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Briefing Paper

Assessing Health and Wellbeing in Buildings

Alignment between BREEAM and the WELL Building Standard™

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Introduction

BRE and the International WELL Building Institute™ (IWBI™) are collaborating to promote health and wellbeing in the design, construction and operation of buildings and fit-outs, internationally. The two organisations announced their collaboration on 28 November 2016 with the aim to make it more efficient for clients and project teams to pursue both of their respective standards: BREEAM and the WELL Building Standard™ (WELL).

Given that people in the developed world, on average, spend over 90% of their lives in and around buildings, both IWBI and BRE recognise the value and complementary nature of measuring and recognising health and wellbeing elements of building design, construction and operation in the context of a holistic assessment of environmental and social impacts within the built-environment.

Since its launch in 1990, BREEAM has set evidence based standards that go beyond regulatory requirements and standard practice. This includes requirements to optimise internal environments and encourage healthier lifestyles as a part of a broad and holistic evaluation of a building's social, environmental and economic impacts and benefits. BRE and IWBI recognise the value to the property sector of a wellbeing focused building certification process that sits alongside this holistic rating and are working together to ensure that this can be met efficiently where a client need exists.

To simplify the process for project teams pursuing both assessment methods, BRE and IWBI have worked together to compare performance requirements, harmonise evidence and identify opportunities to streamline the process of achieving dual certification. This work demonstrates the significant synergies between the two methods and the efficiencies that exist between their respective assessment and certification processes. It forms a part of an ongoing collaboration between BRE and IWBI to work together to harmonise their approach to health and wellbeing in the built environment across their standards, research programmes and services generally.

Purpose of this document

This document provides assistance for those wishing to obtain both a certified BREEAM rating and WELL Certification. It provides guidance on the areas where assessment under one method can result in efficiencies in assessment under the other. It outlines how credits awarded in a certified BREEAM assessment may be used to demonstrate compliance with WELL features post occupation and identifies areas where project teams can demonstrate compliance using the same evidence for both schemes.

The WELL Building Standard was developed in the United States and so addresses a number of issues that are already covered through regulations in the UK and across the EU. For this reason, the document also sets out the areas where WELL requirements are already addressed by UK and/or EU regulations and, where appropriate, where these do not require assessment for buildings undergoing a WELL assessment in these territories.

BRE and IWBI will work together to update this document as and when BREEAM and WELL standards are significantly updated/modified.

About BREEAM

BREEAM (Building Research Establishment Environmental Assessment Method) is the world's first sustainability rating scheme for the built environment. Through its application and use, BREEAM helps clients to measure and reduce the impacts of their buildings and in doing so, create higher value, lower risk assets that are better for people and the environment.

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About the WELL Building Standard™

The WELL Building Standard™ (WELL) is the first building standard to focus exclusively on the health and wellness of the people in buildings. WELL is a performance-based system for measuring and certifying features of buildings that impact human health and well being, through air, water, nourishment, light, fitness, comfort and mind. It marries best practices in design and construction with evidence-based medical and scientific research – harnessing buildings and communities as a vehicle to support human well-being.

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How to use this document

The document maps requirements between the WELL Building Standard v1 (October 2016) and the following BREEAM scheme versions:

1. BREEAM UK New Construction 2014 (UK NC 2014),
2. BREEAM UK Refurbishment and Fit-out 2014 (UK RFO 2014),
3. BREEAM International New Construction 2016 (INC 2016)[1],
4. BREEAM International Refurbishment and Fit-out 2015 (IRFO 2015)[1],
5. BREEAM In-Use International 2015 (In-Use 2015)[1].

This document is split into four sections:

1. An introductory section outlining the overall approach taken to harmonise the BREEAM and WELL assessment and certification processes.
2. Appendix A sets out BREEAM credits that overlap with WELL. It should be noted that final WELL Certification occurs after the building has been fully occupied and is dependent on a range of in-situ testing and occupant surveys. Compliance with BREEAM requirements does not negate the requirements under WELL for such post occupancy evidence.
3. Appendix B sets out the credit areas within BREEAM New Construction (NC) and Refurbishment and Fit-out (RFO) where WELL evidence can be used to demonstrate compliance with all or part of the BREEAM requirements. It also indicates where there is potential for evidence to be aligned to achieve compliance under both methods.
4. Appendix C sets out the WELL requirements that would be deemed to satisfy BREEAM In-Use requirements and where additional evidence would not be required by BREEAM Assessors and BRE Global to demonstrate compliance with BREEAM criteria. It also indicates where there is potential for evidence to be aligned to achieve compliance under both methods.

Assessors carrying out assessments under the WELL and BREEAM methods listed above will be able to accept certification under the other scheme and/or the related calculation and/or documentary evidence in line with the guidance in this document to confirm:

- Post construction compliance in the case of BREEAM New Construction and Refurbishment and Fit-out schemes
- In-use performance compliance in the case of BREEAM In-Use; and
- Post occupancy performance in the case of WELL.

