

ILLIMITABLE PROSPECT


BRINGING THE FUTURE
TOGETHER



Strucbit Engineering Solution Limited


www.strucbit.com

Who we are




STRUCBIT is a unique consulting engineering company utilizing local and international professionals that understand your business and are driven to provide the best solution. We are anchored by exceptional designers, planners, engineers, architects, consultants and technical specialists, working across every aspect of today's-built environment.

Our Core values



We bring a positive mindset and collaborative attitude, combined with technical excellence and a commitment to exceptional client service, to all our assignments. We succeed when our clients succeed.

Our Mission



To help our clients solve their most complex challenges – transforming forecasts into ventures that convey results and meet regularly evolving needs.

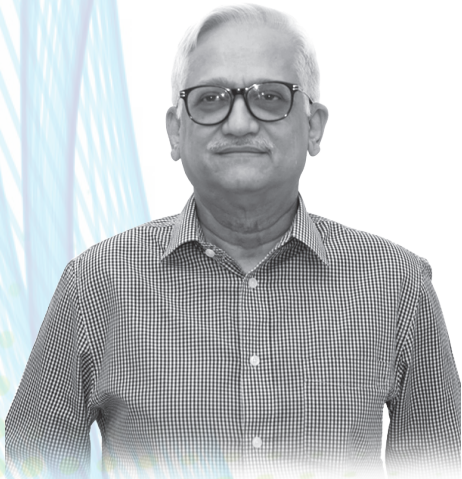
2

Locations

2

Countries





Chairman's Statement

To Collaborate & Achieve Together

Ahmadul Hassan, PhD

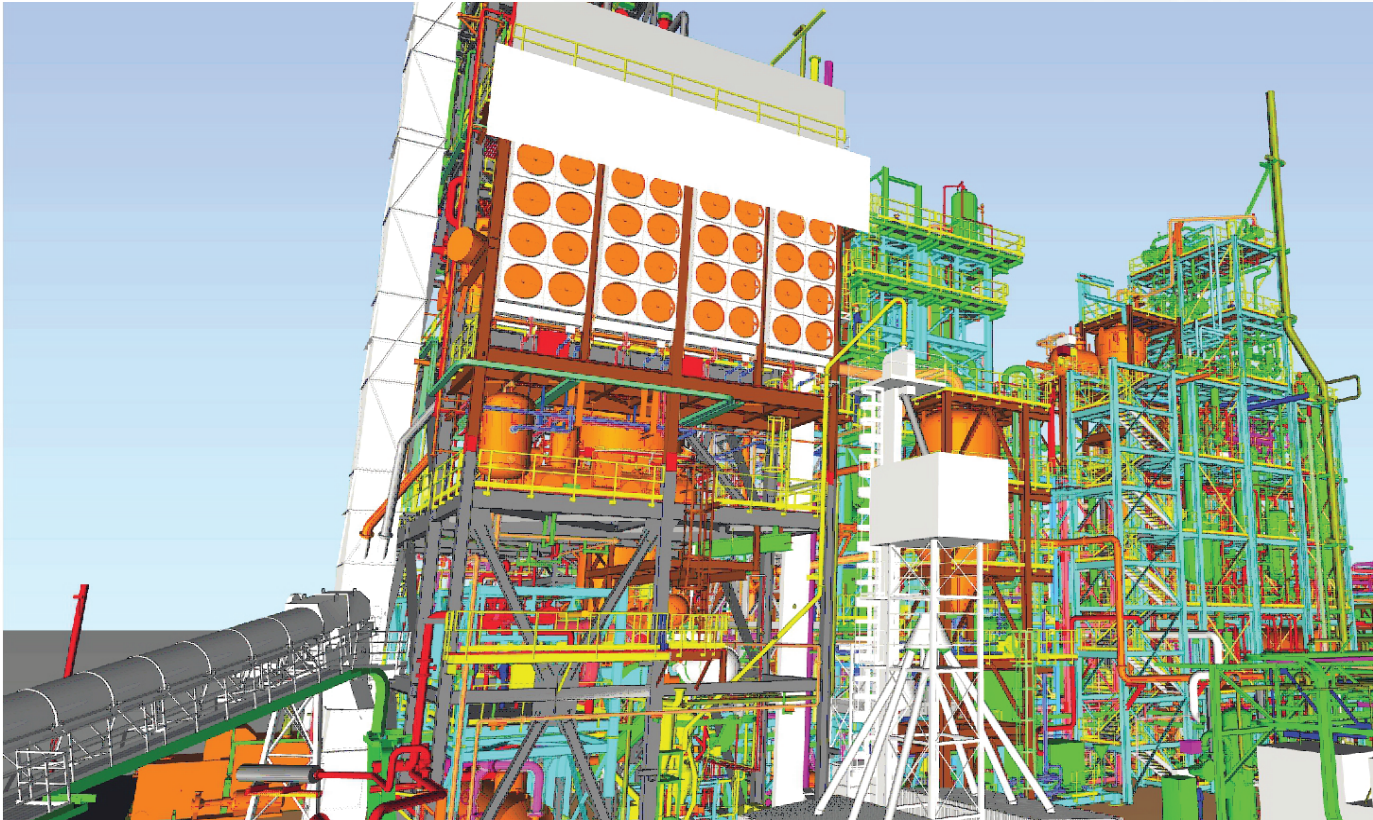
Bangladesh has stepped into a new journey as it qualified to graduate into a developing nation from a Least Developed Country (LDC). Keeping pace with the era, the demand of establishing critical structures e.g. high-rise building as well as dynamic and unique design of industrial structures is rising rapidly. Structures are becoming more complex and challenging to design ensuring safety and sustainability. Presently, we are highly dependent on the external experts to meet the requirements for design.

