HELLA Sonnen - und Wetterschutztechnik GmbH
Contribution within the framework of BREEAM certification

Date: **27.08.2014**

Manufacturer: **HELLA Sonnen - und Wetterschutztechnik GmbH**

Products: **Textile Facade Blind**

with textile blind acrylic
with textile blind fibreglass, PVC coated
with textile blind polyester
with textile blind polyester, PVC coated

Description: **Exterior, textile sun protection device with box or lateral mounting brackets to shade glass facades and window surfaces. Suitable for direct installation in the soffit or to post-and-beam facades. All guidances are provided either with a guide rail or a tension cable. The visible aluminium parts are coated according to the RAL colour charts. Driven by an electric motor 230V AC.**

This declaration serves to evaluate and classify HELLA products in terms of the BREEAM International 2013 New Construction certification system. Products are not evaluated or certified by BREEAM. The BREEAM specifications pertain to the overall evaluation in the context of a project, and not to individual products. For further information, visit www.breeam.org. It is the responsibility of the project team or the manufacturer to ensure compliance of the products with the BREEAM criteria. This declaration serves as a practical summary of the applicable contributions regarding HELLA products within the BREEAM certification system. All the information has been made available by the product manufacturer.

Ref.	Credit Name	Objective	BREEAM International 2013 New Construction specifications	Relevance for HELLA products	BREEAM credits attainable within given criteria	BREEAM credits attainable with HELLA products	HELLA contribution towards the fulfilment of criteria specifications
Management							
Man 01	**Sustainable procurement**	Sustainable procurement		**No**			Not relevant
Man 02	**Responsible construction practices**	Responsible construction practices		**No**			Not relevant
Man 03	**Construction Site Impacts**	Construction Site Impacts		**No**			Not relevant
Man 04	**Stakeholder participation**	Stakeholder participation		**No**			Not relevant
Man 05	**Life Cycle Cost Analysis**	To recognise and encourage the development of a Life Cycle Cost (LCC) analysis model for the project to improve design, specification and through-life maintenance and operation.		**No**			Not relevant

