BREEAM International
New Construction + Refurbishment

Updated 01.12.23

CATEGORY	POINTS	DESCRIPTION	REQUIREMENTS FOR SYSTEM	HELVAR IMPACT
Hea 01 Visual comfort	Up to 2	Ensure daylighting, artificial lighting and occupant controls are considered at the design stage to ensure best practice in visual performance and comfort for building occupants.	Glare control Daylight harvesting Internal and external lighting	Helvar solutions allow you to fine-tune your lighting system to precise requirements across a variety of spaces, while delivering optimal visual comfort for building occupants.
Hea 02 Indoor Air Quality	1	Recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.	Part of reaching one of the credits requires that sensors have the ability to alert the building owner or manager when CO2 levels exceed a certain threshold.	Helvar Senses can monitor CO2 concentrations with indicators and alerts if concentrations exceed limits.
Ene 01 Reduction of energy use and carbon emissions	Up to 4	Minimise operational energy demand, primary energy consumption, and CO_2 emissions.	Energy efficient design features e.g. occupancy-based lighting control. Adequate lighting controls must also be provided to all ancillary areas (as applicable).	Helvar's luminaire components can be paired with intelligent lighting controls for a strong reduction in lighting energy usage through daylight and occupancy based-control. Increase energy saving opportunities further by integrating with other building systems such as HVAC, blinds.
Ene 02a Energy monitoring	Up to 2	Encourage the installation of energy sub-metering to allow monitoring of operational energy consumption. Allow managers and consultants post-handover to compare actual performance with targets in order to inform ongoing management and reduce any performance gap.	Energy metering for lighting-specific energy usage.	Helvar Insights allows you to measure the energy consumption of your lighting systems and identify opportunities to improve your energy usage.
Ene 03 External Lighting	1	Recognise and encourage the specification of energy efficient light fittings for external areas of the development.	Output of external light fittings can be controlled through e.g. daylight harvesting, presence detection.	Helvar's control solutions can easily be implemented for outdoor applications. E.g. Facade lighting, Infrastructure lighting
Man 05 Aftercare	Up to 2	Provide post-handover aftercare to the building owner or occupants during the first year of occupation to ensure the building operates and adapts, where relevant, in accordance with the design intent and operational demands.	One credit can be awarded for seasonal commissioning activities completed over a minimum 12-month period, once the building has become substantially occupied. One credit can be awarded for a Post-occupancy evaluation (POE) exercise one year after initial building occupation.	Helvar solutions can provide Post Occupancy Evaluation (POE) data to aid in checking whether the actual building performance is aligned with the predicted performance. Helvar is also able to support with lighting-related commissioning activities, such as adjusting the system to acheive a desired performance level.
Inn 01 Innovation	Up to 10	Points are awarded for any new technology, design, construction, operation, maintenance or demolition method or process that can be shown to improve the sustainability performance of a building and is of demonstrable benefit to the wider industry in a manner that is not covered elsewhere in BREEAM.	Lighting and/or environmental sensing technology can be used to significantly improve building performance and wellbeing impact in ways that are not directly covered in the BREEAM standard.	Helvar offers a diverse portfolio of lighting and sensing solutions with opportunities for additional integrations and unique control requirements.

LEED v4.1 [1/2]

