

# PRINCIPAL

ENGINEERING FARM





## Service Profile

- Digital Survey
- Soil Test / pile Construction
- Architectural Design

- Structural Design
- Electrical & Plumbing Design
- 3D View ■ Interior Design

- Animation ■ Brochure Design
- Estimation & Cost Analysis
- Project Supervision

- Approval from RAJUK
- Hollow Block Industry
- Ready Mix Concrete
- Constructing Equipment

Principal Engineering Farm is striving to offer a global touch and also maintaining Bangladeshi culture. We aim to build beautiful homes keeping pace with the changes in tastes and needs of a modern lifestyle. Principal Engineering Farm constantly strives to foster confidence of its valued clients.

All the team members of the company personally engage themselves in implementing the each of projects. Company has built project in Afatb Nagar, Uttar Badda, Rampura, Mirpur, Khilgoan, Basabo, Signboard, Sonargoan region and so on. These projects represent super engineering ingenuity and architectural excellence. The company is committed to ensure the quality in each project and for that purpose the management gives attention to every aspect of projects. Services of renowned architects, engineers and technicians are complimented to ensure that each of the projects is crafted with excellent workmanship. Our objective is simple to create the finest space design people who aspire for a good living. We define the aesthetics of interior design according to the scope of a given space and test of our client. Sometimes we combine the elegance of classical design with modern flamboyance. Sometimes we try to come up with a unique solution to define design. You are invited to work with us; you will be happy and satisfied.



You know how precious a piece of land is. Don't waste, get a digital survey, and plan it right now.



The soil is the most important yet most neglected in a construction project. The soil is the natural foundation that supports all structures and investment. Most clients see soil investigation as a waste of fund despite being the cheapest in the construction process, hardly is the cost of soil test up to one per cent of the cost of construction. Some contractors to ignore the importance of proper soil investigation and analysis and base their design on assumed bearing capacity and rate of settlement. Soil test helps to determine varying physical and chemical characteristic of soil, which can vary from place to place, if the foundation is not designed properly to the bearing capacity of the soil, then they will fail and so will the building. This is an important as the entire project itself that may cause long term complications and may result to loss of life and property, endanger residents, tenants and damage other properties.

All intending property owners or real estate investors should note that for a small sum you can protect, possibly the largest investment of your life. Without soil investigation buildings can collapse or rendered non functional for intended purpose. Why risk the expense for the cost of a soil test? Being aware of any problems will enable you to determine future costs and help you to make vital decisions about the suitability of the land for building. The design will match the site conditions, give you peace of mind yet will reduce the risk of over design thus saving you money.







