Desionics®
SMEP | BIM CONSULTING ENGINEERS

COMPANY PROFILE

DESIONICS PROJECT DESIGNS (P) LTD

*" Engineering **Desi**gns based **O**perating*
***N**etwork for **I**ndustrial & **C**ommercial **S**ervices "*

About Us

As Desionics, we are a passionate team of Professionals striving to deliver SMEP design through innovation and cutting edge technology in the world of Construction.

Desionics was founded in 2006, In this span of over 12 years, we have laid a strong foundation in the Design Industry and our projects includes from complicated Airports to simple Villas.

From its inception, our clientele has increased exponentially with projects like but not limited to Airports, Malls, Hotels, Hospitals, Factories, High Rise Towers, Mixed Use Developments etc.

We have a unique High Performance Business Strategy to build our technical expertise that facilitates us to perform at the highest levels.

Regardless of the sector or scale, every project receives the same level of attention.

Our building design capabilities include an extensive team of SMEP & BIM Engineers which combines innovative ideas with modern tools while ensuring sustainability and serviceability. In addition, the comprehensive range of BIM services and ELV system design enables the property operation activities to positively impact the building life cycle and customer satisfaction.

Our Mission

"We combine technical expertise and dynamic tools with reliable process to achieve design excellence"

Our Vision

"Establish global presence for delivering innovative designs in construction industry through lean services"

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OUR KEY STRENGTH

From Conceptual Design Development to good for construction level drawings, we follow validated Engineering Practices, International Drafting codes & standards

- Managed by Well Experienced Engineers & Experts in the relevant Field.
- Utilizing most advanced software tools and packages for design, drafting since inception.
- Dedicated in-house BIM team co-ordinate with respective services designers throughout the process of design development to ensure well-coordinated clash free designs.
- Equipped to handle fast-track projects.
- Hands on experience in designing international projects.
- Integrated service provider specialized in various sectors on construction industries.
- Multiple level Quality Check and Assurance ensured by Dedicated Quality Department.
- Tailor made services to suit customer requirements.
- Specialized in designing MEP services for Precast buildings.
- Globally competitive with quality and reliable service.

SERVICES OFFERED

We provide SMEP, special Engineering consultancy and BIM Modelling services for versatile projects like commercial, Healthcare, Industrial, Residential, Retail & Hospitality, Urban development and Infrastructure.

Our Design solution offers Integrated and flexible solutions matching the client requirements at various stages of design development. We are specialized in designing of following services :

Structural Engineering

- Foundation Engineering
- Evaluation of structural system
- Value Engineering
- Analytical Modelling
- QS and Tendering
- Quality Assurance and Quality Control
- Peer review consultancy

Mechanical Engineering

- Centralized and Decentralized Air-Conditioning Systems
- Heating and Ventilation systems
- Noise and vibration control
- Smoke extract ventilation
- Staircase pressurisation
- Geo Thermal & Storage Systems
- Radiant Cooling Systems
- Value Engineering

Electrical Engineering

- HV System and Substation
- EHT/HT/LT Distribution Systems and Controls.
- Captive / Standby Power
- Generation and Distribution
- Lighting Control systems
- Small power Distribution Systems
- Short circuit studies and load flow analysis
- Earthing and Lightning protection Systems
- Rotary, hybrid and static UPS distribution systems

Public Health Engineering

- Water supply distribution systems
- Potable water source / storage system
- Sewage collection, treatment, disposal and reuse
- Rain water harvesting, treatment, disposal and reuse.
- Hot Water generation and distribution
- Infrastructure drainage system.
- Swimming Pool Systems
- Landscape / Irrigation water supply.

Fire Protection system & Vertical Transportation

- Automatic Wet and Dry sprinkler
- Special Hazard Fire Protection
- Fire Hydrant System
- Dry, Gaseous & Foam fire
- suppression systems
- Fire Detection, Alarm and notification system
- Lifts, Escalators
- Inclined Travellators
- Elevators

ELV System & Associated Services

- Structured cabling system
- Surveillance & Security Systems
- Communication PA-BGM System
- IT Infrastructure – AV & Master clock
- Queue Management & Digital Signages
- IPTV & Nurse call System
- Medical Gas system
- Medical Pneumatic Tube System
- Fuel Storage & Distribution
- Steam & Condensate distribution
- Industrial Piping System

INTRODUCTION TO BIM

Building Information Modeling (BIM) is an intelligent 3D model-based process that gives the insight and tools to more efficiently plan, design, construct, and manage buildings and infrastructure.

The model-based approach increases efficiency within individual organizations and truly shines during coordinated project delivery. Building Information Modeling (BIM) offers the advantage of time and budget savings for building and infrastructure projects.

BIM Advantages :

- Improves visualization of the project, commu nicates the design intent.
- Helps in multidisciplinary collaboration more effectively.
- Reduces instances of rework and revisions.
- Integrating BIM with 4D CAD simulation models bring benefits to participants in terms of plan ning optimization.
- Integrating BIM with 6D CAD simulation models leads to an overall reduction in energy consumption.
- optimizes asset management from design to demolition.

BIM Dimensions

3D: Three-dimensional Model with Parametric Data

4D: Duration analysis

5D: Cost analysis

6D: Sustainability assessment

7D: Facilities Management/Asset Management

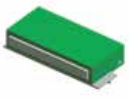
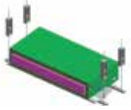
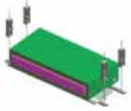
Level of Development (LOD)

Architectural : LOD 100, 200 & 300.

Structural : LOD 100, 200 & 300

MEP Services : LOD 100, 200, 300, 400 & 500.

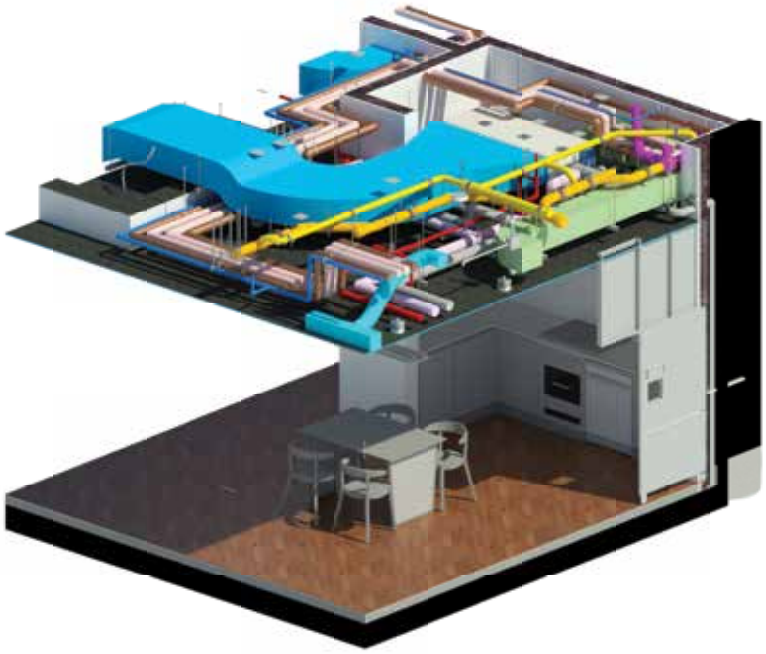
LOD Description

LOD 100	LOD 200	LOD 300	LOD 400	LOD 500
				
Conceptual	Approximate geometry	Precise geometry	Fabrication	As Built
The Model element may be graphically represented in the Model with a symbol or other generic representation, but does not satisfy the requirements of LOD 200	The Model element is graphically represented in the Model as a generic system, object, or assembly with approximate quantities, size, shape, location and orientation.	The Model element is graphically represented in the Model as a specific system, object , or assembly accurate in terms of quantity,size,shape,location and orientation	The Model element is graphically represented in the Model as a specific system, object , or assembly that is accurate in terms of quantity,size,shape,location and orientation with detailing,fabrication,assembly and installation information.	The Model Element is a field verified representatio accurate in terms of size,shape,location,quantity and orientation.

3D-PARAMETRIC MODELLING

This is primarily a three dimensional digital representation of a building and its intrinsic characteristics. It is made of intelligent building components which includes data attributes and parametric rules for each object. It gives a three dimensional virtual representation of the building, which provides a better understanding of what the final product, may look like.

3D information allows all designers of a building to realistically analyze a design as a whole and improve coordination between disciplines. Software automated interference and clearance check with 3D models helps to detect, analyze and resolve the clashes among services efficiently before construction at site.

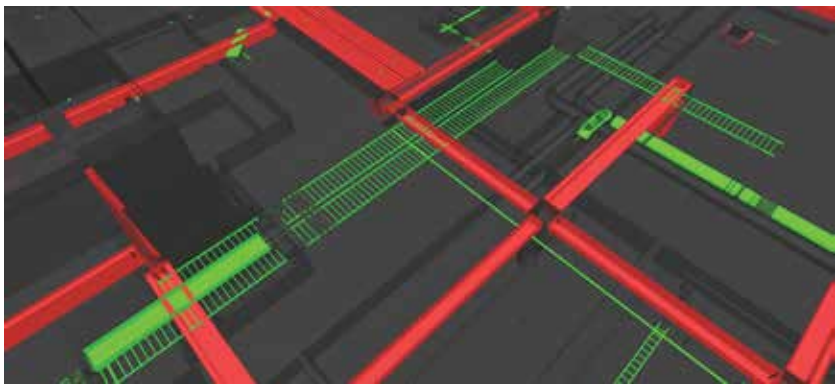


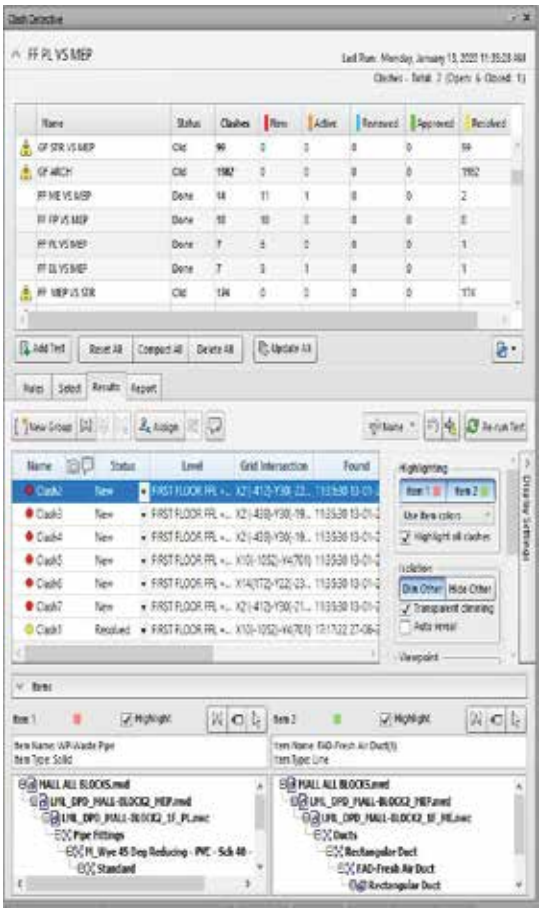
CLASH DETECTION AND ANALYSIS

It allows us to view, prevent and resolve problems in the virtual model before construction begins, to reduce costs and minimize changes and delays.