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CATEGORY	POINTS	DESCRIPTION	REQUIREMENTS FOR SYSTEM	HELVAR IMPACT
Interior Lighting	2	Promote occupants' productivity, comfort, and well-being by providing high-quality lighting.	1. Glare Control 2. Color Rendering 3. Lighting Control	Helvar solutions allow you to precisely control the light fixture to tune the luminance levels of luminaires. Desired CRI can be achieved by selcecting the right light sources and with the help of Tunable White LED Drivers. Dimmable lighting for occupied spaces is a core function of Helvar solutions.
Advanced Energy Metering	1	Support energy management and identify opportunities for additional energy savings by tracking building-level and system-level energy use.	Advanced energy metering capabilities.	Helvar Insights allows you to measure the energy consumption of your lighting systems and identify opportunities to improve your energy usage.
Daylight	Up to 3	Connect building occupants with the outdoors, reinforce circadian rhythms, and reduce the use of electrical lighting by introducing daylight into the space.	Provide manual or automatic (with manual override) glare-control devices for all regularly occupied spaces.	Helvar's intelligent lighting solutions help you to maximise the amount of daylight in your space, by working only when needed. Blinds system integrations can be set up for additional glare control possibilities.
Optimise energy performance	Up to 4	Achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use that disproportionately impact frontline communities.	(Option 3) 1. Lighting power reduction 2. Daylight controls	Helvar's luminaire components can be paired with intelligent lighting controls for a strong reduction in lighting energy usage through daylight and occupancy based-control. Increase energy saving opportunities further by integrating with other building systems such as HVAC, blinds.
Minimum energy performance	Required	Promote resilience and reduce the environmental and economic harms of excessive energy use that disproportionately impact frontline communities by achieving a minimum level of energy efficiency for the building and its systems.	Comply with ANSI/ASHRAE/IESNA Standard 90.1–2016, with errata or a USGBC-approved equivalent standard.	Helvar systems can provide significant energy savings and are future-proof by design, allowing for easy scalability and updates when space requirements change.
Integrative Process	1	Support high-performance, cost-effective, equitable project outcomes through an early analysis of the interrelationships among systems.	Identify and use opportunities to achieve synergies across energy-related systems.	Helvar Insights works together with intelligent sensors to bring actionable lighting data to the table, allowing you to optimise lighting levels according to space- and energy usage. Optimise for occupant wellbeing without compromising on energy usage.
Grid harmonization	Up to 2	Increase participation in demand response technologies and programs that make energy generation and distribution systems more affordable and more efficient, increase grid reliability, and reduce greenhouse gas emissions.	Participate in demand response programs through load shedding or shifting.	Helvar Insights enables real-time control of many lighting parameters according to Smart Grid needs.

LEED v4.1 [2/2]

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Enhanced Indoor Air Quality Strategies	1	Promote occupants' comfort, wellbeing, and productivity by improving indoor air quality.	(Strategy 9) Monitor CO2 levels within densely occupied spaces. (Strategy 10) Evaluate additional sources of air contaminants through sensors and monitoring systems.	In addition to monitoring and providing alerts for enhanced CO2 limits, Helvar Senses can report on tVOC (Total Volatile Organic Compound) concentrations for more comprehensive Air Quality assessments.
Minimum Indoor Air Quality Performance	Required	Contribute to the comfort and wellbeing of all building occupants by establishing minimum standards for indoor air quality.	For naturally ventilated spaces, CO2 concentrations should be monitored with indicators or alerts.	Helvar Senses can monitor CO2 concentrations within each thermal zone, providing indicators and alerts if limits are exceeded.
Innovation	Up to 5	Encourage projects to achieve exceptional or innovative performance to benefit human and environmental health and equity. To foster LEED expertise throughout building design, construction, and operation and collaboration toward project priorities.	Achieve significant, measurable environmental performance using a strategy not addressed in the LEED green building rating system.	Helvar solutions offer a range of opportunities for additional integrations and unique control requirements.

WELL Building Standard v2 [1/2]

