooth arched metal reflective of contemporary designs. "The mirrors are also handcrafted by traditional artisans in tune with the product retailed which is totally handcrafted", adds Arjun.

Pairs of footwear are also aesthetically mounted on these mirrors with the help of handcrafted hooks where the mirrors permit the customer to check their individual image with the juttis on the one hand while the backside of the footwear is simultaneously reflected on the display. "This keeps with the philosophy of offering a 360° view before purchase", adds Arjun.

The in situ cement floors come with thought provoking quotes as well as brain teasers to spark interest and induce a social media photo opportunity for the customer, wearing the handcrafted juttis. Similar delicate embroidery and colour usage for seating in the store, which tie in with the juttis, further add to the artistic element sought to be enhanced. A ribbed glass screen, besides adding a differential dimension to the ambience, segregates the storage area from the main showroom while simultaneously ensuring the openness of the store is not compromised.

Fizzy Goblet is a chain of four stores across the country, each housed in an average 400 Sq ft space.







#### Dear Trade Members,

Team Antarya has an irresistible proposition for all the Institute of Indian Interior Designers Bangalore Regional Chapter (IIID BRC) trade members where they can seamlessly connect with the design fraternity through our design magazine Antarya.

We propose to feature a trade directory in every issue of Antarya going forward, where the participating trade members can list their company and products to enable architects and interior designers to use the same as a ready reckoner. The engagement of each trade member participant will be for four consecutive issues of Antarya spanning a year.

As members are aware, Antarya has been serving as a fertile connect with the design fraternity, not only with members of IIID BRC but across the country, since January 2013. Antarya has a captive audience of architects and interior designers from across the country through its hard copies circulation and extensive digital presence. The projects and designers featured in every issue serve as the icons of architecture, not just in the country but internationally too.

Every issue of Antarya is based on a specific theme around which the cover story rests, along with unforgettable features of master architects from Karnataka and rest of India, where each has left an indelible mark on architecture. The features are carefully selected and the projects diligently assessed to bring in only the very best of designs, making every issue of Antarya a collector's magazine. The design magazine has also proved to be an immense learning curve for young architects, with architecture schools eagerly seeking every issue for their libraries.

Starting 2021, team Antarya decided to go a step further and engage IIID BRC trade members through a Trade Directory, so that a mutually beneficial connect is established between the trade members and the design fraternity.



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## **TRADE DIRECTORY**

#### MODE OF PARTICIPATION

- The participation from the trade members will be in the form of insertions in the trade directory about their company and their products under the defined colour coded categories.
- Every page will have 5 listings, each coming in the size of 5cm x 20cm
- Based on the products, the listing will be done under Colour **Coded Categories**
- A person can also choose 2 modules instead of 1.
- Trade Members are to provide their company and branding details to fit the module.
- Antarya will develop a QR Code for all Participant Trade Members; this will lead readers to their website. This special feature will enhance their communication.

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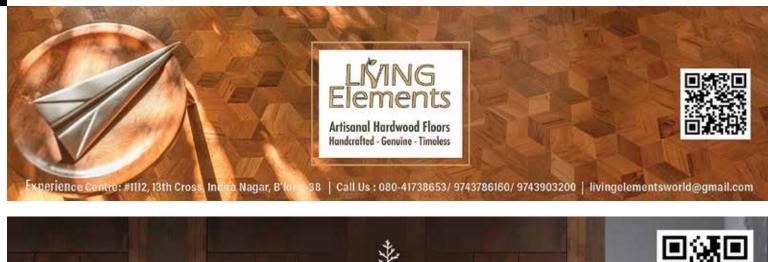
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#### CONTACT

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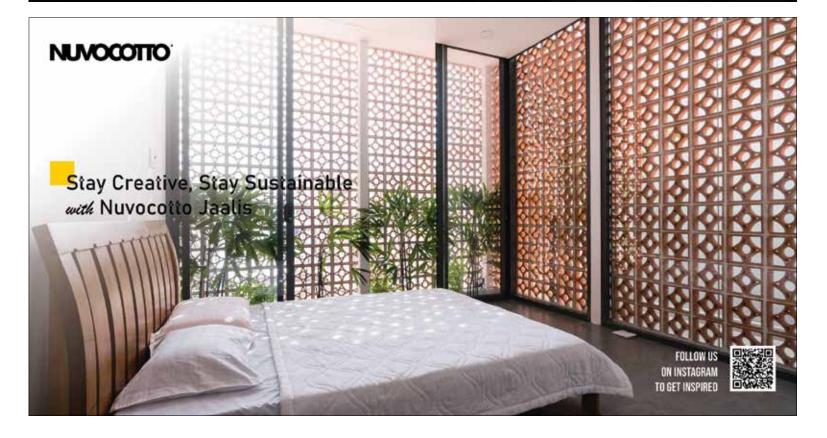




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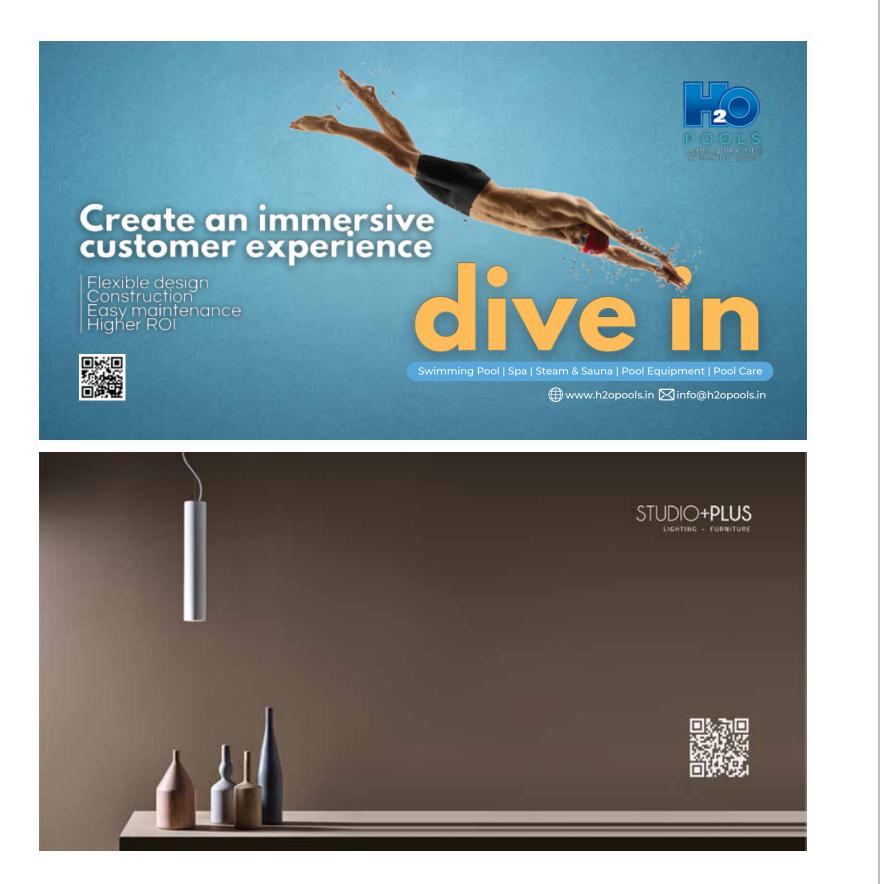
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## WORKING OUT OF A CONTAINER BY NANDHINI SUNDAR | FEATURING AR ARUN BALAN



#### **BALAN & NAMBISAN ARCHITECTS**

PROJECT K2K

**BUILT-UP AREA** 1500 sqft

LOCATION Bengaluru

PICTURE CREDITS Archana Vikram

The location was a precast concrete factory; the requirement was an office and an experience centre. The objective was to make the structure stand out amidst the industrial environs while retaining the industrial language. Added to this were the considerations of permitting the structure to be dismantled when required and relocated elsewhere.

