



The Code for Sustainable Homes

(Produced under CSH version November 2010)

Post Construction Stage Assessment of

The Sidings

Off Railway Road, Stansty, Wrexham

For

Gower Homes Ltd

By

T M Richards Ltd
TREVOR RICHARDS



Parties Involved

Site:The Sidings

Assessor

Organisation Name: T M Richards Ltd

Assessment Carried Out By: Trevor Richards
BRE Assessor Ref. No: BREEAM-Assessor-112

Address: 15 Lorne Terrace, Salters Lane, Shrewsbury, Shropshire, SY3 7EW

Email Address: t.richards@ecohomes-assessment.co.uk

Client / Funding Body

Assessment Required by a Funding Body:
No

Organisation Name: Gower Homes Ltd
Contact: M Forgrave
Address: 8 Temple Row, Wrexham, LL13 8LY

Developer

Organisation Name: Gower Homes Ltd
Contact: M Forgrave
Address: 8 Temple Row, Wrexham, LL13 8LY

Architect

Organisation Name: Parry Davies Architects Ltd.
Contact: -
Address: Studio 55, 20, North Wales Business Park, Abergele, LL22 8LJ



Assessment and Site Information

Site: The Sidings

Assessment Details

Scheme:	CSH
Assessment Reference No:	BRE-00024889-PC-003-01
Scheme Version:	Nov2010
Date Assessment Registered:	09/06/2014
Stage of Development:	Post Construction Stage
Development Phase:	3

Site Details

Site Name:	The Sidings
Site Address:	Off Railway Road, Stansty, Wrexham
Local Planning Authority:	Wrexham County Borough Council
No. of Units:	6
No. of Social Housing Units:	6
<u>General Description of Development:</u>	
This is 6 units of a phased 47	

General Description of Site

Site Area (M ²):	10120
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Building Types:

Houses

Construction Types:

Timber Frame

Services:

Gas & Electric

Unusual Features:

N/A



Category Summary

Site: The Sidings

Energy:

Code 3, with EDD, Washing line, energy efficient external lights

Water :

Code 4 & Water Butt

Materials:

Mandatory surpassed with timber frame Degree of responsible sourcing

Surface Water Run-off:

Low flood risk Reduction in peak rate and volume achieved

Waste:

Inclusion of internal and external recycling, supported by council collections IDP compliant SWMP on going and shows a high level of diversion from landfill. Compost bins

Pollution:

Low GWP insulations Low NOx boilers

Health & Wellbeing:

High level sound performance proven through testing. Units have gardens

Management:

Specification meeting section 2 of SBD CSI's implemented and HUG produced

Ecology:

Ecologist identified low ecological value. Implementation of enhancements



Dwelling Details

Site: The Sidings

Address: Off Railway Road, Stansty, Wrexham

County : Wrexham

Dwelling ID	Plot No	House No/Name	Street	Post Code	House Type	Soc. Housing	EPC Number	CO ₂ Rating
40	40	2	Brunswick Court	LL11 2JD	House	Yes	2098-3932-7319-2664-9960	86
41	41	4	Brunswick Court	LL11 2JD	House	Yes	8944-7930-2319-8679-2972	86
42	42	6	Brunswick Court	LL11 2JD	House	Yes	9129-3869-7301-9974-4261	84
43	43	8	Brunswick Court	LL11 2JD	House	Yes	0221-3866-7312-9924-6225	86
44	44	10	Brunswick Court	LL11 2JD	House	Yes	8664-7931-2320-2686-2922	86
45	45	12	Brunswick Court	LL11 2JD	House	Yes	8504-7931-2320-4666-2922	84



Issue Details

Site:The Sidings

Category: Energy

Issue:Ene1 Dwelling Emission Rate

Max Credits:15

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
3	DER < TER score = 1.5	Complete	1.50	6,3,4,5,1
5	DER < TER score = 1.2	Complete	1.20	2,6,3,4,5,1
6	DER < TER score = 1.3	Complete	1.30	6,3,4,5,1
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
2	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	Letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hardcopy folder: doc. ref: TS-02
3	Copy of revised/final calculations as detailed in the methodology	NHER: Part L1A 2010 Building Regulations Compliance Reports	As-Built Final	see PCR electronic folder "EN E 1" for PDFs (plots 40 to 45) "...Building Regulations Compliance Reports"
4	Detailed documentary evidence confirming the TER, DER and percentage improvement of DER over TER based on As Built SAP 2009 outputs	NHER: Part L1A 2010 CSH Reports	As-Built Final	see PCR electronic folder "EN E 1" for PDFs (plots 40 to 45) "...CSH Reports"
5	User Defined Evidence Type	NHER: SAP 2009 Worksheet	As-Built Final	see PCR electronic folder "EN E 1" for PDFs (plots 40 to 45) "...SAP Worksheet"