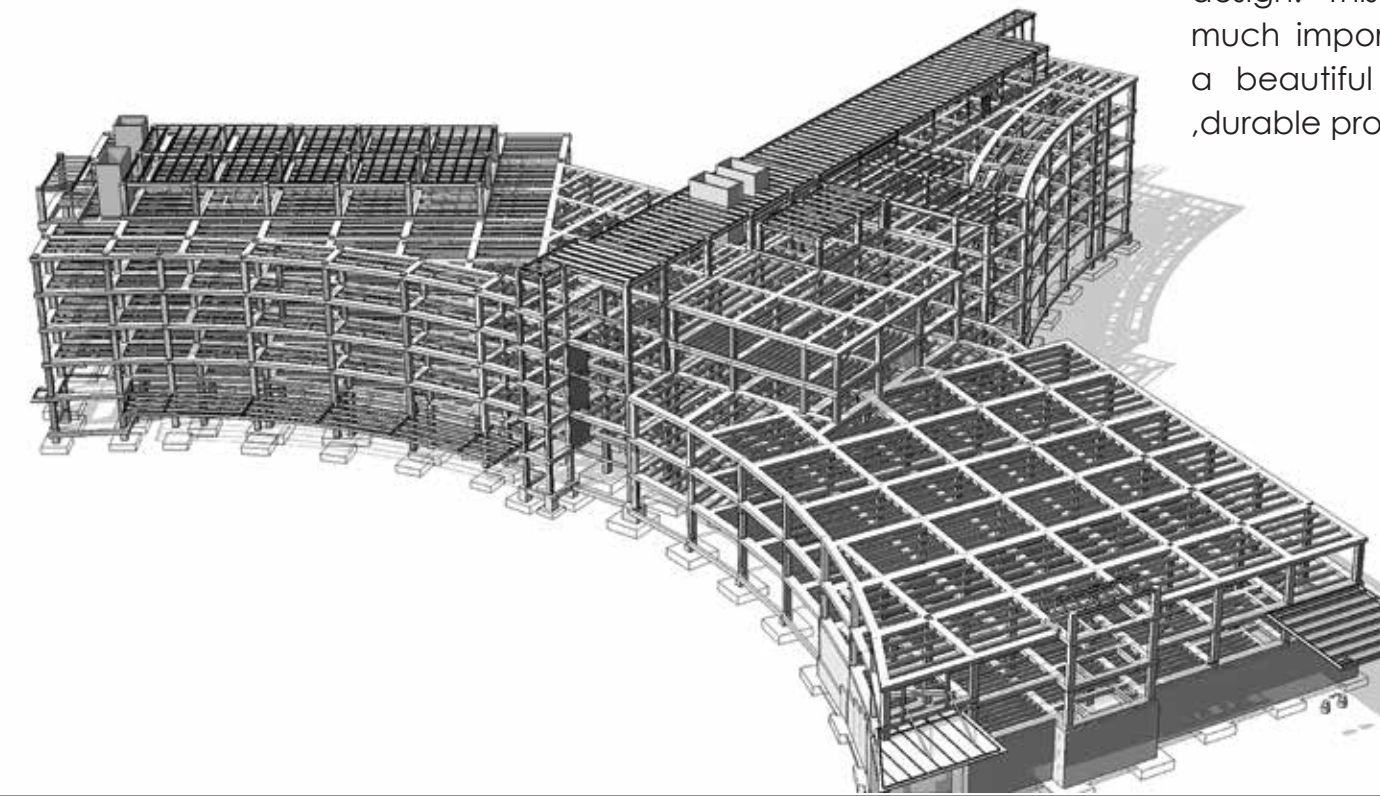
# ARCHITECTURE design

Architectural design is the major sustaining factor of the building design and it plays a vital role in translating a design to feasible building. Architectural design is a descriptive, developmental and methodical technique. Good designs requires a lot of time making sure a building is safely designed and also making sure the building will last for many years. The main causes of defects in a building were the errors made at the design stage, construction phase, and maintenance practice and in materials selection. Investment in a good architectural design is a necessity before you start your building project.