Autodesk Navisworks tools is used to detect and highlight multi discipline clashes and auto generate clash report.

The clash detection report involves all the Clashes incurred, Exact location and elements involved in it.





4D- CONSTRUCTION SEQUENCING & MONITORING

It is a process that involves linking individual 3D elements or assemblies with the construction timeline. It includes scheduling of resources and quantities, to assist tracking and project phasing.

Scheduling data helps in outlining how much time will be involved in completion of the project and how will the project evolve over time. The information can provide elaboration about the time taken for installation or construction, time needed to make the project operational, the sequence of installation of various components, along with other scheduling information.

5D- COST ESTIMATION & ANALYSIS

It is Integration of design with estimation, costing, budget tracking, generation of Bills of Quantities, and derivation of productivity rates.

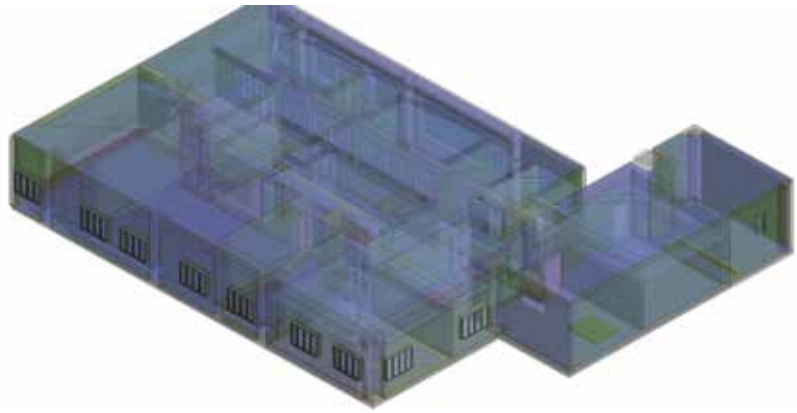
Quantities may be extracted directly and instantly from the BIM model. By assigning unit cost to the extracted quantities we automatically obtain precise and reliable cost analysis. As a result, if the total cost does not reflect the client's request, the designer may efficiently proceed with real time amendments and change impact assessment.

The utilization of 5D-BIM technology can result in a greater accuracy and predictability of project's estimates, scope changes and materials, equipment or manpower changes. 5D BIM provides methods for extracting and analyzing costs, evaluating scenarios and changes impacts.

6D- SUSTAINABILITY & ENERGY ANALYSIS MODELLING

Sustainability and energy consumption is an increasing important characteristic for buildings from the facility management perspective. Operational costs can represent a large part of a facility's costs throughout its lifecycle, in some case up to 80%.

The utilization of 6D-BIM technology can result in more complete and accurate energy estimates earlier in the design process. It also allows for measurement and verification during building occupation, and improved processes for gathering lessons learned in high performance facilities. Integrating BIM with 6D simulation models leads to an overall reduction in energy consumption.



7D- FACILITY MANAGEMENT

It includes the information that is required to support facility management and operation to drive better business outcomes. This data includes information such as the manufacturer of a component, its installation date, required maintenance and details of how the item should be configured and operated for optimal performance, energy performance, along with lifespan and decommissioning data.

This is achieved by integration of the as-builts from the subcontractors and each object property in the model is linked to submittals, operations and maintenance, and warranty information documents.

The information model comprise of regular updates on repairs and replacements added in it. This allows the facilities managers to pre-plan maintenance activities potentially years in advance and develop spending profiles over the lifetime of a built asset, working out when repairs become uneconomical or existing systems inefficient

Overall, a record model can be utilized to optimize facility management and maintenance.

FM TOOLS AND SOFTWARE'S

Even with the possession of BIM models, from Construction Handover, Facilities Operators are typically not BIM Software experts and they may not be equipped to quickly access the essential asset information created during the design and construction process. Having access to these models from specific computers with specific software installed should also never be a requirement. Hence FM tools bridges the gap by creating a cloud based platform for accessing all information in various formats like : BIM model, COBie Spreadsheet, PDF's, Custom Excel, or other databases which are essential during O&M of the project by the FM team.

OUR INFRASTRUCTURE

We are equipped with ample office space which can accommodate 100 Work Stations with state of art Technology & IT assets capable to handle all latest industrial software's.
Systems are provided with LAN Networking and 100% Back up Supply. The network is well protected with hardware firewalls and updated antivirus software's with well protected data storage server.

Management

Chairman	– 1
Managing Director	– 1
Regional Director	– 1
Associate Director	– 2
BDM	– 1

Administration

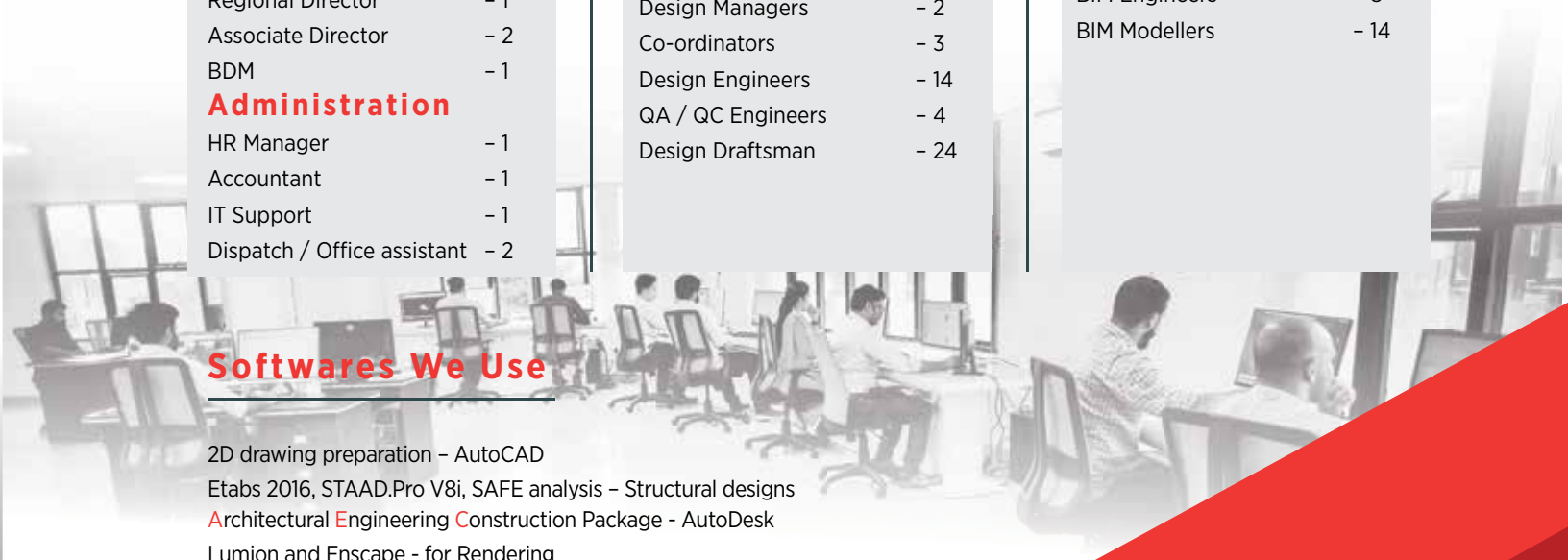
HR Manager	– 1
Accountant	– 1
IT Support	– 1
Dispatch / Office assistant	– 2

SMEP Team

Technical Directors	– 3
Chief Consultant – VT	– 1
Design Managers	– 2
Co-ordinators	– 3
Design Engineers	– 14
QA / QC Engineers	– 4
Design Draftsman	– 24

BIM Team

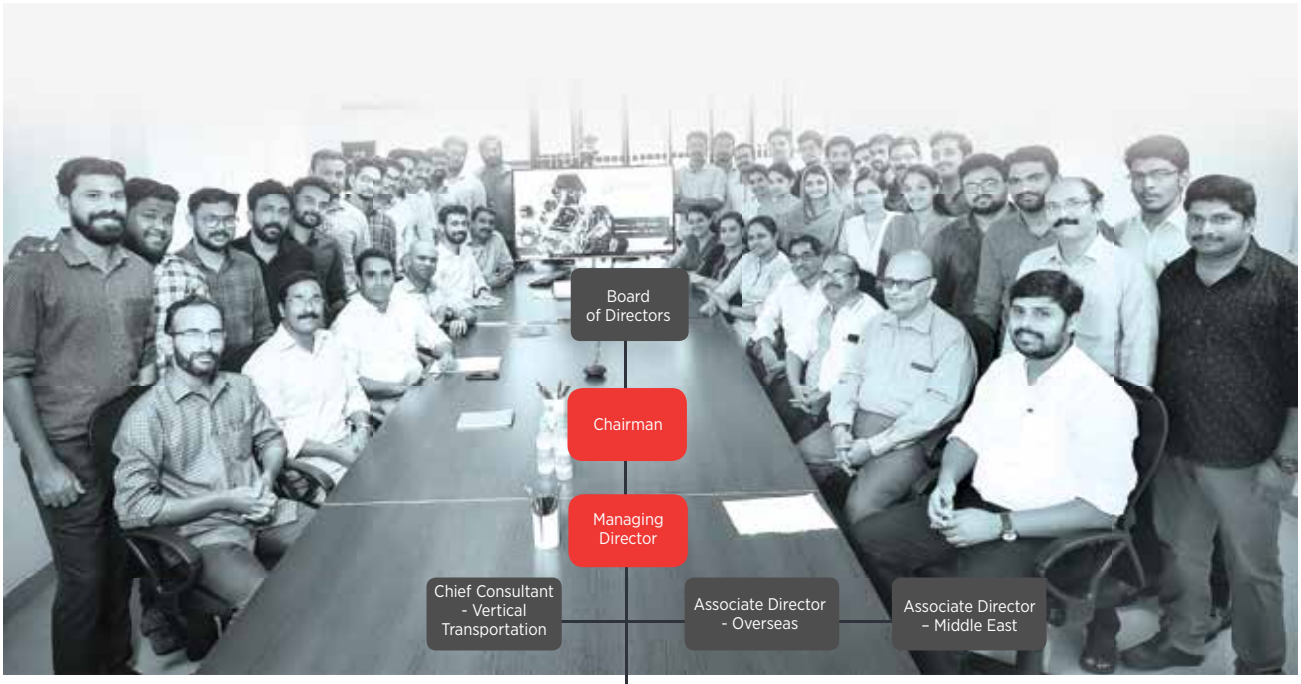
BIM Manager	– 1
Team Lead	– 2
BIM Engineers	– 8
BIM Modellers	– 14



Softwares We Use

2D drawing preparation – AutoCAD
Etabs 2016, STAAD.Pro V8i, SAFE analysis – Structural designs
Architectural Engineering Construction Package - AutoDesk
Lumion and Enscape - for Rendering
Lighting Calculation – Dialux and Relux
Electrical power distribution Analsyis software - ETAP
Sprinkler System Calculation - Elite Software
Heat Load Calculation – HAP

ORGANIZATION CHART



- Associate Director - Structures
  - Team Leads / QA/QC Engineer
    - Design Engineers
      - Design Draftsman
- Co-ordination - Team Lead
  - Design Co-ordinators
    - Project Co-ordinators
- BIM Manager
  - Team Leads
    - BIM Engineers
      - BIM Modellers
- Sr. Design Manager HVAC
  - Team Lead / QA/QC Engineer
    - Design Engineers
      - Design Draftsman
- Technical Director - Electrical
  - Team Lead / QA/QC Engineer
    - Design Engineers
      - Design Draftsman
- Technical Director- PHE
  - Team Lead - FPS QA/QC Engineer
    - Design Engineers
      - Design Draftsman
- Technical Director - ELV Systems
  - Design Engineers
    - Jr. Engineer
- Business Development Manager
  - HR Manager / Accountant
    - IT Support
      - Dispatch / Office assistant

KEY PERSONNEL

CHERIAN C
Chairman

Mr. Cherian C graduated in 1983 in Electrical Engineering from Regional Engineering College, Calicut.

