PORTFOLIO

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LEED AP BD+C | WELL AP | EDGE Expert | LFA | IGBC AP | GEM CP

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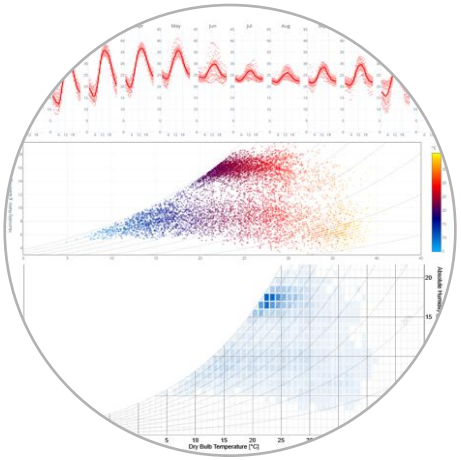

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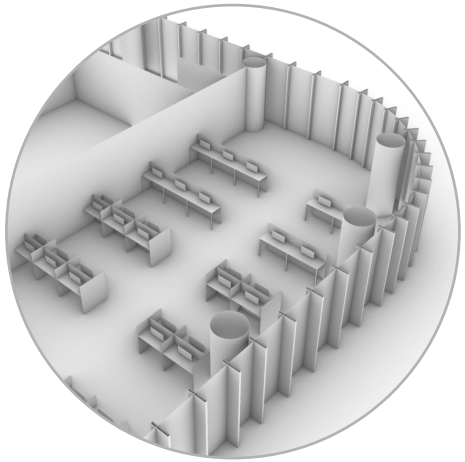

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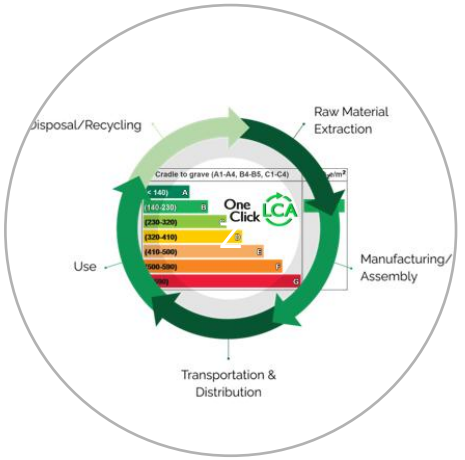

Apple Store: Life Cycle Assessment

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Competitions

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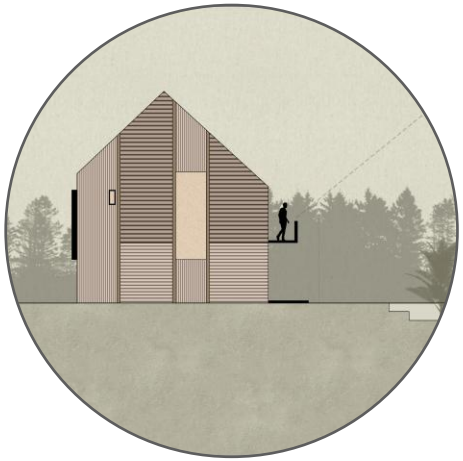

Architectural Illustrations

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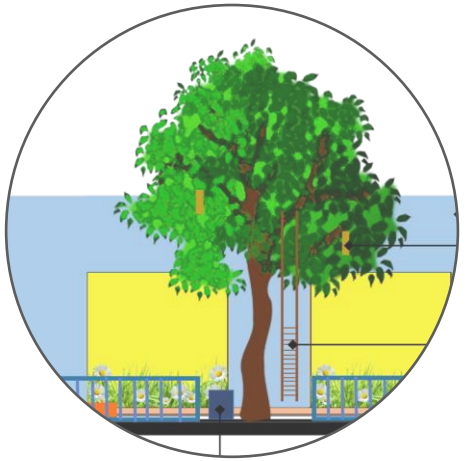


Child Friendly City –
Tactical Intervention

ARCHITECTURE FOR URBAN HAPPINESS:

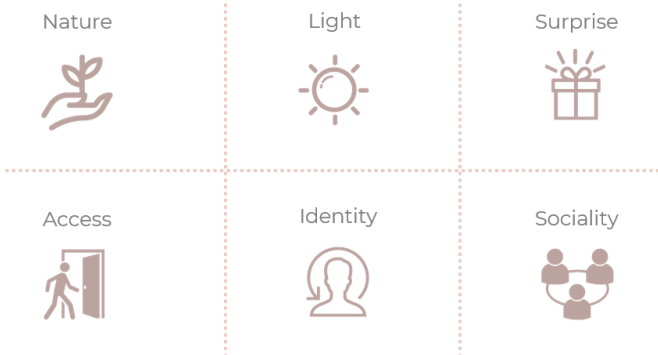
A PAUSE POINT IN A CITY

Architectural Thesis

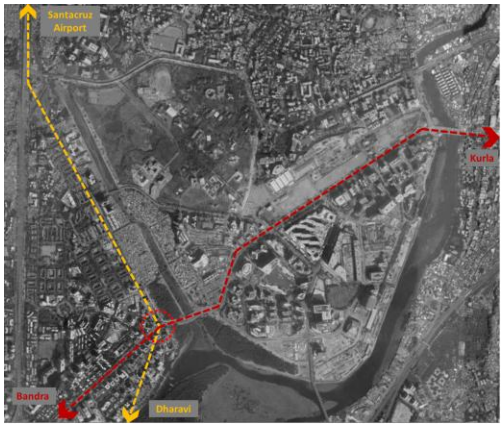
ARCHITECTURE FOR URBAN HAPPINESS: A PAUSE POINT IN A CITY

PROJECT BRIEF:
India holds the unfortunate rank of being the 2nd most depressed country globally, with nearly one in every five Indians grappling with a mental disorder. The veil of shame and isolation has concealed emotional well-being for far too long. It's high time to unveil it from the shadows. This thesis endeavors to explore the impact of architecture and design on individuals' mental states, aiming to enhance their well-being and contribute to the development of a joyful city. The task at hand is to establish an affordable and accessible sanctuary for healing within the bustling cityscape. The chosen site for this thesis is the Bandra-Kurla Complex in Mumbai.

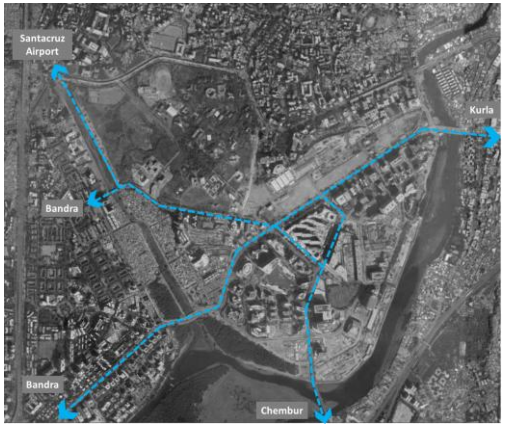
Causes of Stresses in Mumbai



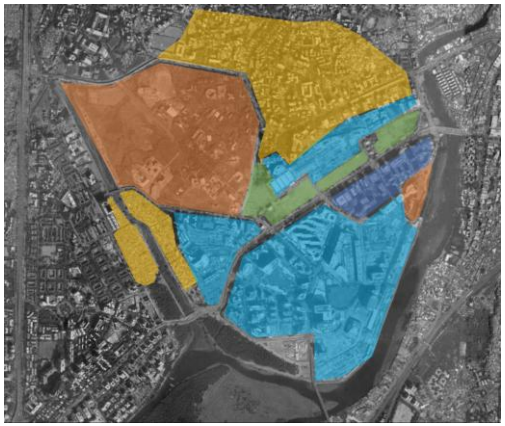
Factors to promote Happiness



Metro Route Mapping



Vehicular Circulation



Land Use Mapping

Major Landmarks

Understanding Pause Points:

Rest Stop
Benches, Seating Spaces

Flexible Amenity Stop
Temperory Food stalls, Reading zone

Mini Park
Pocket Parks, Play Area, Greenery

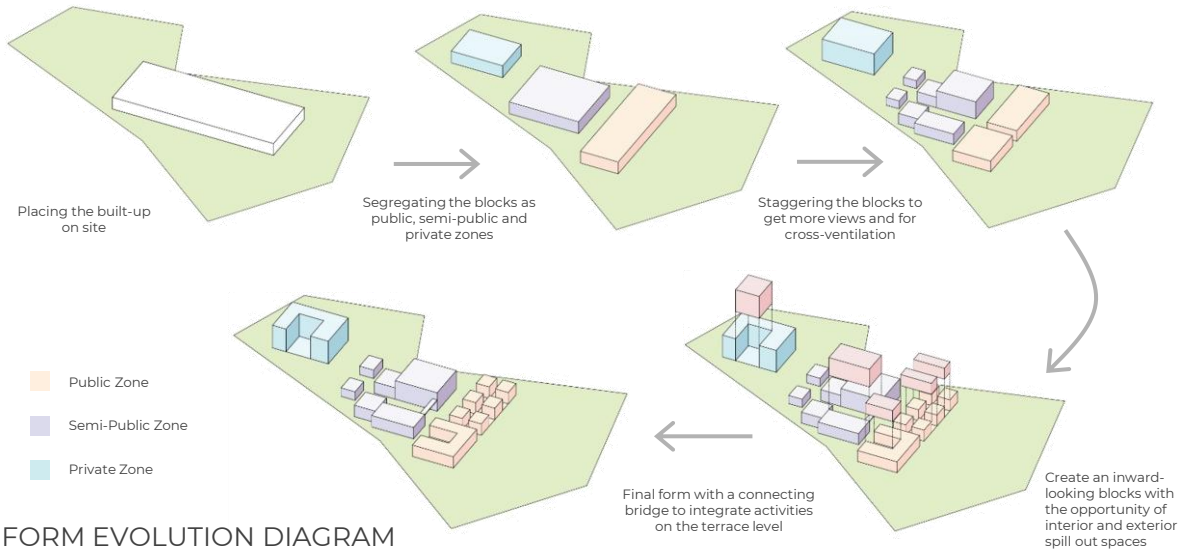
Interaction Zone
Pedestrian Bridge, Sky-walk, Walkways

Information Stop
Bike racks, Smart Parking, Kiosks, Signages

ARCHITECTURE FOR URBAN HAPPINESS: A PAUSE POINT IN A CITY

PROPOSED MASTER PLAN

SITE 1: PLAN

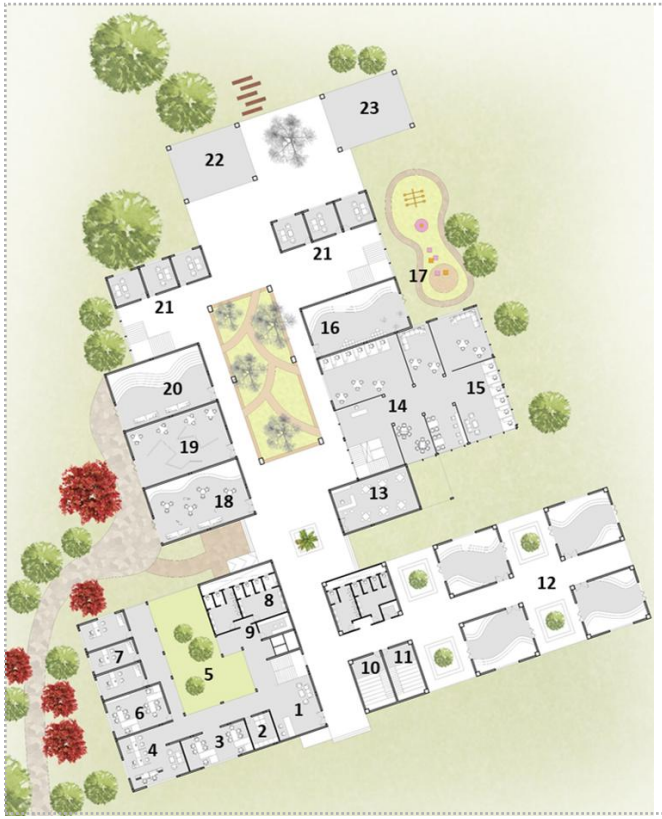


FORM EVOLUTION DIAGRAM

SITE 1: TREE DETAILS

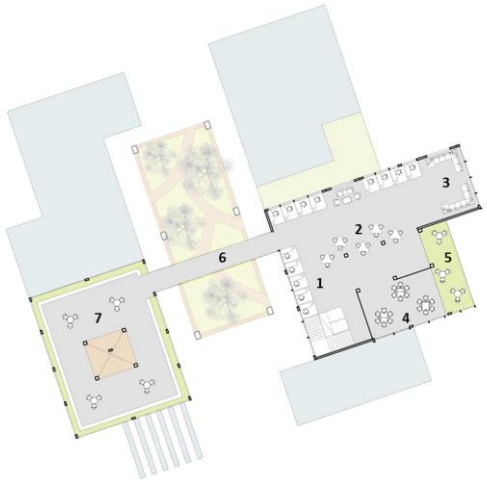
ARCHITECTURE FOR URBAN HAPPINESS: A PAUSE POINT IN A CITY

MAIN BLOCK:
GROUND FLOOR PLAN



MAIN BLOCK:
FIRST FLOOR PLAN

MAIN BLOCK:
SECOND FLOOR PLAN



LEGEND

1. Reception & Waiting Area
2. Safety Lockers
3. Staff Area
4. Administration
5. Courtyard
6. Facility Management
7. Cabin
8. Washrooms
9. Housekeeping
10. AV Room
11. Seminar Hall
12. Workshops
13. Eateries/Food based counselling
14. Co-working/Co-learning
15. Work/Study Pods
16. Children Counselling
17. Kids Play Area
18. Pet Café
19. Art Therapy
20. Group Counselling
21. Individual Counselling
22. Meditation Pavilion
23. Yoga Pavilion

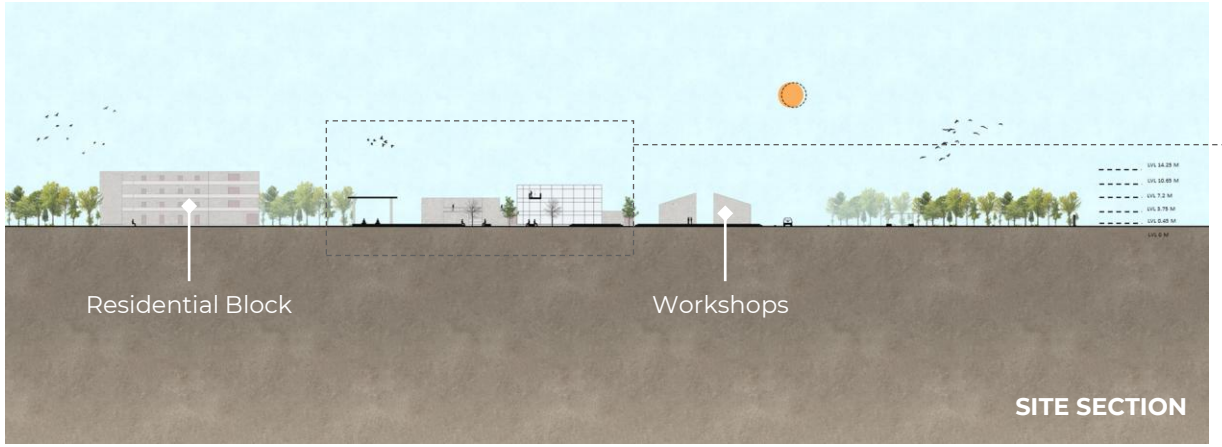
LEGEND

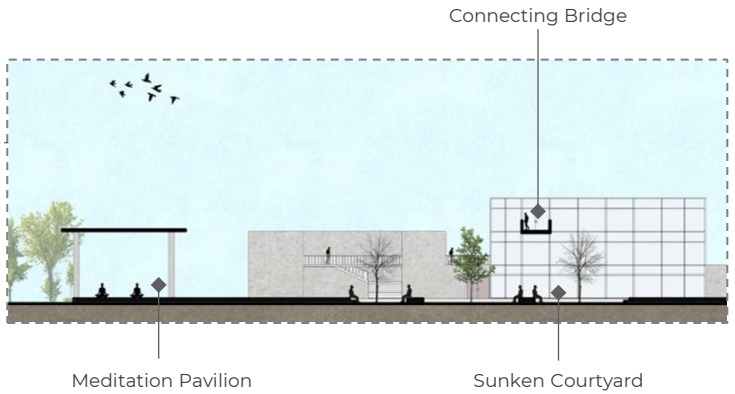
1. Library
2. Physiotherapy
3. Common Gym
4. Ladies Gymnasium
5. Spa/Massage Rooms
6. Washrooms
7. Housekeeping
8. Individual work desks
9. Formal working zone
10. Active Workstations
11. Outdoor Work/Study Area
12. Individual Counselling
13. Outdoor Counselling