When Architect Arun Balan of Balan & Nambisan Architects was given this proposal, his first instinct was to come up with a design that is sustainable where the structure defies the conventional forms, pushing the boundaries of design and the built form. Not surprisingly, the materials explored too were ones that would encourage recycling, reduce waste and cap consumerist leanings.



An intermediate level to host meetings.

1500 Sq ft office space that hosted a workstation, experience centre, dining and pantry, an outdoor deck and a set of toilets.

#### COLOURED TO DISTINGUISH

Given the industrial site on which the office space was positioned, the shipping containers would totally merge into the scene, something Balan and his team did not desire. "The objective was to harmonise the structure with its industrial environs, yet enable it to stand out as unique and identifiable. This prompted painting the containers in bright red, chirpy yellow and dark cobalt blue where they stand out against the landscape which is submerged chiefly in monotonous metal green industrial structures", he elaborates.

The brightly painted cheerful shipping containers feature at an elevation, perched as they are, above ground level, drawing attention effortlessly, compelling the visitor to step in and experience. A cantilevered staircase, with its large glazing, brings in an arresting sculptural element to this structure, visually lifting it away from its mundane material component. Multiple open decks permit stepping out into the open for a short break when desired.

#### PLANNED ON THREE LEVELS

The built spaces are designed over three levels, the 800 Sq ft marketing office and experience centre featuring at ground level, breaking out into an external courtyard with waterbody where the visitor can sit back and discuss. The first level features an open deck which doubles up as an outdoor discussion centre. The second level houses the lobby and the Director's cabin along with a step-out balcony space.

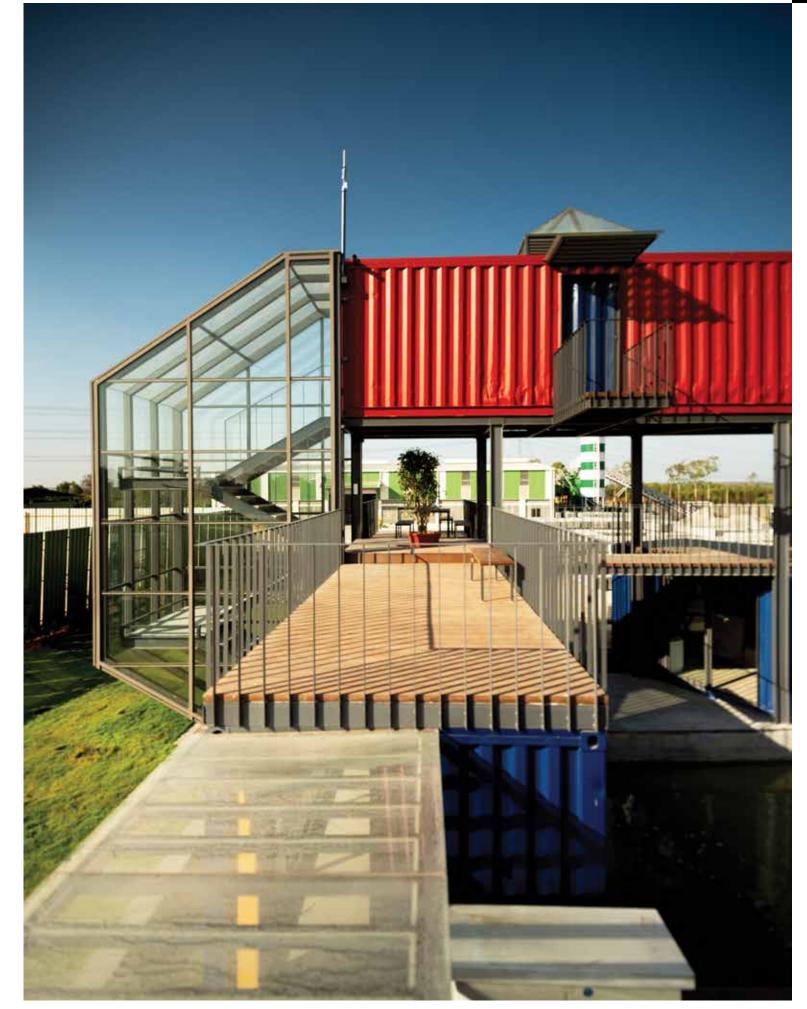
"The outdoor decks on all three levels are placed in different directions. Based on the sun movement through the day, the outdoor discussion space can be chosen for use", states Balan. Given the linear form of the container spaces, a need for breaking the monotony was felt. A transitionary space in the form of a skylight area was created between the lobby and the Director's cabin on the second level. The large openings and an outdoor deck besides the skylight permits the free flow of air to complement the copious natural light filtering in.



The strand board detail used for insulation becomes an aesthetic feature.

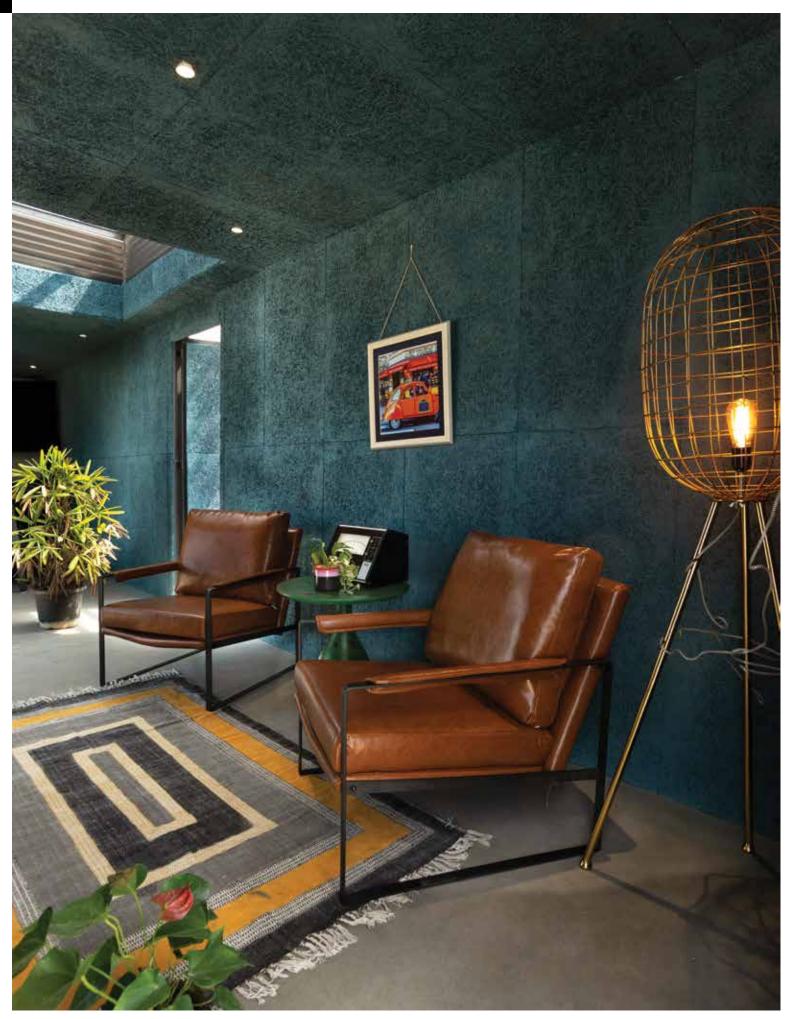


Fragmented, yet part of the whole.