To overcome the dependency, we offer highly qualified specialist from our country collaborating with foreign experts from some of the finest design consultancy organization around the world to provide efficient design maintaining strict schedule and utilizing modern technology. Whether we are collaborating on a competition or offering regular input during design, we work as your partner throughout the entire process. Our motto is to gain a deeper understanding of your goals and can proactively define solutions with you to build economic and environment friendly infrastructures without compromising its quality. Although engineers now a days can design just about anything but ruining project schedule and budget, we collaborate with clients, design partners and builders to deliver designs that raise the bar without breaking the bank.

We are passionate problem solvers. So, we are eager to implement technologies that unlock our creativity and transform design and construction. Whenever we face any complex problem and the required tools is not even exist to deal with, we invent our own way to solve it in accordance with proper code requirement. As structural designs are becoming complicated gradually, we use technology to deliver high-level analysis, make complex concepts clear and create interoperability that amplifies teamwork.

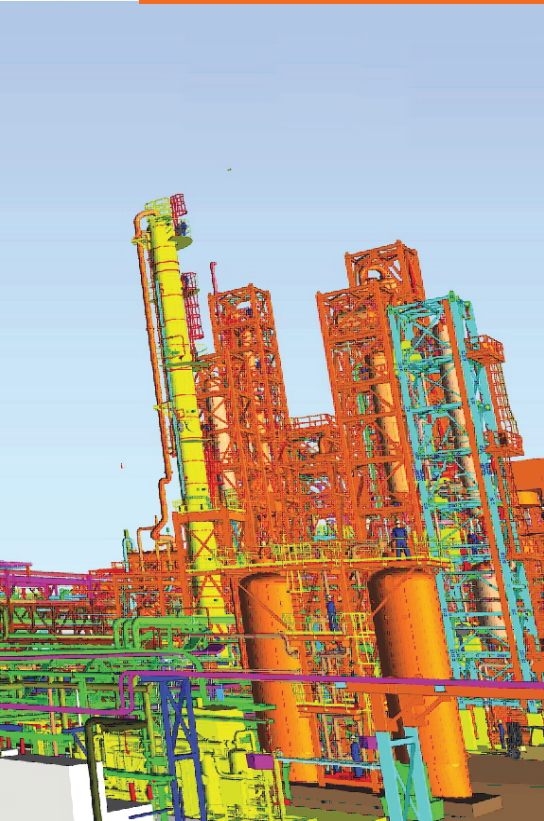
OUR SERVICES

- ◆ Structural Engineering Solution of complex structures in the form of Shape, Geometry, Occupancy, Feature, Height, Wind & Earthquake loading for Commercial & Residential sector.
- ◆ Structural design services for the Industrial sector (Tank farm facility, Oil refinery, Powerplant, Mining facility, Pipeline project).
- ◆ Demand-driven design solution of Mechanical, Electrical & Plumbing (MEP) engineering.



Four seasons center
Kuala Lumpur, Malaysia
One 70-story and one 43-
story building with a gross
area of 210,000 sqm

Biofuel facility upgrade
Edmonton, Alberta, Canada



STRUCTURAL DESIGN SERVICES FOR CRITICAL STRUCTURES

Sometimes traditional building design does not cover all structural requirements of the building in accordance with the building code as it becomes complicated in terms of shape and height. To appropriately design those buildings, special design approaches are required. That is where our team of expert structural engineers provide the best solution adopting Advanced analytical tools to solve any complex structural complications.