He has more than 32 years of experience and expertise in providing engineering design & Execution services for Electrical projects like Multi-storied, Residential, Commercial, Hotels, Malls, Hospital, Industrial and Institutions.

His key milestone project includes :

- 21 MW power plant & 1,00,000 TPA steel mill for GK Steels , Kurdistan.
- 2,00,000 TPA steel mill for Seashore Steel WLL, Qatar.
- Industrial & Hospital projects in Kerala & Karnataka.
- KEF Katerra Pre-fabrication factory in Krishnagiri.
- 66KV GIS substation for Kerala State Electricity Board.
- India's largest floating solar power plant, Banasurasagar Dam.

Mr. Eldho P Kuriakose holds a degree in Electrical Engineering and has more than 13 years experience in Design of MEP services for various building & Infrastructure projects in India & Abroad. He has gained experience from middle east with leading Consultants and contractors. Upon his return to India has worked in the construction management and design field specializing in the MEP Services. He has worked as a Quality Controller in one of the International Engineering Consultancy Firm providing Designing services to major clients in USA and UK. He is an Auto Desk Certified LISP Programmer.

ELDHO P KURIAKOSE
Managing Director

His key milestone project includes :

- Lusail Marina Twin Tower -Lusail, Qatar.
- Lusail City Development Project, Qatar.
- Mall of Qatar.
- Hamad Women's hospital, Qatar.
- Qatar Airways – Rotana Hotel, Qatar.
- Qatar Petroleum-Science and Technology Park.
- Sunrise Hospital, Alleppey.
- Ansar mothers & child hospital, Kerala, India.
- Crescent convention centre, Kerala.

P.C. RAJAN BABU
Technical Director – Electrical

Mr. P.C.Rajan Babu is one of the most renowned Electrical Designer in southern India with more than 42 Years of Experience. After extensive service in the Kerala State Electrical Inspectorate, he retired as the Chief Electrical Inspector for the Govt of Kerala in the year 2001.

Key Milestones of his career & projects handled:

- Fellow of Institution of Engineers, India.
- Member of Indian Institute of Plant Engineers.
- Cochin International Airport – 110kv Hybrid substation, Solar Power Plant.
- Wonderla theme Park, Cochin.
- Chief Electrical Inspector, Dept of Electrical Inspectorate, Govt. of Kerala.
- Experience in implementation of Electricity Act, Rules Codes of Practice.
- MVR Cancer Centre, Calicut- Solar Power Plant.
- 5 MW Solar Power Plant for Hindalco.
- Floating Solar power plant at Banasura Sagar Dam.

Mr. Harindra Varma holds an Engineering degree in Electronics and communication and has more than 40 YEARS of experience in Medical, Process Control, Scientific Instrumentation & Multimedia Communications, Wired and wireless Satellite communications. He has wide experience in Design of servers, BMS systems Switching and Routing Systems, Network Security, NMS, Audio/Visual Media rooms IP/ Cable TV Networks, Public Address system, CCTV Networks, Building Security BMS SYSYTEMS.

His key milestone project includes :

- Cochin International Airport, India.
- Tidal Park Coimbatore.
- INS Dronacharya cochin.
- Naval Armament Depo Cochin.
- SNIMS, Pant Nagar Airport.
- Rajahmundry Airport, Andhra Pradesh.
- KTDC Hotel Chennai.
- KMML Chavara, MUZRIS Project.
- JIPMER Project.

HARINDRA VARMA
Technical Director - ELV System

Mr. E.A Paulose is a Civil Engineering graduate from the Govt. Engineering College Trissur. He has Served the Kerala Water Authority for about 30years holding various management posts up to 2002. He is well experienced in investigating, planning, design, construction, operation and maintenance of water supply and drainage schemes of various capacities in his long service. Since 2002,he worked as a Senior Consulting Engineer (Plumbing) for various prestigious projects like High rise apartments, hospitals, star hotels, resorts, public buildings, housing projects, villas and industrial complex with the leading consultancy firm M/s. Modern Plumbing Systems and Services, Cochin.

E.A PAULOSE
Technical Director – PHE

His key milestone project includes :

- Kerala High Court.
- Govt Disctrict Hospital, Manjeri.
- SRK Skywings Apartment, Kochi.
- Sunrise Apartments.
- SN Medical College.
- Edassery Resort, Kumarakom.
- Mangla Internation Hotel, Coimbatore.

VALSARAJ V.K
Associate Director - Structures

Mr. Valsaraj V. K. graduated in Civil Engineering in 1983 from Regional Engineering College, obtained Master of Engineering (structure) from IIT Bombay, in 1985. He is also a Engineers(India) and Founding member of Graduate Association of Consultant Engineers. After specialization in structure, he started his career with M/s Tata Consulting Engineers. He is involved in the design of high rise buildings such as apartments, commercial & institutional buildings and Industrial structures using reinforced concrete, pre stressed concrete and structured steel.

His key milestone project includes :

- Hindustan Lever Ltd, Calicut, Kerala.
- Binani Zinc Ltd, Cochin, India.
- Steel Melting and Rolling Mill, Erbil Kurdistan.
- Textile plant for GPB Fibres, Madhya Pradesh, India.
- Football stadium, Goa, India.
- Southern Railways- Foundation system for 30m post-tensioned bridge.
- Military Engineering Services, Naval Works, Cochin.
- Seawood Apartments, 20 storeyed Apartments.
- Gokulam Park convention centre.

Mr. Rajesh Verma is an Engineering and Management professional with over 20 years of proven expertise in Project Management and Business Strategy. Highly proficient in MEP systems implementation, procurement, Quality control and safety procedures. Projects covered include schools, universities and federal projects in the United States. Have International working exposure to Projects in USA, Qatar, Singapore & India.

RAJESH VARMA
Associate Director - Overseas

His key milestone project includes :

USA :

- Building Renovations for Naval Weapon Station, Colts Neck, New Jersey, USA. For US Army Corps of Engineers.
- Mechanical/Electrical Upgrades in Elizabeth Township School District., New Jersey, USA. For New Jersey Economic Development Authority (NJEDA).
- Contract for construction work in Woodbridge School District, New Jersey.

Middle East :

- New Warehouse and office for Oriental Trading Company (OTC) Qatar at Manateq Project Site.
- Development of Sea & Sand Beach Theme Park project as Strategic Partner with Souq Wakhra, (PEO) Qatar.
- Doha Convention Center and Tower for Qatari Diar Real Estate Development Co.
- Oryx Rotana Hotel Client Qatar Airways Musherib Downtown Development for Qatar Foundation.

ALI AKBAR M.A
Regional Director – Middle East

Mr.Ali Akbar M.A is a Mechanical Engineer with more than 12 years of experience in project management, design development, and quality assurance in MEP services for various building & Infrastructure projects in Doha-Qatar. He is a UPDA Certified engineer in Qatar. He has gained design experience from international consultants like OVE Arup & Partners, KEO International Consultants,

His key milestone project includes :

- New Doha Zoo-Qatar
- Souq Al Haraj
- Hamada Hospital
- Lusail Marina Twin Tower -Lusail, Qatar.
- New Doha Port- Qatar
- Doha Festival City Mall
- Al Hazam Mall -Qatar
- Barwa Commercial Avenue - Qatar
- Mirqab Mall Doha Qatar
- Khaleefa Stadium Qatar

GOPA KUMAR G
Chief Consultant – Vertical Transportation

Mr. Gopakumar. G is a graduate Electrical Engineer from University of Kerala. Joined Vertical transportation industry in the year 1988. Worked with a couple of major multinational companies till 2013 in various capacities overseeing their sales, installation and services in Southern India. Working as a professional consultant for Architects, Builders, Consultants and Developers in areas of right design, procurement, execution and inspection of elevators, escalators and moving walks. Has an overall experience of 31 years in the field of vertical transportation. He holds supervisory license for elevators and escalators and is a Chartered Engineer.

His key milestone project includes :

- Rajagiri Hospital, Aluva
- Nippon Infra Q1Mall, Ernakulam
- Noel Villas & Apartment – various projects
- Lulu Cyber Tower, Infopark, Kochi
- Parco Hospital, Vatakara
- Nest Infrastructure – various projects
- Rajagiri School of Engineering & Technology, Ernakulam

DALAVAI SAGAR
Business Development Manager

Mr. Dalavai Sagar holds a Degree in Civil Engineering from UVCE, Bangalore University. He has 11 years of experience in SMEP Services Design Coordination / Planning, Site Construction, QA/QC, Billing & PMC Sector, spread across various industries namely Residential / Commercial / Hotel / IT Space Buildings. He is passionate in Developing growth strategies and plans for business improvement for consultancy sector. Key Milestones of his career & projects handled:

Key Milestones of his career & projects handled:

- Lulumall, Lucknow India.
- Lulumall, Trivandrum India.
- Prestige Bagamane Temple Bells, Bangalore.
- Prestige Valley Crest, Mangalore.
- Laxmi Infobahn – GAR Corp, Hyderabad.
- Sattva Casa Irene, Bangalore.
- RMZ MARQ, Bangalore.
- Godrej United, Bangalore.
- Godrej Avenues, Bangalore.

Mr. Robin Xavier has Vast experience of 23 years in HVAC Design and proficiency in leading a team of Mechanical Engineers for successful design & delivery of projects within timelines and cost. Handled number of projects in Design, Installation, and Commissioning & Handing over of Turnkey MEP Projects in India & Abroad.