Transparency is the key. Seamless interior and exterior connect.

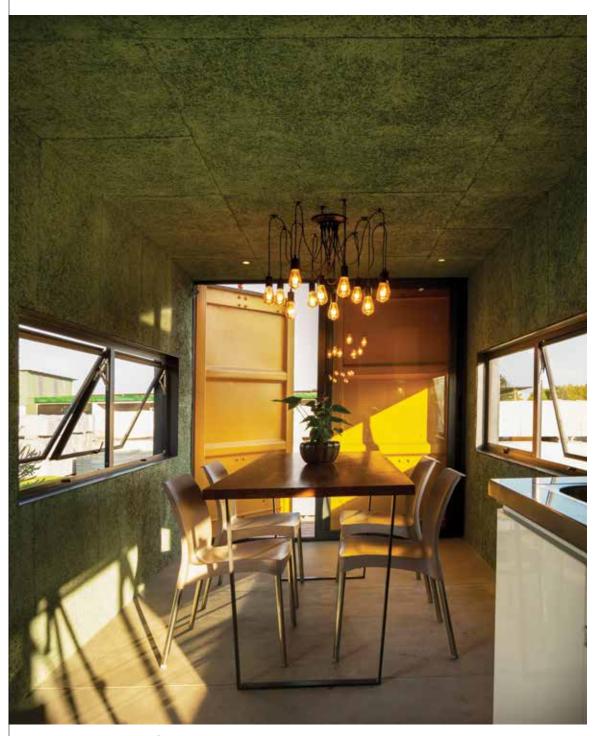
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Waiting lounge with its evocative detailing.

#### MANAGING THE HEAT INGRESS

Since the shipping containers are metal boxes, a structure built with them can become extremely hot especially in the summer months. This raises the need for appropriate and adequate insulation of the interiors. "The interior spaces are strategically designed around a courtyard and a waterbody. This brings in both ample natural ventilation as well as moisture, reducing heat and dryness in the interiors. This is further complemented



Pantry overlooking the waterbody.

Ø

by large windows and openings carved out in the containers, permitting unhindered flow of cool air from outside and exit of hot air from within", explains Balan.

While the structural design provides passive cooling, the metal structure still requires insulation to prevent radiation of heat into the interiors. "To address this heating, the ceiling and walls of the metal containers were insulated using novel rock wool and strand board panelling, bringing down the ambient temperature by several notches", states Balan.

#### CIRCUMVENTING THE METALLIC TRAITS

Yet another challenge faced in using metal containers for the structure was the possible rusting of the exterior surfaces due to rain. The possible rusting was circumvented by carefully planning the exposed service lines such that they effectively drain the rainwater and prevent stagnation.

Just as the exteriors needed colour and cheer to stand out amidst the industrial landscape, the interiors too need warmth and cheer where the ambience does not characterise a discarded metal structure. Keeping with this requirement, the cobalt blue walls tie in tastefully with the leather seating and rugs even as the sunlight, slipping in gaily through the skylight and vertical openings, blends cheerfully with the greens. The narrow interior spaces are cleverly designed to appear uncluttered, naturally lit and ventilated, effusing an energetic space that is both novel and refreshing.



Greens to soften the tin box experience.

## STRAIGHT LINED AND MINIMALIST BY NANDHINI SUNDAR FEATURING AR ROHIT MOHITE



He insists he has no specific design style, "as structures emerge based on the context, culture, the functional requirements and locational sensitivities." Yet, a strong leaning towards straight lines and earthy minimalism can be deciphered as one walks through the works of Architect Rohit Mohite of Studio Detail **Architects.** After graduating from KLS Gogte Institute of Technology in Belagavi in 2013, young Rohit started his career with a stint in Collage Architecture Studio in Bengaluru, training under Architect Swapnil Valvatkar and team.





Before and After: Residence 153





Residence 153 interiors.

Three and half years thence, Rohit decided to start his own practice in 2017 to execute his design leanings. Three years on, Rohit has already completed 8 projects, with 2 of them involving renovation of an existing residence, transforming to speak the contemporary language.

His project Residence 153 is a 30 year old G+1 structure which was required to be refurbished with an extra bedroom and multi-purpose space. The brief was to bring in more natural light into the spaces while keeping the design style simple. In the renovated structure, an open entertainment lounge was created while the tone of the interiors was kept neutral to focus more on



the existing collection of art and antique furniture.

"The façade too was kept simple and minimal while doubling up as a veil against the commercial neighbourhood of the residence. The wood screen façade combined with its blank white wall, converted the building into an inward looking structure, the horizontal lines connecting the interiors to the street while keeping the privacy intact", explains Rohit on the intervention made.

Complementing the arts and antiques in the spaces is a green wall in the open entertainment deck while a 200 year old carved door sets the tone right at the entrance for the harmonious existence of the old world décor in a straight lined contemporary space. "We had to bring down a 40 feet wall which was part of the living room earlier to open up and encompass the outdoor lounge and greenery. The dramatic floating roof made of MS steel and GI sheets, provides the shade during the sunny hours of the day while the wooden louvers ensure continuous natural ventilation of the interior spaces", Rohit explains.

#### A HIERARCHY OF BOXES

His project, Residence 478 is yet another renovation, where the 30 year old sloped roof structure had to be redesigned. Rohit





Residence 153 interiors.



Artist Retreat interior views.











Weekend House.

added another level to the G+1 structure, creating a multi-purpose space with an open terrace garden, a gym and massage area. "The roof and staircase was demolished to create a double height lobby where the space seamlessly connects to an existing set of old trees in the site." The redesigned structure comes in a hierarchy of three boxes, the double height lobby with its glass façade forming one of them.

The second box comes up in the section where an existing odd shaped terrace was demolished and restructured to create the multi-purpose space with its open terrace. "A wooden louvered façade shields this second box structure, with the library area placed underneath breaking this wood façade with its glass wall", elaborates Rohit. The third box encloses the family area created in the section where the terrace prevailed. The exterior concrete panel finish façade encompassing the boundary wall lends a minimalist style, tying in warmly with this wood and white expanse.

Rohit's interior project, Artist Retreat reveals minimalism in totality, the white spaces punctuated by shades of grey and black. "The request was for a clean minimalist theme where the colour comes purely from the greenery and wooden floors. A Scandinavian theme was hence opted, the art and furniture in black bringing in the patterns and accents in the space", he explains.

