



DT: 07th Dec 2024

PROFILE & PROPOSAL FOR PROFESSIONAL SERVICES

ENERGY CONSERVATION BUILDING CODE (ECBC) (ECBC COMPLAINT)

PROJECT

PROPOSED "HOSPITAL BUILDING" CONSISTING OF GROUND, FIRST & SECOND FLOORS, IN SURVEY NO. 480/2, SITUATED AT AMTZ, DIVISION NO. 77, ZONE – VI OF NADUPURU (V), PEDAGANTYADA (M), GVMC, VISAKHAPATNAM DIST, A P.

Submitted to,

AMTZ MEDPOLIS HEALTHCARE LLP
FORMALLY KNOWN AS VIGYAN NACHARAM LLP

Submitted by,

M/s. BYLDAN ARCHITECTURE & INTERIORS
Contact # 80086 33366, Email: Byldan.architects@gmail.com

HEAD OFFICE. PLOT NO 15, 3RD FLOOR, AKASH NAGAR
COLONY, NEW BOWENPALLY, SECUNDERABAD,
TELANGANA - 500 011

REGIONAL OFFICE. PLOT NO. 44, SBI EMPLOYEES COLONY,
REVENUE WARD 13, VIKAS NAGAR,
9TH LANE, GUNTUR, ANDHRA PRADESH

1.0 ABOUT US

BYLDAN Architectural & Interiors is an Architectural design consultancy firm. We endeavour to balance imagination, creativity and reliability, combining all the skills necessary to envision, design, plan and manage the project to get the results you want, on-time and on-budget

We committed to offer green building design solutions to promote environmentally friendly ` and technologies that brings harmony with nature and building. BYLDAN believes in excellence and strives to achieve highest standards of perfection.

Our vision to foresee the rapid growth in renewable/green energy and need to bridge the knowledge gaps of budding entrepreneurs in Green & Solar industry is key factor behind formation of "BYLDAN".

To deliver world-class sustainable designs, innovative use technologies and eco-friendly material, managed by professionals and deliver quality services through process driven approach so as to achieve customer delight.

We believe in conducting our business with the highest standards of honesty, integrity and professionalism.

Our projects diversity from Residential, Commercial, Hospitality and Industrial with Services of Master plan designing, Architecture, Interior designing, MEP Services, ECBC certification, Green Building Rating etc. Our dedication towards efficient design, attention to detail, and aesthetics of our projects is Byldan's utmost priority.

Given the opportunity to work on your project, BYLDAN will make sure we maintain the high standards we have set for ourselves with the personal touch in every project we undertake

2.0 OUR FEW CLIENTELE:

COMPLETED MORE THEN 200 PROJECTS RANGING FROM 25,000 SFT TO 17,00,000 SFT

- | | |
|---|------------------|
| 1. M/s ALLURI VENTURES LLP
<i>Prescriptive method – 1 Star Rating</i>
Total BUA: 26,693 sft at Road No 45, jubilee Hills, Hyd. | STATUS:COMPLETED |
| 2. M/s RIDHI INFRAESTATE LLP
<i>Prescriptive method – 1 Star Rating</i>
Total BUA: 60,900 sft at Himayath Nagar, Hyd | STATUS:COMPLETED |
| 3. M/s SRI VEDA INFRA
<i>Simulation Method - 3 Star Rating</i>
Total BUA: 48,000 sft at Sec-bad | STATUS:COMPLETED |
| 4. M/s JAIN SADGURU CONSTRUCTIONS LLP
<i>Simulation Method - 3 Star Rating</i>
Total BUA: 7,76,000 sft at Hitech city | STATUS:COMPLETED |
| 5. M/s ALLOLAMURALIDHAR REDDY
<i>Simulation Method - 3 Star Rating</i>
Total BUA: 43,931 sft at Quthbullapur | STATUS:COMPLETED |
| 6. M/s RAICHANDANI PAHAL DEVELOPERS LLP
<i>Simulation Method - 3 Star Rating</i>
Total BUA: 74,105 sft at Sheikpet, Hyd | STATUS:COMPLETED |
| 7. M/s PRESTIGE OFFICE VENTURES
<i>Simulation Method - 2 Star Rating</i>
Total BUA: 46,469 sft at Begumpet, Hyd | STATUS:COMPLETED |