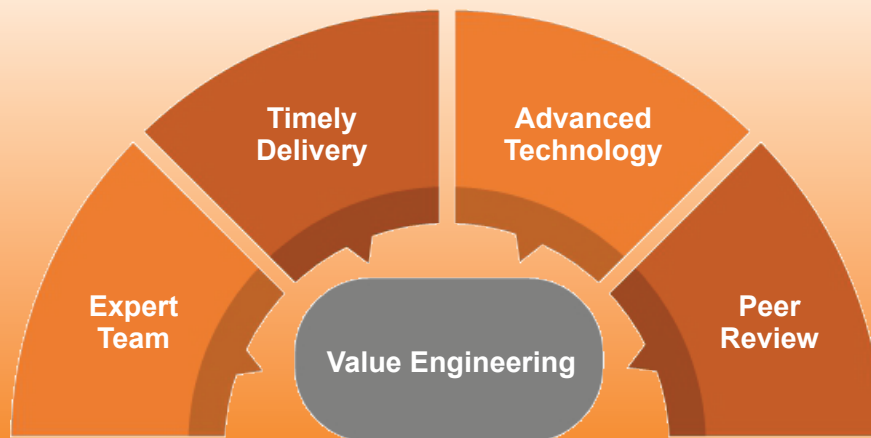
Our expertise expands from top-notch wind engineering, performance-based seismic design, advanced geotechnical analysis & design to value engineering.

Strucbit offers

- ◆ Development of Concept Design
- ◆ Concrete and Steel Design
- ◆ Foundation Analysis & Design
- ◆ Seismic Analysis
- ◆ Building Information Modeling (BIM)
- ◆ Detail Structural Drawing
- ◆ Construction Drawing
- ◆ Design and Drawing QA & QC

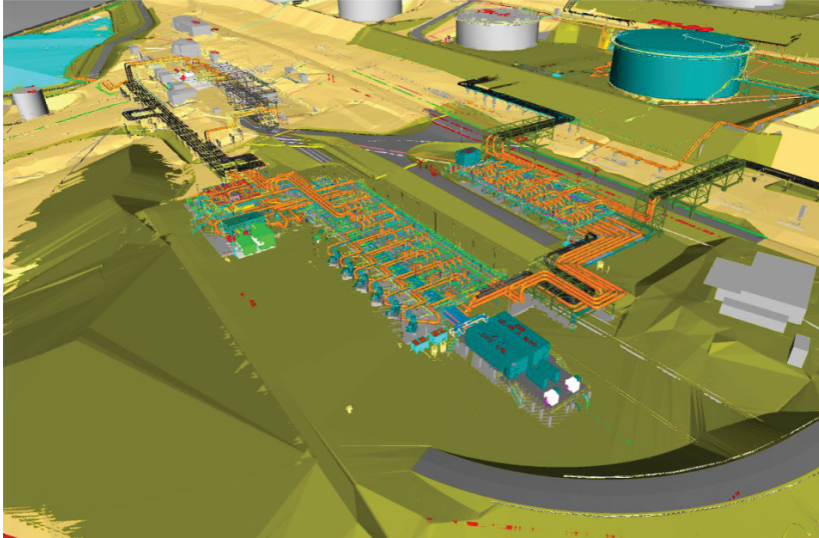
We bring national & international expert teams together to achieve project goals. Our international strategic partner is **Thornton Tomasetti** - a leader in tall building design in the world.

Work Scheduling Techniques



STRUCTURAL DESIGN SERVICES FOR INDUSTRIAL SECTOR

Strucbit can provide civil & structural engineering services for heavy industrial projects such as Power plant, Oil refinery, Mining solution, Oil pipeline etc. across the world mostly in North America. Our skilled team of engineers and designers from in-house & overseas have hands-on experience in all aspects of industrial manufacturing. We manage all aspects of our client's needs from concept development, strategic planning and design to project implementation and commissioning. Through our extensive coordination with-process and energy integration team, we can identify opportunities to lower production costs and optimize energy usage and power production. Through our experience with retrofit and remote projects, we have become very efficient at executing our work cost effectively with a high level of quality.



Pipeline Expansion Project.
Burnaby Terminal,
British Columbia, Canada.

