# **Macro Construction & Engineering Limited**





We provide engineering, management and specialist technical services for public and private sector clients.



#### **Organization Information**

#### **Company Address**

House-1, Road-9, Sector-12

Uttara, Dhaka- 1230

Year Established: 2023

Trade License No.: TRAD/

DNCC/138548/2022

TIN No.: 386980922062

Email: macroengineering007@gmail.com



#### **Macro Construction & Engineering Limited**

We are the people who provide innovative solutions to industrial sectors, enabling them to achieve greater efficiencies and ultimately increase their profitability. MCEL is a multi-disciplined engineering, installation and maintenance company with extensive experience working on sites throughout the country. We provide services by three distinct means; consultancy, projects and ongoing operations. Our key areas of expertise include ELECTRICAL ENGINEERING, CIVIL ENGI-NEEIRNG, MECHANICAL ENGINEERING, FIRE SAFETY ENGINEER-ING, SOFTWARE ENGINEERING, IT DEVELOPMENT AND SECURITY SYS-TEM. We work with clients in a broad range of sectors, each with specialist requirements, including electrical system, process development, project management consultancy, piping network, fire detection & protection, HVAC, water and waste treatment, energy generation, power distribution and research and development. In every single project we undertake we are dedicated to providing our clients with quality, results and peace of mind. We also have a real commitment to sustainability in all areas of our operations

#### MISSION, VISION AND VALUES

"Good leaders have vision and inspire others to help them turn vision into reality. Great leaders create more leaders, not followers. Great leaders have vision, share vision, and inspire others to create their own." — Roy T. Bennett

#### VISION



We strive to be a leading preferred partner in customer focused and innovative engineering solutions to clients nationally and beyond.

#### **MISSION**



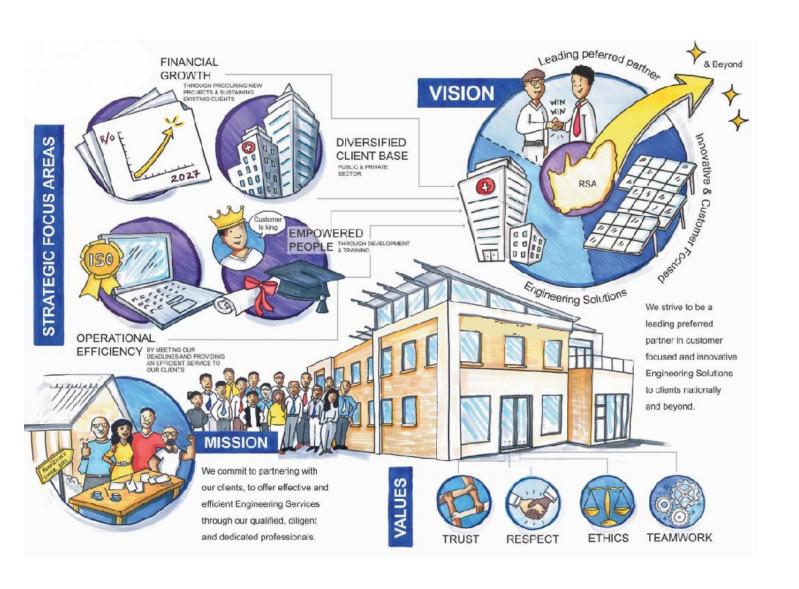
We commit to partnering with our clients, to offer effective and efficient Engineering Services through our qualified, diligent and dedicated professionals.

#### **VALUES**



- Trust
- Respect
- Ethics
- Teamwork

### MISSION, VISION AND VALUES







The management of MCEL is committed to safeguarding the health and safety of its employees and subcontractors, maintaining the safety integrity of services provided to clients and acting as a good citizen in the area in which it work. The objective of this policy is to prevent harm to persons and events that lead to unsafe situations.

To implement this policy EET management promotes the following:

- Compliance with ISO 9001 and OHSAS 18001 requirements.
- Operating a 'target zero' principle for unsafe acts and conditions by encouraging reporting of all incidents and accidents to management for further investigation and follow up.
- Continuing to strive for improvement in quality and safety management and performance.
- Regular health and safety trainings to instill in all employees the responsibility to work in a way that ensures their own safety and that of their colleagues and to encourage them to intervene in unsafe acts or situations.
- Annual review of the policy, after which it is explained and made available within our organization. All staffs are made aware of their individual OHSAS obligations. The policy is also made available to subcontractors and interested parties.



### **Our Company Culture**

At MCEL we partner with our clients to provide superior quality solutions that deliver or exceed - the results they are seeking and give them peace of mind that their operations are running smoothly.