- | | |
|---|------------------|
| 8. M/s N8 INFRA DESIGN CONST PVT LTD
Simulation Method - 4 Star Rating
Total BUA: 1,20,468 sft at Karimnagar, TG | STATUS:COMPLETED |
| 9. M/s RAICHANDANI DEVELOPERS
Simulation Method – 2 star Rating
Total BUA: 3,68,000 Sft at Kompally, Hyd | STATUS:COMPLETED |
| 10. M/s PRESTIGE ESTATES LIMITED
Simulation Method – 2 star Rating
Total BUA: 50,000 Sft at Rajendra Naga, Hyd | STATUS:COMPLETED |
| 11. M/s JAIN SADGURU CONSTRUCTIONS LLP
Simulation Method – 3 star Rating
Total BUA: 2,50,800 Sft at Malkajgiri, Hyd | STATUS:COMPLETED |
| 12. MULTIPLEX – Bathini Venkat Narayana Rao
Simulation Method – 2 star Rating
Total BUA: 1,20,681.14 Sft at Warangal, TG | STATUS:COMPLETED |
| 13. M/s MALLA REDDY MEDICAL COLLEGE
Simulation Method – 2 star Rating
Hospital Total BUA: 98,665.43 sft
Auditorium Total BUA: 68,465.88 Sft | STATUS:COMPLETED |
| 14. M/s WADI SURGICALS
Simulation Method – 3 star Rating
Total BUA: 1,25,000 sft at Vizag, A.P. | STATUS:COMPLETED |
| 15. M/s A P MEDTECH ZONE LIMITED
Simulation Method – 2 star Rating
Total BUA: 30,980 sft at AMTZ- Vizag, A.P. | STATUS:COMPLETED |
| 16. M/s DECK MOUNT ELECTRONICS PVT LTD
Simulation Method – 2 star Rating
BUA: 28,460 sft at AMTZ Vizag, A. P. | STATUS:COMPLETED |
| 17. M/s TENSWALL SERVICES PVT LTD
Simulation Method – 2 star Rating
BUA: 24,059 sft at AMTZ - Vizag, A.P. | STATUS:COMPLETED |
| 18. M/s SUN VENTURES & INVESTMENTS PVT LTD
Simulation Method – 3 star Rating
BUA: 1,84,426 sft at AMTZ - Vizag, A.P. | STATUS:COMPLETED |
| 19. M/s SPECTRA INDIA PROJECTS PVT LTD
Simulation Method – 2 star Rating
BUA: 53,190 sft at Saroornagar, Hyd. | STATUS:COMPLETED |
| 20. M/s MICROSOFT CORPORATION (INDIA) PVT LTD
Simulation Method – 2 star Rating
BUA: 3,51,951 sft at Nandigama, Hyd. | STATUS:COMPLETED |
| 21. M/s PREMIER TOBACCO PACKERS PVT LTD
Simulation Method – 2 star Rating
BUA: 1,20,160 sft at Guntur, A.P. | STATUS:COMPLETED |

22. M/s CMR SHOPPING MALL <i>Simulation Method – 2 star Rating</i> BUA: 56,065 sft at Proddatur, A.P.	STATUS:COMPLETED
23. M/s ANIKA STERILIS PRIVATE LIMITED <i>Simulation Method – 2 star Rating</i> BUA: 56,576 sft at Vizag, A.P.	STATUS:COMPLETED
24. M/s ANNAMACHARYA EDUCATIONAL TRUST <i>Simulation Method – 2 star Rating</i> BUA: 1,66,008 sft at Rajampet, A.P.	STATUS:COMPLETED
25. M/s BHARAT RASTRA SAMITI (BRS Towers) <i>Simulation Method – 2 star Rating</i> BUA: 4,13,813 sft at Narsingi, TG.	STATUS:COMPLETED
26. M/s RAICHANDANI – R S CONSTRUCTIONS <i>Simulation Method – 3 star Rating</i> BUA: 9,09,320 sft at Narsingi, TG.	STATUS:COMPLETED
27. M/s VENKATESHWARA VIDYA PEETH (ENGG COLL & HOSTEL) <i>Simulation Method – 2 star Rating</i> BUA: 1,18,367 sft at Vizag, A.P..	STATUS:COMPLETED
28. M/s PROTIGENIX LIFE SCIENCES PVT LTD <i>Simulation Method – 2 Star Rating</i> BUA: 2,60,342 sft at AMTZ, Vizag, A.P.	STATUS: COMPLETED
29. M/s PV SINDHU BADMINTON ACADEMY & SPORTS SCHOOL <i>Simulation Method –3 Star Rating</i> BUA: 1,61,293.36 sft at Vizag, A.P.	STATUS: COMPLETED
30. M/s HEALTH 360 DEGREES CLINICS & HOSPITAL PVT LTD <i>Simulation Method – 2 Star Rating</i> BUA: 1,81,329 sft at AMTZ, Vizag, A.P	STATUS: COMPLETED
31. M/s RECUR INFRA – INTERNATIONAL CONVENTION CENTRE <i>Simulation Method –4 Star Rating</i> BUA: 1,02,600 sft at AMTZ, Vizag, A.P.	STATUS: COMPLETED
32. M/s BRIGADE ENTREPRISES LIMITED <i>Simulation Method –5 Star Rating</i> BUA: 22,14,535.61 sft at Kokapet, Hyd	STATUS: COMPLETED