Strucbit services for industrial sector :

- ◆ Concrete and Steel Design
- ◆ Foundation and Road Design
- ◆ Seismic Analysis
- ◆ Structural Inspections
- ◆ Drainage Design
- ◆ Rehabilitation of Existing Structures
- ◆ Code Compliance
- ◆ Design Optimization
- ◆ Proactive Solutions



MEP DESIGN SERVICES FOR BUILDINGS & INDUSTRIAL SECTOR

ELECTRICAL INSTALLATIONS

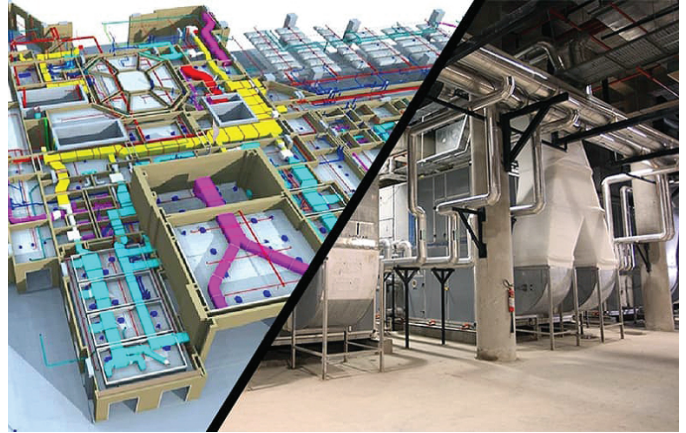
Supply, installation, testing and commissioning of Transformers, MV Panel, Diesel Generator sets & ATS, Busbar Trunking systems, HV/MV/LV/MICC cables and cable termination.

Supply and installation of cable tray and trunking, floor trunking, skirting trunking, etc.

Supply and installation of Earthing and Lightning protection systems.

Supply and installation of internal light fittings, external pole lights and façade lighting.

Design, supply and installation of control panel system.



AIR-CONDITIONING AND VENTILATION SYSTEM

Design, supply, installation, testing and commissioning of air conditioning and ventilation works on turnkey basis including chillers, packaged type central air conditioning systems, Air Handling Units, Fan Coil Units, Precision air conditioning units, Ducted and window split AC units, Chilled water pipeline works, Chilled water pumps, GI and MS ducting and decorative ducting, industrial and commercial ventilation systems for Residential, Commercial, institutional, and industrial buildings.

PLUMBING AND DRAINAGE SYSTEM

Design, supply, installation and commissioning of plumbing, water supply systems and drainage networks including design and installation of pumping systems for various buildings and for outdoor drainage systems, storm drainage and irrigation water supply networks, underground sewage piping works, storm-water drainage systems.

FIRE FIGHTING SYSTEM

Design, supply, installation and commissioning of Fire Fighting systems such as Wet and Dry Safety Sprinkler systems, Deluge Systems, Wet & Dry Risers, Fire Hose Reels, Fire Extinguishers and Fire Suppression Systems, etc. for all types of building & factories compliance with local and national codes, standards regulations.

Our Key Persons

Partha Das, P.Eng.
Engineering Manager

Partha Das has over 17 years of experience in Civil-Structural Engineering with extensive experience in structural analysis and design, site construction support, procurement support, business operations budget planning and forecasting and technical and project management in a multi-disciplinary engineering environment for local and international brown and green field projects with clients in buildings, oil & gas, power, minerals, mining and metals, pulp and paper, chemicals/petrochemicals and infrastructure customer sectors. Familiar with design codes and standards of Bangladesh, Canada, and USA.



Saddam Ahmed, P.E., P.Eng.
Principal Structural Engineer

Saddam Ahmad has over 30 years of successful experience in Civil-Structural Engineering primarily for Oil-gas, power and petrochemical industries performing hands-on management of large-scale global projects with structural engineering teams from Bangladesh, China, India, Philippines, Venezuela, Columbia, Trinidad & Tobago and Chile. He has completed numerous projects from conceptual phase to completion of construction, at times leading teams of up to 80 engineers, BIM modelers and designers.

