Planning Sustainability Review

Employing Equivalent Code for Sustainable Homes Criteria

Welsh Baptist Church

20.07.2017

SUMMARY

Potential Score
60.34%
Equivalent CfSH Rating
★★★

The development was required to be designed to achieve an equivalent to a Code for Sustainable Homes Rating of Level 3. This would require a score of at least 57% under the scheme.

Based on the detailed information provided by the design and construction team - including actual product and supply chain information, as well as the designs based on the development as it stands circa 6 weeks prior to completion, the project would be capable of achieving a score equivalent to 60.34% under the CfSH criteria, where it suitable for formal assessment under the scheme.

This report provides a detailed review of the methods employed by the design team towards this, as well as supporting evidence.

NOTE: This review is not a certified assessment of the project - as the project is a student residence, any formal assessment would necessarily be carried out against the BREEAM Multi-Residential criteria. In some cases, estimated credits have been awarded based on a reasonable interpretation of whether the project meets the aims and intent of the formal CfSH criteria.

Issue	Responsibility	Credits for Issue	Value of Credit	Credit Target	Achieved Credits	Comments
Category 1 - Energy and CO2 Emissions						
Ene 1 - Dwelling Emission Rate	COMPLETE FOR DESIGN	19	1.17%	6 > 9	6 > 9	The development will be subject to Building Regulations Part L2a, as a Multi-Residential Building. In this case, the BREEAM ENE01 criteria has been applied to the development in place of CfSH requirements relating to SAP calculations. To comply with Manchester's Energy Efficiency Standards, which require a 10%-15% reduction over Part L2a 2010 levels for this type of building, a development would typically improve on Part L2a 2013 by circa 4%. This development will achieve this via efficient servicing systems, with natural strategies as far as is practical, low energy lighting and an efficient building fabric. The development is not over reliant on LZC technologies or active systems. The development would be expected to achieve between 33% and 50% of the credits available under the BREEAM New Construction Scheme. **EVIDENCE:** This can only be confirmed based on as-built energy calculations. Information provided to date is sufficient to provide the estimate made here.
Ene 2 - Fabric Energy Efficiency						
~~Ene 3 - Energy Display Devices~~	~~N/A~~	~~2~~	~~1.17%~~	~~0~~	~~0~~	~~Credit not sought.~~
~~Ene 4 - Drying Space~~	~~N/A~~	~~1~~	~~1.17%~~	~~0~~	~~0~~	~~Credit not sought.~~
Ene 5 - Energy Labelled White Goods	COMPLETE	2	1.17%	2	2	The specified Fridge Freezer - Montpellier MBUR200 achieves an A+ rating. The specified Dish Washer - Montpellier MDI600 achieves and A+ rating. EU Energy Efficiency Labelling Scheme Information will be provided in all dwellings, in place of a tumble dryer or a washer dryer. **EVIDENCE:** Product Information for White Goods - RECEIVED
Ene 6 - External Lighting	COMPLETE	2	1.17%	2	2	All external lighting systems will be dedicated LED fittings, controlled via timeclock. **EVIDENCE:** Drawings - RECEIVED.
~~Ene 7 - LZC Technologies~~	~~N/A~~	~~2~~	~~1.17%~~	~~0~~	~~0~~	~~Credit not sought.~~
Ene 8 - Cycle Storage	COMPLETE	2	1.17%	1	1	Cycle Storage will be provided for all dwellings (minimum of one space per every two dwellings.) **EVIDENCE:** Information on cycle store provided - RECEIVED.