6	User Defined Evidence Type	CSH_10Nov_Ene1_2_Tool_The Sidings Stansty (PCR)	As-Built Final	onic folder "ENE 1" for S/S "CSH_10Nov_Ene1_2_Tool_The Sidings Stansty (PCR)"
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Description of Features Relating to Issue & Suggested Improvements

It is confirmed that the units are as-built to design stage plans. The units have been assessed by a qualified NHER energy assessor under Part L1A 2010. In line with As-Built Final calculations all units achieve a DER that is at least lesser than TER, with a range of improvements, as allocated under the specification ID's.

Issue:Ene2 Fabric Energy Efficiency

Max Credits:2

		<u>Specification</u>			
ID	Description	Status	Credits	Ev.No.	
1	FEE score = 3.8	Complete	3.80	2,3,6,4,5,1	
3	FEE score = 3.9	Complete	3.90	2,3,6,4,5,1	
4	FEE score = 5.5	Complete	5.50	3,6,4,5,1,2	
5	FEE score = 5.6	Complete	5.60	3,6,4,5,2,1	
6	FEE score = 6.1	Complete	6.10	1,3,6,4,5,2	

		<u>Related Evidence</u>		
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
2	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hardcopy folder: doc. ref: TS-02
3	User Defined Evidence Type	NHER: Part L1A 2010 Building Regulations Compliance Reports	As-Built Final	see PCR electronic folder "ENE 1" for PDFs (plots 40 to 45) "...Building Regulations Compliance Reports"
4	Detailed Documentary evidence confirming FEE based on as	NHER: Part L1A 2010 CSH Reports	As-Built Final	see PCR electronic folder "ENE 1" for PDFs (plots 40 to 45)

Built SAP 2009 outputs

5	Copy of revised/final calculations as detailed in the methodology	NHER: SAP 2009 Worksheet	As-Built Final	"...CSH Reports" see PCR electronic folder "ENE 1" for PDFs (plots 40 to 45) "...SAP Worksheet" see PCR electronic folder "ENE 1" for S/S "CSH_10Nov_Ene1_2_Tool_The Sidings Stansty (PCR)"
6	User Defined Evidence Type	CSH_10Nov_Ene1_2_Tool_The Sidings Stansty (PCR)	As-Built Final	

Description of Features Relating to Issue & Suggested Improvements

It is confirmed that the units are as-built to design stage plans. The units have been assessed by a qualified NHER energy assessor under SAP 2009. According to As-Built Final calculations all units have a good envelope and a range of FEE outcomes, as allocated under the specification ID's.

Issue:Ene3 Energy Display Devices

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	EDD: For secondary (Electricity) fuel monitoring		Complete	1.00	1,2,4,5,3
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessor	12/11/14	See PCR Hard copy folder: Doc ref: TS-04	
2	Site Inspection Report	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessor	12/11/14	See PCR Hard copy folder: Doc ref: TS-05	
3	Site Inspection Report	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessor	12/11/14	See PCR Hard copy folder: Doc ref: TS-06	
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "ENE 3" for PDF "Photographic Specification" (Jpegs/descriptions)	
5	Detailed Documentary evidence confirming the consumption data displayed by the energy display	Is the Micro+ suitable for Code for Sustainable Homes (CfSH) use?	10 December 2013	See PCR electronic folder "ENE 3" for PDF "Owl Micro - Suita	

6	play device Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	ble for CfSH " See PCR hardcopy folder: doc. ref: TS-02
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Description of Features Relating to Issue & Suggested Improvements

The units have been inspected, and are as-built to design stage plans. The units are have gas (primary) and electric (secondary) fuel supplies. The units are installed with an EDD for electricity, and the item provides a comprehensive display for occupants as required by CfSH. One CSH credit is awarded.

Issue:Ene4 Drying Space

Max Credits:1

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
1	External Drying line	Complete	1.00	3,2,1,4,5,6
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hardcopy folder: Doc ref: TS-04
2	Site Inspection Report	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hardcopy folder: Doc ref: TS-05
3	Site Inspection Report	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hardcopy folder: Doc ref: TS-06
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "ENE 4" for PDF "Photographic Specification" (Jpegs/descriptions) See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
5	Detailed Documentary evidence confirming the location of drying fixings	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	
6	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hardcopy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

a rotary drier providing >6m of line, and situated adjacent to hard-standing in a secure footing in the rear garden. One CSH credit is awarded.

