



Center for Computing & Data Sciences, Boston  
LEED Platinum

# + LEED CERTIFICATION

D+H's contribution

## What is LEED?

LEED (Leadership in Energy and Environmental Design) is a green building rating system developed by the U.S. Green Building Council (USGBC) in 1998. Today it is among the most renowned and most widely used green building rating systems in the world with certified projects in 180 countries. The Green Business Certification Inc. (GBCI) verifies and reviews projects that are enlisted for achieving LEED certification. LEED offers certification during design, construction, operation, and performance of a project and is applicable for both existing and new buildings (incl. interiors) as well as for cities and communities.

LEED is not a product certification, but rather a holistic system assessing the overall performance of a building pursuing the following goals:

- » enhance individual human health
- » protect and restore water resources
- » protect and enhance biodiversity and ecosystem services
- » promote sustainable and regenerative material cycles
- » enhance community quality of life

Three components contribute to LEED certification within the credit categories. These are prerequisites, credits, and points. Prerequisites represent minimum requirements without which LEED certification is impossible. Credits can be understood as assessment criteria within the credit categories that can earn the project points. According to the level of adherence to the respective credit category, the GBCI awards points that correspond to a specific level of

The following rating systems appropriate for various different projects are offered in LEED version v4.1:

1. LEED for Building Design and Construction (BD+C)
2. LEED for Interior Design and Construction (ID+C)
3. LEED for Residential BD+C
4. LEED for Cities and Communities
5. LEED for Building Operations and Maintenance (O+M)

Within these rating systems, LEED has set up the credit categories below:

1. Integrative Process
2. Location and Transportation
3. Sustainable Sites
4. Water efficiency
5. Energy and Atmosphere
6. Materials and Resources
7. Indoor Environmental Quality
8. Innovation
9. Regional Priority

LEED certification. Thus, depending on the overall achievement, four certification levels are obtainable:

- |               |           |
|---------------|-----------|
| 40-49 points: | Certified |
| 50-59 points: | Silver    |
| 60-70 points: | Gold      |
| 80+ points:   | Platinum  |



## D+H's contribution to LEED certification

D+H's products and solutions can contribute to a project earning LEED points in three credit categories. The scorecard below lists these credit categories in LEED version 4.1 for BD+C (Building Design and Construction): New Construction with their respective assessment criteria. The column on the right indicates whether the assessment criteria

is a prerequisite or the amount of points that can be achieved towards overall certification. Products and solutions of D+H can directly or indirectly impact LEED certification. Assessment criteria to which D+H's products have a direct contribution are highlighted in bold and red, those with an indirect contribution in bold.

### LEED v4.1 BD+C (Building Design and Construction): New Construction Scorecard according to the LEED credit library

Credit	POINTS / PREREQUISITES
ENERGY AND ATMOSPHERE	33 total sum categorie
Fundamental Commissioning and Verification	Prerequisite
<b>Minimum Energy Performance</b>	<b>Prerequisite</b>
Building-Level Energy Metering	Prerequisite
Fundamental Refrigerant Management	Prerequisite
<b>Optimize Energy Performance</b>	<b>18</b>
Enhanced Commissioning	6
Advanced Energy Metering	1
Renewable Energy	5
Enhanced Refrigerant Management	1
Grid Harmonization	2
MATERIALS AND RESOURCES	13 total sum categorie
Storage and Collection of Recyclables	Prerequisite
Building Life-Cycle Impact Reduction	5
<b>Environmental Product Declarations</b>	<b>2</b>
Sourcing of Raw Materials	2
<b>Material Ingredients</b>	<b>2</b>
Construction and Demolition Waste Management	2
INDOOR ENVIRONMENTAL QUALITY	16 total sum categorie
<b>Minimum Indoor Air Quality Performance</b>	<b>Prerequisite</b>
Environmental Tobacco Smoke Control	Prerequisite
<b>Enhanced Indoor Air Quality Strategies</b>	<b>2</b>
Low-Emitting Materials	3
Construction Indoor Air Quality Management Plan	1
Indoor Air Quality Assessment	2
<b>Thermal Comfort</b>	<b>1</b>
Interior Lighting	2
Daylight	3
Quality Views	1
<b>Acoustic Performance</b>	<b>1</b>

Legend

**Direct contribution**  
**Indirect contribution**

## Assessment criteria that D+H can contribute to

### Energy and Atmosphere

#### **Minimum Energy Performance**

Intent: To promote resilience and reduce the environmental and economic harms of excessive energy use and greenhouse gas emissions that disproportionately impact frontline communities by achieving a minimum level of energy efficiency for the building and its systems.

#### **Optimize Energy Performance**

Intent: To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use and greenhouse gas emissions that disproportionately impact frontline communities.

D+H contributes to reducing the overall energy use within a building with its controlled natural ventilation systems that serve as an excellent alternative to air-conditioning systems and other mechanical ventilation systems. By closing the permanent opening in the lift shaft, D+H's lift shaft smoke extraction and ventilation solutions provide an energy-efficient opportunity to not only decrease CO<sub>2</sub>-emissions, but also heating energy costs of up to 7 % for the entire building.

### Materials and Resources

#### **Environmental Product Declarations (EPDs)**

Intent: To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products from manufacturers who have verified improved environmental life-cycle impacts.

With its Environmental Product Declarations for electrical control units and pneumatic valves as well as for electrical drives and pneumatic cylinders, D+H provides information on the environmental performance of its products from a life-cycle perspective in a transparent way.

#### **Material Ingredients**

Intent: To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products for which the chemical ingredients in the product are inventoried using an accepted methodology and for selecting products verified to minimize the use and generation of harmful substances. To reward raw material manufacturers who produce products verified to have improved life-cycle impacts.

D+H subscribes to minimizing the use of harmful substances in its electronic products by complying with the Restriction of Hazardous Substances Directive 2011/65/EU and its extension 2015/863/EU (RoHS).

## Indoor Environmental Quality

### Minimum Indoor Air Quality Performance

Intent: To contribute to the comfort and well-being of all building occupants by establishing minimum standards for indoor air quality (IAQ).

### Enhanced Indoor Air Quality Strategies

Intent: To promote occupants' comfort, well-being, and productivity by improving indoor air quality.

D+H's natural ventilation solutions help managing the supply of fresh air by a high air exchange rate, thus creating a healthy working and living environment and reinforcing a sense of well-being.

### Thermal Comfort

Intent: To promote occupants' productivity, comfort, and well-being by providing quality thermal comfort.

D+H's BlueKit system for lift shaft ventilation reduces the stack effect within the building and can thus positively impact the thermal comfort. Moreover, D+H's controlled natural ventilation solutions can provide fresh outside air for improved thermal comfort.

### Acoustic Performance

Intent: To provide workspaces and classrooms that promote occupants' well-being, productivity, and communications through effective acoustic design.

The use of D+H's drives that are low-noise can reduce the overall equipment noise leading to increased comfort levels in workspaces and classrooms.

## Did we catch your interest?

Your specialist Frederik Rocksien will be pleased to advise you on which D+H products and solutions will have the best impact on your LEED certification.



### Your contact

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