Rohit's upcoming project involves a farmhouse planned on 15 acres. The Weekend Home will house a 3500 Sq ft structure opening on to an expansive outdoor courtyard spanning half an acre. Large running corridors of the residence will enclose this sprawling outdoor courtyard. "The existing stone house in the farm will be integrated into this new extension, while the Mangalore tiled roof will aid to lend an earthy charm to the exteriors to fuse into the rural scene", states Rohit. Apart from this project, Rohit is also working on a resort in Ooty where the design structure aims to seamlessly connect the interiors with the surrounding hills.



## **ADDRESSING FIRE** SAFETY IN ARCHITECTURAL *DFSIGN*

BY ARCHITECT ADNAN NAKHODA | KAN Group Associates, Visiting Faculty at RV College of Architecture

Built environments are meant to serve the primordial needs of shelter, comfort and safety. This is the

fundamental principle of Architectural Design. Alarm bells hence must be rung about the oft-missing fire

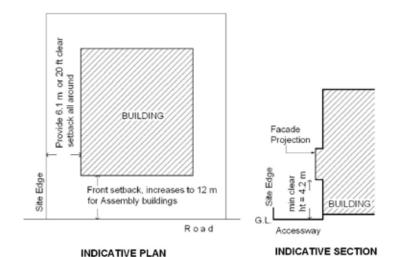
and life-safety standards in buildings around us.

In academia, it is observed that the student is mostly engaged in three all important tasks -understanding the project, arriving at a concept and endeavoring a proper representation. Yes, sufficient indulgence is required to develop an Architectural philosophy and concept, to obtain a deep understanding of culture and context; but what also requires due diligence is to transform a studio concept into a buildable, reliable, safe habitat.

Unfortunately the terms shelter and safety have lost their significance in design vocabulary. Studio concepts are often seen to be a collection of amorphous abstractions or an imitation of current world trends and often do not address the larger issues of climatology, sustainability and life safety. The best approach in ensuring safety standards in designs would be to adopt important principles right at the formative stage of concept design. The casestudy phase of the studio can also become more meaningful if the fire safety measures adopted in the project of concern are also observed and recorded, along with other aspects.

What then are the necessary standards to be followed and under what project conditions are they applicable? The NBC (National Building Code of India) advocates mandatory standards for the following:

- All building types that have a floor area of over 500 Sqm or a height of over 15m
- All educational and institutional buildings of height 9m or more
- All buildings with 2 basements or more
- All multipurpose and assembly buildings hosting over 50 persons at a time



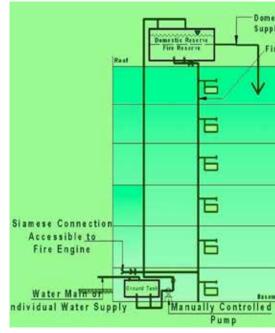
Clear access way around the building may be reduced to 4.5 M only in high density areas with narrow access roads

#### IMPORTANT DESIGN GUIDELINES

Provide sufficient set back to enable fire truck access to the building

Design to accommodate the fire fighting and alarm systems

- Provide the necessary underground and overhead roof tanks and the necessary service cores for fire-fighting plumbing lines.
- Plan sufficient ceiling height to enable installations of sprinkler systems.
- Detectors and Heat Detectors in all enclosed areas as per standards.
- Suspended Ceilings shall be installed at minimum 2.4m clear above the finished floor level.



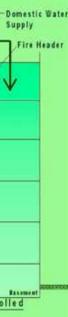
Typical diagram of ground and gravity roof tank with adequate domestic and fire reserve. Source: https://civil-enaa-world. Blogspot.com/2009/05/fire-protection-plumbing.html

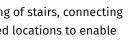
#### **Proper Planning of Egress ways**

- Plan vertical transport cores (comprising of stairs, connecting lobby, and a fire-rated lift) in centralised locations to enable quick egress.
- The total travel distance per floor to the nearest Exit Core, shall not exceed 30m.
- The maximum dead end corridor length (as indicated below) is 6m for educational, institutional and assembly buildings and can stretch to15m for other project types.
- A building shall have at least two stairways (open plan or enclosed) located in different zones, to enable egress in different directions.
- Stairways shall conform to a minimum width of 1.5m (except residential buildings).
- It is important to note that a staircase shall not be arranged around a lift shaft and spiral staircases are not permissible for buildings over 9m in height.
- Ramps for pedestrians shall have a maximum slope of 8 per cent or 1 in 12 and shall be at least 1.5m wide.

#### Provide adequate Ventilation in all areas

• Enable natural ventilation to all areas of the projects, especially service areas and basements. Not only does this allow access to natural daylight, but also enables the release of heat and smoke, in the event of a mishap.







Provide centrally located service cores to accommodate FF equipment. Source: disnyrfire.com





Ceilina aesthetic where service lines are exposed Source: qrfs.com



L - LIFT

Source: NBC 2016 part 4, section 4.4

#### Segregation of spaces

- Ensure that intense heat areas such as commercial kitchens / workshops / production zones are segregated from general areas.
- Raw material and fuel storage areas shall be securely contained.
- In large halls and multipurpose spaces, a fire curtain (a flexible drop down barrier as seen below) may be used to segregate space in the event of a fire.



Source: coopersfire.com

Imbibing fire safety in buildings requires elaborate planning on the part of the designer and is certainly much more than just placing fire extinguishers within easy reach. Integrating basic principles into concepts at an early stage will ensure responsible and rewarding design outcomes.

References 1. National Building Code of India 2016, Part 4 Fire and Life Safety, by BIS year 2016. 2. www.nfpa.org

## THE PANDEMIC AND ARCHITECTURE EDUCATION

BY PROF. JAFFER AA KHAN | Director VSPARC VIT Vellore



Galleria and Studio at VSPARC VIT Vellore.

Pandemics have happened before but nothing like the way the world was hit by Covid-19, impacting people and their livelihoods. The profession of architecture and the related construction industry had a major shift impacting not just the practice of architecture but the idea of educating it.

The impact was so huge that it has forced architecture schools to completely rethink and practice remote learning. The UGC has recently communicated that even when normality returns, a hybrid version of education will set in with a ratio of 60:40. Hence this hybrid system is going to stay for a long time till we tackle the various mutations of the present virus. Our entire outlook will and has changed and so is our learning environment and we know the major casualty is architecture education.

Online lectures are nothing new; I was used to them long before these became the new normal. In 2012 I remember organising a lecture and a panel discussion by my friend Architect Sunand Prasad, former President of the RIBA, talking to my students in Chennai, from London through Skype and I was travelling and stationed in Toronto organising this lecture. But that was a one-off lecture, though the scenario changes when the entire studio goes online.



The online studio was introduced to me in February 2020 and since then I have been doing several studios and capstone project reviews including lectures delivered worldwide. I landed in India in July 2020 and since then I have joined as the Director of the Architecture School at the Vellore Institute of Technology and all that experience I gained in the Middle East, delivering online studio reviews, became extremely advantageous as India was seriously entering into the pandemic situation then and many restrictions on travel within State boundaries were in place.