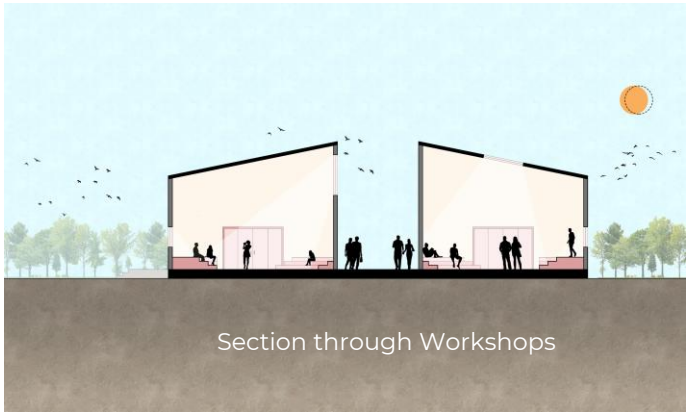
LEGEND

1. Individual Work/Study Pods
2. Group Study
3. Nap Rooms
4. Entertainment Room
5. Outdoor Work/Study Area
6. Connecting Bridge
7. Social Gathering at terrace level

ARCHITECTURE FOR URBAN HAPPINESS: A PAUSE POINT IN A CITY







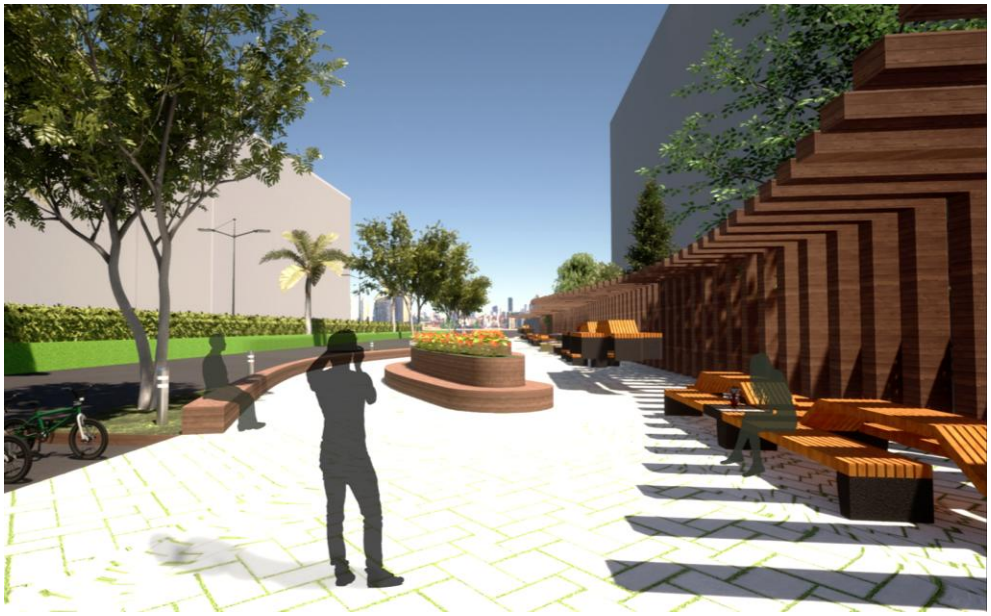

Sensory Garden


Green Wall near Cafe


Sunken Courtyard

ARCHITECTURE FOR URBAN HAPPINESS:
A PAUSE POINT IN A CITY

URBAN DESIGN INTERVENTIONS:



ORTHOPAEDIC HEALTHCARE CENTER:

HEALING SPACE

Semester 6

ORTHOPAEDIC HEALTHCARE CENTER: HEALING SPACE

PROJECT BRIEF:
In conceptualizing an Orthopedic Health Care Center at Kanhe Phata, Pune, spanning approximately 3 acres within a residential community, the focus lies on a holistic approach to healthcare. Beyond treatment, the center emphasizes preventive care, viewing architecture as a catalyst for healing and well-being. The site integrates landscape elements strategically, not only fostering a sense of community in the form of a garden but also serving as therapeutic components. Recognizing the diverse needs of patients, the In-Patient Department innovatively extends these healing opportunities to those unable to access them at the ground level, ensuring inclusive and comprehensive healthcare experiences.

SITE PLAN

AERIAL VIEW

ORTHOPAEDIC HEALTHCARE CENTER: HEALING SPACE

MAIN BLOCK:
GROUND FLOOR PLAN

MAIN BLOCK:
FIRST FLOOR PLAN

MAIN BLOCK:
SECOND FLOOR PLAN

LEGEND

1. Entrance Lobby with Reception
2. Pharmacy and Billing Counter
3. Examination Rooms
4. Outpatient Department (OPD)
5. Nurse Station
6. Cafe with Outdoor Seating
7. Kitchen
8. Diagnostic Department
9. Waiting Area
10. Emergency and Accident Department

LEGEND

1. Intensive Care Unit (ICU)
2. Waiting Area for ICU
3. Common Waiting Area
4. Outdoor Waiting Area / Prayer Corner
5. Counselling Room
6. Nurse Station
7. Doctor's Lounge
8. Induction Room
9. Operation Theatre (OT)
10. Landscape Area for comforting patients / doctors in OT

LEGEND

1. In Patient Department (IPD) : General Ward
2. Nurse Station
3. Medical Record Room
4. Medical Insurance Department
5. Board Room
6. Administration
7. Waiting Area for Visitors
8. Pantry with semi open seating
9. IPD: Semiprivate Ward
10. IPD: Private Ward

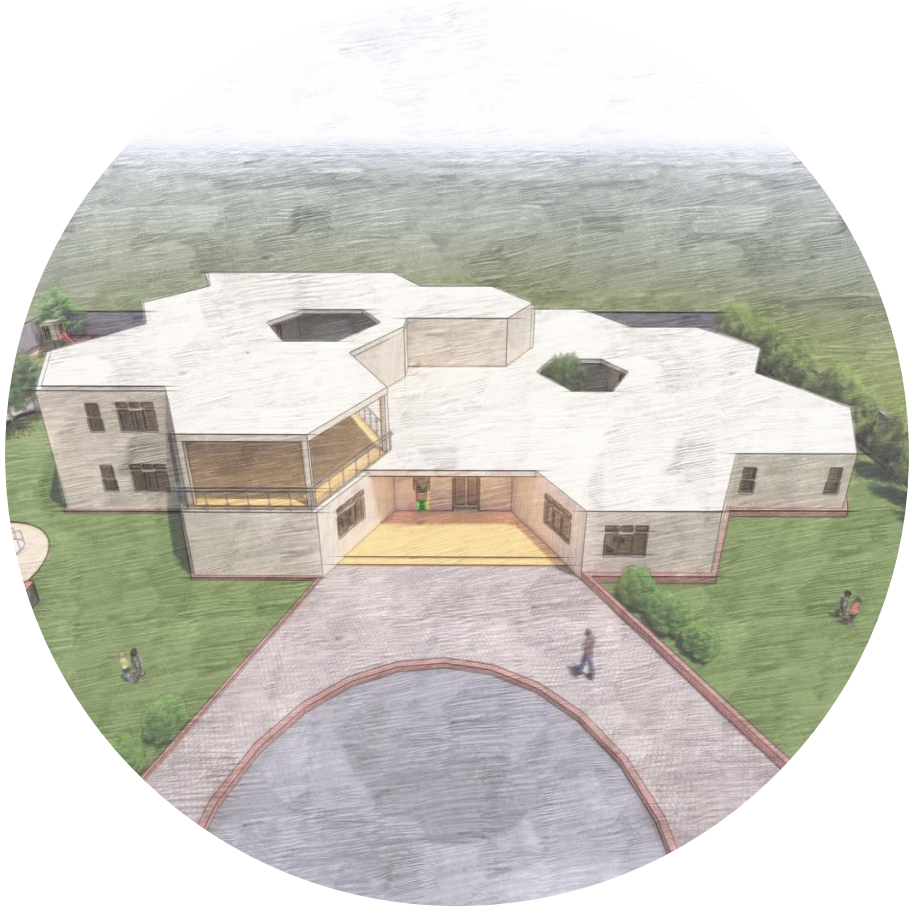
ORTHOPAEDIC HEALTHCARE CENTER: HEALING SPACE

OUTDOOR HEALING ZONE:

KINDERGARTEN:

A SPACE TO LEARN AND GROW

Semester 4

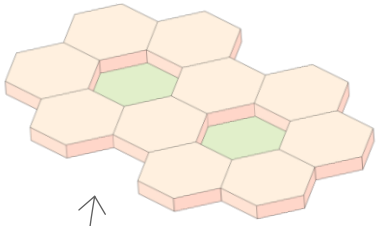


KINDERGARTEN:
A SPACE TO LEARN AND GROW

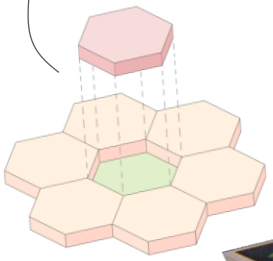
PROJECT BRIEF:
Crafting a Kindergarten with an integrated Daycare, the design weaves a contemporary tapestry of play and learning. Hexagonal modules grace the blueprint, a thoughtful dance with daylight and panoramic vistas, optimizing every inch of the 400 sq.m site at Life Republic, Pune. The architecture mirrors a child's world, nurturing familiarity. Delving into the nuances of child psychology, anthropometry, spatial distribution, and climate responsiveness, the design encapsulates a holistic approach. With a mere 300 sq.m built-up area, the space unfolds seamlessly, a testament to maximizing potential and creating an environment where each child's journey is a vibrant exploration of growth and joy.

SITE PLAN

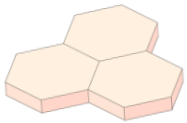
CONCEPT DEVELOPMENT



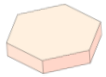
Replicating the module to create a functional space



Creating an inward-looking arrangement with the opportunity of interior and exterior spill out spaces