We have a reputation for innovation and a proven track record for success, having completed numerous major industrial projects, on spec, on time and on budget. Health and safety is more than just a mantra at EIS; it is a driving force behind every element of our business operation. Our goal is to help other companies attain this level of safety in their operations.

At MCEL we believe that the ultimate success of any project hinges primarily on the quality of the people involved. We have therefore made recruiting and retaining talented personnel a corporate priority. Our group of dedicated personnel are second to none.



#### **MCEL ADVISOR**

## **Engr MD Shahadat Hossain Advisor**, **Construction**

Environmental, Water & Climate Change Specialist
B.Sc In Civil Engineering (BUET)
M.Sc. In Water Resources Engineering (BUET)
M.Sc. In Climate Change and Development (IUB)
PGD On Disaster Management (IDMVS, University Of Dhaka)



#### **Syed Badre Alam**

#### Chairman

Syed Badre Alam is experienced with global sourcing and distribution of products and Business In USA. He ensures the quality product sourcing through developing sustainable business relation with the suppliers. His words have the power to motivate people and make them do the unthinkable. He has experience on business development and sourcing over 8 years.

#### Pranab Chakma Director

Pranab Chakma is an expert of Electrical Engineering with an experience over 6 years. He has started his career with Walton.). With his enrich experience in Electrical Section , marketing and manufactures process, he has completed several projects successfully. He has graduated in Electrical Engineering from Chittagong University of Engineering & Technology. He achieved master's in business administration degree from University of Dhaka. He is a Member of Institute of Engineers Bangladesh (IEB).

### MD. Touhidul Alam Managing Director

Md Touhdul Alam has truly succeeded in business management with a balancing act and maintains the respect of team and superiors, also put on a good face for the company in all of its external affairs and manage the work of company. With his sound technical expertise, combined with over 4 years of industrial experience and project experience with Foreign EPC Company.

#### Ankur Dash Avi Manager, Technical Support

Ankur Dash Avi is highly motivated professional with more than 3 years experience in electrical Engineering & Project Management. Proven ability to efficiently multi-task and meet critical deadlines. Being a project manager of some renowned projects, he is well-known for his excellent way of making things done.



### SHEIKH MUHAMMAD MUHTASHIM ABID Chief Consultant, Civil

Specialization: i) Reinforced Concrete Design ii) Behavior & Design of Metal Structures iii) Finite Element Methods of Structural Modeling

### S.M.Sajjad Hussain Sadi (M.IEB, M.ASCE) BS in Civil & Environmental Engineering, NSU

Specialization: i) Soil Characterization and Mechanical performance

### MD. RAIHANUL HOQUE CHOWDHURY Head, Civil Project

BS in Civil & Environmental Engineering, NSU MS in Environmental Science and Management, JU Construction and Environmental Consulting Engineer,

BS in Civil & Environmental Engineering, NSU MS in Environmental Science and Management, JU Construction and Environmental Consulting Engineer,

Anik Kumar Bhakta (A.IEB) BS in Civil & Environmental Engineering, NSU MS in Environmental Science and Management, JU

Specialization: i) Advance Characterization of Asphalt Binder ii) Air Quality Index Study of Dhaka Metro Rail Construction



#### **Sayedul Haque Sarker**

#### **Team Lead, Software Development**

In the dynamic realm of software development, effective leadership is the cornerstone of success. Meet our dedicated and visionary Team Lead, Sayedul Haque Sarker, who spearheads innovation and excellence within our talented group. With a proven track record of driving projects to fruition and inspiring cross-functional collaboration, Sayedul brings a wealth of expertise to guide our team towards new horizons. With a profound understanding of the software development life-cycle and a knack for harnessing cutting-edge technologies, Sayedul cultivates an environment where creativity flourishes and challenges are met with enthusiasm. With a demonstrated history of nurturing professional growth, Sayedul empowers each team member to excel, fostering an atmosphere of continuous learning & skill enhancement.

#### Sabbir Hossain Project Engineer

Sabbir Hossain is an expert of Mechanical Engineering with an experience over 3 years. He has started his career with Volt Mills Energy Limited . He is expert in project control system , team control and maintenance management .