Issue:Ene5 Energy Labelled White goods

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	No White Goods installed/EU Label Leaflet provided		Complete	1.00	2,1
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	A copy of the EU Energy Efficiency labelling Scheme information	Gower Homes - Heath & Safety Pack for Owner/Occupier....Plot Final 1 the Sidings, Wrexham....		See PCR hard copy folder; Doc ref: TS-01	
2	Confirmation that leaflets will be provided to every dwelling	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hard copy folder: doc. ref: TS-02	

Description of Features Relating to Issue & Suggested Improvements

No white goods appliances have been installed. A leaflet explaining the EU label scheme for white goods has been provided to all units. One CSH credit is awarded.

Issue:Ene6 External lighting

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	<150w fittings with energy saving controls		Complete	2.00	6,3,5,2,1,4
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-04	
2	Site Inspection Report	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-05	
3	Site Inspection Report	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-06	
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "ENE 6" for PDF "Photographic Sp	

5	Drawings showing the location of all external light fittings	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	ecification" (Jpegs/descriptions) See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
6	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	Letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hardcopy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

The units have been inspected and are as-built to design stage plans. The units have external lights with PIR and daylight cut-off control and the fittings are dedicated < 150w. There are no dedicated security lights. Two CSH credits are awarded.

Issue:Ene7 Low and Zero Carbon Technologies

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Credit not Sought		Complete	0.00	

Description of Features Relating to Issue & Suggested Improvements

Credit not Sought

Issue:Ene8 Cycle Storage

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Credit not sought		Complete	0.00	

Description of Features Relating to Issue & Suggested Improvements

Credit not sought.

Issue:Ene9 Home Office

Max Credits:1

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Home Office set-up (Whitby/Hampton)		Complete	1.00	5,2,4,3
2	No Home Office due to DF < 1.5		Complete	0.00	1

Related Evidence

Ev.No.	Evidence Type	Evidence Title	Version	Location
1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-04
2	Site Inspection Report	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-05
3	User Defined Evidence Type	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-06
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "ENE 9" for PDF "Photographic Specification" (Jpegs/descriptions) See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
5	Detailed Documentary evidence showing loc'n & size of the home office	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	
6	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	Letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hardcopy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

The units have been inspected and are confirmed as-built to design stage plans. The units are designed to include a home-office in a suitable room; with potential room for desk and chair, opening window and ventilation, wall >1.8m, 2 double sockets and telephone extension point, in bedroom 2. Broadband is available at the site level (see design stage report). The designated room in all units except the Durham achieves a DF > 1.5 (see HEA 1 for details) and One CSH credit is awarded. The Durham units are awarded No CSH credits

Category: Water

Issue: Wat1 Indoor Water Use

Max Credits: 5

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
1	All units: < 90litres per person per day	Complete	4.00	10,6,7,8,9,1,3,5,2,4
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location

1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessor)	12/11/14	See PCR Hard copy folder: Doc ref: TS-04
2	Site Inspection Report	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessor)	12/11/14	See PCR Hard copy folder: Doc ref: TS-05
3	Site Inspection Report	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessor)	12/11/14	See PCR Hard copy folder: Doc ref: TS-06
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "WAT 1" for PDF "Photographic Specification" (Jpegs/descriptions)
5	Detailed Documentary evidence showing the location, details and type of appliances/fittings to be provided	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
6	Detailed Documentary evidence showing the location, details and type of appliances/fittings to be provided	Twyford - Celtic Bath	04/11/2014	see PCR electronic folder "WAT 1" for PDF "Data Sheet - Bath"
7	Detailed Documentary evidence showing the location, details and type of appliances/fittings to be provided	Twyford - Alcona Close Coupled WC	04/11/2014	see PCR electronic folder "WAT 1" for PDF "Data Sheet - WC"
8	A letter of instruction to a contractor/supplier or a formal letter to an assessor	letter: from Total Boilers - re: installation of flow restrictors at Wrexham	C Jones (as-built)	see PCR electronic folder "WAT 1" for PDF "MX-2314N_2014_0829_084722"
9	Revised/Completed Water Efficiency Calculator for New Dwellings internal potable water use for each dwelling which has a different specification	CSH_Wat_1_Calculator Tool Stansley Wrexham plots 40 to 45 (As-Built)	03/12/14	See PCR electronic folder "WAT 1" for s/s "CSH_Wat_1_Calculator Tool Stansley Wrexham plots 40 to 45 (As-Built)"
10	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hardcopy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

same for all units, with low-volume dual flush w.c's, flow restrictions to both WHB taps and Kitchen taps, low fill bath and a water restriction to the shower. It is also identified that best practice installation to avoid bacterial contamination has been implemented. The calculated usage for the specification is <90 litres per person per day; a performance awarded Four CSH credits.

