

KONE & BREEAM INTERNATIONAL NEW CONSTRUCTION 2016

HELPING CUSTOMERS TO SUCCEED IN GREEN BUILDING CERTIFICATIONS

KONE's eco-efficient People Flow® solutions for BREEAM International New Construction (NC) 2016 certified buildings help to combat climate change and contribute to the development of next-generation green buildings. Using our eco-efficiency expertise, we provide in-depth analysis of traffic patterns as well as the energy consumption and potential carbon footprint reduction of our solutions over their entire operational lifespan.

WHAT IS BREEAM INTERNATIONAL NC 2016?

BREEAM (Building Research Establishment's Environmental Assessment Method) is globally used green building rating system. Developed by Building Research Establishment (BRE), BREEAM scheme helps clients manage and mitigate risk through demonstrating sustainability performance during planning, design, construction, operation or refurbishment.

BREEAM INTERNATIONAL NC 2016 CREDITS

ENE06 - Energy efficient transport systems – ONE CREDIT
One credit is achieved when all assessment criteria are fulfilled

REQUIREMENTS

HOW KONE CAN HELP

Conduct an analysis of the transport demand for the building to determine the optimum number and size of lifts, escalators and moving walks.

KONE can provide a dedicated traffic analysis report utilising its people flow expertise and tools.

Estimate the energy consumption of the design lift, escalator and moving walks in accordance with ISO 25745 Energy performance of lifts, escalators and moving walks, comparing the designed solution with another system fitted for purpose.

KONE can provide energy efficiency calculations in accordance to ISO 25745 methodology.

Consider the use of regenerative drive in case where it produces an energy saving greater than the additional standby energy used to support the drives.

KONE can provide evidence of the potential energy savings enabled by the regenerative drive.

Specify the lift with the lowest energy consumption.

KONE can provide an energy efficiency report for its solutions.

ENE06 - Energy efficient transport systems – TWO CREDITS
Once the first credit has been achieved, two further credits can be achieved by fulfilling all the additional criteria for energy-efficient features for elevators described below

LIFTS

REQUIREMENTS

HOW KONE CAN HELP

Adopt standby solutions for example for the lift car lighting, user displays and ventilation fans.

KONE can provide technical information for:

Adopt car lighting and display lighting providing an average lamp efficacy (across all fittings in the car) of >55 lamp lumens/circuit Watt.

- Standby solutions
- Car lighting lamp efficacy - standby mode
- Drive
- Energy saving enabled by the regenerative drive

Adopt a drive with variable voltage and variable frequency.

Adopt a regenerative drive.

ECALATORS AND MOVING WALKS

REQUIREMENTS

Each escalator or moving walk complies with at least one of the following:

- It is fitted with a load sensing device that synchronises motor output to passenger demand through a variable speed drive.
- It is fitted with a passenger sensing device for automated operation (auto walk), so the escalator operates in standby mode when there is no passenger demand.

HOW KONE CAN HELP

KONE escalators feature various operational modes such as automated operation so that escalator operates in standby when there is no passenger demand. Escalators' standby operation reduces energy consumption and lengths equipment lifetime.

ADDITIONAL BREEAM INTERNATIONAL NC 2016 CATEGORIES RELEVANT TO KONE

CREDIT		REQUIREMENTS	HOW KONE CAN HELP
HEA02	INDOOR AIR QUALITY	Materials containing asbestos are prohibited. Listed product types need to meet the emission limits (for formaldehyde, volatile organic compounds and carcinogens), testing and additional requirements.	KONE can support the project to select compliant finishing materials for the elevator car and provide evidences of materials' compliance with technical requirements.
HEA06	ACCESSIBILITY	Adopt minimum car dimensions to guarantee the accessibility to all types of users, including persons with disability or with reduced mobility.	KONE can deliver a lift car that fulfills the requirements.
MAT01	LIFE-CYCLE IMPACTS	Specify materials with a low environmental impact over the full life cycle.	KONE Environmental Product Declarations (EPDs) provide information about the environmental performance of the solutions throughout their life cycle. Third party verification exists currently for a limited scope of solutions.
MAT05	DESIGNING FOR DURABILITY AND RESILIENCE	Adopt adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimization.	KONE can provide resistant materials for the lift car.
MAN04	COMMISSIONING AND HANDOVER	Ensure users awareness regarding the 'green features' of their building and how to interface with them.	KONE can provide user guides for its lifts.
WST01	CONSTRUCTION WASTE MANAGEMENT	Reduce waste generation and encourage its diversion from landfill through good design and construction practices.	KONE can fulfill the Construction Waste Management plan established for the project. KONE has also its own waste management guidelines for waste handling and recycling at installation sites.

KONE PLC

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