#### Shaon Pradhan Team Lead, Information Technology

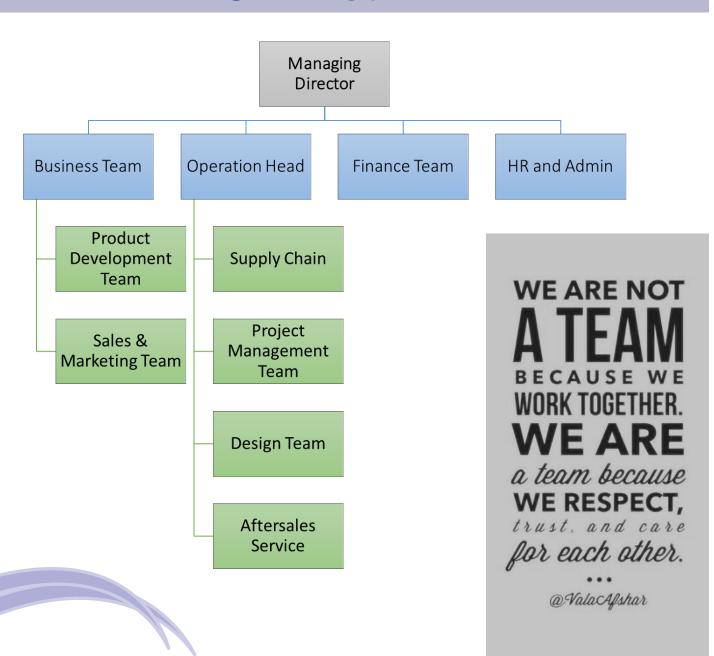
Shaon Pradhan is a networking and security engineer with over 3 years of experience in the IT industry. He has a strong understanding of networking protocols and security best practices, and he is proficient in a variety of networking and security tools. He has started his career with Beximco IT Division. With his enrich experience in IT sector, he has completed several projects successfully. He has graduated in Electrical, Electrical and Communication Engineering from Military Institute of Science and Technology. He is a highly motivated and results-oriented engineer. He is a team player who is always willing to help others.

#### Mortuza Alam Manager, Sales and Marketing

Mortuza Alam is highly motivated professional with more than 3 years experience in Software Engineering & Project Management. Proven ability to efficiently multi-task and meet critical deadlines. Being a project manager of some renowned projects, he is well-known for his excellent way of making things done.



# **Our Team**





# **AREAS OF SERVICE**

We are a complete discipline engineering company providing thorough project management, quality control and cost accountability to our loyal clients.









**ELECTRICAL ENGINEERING** 

**MECHANICAL ENGINEERING** 

STRUCTURAL ENGINEERING

FIRE SAFETY ENGINEERING



PROJECT MANAGEMENT CONSULTANCY



**ENGINEERING CONSULTANCY** 



SOFTWARE & IT SUPPORT





#### Our Services Part:

- 1. Structured LAN
- 2. Security & IP Surveillance
- 3. Enterprise Wireless Network
- 4. Enterprise Switching and Routing
- 5. Data Center, Near Data Centre & Disaster Recovery solutions.
- 6. Identity Management System Application, AFIS and Biometric Hardware
- 7. Firewall/ Internet Security
- 8. Server Solution
- 9. Interactive Displays
- 10.PA Systems
- 11. Technology Advisory Services
- 12. Software Solution



#### Our Services Part:

#### **Unified Communication Solutions**

Unified communications and collaboration describe the combination of communications and collaboration technologies. Macro performs the integration of real-time enterprise, communication services. Macro offers end-to-end UC Solutions to customer-focused companies as part of their business response solution.

#### **Enterprise Networking**

Today's networks (wired and wireless) need to be easily installable, highly scalable, use non-proprietary protocols for compatibility, highly secure, and easy to manage. Business requirements are very dynamic nowadays and managing the change easily and without replacing all the devices every time is also extremely important. Macro offers high performance, agile, and flexible network solutions from data-center to core, service providers to edge at affordable cost, including planning and implementation in the most efficient, user-friendly way.

#### **Security Solutions**

As organizations move more and more of their services online for customer's convenience, they also become susceptible to breaches, viruses, malware. Organization's data at every stage from source to destination, at rest, and while on the move, needs to secured from both internal and external threats. While every solution provider focuses on a specific area or component of the security, organizations often struggle with a consolidated strategy to cover every aspect of the security or suffer breaches in spite of investing in several security components. Macro takes a holistic approach to an organization's security instead of taking a piece-meal based approach. We help institutions plan their security strategy, set standards for regularity compliance, and offer 360 degree Security Coverage for an Organization, including Network Security (Next-Generation Firewall, Anti DDoS Solution, Network Access Control (NAC), Secured VPN Solution), Application Security (Web Application Firewall, E-Mail Security, Web Security Gateway), Data Security (Data Encryption & Key Management, Hardware Security Module (HSM)), End Point Security (Data Loss Prevention or DLP, End Point Detection & Response or EDR) and Security Management Solutions (Advance Threat Detection & Response Platform (Anti-APT), Security Operation Center (SOC) Solution, Privileged Access Management (PAM), Vulnerability Assessment and Penetration Testing (VAPT). Besides offering the solutions, we can also offer Security as a Service.