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Health & Wellbeing							
Hea 01	**Visual Comfort**	High frequency lighting	1. All fluorescent and compact fluorescent lamps are fitted with high frequency ballasts or the building is exclusively fitted with LED lighting.	**No**			Not relevant
		Daylighting	2. EITHER a. The provision of daylight has been designed in compliance with the national best practice daylighting guide (see Table - 9 within BREEAM International New Construction Technical Manual 2013 for distribution of credits and Compliance notes for information regarding national best practice standards) OR b. Relevant building areas meet good practice daylighting criteria as outlined for average daylight factor in Table - 9 AND uniformity in Table - 10 within BREEAM International New Construction Technical Manual 2013 OR c. Relevant building areas meet the daylight illuminance recommendations in Table - 11 within BREEAM International New Construction Technical Manual 2013.	**Yes**	**2**	**2**	As part of BREEAM certification, the daylight factor for habitable spaces/rooms is calculated. As a rule, the sun protection system is not taken into account in this calculation. Even so, the sun protection system plays a role in introducing daylight into the room even in the case of the system being closed. The sun protection system can be controlled, in particular by adjusting the position of the slats, and can be opened and closed as required and unwanted glare prevented while maintaining a view of the area outside. When translucent fabric drapes are used, the sun protection system helps introduce daylight into the room even when the sun protection system is closed. HELLA Sonnen - und Wetterschutztechnik GmbH offers a variety of products which help to introduce as much daylight into the room as possible and prevent unwanted glare while maintaining a view of the area outside. As a result, the sun protection system contributes towards being awarded credits under the BREEAM criterion HEA 01 Visual Comfort - Daylighting.
		Glare Control and View Out	3. The potential for disabling glare has been designed out of all relevant building areas either through building layout (e.g. low eaves) and/or building design (e.g. blinds, brise soleil, bioclimatic design that provides shading from high level summer and low level winter sun). 4. The glare control strategy should be developed to ensure that daylight can enter the space under cloudy conditions, or when the sun is not on the façade, therefore avoiding higher than expected lighting energy consumption. 5. All positions (or 95% of the net floor area) within relevant building areas are within Xm of a window or permanent opening that provides an adequate view out, as outlined in Table - 8 within BREEAM International New Construction Technical Manual 2013.	**Yes**	**2**	**2**	The sun protection system is controllable and can be opened and closed as required, thus allowing a view out. Additionally, the sun protection system also serves as protection against glare. As a result, the sun protection system contributes towards being awarded credits under the BREEAM criterion HEA 01 Visual Comfort - Glare Control and View Out.
Hea 02	**Indoor air quality**	To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes with low emissions of volatile organic compounds (VOCs). .	**Create an Indoor Air Quality Plan** Building is designed to minimise sources of internal air pollution.	**No**			Not relevant
			Volatile Organic Compounds / VOC testing and emission levels of products All decorative paints and varnishes have met the requirements in terms of VOC according BS EN 13300:2001 referred to the criteria of Decorative Paint Directive 2004/42/CE. The remaining product categories have to meet the testing requirements and emission levels for Volatile Organic Compound (VOC) emissions against the relevant standards.	**Yes**	**1**	**1**	The sun protection systems do not fall under the relevant BREEAM product groups in this criterion. For this reason, no certificates are required for the sun protection system. As a rule, the sun protection system is deployed on the outside, and thus does not have an effect on indoor air quality. As a result the sun protection system contributes towards attaining credits for the BREEAM Credit HEA 02 Indoor Air Quality.
			Indoor Air quality testing Formaldehyde concentration level is measured post construction (but pre-occupancy) and is found to be less than or equal to 100µg/m^3 averaged over 30 minutes (WHO guidelines, source BRE Digest 464 part 2). The total volatile organic compound (TVOC) concentration is measured post construction (but pre-occupancy) and found to be less than 300µg/m^3 over 8 hours, in line with the Building Regulation requirements.	**Yes**	**1**	**1**	The objective is to attain as negligible a concentration of VOCs (volatile organic compounds) and formaldehyde in the air inside the room as possible. As a rule, the sun protection system is deployed on the outside, and thus does not have an effect on indoor air quality. As a result, the sun protection system contributes towards attaining points for the BREEAM Credit HEA 02 Indoor Air Quality.
			Potential for natural ventilation Occupied spaces of the building are designed to be capable of providing fresh air entirely via a natural ventilation strategy.	**No**			Not relevant