**Commercial** Hotel  
Residential suite School  
Hospital **resort**  
Industrial  
Municipal

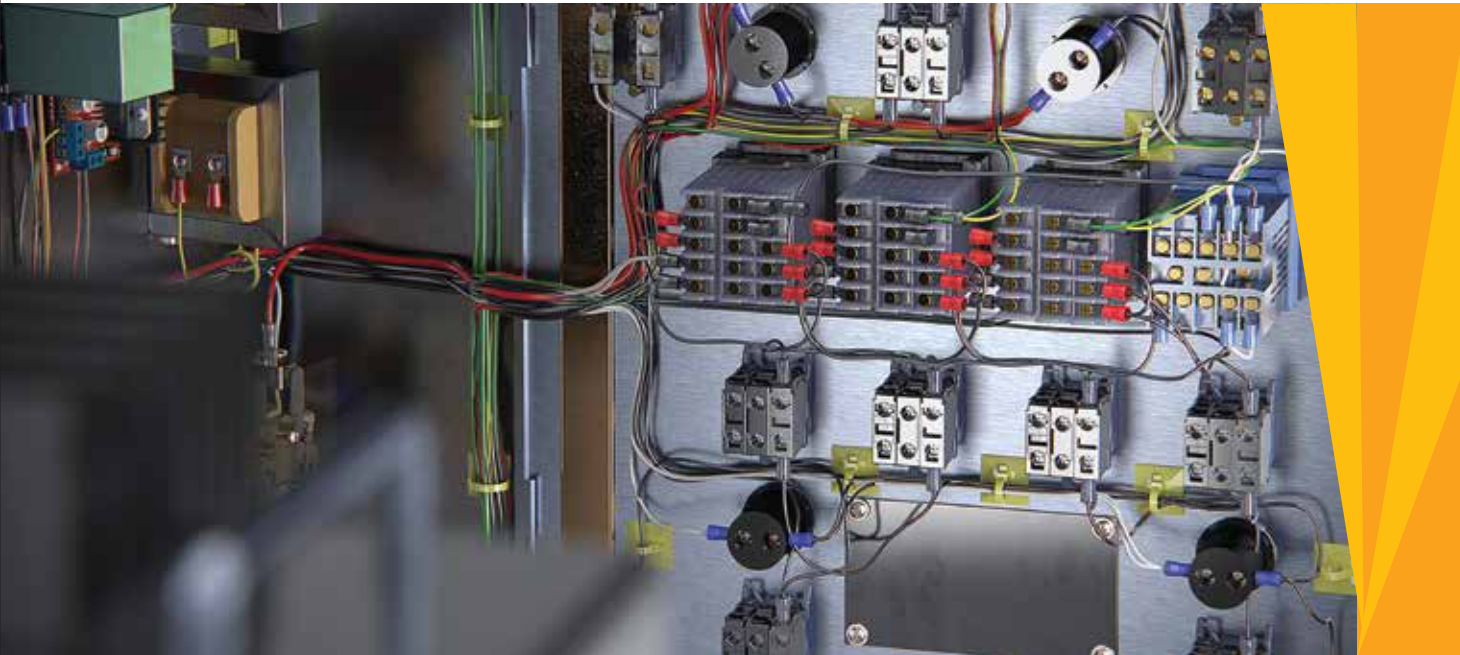
# Structural DESIGN

The main objectives of structural design are Safety, Stability, Serviceability and Durability. Someone is providing just safety structure; someone is providing just economic structure. Both of its are bad practice. We ensure you both economic and safety structure. Structural Design is done maintaining BNBC. Structural component are being Earthquake resistive. Deflection check, Drift Check, Lateral Displacement check is necessarily to be done. Proper structure design need as well as proper monitoring is badly in need. We have a expert group where you will get all types of project management service such as quality control, quantity survey, regular work monitoring as per design. This services are so much important to construct a beautiful and sustainable ,durable project.





# Electrical DESIGN



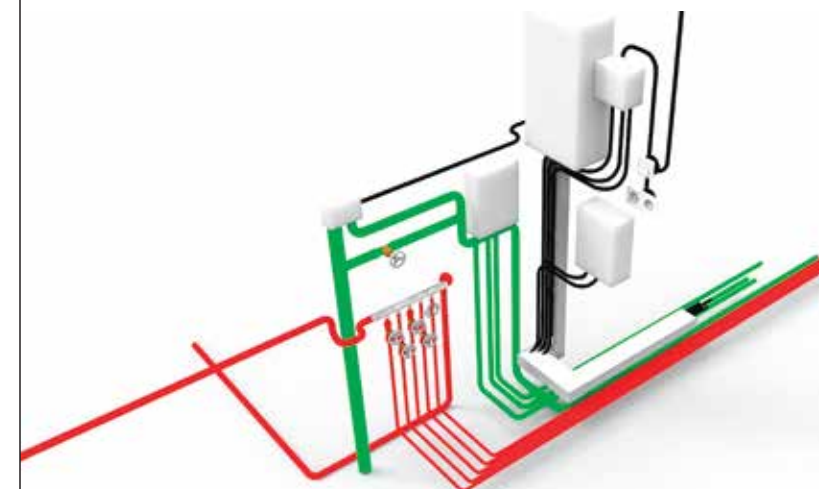
The best outcome of electrical design as a designer is generally depends on the successful collaboration between customer and electrical designer. As the buildings get more sophisticated the main focus of the design slides to the smooth collaboration between the designers of the different technological parts. It is important to identify the needs and wishes of the customer first. As well to determine the possibilities that customer can allow. Electrical designer's mission is to point out clients' attention to the different aspects and options onto what ordinary people will hardly come planning their electrical systems. This complex initial data is for the electrical designer to form the electrical design following all the relevant latest standards and acts.