Arranging the hexagonal modules to achieve maximum daylight and outdoor views

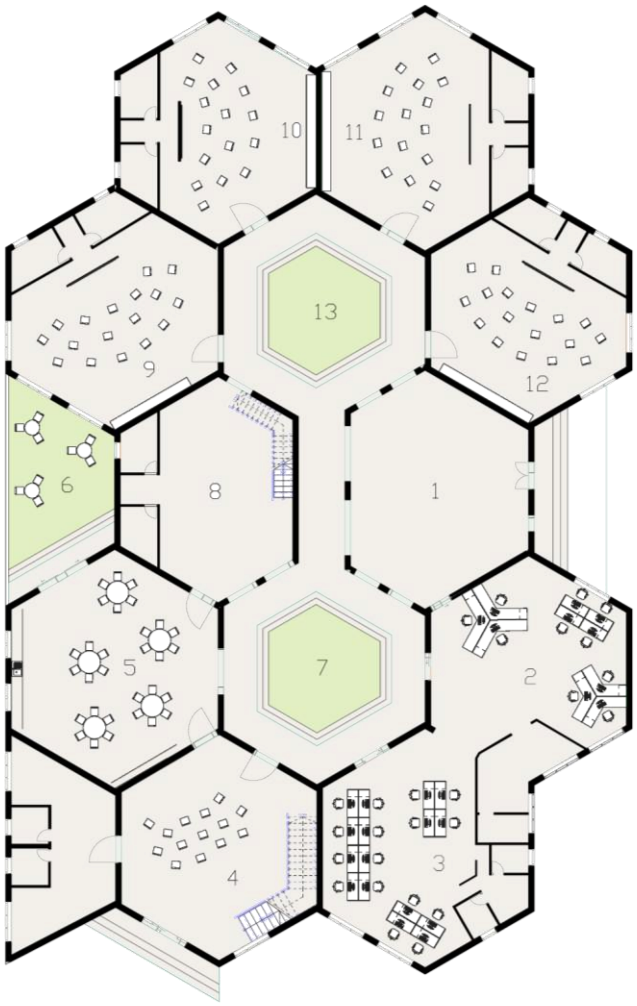


Placing the built-up on site in a hexagonal module

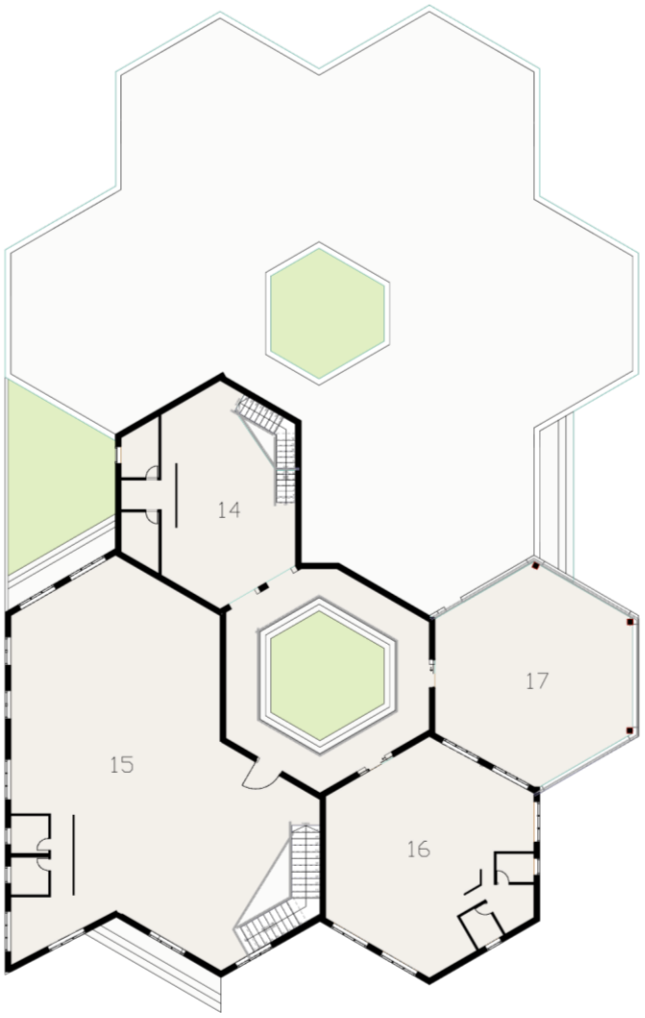
AERIAL VIEW

KINDERGARTEN:
A SPACE TO LEARN AND GROW

MAIN BLOCK:
GROUND FLOOR PLAN



MAIN BLOCK:
FIRST FLOOR PLAN



LEGEND

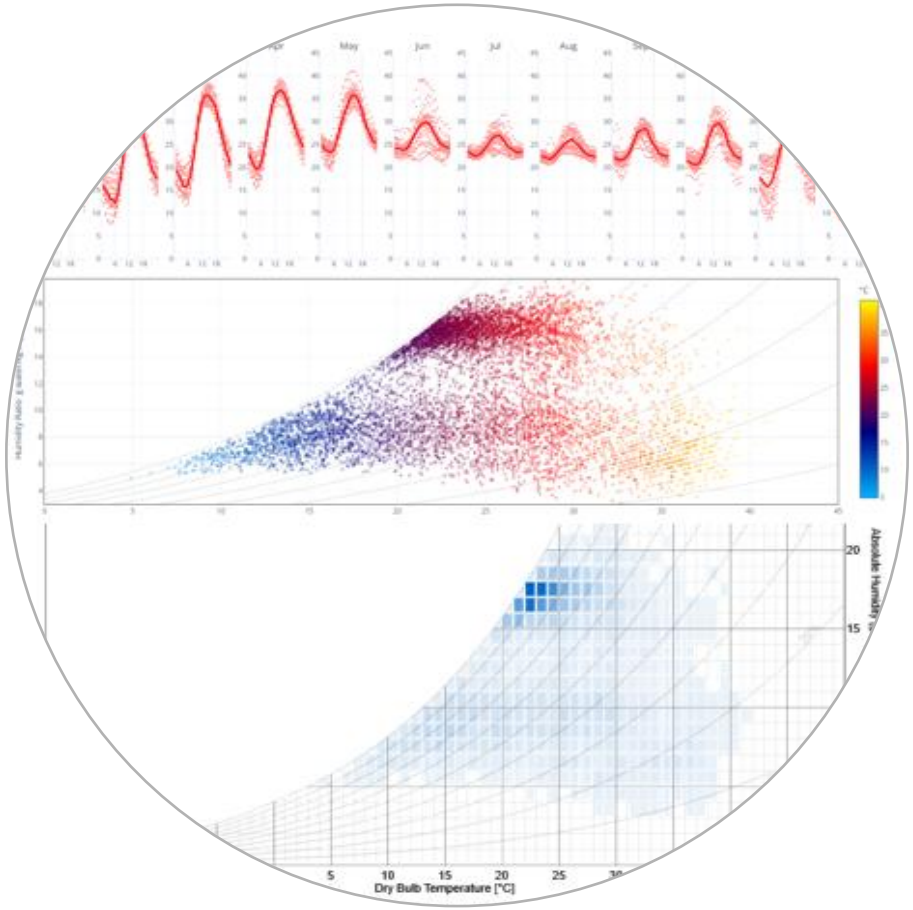
1. Reception
2. Administration
3. Teaching Staff Room
4. Daycare
5. Kitchen / Pantry
6. Open Dining Space
7. Open Play Area
8. Non-Teaching Staff Room
9. Senior KG
10. Junior KG
11. Nursery
12. Play School
13. Open Play Area
14. Sleeping Room
15. Multi purpose Hall
16. Sick Room
17. Open Library

KINDERGARTEN:
A SPACE TO LEARN AND GROW

OUTDOOR LEARNING AND PLAYING ZONE:

HORIZON – RESIDENTIAL PROJECT:
HIGH-PERFORMANCE BUILDING DESIGN ASSISTANCE

Client: Mahindra Lifespaces

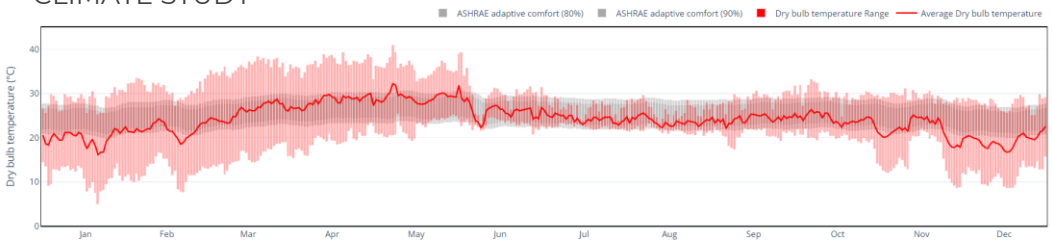


HORIZON – RESIDENTIAL PROJECT:
HIGH-PERFORMANCE BUILDING DESIGN ASSISTANCE

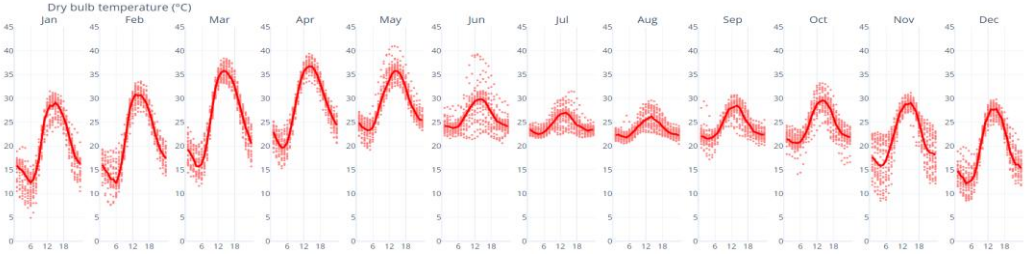
PROJECT BRIEF:

Introducing 'Horizon,' a Pune-based residential project with 2000+ apartments. Tasked as a green building consultant, my role involved analyzing the site and micro-climate to guide architects in constructing an eco-friendly, high-performance building. The primary goal is to ensure maximum thermal comfort with minimal environmental impact, reducing the overall carbon footprint. 'Horizon' aims for prestigious certifications, including IGBC Green Homes, IGBC Net Zero Energy, and IGBC Net Zero Waste, showcasing its dedication to sustainable living.

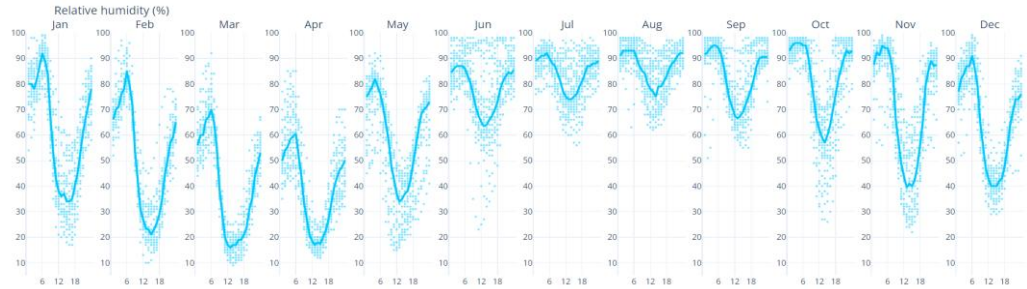
CLIMATE STUDY



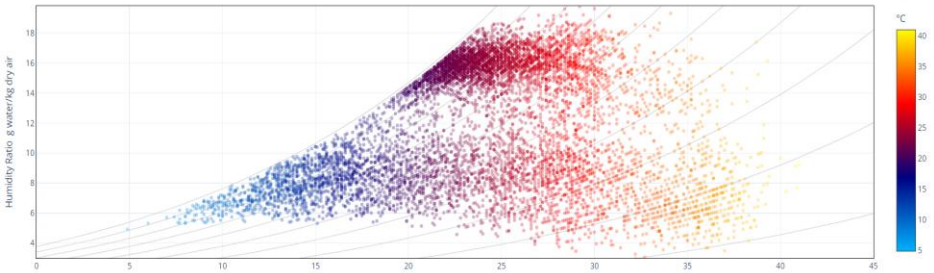
Yearly Chart - Dry Bulb Temperature



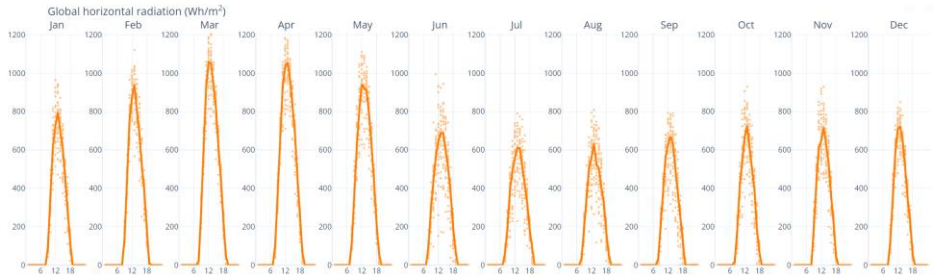
Daily Chart - Dry Bulb Temperature



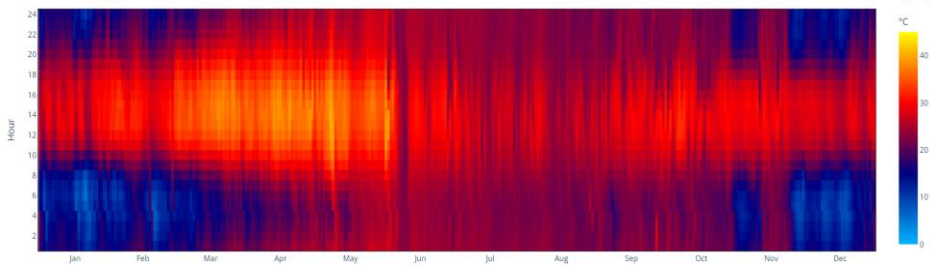
Daily Chart - Relative Humidity



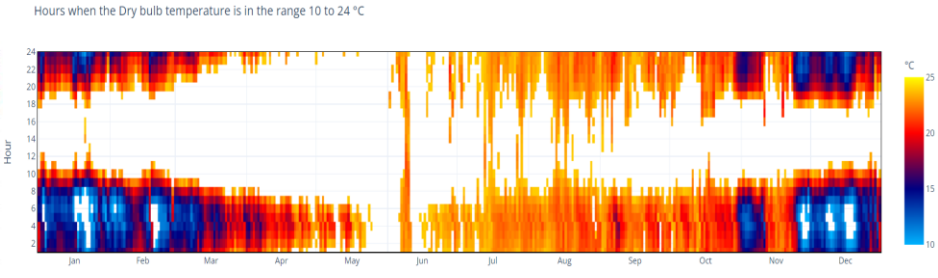
Daily Chart - Solar Radiation



Daily Chart - Solar Radiation



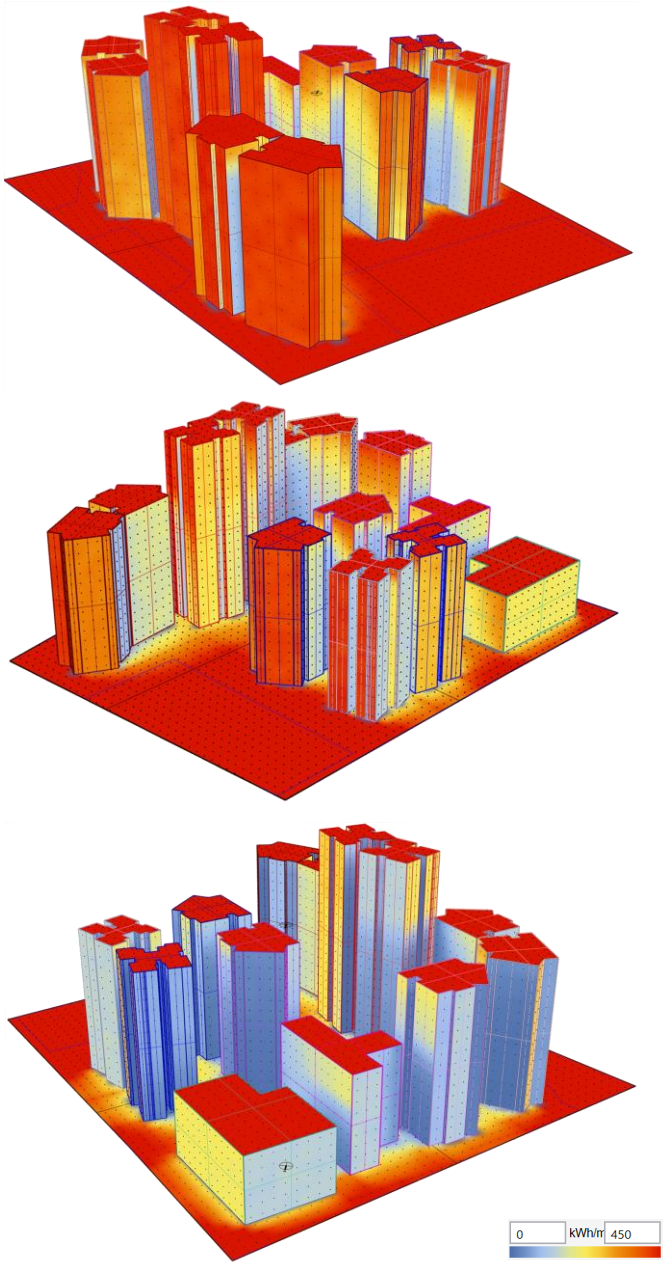
Heatmap Chart



Natural Ventilation Chart

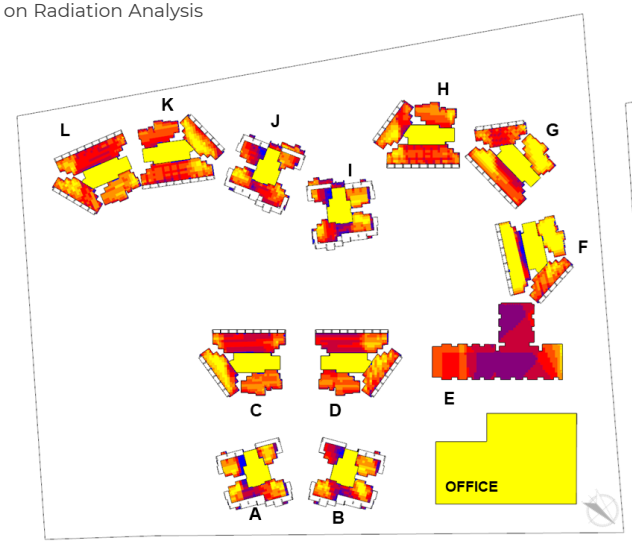
HORIZON – RESIDENTIAL PROJECT: HIGH-PERFORMANCE BUILDING DESIGN ASSISTANCE

DIRECT SOLAR EXPOSURE

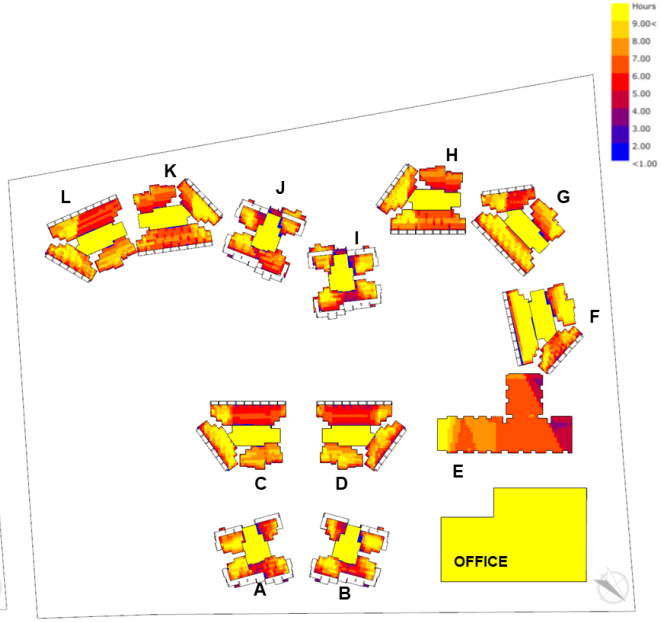


ROOF SHADOW ANALYSIS

Renewable Energy Integration based on Radiation Analysis



Existing Façade Elements



Optimized Façade Elements

Total RE Potential of Residential Towers

Solar Panels : 460kWp + Wind turbines : 90kWp = Total Hybrid energy potential : 550kWp

690,000 kWh | 135,000 kWh | 825,000 kWh

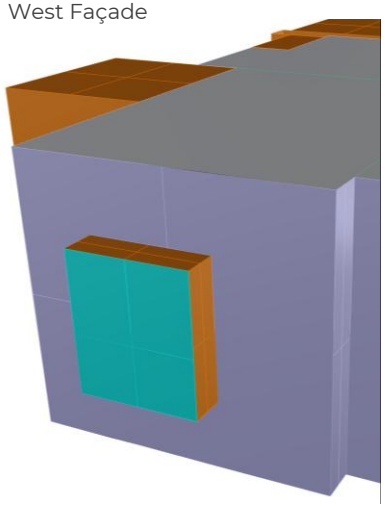
Total Residential towers demand load : 9089kW

