

Brand your project with
worldwide accredited
green building standards



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LEAD
CONSULTING

WHAT IS Green Building ?

A 'green' building is a building that, in its design, construction or operation, reduces or eliminates negative impacts, and can create positive impacts, on our climate and natural environment. Green buildings preserve precious natural resources and improve our quality of life.

There are a number of features which can make a building 'green'. This includes:

- Efficient use of energy, water and other resources
- Use of renewable energy, such as solar energy, hydro, bio gas etc.
- Pollution and waste reduction measures, and the enabling of re-use and recycling
- Good indoor environmental air quality
- Use of materials that are non-toxic, ethical and sustainable
- Consideration of the environment in design, construction and operation
- Consideration of the quality of life of occupants in design, construction and operation
- A design that enables adaptation to a changing environment



Why Green Building?

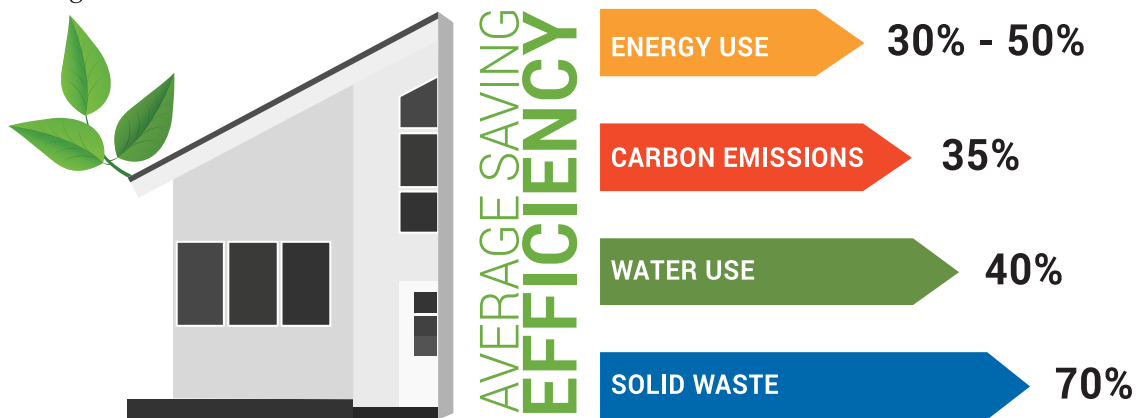
There are many reasons why we can recommend Green Building design and construction. The first and most obvious reason is our responsibility protecting the environment for our own benefit and even more so for our future generations.

Green buildings save energy costs by reducing the energy consumption. Traditional buildings consume more of the energy resources than any other building components. Therefore, green building materials are composed of renewable rather than non-renewable resources. They are eco-friendly materials which do not cause damage to human body. Green building materials consist of recycled materials; highly efficient insulation, agricultural buildings, bio cement, eco-cement, green concrete, green roofs, low-energy building, Zero-carbon building, eco-construction



Green Building Benefits include:

- Energy consumption 25-40% less compared to a standard code compliant building
- Reduced water consumption up to 50 % compare to conventional building
- Less waste generation and carbon emissions up to 35% less than conventional buildings
- Better management and maintenance and enhance life cycle
- Savings for ongoing running costs (operational cost)
- 10-25% higher mental function and memory when they have access to external views
- Students achieve 5-14% higher test scores with access to natural daylight
- 11% increase in staff productivity with adequate ventilation and fresh air
- Occupancy rates, rental returns and resale price consistently higher than standard stock buildings



What Is LEED Certification?

LEED (Leadership in Energy and Environmental Design) is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Developed by the U.S. Green Building Council (USGBC), LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.

LEED is flexible enough to apply to all building types – commercial as well as residential. It works throughout the building lifecycle – design and construction, operation, tenant fit out, and significant retrofits. And LEED for Neighborhood Development extends the benefits of LEED beyond the building footprint into the neighborhood it serves.

LEED provides a point system to score green building design and construction. The system is categorized in five basic areas: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. Buildings are awarded points based on the extent various sustainable strategies are achieved. The more points awarded the higher the level of certification achieved from Certified, Silver, Gold, to Platinum.



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LEAD Consulting Limited:

About us:

Who we are:

LEAD Consulting is premium green building certification company in Bangladesh. It has started its journey on October 2017 as a public limited company. From the beginning we are committed to provide quality and value added services to our clients who wish to go LEED Certification. Our key focuses are as below:

- Comparatively lowest price but the best services in the market
- Always available for any assistance
- Regular site visit and guideline on procedure to be followed
- Have 25 projects under certification process
- Equipped with qualified experts in all required fields
- On time project delivery and certification award

Our team:

The Company is equipped with expertise such as well experienced Architects, Electrical and Mechanical Engineers. We have in house most experienced Green Architects, HVAC expert, Energy modeler, Electric designer, MEP expert, Energy auditor and Commissioning agent.