# Plumbing DESIGN



The construction of a new building requires the design and implementation of several sophisticated systems, many of which have significant overlap with the structure's plumbing. To make sure that these systems are properly designed and executed, especially when the level of complexity is high, it is a very good idea to have a plumbing engineer as part of the project team. Here is a brief introduction to the role along with five reasons why this professional can improve building safety, security and functionality.

In a new construction project, a plumbing engineer can be responsible for designing the sanitary sewer system from the building to the point where it connects to a municipal sewer system, an on-side disposal system or specialized containment site. This helps to control standard sewer and wastewater that accumulates as part of daily activities in the building. If there are specialized sewage and drain system needs, he can also accommodate those. For example, the engineer can design drainage that separates wastewater streams if one of the streams needs specialized treatment before being diverted into a municipal sewer system.





# 3DVIEW

## 3D Visualization

It's time to leverage the power of 3D animation and visualization in improving operational efficiency in construction and manufacturing, as well as gaining maximum cost benefits. Today, it is important to market your product or project quick and in an effective manner. There is hardly any scope for trial and error, which not only delays time for product-to-market but also increases your cost substantially. This is where 3D visualization and animation can save your time and money.



# Interior DESIGN

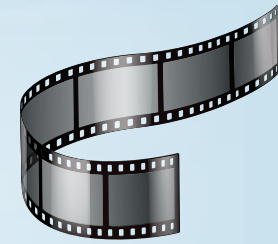
## Interior design & build

Our ethos is always to deliver inspiring interior that complements the way, the clients want to live, understanding and interpreting. Our client's preference of aesthetics and lifestyle are essential for our skill set in order that, the design reflects their personality and resounds to their individual tests and aspiration. We pride us on designing practical and aesthetically rich.



Commercial  
Residential  
Hospital  
Hotel  
suite  
Industrial  
resort  
School  
Municipal





## Animation

Our goal was to develop a 4D construction animation process that would take no more than two days of project time to set up the first animation and one day maximum to produce subsequent ones, as design progressed.