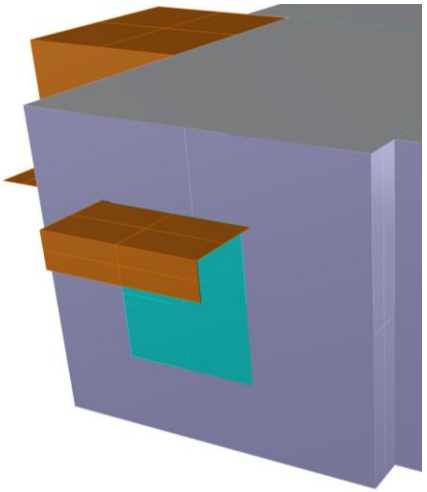
Renewable Energy offset : **6.05%**

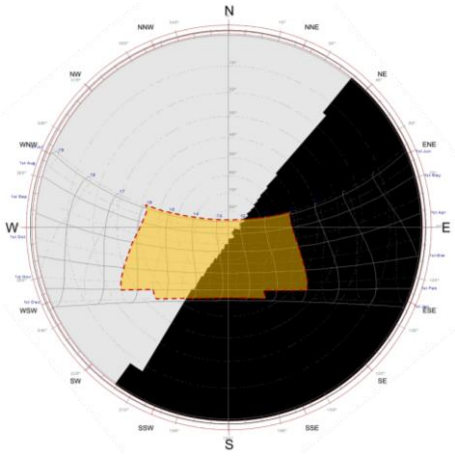
HORIZON – RESIDENTIAL PROJECT:
HIGH-PERFORMANCE BUILDING DESIGN ASSISTANCE

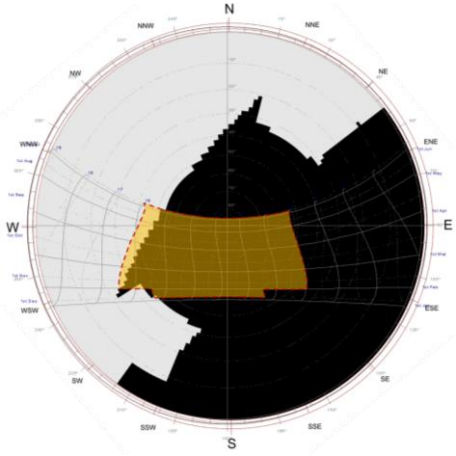
FAÇADE DESIGN OPTIMIZATION

West Façade









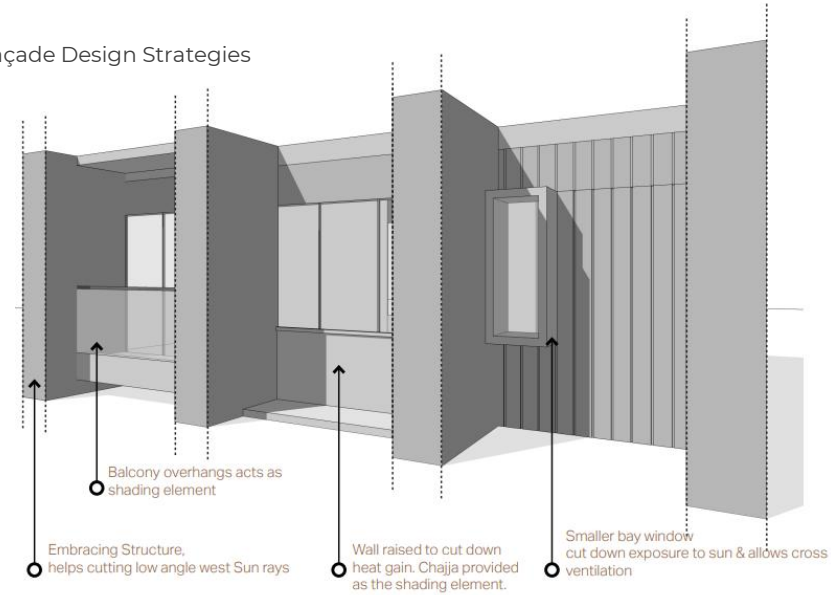
Existing
- Box window

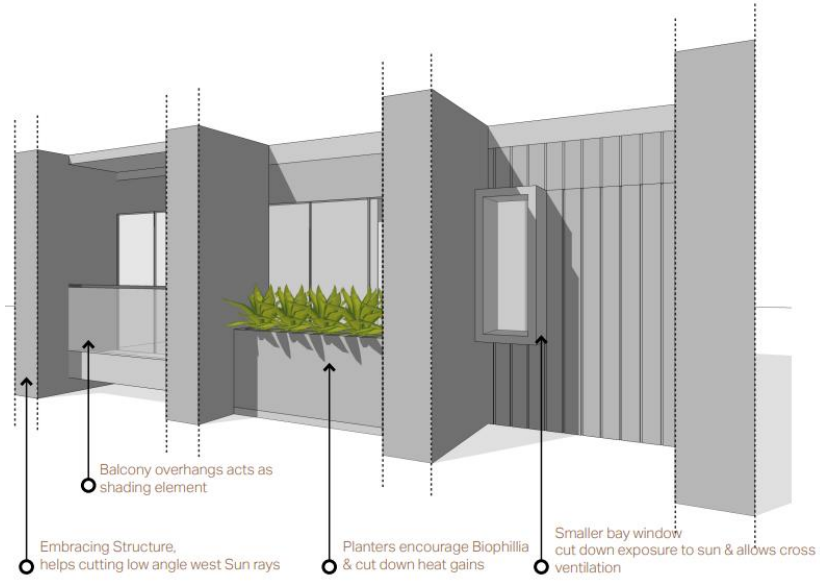
Proposed
- Overhang depth= 750mm
- With additional member of height= 350mm

Time shaded by design shading

Critical time where additional shading is required

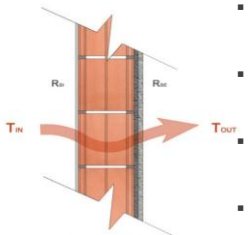
Façade Design Strategies



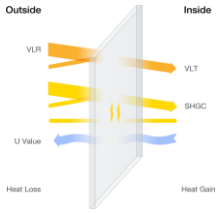


HORIZON – RESIDENTIAL PROJECT: HIGH-PERFORMANCE BUILDING DESIGN ASSISTANCE

BUILDING ENVELOPE OPTIMIZATION

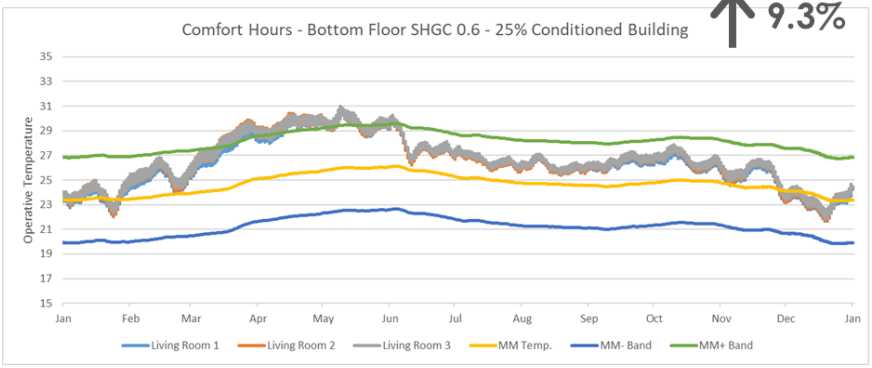


- Wall: 125 mm Concrete + 10 mm Gypsum
- U-value (W/m2-K): 2.64
- Roof: 125 mm RCC + 50 mm XPS Insulation
- U-value (W/m2-K): 0.5
- Reflectivity: 0.3

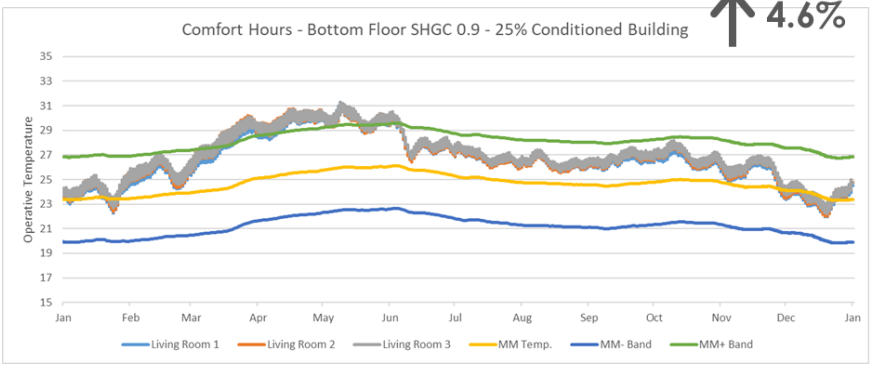


- Glazing: Single Glazed Unit
- U-value (W/m2-K): 5.6
- SHGC: 0.68
- WWR %: 12.34 %

THERMAL COMFORT ANALYSIS

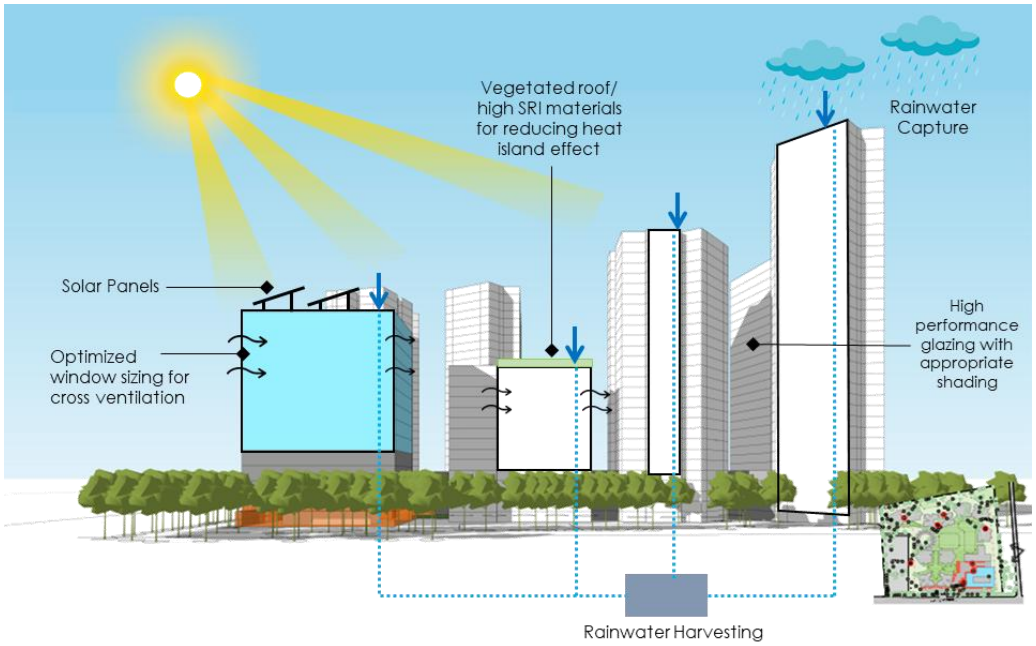


Case 1: Solar Heat Gain Coefficient (SHGC) of the glazing – 0.6



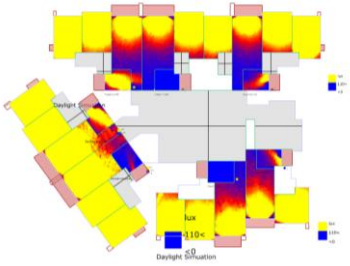
Case 2: Solar Heat Gain Coefficient (SHGC) of the glazing – 0.9

SUSTAINABLE DESIGN INPUTS INCORPORATED



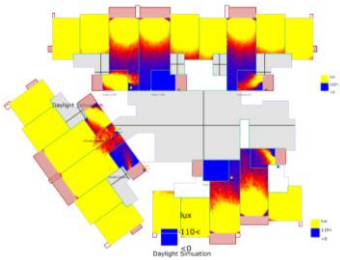
DAYLIGHT ANALYSIS

21st September at 12 pm



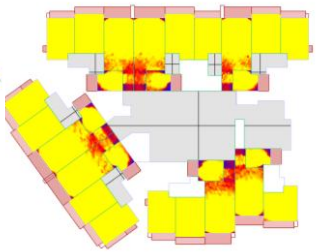
Case 1: Without shading devices and with shadow impact of surrounding buildings
ST 167 Glazing: VLT 0.6

Percentage of regularly occupied space with daylight: **58.84%**



Case 2: Without shading devices of phase 1 and with shadow impact of Phase 1&2 buildings
Clear Glass: VLT 0.8

Percentage of regularly occupied space with daylight: **65.53%**

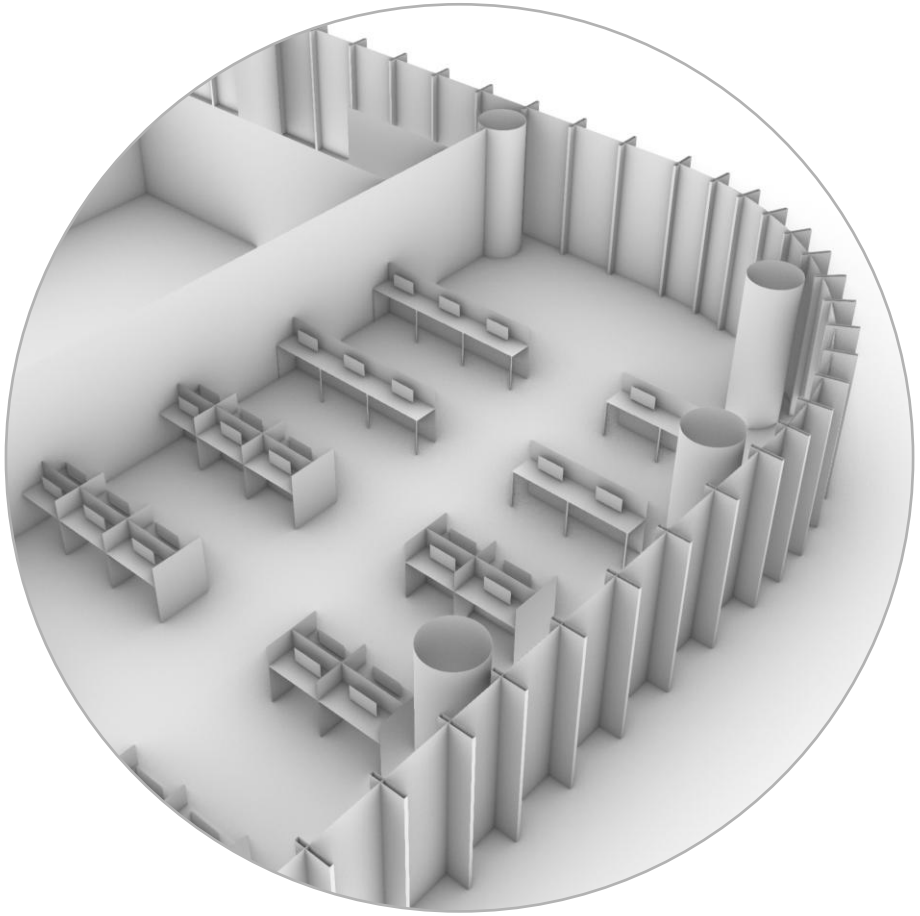


Case 3: Top Floor with shading devices
ST 167 Glazing: VLT 0.6

Percentage of regularly occupied space with daylight: **81.78%**

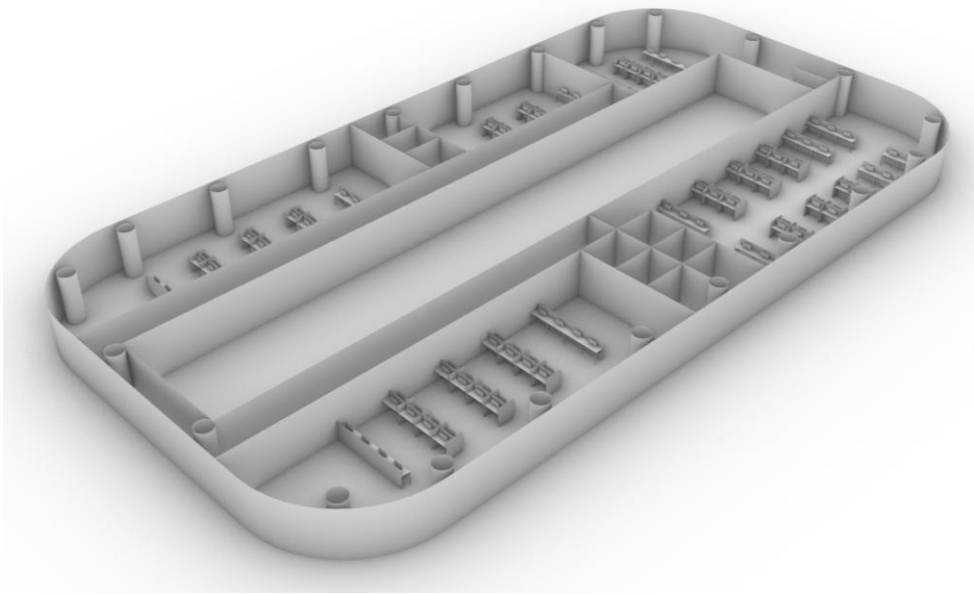
INTERNATIONAL FINANCIAL SERVICES CENTRES AUTHORITY (IFSCA): DAYLIGHT AND GLARE ANALYSIS