Issue: Wat2 External Water Use

Max Credits: 1

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
1	Water butt to houses	Complete	1.00	6,1,5,2,4,3
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessor)	12/11/14	See PCR Hard copy folder: Doc ref: TS-04
2	Site Inspection Report	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessor)	12/11/14	See PCR Hard copy folder: Doc ref: TS-05
3	User Defined Evidence Type	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessor)	12/11/14	See PCR Hard copy folder: Doc ref: TS-06
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "WAT 2" for PDF "Photographic Specification" (Jpegs/descriptions) See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
5	Detailed Documentary evidence stating type, size and location of rainwater collection systems	Drawings (matrix): Site layout/External, Unit layout/electrical/ elevations/sections	As-Built	
6	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	Letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hard copy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

The units include a water butt of sufficient size (200 litres), c/w with tap, overflow to down-pipe, and childproof lid. The item is on a secure base. One CSH credit is awarded.

Category: Materials

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
1	Houses: Detached/Semi-Detached/Terrace	Complete	12.00	13,14,12,6,9,10,11,7,8,1,3,5,2,4
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	User Defined Evidence Type	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-04
2	User Defined Evidence Type	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-05
3	User Defined Evidence Type	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-06
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "MAT 1" for PDF "Photographic Specification" (Jpegs/descriptions) See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
5	References stating the source of data used to complete the tool	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR Hard copy folder: Doc ref: TS-04
6	References stating the source of data used to complete the tool	Invoice: Partition Timber - Huws Gray	12158519	See PCR Hard copy folder: Doc ref: TS-11
7	References stating the design or specification documentation used to complete the tool	Invoice: Bricks - Kent Supplies Ltd	395935	See PCR Hard copy folder: Doc ref: TS-12
8	User Defined Evidence Type	Invoice: Bricks - Kent Supplies Ltd	395936	See PCR Hard copy folder: Doc ref: TS-16
9	User Defined Evidence Type	Invoice: Windows - Rooms & Views	21130	See PCR Hard copy folder: Doc ref: TS-18
10	User Defined Evidence Type	Invoice: Timber Frame - Lowfield	3575	
11	User Defined Evidence Type	Invoice: Roofing - Jones Roofing Supplies	6309	See PCR Hard copy folder: Do

12	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	c. ref: TS-20 See PCR hardcopy folder: doc. ref: TS-02 see PCR electronic folder "MAT 1" for s/s "Mat1_Houses Detached (the sidings) As-Built" see PCR electronic folder "MAT 1" for s/s "Mat1_Houses semi-detached (the sidings) As-Built"
13	Revised Code Mat 1 Calculator Tool	Mat1_Houses Detached (the sidings) As-Built	09/12/14	
14	Revised Code Mat 1 Calculator Tool	Mat1_Houses semi-detached (the sidings) As-Built	09/12/14	

Description of Features Relating to Issue & Suggested Improvements

The units have been inspected and are as-built to design stage specifications. The units are based on a timber frame, with a brick outer skin, a concrete ground floor, suspended timber upper floor in houses, PVCU windows and tiled timber roof, the units all meet the mandatory minimum requirements. For both the semi-detached & detached units, the calculator identifies 12.50 points, meaning that the units are awarded Twelve CSH credits.

Issue: Mat2 Responsible Sourcing of Materials - Basic Building Elements

Max Credits: 6

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Houses: Responsible Sourcing Performance		Complete	4.00	1,15,16,10,11,12,13,14,2,8,9,3,4,5,6,7
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built		See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
2	User Defined Evidence Type	Invoice: Partition Timber - Huws Gray	12158519		See PCR Hardcopy folder: Doc. ref: TS-04
3	User Defined Evidence Type	Invoice: Stairs & Balustrades - Custom Precision Joinery Ltd	55589		See PCR Hardcopy folder: Doc. ref: TS-06 See PCR Hard