Key Services

Our green building consulting and certification facilitation services will support you both technical-ly and administratively towards high performance green building standard to comply with environmental certification requirements.

- Feasibility Studies
- Certification Consulting
- Certification Facilitation
- Energy Modeling
- Water Budget Calculations
- Daylight Simulations
- Thermal Comfort Analysis
- Carbon footprint calculations
- Energy Audit
- Green Interior



LEED Certification

Our areas of expertise include:

- Sustainable master planning
- Green Charettes and design workshops
- Building Energy efficiency studies including whole building energy simulations, day lighting analysis, sun path and shading analysis, radiation analysis, fenestration analysis, passive design strategies review, MEP design peer review and analysis, renewable energy studies among others
- Policies & Plans Development & Implementation for existing building certification programs
- Green materials and product analysis including consultancy and support for creating EPDs (Environmental Product Declarations), LCA (Life cycle assessment) analysis, for various products and calculations of GHG (Greenhouse gases) emissions footprint for products
- Green Training & education
- Preparing Green Building Certification Documentation

- Pre-certification documentation and Management whenever applicable
- Ongoing coordination with project team members
- LEED Online Management
- Project Submission & answering clarifications and coordination until award of final LEED Certification.
- Recertification – for projects under LEED EB O&M certification within 5 years of its original LEED certification

Green Building Feasibility Study:

You want to go green but have already started your design process. You are not sure if at this stage whether you can still pursue a green certification. In such cases, we can do a quick feasibility study/gap analysis to assess the building(s) likelihood of certification, and the necessary steps to get there in the most effective and timely manner. The same can be done for existing buildings which want to pursue a green certification as well.

The gap analysis generally focuses on the following areas:

- Minimum Program Requirements attainment
- Prerequisite Performance & changes that may have to be done to meet mandatory requirements
- Minimum Energy and Water Efficiency performance and further improvements that can be made to enhance performance
- Credit-by-Credit Review for any green building rating including LEED, GRIHA.
- Opportunity for improvement

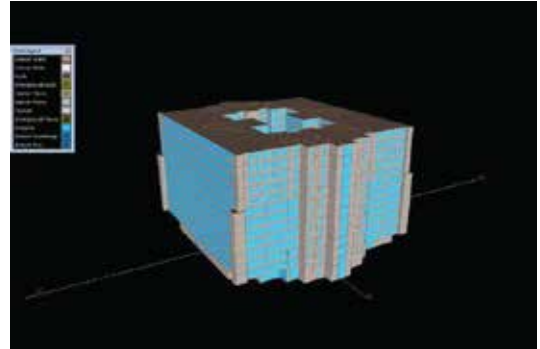
The analysis will also provide preliminary budget estimates for each level of certification which becomes a decision making tool for the project goals and strategy in the pursuit of building certification.

We have experience working with green projects since 2016 and have to our credit more than 25+ projects in Bangladesh and another 500+ green projects globally.



Energy modeling and building simulation

Whole building energy modeling and simulations are a very important part of any high performance building design and is a very useful tool to help projects arrive at the optimum specifications and design that is cost-effective and still helps achieve the desired energy saving goals. Our in-house teams of energy experts and analysts help projects analyze their designs, review HVAC design approaches and configurations, evaluate energy efficiency strategies and set performance targets for projects to achieve within specific budgets.



Specifically our services include:

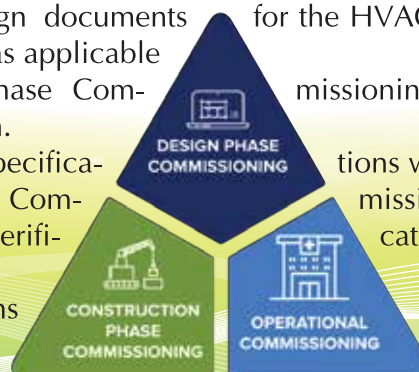
- Whole building energy simulation including fenestration analysis, wall and roof assembly optimization, HVAC, lighting and other systems analysis
- Review of passive design techniques and their feasibility for buildings
- Sun path analysis, shading analysis, radiation analysis
- Day lighting simulations and views analysis
- Peer review of HVAC and Electrical designs to ascertain optimum sizing and configurations for maximum energy efficiency
- Renewable energy studies for on-site and off-site solar, geothermal, wind, biomass and cogeneration systems etc.