In addition to setting out mutual equivalencies, the appendices also set out areas where aims and objectives are harmonised but where the level of performance and/or assessment methodology required by BREEAM and WELL are different. In such cases, evidence produced for one scheme may potentially be used in an assessment under the other to avoid the need for duplication of assessment evidence and/or calculations.

Table A defines the levels of overlap:

- For WELL, Appendix A compares the requirements of the BREEAM schemes and outlines a level of overlap for each credit requirement in the associated BREEAM scheme and highlights relevant overlaps with UK/ EU regulations.
- Similarly for BREEAM, Appendices B and C identify and map WELL features that are either fully equivalent or aligned for BREEAM In -Use or where WELL evidence can be used to demonstrate compliance with all or part of the BREEAM NC or RFO requirements.

1 In addition to BRE Global's BREEAM International schemes, BREEAM also supports a number of National Scheme Operators (NSOs) across the world. The NSOs affiliated to BREEAM and their local schemes are listed on the BREEAM website http://www.breeam.com. These local schemes must be used for international assessments where appropriate, in these instances contact your local NSO for further information. Where a building falls outside of the scope of these local schemes, the pan country BRE Global BREEAM International schemes can be used.

Table A - level of overlap used in the Appendices

Symbol	Overlap assignment	Definition
✓	Equivalent	Formal certification under one scheme can be used as evidence of full compliance with the other. The awarded feature or credit can be used as verification that the requirement has been satisfied.
●	Aligned	The outcomes and methodologies are aligned but there are material differences between the requirements of the schemes. For instance the required performance levels may be different. In this case it may be possible to carry out a single analysis and use this as evidence in both schemes although this will need to be separately submitted to the relevant assessor.
▲	Partially equivalent	Appendix A only - Formal certification under BREEAM can be used as evidence of partial compliance with WELL features. This indicates that further requirements will need to be met before the feature can be deemed to be fully met.
–	Not addressed	Appendices A and B – The issue is not covered by BREEAM and so will require full assessment under WELL.
■	EU/UK directive/regulation	Appendix A only – The WELL feature is covered by EU or UK directive/regulation and may not need to be assessed for projects in these countries.
UKR	UK regulation	Appendix A only – The WELL feature is covered by regulations in the UK.
EUR	EU regulation	Appendix A only – The WELL feature is covered by directives or regulations across the EU.
❖	BREEAM compliant WELL evidence	Appendix B only – WELL evidence can be used to demonstrate full or partial compliance with the BREEAM requirements but formal review will be required by the Assessor.

Use of BREEAM certified evidence within WELL assessments

IWBI has evaluated this mapping and provided rulings of equivalency for entire features or parts that are satisfied by the BREEAM credits or UK/ EU regulations.

When the level of overlap is considered equivalent, it indicates that a feature or credit has been evaluated and deemed satisfactory to achieve the requirement of the WELL feature indicated. The awarded BREEAM credit can be used as verification that the requirement has been satisfied.

Claiming BREEAM credits in the WELL Building Standard

Appendix A maps the equivalencies between BREEAM credits and WELL for the purpose of carrying out a WELL assessment on a building that has been BREEAM assessed.

Where a project has achieved, or is pursuing a BREEAM certified rating and seeks to apply these efforts to achieve a WELL feature, the project should submit the following during WELL documentation review:

- Short report identifying which BREEAM credits are being used to claim WELL features, in line with the guidance provided in this document; and
- Supporting evidence for each WELL feature or part, in line with the guidance provided in this document.
- If already awarded, proof of BREEAM certification and awarded credits may be submitted in lieu of the ascribed WELL performance verification method in Appendix D of the WELL Building Standard.
- If not yet awarded, use the ascribed WELL performance verification method in Appendix D of the WELL Building Standard. Project teams may reference applicable BREEAM credit requirements in letters of assurance and annotated documents rather than the language in the WELL letters of assurance drawn from the WELL Building Standard.
- Given the stage at which full WELL Certification is carried out, it is most likely that BREEAM compliance through the NC or RFO schemes will be used as evidence in a WELL assessment.

Use of WELL Certification within BREEAM assessments

WELL Certification occurs when the building has been occupied for a period of time and post occupancy testing has been carried out to demonstrate performance in operation.

a. BREEAM New Construction/Refurbishment and Fit out schemes:

Whilst there is a defined WELL documentation review process at the design stage this does not result in a formal certification output and as such it is not possible to use WELL Certification as a means of demonstrating compliance at the Design or Post Construction certification stages for BREEAM assessments. Appendix B maps WELL features against the BREEAM credit requirements and indicates where evidence prepared for WELL may be used to justify full or partial compliance with BREEAM requirements for New Construction and Refurbishment and Fit out schemes.

b. BREEAM In-Use:

BREEAM In-Use certification occurs during occupation and as such it is possible to use formal WELL Certification against specific WELL features to demonstrate compliance with BREEAM In-Use requirements. Appendix C maps WELL features against BREEAM In-Use requirements and indicates where WELL Certification can be used to demonstrate compliance with the BREEAM assessment requirements without further or additional assessment. It also indicates where outcomes are broadly aligned.