4	User Defined Evidence Type	Invoice: Foundation Blocks - Kent Supplies Ltd	395136	copy folder: Do c. ref: TS-08
5	User Defined Evidence Type	Invoice: Bricks - Kent Supplies Ltd	395935	See PCR Hard copy folder: Do c. ref: TS-11
6	User Defined Evidence Type	Invoice: Bricks - Kent Supplies Ltd	395936	See PCR Hard copy folder: Do c. ref: TS-12
7	User Defined Evidence Type	Invoice: Timber Frame - Lowfield	3575	See PCR Hard copy folder: Do c. ref: TS-18
8	User Defined Evidence Type	Invoice: Internal Doors - Kent Supplies	396035	See PCR Hard copy folder: Do c. ref: TS-19
9	User Defined Evidence Type	Invoice: Roofing - Jones Roofing Supplies	6309	See PCR Hard copy folder: Do c. ref: TS-20
10	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham.....M Forge (Gower Homes Ltd)	22/08/14	See PCR hard copy folder: doc. ref: TS-02
11	Copy of CoC	Lowfield Timber Frames - PEFC certification CATG-PEFC-302	Expiry June 2019	See PCR Hard copy folder: Do c. ref: TS-22
12	User Defined Evidence Type	email: from Doug Bailey (Gower Homes) re: Fwd Grampian Tiles	10/09/14	See PCR electronic folder "MAT 2" for email "Fwd Grampian Tiles"
13	Copy of EMS Certificate	Tuscan Red Brick - BES 6001 Certified Products inc MARSS content	(08 07 14)	see PCR electronic folder "MAT 2" for S/S" BES 6001 Certified Products (08 07 14) inc MARSS content"
14	Copy of BES6001	24631 App 2 - Wienerberger Waresley - Very Good	3	See PCR electronic folder "MAT 2" for PDF "24631 App 2 - Wienerberger Waresley iss3"
15	Copy of CoC	G-E-Robinson GowerHomes-Sidings-Wreham-PEFC-FSC	27/08/14	See PCR electronic folder "MAT 2" for email "G-E-Robinson GowerHomes-Sidings-Wreham-PEFC-FSC"
16	Revised/Completed Mat 2 calculator tool	CSH_Mat_2_Tool_Stansty Houses (As-Built)	09/12/14	see PCR electronic folder "MAT 2" for PDF "CSH_Mat_2_Tool_Stansty Houses"

Description of Features Relating to Issue & Suggested Improvements

Gower Homes Ltd have provided evidence of their materials procurement and details of any certification from their supply chain. The timber frame (external walls/internal walls/upper floor) and stairs are proven to be Chain of Custody, whilst the bricks have BES6001 Very Good certification. Based on the proportion of materials the 2 storey houses are awarded Four CSH credits.

Issue:Mat3 Responsible Sourcing of Materials - Finishing Elements

Max Credits:3

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
1	Houses: Responsible Sourcing Performance	Complete	1.00	10,8,9,11 ,12,13,4 ,5,6,7,2 ,3,1
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	Detailed Documentary evidence stating the materials specified in each element	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
2	User Defined Evidence Type	Invoice: Internal Doors - Jewson	0140355	See PCR Hard copy folder: Doc. ref: TS-05
3	User Defined Evidence Type	Invoice: Stairs & Balustrades - Custom Precision Joinery Ltd	55589	See PCR Hard copy folder: Doc. ref: TS-06
4	User Defined Evidence Type	Invoice: Fascias - Morton & Jones Ltd	53737	See PCR Hard copy folder: Doc. ref: TS-07
5	User Defined Evidence Type	Invoice: External Doors - Kent Supplies Ltd	395150	See PCR Hard copy folder: Doc. ref: TS-09
6	User Defined Evidence Type	Invoice: Kitchen - Magnet Group	138741	See PCR Hard copy folder: Doc. ref: TS-15
7	User Defined Evidence Type	Invoice: Windows - Rooms & Views	21130	See PCR Hard copy folder: Doc. ref: TS-16
8	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	Letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hard copy folder: doc. ref: TS-02
9	Copy of EMS Certificate	(Freefoam - make Magnum Fascia)ISO14001_Certificate_Envir	Valid to 2015	see PCR electronic folder "MAT 3" for s/s "_ISO14001_Certifi

		onment		cate_Environm ent_to_(Fasci a)"
10	Copy of CoC	pefc-certificate Premdor SGS-P EFC/COC-0090	Valid to 2016	see PCR electr onic folder "MA T 3" for PDF "p efc-certificate P remdor"
11	Copy of CoC	forest-stewardship-council-certi ficate Premdor SGSCH-COC-0 06285	Vaild to 2016	see PCR electr onic folder "MA T 3" for PDF "fo rest-stewardshi p-council-certifi cate Premdor"
12	Copy of CoC	G-E-Robinson GowerHomes-Si dings-Wreham-PEFC-FSC	27/08/14	See PCR electr onic folder "MA T 2" for email "G-E-Robinson GowerHomes- Sidings-Wreha m-PEFC-FSC"
13	Revised/Completed Mat 3 calc ulator tool	CSH_Mat_3_Tool_Stansty Wre xham (as built)	09/12/14	See PCR electr onic folder "MA T 3" for s/s "CS H_Mat_3_Tool _Stansty Wrex ham (as built)"

Description of Features Relating to Issue & Suggested Improvements

Gower Homes Ltd have provided evidence of their materials procurement and details of any certification from their supply chain. The internal doors and stair balustrades are proven to be Chain of Custody, whilst the Fascias have ISO14001 EMS certification. Based on the proportion of materials the 2 storey houses are awarded One CSH.

