PRODUCT VERIFICATION - LEED

COMPANY

Schüco International KG Karolinenstraße 1-15 33609 Bielefeld Germany

PRODUCT SYSTEM

Schüco Fire and Smoke Protection Systems (AWS, ADS, FW and Firestop)

GREEN BUILDING CERTIFICATION SYSTEM

LEED Building Design and Construction (New Construction) v4

1st January 2016

Date

Peter Mösle

Managing Director Drees & Sommer

Thomas Haun

LEED Accredited Professional

PRODUCT ANALYSIS | FIRE AND SMOKE PROTECTION SYSTEMS

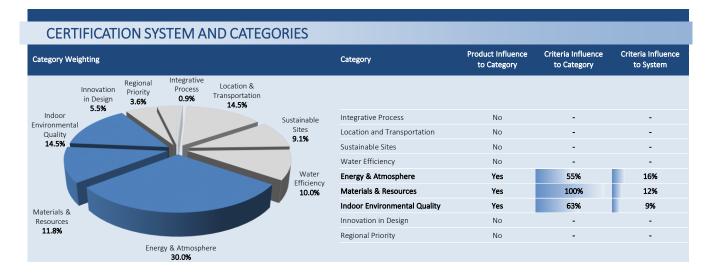


GREEN BUILDING CERTIFICATION SYSTEM

Developed by the U.S. Green Building Council, LEED (Leadership in Energy and Environmental Design) is a framework for identifying, implementing and measuring green buildings and neighborhood design, construction, operations, and maintenance. The LEED system was developed in 1998 for commercial building industry and has been updated several times. Until today about 84,000 projects have been certified internationally. For more than 15 years this voluntary certification process has set new standards in the development and planning of sustainable buildings around the world.

The system relates to its standards for awareness, efficiency and healthy use – both in commercial and private buildings. During the certification in 9 categories points can be awarded, which lead to a certification in the categories 'Certified', 'Silver', 'Gold' and 'Platinum'.

 $^{^{\}mathrm{1}}$ cf. LEED Reference Guide for Building Design and Construction, Edition 2013



PRODUCT VERIFICATION

Aim of the verification is to illustrate how the use of **Schüco Fire and Smoke Protection Systems** can influcence the critieria of the LEED certification system in a positive way. The **Schüco Fire and Smoke Protection System** meets the set requirements of the relevant topics of the certification system, thus adding value to the certification process.

In principle the LEED System certifies only the total performance of a building and not products. Therefore, Fire and Smoke Protection Systems can achieve a total credit only in combination with several trades.

To achieve a LEED criteria fulfillment a wide range of technical data is necessary. Additionally to this product verification, evidences can be provided by the producer. For this purposes the Window, Façade, Door, Fire and Smoke Protection System related **LEED Guide** of **Schüco International KG** provides an overview.

AUTHOR

Drees & Sommer has been working on topics related to sustainable buildings for over ten years. The company employs, among others, LEED Accredited Professionals, Licensed BREEAM Assessors and Auditors for the German Sustainable Building Council (DGNB). In addition, Drees & Sommer has Auditors for certification processes for urban neighborhoods and existing buildings, and for other less well-known certification systems on the market.

PRODUCT ANALYSIS | FIRE AND SMOKE PROTECTION SYSTEMS



PRODUCT EVALUATION

TRODUCT EVALUATION						
Category		Criteria	Max. Credits	Criteria Influence to Category	Criteria Influence to System	Product Verification
ENERGY AND ATMOSPHERE	EA	Minimum Energy Performance	Req'd	-	-	√
	EA	Optimize Energy Performance	18	54.55%	16.36%	\checkmark
MATERIALS AND RESOURCES	MR	Construction and Demolition Waste Management Planning	Req'd	-	-	\checkmark
	MR	Building Life-Cycle Impact Reduction	5	38.46%	4.55%	√
	MR	Building Product Disclosure and Optimization — Environmental Product Declarations	2	15.38%	1.82%	\checkmark
	MR	Building Product Disclosure and Optimization — Sourcing of Raw Materials	2	15.38%	1.82%	√
	MR	Building Product Disclosure and Optimization — Material Ingredients	2	15.38%	1.82%	√
	MR	Construction and Demolition Waste Management	2	15.38%	1.82%	\checkmark
INDOOR ENVIRONMENTAL QUALITY	EQ	Minimum Indoor Air Quality Performance	Req'd	-	-	\checkmark
	EQ	Enhanced Indoor Air Quality Strategies	2	12.50%	1.82%	\checkmark
	EQ	Low-Emitting Materials	3	18.75%	2.73%	\checkmark
	EQ	Thermal Comfort	1	6.25%	0.91%	\checkmark
	EQ	Daylight	3	18.75%	2.73%	√
	EQ	Acoustic Performance	1	6.25%	0.91%	√
TOTAL DEGREE OF FULFILLMENT					37.27%	
LEGEND					VERIFIED	J

EXPLANATION

Max. Credits

Maximum reachable points within the evaluation of criterion

Criteria Influence to Category

The influence of criteria in its category

Criteria Influence to System

This value specifies the percentage of fulfillment (whole system)

Total Dregree of Fulfillment

Those Criteria, where a product influence of Schüco Fire and Smoke Protection System is present, up to **37.27%** can be achieved (whole system)

DISCLAIMER

Aim of the verification is to illustrate how the use of Schüco Fire and Smoke Protection Systems can influcence the critieria of the LEED certification system in a positive way. In principle the LEED System certifies only the total performance of a building and not products. To achieve a LEED criteria fulfillment a wide range of technical data is necessary. The project team (e.g. design team or LEED Accredited Professional) is responsible to declare the compliance with respect to the LEED criteria. This document does not contain any detailed information whether the Schüco product system meets the requirements of the listed criteria. Within this verification the background of a LEED certification evidence or a third party declaration is not intended. During a building certification process the project team has the responsibility to declare the relevant product features by using specific and suitable evidences. For this purposes the Window, Façade, Door, Fire and Smoke Protection System related LEED Guide of Schüco International KG provides an overview.

Notice

This verification is a product of Schüco International KG. The distribution or publication by third parties is not permitted. The data sheet is not a LEED certification document. The information is based on manufacturer's specifications. Despite a diligent treatment of all information Schüco International KG can not make any warranties about the completeness, reliability and accuracy of this information. The requirements of LEED can be interpreted differently and depend on the project and scope of application. Therefore, Schüco International KG cannot accept any liability for the evaluation in terms of the LEED criteria. The user of this product verification, the user / purchaser of the product and the consultant / planner, who is advising on this product has the duty to check the product for the intended application at their own responsibility. If a new version of product verification is produced, the previous version loses its validity.