Claiming WELL Certification as a means of demonstrating compliance with BREEAM criteria

For New Construction and Refurbishment and Fit-out assessments, evidence should be submitted to the licensed BREEAM assessor in the normal way and, in turn, they will reference and submit as part of their assessment report to BRE Global when they request certification. The BREEAM assessor should identify in their report, against the relevant assessment issues, where evidence provided relates to certification under both BREEAM and WELL.

For BREEAM In-Use assessment, entries in the assessment tool should make specific reference to the relevant WELL assessment/certification and evidence documentation. It is important that this referencing fully identifies those BREEAM credits that are being justified through the provision of WELL Certification in line with the guidance provided in this document. Proof of WELL Certification will be required as supporting evidence by the Assessor and BRE Global in lieu of the ascribed evidence outlined in the BREEAM In-Use International Technical Manual for each instance where compliance with a WELL feature is claimed as evidence of compliance with BREEAM In-Use.

Appendix A - WELL Building Standard alignment with BREEAM credits

WELL Building Standard			BREEAM Credit(s)					WELL - BREEAM Overlap				
Feature No.	Feature Name	Feature Part	UK NC 2014	UK RFO 2014	INC 2016	IRFO 2015	In-Use 2015	UK NC 2014	UK RFO 2014	INC 2016	IRFO 2015	In-Use 2015
AIR												
01	Air quality standards	Standards for volatile substances	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (post construction)	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (post construction)	Hea 02 Indoor air quality – Post-construction indoor air quality measurement	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (post construction)	HEA 18 Volatile organic compounds	●	●	●	●	●
		Standards for particulate matter and inorganic gases	Hea 02 Indoor air quality - Indoor air quality (IAQ) plan; Ventilation; Adaptability - Potential for natural ventilation	Hea 02 Indoor air quality - Indoor air quality (IAQ) plan; Ventilation; Adaptability - Potential for natural ventilation	Hea 02 Indoor air quality - Indoor air quality (IAQ) plan; Ventilation; Adaptability - Potential for natural ventilation	Hea 02 Indoor air quality - Indoor air quality (IAQ) plan; Ventilation; Adaptability - Potential for natural ventilation	HEA 14 Internal environment: CO2 Monitoring HEA 15 Internal environment: CO Monitoring HEA 16 Internal environment: NOx monitoring	●	●	●	●	●
		Radon	UKR	UKR				●	●	–	–	–
02	Smoking ban	Indoor smoking ban	UKR	UKR	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation		■ ✓	■ ✓	●	●	–
		Outdoor smoking ban						–	–	–	–	–
03	Ventilation effectiveness	Ventilation design	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation	HEA 11 Ventilation requirements HEA 12 Fresh air rates	✓	✓	✓	✓	●
		Demand control ventilation	Hea 02 Indoor air quality - Potential for natural ventilation	Hea 02 Indoor air quality - Potential for natural ventilation	Hea 02 Indoor air quality - Potential for natural ventilation	Hea 02 Indoor air quality - Potential for natural ventilation		✓	✓	✓	✓	–
		System balancing	Man 04 Commissioning and handover - Commissioning building services	Man 04 Commissioning and handover - Commissioning building services	Man 04 Commissioning and handover - Commissioning building services	Man 04 Commissioning and handover - Commissioning building services		✓	✓	✓	✓	–
04	VOC reduction	Interior paints and coatings	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	Hea 02 Indoor air quality – Emissions from building products	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	HEA 18 Volatile organic compounds	✓	✓	✓	✓	●
		Interior adhesives and sealants	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	Hea 02 Indoor air quality – Emissions from building products	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	HEA 18 Volatile organic compounds	✓	✓	✓	✓	●
		Flooring	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	Hea 02 Indoor air quality – Emissions from building products	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	HEA 18 Volatile organic compounds	✓	✓	✓	✓	●
		Insulation	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	Hea 02 Indoor air quality – Emissions from building products	Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	HEA 18 Volatile organic compounds	✓	✓	✓	✓	●
		Furniture and furnishings		Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)		Hea 02 Indoor air quality - Volatile organic compound (VOC) emission levels (products)	HEA 18 Volatile organic compounds	–	✓	–	✓	●