Issue	Responsibility	Credits for Issue	Value of Credit	Credit Target	Achieved Credits	Comments
Category 1 - Energy and CO2 Emissions Continued						
Ene 9 - Home Office*	COMPLETE	1	1.17%	1	1	There will be space and services within a suitable room, so as to allow occupants to set up a home office. The space is well ventilated, and provided with good daylighting levels via large glazed areas and rooflights. The space provides: - A suitable wall length, for office furniture; - Two double power sockets; - Two telephone points (or double telephone point), or one telephone point where cable or wireless broadband is available. **EVIDENCE:** Dwelling layout drawings - RECEIVED.
Category 2 - Water						
Wat 1 - Indoor Water Use	COMPLETE	5	1.50%	3	3	The development must achieve a water consumption of ≤ 105 l/p/day. The installed showers and taps both achieve less than 5 litres per minute. WCs are dual-flush. Kitchen taps have a range of flow rates depending on input pressure / restrictors and are capable of achieving water efficient performance in developments of this volume. **EVIDENCE:** Details of sanitary ware flow rates - RECEIVED.
Wat 2 - External Water Use	COMPLETE	1	1.50%	1	1	A min. 200 litre water butt must be provided to collect rainwater for use in irrigating the garden planting. The storage must comply with the following: • No open access at the top of the collector (a child-proof lid is allowed); • Provision of a tap or other arrangement for drawing off water; • Connection to the rainwater downpipes with an automatic overflow into the conventional rainwater drainage system; • A means of detaching the rainwater downpipe and access provision to enable the interior to be cleaned; • Where the collection system is to be sited outside, and not buried, it must be stable and adequately supported; the material used for the container shall be durable and opaque to sunlight; • Where the system is part of a rainwater collection system providing internal water, water for external use may be provided in a separate tank to water required for internal use. This could be an overflow pipe leading from the main tank to a correctly specified water butt for external water use. **EVIDENCE:** Product information for water butt - RECEIVED.
Category 3 - Materials						
Mat 1 - Environmental Impact of Materials	COMPLETE	15	0.30%	12	12	**MANDATORY: At least three of the following five key elements of the building envelope must achieve a rating of A+ to D in the 2008 version of The Green Guide:** Roof; External walls; Internal walls (including separating walls); Upper and ground floors (including separating floors); Windows. Ground Floor, Internal and External Walls, Roof, and Upper Floor specifications achieve A / A+ ratings. **EVIDENCE:** Architect NBS Specification, drawings showing above listed materials specifications (elevations, plans, section drawings.) **- RECEIVED**
Mat 2 - Responsible Sourcing of Materials (Major Building Elements)	COMPLETE	6	0.30%	3	3	Circa 50% by volume of materials in the following Building Elements must be responsibly sourced, as follows: **Frame, Ground floor, Upper floors (including separating floors), Roof, External walls, Internal walls (including separating walls), Foundation/substructure (excluding sub-base materials), Staircase.** 100% of any timber in these elements must be legally sourced; 100% of concrete, aggregates from BES6001 or ISO14001 accredited suppliers; Steel re-enforcement from CARES / BES6001 accredit suppliers; All other materials (brick, glass, cladding panels etc.) from ISO14001 accredited suppliers. **EVIDENCE:** List of suppliers and accreditation - RECIEVED.
Mat 3 - Responsible Sourcing of Materials (Finishing Elements)	COMPLETE	3	0.30%	3	3	The materials in the following Building Elements must be responsibly sourced, as follows: **Stair (including handrails, balustrades, banisters, other guarding/rails, excluding staircase):** ISO14001 accredited **Window (including sub-frames, boards, sills):** ISO14001 accredited **External and internal door (including sub-frames, frames, linings, door):** Over 80% Timber to FSC / PEFC standard **Skirting (including architrave, skirting board and rails):** Over 80% Timber to FSC / PEFC standard **Panelling (including any other trim):** Over 80% Timber to FSC / PEFC standard **Furniture (including fitted kitchen, bedroom and bathroom units):** ISO14001 and/or FSC/PEFC for majority of materials. **Facias (soffit boards, bargeboards, gutter boards, others):** Over 80% Timber to FSC / PEFC standard. **EVIDENCE:** List of suppliers and accreditation - all of the above achieved - RECIEVED.