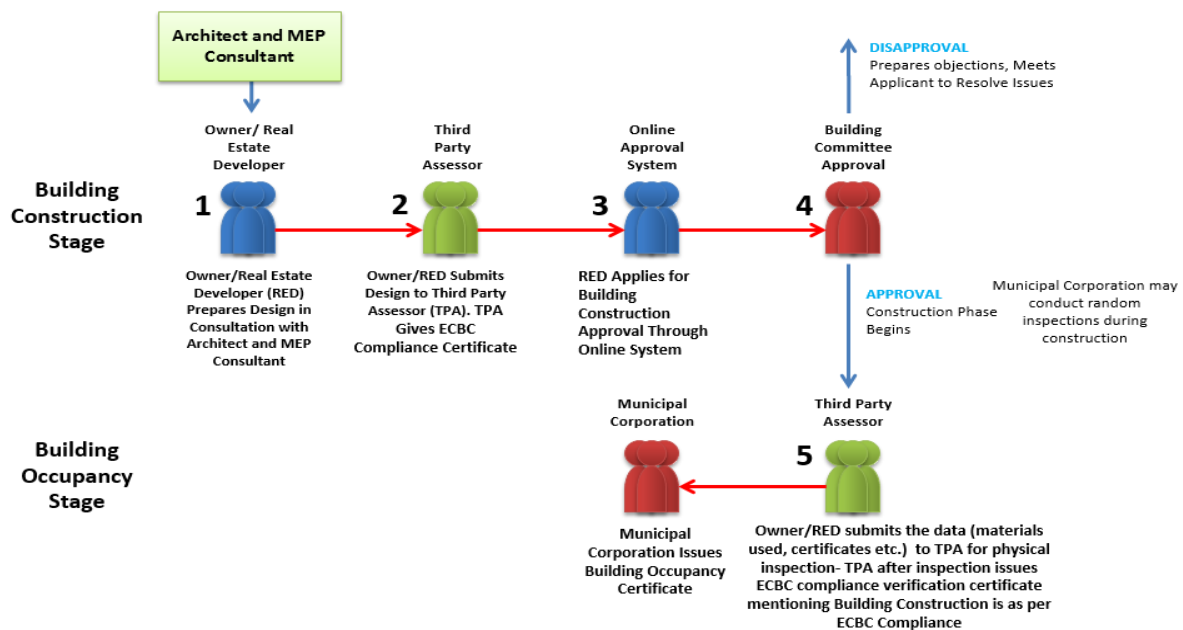
3.0 PROJECT BRIEF:

Proposed “Hospital Building” Consisting Of Ground, First & Second Floors, In Survey No. 480/2, Situated At AMTZ, Division No. 77, Zone – VI Of Nadupuru Village, Pedagantyada Mandalam, GVMC, Visakhapatnam District, Andhra Pradesh.

Net SITE AREA : **6,299.72 Sqm**

Total Net BUA : **6,117.79 Sqm / 65,827.42 sft**

THE BELOW FIGURE EXPLAINS THE SCHEMATIC REPRESENTATION OF BUILDING APPROVAL SYSTEM SHOWING THE ROLE OF TPA



“ENERGY CONSERVATION BUILDING CODE” (ECBC) DESIGN STAGE SERVICES TO THE PROPOSED “PROPOSED “HOSPITAL BUILDING” CONSISTING OF GROUND, FIRST & SECOND FLOORS, IN SURVEY NO. 480/2, SITUATED AT AMTZ, DIVISION NO. 77, ZONE – VI OF NADUPURU VILLAGE, PEDAGANTYADA MANDALAM, GVMC, VISAKHAPATNAM DISTRICT, ANDHRA PRADESH.