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Hea 03	**Thermal comfort**	To ensure that appropriate thermal comfort levels are achieved through design and controls are selected to maintain a thermally comfortable environment for occupants within the building.	**Thermal Comfort** Thermal modelling demonstrates that the building design and services strategy can deliver the required thermal comfort levels. 1. Thermal modelling (or an analytical measurement/evaluation of the thermal comfort levels of the building) has been carried out using the PMV (predicted mean vote) and PPD (predicted percentage of dissatisfied) indices in accordance with ISO 7730:2005 taking full account of seasonal variations. 2. Local thermal comfort criteria have been used to determine the level of thermal comfort in the building, in particular internal winter and summer temperature ranges will be in line with the recommended comfort criteria within ISO 7730:2005, with no areas falling within the levels defined as representing local dissatisfaction. 3. Thermal comfort levels in occupied spaces meet the Category B requirements set out in Table A.1 of Annex A of ISO 7730:2005. 4. The PMV and PPD indices are reported, via the BREEAM scoring and reporting tool, based on the modeling/measurement above.	**Yes**	**1**	**1**	In the summer in particular, the sun protection system makes a significant contribution toward ensuring thermal comfort inside the room. The sun protection system reduces solar absorption in the summer and reduces the cooling load. Cooler and hence more comfortable room temperatures are thereby achieved in summer. In this way, the sun protection system contributes to a more comfortable indoor climate. As a result the sun protection system contributes towards attaining points for the BREEAM Credit HEA 03 Thermal Comfort.
			Zoning Control Development of a thermal zoning and control strategy.	**No**			Not relevant
Hea 4	**Water quality**	Water quality		**No**			Not relevant
Hea 5	**Acoustic Performance**	To ensure the buildings' acoustic performance including sound insulation meet the appropriate standards for its purpose.	**Indoor ambient noise levels** Indoor ambient noise levels comply with the "good practice" criteria levels. The appropriate criteria for ambient noise levels,sound insulation and acoustic privacy must also be achieved. **Reverberation times** Achieve acceptable reverberation times..	**No**			Not relevant
Energy							
Ene 1	**Energy Efficiency**	To recognise and encourage buildings designed to minimise operational energy demand, consumption and CO2 emissions.	Calculate an Energy Performance Ratio for New Constructions (EPR_{NC}) using BREEAM's Ene 01 calculator. Compare the EPR_{NC} achieved and award the corresponding number of BREEAM credits.	**Yes**	**15**	**0-15**	The sun protection system means that operational energy consumption for cooling can be reduced. A sun protection system will reduce solar absorption in summer and reduce the cooling load. Consequently, less cooling energy is required, particularly in the summer. In this way, the sun protection system contributes towards a reduced cooling load and thus improves the building's energy efficiency. As a result, the sun protection system contributes towards attaining points for the BREEAM Credit ENE 01 Energy Efficiency.
Ene 2	**Energy Monitoring**	Energy Monitoring		**No**			Not relevant
Ene 3	**External Lighting**	External Lighting		**No**			Not relevant
Ene 4	**Low zero carbon technologies**	Low zero carbon technologies		**No**			Not relevant

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Ene 5	**Energy efficient cold storage**	Cold storage equipment		**No**			Not relevant
Ene 6	**Energy efficient transportation systems**	Energy efficient transportation systems		**No**			Not relevant
Ene 8	**Energy efficient equipment**	Energy efficient equipment		**No**			Not relevant
Transport							
Tra 1	**Provision of public transport**	Provision of public transport		**No**			Not relevant
Tra 2	**Proximity to amenities**	Proximity to amenities		**No**			Not relevant
Tra 3	**Cyclist facilities**	Cyclist facilities		**No**			Not relevant
Tra 4	**Pedestrian and cycle safety**	Pedestrian and cycle safety		**No**			Not relevant
Tra 5	**Travel plan**	Travel plan		**No**			Not relevant
Tra 4	**Maximum car parking capacity**	Maximum car parking capacity		**No**			Not relevant
Water							
Wat 1	**Water Consumption**	Water Consumption		**No**			Not relevant
Wat 2	**Water monitoring**	Water monitoring		**No**			Not relevant
Wat 3	**Major leak detection**	Major leak detection		**No**			Not relevant
Wat 4	**Water Efficient Equipment**	Water Efficient Equipment		**No**			Not relevant