WELL Building Standard			BREEAM Credit(s)					WELL - BREEAM Overlap				
05	Air filtration	Filter accommodation	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation		✓	✓	✓	✓	–
		Particle filtration	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation	Hea 02 Indoor air quality - Ventilation		✓	✓	✓	✓	–
		Air filtration maintenance					MAN 04 Operation and maintenance manuals MAN 05 Maintenance procedures	–	–	–	–	✓
09	Cleaning protocol	Cleaning plan for occupied spaces					HEA 21 Deep cleaning	–	–	–	–	●
10	Pesticide management	Pesticide use					LE 05 External landscaping/ maintenance	–	–	–	–	●
11	Fundamental material safety	Asbestos and lead restriction	EUR	EUR	Hea 02 Indoor air quality - Prerequisite	Hea 02 Indoor air quality - Prerequisite	EUR	■ ▲	■ ▲	▲	▲	■ ▲
		Lead Abatement	UKR	UKR				■ ▲	■ ▲	–	–	–
		Asbestos abatement	EUR	EUR	EUR	EUR	EUR	■ ✓	■ ✓	■ ✓	■ ✓	■ ✓
		Polychlorinated biphenyls abatement	EUR	EUR	EUR	EUR	EUR	■ ✓	■ ✓	■ ✓	■ ✓	■ ✓
		Mercury Limitation	EUR	EUR	EUR	EUR	EUR	■ ✓	■ ✓	■ ✓	■ ✓	■ ✓
12	Moisture management	Exterior liquid water management	UKR	UKR				■ ✓	■ ✓	–	–	–
		Interior liquid water management	Wat 03 Water leak detection – Leak detection system; Flow control devices	Wat 03 Water leak detection – Leak detection system; ; Flow control devices	Wat 03 Water leak detection – Leak detection system; Flow control devices	Wat 03 Water leak detection – Leak detection system; Flow control devices	WAT 07 Leak detection system	●	●	●	●	●
		Condensation management	UKR	UKR				■ ●	■ ●	–	–	–
		Material selection and protection	UKR	UKR				■ ●	■ ●	–	–	–
13	Air flush	Air flush	Hea 02 Indoor air quality – Indoor air quality (IAQ) plan	Hea 02 Indoor air quality – Indoor air quality (IAQ) plan	Hea 02 Indoor air quality – Indoor air quality (IAQ) plan	Hea 02 Indoor air quality – Indoor air quality (IAQ) plan		●	●	●	●	–
14	Air infiltration management	Air leakage testing	Man 04 Commissioning and handover - Testing and inspecting building fabric	Man 04 Commissioning and handover - Testing and inspecting building fabric	Man 04 Commissioning and handover - Testing and inspecting building fabric	Man 04 Commissioning and handover - Testing and inspecting building fabric	ENE 04 Pressure/ air leakage test	✓	✓	✓	✓	✓
17	Direct source ventilation	Pollution isolation and exhaust					HEA 19 Control of chemicals	–	–	–	–	●

WELL Building Standard			BREEAM Credit(s)					WELL - BREEAM Overlap				
18	Air quality monitoring and feedback	Indoor air monitoring					HEA 14 Internal environment: CO2 Monitoring HEA 15 Internal environment: CO Monitoring HEA 16 Internal environment: NOx monitoring	–	–	–	–	✓
		Air data record keeping and response						–	–	–	–	–
		Environmental Measures Display						–	–	–	–	–
19	Operable windows	Full control	Hea 02 Indoor air quality - Potential for natural ventilation	Hea 02 Indoor air quality - Potential for natural ventilation	Hea 02 Indoor air quality - Potential for natural ventilation	Hea 02 Indoor air quality - Potential for natural ventilation	HEA 03 Thermal control HEA 04 Ventilation controls	✓	✓	✓	✓	✓
		Outdoor air measurement						–	–	–	–	–
		Window operation measurement						–	–	–	–	–
24	Combustion minimization	Appliance and heater combustion ban						–	–	–	–	–
		Low emission combustion sources	Pol 02 NOx emissions	Pol 02 NOx emissions	Pol 02 NOx emissions	Pol 02 NOx emissions	POL 06 NOx emissions	✓	✓	✓	✓	✓
		Engine exhaust reduction						–	–	–	–	–
WATER												
30	Fundamental water quality	Sediment	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●
		Micro-organisms	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●
31	Inorganic contaminants	Dissolved metals	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●
32	Organic Contaminants	Organic Pollutants	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●
33	Agricultural contaminants	Herbicides and pesticides	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●
		Fertilizers	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●
34	Public water additives	Disinfectants	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●
		Disinfectant by-products	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●
		Fluoride	EUR	EUR	EUR	EUR	EUR	■ ●	■ ●	■ ●	■ ●	■ ●