Issue	Responsibility	Credits for Issue	Value of Credit	Credit Target	Achieved Credits	Comments
Category 4 - Surface Water Run-Off						
Sur 1 - Management of Surface Water Run-off from Developments	COMPLETE	2	0.55%	1	1	Credits are not achieved in this area, however, the FRA provided has been deemed to meet MCC Planning requirements and hence, the Mandatory Elements of the credit have been deemed to be met for the purposes of this exercise. There are no pollution sources on site, and hence, the water quality credit can be deemed to have been met. **EVIDENCE:** Flood Risk Assessment and drainage strategy - RECEIVED.
~~Sur 2 - Flood Risk~~	~~N/A~~	~~2~~	~~0.55%~~	~~0~~	~~0~~	
Category 5 - Waste						
Was 1 - Storage of Non-recyclable Waste and Recyclable Household Waste	COMPLETE	4	0.80%	2	2	**The MANDATORY REQUIREMENTS of CfSH have been met for the development.** A single recycling bin of at least 30 litres per dwelling will be provided for collection by and offsite segregation by an appointed waste contractor. **EVIDENCE:** 1) Drawings and product information for waste storage as above - RECEIVED. 2) Letter confirming consultation with appointed waste contractor - RECEIVED.
Was 2 - Construction Site Waste Management	COMPLETE	3	0.80%	3	3	The Site Waste Management Plan (SWMP) will contain: a. Target benchmarks for resource efficiency, i.e. m3 of waste per 100 m2 or tonnes of waste per 100 m2 set in accordance with best practice (e.g. based on WRAP, BRE, Constructing Excellence guidance); b. Procedures and commitments to minimize non-hazardous construction waste at design stage. Specify waste minimisation actions relating to at least 3 waste groups and support them by appropriate monitoring of waste. c. Procedures for minimising hazardous waste. d. Monitoring, measuring and reporting of hazardous and non-hazardous site waste production according to the defined waste groups (according to the waste streams generated by the scope of the works) A Site Waste Management Plan must be compiled for the project, including procedures and commitments to divert waste from landfill, according to the key waste groups likely to be generated in construction via: a. Re-use on site (in situ or for new applications) b. Re-use on other sites c. Salvage/reclaim for re-use d. Return to the supplier via a 'take-back' scheme e. Recovery and recycling using an approved waste management contractor f. Compost. The SWMP must be completed, and confirm that at least 85% by weight or by volume of non-hazardous construction waste generated by the project has been diverted from landfill. **EVIDENCE:** Site Waste Management Plan / Waste Contractor records - RECEIVED.
Was 3 - Composting	COMPLETE	1	0.80%	1	1	Space for a 7 litre kitchen waste container in the home, and for an **exterior composter** accessed by an inclusive route and within 30m of an external door, must be provided for home composting. Details of the internal storage container have been provided. **EVIDENCE:** The design team have confirmed that food waste will be appropriately stored on site - RECEIVED.
Category 6 - Pollution						
Pol 1 - Global Warming Potential (GWP) of Insulants	COMPLETE	1	0.70%	1	1	All insulating materials in the elements listed below only use substances that have a GWP < 5 (in manufacture AND installation): • Roofs: including loft access • Walls: internal and external including lintels and all acoustic insulation • Floors: including ground and upper floors • Hot water cylinder: pipe insulation and other thermal stores • Cold water storage tanks: where provided • External doors **EVIDENCE:** Product information for insulation - RECEIVED.
~~Pol 2 - NOx Emissions~~	~~N/A~~	~~3~~	~~0.70%~~	~~0~~	~~0~~	~~Credits not achievable.~~