His key milestone project includes :

- Technopark Trivandrum –Phase-3.
- Leela IT park Kochi & Trivandrum.
- Bangalore International Airport.
- Lakeshore Hospital Cochin.
- Regional Cancer Centre TVM.
- Le-meridian Cochin.
- Kumarakom Lake Resort Tulip Group.
- Lulu Convention Centre.
- Gulfar Convention Centre.

ROBIN XAVIER
Sr. Design Manager – HVAC

JALEEL KADAVIL
Team Lead - Fire Protection System

Mr.Jaleel kadavil holds Diploma in Mechanical Engineering with a total experience of 18 years; in which 12 years in Middle-east and 6 years in India. He has a wide range of experience in designing of water/gas based firefighting/fire suppression system and fire alarm systems using national (NBC) & international (NFPA) standards, budgeting and detailed estimation. Also, experienced in site coordination and project planning. He is handled number of projects in Design, Installation and commissioning.

Key milestone projects include;

- Aster Med-city, Kochi
- Hotel Crown plaza, Kochi
- Nippon Toyota Show rooms across Kerala
- Aster CMI Hospital, Bangalore
- Kool Home Builders Mall, Kochi
- Residential & Commercial buildings in Kerala
- Talise Gym & Prayer room construction @ Emirates Tower, Dubai
- Renovation works in Madinat Jumeirah, Dubai

Mr. Joshua Jermias holds a Bachelor Degree in Mechanical Engineer from Kerala University with 10 Years of total Experience , 3 years in MEP designs and 6 years in BIM Co-ordination at ADVENSER Engineering Service, in India & Middle East.

His key milestone project includes :

- Jumeirah Gate, Dubai (77 storey Hotel & residential Apartment),
- Imperial Avenue, DUBAI , (47 Storey Residential & commercial building)
- Lulumall Lucknow, India

Projects based in USA :

- Boise VAW medical centre.
- St. Francis Hospitals.
- Cath Labs.
- CHELMSFORD fire department building.
- ILLINOIS Military Airbase hangar.

JOSHUA JERMIAS
BIM Manager

HARI KRISHNAN
Project Co-ordinator

Mr. Hari Krishnan holds a Degree in Civil Engineering from SCMS School of Engineering and Technology in Civil Engineering and Masters in Construction Management from University of Dundee (UK).

He has 8 years of experience in Project Management and SMEP Services Design Coordination. Over his tenure in Design coordination, he was also involved with company in preparing Design Management reports, Project feasibility reports, Project Schedules and Cost Management.

Key Milestones of his career & projects handled:

- Design Co-ordination for GM Infinite projects comprising of Malls, Residential projects with 100- 5300 Flats
- Mahindra Windchimes (4 Tower of each 2B+G+25 floors), residential development, Bangalore
- Sify Data Centre (3 r towers of each 2B+G+5 floors), Data Centre Project, Chennai
- Divyasree Tower F comprising of 10Lakhs Sqft
- Durga Petals(8 towers of each B+G+14 floors), residential development, Bangalore
- SPRE Park West (7 towers of each 2B+G+25 floors), residential development, Bangalore

Mrs. Deepa Ananthasivan holds a Bachelor Degree in Electronics and Communication Engineering from Institution of Engineers ,Calcutta. With 15 Years of total Experience , 12 years in HVAC and IBMS system as Project Team leader in construction industry. She has wide rage of experience in Co-ordination of MEP services.

DEEPA ANANTHASIVAN
Design Co-ordinator

Major projects handled :

- Hospitals -Lissie hospital, Lake shore Hospital, Vypin hospital
- Malls – Kool mall, Joy Alukkas mall
- IT park - Leela IT park, Cyber park Calicut
- Hotels – Jomer, VKL
- Auditorium – MCP, St Marys ,Thrissur
- Thamar IT park – Chennai
- Cathedral IT Park – Chennai
- Satyam Cinemas – Chennai
- RMZ Millennium - Chennai

RINU FREDERIC
Design Co-ordinator

Mrs. Rinu Martha Frederic is a Management graduate from CUSAT. She holds a Bachelor Degree in Electrical and Electronics Engineering from MG University with 9 Years of total Experience , 6 years in Electrical designs & MEP Co-ordination in construction industry and 3 years in Electrical Design in Marine offshore industry at Chalmers Engineering Pvt Ltd, in India & Middle East.

Her key milestone project includes :

- Cather FPSO Living Quarters, UK
- Containerized Substation & Instrumentation Shelter , Albila Group, Iraq
- Sagar Pragathi , Gujarat
- Infopark IT Building, Koratty
- Executive Ship Management(ESM), Vytilla
- Mather , Cochin
- Autobahn, Aluva
- Welcare Hospital, Vytilla

QUALITY POLICY

Quality review process begins at the initial stage and continues until the work is completed. As a part of our quality management system there are three tier quality control and assurance procedures, which filter out design and drafting errors ultimately providing accurate information. The measurement analysis and improvement are done through customer feedback & continuous interactions.

Desionics has a firm commitment to quality and excellence as well as strict adherence to the stringent requirement of international codes, rules, regulations and practices and Local codes/standards of the Country.

- Client inputs
- Resource Allocation by Technical Directors
- Design and Analysis by Design Engineers
- Review and Assurance by QA/QC Engineers
- Final Approval by Technical Directors

OUR AFFILIATIONS

ASHRAE MEMBER ISHRAE GRIHA MEMBER NFPA MEMBER

DESIGN PROCESS

Concept Stage

- Technical Questionnaire feedback from Client
- Bore Hole locations for soil testing.
  Macro services spatial inputs
- Preliminary framing plans & design Intent.
  Major Equipment sizing & location
- Techno-commercial Presentation
- Preliminary DBR & Budgetary Estimation

Schematic Stage

- Schematic layouts
- E-Tab model and SAFE analysis.
  Preparation of SLD's for respective services
- Issual of final column locations to architects.
  Site plan all services routing
- Tentative shaft locations & sizing
- Authority submission drawings & documents if applicable

Detail Design Stage

- Framing plans with column location & sizes in accordance to architects.
  Final heat load, power distribution & water demand calculations
- Co-ordination with services and finalization of floor to floor clear heights.
  Double line routing of respective services
- Final shafts / cut-outs sizes and sufficiency check for duct routings & accessing facility during maintenance
- Struc main elements design calculations with final E-tab model as per latest soil report.
  Services co-ordination with Arch & Struc drawings
- Submission of Final Design Brief Report & sign off from all stake holders

STAGE-WISE DELIVERABLES

Tender Stage

- Tender drawings with typical levels slab elements reinforcement details for ease of estimation.
  MEP Tender drawings
- Tender documents which includes Tender BOQ & Technical specification
- Sign-off from all stake holders

GFC Stage

- Final RCP co-ordination & clash free MEPF services co-ordination
- Phase – 1
  Sub structure GFC drawings
- Phase – 2
  Super structure GFC drawings

Post Contract & construction Stage

- Check & Approve vendor shop drawings
- Site Visit & inspection as when required
- Check & approve As-built drawing prepared by Vendor

THEY ALREADY TRUST US

OUR MILESTONE PROJECTS

INDIA & MIDDLE EAST

Commercial Workspace & Retail

Health & Wellness

Hospitality

Industrial

Residential

Education & Science

COMMERCIAL WORKSPACE & RETAIL

Lulu Mall, Lucknow, India

Client : Lulu International shopping Mall Pvt. Ltd./ KEF infra
Description : Mall : B+G+2 Floors, MLCP : 2B+G+11 Floors,
Area: 2 Million Sqft
Services : MEP Detail design to GFC stage & BIM Model for MEP services
Status : Design Completed , Construction in progress

International Tech Park, Pune, India

Client : AIGP DEVELOPERS (PUNE) PRIVATE LIMITED/KEF infra
Description : Block – 1 & 2 (4B+G+14 floors) Block – 3 (2B+G+5 floors),
Area: 3.5 Million Sqft
Services : Preparation of Prebid documents and Value Engineering of MEP Services
Status : Completed

Sumagali Silks, Cuddalore, India

Client : CECON Foundations Pvt Ltd.
Description : G+4 floors
Area : 1,22,000 sft
Services : Design of MEP services and BIM
Status : Design in Progress.

Commericial Building
Thrissur, India

Arch: Jibu & Thomas
Descriptions: B+G+Floors
Area : 30,000Lakhs Sqft
Services: MEP Design
Status: Completed

Zam's Mall, Paravur, India

Client : Zamil Group
Description : B+G+4 floors shopping mall,
Area : 70,000 sft
Services : Detailed Engineering design of MEPF services.
Status : Completed

Lusail Marina Tower, Qatar

Client : E-Square Architects, Qatar –Lebanon
Description : 3 basements+GF+32 floors.
Area : 10 Lakhs Sft
Services : Design of MEPF & ELV Systems
Status: Completed

Children's Mall, Qatar

Client : Qatar Design Consortium
Description : G+4 floors.
Area: 4 lakhs sft
Services : Design of Mechanical, Plumbing & Fire fighting services
Status : Completed

Mahendra Millennium Mall, Bangalore, India

Client : Mahendra Millennium
Description : Mall : 3B+G+4 Floors
Area : 6.6 lakhs Sqft
Services : preparation of tender documents for MEP services
Status : Completed

Crescent Convention Centre, Chalakudy, India

Client : Crescent Convention Trust- Chalakudy
Description : GF+FF.
Services : Design of Electrical Services
Status : Completed

Sree Gokulam Convention Center, Balussery, India.

Client : Gokulam Groups.
Area : 60,000 sft
Services : Design of MEP services and BIM
Status : Completed

Textiles showroom, Kollam, India

Clients :	Silver cloud Textiles
Description :	G+4 floors commercials building
Area:	90,000 Sqft
Services :	Design of MEPF services & construction supervision
Status :	Design Completed, Construction in progress

Gokulam Convention Centre, Kochi, India

Client :	M/s Sri Gokulam Groups
Description :	Convention centre block : G+2 floors , Hotel Block : G+14 floors.
Area :	2.5 Lakhs Sqft
Services :	Structural Design
Status :	Completed

HEALTH & WELLNESS

Hammad Medical City, Qatar

Client : Hamton International, Qatar
Description : 3 No. Buildings for Mosque & Accommodation / Auditorium
Area: 7 lakhs Sft
Services : Detailed Engineering drawings for Electrical, Fire alarm system & Structured Cabling.
Status : Completed

Khalifa Aspetar Hospital Expansion, Qatar

Client : Qatar Design Consortium, Aspire Logistics
Description : Hospital BuildingG+2 floors.
Area: 1 lakh sft
Services : Design for HVAC, Plumbing & fire fighting
Status : Completed

KMCH Phase- II, Coimbatore, India

Client : M/s Kovai Medical Center and Hospitals / KEF Infra.
Description : H1,H2,H3 & H4 Block - B+GF+ 8 Floors ,RQ Block - GF + 8 Floors , 2BHK & 3 BHK Quarters - Stilt + 4 Floors.
Area: 4 lakhs sft
Services : MEP Detail design to GFC stage & BIM Model for MEP services
Status : Design completed, construction in progress.