Belonging to : M/s AMTZ MEDPOLIS HEALTHCARE LLP

4.0 SCOPE OF WORK:

ECBC SCOPE OF WORK

STEP 1 - FEASIBILITY STUDY

Overall Scope of Work The scope of feasibility activity will be as follows:

- 1) Evaluate realistic compliance as per ECBC Code that can be aimed for the project ECBC program.
- 2) Identify improvements required over and above what have already been considered.
- 3) Estimate financial implications for Client to implement the improvements that are economically viable to implement to achieve the ECBC Compliance under GHMC/HMDA, Hyderabad.
- 4) To identify realistic, cost effective, and sustainable measure that could be designed and implemented.
- 5) Estimate tangible benefits to Client over the life cycle of the Building.
- 6) Suggestions on the usage of materials for the construction of the building.
- 7) Submission of final documents and obtaining ECBC Compliance Certificate under GHMC/HMDA - Telangana State or any other ULB's of Andhra Pradesh.

❖ Methodology the Feasibility study will be carried out as follows:

- 1) Discussion with concerned operational team to understand the functional requirements of the building.
- 2) Evaluate broadly the likely design specifications that can be achieved under the ECBC Code.
- 3) Detailed point-wise report on the findings of the feasibility study
- 4) ECBC Concept & different criteria available under the code
 - a) Building Envelope
 - U Value – Wall, Roof & Glass
 - SHGC
 - Visible Light Transmission
 - Window to Wall Ratio
 - b) HVAC
 - c) Service Hot Water & Plumbing
 - d) Lighting
 - e) Electrical Power

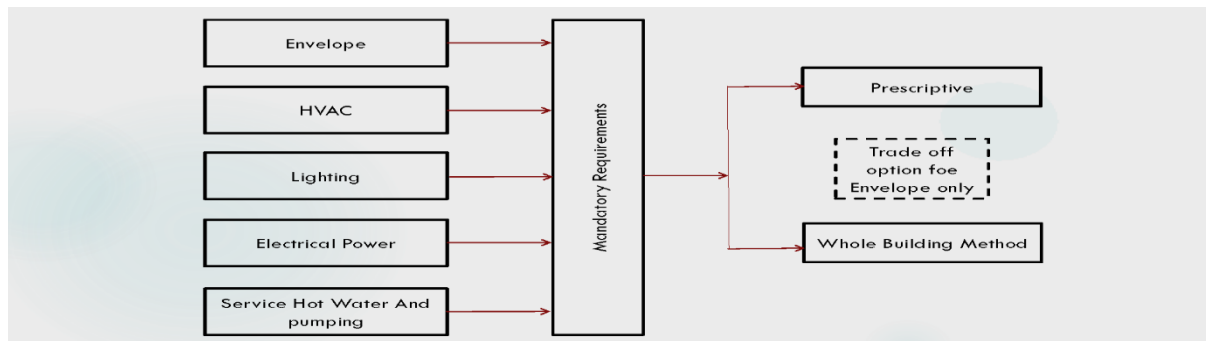
STEP 2 – ECBC PROCESS & METHODOLOGY

Overall scope of work;

- 1) The facilitating team will handhold the project team in its ECBC activities and help achieve the HMDA/GHMC- Telangana or ULB's of Andhra Pradesh - ECBC CODE COMPLAINEE.
- 2) After the preliminary study on mandatory compliance approaches, further details and drawings will be requested to prepare and submit the design stage ECBC compliance to GHMC/HMDA – Telangana or ULB'S Of Andhra Pradesh.
- 3) Once design submission is complete, a meeting will be held to review strategies and ensure correct implementation for compliance.
- 4) During the later stage of the project, guidance will be provided on vendor selection and material purchases as per ECBC guidelines.
- 5) Submit a review document based on the submittals from the different vendors, fortnightly meetings with the design team to understand and incorporate the requirements that meet the ECBC code compliance.
 - a. Templates to be prepared to each design team relate to the application procedure and understand and to identify the design related parameters affecting the ECBC.
 - b. Checklist to prepared and sent to PMC team for continuous monitoring of site activities related to Green Building.
 - c. Co-ordinate with the energy and lighting consultant on energy simulation and support project team in selecting energy efficient and eco-friendly technologies based on life cycle analysis.
 - d. Co-ordinate with the design team to prepare documents required to submit to GHMC /HMDA – Telangana or ULB'S Of Andhra Pradesh for ECBC Compliance rating.
 - e. Filter, cross validate, verify consistency, add value and consolidate to make the document suitable for submission to GHMC/HMDA – Telangana or ULB'S Of AP.
 - f. Scrutinize the ECBC documents before submission to GHMC/HMDA /HMDA – TG or ULB'S Of Andhra Pradesh. Provide inputs on previous credit interpretation requests.