OUR INTERNATIONAL STRATEGIC PARTNER

Thornton Tomasetti

Thornton Tomasetti is a 100 percent employee-held organization of 1,500 engineers, architects, sustainability practitioners and support professionals collaborating from offices across North America and in Asia-Pacific, Europe, Latin America and the Middle East. Thornton Tomasetti focuses on providing a diverse suite of integrated services and leading innovation in our industry to ensure the continued success of our clients. Thornton Tomasetti has a unique experience of providing structural design services of world's renowned tall & super tall buildings, i.e.,

- ◆ Jeddah (Kingdom) Tower, Jeddah Saudi Arabia- The tallest building in the world when completed.
- ◆ Petronas Twin Tower, Kuala Lumpur, Malaysia- dramatic islamic-themed design.
- ◆ Shanghai Tower, Shanghai, China- one of the world's most distinctive and innovative mega tall buildings.
- ◆ Federation Tower Complex, Mirax City, Moscow International Business Center, Lot 13, Moscow, Russia- centerpiece of the new Moscow International Business Center.
- ◆ Wilshire Grand Center, Los Angeles, California-tallest building in the Western United States.

OUR STRATEGIC PARTNER IN BANGLADESH



Environment and Infrastructure Management Solution (EIMS) Limited

Environment and Infrastructure Management Solution (EIMS) Limited, a fast-growing multidisciplinary organization, aims to provide solutions across a wide spectrum of Natural Resources Management, Environmental / Climate Change & Disaster Management Studies, Structural Engineering, Structural Vulnerability and Integrity Assessments, Retrofitting Design & Construction, Geotechnical Engineering.

Projects in Bangladesh



Project Name : **Bangabandhu Square**

Location : Purbachal Sector 15, Dhaka

Height: 71 Feet Sculpture

Scope: Connection design & Structural Drawing Preparation

The material of the sculpture is solely steel-based. An enormous number of connections had to design for the stability of the structure against wind and seismic loading. Each member and connection were thoroughly checked and maintained the allowable stress limit.

Project Name : **Jhilmil Residential Park**

Location : Keraniganj, Dhaka.

No. of Stories: 60 nos 20 storied
25 nos 25 storied

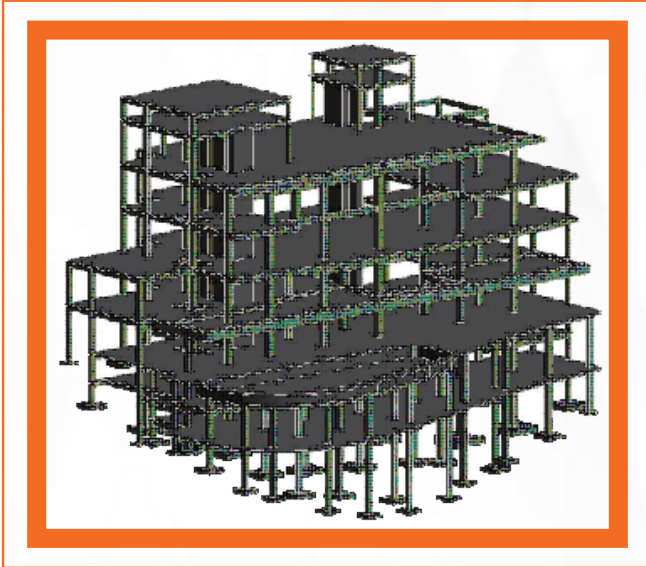
Usage: Housing project

Scope: Structural design & Structural Drawing Preparation

Jhilmil Residential Park is the prodigious residential project is under Public Privat Partnership (PPP). The purpose of this project is to reduce the acute problem of housing in Dhaka by buildings 85 nos. twenty (20) to twenty-five (25) storied buildings inside the Jhilmil Residential Park Project area. The lateral-force-resisting system consists of ordinary reinforced concrete shear walls. All the components of the structure have been designed to achieve economy and constructability that provide adequacy against hazards and ultimate human comfort conforming the code provisions of Bangladesh National Building Code (BNBC) 2020.



Projects in Bangladesh



Project Name : **Delta Nilgiri Hotel Complex**
Location : **Bandarban, Chittagong**
Features: **5 hotel building 680m above sea level**



Usage: **Hotel Complex**
Scope: **Structural design & drawing**

Reaching the project goal with reliability for a hotel on the hill slopes in a seismically severe intensity and cyclone prone area was challenging. The project goal was reached by meeting the design demands for strength, ductility, serviceability, and constructability using the assumptions and criteria from Bangladesh National Building Code (BNBC-2020).

Projects in Abroad

Project : **Pipeline Expansion Project**
Location : **Westridge, British Columbia Canada**
Features: **Design of Piperacks, Valve Manifolds, Electrical Building foundation etc.**
Usage: **Crude oil loading facility**
Scope: **Structural design & reporting**



The facility was heavily equipped with pipes and other structural members, the design was prepared in such a way that it reduces the possible conflicts with the existing pipes or other structural members.