GKNM Hospital, Coimbatore, India

Client : M/s G.Kuppuswamy Naidu Memorial Hospital/KEF Infra
Description : 2 Basements +5 FLOORS
Area: 3.3 lakhs Sqft
Services : MEP Detail design to GFC stage & BIM Model for MEP services.
Status : Design Completed

Tata Trust Hospitals L1, Thirupathi, India

Client : M/s Tata Trust
Description : G+3+Terrace
Area: 7.5 Lakhs Sqft
Services : MEP Detail design to GFC stage & BIM Model for MEP services
Status : Design Completed

Meitra Hospital, Calicut, India

Client : Premium Medical and Healthcare Providers Pvt Ltd.
Description : Hospital Building
Services : Design of Electrical Services
Status: Completed

Tata Trust Hospitals (L2) , Assam, India

Client : M/s Tata Trust/KEF
Description : G+6+Roof Area :2.5 Lakhs Sqft
Services : MEP Detail design to GFC stage & BIM Model for MEP services
Status : Design Completed

Tata Trust Hospitals (L3) , Assam, India

Clients : M/s Tata Trust
Description : G+ Terrace Area: 1 Lakhs Sqft
Services : MEP Detail design to GFC stage & BIM Model for MEP services
Status : Design Completed

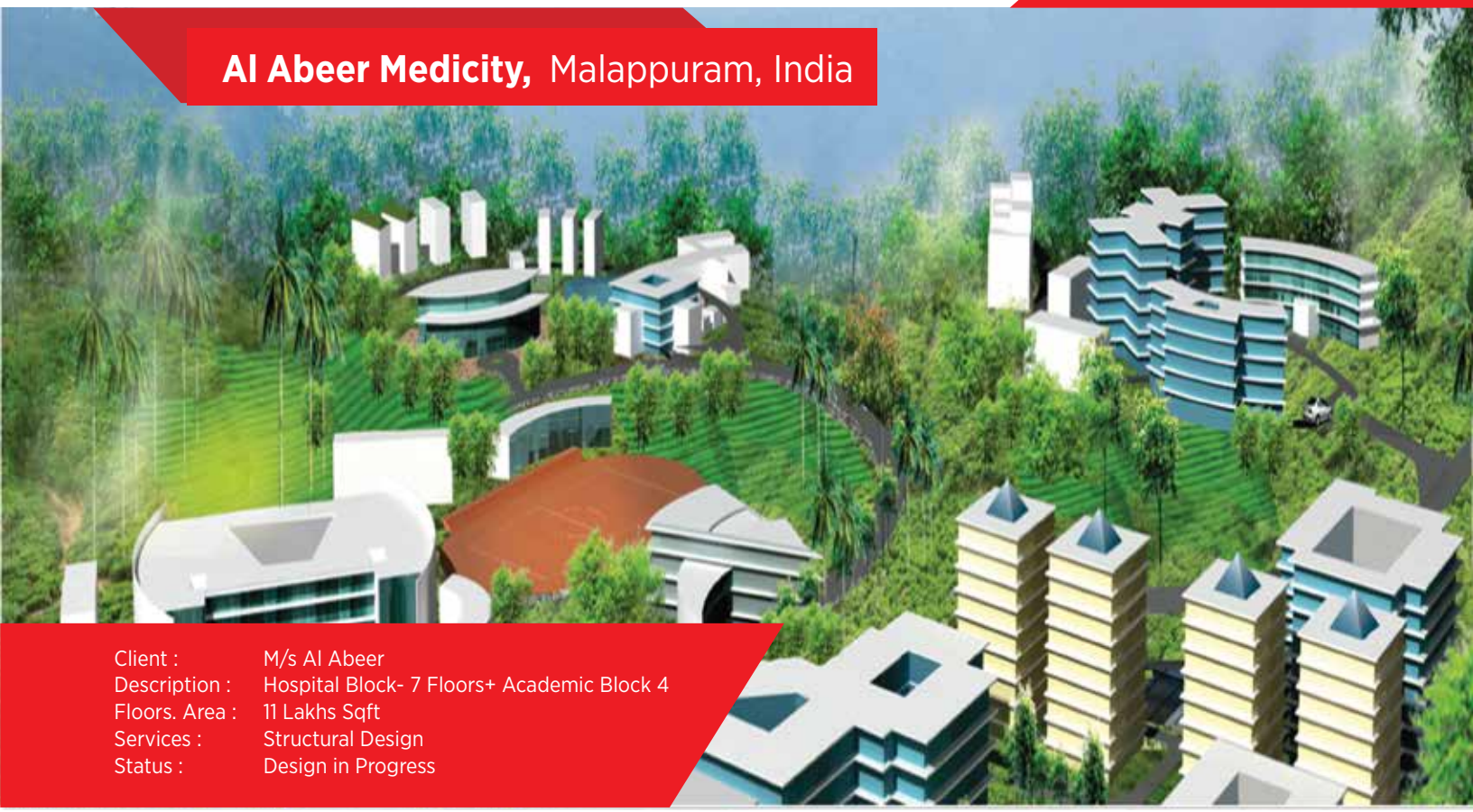
Kims Hospital, Trivandrum, India

Client : Kerala Institute of Medical Science
Description : B1+B2+8 FLOORS Area : 4.5 Lakhs Sqft
Services : Structural Design
Status: Completed

Ananthapuri Hospital, Trivandrum, India

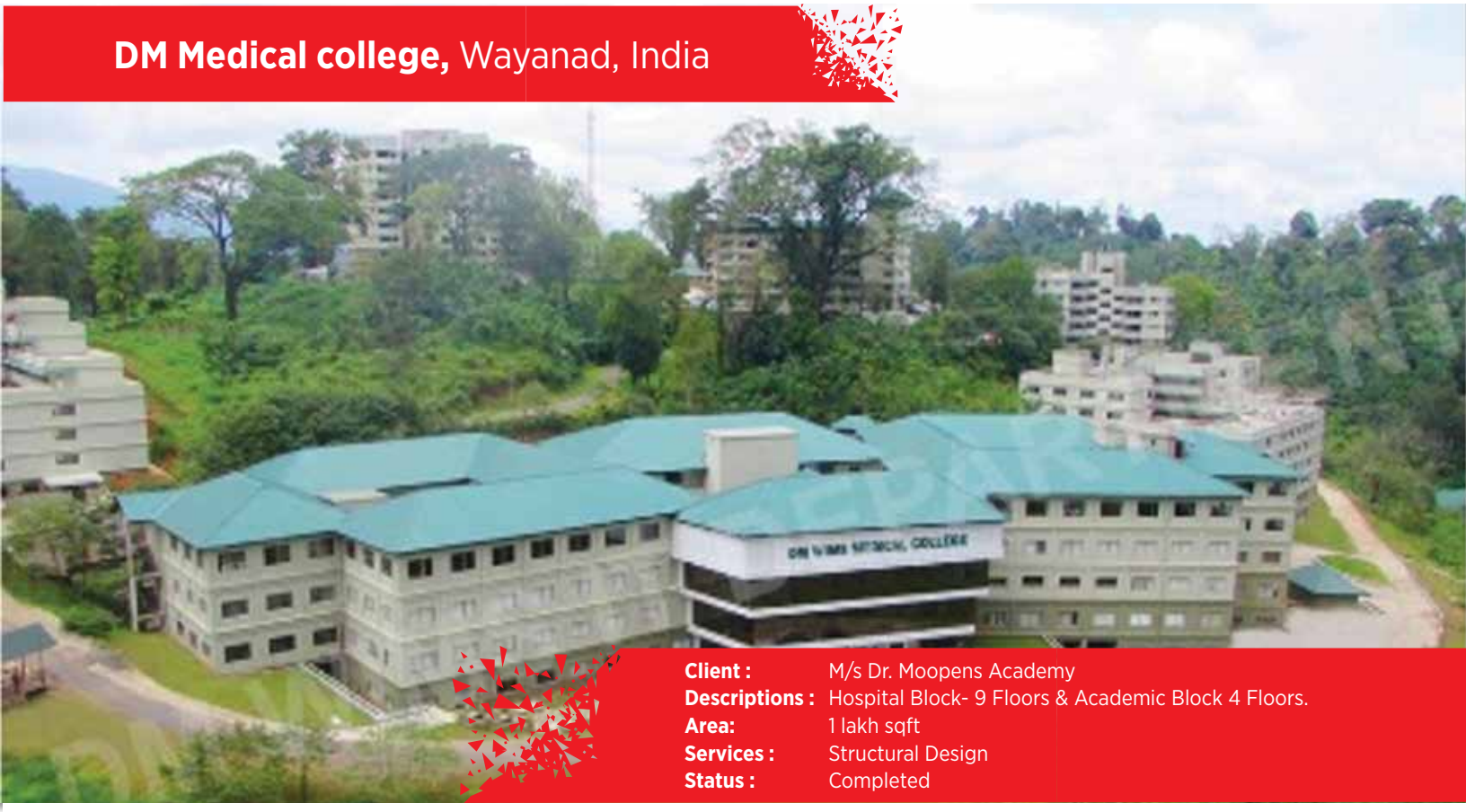
Client : Ananthapuri Hospitals
Description : Hospital & Research centre
Services : Design of Electrical Services
Status: Completed

Al Abeer Medicity, Malappuram, India



Client :	M/s Al Abeer
Description :	Hospital Block- 7 Floors+ Academic Block 4
Floors. Area :	11 Lakhs Sqft
Services :	Structural Design
Status :	Design in Progress

DM Medical college, Wayanad, India



Client :	M/s Dr. Moopens Academy
Descriptions :	Hospital Block- 9 Floors & Academic Block 4 Floors.
Area:	1 lakh sqft
Services :	Structural Design
Status :	Completed

MIMS Hospital, Kannur, India

Client :	M/s Aster Healthcare
Descriptions :	B+7 Floors
Area:	2.6 lakh Sqft
Services :	Structural Design
Status :	Completed