## Brochure DESIGN

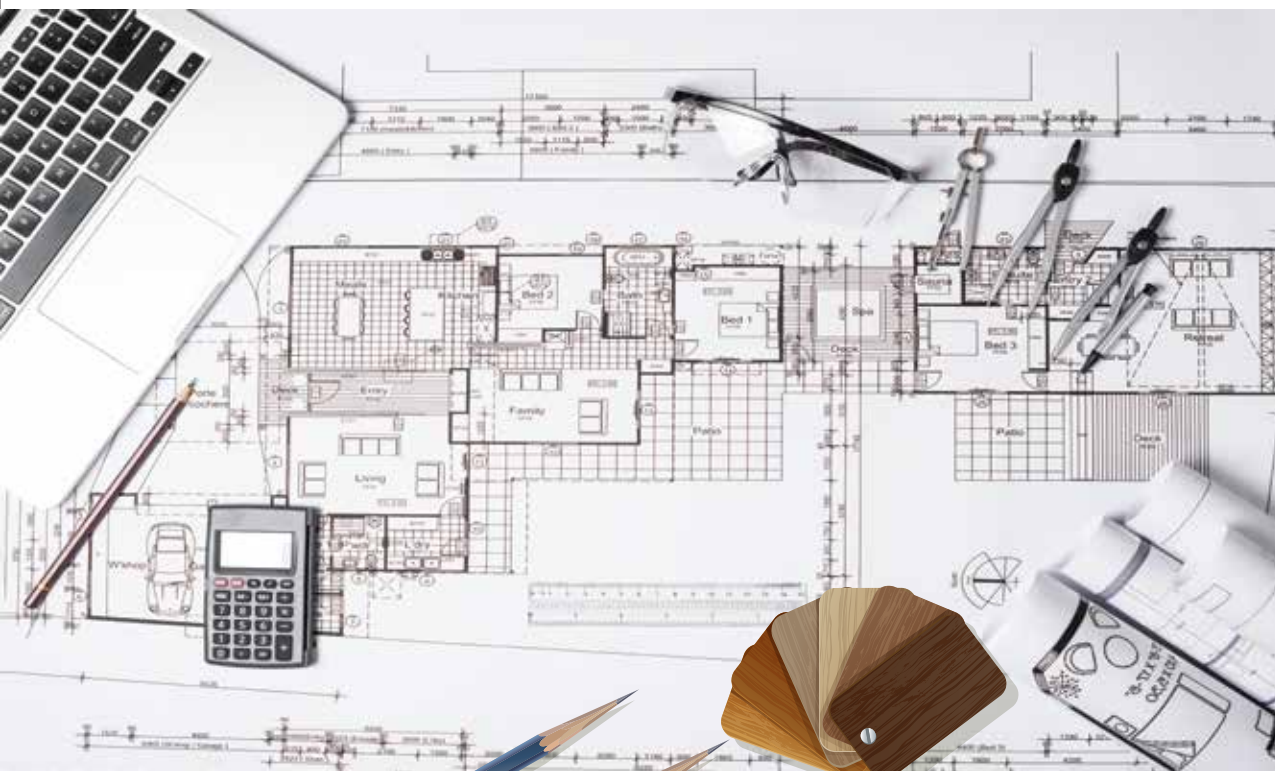


Brochures are powerful and effective tools for engaging and educating any audience. When it comes to brochures, it's all about the design. A great design will compel your audience to read all about what you're doing. A less-than-stellar design will end up in the trash can. A great brochure that drives results and makes a lasting impact on your target audience.





## Estimation Cost Analysis



## Approval from RAJUK

This guarantees that the materials used, all equipment and systems are of good quality, function well and conform to the standards within limiting of cos

## project Supervision



On construction sites large and small, supervision has a key role to play in preventing accidents. Typical supervisory functions include planning and allocating work, making decisions, monitoring performance and compliance, providing leadership and building teamwork, and ensuring workforce involvement. Supervision is therefore heavily involved in the running of a typical construction project and in particular in ensuring that health and safety is effectively managed.

Our construction site supervision services can be complemented with comprehensive quality control services. This guarantees that the materials used, all equipment and systems are of good quality, function well and conform to the standards. Our Site Engineers can also act as safety coordinators for the project – to make sure the site is a safe working place for everyone. Benefits -

- a) Helps to reach project goals
- b) Supervises that construction projects are executed properly
- c) Ensures quality, functioning and standard conformity of materials, equipment and systems
- d) Enhances safety on the site
- e) Makes sure that regulations are followed



- ❑ Hollow Block
- ❑ Parking Tiles
- ❑ Pavement Tiles
- ❑ Centering Block
- ❑ Piling Block



Hollow Block



Centering Block  
Piling Block



## Principal Concrete hollow blocks: Bangladesh perspective.

PHBI has consistently provided high quality work throughout its life span, strictly adhering to prescribed rules and regulations to maintain the highest quality standards. With our many years of experience, it is safe to say that no one knows building construction like we do we strive to ensure that we provide our customers the best value for their money and provide the country with better. Cost-effective, and environment friendly building solutions

As concrete hollow blocks are brought to you by PHBI building products - a concern of PHBI you can rest assured of the superior quality of the products as well as unmatched customer service that is highly emphasized throughout our company. Other than this, you can also rely on us for concrete paving tiles. We aim to increase our scope and range of building materials in the future to meet the different needs of the construction and real estate sector in Bangladesh.