Building Commissioning:

Building commissioning (Cx) is an all-inclusive process of systematic quality assurance that verifies building systems to be designed, installed, tested, and capable of being operated and maintained to perform interactively according to the design intent and the owner's operational needs. We have tremendous expertise in the building commissioning activities and have been performing these activities for several years in line with international guidelines and requirements. Our services and expertise for commissioning include:

Design Phase

- Develop the owner's project requirements.
- Verify the initial design intent document from information contained in Design Consultant's building programming document.
- Prepare a design-phase Commissioning Plan
- Review the schematic design documents for the HVAC, mechanical, electrical, plumbing, and other systems as applicable
- Prepare the construction-phase Commissioning Plan required as part of the
- Review the final plans and specifications in all areas relating to the Commissioning process.
- Develop a measurement & verification plan keeping in mind project
- Review contract specifications for various tender packages



Construction Phase

- Execute the Commissioning process through proper coordination, tests, demonstrations, training events, and performance verifications as required
- Review the complete commissioning process with MEP contractors
- Establish tentative schedules for various systems commissioning; O&M submittals; training sessions; system flushing and testing; job completion; Testing, Adjusting, and Balancing (TAB) work; and functional performance testing.
- Receive and review the operations and maintenance (O&M) manuals submitted by contractors
- Check installation for adequate accessibility for maintenance and component replacement or repair.
- Witness equipment, subsystem, and system start-up and testing and all TAB work supervise the commissioning team members in the functional performance tests.
- Review record drawings for accuracy with respect to the installed systems. Request revisions, as and when necessary, to achieve accuracy.

Training

Coordinate the various system contractors and conduct system training and inspection. Perform training for all facility operators and maintenance personnel on various aspects of O&M to ensure that the building systems perform as per requirements

Final Documentation

- Ensure that O&M manuals and all other records have been updated.
- Conduct a selective review of contractor submittals of commissioned equipment.
- Prepare the Systems Manual.
- Repeat functional performance tests to accommodate seasonal tests and/or correct any performance deficiencies. Revise and resubmit the Commissioning Report.
- Prepare the final Commissioning Report.
- Develop a re-commissioning management manual.
- Recommend acceptance of the commissioned systems to the Project Manager.

Post Occupancy Phase

- Complete the outstanding issues pertaining to commissioning.
- Monitor the building energy & water performance post occupancy for the period of 12 months.
- Conduct & verify periodic performance evaluations of facility systems and assemblies
- Complete enhanced commissioning report for the project

Workshop and Training program:



Daylong Green Building and Green
Factory Workshop:

Learning Outcome:

- A Day long of Live Integrative Workshops
- Workshop Workbook
- Gain comprehensive knowledge on environmental issues and benefits of sustainable development
- Participant would understand basic of Green Building or LEED Certification process
- Be confident to supervise a project that would go for certification under LEED rating system
- Know the real cost involve to obtain LEED Certification and its core values

Benefits from this workshop:

- Able to understand the need to take initiatives during construction and operations
- Learn how to close gaps and strengthen Environmental, health and safety in your business
- Understand impact category and respective points distribution to each category
- Achieve knowledge on documentation needed for each credit point
- Share expertise across your organization to build an healthy and congenial work environment
- Easily connect to the community who are engaged in Sustainable Development

Content of the workshop:

- Expose the participants to the basic information on Global Warming, Sustainable Development, Green
- Building and Certification System, Global Green Certificate Authorities and LEED Rating System and
- LEED Rating system's NC BD+C category in credit by credit for further understanding
- Explain Green Building core values and Triple Bottom Line benefit and Mythology about first costs
- Simple and Step by Step process of green building certifications and a Participations Certificate

Who can attend?

- Any stakeholder related to Green Building Certification process
- Factory owner, Real estate developer
- Architects, Engineers (Civil, Structural, Mechanical, Electric, Maintenance)
- Consultants like MEP, HVAC, Lighting, Landscape etc.
- HR, Admin, CSR, ESH, Compliance etc. professionals.
- Personnel engaged with ISO14001, EMS, HIGG Index, and SA8000 etc.
- Sustainable product vendors like (LED, Power, Renewable, Low-e Glass etc.)
- Banking professional who deals Sustainable Finance operations

1st day Long Green Building workshop at Chittagong, on Dec 30, 2017



2nd Day long Workshop on Green Building, Dhaka, Nov 4, 2018



LEED Green Associate Exam Preparation:

LEED Green Associate is the introductory level of accreditation and sets you apart from your competition as a green building expert. Developed by U.S Green Building Council, LEED (Leadership in Energy & Environmental Design) is the universally accepted green building system and covers all elements of building Construction including: site, water, energy, materials, air quality & design innovation.