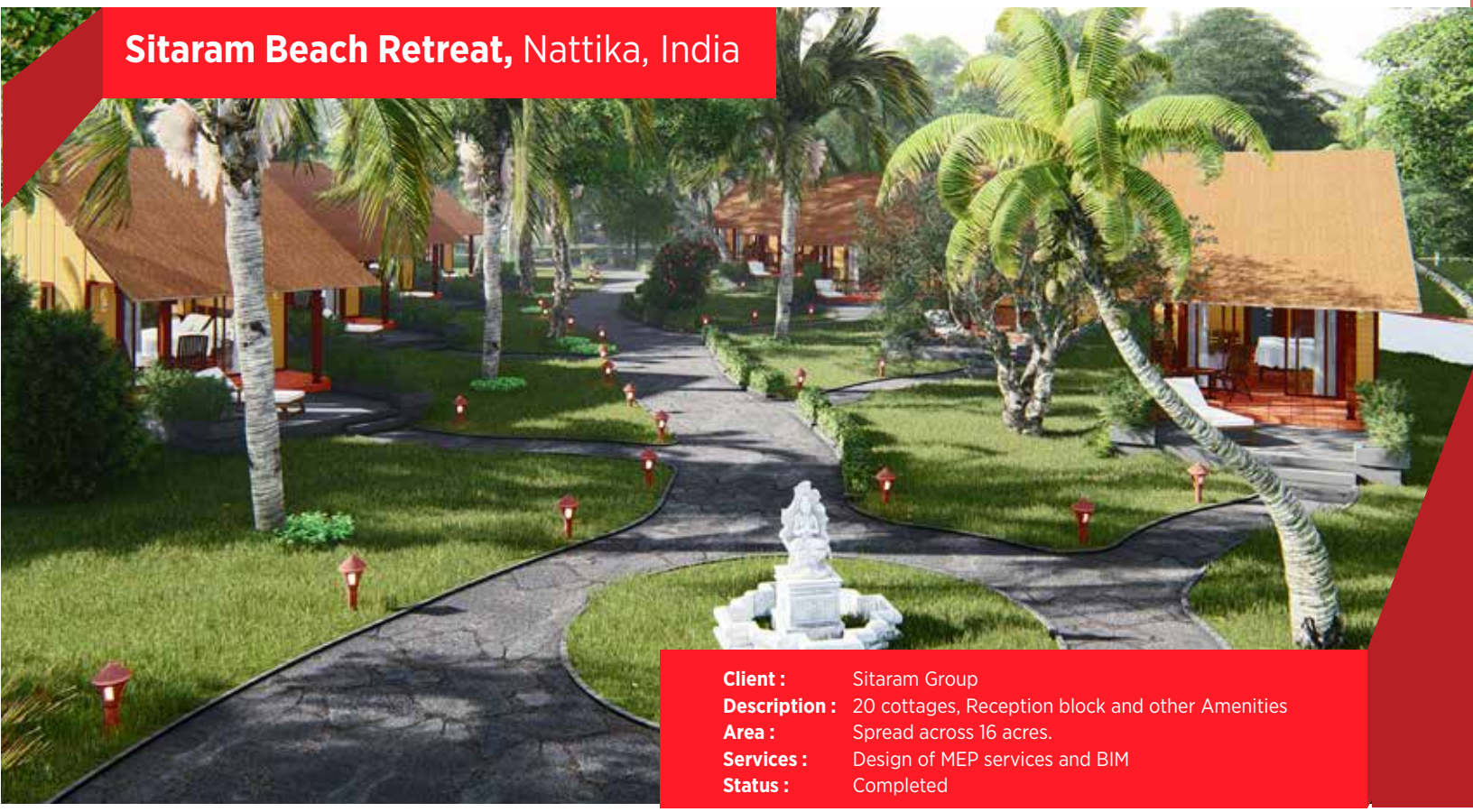
Pushpagiri Eye Hospital, Kadapa, India

Client :	Pushpagiri Vitreo Retina Institute
Description :	G+4 Floor
Area :	60,000 sft
Services :	Design of MEP services and BIM
Status :	Design in Progress

Ansar Mother & Child Hospital, Thrissur, India

Client :	Ansar Charitable trust
Description :	G+4 Floors, Hospital Building
Services :	Design of MEP Services
Status :	Design Completed, Construction in progress

Sitaram Beach Retreat, Nattika, India



Client :	Sitaram Group
Description :	20 cottages, Reception block and other Amenities
Area :	Spread across 16 acres.
Services :	Design of MEP services and BIM
Status :	Completed

HOSPITALITY

City Inn Hotel, Kochi, India

Client :	Edassery Group
Description :	G+ 4 floors Area : 50,000 sft.
Services :	Design of MEPF & ELV System
Status :	Design In progress

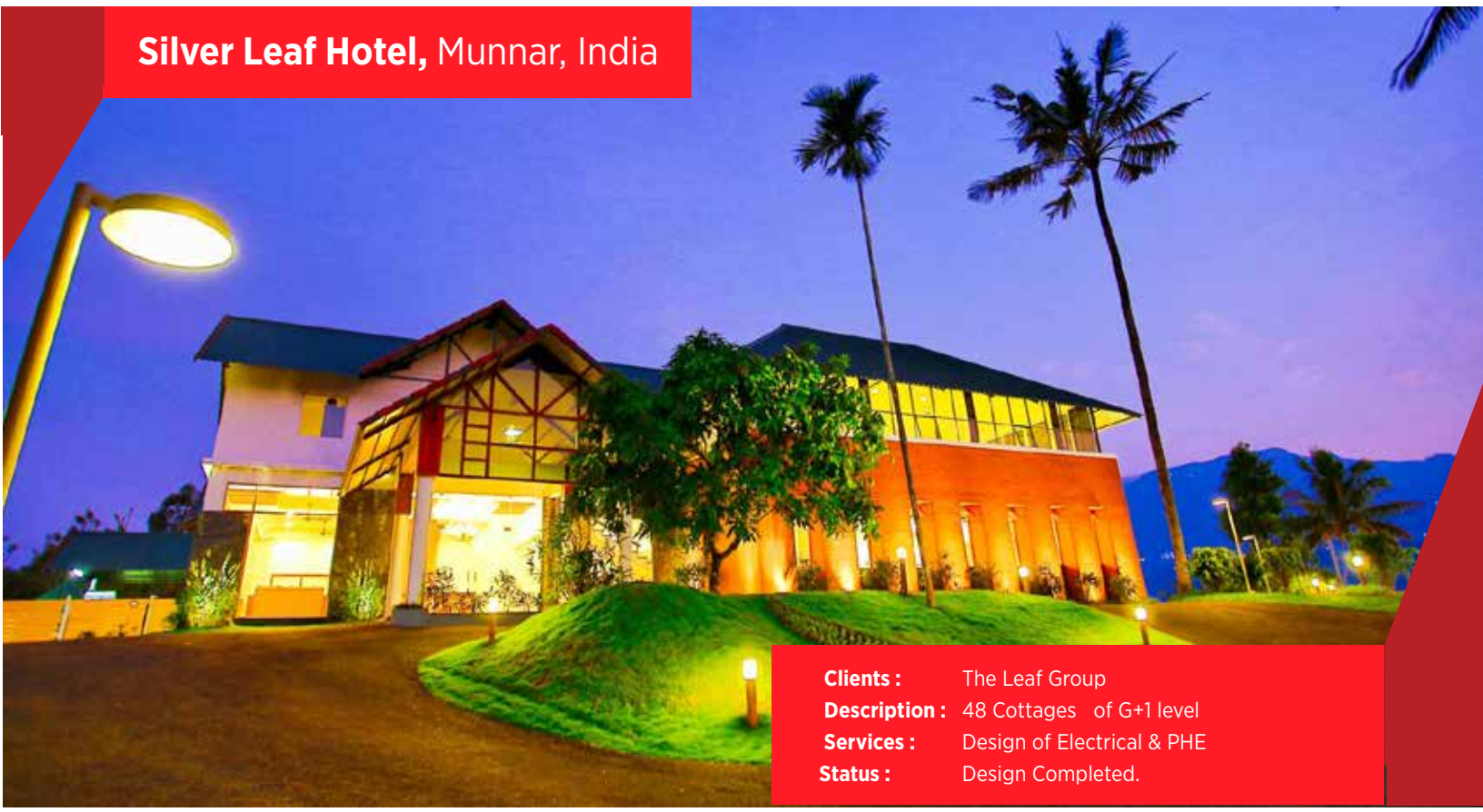
Nakshatra Regency Hotel, Thrissur, India

Client :	Nakshatra Group
Description :	G+2 Floors, Hotel Block
Services :	Design of MEP Services
Status :	Completed

Eastend Hotel & Resort, Munnar, India

Client : Edassery Groups
Description : G+ 3 floors Hotel building, 5 Blocks of luxury villas.
Services : Design of MEP services
Status : Completed

Silver Leaf Hotel, Munnar, India



Clients : The Leaf Group
Description : 48 Cottages of G+1 level
Services : Design of Electrical & PHE
Status : Design Completed.

Lapita Hotel, Dubai

Client : Dubai Parks and resorts
Description : 5 star hotel
Services : Detailed design engineering for MEP systems
Status : Completed

Marriott Hotel , Qatar

Client : SAMKO International Co. W.L.L.
Description : Hotel Building – Tower D ,
Area : 422,484 Sqft
Services : Arch, Structural & MEPF services BIM up-to LOD 500
Status : In Progress

Hotel Mangala International, Coimbatore, India

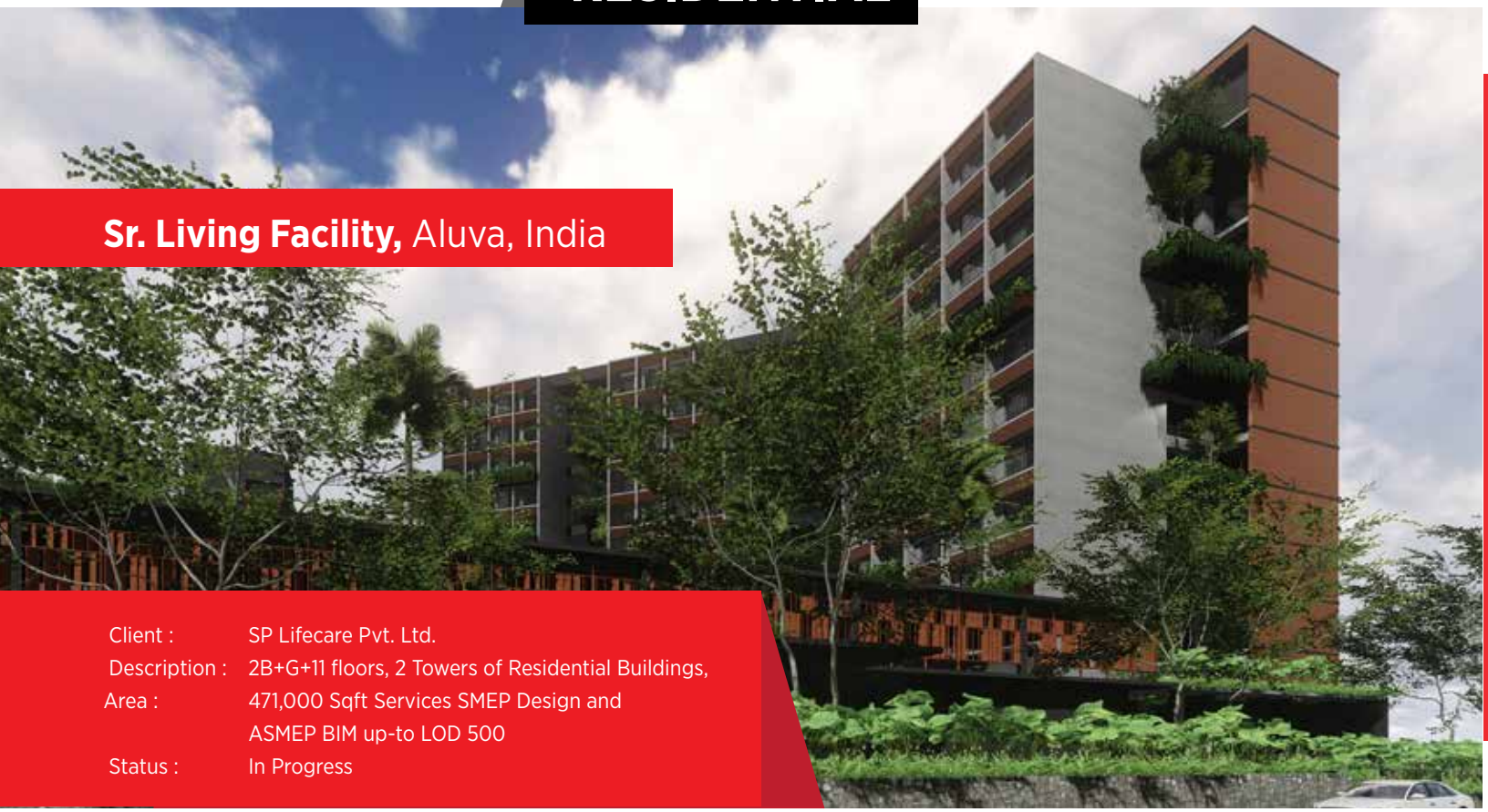
Client: Mangala Group
Description : G+5 Floor
Services : MEP Design
Status: Completed