Updated 01.12.23

CATEGORY	POINTS	DESCRIPTION	REQUIREMENTS FOR SYSTEM	HELVAR IMPACT
L01 Light Exposure	Precondition	Provide appropriate light exposure in indoor environments through lighting strategies.	(Option 4: Circadian lighting design) Regulate indoor light exposure through daylight and electric light control strategies.	Helvar's intelligent control solutions and luminaire components can help achieve criteria for circadian lighting design as set out by the WELL Standard.
L02 Visual Lighting Design	Precondition	Provide appropriate illuminances on work planes for regular users of all age groups, as required for the tasks performed in the space.	Comply with various requirements for illuminance thresholds, taking into account the needs of users of the space.	Helvar's customisable solutions allow you to address the individual needs of end-users when designing the lighting system, helping to follow standards such as EN 12464-1.
L03 Circadian Lighting Design	3	Provide users with appropriate exposure to light for maintaining circadian health and aligning the circadian rhythm with the day-night cycle.	Support circadian and psychological health through indoor daylight exposure and outdoor views.	Intelligent lighting controls can be combined with Helvar's Light over Time solution to create optimal circadian lighting profiles for different spaces.
L04 Electric Light Glare Control	2	Manage glare by using strategies, such as calculation of glare and choosing the appropriate light fixtures for the space.	Minimise glare caused by electric light.	Helvar solutions allow you to precisely control the light fixture to tune luminance levels in any space.
L05 Daylight Design Strategies	4	Design spaces to integrate daylight into indoor environments, so that daylight may be used for visual tasks along with electric lighting.	Provide optimal daylight exposure indoors through design strategies.	Helvar controls can be integrated with blinds systems in order to automatically adapt to daylight levels and optimise daylight exposure in your space.
L07 Visual Balance	1	Develop and implement strategies to create a visually comfortable lighting environment.	Create lighting environments that enhance visual comfort.	Helvar solutions provide tools for maximising visual comfort for any range of activities throughout the day and night.
L08 Electric Light Quality	3	Take into account characteristics of electric light used in the space, such as color rendering and flicker.	Enhance visual comfort and minimise flicker for electric light.	Helvar offers a range of flicker-free dimmable LED drivers.
L09 Occupant Lighting Control	3	Implement innovative lighting strategies that take into account personal preferences of users, as well as their interaction with the physical space.	Provide individuals with access to customisable lighting environments.	Helvar offers multiple solutions to help create customized, personalized lighting scenes. E.g. ActiveTune, SceneSet. Note: Individual color+color temperature control requires additional capabilities in luminaires.

WELL Building Standard v2 [2/2]

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CATEGORY	POINTS	DESCRIPTION	REQUIREMENTS FOR SYSTEM	HELVAR IMPACT
S01 Sound Mapping	Precondition	Incorporate strategic planning required to prevent issues of acoustic disturbance from various sources of noise.	(Part 1) A floor plan or similar document should be made available for occupants which demonstrates different acoustic zones within the occupied space.	Helvar Senses can provide acoustics data which facilitates the process of defining and monitoring acoustic zones.
T01 Thermal Performance	Precondition	Provide a thermal environment that the majority of building users find acceptable.	(Part 2) Thermal parameters in regularly occupied spaces should be measured and reported.	Helvar Senses can provide sensor data for thermal measurements to demonstrate whether the required parameters are being met.
T06 Thermal Comfort Monitoring	1	Monitor and effectively address unacceptable thermal comfort conditions and inform building managers and users of the thermal comfort parameters of their indoor environment.	(Part 1) Temperature and relative humidity should be monitored according to specific requirements, and displayed in an accessible manner to occupants.	Helvar Senses can meet the temperature and humidity monitoring requirements while providing real time measurements for display units as required.
A03 Ventilation Design	Precondition	Minimize indoor air quality issues through the provision of adequate ventilation.	(Option 4) Occupiable spaces should meet specific carbon dioxide thresholds.	Helvar Senses can monitor CO2 levels and provide data regarding whether or not the threshold is met for occupied spaces.
A06 Enhanced Ventilation Design	Up to 2	Implement advanced ventilation strategies that bring higher air quality levels and thus benefit human health and productivity.	(Part 1: Options 3 & 4) Implement a ventilation system that can keep CO2 levels within a certain threshold in occupied or occupiable spaces.	Helvar Senses can monitor CO2 and occupancy levels and provide data regarding whether or not the enhanced thresholds are met for occupied spaces. This helps to optimise ventilation systems in occupied areas of the building.
Innovate WELL	Up to 10	Promote the continuous evolution of WELL, by encouraging projects to propose a new intervention that addresses health and well-being in a novel way.	Positively impact occupants by supporting health and well-being in a novel way that is not covered in WELL v2.	Helvar solutions offer a range of opportunities for additional integrations and unique control requirements.