WELL Building Standard			BREEAM Credit(s)					WELL - BREEAM Overlap				
36	Water treatment	Organic chemical removal						–	–	–	–	–
		Sediment filter						–	–	–	–	–
		Microbial elimination						–	–	–	–	–
		Water quality maintenance						–	–	–	–	–
		Legionella control	UKR	UKR	Hea 09 Water quality - Building services water systems: Minimising risk of contamination		HEA 05 Microbial contamination HEA 22 Legionella management	■ ●	■ ●	✓	–	✓
37	Drinking water promotion	Drinking water taste properties						–	–	–	–	–
		Drinking water access	UKR	UKR	Hea 09 Water quality - Building occupants: Provision of fresh drinking water		HEA 06 Water provisions	■ ●	■ ●	✓	–	✓
		Water dispenser maintenance						–	–	–	–	–
LIGHT												
53	Visual lighting design	Visual acuity for focus	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	HEA 08 Illuminance levels	✓	✓	✓	✓	✓
		Brightness Management Strategies						–	–	–	–	–
55	Electric light glare control	Lamp Shielding	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	HEA 08 Illuminance levels	✓	✓	✓	✓	✓
		Glare minimization	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	HEA 08 Illuminance levels	✓	✓	✓	✓	✓
56	Solar glare control	View window shading	Hea 01 Visual comfort - Glare control	Hea 01 Visual comfort - Glare control	Hea 01 Visual comfort - Glare control	Hea 01 Visual comfort - Glare control	HEA 02 Glare control	✓	✓	✓	✓	✓
		Daylight management	Hea 01 Visual comfort - Glare control	Hea 01 Visual comfort - Glare control	Hea 01 Visual comfort - Glare control	Hea 01 Visual comfort - Glare control	HEA 02 Glare control	✓	✓	✓	✓	✓
57	Low-glare workstation design	Working and learning area surface reflectivity	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	HEA 08 Illuminance levels	●	●	●	●	●
58	Color quality	Color rendering index	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	HEA 08 Illuminance levels	✓	✓	✓	✓	✓
59	Surface design	Working and learning area surface reflectivity	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	Hea 01 Visual comfort - Internal and external lighting levels, zoning and control	HEA 08 Illuminance levels	●	●	●	●	●

WELL Building Standard			BREEAM Credit(s)					WELL - BREEAM Overlap				
60	Automated shading and dimming controls	Automated sunlight control	Hea 01 Visual comfort – Glare control	Hea 01 Visual comfort – Glare control	Hea 01 Visual comfort – Glare control	Hea 01 Visual comfort – Glare control	HEA 02 Glare control	●	●	●	●	●
		Responsive light control						–	–	–	–	–
61	Right to Light	Lease Depth	Hea 01 Visual comfort – View out	Hea 01 Visual comfort – View out	Hea 01 Visual comfort – View out	Hea 01 Visual comfort – View out	HEA 28 View out	✓	✓	✓	✓	✓
		Window access	Hea 01 Visual comfort – View out	Hea 01 Visual comfort – View out	Hea 01 Visual comfort – View out	Hea 01 Visual comfort – View out	HEA 28 View out	✓	✓	✓	✓	✓
62	Daylight modeling	Healthy sunlight exposure	Hea 01 Visual comfort – Daylighting	Hea 01 Visual comfort - Daylighting	Hea 01 Visual comfort - Daylighting	Hea 01 Visual comfort - Daylighting	HEA 01 Glazing	●	●	●	●	●
63	Daylighting fenestration	Window sizes for working and learning spaces	Hea 01 Visual comfort – Daylighting; View out	Hea 01 Visual comfort - Daylighting; View out	Hea 01 Visual comfort – View out	Hea 01 Visual comfort – View out	HEA 01 Glazing	✓	✓	✓	✓	✓
		Window transmittance in working and learning areas						–	–	–	–	–
		Uniform color transmittance						–	–	–	–	–
FITNESS												
65	Activity incentive programs	Activity incentive programs					HEA 26A Health and Wellbeing	–	–	–	–	●
66	Structured fitness opportunities	Professional fitness program					HEA 26A Health and Wellbeing	–	–	–	–	●
		Fitness education					HEA 26A Health and Wellbeing	–	–	–	–	●
67	Exterior active design	Pedestrian Amenities						–	–	–	–	–
		Pedestrian promotion						–	–	–	–	–
		Neighborhood connectivity	Tra 02 Proximity to amenities	Tra 02 Proximity to amenities	Tra 02 Proximity to amenities	Tra 02 Proximity to amenities	TRA 03 Proximity to amenities	✓	✓	✓	✓	●
69	Active transportation support	Bicycle storage and support	Tra 03 Cyclist facilities - Cycle storage	Tra 03 Cyclist facilities - Cycle storage	Tra 03a Alternative modes of transport – Option 5	Tra 01 Sustainable transport accessibility – Alternative transport measures (Measure B)	TRA 01 Cyclist facilities	▲	▲	▲	▲	▲
		Post commute and workout facilities	Tra 03 Cyclist facilities – Cyclist facilities	Tra 03 Cyclist facilities – Cyclist facilities	Tra 03a Alternative modes of transport – Option 5	Tra 01 Sustainable transport accessibility – Alternative transport measures (Measure C)	TRA 01 Cyclist facilities	✓	✓	✓	✓	✓
COMFORT												
72	Accessible design	Accessibility and usability	UKR	UKR	Hea 06 Accessibility – Indusive and accessible design		HEA 10 Inclusive design	■ ●	■ ●	✓	–	✓
74	Exterior noise intrusion	Sound pressure level	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	HEA 20 Acoustic conditions	●	●	●	●	●