#### **Two Factor Authentication Solutions**

Two-factor authentication (2FA) provides definite identification of users by mixture of two different credentials. The most secure way to access and transact financial electronic information. Ensuring that a user is who he claims to be. Create a layered defense and make it more difficult for an unauthorized person. We offer Mobile pass, Hardware OTP, PKI based authentication, Pattern-based authentication. Class 3 for Server & Wildcard SSL for Serve.



#### Our Services Part:

#### Computing Hardware, IT Infrastructure Management and Optimization

Macro provide Enterprise Server, Networking, Software, and Storage Solutions as well as IT Infrastructure Management and Optimization Solutions to its wide customer-base. Macro has a strong team well-versed with the hardware and software products to identify customer requirements, assess performance, matrices, growth, and capacity.

#### **Project Management**

Macro has established itself as a forerunner in the country for establishing so many critical projects. Our project team includes people with relevant and experience in multi-vendor coordination, system analysis, and design services, integration of proposed hardware, software and custom programs, procurement, installation of equipment, system performance tuning, service support, and providing comprehensive system documentation and training.

Macro can handle Complex ICT projects, Full IT System Integration, Design, Installation & maintenance services, Data Centre, infrastructure and Application systems, Extensive maintenance support for all delivered hardware and software, Technical operations support to large enterprises, maintaining local area network (LAN) & wide area networks (WAN)

#### **IT Service Management**

We have ISO certified service management practices to ensure the highest level of Professionalism for service. We provide ITSM framework, every employee of Macro is well conversant & and adheres to the internal policies under the ITSM framework and well experienced in running the Service Management operations through a central helpdesk. Macro offers Data center, Enterprise Systems, and IT Infrastructure installation and Management Network and connectivity management, IT Security, Database Management, Operations, and Human Resources.

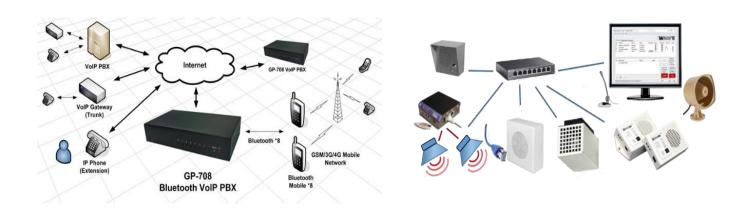
#### **Software Solution**

Transforming Ideas into Seamless Reality. Our Software Solutions service offers you a holistic approach to turning your concepts into efficient, user-friendly, and scalable software applications that drive your business forward. We believe in solutions that fit like a glove. Our team of experienced developers works closely with you to understand your unique requirements, business goals, and challenges. Through a collaborative process, we craft bespoke software solutions that align perfectly with your vision.

Experience the power of software solutions that are tailored to your needs, engineered for excellence, and designed for growth. Let us be your partner in transforming your ideas into a seamless reality that empowers your business to thrive in the digital age.



### Our Offering



IP PBX And PA System



**Bio Metric System** 



### Our Offering



**Data Centers and Storage** 



Surveillance



#### Our Offering





Our partners and Brand





















Our partners and Brand

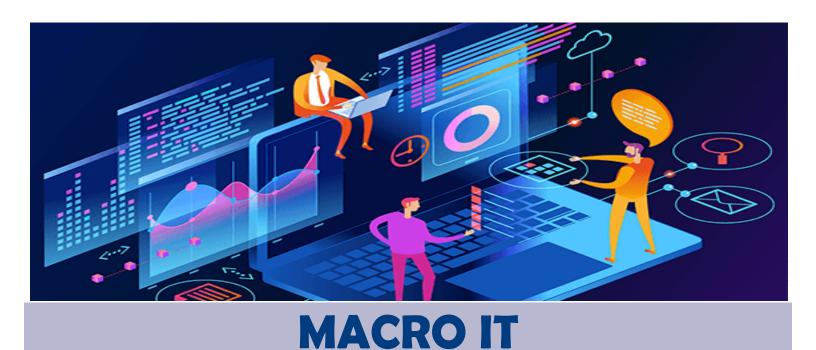


### Rosenberger









Our Government And Private Client for IT and Software







committed to build the best since 1993





#### The following are some areas of Civil Work (Water Proofing and Ceramic Installation)

- 1. Water Proofing of Underground Structure with bituminous system
- 2. Water proofing reinforced concrete foundation for new structures by open excavation
- 3. Systems for laying natural stones in damp environment
- 4. Rapid system for waterproofing and installing ceramic or vitrified tiles on balconies
- 5. Waterproofing system for the installation of ceramic tiles in bathroom and damp environment
- 6. System for the rapid and non-intrusive waterproofing of old terraces