Projects in **Abroad**

Project Name : **Parkland SDX Addition**

Location : Sherwood Park, Edmonton Alberta, Canada

Service : Structural design service for Truck Loading bay

The structural design service was provided for a truck loading bay following code provisions and guidelines. The project site was inspected through 3D scanned images to identify possible conflicts. The design was prepared considering the lowest possible existing structures interruption.



Project Name : **Scoford Benzene Addition**

Location : Calgary, Alberta, Canada

Service : Structural design service for Rail Car Loading bay

An additional loading bay was designed considering local guidelines and regulations. The design was prepared in such a way that the flow of the liquid in the pipe remains uninterrupted. The calculation includes the adverse effect of the environment such as heavy snowfall, wind pressure, and seismic loading.

Projects in **Abroad**



Project Name : **Parkland Bowden Tank Farm**
Location : Bowden, Alberta Canada
Service : Civil and Structural design service for Tank Farm



Gangway modification has been done for ease of access in the rail car loading point. Several types of loading conditions were considered during the design phase. The design was based on NBCC and the inspection was done through 3D scanned images.

Project Name : **Styrene Addition**
Location : Bowden, Alberta, Canada
Service : Structural design service for Rail Car Loading bay

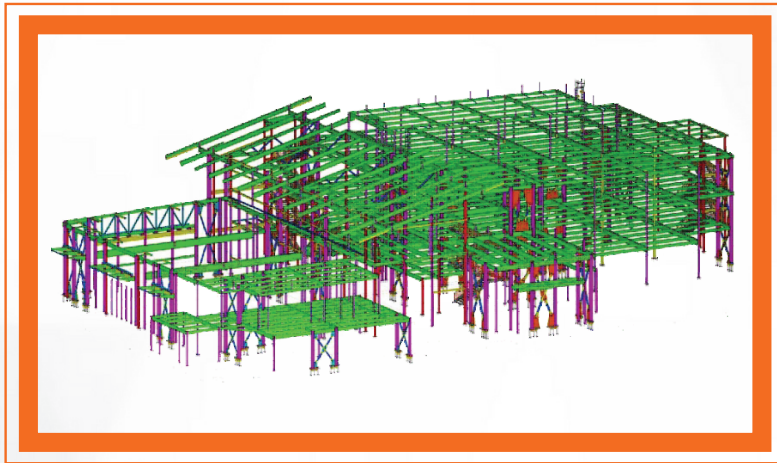
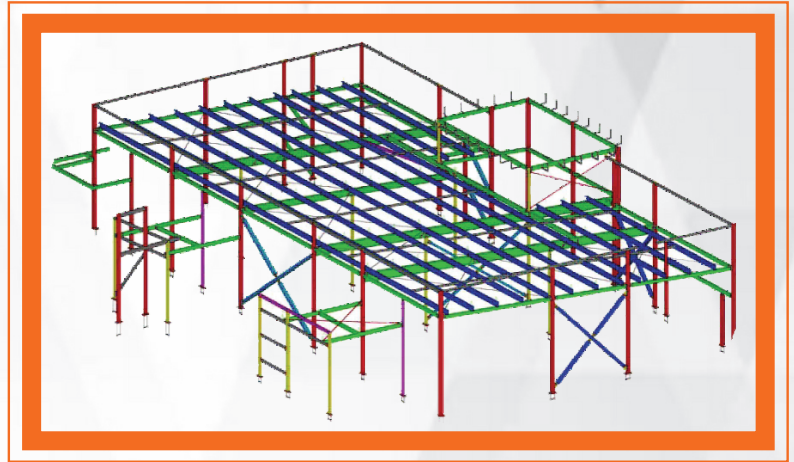


Projects in **Abroad**

Project Name : **McDONALD'S
Invercargill South**

Location : Invercargill, New Zealand

Service : Structural Steel Erection
& Fabrication Detail drawing



Project Name : **Centerilla College ,
New Student Center**

Location : 600 Centralia College Blvd,
Centralia, WA 98531,
United States

Service : Structural Steel Erection &
Fabrication Detail drawing
preparation



STRUCBIT ENGINEERING SOLUTION LIMITED

Bangladesh

126/3, Monipuripara, Airport Road,
Tejgaon, Dhaka-1215
Email : info@strucbit.com
Cell : +8801841419009

Canada

1613 Wates Close SW Edmonton,
Alberta Canada T6W 0X5
Email : partha.das@strucbit.com
Cell : +17809956002