Sree Gokulam Lake Resort, Kumarakom, India

Client : Sree Gokulam Group
Description : 72 guest cottages, restaurant & amenities block
Services : Design of MEPF Services & construction supervision
Status : Design Completed, Construction in progress

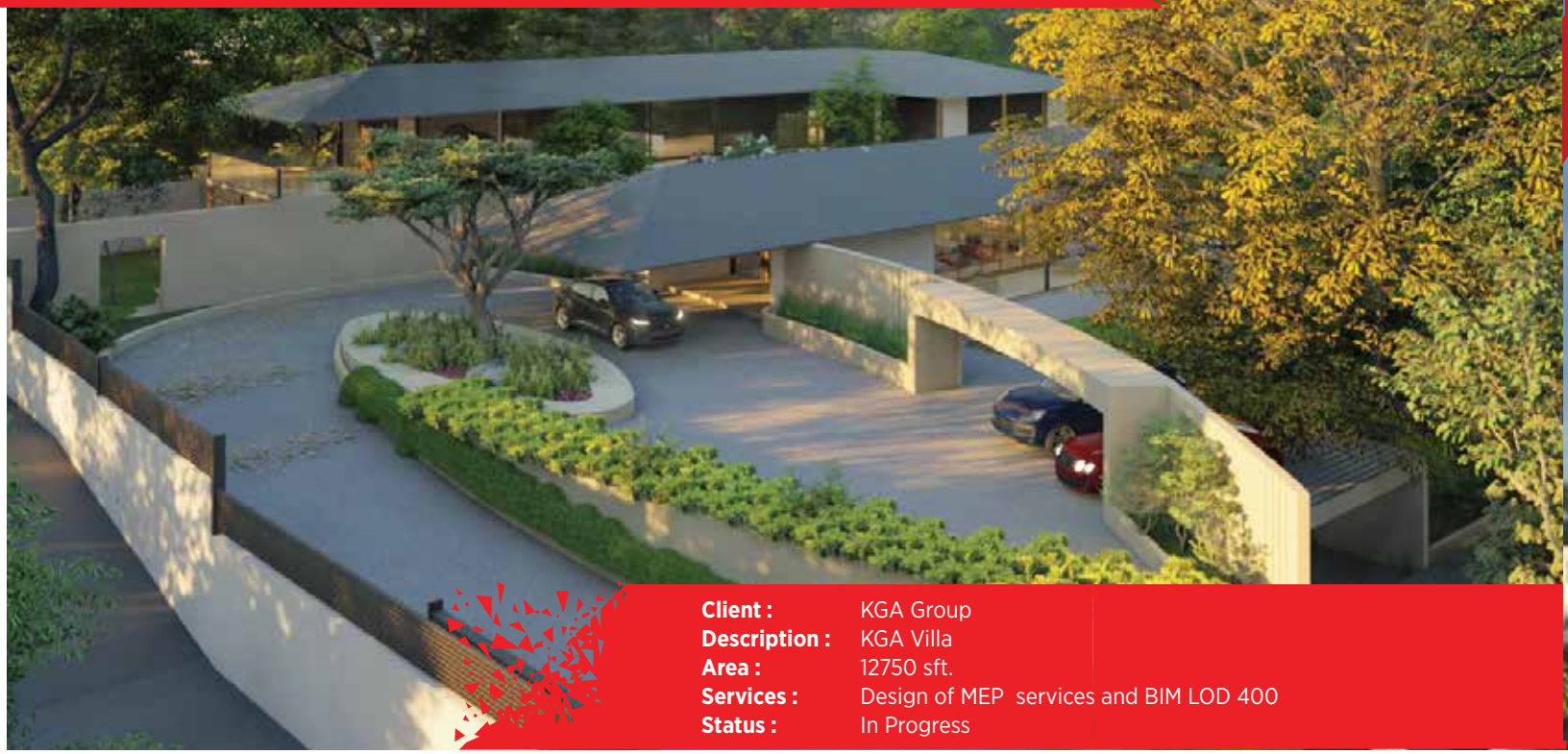
RESIDENTIAL

Sr. Living Facility, Aluva, India



Client : SP Lifecare Pvt. Ltd.
Description : 2B+G+11 floors, 2 Towers of Residential Buildings,
Area : 471,000 Sqft Services SMEP Design and ASMEP BIM up-to LOD 500
Status : In Progress

Monsoon House - KGA Residence Thiruvalla, India



Client : KGA Group
Description : KGA Villa
Area : 12750 sft.
Services : Design of MEP services and BIM LOD 400
Status : In Progress

Seawood Apartments
Kakkanad, India

Architect : M/s. Sony Mathai Lalichan
Description : G+7 Floors, Area: 2.7 lakhs sft
Services : Structural Design
Status : Ongoing

Apartments for IIDL, Cochin, India

Client : M/s IFCI Infrastructure Development Ltd
Description : G+15 Floors Area: 1 Lakhs Sqft
Services : Structural Design
Status : Design Completed

Lords Valley, Kottayam, India

Client: NT Paul Built-Tech Pvt Ltd
Description : 40 Nos of Villas Services Design of Plumbing System
Status: Construction in Progress

iDfix Orchids Apartment, Muvattupuzha, India

Client : iDfix Builder Pvt. Ltd.
Description : G+4 floors, Area : 30,000 sft.
Services : Design of Electrical & PHE Services
Status : Design in progress

Vaishnavi Serene Bangalore, India

Client: Katerra India Pvt. Ltd.
Descriptions: Stilt+4 Floors, 9 blocks, Residential Building
Area: 1.1 Million Sqft
Services: SMEP Modelling for clash co-ordination and Extraction of shop drawings.
Status: Completed

Vinayaka Bhuvaneswary Apartment, Kochi, India

Clients : Vinayaka Homes
Description : G +11 Floors Residential Apartment
Services : Design of MEPF
Status : Completed

Alba Crest Apartment, Vazhakkala, Kochi, India

Client: Alba Homes
Descriptions: G+4 Floors
Area : 60,000 Sqft
Services: Design of Electrical, Plumbing & ELV System
Status: Completed

Pearl Qatar Parcel 8A & 16A, Qatar

Client : Ligments and Trivalley Joint venture
Description : 4P+Mezaninie floor+ Amenities+20floor
Area : 10 Lakhs sft
Services : Design of MEPF services
Status : Completed

Kairali Apartment, Perumbavoor, India

Client:	Kairali Group
Description :	G+4 Floor
Services :	MEP Design
Status:	Completed

Alba Monarch Apartment, Kochi, India

Client:	Alba Homes
Descriptions:	G+4 Floors
Area :	60,000 Sqft
Services:	Design of Electrical, Plumbing & ELV System
Status:	Completed

INDUSTRIAL

GIS Sub-station, Kochi, India

Client:	Kerala State Electricity Board
Description :	66 KV GIS & 200 MVA transformer
Services :	Design of Electrical Services
Status:	Completed

Seashore Steel WLL, Qatar

Client:	Seashore Group
Description :	Steel Plant
Services :	Design of Electrical Services
Status:	Completed

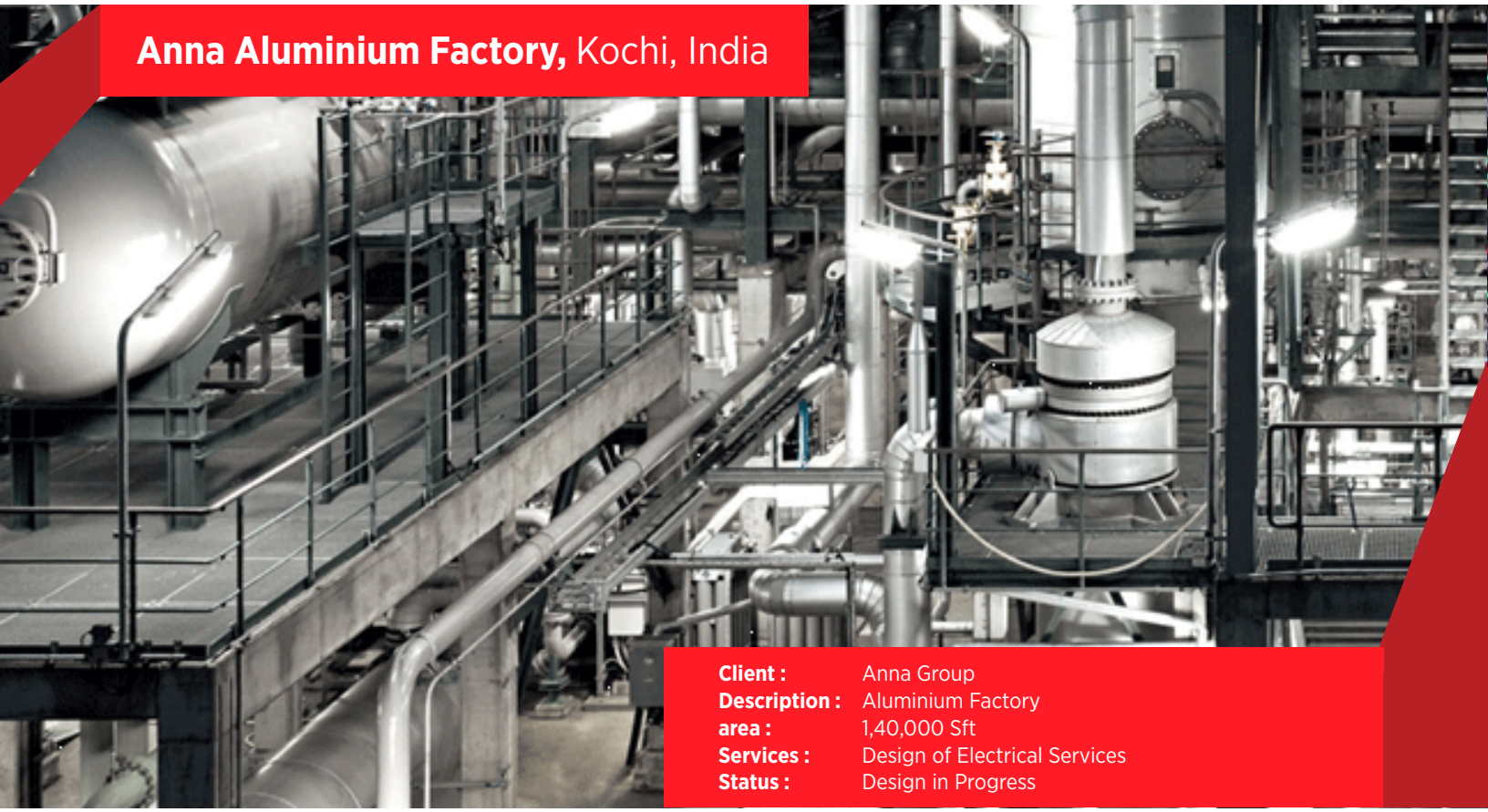
NDIA Duty free ware House, Qatar

Client : Vijay Arabia Security Systems
Area : 65,000 sft
Services : Detailed Engineering and Design review of Fire fighting Systems
Status : Completed