**BRAND: MAPEI** 





#### The following are some areas of Supply and Installation:

- 1. Civil Finishing Item
- 2. Paint
- 3. Panel
- 4. Louver
- 5. Curtain System
- 6. Wood
- 7. Interior part
- 8. Steel Structure renovation
- Water proofing Supply and installation part
- 10. Sanitation Work and Water Supply Work
- 11. Renovation
- 12. Partition System Supply and Installation



## **ELECTRICAL ENGINEERING**

The Electrical Engineers of MCEL provide complete electrical system designs, supply & installation for your site and buildings to meet or exceed all local and international regulations. Safety will always be the top priority, and is the basis of all systems to safeguard persons and property from hazards arising from the use of electricity. Our electrical team has a wide range of experience and can offer custom solutions to meet and exceed their client needs.

The following are some areas of expertise and electrical engineering services available:

- Low & Medium Voltage Electrical System Design
- Electrical Single Line Diagram (SLD)
- Electrical Layout Design
- Earthing Layout Design
- Electrical Distribution Board Design, Supply & Installation
- Electrical Load Management & Monitoring System Design & Installation
- Substation Construction, Installation & Commissioning
- Medium & Low Voltage Switchgear Supply & Installation

- Electrical System Rectification
- Power Distribution Systems
- Lightning Protection System Design, Supply & Installation
- Electrical Safety Inspection for Industrial Facilitates
- Electrical Testing & Inspection
  - Thermographic Scan
  - Earth Resistance Test
  - Insulation Resistance Test
  - Periodical Inspection of Electrical System



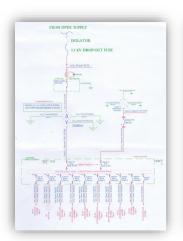


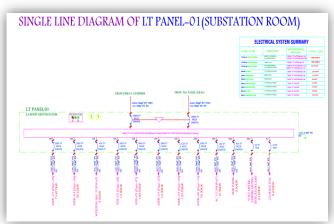
# **ELECTRICAL PRODUCT**& SERVICES

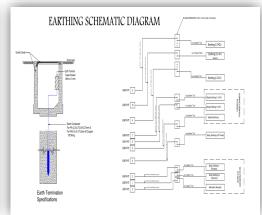
- Substation Equipment
- Distribution Boards
- Switchgears
- PFI Panel Boards
- HT Panel Boards
- Earthing Materials
- Building Energy Monitoring System
- Bus Bar Trunking System
- Building Lighting System
- Lightning Protection System
- Electrical Measuring Equipment

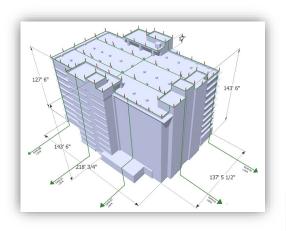


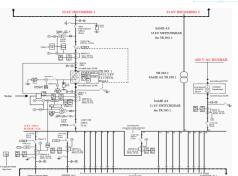
# **ELECTRICAL DESIGN SERVICES**

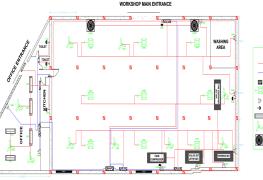


















### **Electrical Distribution Boards**









### **Electrical Switchgears**





### **Electrical Measuring Equipment**









**Earthing & Lightning Protection** 



# ELECTRICAL ENGINEERING ASSOCIATED BRANDS



















### **MECHANICAL ENGINEERING**

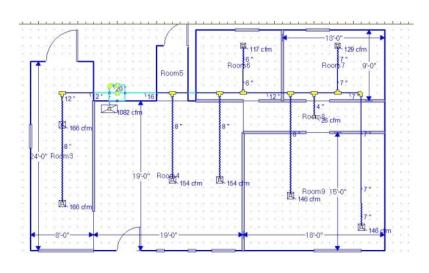
Mechanical Engineering involves the Heating, Ventilation, Air Conditioning (HVAC), Plumbing, and Fire Protection systems of buildings and facilities. In addition, process piping connections such as water, air, and gas tie in from water, gas, and sewer mains to mechanical and process equipment.