Pavement Tiles

Parking Tiles

## The factory & our future plans

Our factory is situated in Sonargaon, Narayangong, Dhaka. The whole manufacturing process is done in-house with state-of-the-art

Fully automated, imported machines and full quality control measures to ensure the product is of the highest quality. Our focus presently is to make high class, good quality concrete hollow

Blocks and pavement tiles of various sizes at PHBI building products, we are constantly researching the different needs and requirements of the construction and real estate sector of Bangladesh in due time, we will be expanding our resources to introduce more products as well as to start exporting building products.

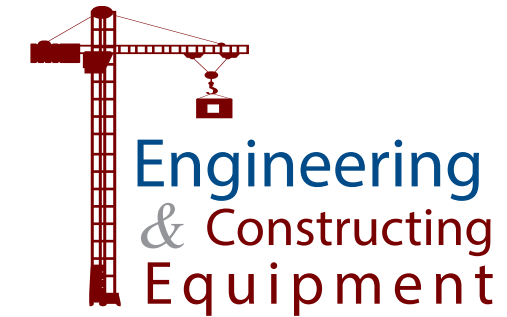
Our present focus is on production and promotion of: . Concrete hollow blocks pavement tiles







Strength of Concrete is the most important thing in your Construction. The degree of strength varies according to the size of the construction structure. And this strength depends on the quality of the concrete you use. Crown Ready Mix Concrete ensures the required and desired level of strength for your building.



Bangladesh (officially the People's Republic of Bangladesh) is one of the popular names of the world for its faster growing of economy, who endured a lot of crisis in her life. But after overcoming all of her destructions, recently Bangladesh has turned into a medium earning country from a poor country. Now, it is one of the floating countries economically in the current world. In order to a sustain and faster improvement, Bangladesh has taken many steps to its structural development like communication, education, medical, power supply, technology, express high way & bridge, metro rail, housing sector, foreign policy, industry, silo of grain, garments and so on.

We believe, Engineering & Constructing Equipment have a great opportunity to establish business organization considering the current circumstance of Bangladesh as its economy is flourishing rapidly. Considering of this bright possibility of Bangladesh and with the hope of keeping contribution in this development.

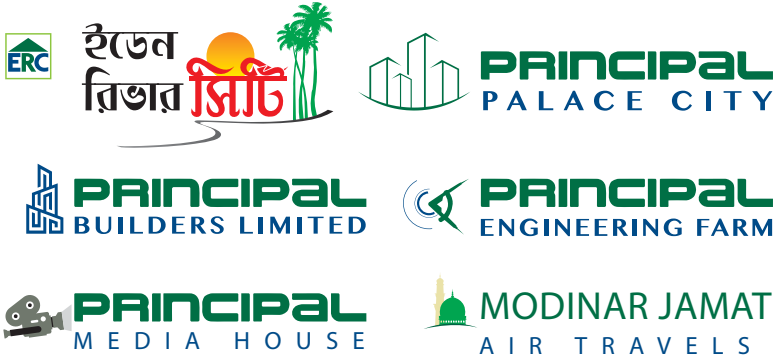




Complete  
**PROJECT**  
gallery



## Sister concern



**PRINCIPAL**  
**DEVELOPMENT LIMITED**

[www.principalgroupbd.com](http://www.principalgroupbd.com)

### Corporate Office

Sultan Ahmed Plaza (11<sup>th</sup> Floor), Suite # 1203  
32 Purana Paltan, Dhaka-1000. Tel : 88-02-9584839

**Hot Line : 01976 111 504, 01976 111 505**

✉ [info@principalgroupbd.com](mailto:info@principalgroupbd.com) [f principaldevelopment](https://www.facebook.com/principaldevelopment)