



LEED

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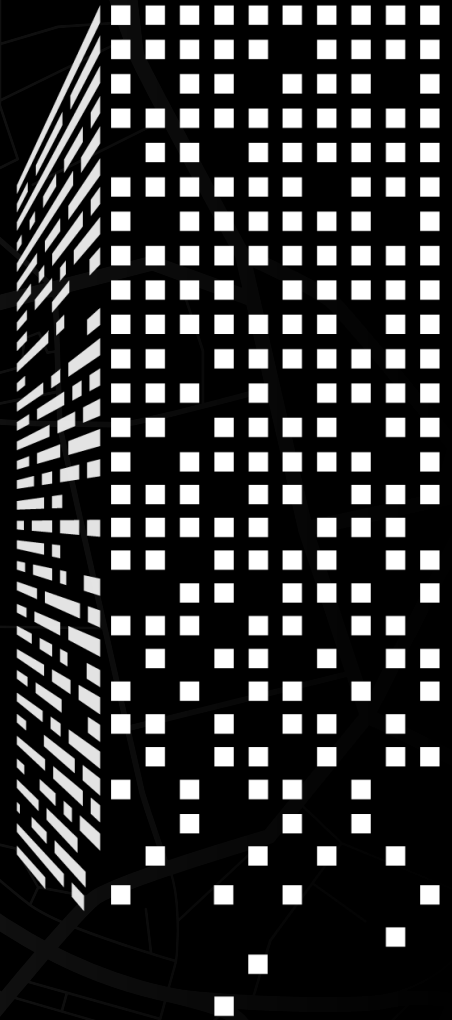




TABLE OF CONTENTS

01

WHAT IS LEED?

02

RATING SYSTEMS AND CATEGORIES

03

TYPES OF CERTIFICATION AND CREDENTIALS

04

STEPS TO CERTIFICATION AND STATISTICS

05

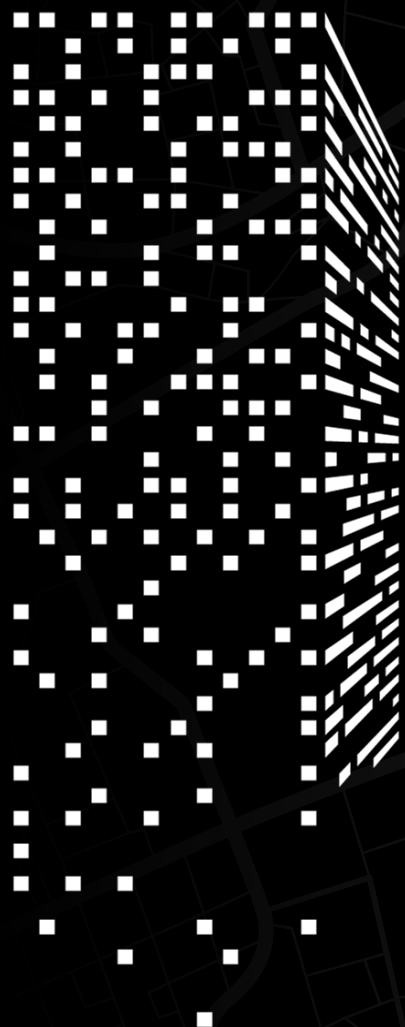
CASE STUDIES



WHAT IS LEED?

The Leadership in Energy and Environmental Design, better known as LEED is basically a certification programme for green buildings, applicable internationally.





WHAT IS LEED?


LEED was developed by the USGBC (the US Green Building Council), which is a non-profit organization. LEED offers rating systems for various areas, such as design, construction, operation and maintenance of green buildings and neighbourhoods. This process aids the use of resources in an efficient manner, and be environmentally responsible.





“The LEED plaque on a building is a mark of quality and achievement in green building.”

WHY IS LEED IMPORTANT?



LEED helps create a better environment by encouraging designers, constructors and manufacturers to create energy and resource efficient buildings, as well as healthier and more meaningful spaces and places by highly decreasing the damage and stress done on the environment.

RATING SYSTEMS

GREEN BUILDING DESIGN & CONSTRUCTION

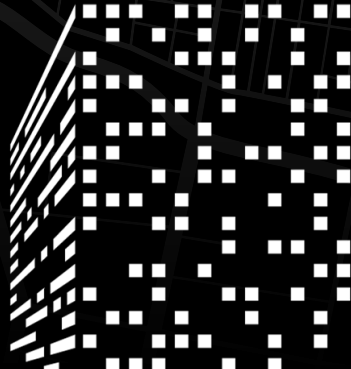
- LEED for New Construction
- LEED for Core & Shell
- LEED for Schools
- LEED for Retail: New Construction & Major Renovations
- LEED for Healthcare

GREEN INTERIOR DESIGN & CONSTRUCTION

- LEED For Commercial Interiors
- LEED for Retail: Commercial Interiors

GREEN BUILDING OPERATIONS & MAINTENANCE

- LEED for Existing Buildings: Operations & Maintenance





RATING SYSTEMS

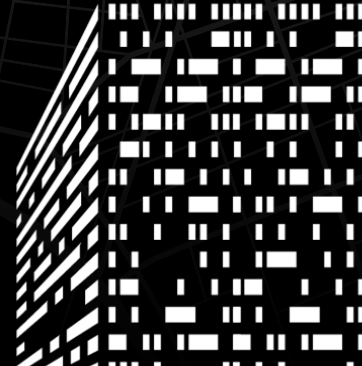
GREEN NEIGHBORHOOD DEVELOPMENT

- LEED for Neighborhood Development




GREEN HOME DESIGN & CONSTRUCTION

- LEED for Homes (Different point categories than others)






CATEGORIES OF CERTIFICATION



There are several categories with respective point ranges for the applicant to be certified with a LEED Certification. These categories also help determine which type/grade of certification will be righteous and accurate for the applicant. There are 6 main and 2 sub categories, with a total of 110 points.