As we know the studio space is the heart of any Architecture School and hence plays an important role in the creative learning process where experimentation is the key. At a global level the physical studio was most preferred, as many students have expressed dissatisfaction over online virtual studio. But the paralysed situation like "stay at home" and the other parameters like social distancing disrupted the normal way of life in an Architecture School. It is almost a year and a half when both synchronous and asynchronous methods have played enough havoc in our lives.

This is more in the case of students who have reported several illnesses related to mental health and wellness and a major part related to financial issues due to the global crisis. While we seem to have almost perfected the art of digital method of teaching architecture, the studios became haunted and the students suffered as heavily as most of them were without dedicated workspace at home. They have experienced a big issue of visual tiredness while the lectures were being delivered.

Many of them would login but absent all the time. As an alternative response, the teaching community shared recorded lectures and reviews of architectural design through the screen-sharing options. All these work well when you have a powerful internet connection. Otherwise the whole experience becomes exasperating.

The other side of it is the big opportunity, unparalleled through these two decades; the innovative and interactive advantage the tools offered in connecting with people and personalities whom you would not have met in the real-world situation. In a way it has become more environmentally sustainable as travel was restricted, fewer drawings were printed and digital animations were encouraged in place of physical models resulting in lesser cost.

The bigger question is how far the architecture education will articulate itself when the lockdown is eased and new realities emerge. In the future the architecture program will have to transform itself to adapt to a hybrid condition to reform the roles of an architect in building pandemic resilient cities and places. Perhaps, there could be a "pandemic room" in every home or an apartment.

I hope and expect that the stakeholders of the architecture education and profession in India will realise the post-pandemic situation and evolve a virtual collaborative review and teaching system as a future standard that will be engaging, cost effective and create better learning possibilities.

Please send your feedback to: jafferaakhan@gmail.com

# SOFT TOUCH

BY PROF. K JAISIM

This article is with context to my journey over six decades in architecture and the built environment and specifically to the subject of soft flooring. The hard floorings I have travelled will make a book by themselves. It is commendable that Design Digital Magazine finds the space to address this remarkable element in architectural design.

I shall, as my memory rolls over the decades of my practice into various projects and spaces, express my experience as the thinking mind explores. From spaces that hardly cover a footprint to areas that spread over acres, defining and disciplining the built environment with its presence.

I shall not go into any specific project but shall wander with my feet feeding the brain with the senses as it walks the elements. My first exploration while designing a beach resort was the sands and the dunes, the feel of the barefoot and as one walked towards the waves, how the same floor hardened and transmitted a totally different experience. This, I with respect, tried getting into the built enclosed spaces, using material that was manufactured and easy to maintain. This also gave me a space in which children could play without their parents fearing the ocean.

From here I travelled to a manufacturing segment which wanted the workers to walk all over, stand for a long time and had minimal joints to make easy maintenance. Linoleum played a part. But the more defined spaces demanded an avatar that allowed a sense of luxury; Cork walked in, it is a fascinating material, initially difficult to master, but once it knew you, allowed the play in many patterns and spirits.

When one gets into the world of carpets and rugs with touches of upholstery, it is a world by itself. Expensive single pieces lying on totally covered carpets, a world of aesthetic explodes. From Jaipur, to Kashmir to Turkey, the wallet is the only control. The carpet on the floor simply raised to the wall becomes a décor that celebrates life, like an Art gallery.

Garment factories and Information Technology are spaces that demanded greater discipline; in one, the workers sometime sat on the floors and worked, making sure that dirt would not hinder the experience, coating with anti-dust material. For the ITs where they had expensive materials and often walked barefoot to ensure that earthing without shock, can take effect and they will not get tired after many hours of day and night was and is an experience.

Sports offered me another area to explore with indoor games like badminton, TT and Gym; people sweating and spending hours jumping



about- the knee joints had to be protected. The heels would hit the floor and yet the player must not and cannot break his/ her game. At this time came another journey designing kindergarten spaces. Little children sitting and spoiling the floor, may be even licking from it. How does one ensure safety and neatness? Challenges only soft flooring can meet.

Wood smiles, Timber awakens. The forests grieve and plantations thrive. It is Life.

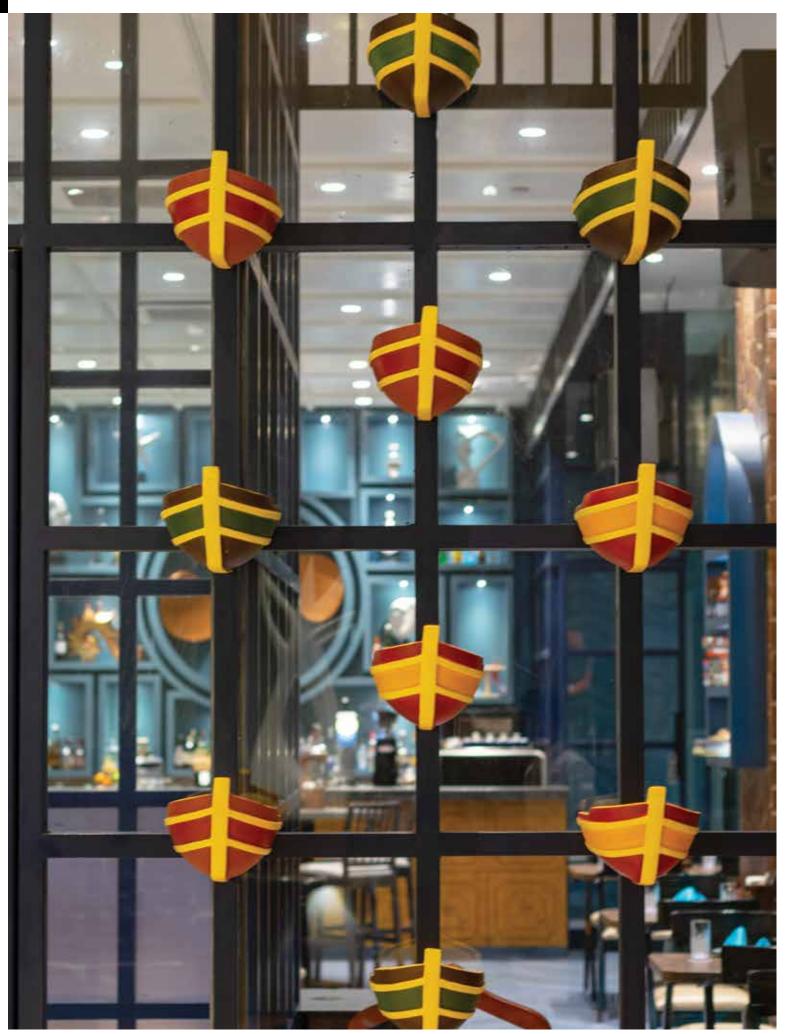
Now, came another client with a smile, I have heard of you, I want you to design a school for the blind. Little did I realise that I was talking to the principal who was also blind, but one could not make out the way he responded to my queries as we walked around the site, texture, the feel, the touch. The senses responded and once one got used to the theme and architecture of the place, one knew precisely where one was. In this project the Play of Hard and Soft material played a significant role.