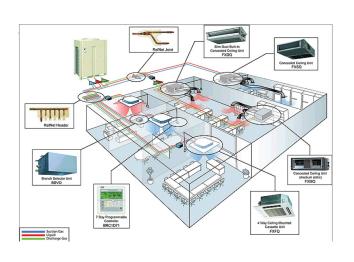
The following are some areas of expertise and mechanical engineering services available:

- HVAC System Design
- HVAC System Supply & Installation
- Pump Supply, Installation & Commissioning
- Process Piping Network Design, Supply & Installation
- Compressed Air System Design
- Steam System Design
- Plumbing System Design, Supply & Installation
- Rainwater Harvesting System Design
- Overhead Cranes Supply & Installation
- Generator Installation & Service
- Boiler Servicing
- Valves & Accessories Supply
- Front End Engineering Design (FEED)



# **MECHANICAL ENGINEERING**















# MECHANICAL ENGINEERING **ASSOCIATED BRANDS**

















## FIRE SAFETY ENGINEERING

MCEL offers complete solutions for Fire Safety. Following the guideline of NFPA, BNBC, ACCORD & Alliance, we ensure quality services to our valued customers. We have wide range of UL & FM approved products for fire fighting solutions. Expert team of engineers & NFPA certified professionals conducts the design works and monitor the projects.

The following are some areas of expertise and fire safety engineering services available:

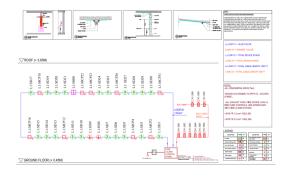
- Fire Detection & Alarm System Design as per NFPA, BNBC, ACCORD & Alliance Guidelines
- Fire Hydrant & Sprinkler System Design as per NFPA, BNBC, ACCORD & Alliance Guidelines
- Gas Suppression System Design as per NFPA, BNBC, AC-CORD & Alliance Guidelines
- Foam Suppression System Design as per NFPA, BNBC, AC-CORD & Alliance Guidelines
- Exit & Emergency Lighting System Design as per NFPA, BNBC, ACCORD & Alliance Guidelines
- Fire Evacuation Plan as per NFPA, BNBC, ACCORD & Alliance Guidelines
- Fire Department Preplanning as per FSCD
- Supply, Installation & Commissioning of Fire Detection System
- Supply, Installation & Commissioning of Fire Hydrant & Sprinkler System

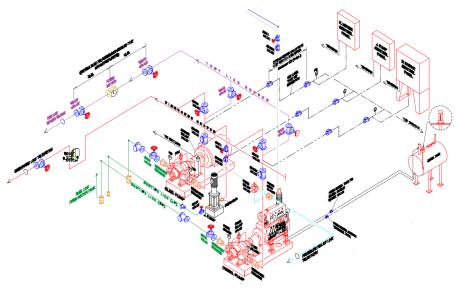
- Supply, Installation & Commissioning of Gas Suppression System
- Supply, Installation & Commissioning of Foam Suppression System
- Supply & Installation of Fire Rated Door
- Supply of Fire Rated Cable
- Supply & Installation of Exit and Emergency Light
- Supply & Installation of Fire Extinguisher
- Safety Equipment
- Inspection Services
  - Fire Safety Assessment
  - Periodical Inspection & Maintenance



# FIRE SAFETY DESIGN SERVICES







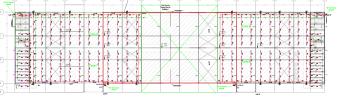
















# FIRE SAFETY PRODUCT & SERVICES

- Fire Detection System (Conventional & Addressable)
- Fire Hydrant & Sprinkler System
- Gas Suppression System
- Foam Suppression System
- Emergency & Exit Light
- Evacuation Map
- Fire Rated Door
- Fire Rated Cable
- Fire Extinguisher
- Fire Pump Controllers





# FIRE SAFETY PRODUCTS







**Certified Horizontal Split Case Pumps** 









**Certified Horizontal End Suction Pumps** 









**Certified Vertical Turbine Fire Pumps** 









**Certified Diesel Engine for Fire Pumps** 









**Certified Control Panels for Fire Pumps** 









### **Fire Hydrant Cabinets**







**Fire Hydrant Accessories** 









Suppression System









#### Fire Door & Accessories









### Fire Detection Systems



## FIRE SAFETY ASSOCIATED BRANDS























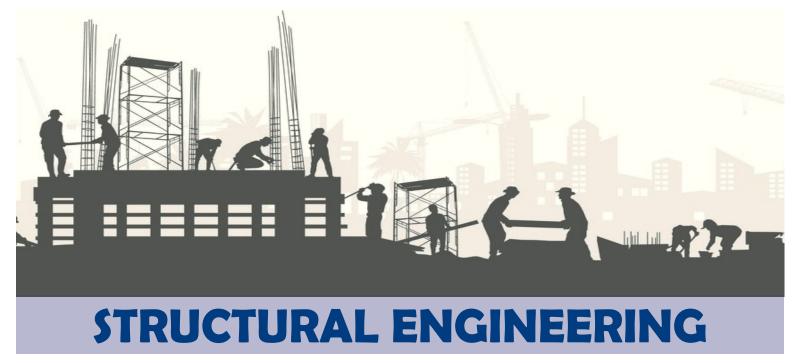












The MCEL structural engineering and design team aims to determine feasible solutions that will provide quality and efficient designs to our clients. We base our designs on a comprehensive understanding of the latest applicable building codes, material specifications, and engineering practices. We understand that collaboration is essential, and with the use of BIM software such as Autodesk Revit, we ensure our projects are coordinated and integrated with architectural requirements and other engineering disciplines as needed.

