

Schindler's contribution to LEED Corporate sustainability









- **1.** Omnitower in Frankfurt, Germany Certified building under LEED Level: Platinum.
- 2. Lakhta Center in St. Petersburg, Russia Certified building under LEED Level: Platinum.
- **3.** Torre Reforma in Mexico City, Mexico Certified building under LEED Level: Platinum.
- **4.** Sinar Mas Plaza in Shanghai, China Certified building under LEED Level: Gold.
- **5.** One Vanderbilt in New York City, USA Certified building under LEED Level: Gold.







Our contribution

For Schindler, sustainability stems from a dual commitment: we want to fulfill our vision of leadership in urban mobility solutions and strive to minimize our impact on the environment. With over 147 years of history, investing in people and society, Schindler has been recognized as a responsible corporate citizen around the world. We firmly intend to continue evolving along this path, setting even more stringent and ambitious goals for Schindler moving into the future.

How can we support your sustainable goals?

If you are looking to have your building LEED (Leadership in Energy and Environmental Design) certified, we can support you with our energy efficient elevators and escalators. We offer configurations that address various LEED credits, from energy to material. Our Schindler sales reps and engineers can help ensure your project meets green building standards and minimizes the environmental impact on the local community.

Sustainability in Schindler products and processes

From the first sketches in design, right through to disposal and recycling, environmental assessment considerations are an integral part of the Schindler product development process. By focusing on sustainability, we have:



Enhanced the environmental performance of our elevators and escalators



Improved the energy efficiency and sustainable materials used in our supply chain



Digitized the field documentation, saving 250 metric tons of paper annually



Optimized our shipping and logistic activities

What is LEED?

LEED certification

LEED, developed by the U.S. Green Building Council (USGBC), is a globally recognized green building rating scheme. It includes rating systems for the design, construction, operation, and maintenance of sustainable buildings, homes and neighborhoods. The LEED certificate can be applied to virtually all building types and building phases, including new construction, renovation, operation and building maintenance.

Since its launch in 1998, more than 96,000 projects in over 167 countries and territories were registered and certified under LEED. The current version, LEED V4.1, aims to raise the bar on building standards in the areas of energy efficiency, water conservation, site selection, material selection, day lighting, and waste reduction.

According to USGBC, building to LEED standards has been shown to emit 50% less Green House Gas (GHG) than conventionally constructed buildings due to water consumption, 48% less GHG due to solid waste, and 5% less GHG due to transportation¹. Furthermore, LEED certified buildings are more cost effective because of their lower energy, water, waste, and maintenance costs. This also raises their values due to higher popularity among prospective tenants, increasing rental and occupancy rates.

LEED categories

LEED certification provides independent, thirdparty verification that a building was designed and built to achieve high performance in key areas of human and environmental health: innovation, indoor environmental quality, materials and resources, location and transportation, sustainable sites, energy and atmosphere, and water efficiency.



innovation



indoor environmental quality



materials and resources



location and transportation



sustainable sites



energy and atmosphere



water efficiency

Each of these categories has pre-defined credits that, once met, contribute to the overall points of the project.

LEED rating systems

The latest LEED rating system consists of five focus areas, to address various types of projects and building phases:

- Building design and construction
- Interior design and construction
- Building operations and maintenance
- Neighborhood development
- Homes

LEED performance rating

Projects that are pursuing an LEED certificate receive points based on their ability to meet various green standards, according to a pre-defined credit system (e.g. a project receives one point for Sustainable Site Credit 7 by reducing light pollution). The aggregate points then determine the LEED certification rating of the project. There are 4 LEED certification ratings that can be awarded: Certified, Silver, Gold and Platinum.

Certified	40-49 Points
Silver	50-59 Points
Gold	60-79 Points
Platinium	80+ Points

More information is available at https://www.usgbc.org/leed

¹ https://www.usgbc.org/leed/why-leed.

Credits available for elevators and escalators

Our elevators and escalators can contribute to the credits and overall points of a project in several key categories: energy performance, materials, and innovation.

Materials

In addition to improving the energy efficiency of our products, we are also focusing increasingly on the products used in our elevators. Schindler elevators emit no volatile organic compounds (VOC) or other harmful substances once installed. The cabling and wiring in a Schindler elevator can also be ordered halogen free. Hazardous substances are avoided as much as possible, in accordance with REACH¹, RoHS² and other regulations. At the end of the elevator life, almost all material can be recycled.

Schindler seeks to maximize the transport capacity per pallet for each delivery. Furthermore, almost all materials are suitable for recycling, including paperboard and wood. Certified materials, such as Forest Stewardship Council (FSC®) for wood, are also available on request.

REACH¹: Registration, Evaluation, Authorization, and Restriction of Chemicals

RoHS²: Restriction of Hazardous Substances

Energy performance

With our latest modular elevator products, including the Schindler 1000, Schindler 3000 and Schindler 5000, the energy efficiency rating has been improved dramatically, up to 30% or more, compared to the previous product generation. Schindler elevators reduce energy consumption by returning energy to the power drive system via a frequency converter. A gearless motor, LED lights, and standby mode for the car lights, ventilation and the door drive improve the overall energy use of the system. Our escalators also feature a standby mode to reduce the energy when not in use.