WELL Building Standard			BREEAM Credit(s)					WELL - BREEAM Overlap				
75	Internally generated noise	Acoustic planning	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	HEA 20 Acoustic conditions	●	●	●	●	●
		Mechanical equipment sound levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	Hea 05 Acoustic performance - Internal indoor ambient noise levels	HEA 20 Acoustic conditions	●	●	●	●	●
76	Thermal Comfort	Ventilated thermal environment	Hea 04 Thermal comfort – Thermal modelling	Hea 04 Thermal comfort – Thermal modelling	Hea 04 Thermal comfort – Thermal modelling	Hea 04 Thermal comfort – Thermal modelling	HEA 13 Operating temperature	✓	✓	✓	✓	●
		Natural thermal adaptation	Hea 04 Thermal comfort – Thermal modelling	Hea 04 Thermal comfort – Thermal modelling	Hea 04 Thermal comfort – Thermal modelling	Hea 04 Thermal comfort – Thermal modelling	HEA 13 Operating temperature	✓	✓	✓	✓	●
78	Reverberation time	Reverberation time	Hea 05 Acoustic performance – Reverberation time	Hea 05 Acoustic performance - Reverberation time	Hea 05 Acoustic performance - Reverberation time	Hea 05 Acoustic performance - Reverberation time		●	●	●	●	–
81	Sound barriers	Wall construction specification	Hea 05 Acoustic performance - Sound insulation	Hea 05 Acoustic performance - Sound insulation	Hea 05 Acoustic performance - Sound insulation	Hea 05 Acoustic performance - Sound insulation		●	●	●	●	–
		Doorway specification						–	–	–	–	–
		Wall construction methodology						–	–	–	–	–
MIND												
86	Post-Occupancy Survey	Occupant survey content	Man 05 Aftercare - Post occupancy evaluation	Man 05 Aftercare - Post occupancy evaluation	Man 05 Aftercare - Post occupancy evaluation	Man 05 Aftercare - Post occupancy evaluation	HEA 23 Occupant satisfaction	✓	✓	✓	✓	✓
		Information reporting	Man 05 Aftercare - Post occupancy evaluation	Man 05 Aftercare - Post occupancy evaluation	Man 05 Aftercare - Post occupancy evaluation	Man 05 Aftercare - Post occupancy evaluation	HEA 24 Occupant satisfaction: feedback	✓	✓	✓	✓	✓
100	Biophilia II - quantitative	Outdoor biophilia	LE 02 Ecological value of site and protection of ecological features LE 03 Minimising impact on existing site ecology LE 04 Enhancing site ecology LE 05 Long term impact on biodiversity	LE 02 Ecological value of site and protection of ecological features LE 03 Minimising impact on existing site ecology LE 04 Enhancing site ecology LE 05 Long term impact on biodiversity	LE 02 Ecological value of site and protection of ecological features LE 04 Enhancing site ecology LE 05 Long term impact on biodiversity	LE 02 Ecological value of site and protection of ecological features LE 04 Enhancing site ecology LE 05 Long term impact on biodiversity	LE 01 Planted area LE 02 Ecological features of planted area	●	●	●	●	●
		Indoor biophilia					HEA 26A Health and Wellbeing	–	–	–	–	●
		Water feature						–	–	–	–	–

Appendix B – BREEAM New Construction and Refurbishment and Fit-Out alignment with WELL features

BREEAM Assessment Issue	BREEAM Credit(s)	WELL Feature Name and Part	BREEAM – WELL Overlap			
			UK NC 2014	UK RFO 2014	INC 2016	IRFO 2015
MANAGEMENT						
Man 04 Commissioning and handover	Commissioning and testing schedule and responsibilities					
	Commissioning building services	03 Ventilation effectiveness – System balancing	❖	❖	❖	❖
	Testing and inspecting building fabric	14 Air infiltration management – Air leakage testing	❖	❖	❖	❖
	Handover					
Man 05 Aftercare	Aftercare support					
	Seasonal commissioning					
	Post occupancy evaluation	86 Post-occupancy survey - Occupant survey content	❖	❖	❖	❖
		86 Post-occupancy survey - Information reporting	❖	❖	❖	❖
HEALTH & WELLBEING						
Hea 01 Visual comfort	Glare control	56 Solar glare control – View window shading	❖	❖	❖	❖
		56 Solar glare control – Daylight management	❖	❖	❖	❖
		60 Automated shading and dimming controls - Automated sunlight control	●	●	●	●
	Daylighting	62 Daylight modelling – Healthy sunlight exposure	❖	❖	❖	❖
		63 Daylighting fenestration – Window sizes for working and learning spaces	❖	❖	❖	❖
	View out	61 Right to light – Lease depth	❖	❖	❖	❖
		61 Right to light – Window access	❖	❖	❖	❖
		63 Daylighting fenestration – Window sizes for working and learning spaces	❖	❖	❖	❖
	Internal and external lighting levels, zoning and control	53 Visual lighting design – Visual acuity for focus	❖	❖	❖	❖
		55 Electric lighting glare control – Lamp shielding	❖	❖	❖	❖
		55 Electric lighting glare control – Glare minimization	❖	❖	❖	❖
		57 Low-glare workstation design – Glare avoidance	●	●	●	●
		58 Color quality – Color rendering index	❖	❖	❖	❖
		59 Surface design – Working and learning area surface reflectivity	●	●	●	●
Hea 02 Indoor air quality	Prerequisite (asbestos)	11 Fundamental material safety - Asbestos and lead restriction			❖	❖
	Indoor air quality (IAQ) plan	07 Construction pollution management – Duct protection	●	●	●	●
		07 Construction pollution management – Filter replacement	●	●	●	●
		07 Construction pollution management – Moisture absorption management	●	●	●	●
		07 Construction pollution management – Dust containment and removal	●	●	●	●
		13 Air flush – Air flush	●	●	●	●
	Ventilation	02 Smoking ban - Indoor smoking ban	–	–	❖	❖
		03 Ventilation effectiveness - Ventilation design	❖	❖	❖	❖
		03 Ventilation effectiveness - Demand control ventilation	❖	❖	❖	❖
		05 Air filtration – Filter accommodation	❖	❖	❖	❖
		05 Air filtration – Particle filtration	❖	❖	❖	❖
		15 Increased ventilation – Increased outdoor air supply	❖	❖	❖	❖
	Volatile organic compound (VOC) emission levels (products) / Emissions from building products	04 VOC reduction - Interior paints and coatings	❖	❖	❖	❖
		04 VOC reduction - Interior adhesives and sealants	❖	❖	❖	❖
		04 VOC reduction - Flooring	❖	❖	❖	❖
		04 VOC reduction - Insulation	❖	❖	❖	❖
		04 VOC reduction - Furniture and furnishings	–	❖	–	❖
	Volatile organic compound (VOC) emission levels (post construction) / Post-construction indoor air quality measurement	01 Air quality standards - Standards for volatile substances	●	●	●	●
	Adaptability - Potential for natural ventilation	03 Ventilation effectiveness - Demand control ventilation	❖	❖	❖	❖
		19 Operable windows - Full control	❖	❖	❖	❖