#### The following are some of the structural engineering services available:

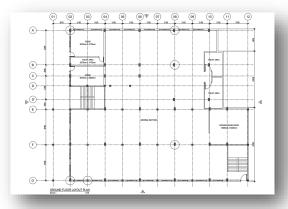
- Architectural Design
- Structural Design
- Detail Engineering Assessment (DEA)
- Load Management Plan
- Interior Design
- Retaining Wall Design
- Masonry Design
- Foundation Design
- Soil Investigation
- Rebar Test
- Core Test

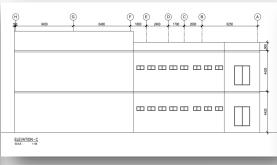
- Steel Building Construction
- RCC Building Construction
- Structural Safety Assessment
- Structural Design Review
- Existing Building Analysis
- 3D Modeling
- Building Construction Material
- Building Finishing Material

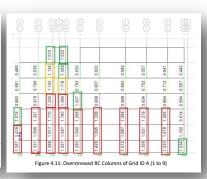


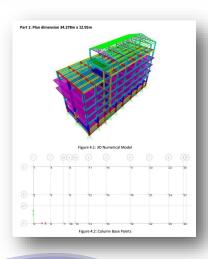


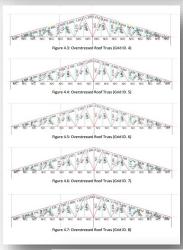
# STRUCTURAL ENGINEERING SERVICES

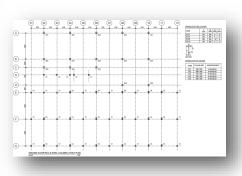


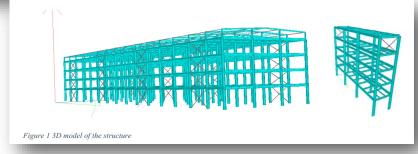














Kitchen Cabinets - Lacquer Finish/Solid Wood/Laminated Finish/Stainless Steel













#### **Kitchen Solution**



#### Blum Drawer/ Blum Tilt-Up Door Accessories

















#### **Kitchen Solution**



#### Faucet



#### **Kitchen Solution**



#### Stainless Steel Sink



PRSS-01



PRSS-02



PRSS-03



PRSS-04



PRSS-05



PRSS-06



PRSS-07





PRSS-09





PRSS-11



PRSS-10

PRSS-12





#### Handles









Tiles



**Building Finishing Materials (Tiles)** 



#### **Sanitary Products**





Window/ Doors





**Insulation Materials** 





**Building Outer Cladding System** 





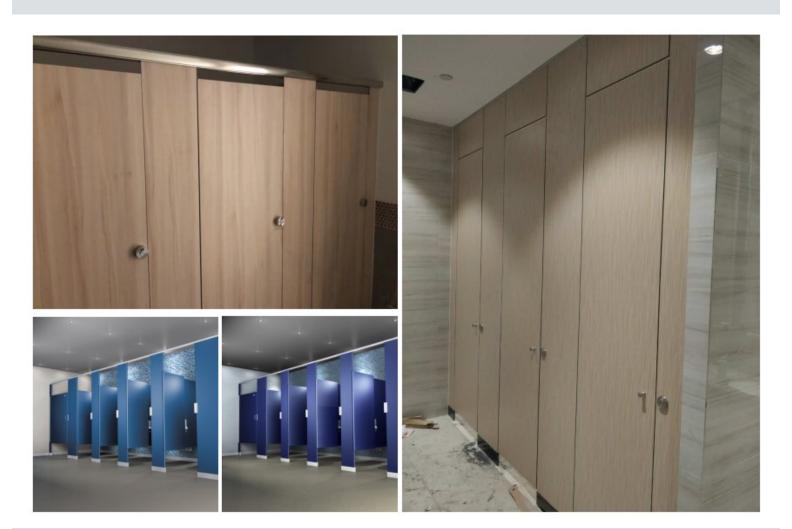


#### **Toilet Partition Wall**





**Toilet Partition Wall** 





#### **Toilet Partition Wall**

Zinc Alloy Fittings



Zinc Alloy Fittings Stainless Steel Fittings





#### **Toilet Partition Wall**

Aluminum



The Overall View





#### **Glass Partition**

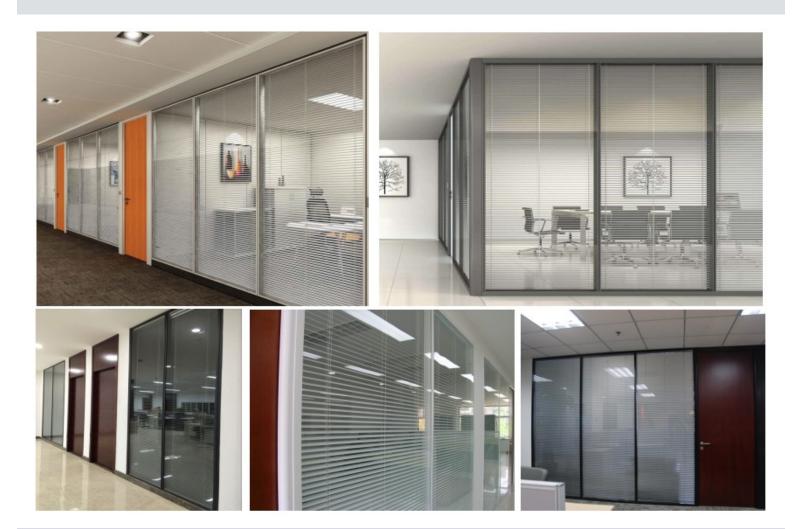






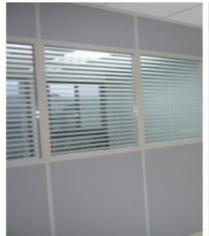


#### **Glass Partition**





#### **Glass Partition**

















#### **Basin with Tables**











## DON'T JUST FOLLOW RULES. HAVE STANDARDS.

## STANDARDS WE FOLLOW















International