From hygienic cow dung straw floors to sophisticated materials, the experience is an architect's paradise. Here we explored another space, integrating the walls and floors and sometimes even the ceilings, all with one material, especially in organically designed spaces. In time this became a language. The vocabulary explored and grew beyond boundaries; experiments conducted and revealed new horizons.

The senses and the elements interplay with infinity and the floor is only an imaginative limitation. It can and will always remain, even in floating space stations and beneath the oceans. I have here addressed in abstraction what in detail each designer can express in the realised world, an environment to delight the souls and enlighten the spirit.

As the abstraction closes and smiles, the hard floor beckons for a glance. It is from unpolished stone, (my favorite) explore the soft stones of the Northern Earth to the hard stones towards the Equator. Pure white to jet black. It is infinite, the grades and varieties left only to the explorer. And today the artificial hard flooring material is another chapter.

Floors are made in heaven, limited only by imagination and innovation; application in context with content, making living spaces for human activity a world of its own. Patterns, designs infinite evolve and explore new expressions. Architecture reveals a fresh environment in each step. Let us live and love life, Soft and Hard for eternity.



Miniature boats mark the entrance.





AMEET MIRPURI

#### **DESIGN STUDIO**

**PROJECT** Harbour Vue

BUILT UP AREA 2000 sqft

PICTURE CREDITS Raveen Garikipati  $\Box$ 

## A PORT INSPIRATION

#### BY NANDHINI SUNDAR

Dining out is an experience that goes beyond the food served to encompass the ambience of the dining space. An inspirational space resonating with the local history and cultural elements can accentuate the dining experience, making the visit memorable and oft sought after. This was precisely the thought process and approach opted by Interior Designer **Ameet Mirpuri of Design Studio** on receiving the design request for a bar and restaurant by the seaside in the port city of Visakhapatnam.



Wall imprints connect to history.

Christened Harbour Vue, the 2000 Sq ft diner is designed to tune in with the fundamental character of the port town, the components and features of the ship and seaside brought into the space even as the interiors visually connect to the sea through the infinity pool adjacent to it. The restaurant comes in two sections, one with the bar counter which is a double height closed space and a sheer glass wall to visually connect to the sea. The second section is on an open terrace overlooking the infinity pool and the sea beyond. "The experience sought to offer is one of dining in a ship while relating subtly to the history of Visakhapatnam" explains Ameet.

#### BOATS SET THE TONE

The initiation into this design intent starts right at the entrance, with a set of miniature boats strung on either side of the entrance door while a handcrafted metal chair incorporating the elements of a ship, sets the tone for what is further in store. On entry, the bar counter greets the visitor with its large propeller, seashells, corals and seahorses, reminiscent of sailing in the

ocean. A story on the history of the port city unfolds on a wall, the black and white narrative going back centuries, depicted in verbal and pictorial form for easy assimilation.

#### LINKING THE HISTORY

The flooring is laid in Ocean stone in Herringbone pattern to recall the sea while the stone pillars in the eatery directly relate to the history of the port city. "The Khondalite stone used for the pillars can be seen in old monuments of Visakhapatnam. This stone is also used in the St. Alloysius School, which dates back in history", says Ameet. Bookracks placed on the pillars further emulate in design the windows seen in this historic school. "The images of the school are also imprinted on the walls to connect with the book racks and their window design. Books on the local history are placed on these racks, linking the diner directly to the fundamental aspects of the port city."

The port city also has spiritual leanings that form part of its history with its many historic temples prompting a pilgrimage. "The sculptures of these historic temples served as an inspiration while designing the tile cladding for the bar counter. The distressed stone was brought into the design as a reinterpretation of the stone sculptures to once again connect to yet another historical component of the port city", elaborates Ameet.

#### YOUTHFUL AND OPEN

While the fine detailing of the closed section of the restaurant makes a strong connect to the sea and history of the port city, the language of the outdoor dining area is lighter, more contemporary and youthful in its leanings. A giant 8 feet fan serves as the highlight of this space along with the miniature boats which are colourfully lit up for night dining. Cement finish tiled flooring sets the tone for the contemporary language of the space, tuning in with accessories picked from the local flea market and interesting items discarded by the navy. A batch of arty tiles is fused into this cement expanse, extending further to the barbeque counter to bring in a dash of colour and art to the space.





Handcrafted metal chair incorporating elements of a ship.

 $\mathbf{Q}$ 



The interiors visually connect to the sea.



Open dining by the pool side linking directly to the sea.





Interiors reminisce sailing in the ocean.

 $\mathbf{Q}$ 

"These lend a light, youthful language to the space, making the dining in the open area by the pool side and the sea, an unforgettable experience", states Ameet. "The design language of the two sections was deliberately kept distinct though both the spaces visually connect through the sheer glass wall and further to the sea beyond. Though the distinction prevails, the visual connect between the spaces ensures the experience is equally strong in both sections, be it inside or in the open area by the poolside which directly links to the sea beyond." The objective is to maintain a balance while keeping the design language subtle, Ameet sums up.

## **PICTURESQUE** TRACKS



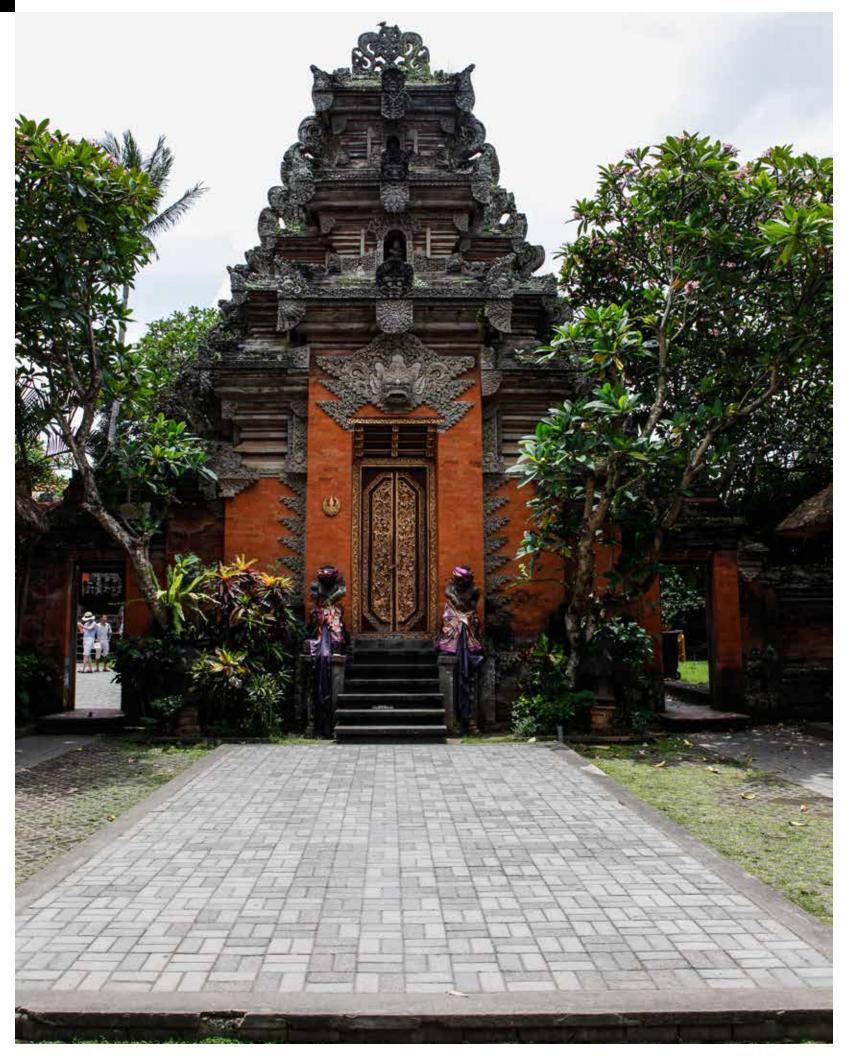
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Ubud, in the uplands of Bali is a renowned centre for traditional arts and crafts. Equally striking are its picture perfect dwellings complemented by their picturesque pathways. Interior Designer Mahesh Chadaga

captures some of the striking visuals of Ubud, its structures complete with their charming paved passages.