- 2 Days of Live Workshops (Class Study)
- LEED v4 Green Associate Exam Preparation Study Guide (Hard Copy)
- LEED v4 Green Associate Exam Preparation Study Audio Book Mp3 (Soft copy)
- Green Associate Practice Exams (1000 Questions)
- Flash Cards
- Simple and Step by Step process
- of passing LEED Green Associate
- Exam and a Participations Certificate.
- 1000 Slides on different impact category like Sustainable Sites, Location and Transportation etc.
- 3rd Day (Half Day) Mock Exam (100 questions) and revision session (one week before the exam this can be planned on a date)



Our completed project in Bangladesh:

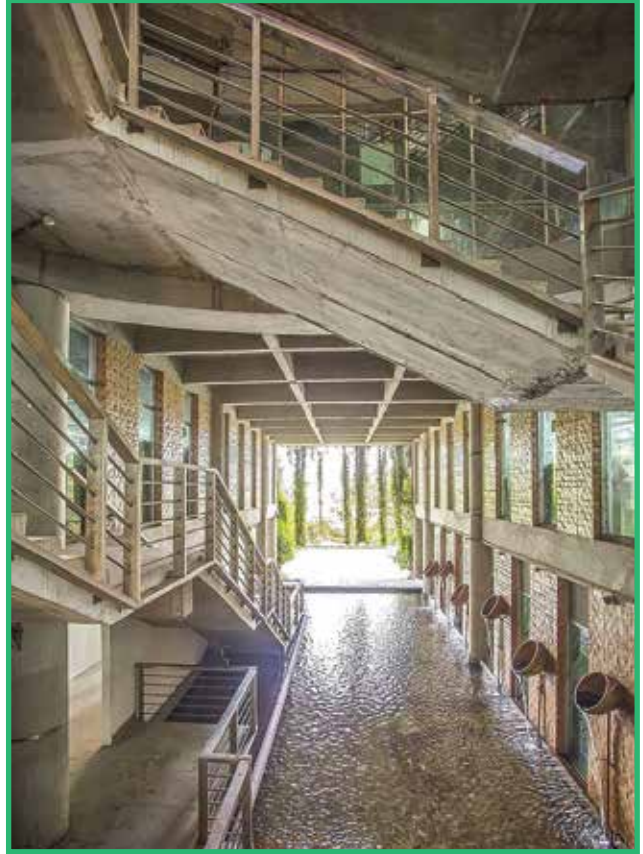
Recently we have successfully completed Karupannya Rangpur Limited LEED Certification process. On July 10, 2020 they have declared as LEED Platinum Certified building under LEED V4.1 EM O+M category. They have achieved 84 out of 100 in Arc Platform.

Karupannya started its journey in 1991 in Rangpur with just 15 craftsmen, and now it has 5,000 workers and employees producing carpets, the majority of which are exported to the European Union, the US and Asia. At present, the factory produces about 15 types of products — all floor coverings made out of waste sourced from the garment and textile sector, jute, waste yarn, rope and short fiber. It also produces some home textiles and products for a number of local furniture makers as per their designs. The environment friendly factory was designed by Architect Bayejid M. Khondker and his team, Nakshabid Architects.

Major improvement towards sustainability by Karupannya Rangpur Ltd.

- They have natural shading to protect from excessive heat (Trees on south and east sides)
- They harvest Rain water
- Good performance in Energy and water use
- One site renewable energy (Solar PVC) 89 KW
- Boiler operated by rice husk
- Zero discharge biochemical ETP
- High SRI paint on roof top
- Biogas plant by using organic food waste and tree waste in the factory
- Fresh air in all occupied spaces
- They have implemented Green awareness program and green cleaning policy
- Adopted 'No smoking' policy
- Material recycle
- Efficient waste management (storage and sale to the waste hauler)
- Less carbon emission





Project Experiences by our Chief Consultant:

During his green building consultation career he has been involved with below project (construction progress and documentation collection)



Our upcoming project list:



About chief consultant:



Md. Golam Rahman

LEED AP BD+C, Msc Env Sci, JU

He is a LEED AP BD+C plus Master's in Environmental Science and Management from Jahangirnagar University. He has tremendous on hand practical experience on delivering on LEED Projects. His green journey has started from May, 2016 when he was employed by a consulting firm. He has served their for one year and was responsible for 15 ongoing projects such as; Aman Graphics & Designs Limited, Patriot Eco apparel Ltd., Deva limited, Amanat Shah fabrics Ltd., Finesse Apparels Ltd, DBL Group, Bravo Ltd (Amtranet Group), Birds A & Z Ltd., Alpha Clothing Ltd. During his services he has organized to conduct several workshops on Green building at Dhaka and Chattogram respectively. He has conducted two whole day workshops on Green Building on December 30, 2017 at Chattogram and on November 04, 2018 at Dhaka. In 2018 he has enrolled his Master's program in Jahangirnagar University in Environmental Science and Management and successfully passed on April 2019. His Masers thesis was on Green Building, perspective Bangladesh.