Electrotechnical
Commission











## **Government Enlistment**



### **Aviation Partner**



























## IHI











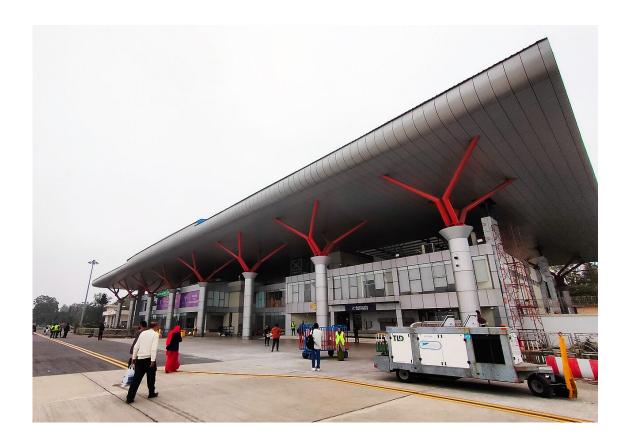






**Coxs Bazar Resort Project Consultancy** 





Security Pass System Work At Saidpur Airport Under Civil Aviation Authority Bangladesh





Security Pass System Work At Shah Amanat International Airport Under Civil Aviation Authority Bangladesh





**Monument Project Consultancy (Bangladesh Air Force)** 





Office Interior Project Consultancy -2





**Security Pass System Work At Jassore Airport Under Civil Aviation Authority Bangladesh** 





**Apartment Interior Project Consultancy -2** 





Office Interior Project Consultancy -2





**Dhaka Resort Project Consultancy** 





Security Pass System Work At Coxs Bazar Airport Under Civil Aviation Authority Bangladesh





Wire Mash Design , Supply at jamuna railway bridge construction project

Under Ministry of Railways





Full Floor Epoxy Project (Client -ZHAOFENG GELATIN LTD.)





**Renovation and Development Work Under BSMMU** 





Civil Material Supply and Installation at Super Specialized Hospital Under BSMMU , Dhaka .





Civil Material Supply at Matarbari 1200 mw Coal power Plant Project At Coxs Bazar





Maintenance Supply at Acorn Infrastructure Services At Chittagong





**Seven Storied Building Project Design and Execution At Uttara** 





Full Renovation Work and Interior Development At Dhaka Airport Under Civil Aviation Authority Bangladesh





Civil Material Supply at Wisdom 5 Star Hotel , Sylhet





# Project Name & Description

LPG Station at Gainagar, Chatmohor, Pabna.

### Client

Mohammad Zaman

#### **Total Area**

10,417.72 sft.

## **Project Type**

Structural Consultation

#### Loaction

Gainagar, Pabna.

**HVAC Consultancy**, Square Pharmaceutical, Pabna







**Macro Construction & Engineering Limited** 

House-1, Road -9, Sector-12

Uttara, Dhaka-1230 **+01780942401** 

macroengineering007@gmail.com