Issue	Responsibility	Credits for Issue	Value of Credit	Credit Target	Achieved Credits	Comments
Category 7 - Health & Wellbeing						
Hea 1 - Day Lighting*	COMPLETE	3	1.17%	3	3	Dwellings achieve good levels of day light to all areas, due to glazed elevation and rooflights. This is likely to be equivalent to 2% in all areas. **EVIDENCE:** Layout drawings and elevations - RECEIVED.
Hea 2 - Sound Insulation	COMPLETE FOR DESIGN	4	1.17%	1 > 3	1 > 3	The development is estimated by the design team to achieve airborne sound insulation values between 3dB (1 credit) and 5dB (3 credits) higher than Building Regulations, Approved Document E. Impact sound insulation requirements are not assessed here as there are no dwellings below the new-build residences. **EVIDENCE:** Acoustic Design Report has been received. Testing would be required to confirm this credit for the as-built development, however information received to date is a sufficient base for the estimate made here.
Hea 3 - Private Space	COMPLETE	1	1.17%	1	1	The outdoor space for the development achieves the following: - Of a size that allows all occupants to use the space. - Provided with inclusive access and usability. - Accessible only to occupants of designated dwellings. **EVIDENCE:** Site Plan **-** RECEIVED
~~Hea 4 - Lifetime Homes~~	~~N/A~~	~~4~~	~~1.17%~~	~~0~~	~~0~~	~~The development will not be specifically built to Lifetime Homes standards.~~
Category 8 - Management						
Man 1 - Home User Guide	COMPLETE	3	1.11%	3	3	A 'Home User Guide' compliant with the **CfSH Technical Manual** will be provided to occupants. **EVIDENCE:** HUG Template - RECEIVED.
~~Man 2 - Considerate Constructors~~	~~N/A~~	~~2~~	~~1.11%~~	~~0~~	~~0~~	~~Credit not sought.~~
Man 3 - Construction Site Impacts	COMPLETE	2	1.11%	2	2	The Main Contractor has carried out the following: - Set targets for, and record, monthly ENERGY (electricity and diesel) usage for the site, displayed on a graph in the site cabin; - Set targets for, and record, monthly WATER (main and bowser) usage for the site, displayed on a graph in the site cabin; - Employ dust sheets, skip covers and regular damping down of the site, as a procedure for minimising dust pollution, in line with best-practice. Posters will be used to advertise this to site operatives; - Use only site timber that is re-used / re-claimed OR procured from FSC / PEFC accredited suppliers. **EVIDENCE:** Documentation to confirm the above - RECEIVED.
Man 4 - Security	COMPLETE	2	1.11%	2	2	The local police have not been consulted with respect to Secured-by-Design considerations AND Section 2 – Physical Security from 'Secured by Design – New Homes' is complied with. **EVIDENCE:** Crime Impact Statement and Application to Discharge Planning Condition - RECEIVED.
Category 9 - Ecology						
Eco 1 - Ecological Value of Site	COMPLETE	1	1.33%	1	1	The site is of low ecological value. **EVIDENCE:** Photo of site prior to development - RECEIVED.
Eco 2 - Ecological Enhancement	COMPLETE	1	1.33%	1	1	The ecological value of the site has been enhanced - all necessary bat surveys etc. and consultation was carried out prior to planning. All Ecological advice has been complied with, although a formal CfSH Ecology Report was not carried out. The external site design and planting lists confirms significant enhancement of the site, including native species and bat boxes. It is considered that the aim and intent of the CfSH criteria has been met. **EVIDENCE:** Bat report, site plan drawings and planting lists - RECEIVED.
Eco 3 - Protection of Ecological Features	COMPLETE	1	1.33%	1	1	No large trees will be removed to enable development. **EVIDENCE:** Photo of site prior to development - RECEIVED.
Eco 4 - Change in Ecological Value of Site	COMPLETE	4	1.33%	2	2	The number of native plant species provided on site is roughly unchanged / slightly improved as a result of development. All Ecological advice has been complied with, although a formal CfSH Ecology Report was not carried out. **EVIDENCE:** Landscape design information, planting lists. - RECEIVED
Eco 5 - Building Footprint	COMPLETE	2	1.33%	2	2	The net internal floor area: net internal ground floor area ratio is greater than 4:1 when the entire site is considered including refurbishment areas. **EVIDENCE:** Floor plan drawings for all buildings on site - RECEIVED