Client: Government of India

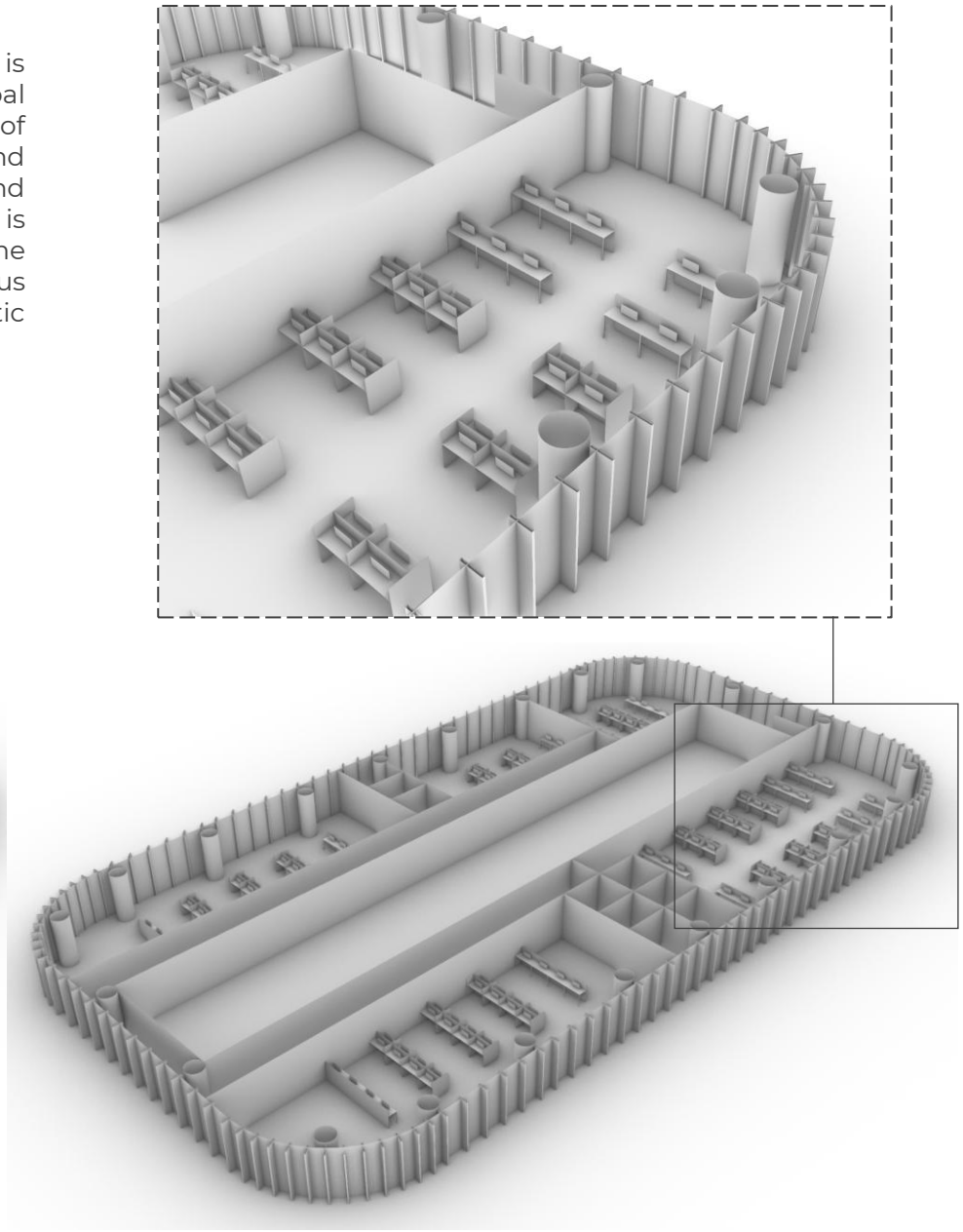


IFSCA:
DAYLIGHT AND GLARE ANALYSIS

PROJECT BRIEF:
The International Financial Services Centers Authority (IFSCA) is headquartered in GIFT City, Gujarat, India, envisioned as a global financial and IT services hub within the Hot & Dry climate of Ahmedabad. Defined by high temperatures in summer, year-round warmth, low humidity (except during the monsoon season), and intense solar radiation (except during monsoon), the project's focus is on conducting comprehensive daylight and glare analyses. The ultimate goal is to optimize the building facade, ensuring a harmonious integration of sustainable design principles within the unique climatic conditions of the region.