Category: Surface Water Run-off

Issue:Sur1 Management of Surface Water Run Off from Developments

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Soakaways: Manage on Site & No Run-off		Complete	1.00	3,1,2
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	User Defined Evidence Type	Drawings (matrix): Site layout/E xternal, Unit layout/electrical/el evations/sections	As-Built		See PCR electr onic folder "Dra wings" for s/s "Drawings Matri x - The Sidings (as-Built)"

2	Statement from the appropriate letter: Richard Broun Associate y qualified professional confirms: Phase 1 Drainage..Gower H ng that the solutions designed omes..Wrexham..As-Built Confi have been implemented rmation	09/10/14	See PCR hardc opy folder: doc. ref: SUR-01
3	Written confirmation that the dw, letter: Confirmation of As-built - elling has been constructed in a the Sidings, Wrexham....M Forg ccordance with design stage dr ave (Gower Homes Ltd)	22/08/14	See PCR hardc opy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

The suitably qualified drainage engineer has confirmed that the designed the surface-water run-off system is as-built to design stage (although minor adjustment to setting out). The development includes a series of soakaways, designed to 1 in 100 year (6 hour), & climate change allowance; and design calculations identify that all surface water will be captured and infiltrated on site. The mandatory requirements are met by this method of SUDs, and One CSH credit is awarded for handling the 1st 5mm on site.

Issue:Sur2 Flood Risk

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Low Flood Risk		Complete	2.00	3,1,2
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	User Defined Evidence Type	Drawings (matrix): Site layout/E xternal, Unit layout/electrical/el As-Built evations/sections		See PCR electr onic folder "Dra wings" for s/s "Drawings Matri x - The Sidings (as-Built)"	
2	Confirmation from the develop	letter: Richard Broun Associate r that the evidence submitted ats: Phase 1 Drainage..Gower H the Design Stage has not chan omes..Wrexham..As-Built Confi ged rmation	09/10/14	See PCR hardc opy folder: doc. ref: SUR-01	
3	Written confirmation that the dw, letter: Confirmation of As-built - elling has been constructed in a the Sidings, Wrexham....M Forg ccordance with design stage dr ave (Gower Homes Ltd)		22/08/14	See PCR hardc opy folder: doc. ref: TS-02	

Description of Features Relating to Issue & Suggested Improvements

It is confirmed that the initial phase of the development is as-per design stage, and that the FRA remains unaffected. The drainage engineers performed a flood risk investigation of the site, and identified that the site is a low flood risk, with no immediate/local flood risks. Two CSH credits are awarded.

Category: Waste

Issue:Was1 Storage of non-recyclable waste and recyclable household waste

Max Credits:1

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
1	Accessible Internal & External Storage for waste & recycling	Complete	4.00	1,3,2,4,5,6
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-04
2	Site Inspection Report	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-05
3	Site Inspection Report	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Doc ref: TS-06
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "WAS 1" for PDF "Photographic Specification" (Jpegs/descriptions)
5	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	Letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hard copy folder: doc. ref: TS-02
6	Detailed Documentary evidence stating the location of the external storage	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"

Description of Features Relating to Issue & Suggested Improvements

The site has been inspected, and there is a change to locations of bins. There is now an area provided to the front of some properties that is suitable for bin storage (room for bins and 1500mm turning circle). Otherwise the units include an internal 3 compartment recycling bin, of adequate size/volume. There is a level threshold to the external hard-standing area. The hard-standing provides sufficient space for the council provided containers (which exceed volume requirements), and there is room for a 1500mm turning circle. The local council provides a regular recycling collection service, which collects 3+ streams of waste. The mandatory requirements are met, and the provision of a recycling collection service and internal and external containers means the Four CSH credits are awarded.

Issue: Was2 Construction Site Waste Management

Max Credits: 2

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.

1	SWMP to WAS 2a,b,c with on-going >85% target for diversion from landfill	Complete	3.00	1,2,3
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Ev.No.	Evidence Type	<u>Related Evidence</u>		Location
		Evidence Title	Version	
1	User Defined Evidence Type	letter: from Gower Homes Ltd: re: Confirmation of ongoing SWMP and Construction Site Impacts	10/09/14	see PCR electronic folder "WAS 2" for PDF "Confirmation of ongoing SWMP and Construction Site Impacts"
2	Confirmation from the developer that the Site Waste Management Plan meets the criteria	email: from GT Roberts & Sons to Gower Homes Ltd re: Recycling from Gower Homes site, The Sidings	26/08/14	see PCR electronic folder "WAS 2" for email "Fwd Recycling from Gower Homes site The Sidings"
3	Copy of a compliant SWMP containing the appropriate criteria in accordance with checklists Was 2a, 2b and 2c	The Sidings Site Waste Management Plan (1)	A	see PCR electronic folder "WAS 2" for s/s "Re The Sidings Site Waste Management Plan (1)"

Description of Features Relating to Issue & Suggested Improvements

The main contractor has implemented their SWMP and the initial review identifies that >85% of generated site waste has been diverted away from landfill, with >3 waste streams followed/monitored. Three CSH credits are awarded.