A row of preserved traditional structures accessed by cobbled pathways.

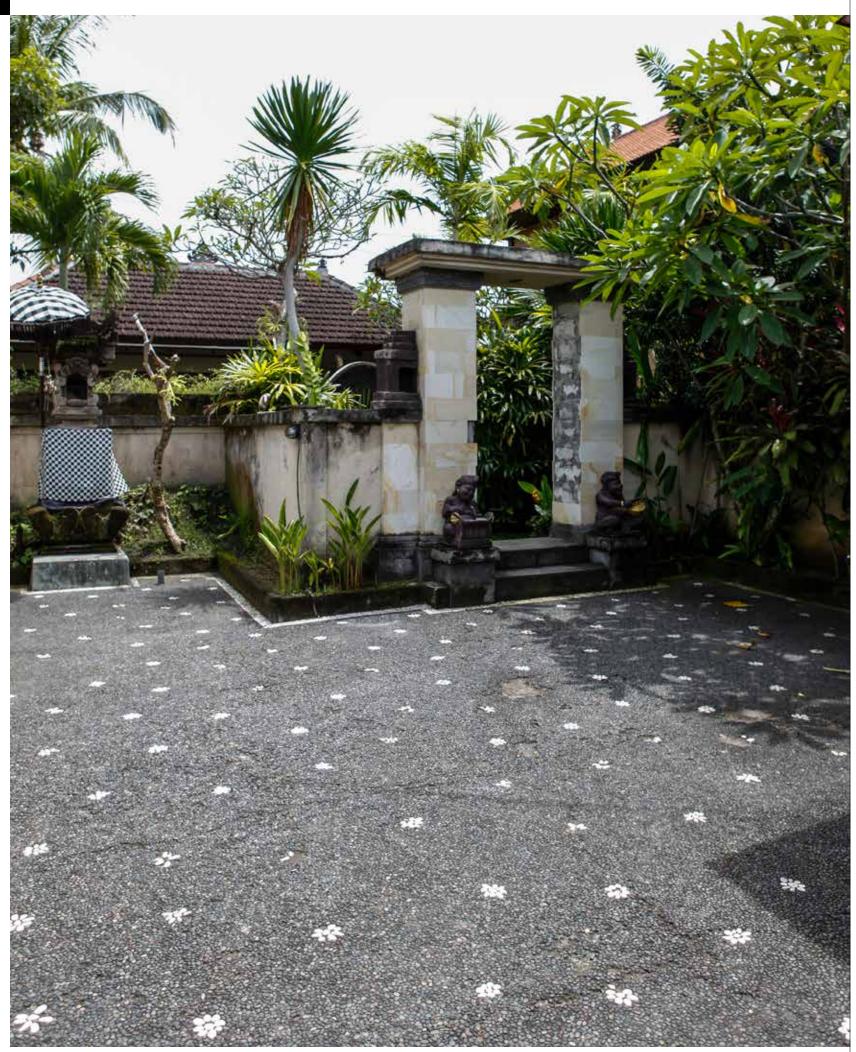


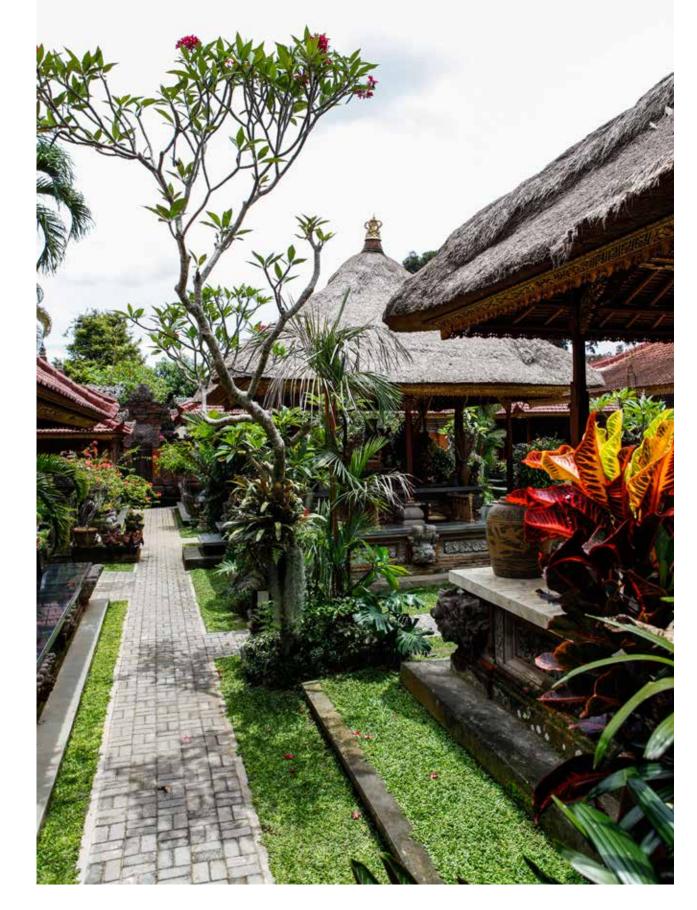






Puri Saren Agung, the Royal Palace of Ubud is one of the most prominent landmarks, featuring Balinese architecture. The paved path leading to it serves to be equally striking.





detailing of exteriors and pathways as to the built structure.

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The residences pay equal attention to the



### **IIID BRC PRESENTS**

# FLASH

### PLAY OUR WEEKLY DESIGN STORY CHALLENGE

- STEP 01 : OPEN INSTAGRAM & ADD A PICTURE OF YOUR WORK TO YOUR STORY BASED ON THE WEEKS IIID THEME
- . STEP 02 : ADD A TAG LINE THAT BEST DESCRIBES THE SHOT
- . STEP 03 : TAG @IIID.BANGALORE
- . STEP 04 : POST AWAY!

Top 03 Entries will be decided every week by our panel & winners get a special feature on our page!

### DATES & THEMES TO BE ANNOUNCED SOON



#### FLASHING THE RIGHT PIC

Back to back webinars can prove to be tiresome and IIID BRC learnt this when the interest began to wane amongst its members after it became the chief platform for holding discussions over last year and a half. To alter this scene, the team came up with a novel idea of showcasing members' works through pictures that would connect to a theme every week. All that was needed was uploading of a picture by the member of their work in tune with the weekly theme. The contest, spread over 5 weeks, was judged by an eminent three member jury comprising of Architects Sanjay Puri, Gayathri Shetty and photographer Archana Vikram. The winning contestant's work was displayed on IIID BRC Instagram page as a story along with the gift of a year's subscription of Livingetc India.