Innovation

When it comes to innovation, Schindler's PORT (Personal Occupant Requirement Terminal) Technology is a cutting-edge intelligent transit management elevator system. Schindler PORT Technology can contribute to credits in the LEED Innovation category.

Our sales people are happy to assist you with your individual requirements.

LEED Requirements

Schindler elevators and escalators can contribute to the following requirements under LEED v4.1 for Building design and construction.

Category	Assessment Criteria	Schindler's Contribution	Available Documentation
Environmental Product Declarations (EPD)	Use at least 20 different permanently installed products sourced from at least five different manufacturers that meet one of the disclosure criteria below.	There are independently verified EPDs (i.e. ISO Type III label), according to the requirements of ISO 14025 and EN 15804 A2, available for the Schindler elevator product lines. They can be included in the calculations.	EPDs are available for several program lines.
Sourcing of Raw Materials	Wood products must be certified by the Forest Stewardship Council (FSC®) or USGBC-approved equivalent.	We minimize all our plastic packaging and replace it with wood packaging. Upon request we use FSC® certified wood for our packaging. Please contact us for more details.	FSC® Certificates
Low-emitting Materials	This credit includes requirements for product manufacturing as well as project teams. It addresses VOC emissions in the indoor air and the VOC content of materials.	No VOCs or other harmful substances are emitted from our elevators and escalators once they leave our factory. On-site applied adhesives, paints and coatings need to be evaluated and reported.	Template for on-site adhesive/ paint application is available for declaration, if needed.

Credits available for elevators

Category	Assessment Criteria	Schindler's Contribution	Available Documentation
Optimize Energy Performance	To reduce environmental and economic harms associated with excessive energy use by achieving increased energy performance.	Our products deliver exceptional high energy efficiency: Elevators: - Standby mode available: shortly after the trip and after a longer period of non-use. - Equipped with energy efficient LED lamps, by default. - Return of regenerated energy by frequency converter - Efficient power drive system with gearless motor technology - Schindler can assist project teams in using the Exceptional Calculation Method according to ASHRAE Standard 90.1-2016¹ to document measures that reduce process loads. - Traffic analysis reports can be provided to choose the most suitable configuration to assure passenger transport efficiency.	Energy efficiency calculations report from the configurator and traffic analysis report.
		Escalators: - Schindler escalators are configured up to Energy efficiency class A+++, according to ISO 25745-3. - Schindler escalators features a frequency converter that reduces the escalator nominal speed to a slower speed when not transporting passengers to limit energy consumption. - In the absence of passengers, units can completely stop. The units shift into operating speed, according to EN 115, when passengers approach.	

Category	Assessment Criteria	Schindler's Contribution	Available Documentation
Innovation	Achieve significant, measurable environmental performance using a strategy not addressed in the LEED green building rating system.	Schindler PORT Technology is a cutting-edge intelligent transit management elevator system. Featuring Schindler's state-of-the-art, energy saving "smart transport" technology. Schindler PORT Technology can be programed to analyze, predict and meet individual passenger needs. Schindler Ahead connectivity solutions for elevators and escalators assure higher uptime of the units and lower CO2 emissions, due to reduced on-site interventions. Schindler Clean Mobility solutions for elevators and escalators provide innovative germicidal protection.	

¹ ASHRAE Standard 90.1 has been a benchmark for commercial building energy codes in the United States. It provides the minimum requirements for energy-efficient design of most buildings, except low-rise residential buildings.



- **1.** Schindler campus in Ebikon, Switzerland Certified building under LEED Level: Gold.
- **2.** Schindler campus in Hanover, USA Certified building under LEED Level: Gold.
- **3.** Schindler campus in Shanghai, China Certified building under LEED Level: Silver.
- **4.** Schindler campus in Pune, India Certified building under LEED Level: Gold.

At Schindler we help our customers achieve their green building and sustainability goals in projects around the world every day. By certifying our own facilities according to the LEED standard, we can truly embrace sustainability in our own business as well.







About Schindler

Founded in Switzerland in 1874, the Schindler Group is a leading global provider of elevators, escalators, and related services. Schindler mobility solutions move more than 1.5 billion people every day all over the world. Behind the company's success are over 66,000 employees in more than 1,000 branches in over 100 countries.

Schindler manufactures, installs, services, and modernizes elevators, escalators and moving walks for almost every type of building worldwide. Schindler's offerings range from cost-effective solutions for low-rise residential buildings to sophisticated access and transport management concepts for skyscrapers. Schindler moves people and materials, and connects vertical and horizontal transport systems through intelligent mobility solutions driven by green and user-friendly technologies.



Sustainability We Elevate... Our World

Sustainability at Schindler is more than striving to minimize the use of natural resources. We facilitate sustainable, smart urban mobility, while committing to a sustainable supply chain for all our products and driving innovation for green building management.

Sustainability at Schindler also means enabling an inclusive work environment where our workforce, which is as diverse as our customers and passengers, can thrive. It also means creating value in the communities where we operate by helping develop young talent through education and training, by fostering lifelong learning for our technicians, and by supporting inclusive urban development.

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