Ref. No.	Document Type	Originator	Recipient (for correspondence)	Title / Description	External Reference	Rev.	Date
1	Specification	WorkSpace	-	Specification - Appliances - Empiric and WorkSpace	-	-	-
2	Diagram	Buttress	-	Proposed Plans Basement Floor	(04) 210	B	16.12.15
3	Diagram	Buttress	-	Proposed Plans Basement Floor Layout Plan	(04) 009	C	14.12.15
4	Diagram	Buttress	-	Proposed Plans Fifth Floor	(04) 207	B	14.12.15
5	Diagram	Buttress	-	Proposed Plans Fifth Floor Layout Plan	(04) 015	B	18.12.15
6	Diagram	Buttress	-	Proposed First Floor Plan Option B Layout Plan	(04) 011	B	19.12.15
7	Diagram	Buttress	-	Proposed First Floor Plan Option B	(04) 203	B	14.12.15
8	Diagram	Buttress	-	Proposed Plans Fourth Floor	(04) 206	B	14.12.15
9	Diagram	Buttress	-	Proposed Ground Floor Option	(04) 202	A	03.12.15
10	Diagram	Buttress	-	Proposed Ground Floor Plan Option B Layout Plan	(04) 010	C	14.12.15
11	Diagram	Buttress	-	New Build Elevations As Proposed	(05) 002	A	17.12.15
12	Diagram	Buttress	-	Proposed Second Floor Plan Option B	(04) 204	B	14.12.15
13	Diagram	Buttress	-	Proposed Second Floor Plan Option B Layout Plan	(04) 012	B	14.12.15
14	Diagram	Buttress	-	Proposed Plans Third Floor	(04) 205	B	14.12.15
15	Diagram	Buttress	-	Proposed Plans Third Floor Layout Plan	(04) 013	B	14.11.15
16	Diagram	Buttress	-	Landscape Plan	(04) 008	A	16.12.15
17	Diagram	Buttress	-	Proposed Plans New Build Ground Floor as Proposed	(04) 501	E	15.05.17
18	Diagram	Buttress	-	Section EE as Proposed	(06) 405	H	31.03.17
19	Application	Buttesss	-	Application to discharge condition with respect to Secured-by-Design	102531/FO/2013/N2	-	10.07.17
20	Report	Miller Goodall	-	Information to Support Discharge of Acoustic Related Planning Conditions	101426	-	25.05.17
21	Diagram	Performance Electrical	-	External Lighting Installation	DT/9540/E36	P4	01.09.16
22	Diagram	Buttress	-	Proposed Refuse Storage	(52) 101	-	27.04.17
23	Information	The Code Store	-	Code 200Ltr Water Butt Green Product Information	-	-	14.06.17
24	Email	Murray Build Services	HH Smith	RE: Welsh Baptist Chapel - BREEAM	-	-	14.06.17
25	Report	Kenny Waste Management	-	Drivers Notes	457/LB/01	8	19.11.15
26	Report	Kenny Waste Management	-	Drivers Notes	457/LB/01	8	20.11.15
27	Certification	Cares	-	Certificate of Approval	80703	-	01.01.17
28	Certification	FSC	-	FSC Certificate of Registration Beers Timber & Building Supplies	SA-COC-002485	2	05.05.17
29	Certification	BMTRADA	-	CERTIFICATE OF REGISTRATION Hi Spec Doorsets	TT-COC-004864	1	17.03.14
30	Report	Kenny Waste Management	-	Waste Collected & Recycled From Site	17.09.04	-	08.12.15
31	Information	Binlinersdirect.com	-	Urba 7 Kitchen Food waste caddy Moss Green	GDURBA7KC	-	-
32	Information	HH Smith	-	Occupant Pack	-	-	-
33	Certification	FSC	-	FSC Certificate of Registration Beers Timber & Building Supplies	SA-COC-002485	2	05.05.17
34	Diagram	-	-	Cycle Stand	-	-	-
35	Report	Smart Architectural Aluminium	-	Responsible Sourcing Report 2016	-	-	-
36	Information	Vieo	-	Vieo Brochure	Ci/SfB (47) Nh2	-	01.08.14
37	Email	HH Smith	HH Smith	RE: Bike Store info	-	-	13.07.17
38	Diagram	Buttress	-	Landscape Plan	8015 (04) 008	A	10.11.15
39	Diagram	Benchmark Pods	-	Standard GRP V1 Layout,Elevations & Services	BMP351/16/001	-	05.06.17
40	Diagram	Benchmark Pods	-	Standard GRP V1 Layout,Elevations & Services	BMP351/16/001	-	05.06.17
41	Information	Methven	-	IBATHROOM TAPS Insignia Mono Basin Mixer Product Information	INS113	-	28.04.16
42	Email	Modular Systems	HH Smith	RE: Welsh Baptist Church	-	-	18.07.17
43	Information	Brabantia	-	Built-In Bin (10 Litre) Product Card	395246	-	-
44	Specification	Modular Systems	-	OPERATION AND MAINTENANCE MANUAL	-	-	-
45	Report	GMP	-	Crime Impact Statement	-	A	18.07.2013
46	Product Information	Brabantia	-	30 litre bin for general waste	Online resource	-	2017
47	Product Information	Brabantia	-	10 litre bin for food waste	Online resource	-	2017
48	Archive	HH Smith	-	Site waste, water and transport monitoring procedures and monitoring records	Various	-	Various