❖ Methodology

- 1) The facilitation team will be responsible for achieving the ECBC Compliance Rating of State. The scope of work would be as follows: Overall facilitation for ECBC COMPLAINE AND STAR RATING.

**STEP 4 – FACILITATION OF DOCUMENTATION**

The ECBC Consultant shall prepare the documentation in accordance with the ECBC Compliance requirements including the documentation, designs, drawings, calculations and basic data. Documentation would be supported by drawings, test results, equipment catalogues and calculations

STEP 5 – SELECTION OF EQUIPMENT & MATERIALS

- 1) The ECBC Consultant will help the project team in selecting appropriate energy efficient & eco-friendly technologies, equipment & materials for the building, which include air-conditioning, lighting system, white goods, water treatment technologies, renewable energy, non-toxic paints, certified woods, rapidly renewable materials, recycled materials, eco-friendly materials, etc.
- 2) The ECBC Consultant will also help in drawing out the specifications of these equipment and materials to suit the ECBC requirement.
- 3) The ECBC Consultant will support the project team at different stages in selecting suitable vendors and suppliers for the project. The facilitation team would also interact with various vendors and suppliers, so as to meet the ECBC specifications.

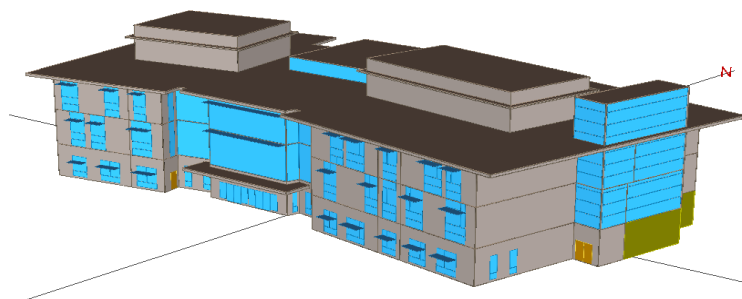
STEP 6 – ENERGY SIMULATION

Overall scope of work

The Energy Simulation for the proposed commercial building will have.

- 1) Computer Modelling of the proposed building
- 2) Energy Analysis of the PROPOSED building considering all design parameters as against a BASECASE model (as per ECBC standards) and arriving at the best solution after much iteration.

Note: Below shown building image is just for reference only



The consultant will prepare the necessary documents to achieve the following ECBC Compliance:

- Minimum Energy performance (Prerequisite)
 - Detailed 3D Energy Model and Building Simulation according to ECBC Protocol.
 - Developing Proposed and Base case Building Simulation Models
 - Simulation of Additional Energy Conservation Measures
 - Ranking & Validation of Results Combining ECMs for Maximizing Energy Efficiency
 - Value addition proposal report for better performance & savings
 - Developing Thermal Specifications
 - Energy dash with breakup – Gap analysis finding & opportunity assessment.
 - Proposed case simulation as per ECBC Compliance
 - ECBC compliance report for GHMC with a Minimum 3 Star Rating
- Optimize energy performance.

ROAD MAP – ECBC COMPLIANCE RATING

Complete the process is shown to achieve ECBC COMPLIANCE CERTIFICATE for the Project

- 1) Freeze Building Envelope, HVAC, Lighting and Electrical Specifications as per ECBC Code
- 2) Freeze equipment & material specification
- 3) Preparation of ECBC Templates
- 4) Preparation of ECBC document for approvals
- 5) Submission of documentation for GHMC/ HMDA - Telangana or ULB'S Of AP.
- 6) Prepare additional documents based on the feedback of GHMC / HMDA - TG or ULB'S Of AP
- 7) Submit Final documents for local approvals.

5.0 PAYMENT TERMS:

- ❖ **CONSULTATION FEE FOR ECBC COMPLIANCE & CERTIFICATION on “SIMULATION METHODOLOGY”**
Rs. 1,50,000*/-(Rupees One Lakh Fifty Thousand Only) + Taxes
- ❖ **Payment Terms** : 50% of Payment against Work Order / Advance
50% on submission of ECBC Certificate

We wait for your confirmation for enabling us to commence work at the earliest. Please go through the proposals and let us know how we can take it forward.

We look forward to hearing from you soon..!

For Byldan Architecture & Interiors



Damodar Velakoti

B.Arch, PGDTC, AIIA, ECBC TPA – Telangana & A.P.

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