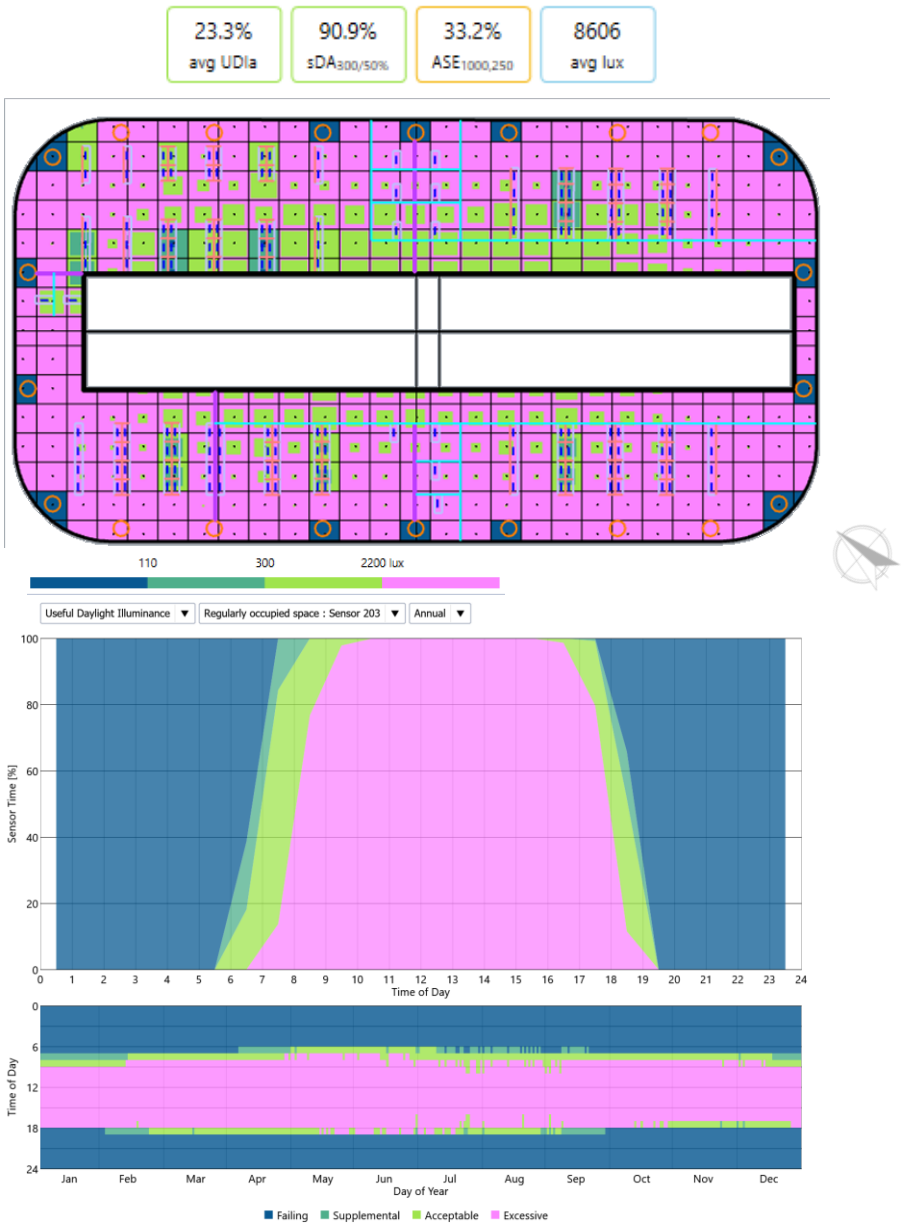


CASE 1: WITHOUT FINS

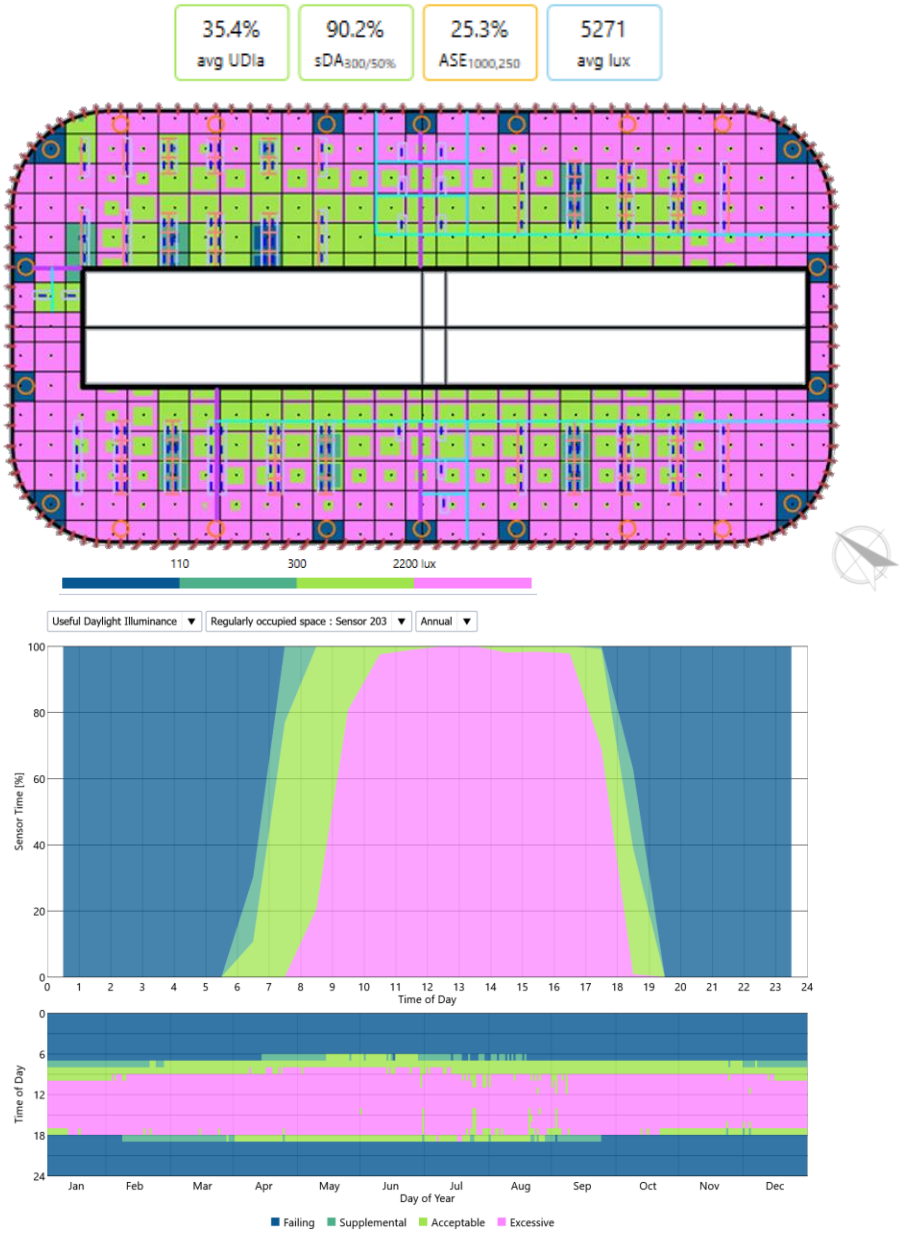


CASE 2: WITH FINS

IFSCA:
DAYLIGHT AND GLARE ANALYSIS



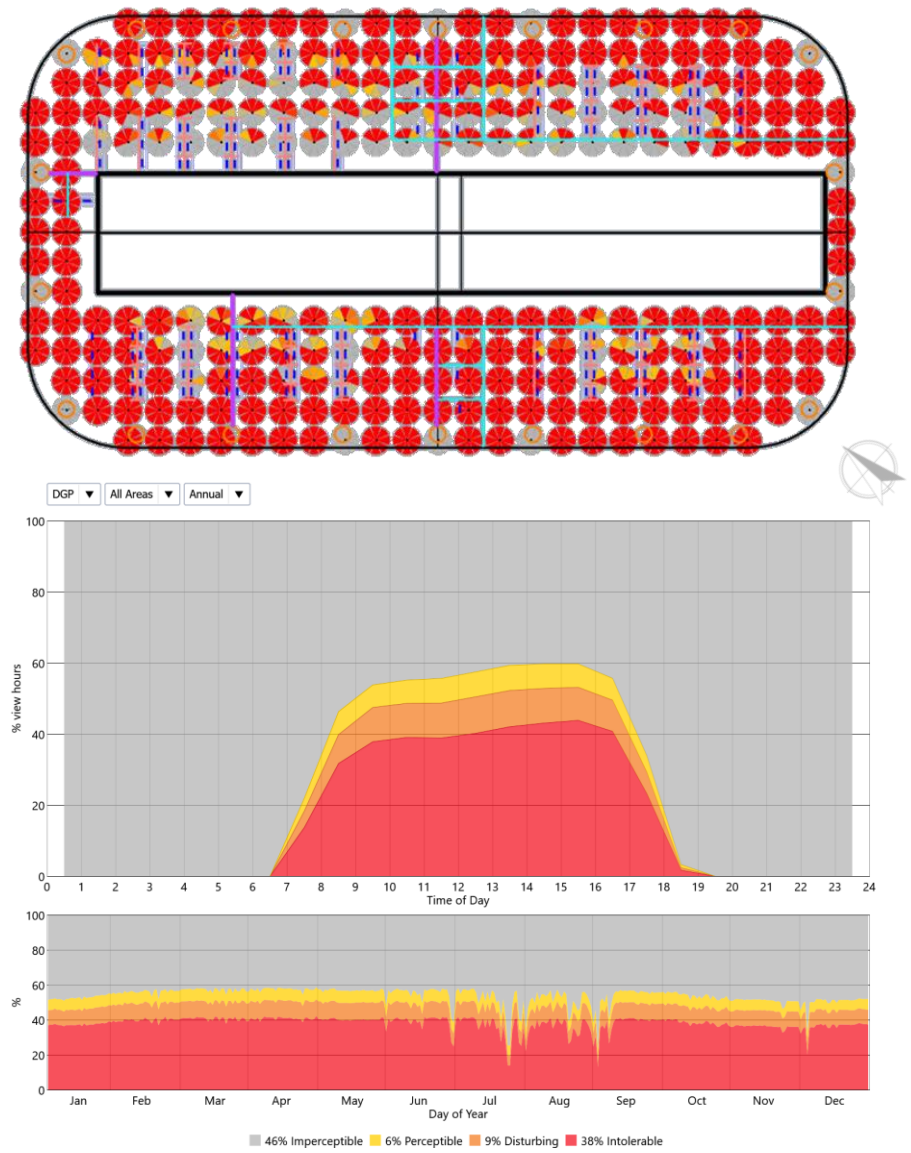
CASE 1: WITHOUT FINS



CASE 2: WITH FINS

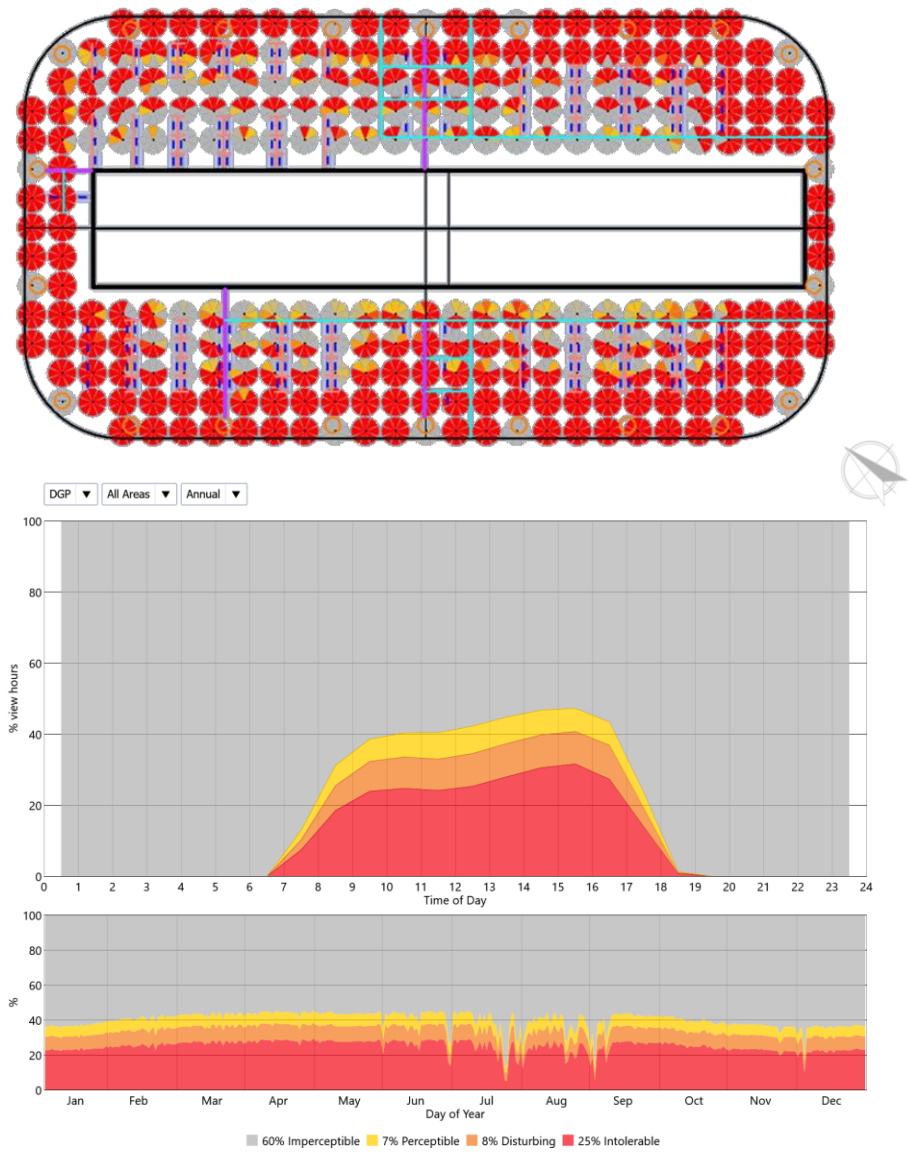
IFSCA:
DAYLIGHT AND GLARE ANALYSIS

71.4 %
sDG (% views with disturbing glare > 5 % of time)



CASE 1: WITHOUT FINS

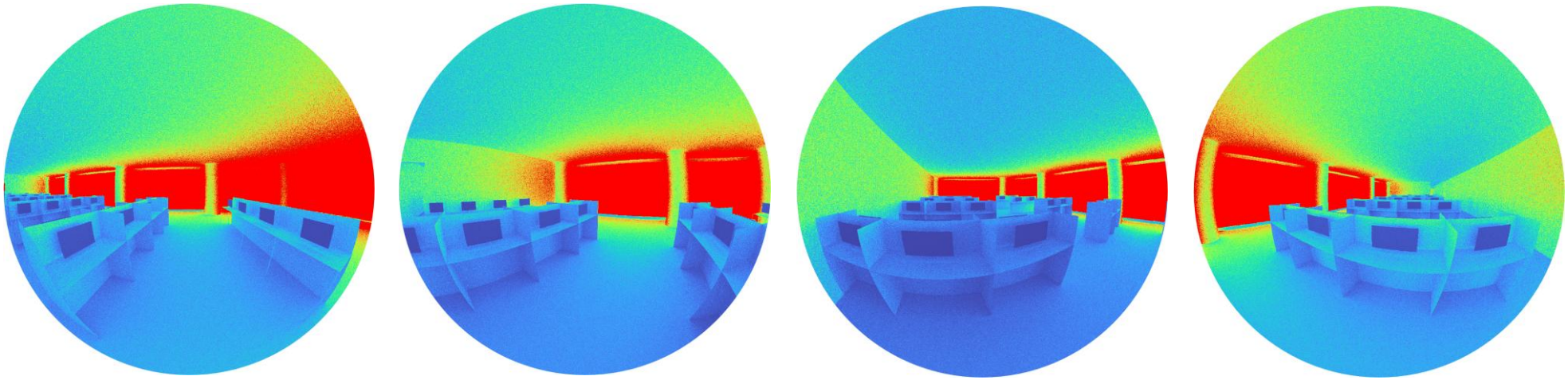
62.1 %
sDG (% views with disturbing glare > 5 % of time)



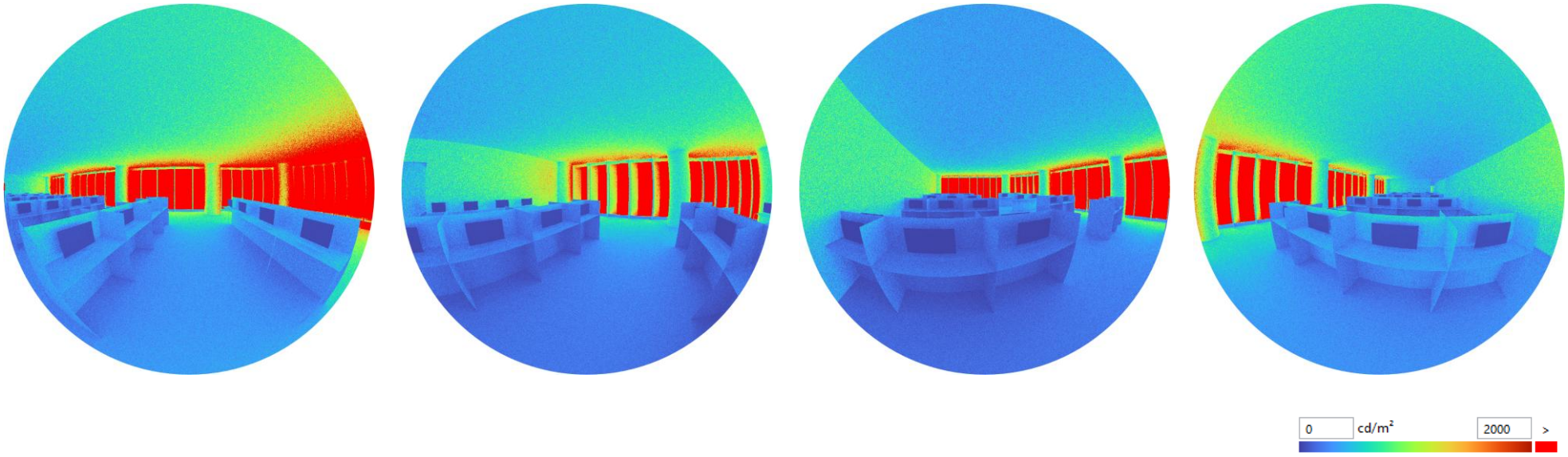
CASE 2: WITH FINS

IFSCA:
DAYLIGHT AND GLARE ANALYSIS

CASE 1: WITHOUT FINS



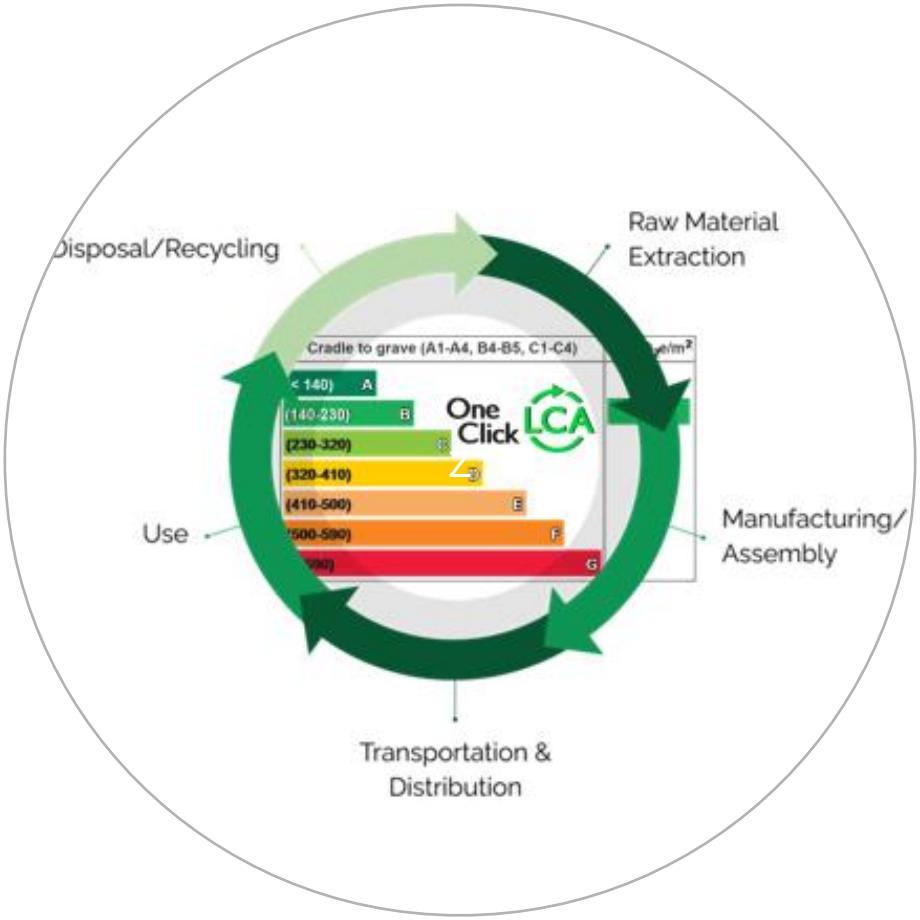
CASE 2: WITH FINS



APPLE STORE:

LIFE CYCLE ASSESSMENT

Client: Apple



APPLE STORE:
LIFE CYCLE ASSESSMENT

PROJECT BRIEF:
The Apple Store Select CityWalk is a New Construction 8,859.8 square feet, two-level retail store located inside Select CityWalk mall in Delhi, India. The building's structural system and envelope includes Aluminium framed curtain wall, steel studs, and steel sheet beams. The goal is to conduct a life cycle assessment using OneClick LCA.

Whole Store Embodied Carbon Equivalents

Includes Biogenic Carbon?	Embodied Carbon (MT CO_2e)	lbs of Coal Burned	Miles Driven
Yes	6.08	6,720.10	15,280.19
No	110.0	1,21,580.8	2,76,450.9

Areas of Opportunity

Exterior Glazing
It is recommended that glazing material be sourced regionally, with maximum recycled content. For framing, minimize the use of aluminium or source low-carbon aluminium.

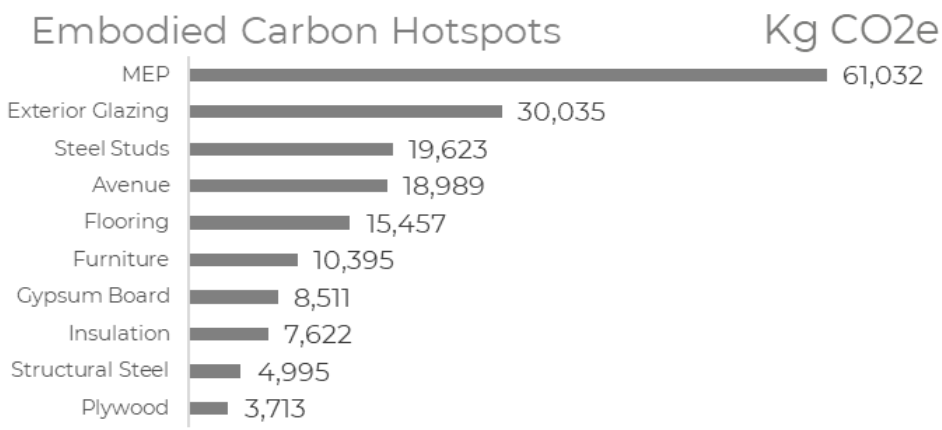
Steel Studs
It is recommended that steel be sourced locally and that it be manufactured in electric-arc furnaces (EAF), with the greatest recycled content available.

Flooring
Polished concrete slab as a finished flooring should be preferred over carpet or vinyl flooring which helps in reducing the embodied carbon. It is recommended to choose all the flooring tiles/finishes that are manufactured locally.

Furniture
It is recommended to choose furniture that are manufactured locally and has the highest percentage of recycled content. For wood-based furniture, look for FSC certified wood or any other eco-label.

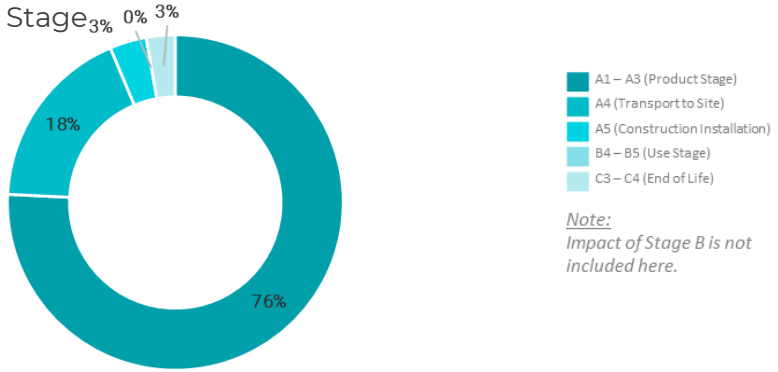
Gypsum Board
Specifying lightweight gypsum board products is the most impactful way to reduce the carbon footprint of gypsum board. Gypsum board alternatives that utilize compressed agricultural fibers (CAF) may present a low-carbon alternative to standard gypsum board.

Insulation
It is recommended to use plant-based insulation instead of mineral wool insulation. Prefer using the materials which are regionally sourced.