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Materials							
Mat 1	**Life cycle impacts**	To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building.	BREEAM awards credits on the basis of the building's quantified environmental life cycle impact through assessment of the main building elements, as set out below: External walls, Windows, Roof, Upper floor slab, Internal walls Floor finishes/coverings The following is required to demonstrate compliance for: One to six credits 1. The project uses a life cycle assessment (LCA) tool to measure the life cycle environmental impact of the building elements. 2. The LCA includes at least the mandatory building elements indicated in the 'Materials assessment scope' section of the BREEAM International Mat 01 calculator (where present in the building). 3. The mandatory requirements identified in the 'Materials assessment tool, method and data' section of the BREEAM International Mat 01 calculator have been met. 4. A member of the project team completes the BREEAM International Mat 01 calculator and determines a score based on the robustness of the LCA tool used and the scope of the assessment in terms of elements considered.	**Yes**	**6**	**0-6**	External sun protection systems can be taken into account optionally from an environmental balance point of view. The impact on environmental balance is negligible. For calculating such a balance, reference may be made to standard data (generic data).
Mat 2	**Hard landscaping and boundary protection**	Hard landscaping and boundary protection		**No**			Not relevant
Mat 3	**Responsible sourcing of materials**	To recognise and encourage the specification of responsibly sourced materials for key building elements.	Each of the applicable specified materials comprising the main building elements are assigned a responsible sourcing tier level. The evidence for responsible sourcing is based on EMS certificates, COC-certificates (FSC/PEFC) and further confirmations of the suppliers to provide a high rating in this credit considering the following product types: 1. Structural Frame 2. Ground floor 3. Upper floors (including separating floors) 4. Roof 5. External walls 6. Internal walls 7. Foundation/substructure 8. Fittings: includes stair case, windows (frame and glazing units), doors (internal and external), floor finishes and any other significant fitting or finish present (see also Compliance note). 9. Hard landscaping (see also Compliance note) Applicable materials • Brick • Resin-based composites and materials, • Concrete • Glass, Plastics and rubbers (including EPDM, TPO, PVC and VET roofing membranes including polymeric renders) • Metals (steel, aluminium etc.) • Dressed or building stone including slate • Timber, timber composite and wood panels (including glulam, plywood, OSB, MDF, chipboard and cement bonded particleboard) • Plasterboard and plaster • Bituminous materials, such as roofing membranes and asphalt • Other mineral-based materials, including fibre cement and calcium silicate • Products with recycled content	**No**			As a rule sun protection systems do not fall under the relevant BREEAM product groups in this criterion. A certificate is therefore not necessary.

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Mat 4	**Insulation**	Insulation		**No**			Not relevant
Mat 5	**Designing For Robustness**	Designing For Robustness		**No**			Not relevant
Waste							
Wst 1	**Construction Site Waste Management**	Construction Site Waste Management		**No**			Not relevant
Wst 2	**Recycled aggregates**	Recycled aggregates		**No**			Not relevant
Wst 3	**Operational waste**	Operational waste		**No**			Not relevant
Wst 4	**Speculative Floor and Ceiling Finishes**	Speculative Floor and Ceiling Finishes		**No**			Not relevant
Land Use & Ecology							
LE1	**Site selection**	Site selection		**No**			Not relevant
LE 2	**Ecological value of site AND Protection of ecological features**	Ecological value of site AND Protection of ecological features		**No**			Not relevant
LE 3	**Mitigating Ecological Impact**	Mitigating Ecological Impact		**No**			Not relevant
LE4	**Enhancing site ecology**	Enhancing site ecology		**No**			Not relevant
LE6	**Long term impact on biodiversity**	Long term impact on biodiversity		**No**			Not relevant
Pollution							
Pol 1	**Impact of refrigerants**	Impact of refrigerants		**No**			Not relevant
Pol 2	**NOx emissions of heating source**	NOx emissions of heating source		**No**			Not relevant
Pol 3	**Surface water run off**	Surface water run off		**No**			Not relevant

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Pol 4	**Reduction of Night Time Light Pollution**	To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.		**No**			Not relevant
Pol 8	**Noise Attenuation**	Noise Attenuation		**No**			Not relevant
Innovation							
Man 01	**Sustainable Procurement**	Sustainable Procurement		**No**			Not relevant
Man 02	**Responsible Construction Practices**	Responsible Construction Practices		**No**			Not relevant
Hea 02	**Indoor air quality**	Indoor air quality		**No**			Not relevant
Ene 01	**Energy efficiency**	Energy efficiency		**No**			Not relevant
Tra 03	**Alternative modes of transport**	Alternative modes of transport		**No**			Not relevant
Wat 01	**Water Consumption**	Water Consumption		**No**			Not relevant
Mat 01	**Life Cycle Impacts**	Life Cycle Impacts		**No**			Not relevant
Mat 03	**Responsible Sourcing of materials**	Responsible Sourcing of materials		**No**			Not relevant
Wst 01	**Construction Waste Management**	Construction Waste Management		**No**			Not relevant
Wst 02	**Recycled Aggregates**	Recycled Aggregates		**No**			Not relevant