Issue:Was3 Composting

Max Credits:1

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	No compost provision		Complete	0.00	

Description of Features Relating to Issue & Suggested Improvements

The units are not provided with an external compost container. No CSH credit is awarded.

Category: Pollution

Issue:Pol1 Global Warming Potential (GWP) of insulants

Max Credits:1

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
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1	All insulations GWP < 5		Complete	1.00	8,2,4,5,6 ,3,1,7
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"	
2	User Defined Evidence Type	Invoice: External Doors - Kent Supplies Ltd	395150	See PCR Hard copy folder: Doc. ref: TS-09	
3	User Defined Evidence Type	Invoice: Insulation - Kent Supplies Ltd	395142	See PCR Hard copy folder: Doc. ref: TS-10	
4	User Defined Evidence Type	Invoice: Insulation - Kent Supplies Ltd	396017	See PCR Hard copy folder: Doc. ref: TS-13	
5	User Defined Evidence Type	Invoice: Insulation - Kent Supplies Ltd	395147	See PCR Hard copy folder: Doc. ref: TS-14	
6	User Defined Evidence Type	Invoice: Insulation - Kent Supplies	396318	See PCR Hard copy folder: Doc. ref: TS-21	
7	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	Letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hardcopy folder: doc. ref: TS-02	
8	Completed/Revised Checklist Pol 1	POL 1 checklist - Stansty	As-Built	see PCR electronic folder "POL 1" for doc. "POL 1 checklist - As-Built"	

Description of Features Relating to Issue & Suggested Improvements

All insulations are identified as being with GWP < 5; either inherently or as confirmed by manufacturer. One CSH credit is awarded.

Issue: Pol2 NOx Emissions

Max Credits:3

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Baxi Duo-tec 2 Combi 28 GA		Complete	3.00	1,3,2,4
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Asse	12/11/14	See PCR Hard copy folder: Do	

2	Site Inspection Report	ssor Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	c ref: TS-04 See PCR Hard copy folder: Do c ref: TS-05
3	Site Inspection Report	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Do c ref: TS-06
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "POL 2" for PDF "Photographic Specification" (Jpe gs/descriptions)
5	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hard copy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

The units have been inspected. The units include a gas combination boiler, the Baxi Duo-tec, which is used for primary water and space heating. This unit has a sealed balanced flue, and dry NOx emissions (in kg/MWh) of less than 40 (see design stage report). There are no other features relating to this credit. Three CSH credits are awarded.

Category: Health & Wellbeing

Issue:Hea1 Daylighting

Max Credits:3

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
3	Durham	Complete	2.00	6,7,1,5,3,4
4	Hampton	Complete	3.00	6,5,2,4,7
5	Whitby	Complete	1.00	6,5,3,4,7
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	On site measurements	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Do c ref: TS-04
2	On site measurements	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Do c ref: TS-05
3	On site measurements	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessment)	12/11/14	See PCR Hard copy folder: Do c ref: TS-06

		sor	
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham	See PCR electronic folder "HEA 1" for PDF "Photographic Specification" (Jpegs/descriptions) See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)" See PCR electronic folder "HEA 1" for PDF "HEA 1 - The Sidings Stansty (as-built)"
5	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	
6	Copy of calculations as detailed in the methodology	Daylight Factor & View of Sky calculations - The Sidings, Stansty (CfSH methodology)	03/12/14
7	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	Letter: Confirmation of As-built - the Sidings, Wrexham.... M Forge (Gower Homes Ltd)	22/08/14

Description of Features Relating to Issue & Suggested Improvements

The unit types have been inspected, including a dimension check, and the contractor confirms the units are as-built to design stage plans. Daylight Factor (DF) and View of Sky (VoS) calculations have been undertaken in line with CfSH methodology. The calculations identify that: The Durham has a DF < 2 in Kitchen, a DF >1.5 in dining room/lounge, and a VoS to worktop height >80% room depth in all key rooms; Two CSH credits are awarded. The Hampton has a DF > 2 in Kitchen, a DF >1.5 in dining room/lounge and home-office, and a VoS to worktop height >80% room depth in all key rooms; Three CSH credits are awarded. The Whitby has a DF < 2 in Kitchen, a DF >1.5 in lounge and home-office, but not the dining room, and a VoS to worktop height >80% room depth in all key rooms; One CSH credit is awarded.