BREEAM Assessment Issue	BREEAM Credit(s)	WELL Feature Name and Part	BREEAM – WELL Overlap			
			UK NC 2014	UK RFO 2014	INC 2016	IRFO 2015
Hea 04 Thermal comfort	Thermal modelling	76 Thermal comfort - Ventilated thermal environment 76 Thermal comfort - Natural thermal adaptation	❖ ❖	❖ ❖	❖ ❖	❖ ❖
	Adaptability - for a projected climate change scenario					
	Thermal zoning and controls					
Hea 05 Acoustic performance	Sound insulation	81 Sound barriers - Wall construction specification	●	●	●	●
	Internal indoor ambient noise levels	74 Exterior noise intrusion - Sound pressure level 75 Internally generated noise - Acoustic planning 75 Internally generated noise - Mechanical equipment sound levels	● ● ●	● ● ●	● ● ●	● ● ●
	Reverberation	78 Reverberation time - Reverberation time	❖	❖	❖	❖
Hea 06 Accessibility	Safe access					
	Inclusive and accessible design	72 Accessible design - Accessibility and usability			❖	
Hea 09 Water quality	Building services water systems: Minimising risk of contamination	36 Water treatment – Legionella control			❖	
	Building occupants: Provision of fresh drinking water	37 Drinking water promotion - Drinking water access			❖	
WATER						
Wat 03 Water leak detection	Leak detection system	12 Moisture management - Interior liquid water management	●	●	●	●
	Flow control devices	12 Moisture management - Interior liquid water management	●	●	●	●
TRANSPORT						
Tra 01 Sustainable transport accessibility	Accessibility Index					
	Alternative transport measures (Measures B and C)	69 Active transportation support - Bicycle storage and support 69 Active transportation support - Post commute and workout facilities				❖ ❖
Tra 02 Proximity to amenities	Proximity to amenities	67 Exterior active design - Neighborhood connectivity	❖	❖	❖	❖
Tra 03 Cyclist facilities	Cycle storage	69 Active transportation support - Bicycle storage and support	❖	❖		
	Cyclist facilities	69 Active transportation support - Post commute and workout facilities	❖	❖		
Tra 03a Alternative modes of transport	Alternative modes of transport (Option 5)	69 Active transportation support - Bicycle storage and support 69 Active transportation support - Post commute and workout facilities			❖ ❖	
LAND USE & ECOLOGY						
LE 02 Ecological value of site and protection of ecological features	Ecological value of site	100 Biophilia II quantitative - Outdoor Biophilia	●	●	●	●
	Protection of ecological features	100 Biophilia II quantitative - Outdoor Biophilia	●	●	●	●
LE 03 Minimising impact on existing site ecology	Change in ecological value 1	100 Biophilia II quantitative - Outdoor Biophilia	●			
	Change in ecological value 2	100 Biophilia II quantitative - Outdoor Biophilia	●			
LE 04 Enhancing site ecology	Ecologist's report and recommendations	100 Biophilia II quantitative - Outdoor Biophilia	●	●	●	●
	Increase in ecological value	100 Biophilia II quantitative - Outdoor Biophilia	●	●	●	●
LE 05 Long term impact on biodiversity	Long term impact on biodiversity	100 Biophilia II quantitative - Outdoor Biophilia	●	●	●	●
POLLUTION						
Pol 02 NOx emissions	NOx emissions	24 Combustion minimization - Low emission combustion sources	❖	❖	❖	❖