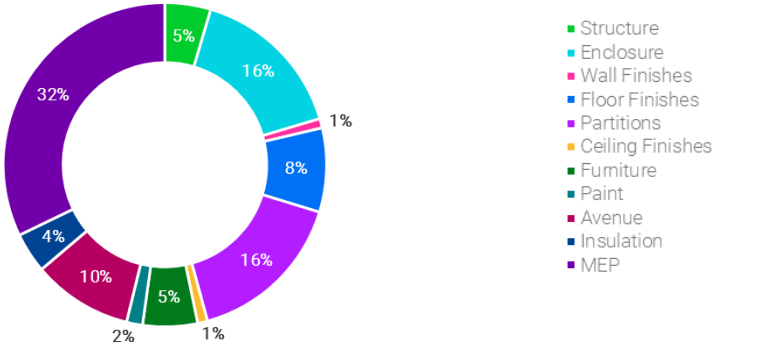


Embodied Carbon Breakdown

By Life-cycle Stage



By Material Category

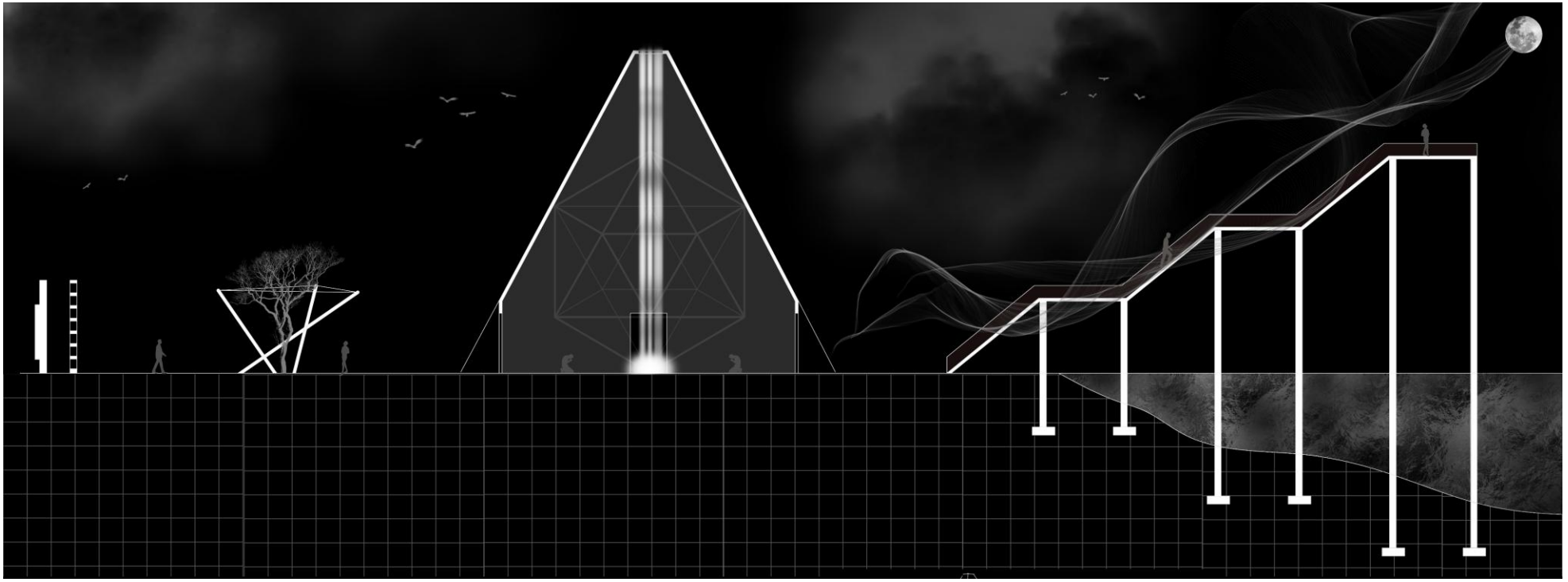


THE SACRED SPACE:
TOWARDS A NEW WORLD

Archdais | October 2020

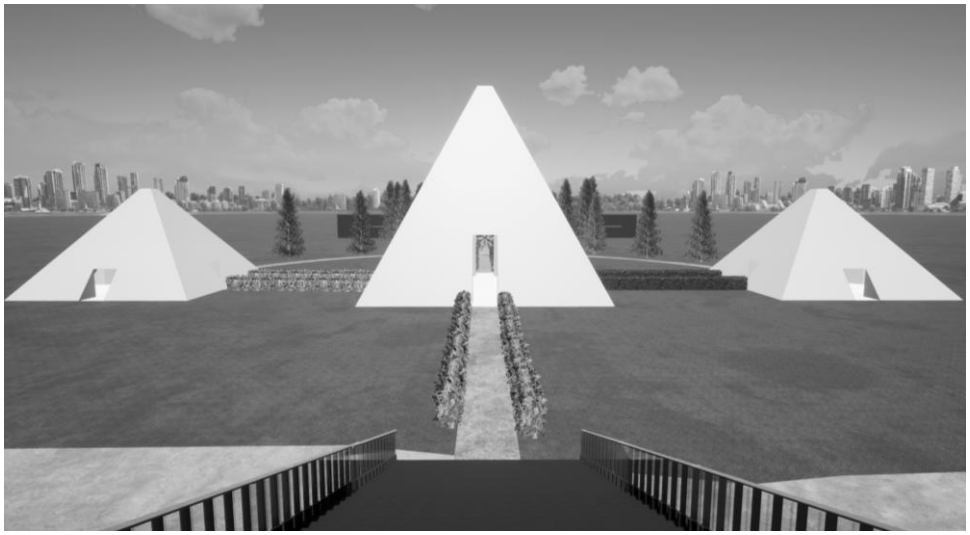
THE SACRED SPACE:
TOWARDS A NEW WORLD

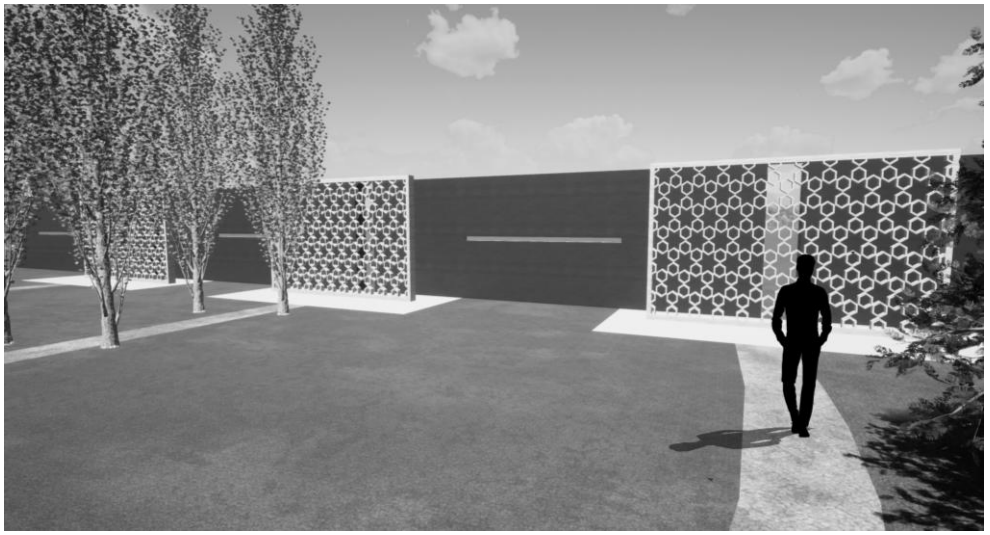
PROJECT BRIEF:
Imagining a place of Faith- a space where humans can feel emotional connection with Nature, which urges them to be better souls. Entering this place through huge entry way, realizing how small particle we all are in this universe. Getting a glimpse of the pyramidal prayer area through Jali wall. Reaching up to the Tree of Life- understanding that we all are one irrespective of all the differences. The pyramidal prayer hall has a skylight through which the beam of light enters the hall and enlightens the dark space. Here we appreciate the power of Light and its potential to purify our mind and soul. The staircase to Heaven teaches us that we all need to go through our life struggles to reach a space which will be worth surviving for. Hence with gratitude, this space would help us all to pledge to make this world a better place to live in. The site is located at Auroville. Auroville is an experimental township in Viluppuram district, mostly in the state of Tamil Nadu, India, with some parts in the Union Territory of Puducherry in India.

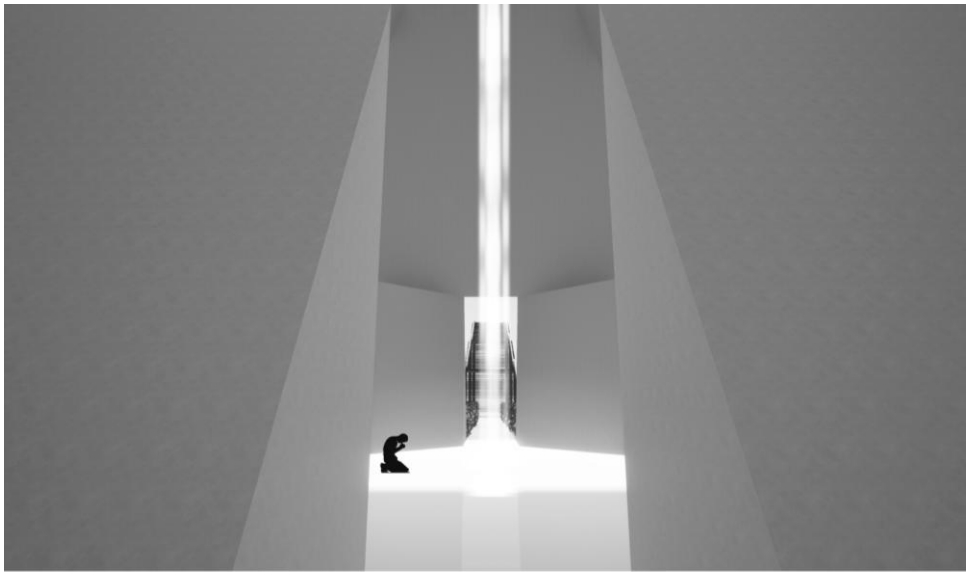


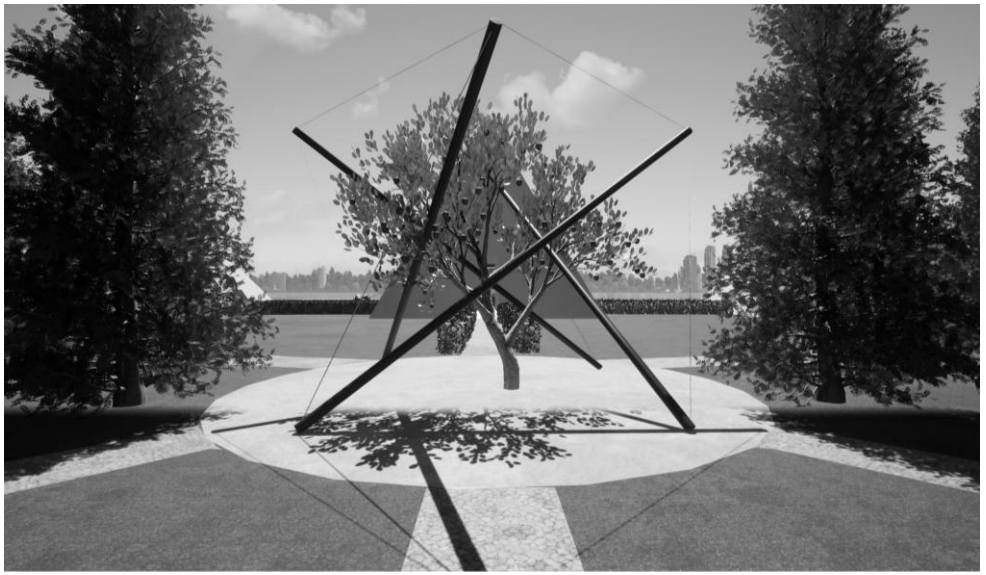
THE SACRED SPACE:
TOWARDS A NEW WORLD

SPACES FOR SPIRITUAL EXPERIENCE:









THE MASTER STUDIO:

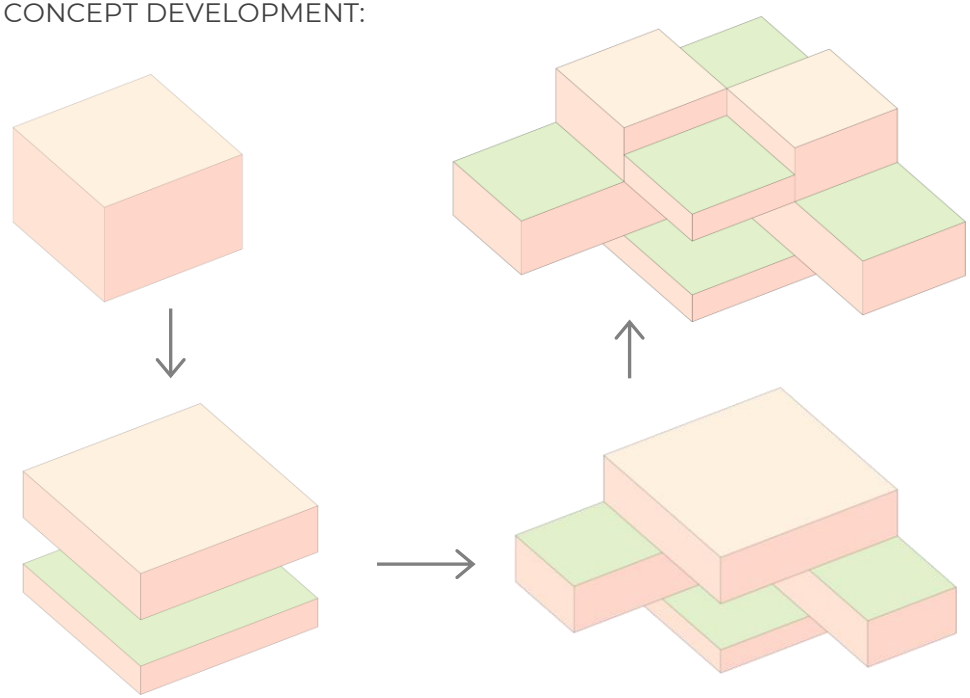
COMMUNITY FOR ARCHITECTS AND DESIGNERS

Archmello | August 2020

THE MASTER STUDIO:
COMMUNITY FOR ARCHITECTS AND DESIGNERS

PROJECT BRIEF:
Creating a sense of identity for the architecture community in the busy city of Bangalore, through an open hand monument- a tribute to a master architect. A building with colorful facades teaches the importance of color psychology theory. The design promotes outdoor working spaces where architects and students can have discussions and brainstorm new ideas. An amphitheater for large gathering, a silent zone near the water fountain where a person can get inspired from the sound of water flowing, an inspirational feature wall full of quotes and artistic display of new innovative designs, reflexology pathway to reduce stress and act as mood lifters, artificial green mounds where architects and students can peacefully sit and think about their designs. This design encourages people to come out of the building and work outdoor in the natural environment. Inside the building it is made sure, that each floor has an opportunity to work in semi open spaces and this helps architects and students to mingle together and learn from each other.