The first week's 'Light and Shadow' theme had the hospitality project, An Interlude NH-75 by Collage Architecture Studio coming up as the winning entry, with its arresting play of light and shadow. The second week's theme of 'Another day in Paradise' had Villa Habu-And Island Getaway by Red Brick Design Studio grabbing the accolades. The third week theme of 'Rawsome' saw Techno Architecture emerging as the winners with their entry of the Far Site House.

The fourth week, with its theme of 'God is in the Details' had Floating Walls by Crest Architects emerging as the winners. The final fifth week theme 'Stairway to Heaven' had Wright Inspires' project, Ambara, walking away as the winner.



THE EYE IS ALWAYS CAUGHT BY THE LIGHT, BUT SHADOWS HAVE MORE TO SAY

Project Name: An Interlude - NH 75 Project Type: Hospitality Location: Hoskote, Karnataka Area: 10,600 Sft. Year of Completion: 2018 Firm Name: Collage Architecture Studio



GOD IS IN THE DETAILS

Project name: Floating Walls Project location: Bangalore, India Completion Year: 2019 Firm name: Crest Architects 11



ANOTHER DAY IN PARADISE

Project Name: Villa Habu - An Island Getaway Project Type: Resort Residence Area: 8,500 Sft. Location: Jaisamand Lake, Udaipur, Rajasthan Year of Completion: 2019 Firm Name: Red Brick Design Studio, Sahil Tanveer



RAWSOME: BORN TO BE REAL, AN ODE TO THE NATURAL MATERIAL

Project Name: The Far Site House Location: Malleshwaram, Bangalore. Year of Completion: 2020 Area: 7,000 SqFt Firm Name: Technoarchitecture, Rajesh Shivaram



STAIRWAY TO HEAVEN

Project Name: AMBARA Location: PP Layout, Bangalore Floor Area: 2,180 Sft. Completion Year: 2019 Firm Name: Wright Inspires, Prathima Seethur





IIID BRC Chairman Ar. Dinesh Verma.

Ar. Viswanath making a point.



Members at the LGBM 2021.



Past Chairperson Ar. Leena Kumar with Ar. Dinesh Verma.



Chairperson Elect Ar. Kavita Sastry.



Members of IIID BRC.



Past Chairperson Ar. Gayathri Shetty.



Ar. Sahana..

#### LGBM 2021

The last general body meeting of current IIID BRC team was held in the first week of July, drawing to a close a spectacular run of events amidst unprecedented times. The two year term under Chairman Architect Dinesh Verma had ensued with an impressive start, only to be tamed by the ongoing pandemic. Yet, undaunted, the IIID BRC team held many online events and an astounding three day Designuru event with all Covid protocols in place. The team's remarkable show received kudos from one and all, setting a benchmark for performance against all odds.



IIID BRC team at the Mysore School of Architecture.

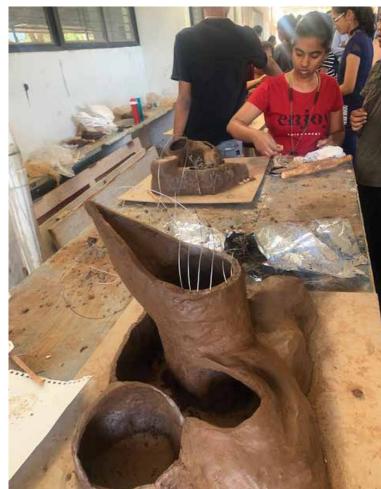


Chairperson Elect Ar. Kavita Sastry at the clay modelling workshop.

#### A DESIGN COLLABORATION

IIID BRC team along with Chairman Ar. Dinesh Verma, at the invitation of Director Prof. Sapna Shivakumar and Design Chair Ar. Ranbir Mudaliar of Mysore School of Architecture / Design, drove to Mysuru to collaborate with Mysore School of Design in its newly launched degree programs, BSc and BVoc in Interior Design ensuing from the academic year 2021-22. A presentation was made by Ar. Dinesh Verma on the various facets of IIID BRC, dwelling on the various aspects of the collaboration.

Ar Kavita Sastry and Ar Shyamala Prabhu made a presentation on Code Studio, Designuru and dwelt on the display panels of award winning architects at MSD and MSA. Ar. Viswanath elaborated on the activities indulged in by IIID BRC to aid design education at various Design Schools in Bengaluru and the process of setting up various material libraries in Design Schools. Starting IIID Mysuru Regional



Centre was also discussed during the visit. IIID BRC team also had an interesting interaction with the students involved in the ongoing clay modelling workshop. Copies of Antarya and IIID BRC calendars were distributed amongst the faculty of MSD and the IIID BRC team received in return a captivating book on the illustrations of Mysuru.

Tiger Shroft



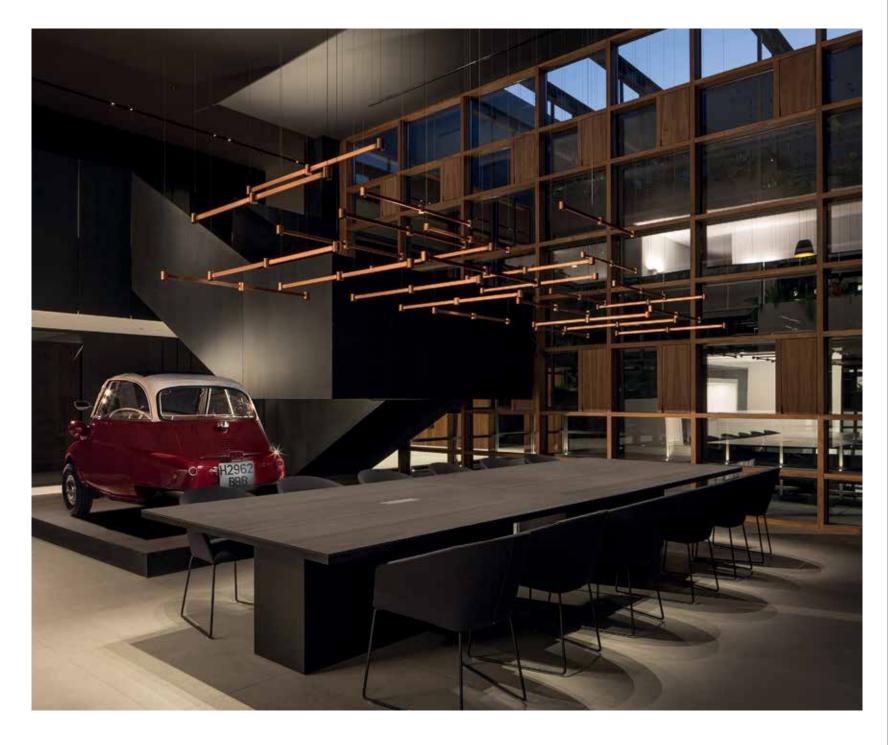
# GO FOR GREAT

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