Appendix C - BREEAM In-Use alignment with WELL features

BREEAM In-Use Assessment Issue/Credit(s)	WELL Feature Name and Part	BREEAM – WELL Overlap BIU 2015
MANAGEMENT		
MAN 04 Operation and maintenance manuals	04 Air filtration – Air filtration maintenance	●
MAN 05 Maintenance procedures	04 Air filtration – Air filtration maintenance	●
HEALTH & WELLBEING		
HEA 01 Glazing	63 Daylighting fenestration - Window sizes for working and learning spaces	✓
HEA 02 Glare control	56 Solar glare control - View window shading 56 Solar glare control - Daylight management 60 Automated shading and dimming controls - Automated sunlight control	✓ ✓ ●
HEA 03 Thermal control	19 Operable windows - Full control	✓
HEA 04 Ventilation controls	19 Operable windows - Full control	✓
HEA 05 Microbial contamination	36 Water treatment – Legionella control	✓
HEA 06 Water provisions	37 Drinking water promotion - Drinking water access	✓
HEA 08 Illuminance levels (Lux)	53 Visual lighting design - Visual acuity for focus 55 Electric lighting glare control - Lamp Shielding 55 Electric lighting glare control - Glare minimization 57 Low-glare workstation design - Glare avoidance 58 Color quality - Color rendering index 59 Surface design - Working and learning area surface reflectivity	✓ ✓ ✓ ● ✓ ●
HEA 10 Inclusive design	72 Accessible design - Accessibility and usability	✓
HEA 11 Ventilation requirements	03 Ventilation effectiveness - Ventilation design	●
HEA 12 Fresh air rates	03 Ventilation effectiveness - Ventilation design	✓
HEA 13 Operating temperature	76 Thermal Comfort - Ventilated thermal environment 76 Thermal Comfort - Natural thermal adaptation	✓ ✓
HEA 14 Internal environment: CO2 Monitoring	18 Air quality monitoring and feedback - Indoor air monitoring	✓
HEA 15 Internal environment: CO Monitoring	01 Air quality standards - Standards for particulate matter and inorganic gases	✓
HEA 16 Internal environment: NOx monitoring	18 Air quality monitoring and feedback - Indoor air monitoring	●
HEA 18 Volatile organic compounds	01 Air quality standards - Standards for volatile substances 04 VOC reduction - Interior paints and coatings 04 VOC reduction – Interior adhesives and sealants 04 VOC reduction – Flooring 04 VOC reduction – Insulation 04 VOC reduction - Furniture and furnishings	● ● ● ● ● ●
HEA 19 Control of chemicals	17 Direct source ventilation – Pollution isolation and exhaust	●
HEA 20 Acoustic conditions	74 Exterior noise intrusion - Sound pressure level 75 Internally generated noise - Acoustic planning 75 Internally generated noise - Mechanical equipment sound levels 76 Reverberation time – Reverberation time	● ● ● ●
HEA 21 Deep cleaning	09 Cleaning protocol - Cleaning plan for occupied spaces	●
HEA 22 Legionella management	36 Water treatment – Legionella control	✓
HEA 23 Occupant satisfaction	86 Post-Occupancy Survey - Occupant survey content	✓
HEA 24 Occupant satisfaction: feedback	86 Post-Occupancy Survey - Information reporting	✓
HEA 26A Health and Wellbeing	65 Activity incentive programs - Activity incentive programs 66 Structured fitness opportunities - Professional fitness program 66 Structured fitness opportunities - Fitness education 100 Biophilia - Indoor Biophilia	● ● ● ●
HEA 28 View out	61 Right to Light - Lease Depth 61 Right to Light - Window access	✓ ✓
ENERGY		
ENE 04 Pressure/ air leakage test	14 Air infiltration management - Air leakage testing	✓

BREEAM In-Use Assessment Issue/Credit(s)	WELL Feature Name and Part	BREEAM – WELL Overlap
		BIU 2015
TRANSPORT		
TRA 01 Cyclist facilities	69 Active transportation support - Bicycle storage and support 69 Active transportation support - Post commute and workout facilities	✓ ✓
TRA 03 Proximity to amenities	67 Exterior active design - Neighborhood connectivity	●
WATER		
WAT 07 Leak detection system	12 Moisture management - Interior liquid water management	●
LAND USE & ECOLOGY		
LE 01 Planted area	100 Biophilia - Outdoor Biophilia	●
LE 02 Ecological features of planted area	100 Biophilia - Outdoor Biophilia	●
LE 05 External landscaping/ maintenance	10 Pesticide management - Pesticide use	●
POLLUTION		
POL 06 NOx emissions	24 Combustion minimization - Low emission combustion sources	●

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