CONCEPT DEVELOPMENT:

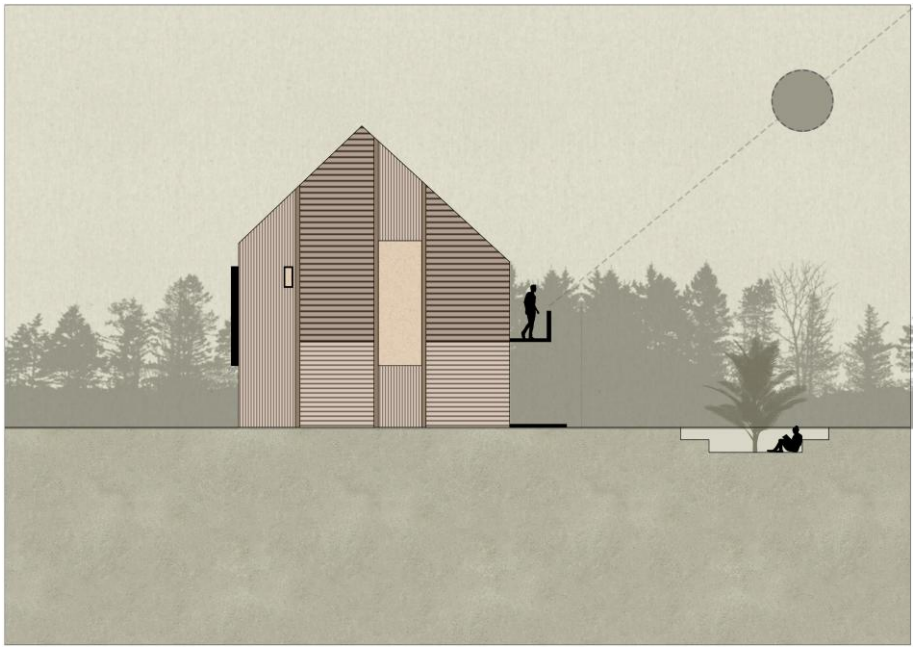


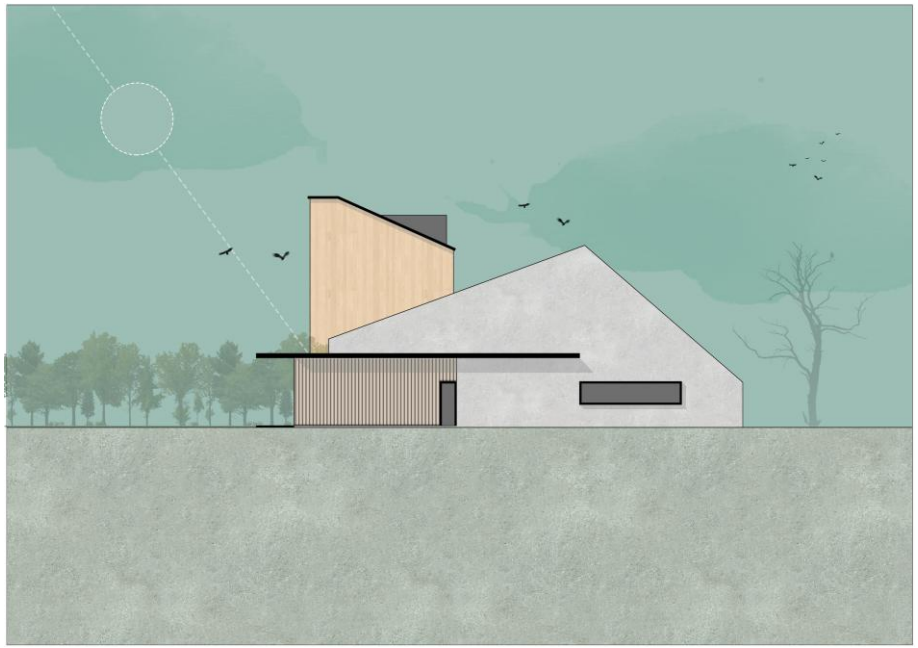
SITE PLAN

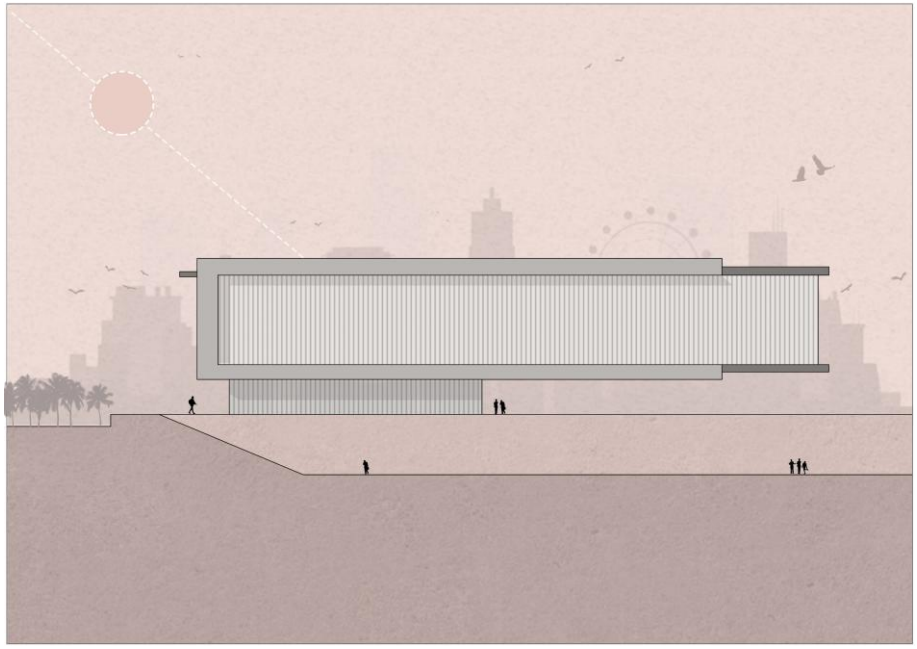
THE MASTER STUDIO:
COMMUNITY FOR ARCHITECTS AND DESIGNERS

SOCIAL INTERACTION ZONE FOR ARCHITECTS, DESIGNERS AND STUDENTS:

ARCHITECTURAL ILLUSTRATIONS







RESEARCH PAPER PUBLICATIONS

Research Paper

Child-Friendly Open Spaces:
Comparative Analysis of Parks in Pune, India

Smera Sera OOMMEN, Pune University, India

Abstract

The vision of a good urban city is to design spaces livable for everyone. Every individual deserves to enjoy each space within the city. In India, 39% of the total population are children below 18 years. Planning of a city from the vantage point of a toddler is the best way to start. A child friendly city will include child friendly parks, streets, roads, and other public spaces. Children need to have easy access to local places away from home, where they can meet, interact and play with their friends. Parks and open spaces provide opportunities for children to learn about nature, each other and the world they live in. Parks are important spaces where children can explore, be active, relax, socialize, play and learn, which would eventually contribute to their development. This research paper focuses on child-friendly parks and how does these spaces contribute in early childhood development which includes physical, mental and social development. Earlier literature studied about dedicated open spaces for children inside the parks. This research would aim to study the parks holistically and how to make the entire park child-friendly. The focused age group is 3 – 10 years. The methodology followed is live case study along with activity mapping and photographic documentation. The selected case studies are Bhimale Udhyan- Bibewadi, Shivarkar Garden- Wanowrie and Anusaya Sabda Lonkar Garden-Kondhwa. Each case study has been studied on the parameters like furniture, light, color, texture on the basis of safety, accessibility, anthropometry, inclusiveness, and playfulness. The research concludes that child friendly green spaces has positive impact on a child's development. The inferences from the research would help in designing child-friendly cities in future which will support healthier, safer and more exciting urban neighborhoods for young children, for those who care for them, and for everyone.

Keywords

Child Friendly City, Public Spaces, Parks, Early Childhood Development

1. Introduction

1.1. Child-Friendly City

'If you find children happy, then the city is healthy.' (Penalosa and Ives 2004) The needs and perspectives of children are largely overlooked in urban development, in spite of children forming a significant percentage of population. A child-friendly city is a city, town or community committed to fulfilling child rights as formulated in the Convention on the Rights of the Child. It is a city or community where the voices, needs and rights of children are an integral part of public policies, plans and decisions. Thus, a child-friendly city is a city that is suitable for all. Every country in the world, regardless of their level of human development, are now involved in implementing the 2030 Agenda for Development. The Child Friendly City Initiative (CFCI) supports local governments in implementing the 2030 Agenda through

56th ISOCARP World Planning Congress

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28th & 29th Feb. 2020

Child-Friendly Open Spaces: Comparative Analysis of Parks in Pune

Smera Sera Oommen, Ar. Meghana Patel
SMEF's Brick School of Architecture, Pune, India
Email: smera1308@gmail.com

Abstract: The vision of a good city is to design spaces livable for everyone. In India, 39% of the total population are children below 18 years. Planning of a city from the vantage point of a toddler is the best way to start. A child friendly city includes child friendly parks, streets, and other public spaces. This research focuses on child-friendly parks and how does these spaces contribute in physical, mental and social development in early childhood. The focused age group is 3 – 8 years. The methodology followed is live case study along with activity mapping and photographic documentation. The inferences from the research would help in designing child-friendly public parks in future which will support healthier, safer and more exciting urban neighborhoods for young children, for those who care for them, and for everyone.

Key words – Child Friendly City, Public Spaces, Parks, Early Childhood Development, Urban Design, Children

1. INTRODUCTION

1.1 CHILD-FRIENDLY CITY

'If you find children happy, then the city is healthy.' (Ives, 2004) The needs and perspectives of children are largely overlooked in urban development, in spite of children forming a significant percentage of population. A child-friendly city is a city, town or community committed to fulfilling child rights as formulated in the Convention on the Rights of the Child. It is a city or community where the voices, needs and rights of children are an integral part of public policies, plans and decisions. Thus, a child-friendly city is a city that is suitable for all. All countries in the world, regardless of their level of human development, are now involved in implementing the 2030 Agenda for Development. The Child Friendly City Initiative (CFCI) supports local governments in implementing the 2030 Agenda through holistically addressing issues related to the health and well-being of children and families at the local level. (Louise Thivant, 2018)

The concept of child-friendly spaces has been inspired by the idea of child-friendly cities. It refers to developing better and healthier conditions for children within urban areas by focusing on child-friendly green spaces within the built environment. Children need open spaces, in order to connect and interact with their natural environment and

consequently, develop their skills and natural abilities to their full potential. The focus of urban planning should thus be to provide, among others, for green spaces designed particularly for children's needs.

1.2 CHILD-FRIENDLY OPEN SPACES

Public spaces like neighborhood parks and playgrounds are important elements of daily urban life for Infants, Toddlers and Caregivers (ITCs). For the 0-5 age group particularly, playing is a way to have fun, to socialize but also to learn. A big portion of this valuable playing time happens in designated play areas like small tot-lots, parks, squares or green areas. If a city invests in better quality of open spaces for children, it also invests in creating better citizens for tomorrow.

1.3 EARLY CHILDHOOD DEVELOPMENT

Playgrounds provide vital opportunities for children to play. There is substantial research showing the clear link between play and brain development, motor-skills, and social abilities. All learning—motor, cognitive and social—is accelerated by the act of play. Playgrounds that promote different types of activities are important for a child's cognitive, emotional, physical, and social development. Research on brain development shows that the most crucial time for a child's development is in the earlier years. (U.S. Department of Health and Human Sciences, n.d.) Children run, jump and play in a park which aids their motor skills and helps in the physical development. The playground maximizes opportunities to interact with their peers and allows them to express ideas and feelings, and develop their social skills. The act of play by a child stimulates brain development and has a key role in building the foundation and capabilities of the brain.

2. LITERATURE REVIEW

Research done by Cilliers and Goosen on 'Child friendly approaches in a city' stated that the necessity for the urban green spaces with the focus of planning for children within a city are regrettably not recognized due to the extensive

International Journal of Engineering Research (IJER)

Journal of Urban Design and Mental Health
UD/MH THE CENTRE FOR URBAN DESIGN AND MENTAL HEALTH

City Case Study

Case Study on Urban Design and Mental Health in Mumbai

Chaitali Mendon[1], Smera Sera Oommen [2]

[1] Mental health practitioner, Mumbai
[2] Green Building Analyst at Environmental Design Solutions, Mumbai

Introduction

"Ae dil hai mushkil jeena yahaan, zara hat ke, zara bach ke
yeh hai bombay meri jaan"
"O heart, it's tough to live here, move a little, be careful,
it's Bombay, my dear" (translation)

The case study examines various urban infrastructures that influence the mental wellbeing of individuals residing in Mumbai. Additionally, it closely looks at structures that support mental wellbeing, general focus on mental health in the city and urban design policies that mandate maintaining infrastructures that have proven to positively influence mental health of people.

Understanding Mumbai

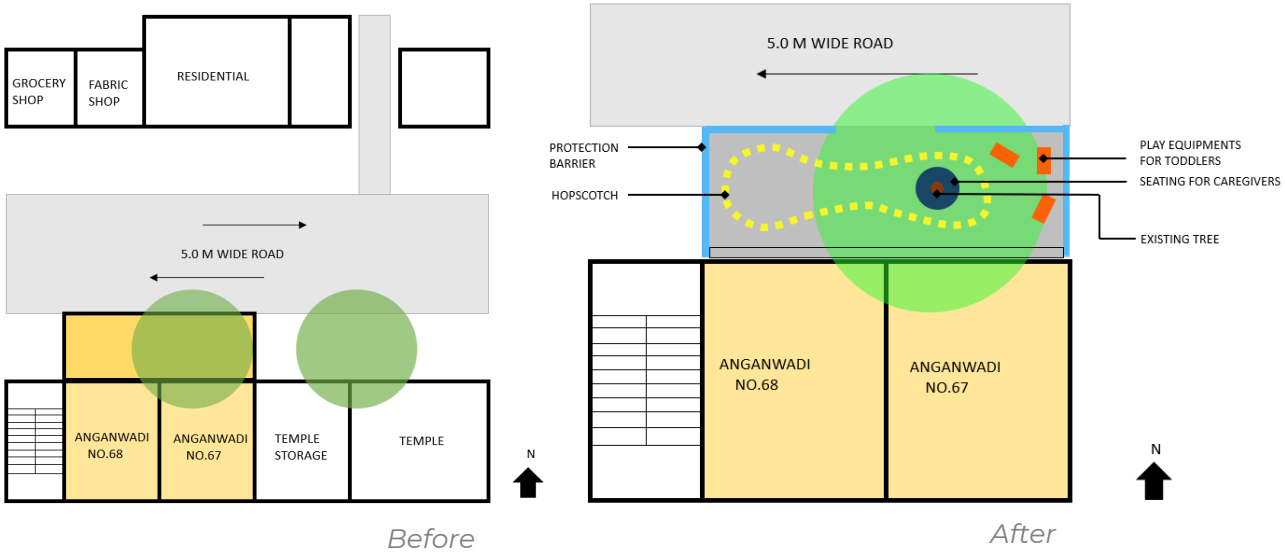
Mumbai, formerly known as Bombay, is the capital of Maharashtra state of southwestern India. It is the nation's financial and business focus and its chief port on the Arabian Sea. Situated on Maharashtra's coast, Mumbai is India's most-crowded city, and it is one of the biggest and most densely populated metropolitan territories on the planet with an estimated population of 22 million (World Population Review, 2023). It was built on a site of an old settlement, and it took its name from the local goddess Mumba—a form of Parvati, the partner of Shiva, one of the important deities of Hinduism—whose sanctuary once remained in what is currently the south-eastern segment of the city. The city was known as Bombay during the British colonial time, the name conceivably an anglicized version of Mumbai or maybe of Bom Baim ("Good Harbor"), supposedly a Portuguese name for the district. The name 'Mumbai' was re-established formally in 1995, even though Bombay remained in common usage (Raghavan, 2021).

Mumbai, the focal point of India's cotton material industry, subsequently fostered a profoundly enhanced manufacturing sector that incorporated an increasingly significant Information Technology (IT) component. Moreover, the city's business and monetary foundations are strong and energetic, and Mumbai serves as the country's financial centre. It endures, however, from a portion of the perpetual issues of many large expanding cities: air and water contamination, inadequate and poor-quality housing, and overcrowding.

Figure 1: Aerial View of Mumbai City, Image posted by IndiaSpeak on Reddit

Journal of Urban Design and Mental Health

CHILD FRIENDLY CITY: TACTICAL INTERVENTIONS



Project 1: Submitted a proposal to Pune Municipal Corporation to Redesign the front area of an Anganwadi in Katraj, Pune using Tactical Interventions to make the space more child-friendly

Project 2: Volunteered for Pune Municipal Corporation and assisted in a Tactical Intervention outside a maternity home in Wanowrie, Pune

Thank You.