KEF Infra Prefabrication Factory - Krishnagiri, India

Client: KEF infrastructure India Pvt. Ltd.
Description : Off-site Manufacturing Factory
Services : Design of Electrical Services
Status: Completed

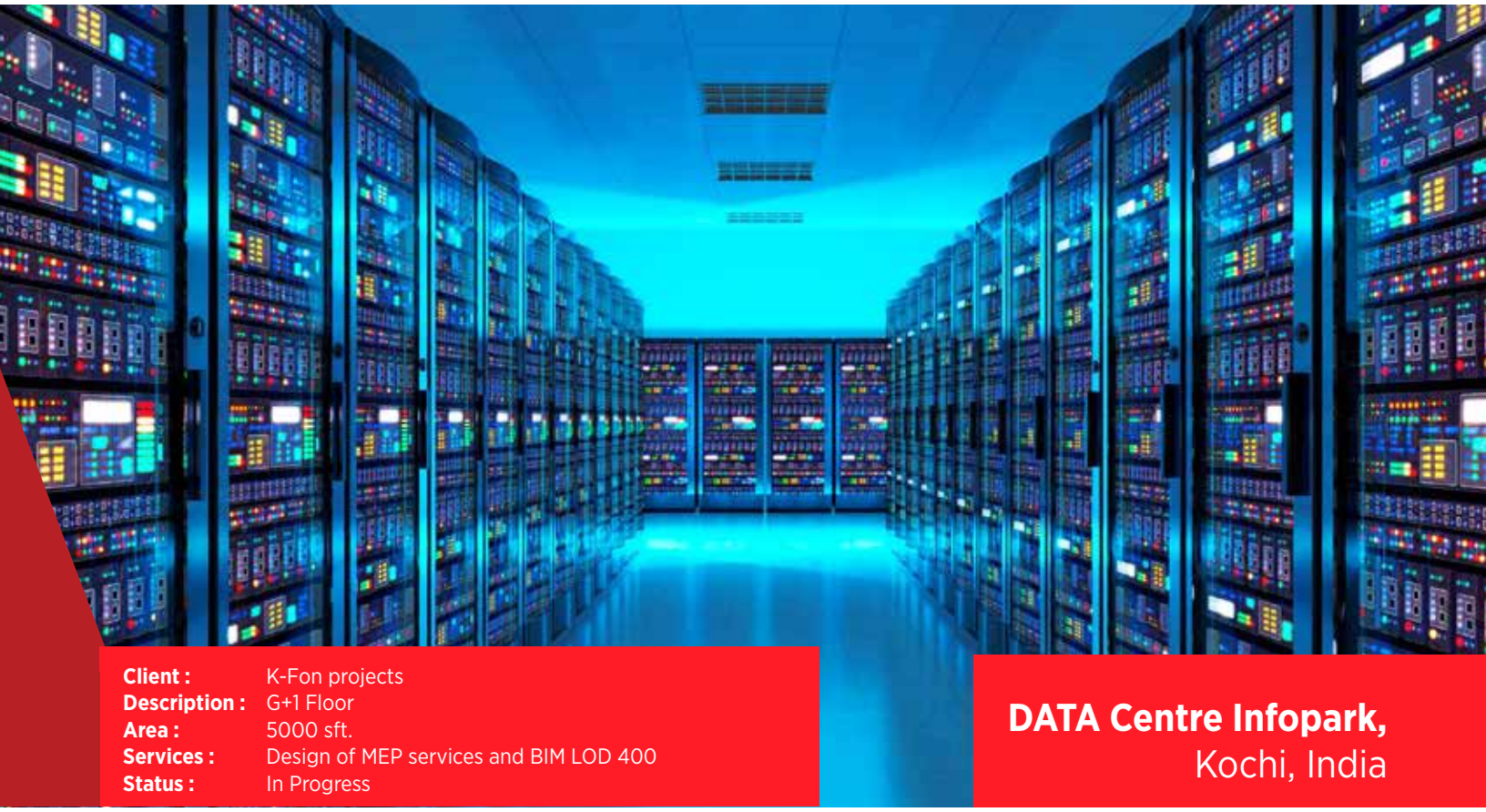
Anna Aluminium Factory, Kochi, India



Client :	Anna Group
Description :	Aluminium Factory
area :	1,40,000 Sft
Services :	Design of Electrical Services
Status :	Design in Progress

Qatar Power Transmission System Expansion

Client :	M/s Siemens
Description :	3 Nos 132/66/11Kv GIS Substation
Services :	Detailed Engineering design of MEPF services
Status :	Completed



Client : K-Fon projects
Description : G+1 Floor
Area : 5000 sft.
Services : Design of MEP services and BIM LOD 400
Status : In Progress

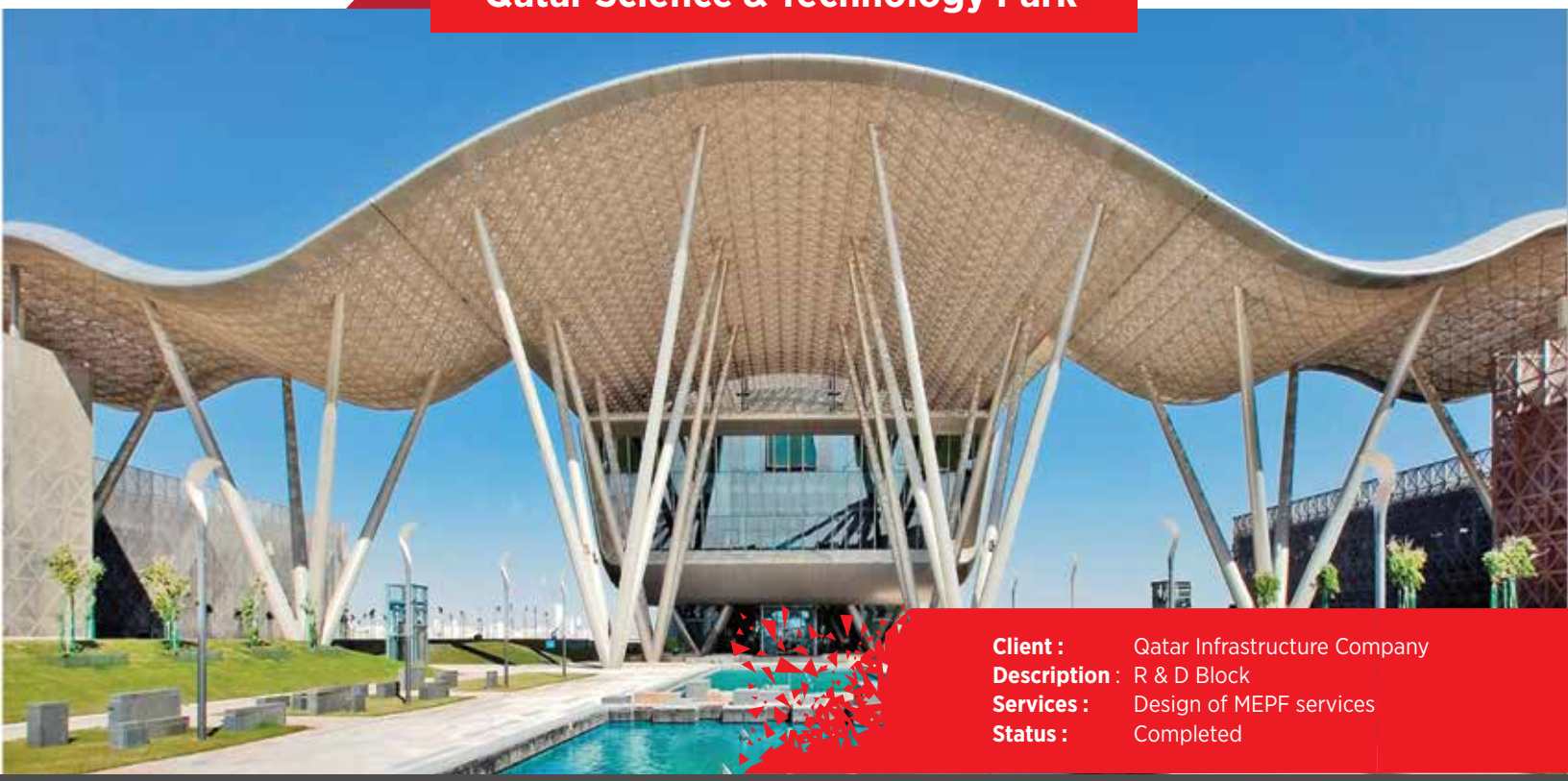
DATA Centre Infopark,
Kochi, India

EDUCATION & SCIENCE

International School of London,
Qatar

Client : AIDC, Qatar
Description : G+1 floor , school building
Services : Detailed design engineering for Electrical, Plumbing & Fire fighting services.
Status : Completed

Qatar Science & Technology Park



Client : Qatar Infrastructure Company
Description : R & D Block
Services : Design of MEPF services
Status : Completed

Sree Gokulam Arts & Science College, Thrissur, India

Client : Gokulam Groups
Description : G+3 floors College Campus,
Area: 1.5 Lakhs sft
Services : Detailed design engineering for Electrical & Plumbing systems
Status : Completed

If you think good design is expensive, you should look at the cost of bad design.

- Ralf Speth

Desionics®

SMEP | BIM CONSULTING ENGINEERS

INDIA | MIDDLE EAST

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