1. Location & Transport (16 Points)

This category is a rather new addition to the rest of the categories. The main aim of this category is to make sure that the design decreases the carbon footprint of those accommodating in the building in any way. The building should NOT be built on usable/fertile land, and needs to be close to social life, to minimize car usage. This category also consists of credits such as green parking areas, proximity of the design to the public transportation areas and cycling paths.



2. Sustainable Sites (10 Points)

One of the most important things about green buildings are that they need to create a sustainable site. This means minimizing and preventing to the best of their abilities, the wastes and erosion caused from the construction. Integrating greenery, open spaces and exterior lighting, as well as utilizing the rainwater falling down on the site, etc.



3. Water Efficiency (11 Points)

The efficient use of water is very important in any Project/construction phase. In this category, minimizing the water usage and recycling gray water is very crucial. Water purification is also important. The geographical location and climate of the site should also be taken into consideration when planning for landscape and sewage.



4. Energy & Atmosphere (33 Points)

In this category, the aim is to encourage taking advantage of the latest technology in order to create an energy source, or even make the building its own energy source, and prevent any damage to the atmosphere. Cooling and heating systems, as well as ventilation systems play a very important role in this category, especially in the form of passive energy/ventilation/heating-cooling systems. Isolation, materials and glass choices are also very crucial (they need to have a low U-value). In the case of zeroing out the carbon footprint in the building, an extra of 2 points will be rewarded.



5. Materials & Resources (13 Points)

When getting materials for construction, especially when they are shipped/imported, it's important to consider any environmental aspects. In order to prevent any damage on the environment, less imports should be done and local materials should be used, in order to reduce excessive usage of resources. The materials utilized should also be recyclable.

If local/ EPD (Environmental Product Declaration) certified materials are used, the designers will receive an extra of 3 points.

6. Quality of Indoor Environment (16 Points)

The functions assigned to the Project are also taken into consideration throughout the process of certification.

Reducing the polluting substances in the interior, increasing quality of life, preventing the usage of radioactive devices, using healthy indoor materials and creating social environments are also priorities with the rewarding of the certificate.

Fresh air intake and filter usage are encouraged, while smoking prohibitions take place and activities that may cause emission in the interior are discouraged.

7. Innovation & Regional Priority (10 Points)

The remaining 10 points for the certification process is mostly concerned about the innovative techniques utilized within the design and construction phase, as well as exemplary performance and regional priorities. Regional priorities suggest that the location of the Project is declared in the list of «LEED Regional Priority».





Innovation



Introduction of novel features and procedures

Indoor Environmental Quality



Use of natural light and efficient air conditioning

Materials and Resources



Responsible construction waste management and sustainable sourcing of materials

Location and Transportation



Land protection and access to public transportation and green vehicles

Sustainable Sites



Sufficient green open space and light pollution reduction

Energy and Atmosphere



Optimizing sustainable energy production and metering

Water Efficiency



Indoor and outdoor water reduction

TYPES OF CERTIFICATION



CERTIFIED

40-49 Points



SILVER

50-59 Points



GOLD

60-79 Points



PLATINUM

80+ Points



TYPES OF CERTIFICATION



LEED CREDENTIALS



LEED AP

LEED AP, also known as LEED Accredited Professional, is a title given to professionals who have been proven proficient in terms of knowledge in green building and expertise in particular rating systems. A proficiency exam is required to get the title of LEED AP.

LEED Green Associate

Demonstrates a solid and current foundation in green building principles and practices.

LEED Fellow

This credential is given to professionals with more than ten years of green building experience and proficiency. It is peer-nominated.

STEPS TO CERTIFICATION

REGISTER

Registration is required. The Project to be certified needs to be registered by giving the accurate information.

SUBMIT

After registration, a complete and extensive application is done through the website of LEED, and a fee is paid.

REVIEW

GBCI (Green Business Certification Inc.), a third-party organization reviews the applications and submissions fitting to the preselected criteria.

CERTIFY

Qualified and eligible projects are certified by GBCI.

Environmental benefits: Help the environment and reduce carbon with LEED

Reduced energy use and carbon emissions

34%

lower CO₂ emissions*

25%

less energy consumed*

11%

less water consumed*

80 million

tons of waste diverted from landfills*

89/100

average ENERGY STAR score for LEED projects

25%

less energy on average used by LEED buildings compared to commercial buildings

1.3 million

tons of coal equivalent saved each year

78 million

tons of avoided CO₂ emissions

*Re-Assessing Green Building Performance: A Post Occupancy Evaluation of 22 GSA Buildings. Kim M. Fowler, Emily M. Rauch, Jordan W. Henderson.

CASE STUDIES

Savona, Italy — first LEED-certified city in Europe
LEED for Cities - LEED Gold



CASE STUDIES

Unilever Turkey Central Office — Turkey's first LEED-certified project
LEED for Commercial Interiors - LEED Silver



CASE STUDIES

One Bryant Park— first high-rise building to receive LEED Platinum
LEED for Core & Shell - LEED Platinum



CASE STUDIES

Turkish Contractors Association Headquarters— 1 of the 5 buildings in Turkey to receive LEED Platinum
LEED for New Construction - LEED Platinum



CASE STUDIES

Kuzu Effect Mixed-Use Project—first Mixed-Use Project in Turkey to receive LEED Gold
LEED for New Construction - LEED Gold



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