Issue:Hea2 Sound InsulationMax Credits:4

Specification				
ID	Description	Status	Credits	Ev.No.
1	Sound Test Performance >8dB Improvement	Complete	4.00	4,2,3,1
2	Detached Unit	Complete	4.00	2,1
Related Evidence				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
	Written confirmation that the dw			

2	elling has been constructed in a letter: Confirmation of As-built - ccordance with design stage dr the Sidings, Wrexham....M Forg22/08/14 awings/spec rave (Gower Homes Ltd)		See PCR hardc opy folder: doc. ref: TS-02 See PCR electr onic folder "HE A 2" for PDF "5 284 14 R03 MC Walls" See PCR electr onic folder "HE A 2" for PDF "5 284-14 R04 BS RIA"
3	Copies of sound insulation field Sound Insulation report - The S test results idings, Wrexham -	13/10/14	
4	Copies of sound insulation field Sound Insulation report - The S test results idings, Wrexham -	30/10/14	

Description of Features Relating to Issue & Suggested Improvements

The site/phase is as-built to design stage plans. The detached units (all Whitby) are awarded Four CSH credits. For the semi-detached units, sound-testing units in-situ has been undertaken by a qualified body. The tests identify that performance exceeds Part E of the Building Regulations by >8dB; Four CSH credits are awarded.

Issue:Hea3 Private Space

Max Credits:1

		<u>Specification</u>			
ID	Description		Status	Credits	Ev.No.
1	Private Accessible Garden		Complete	1.00	6,1,5,2,3,4
		<u>Related Evidence</u>			
Ev.No.	Evidence Type	Evidence Title	Version	Location	
1	Site Inspection Report	Site Inspection Report - "phase 1" - Durham - the Sidings, Wrexham - T Richards (CfSH Assessor	12/11/14	See PCR Hard copy folder: Doc ref: TS-04	
2	Site Inspection Report	Site Inspection Report - "phase 1" - Hampton - the Sidings, Wrexham - T Richards (CfSH Assessor	12/11/14	See PCR Hard copy folder: Doc ref: TS-05	
3	Site Inspection Report	Site Inspection Report - "phase 1" - Whitby - the Sidings, Wrexham - T Richards (CfSH Assessor	12/11/14	See PCR Hard copy folder: Doc ref: TS-06	
4	User Defined Evidence Type	Photographic Specification - The Sidings, Wrexham		See PCR electronic folder "HEA 3" for PDF "Photographic Specification" (Jpegs/descriptions)	
5	Detailed Documentary evidence confirming the number of bedrooms served by the outdoor space	Drawings (matrix): Site layout/External, Unit layout/electrical/el	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix"	

	ace	evations/sections	x - The Sidings (as-Built)"
6	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	See PCR hardcopy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

The units have been inspected and are as-built to design stage plans. Each unit has an accessible garden area, of sufficient space for all occupants to sit outside. One CSH credit is awarded.

Issue:Hea4 Lifetime Homes

Max Credits:4

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
2	Not Lifetime Homes compliant		Complete	0.00	

Description of Features Relating to Issue & Suggested Improvements

Credit not sought

Category: Management

Issue:Man1 Home User Guide

Max Credits:3

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Home User Guide (as per checklist MAN 1)		Complete	3.00	2,1
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	A sample copy of the Home User Guide	Gower Homes - Heath & Safety Pack for Owner/Occupier....PlotFinal 1 the Siding, Wrexham....		See PCR hardcopy folder; Doc ref: TS-01	
2	Confirmation the home user guide has been supplied to all dwellings	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd) item 6	22/08/14	See PCR hardcopy folder: doc. ref: TS-02	

Description of Features Relating to Issue & Suggested Improvements

The main contractor has produced a Home User Guide to checklist MAN 1, which they have confirmed is being provided to all units. Three CSH credits are awarded.

Issue:Man2 Considerate constructors Scheme

Max Credits:2

Specification

ID	Description	Status	Credits	Ev.No.
1	Credit not sought	Complete	0.00	

Description of Features Relating to Issue & Suggested Improvements

Credit not sought.

Issue:Man3 Construction Site Impacts

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	4 Construction Site impacts ongoing		Complete	2.00	2,1,3
Ev.No.	Evidence Type	<u>Related Evidence</u> Evidence Title	Version	Location	
1	A letter from the developer confirming the materials specified on site that were re-used	Invoice: Partition Timber - Huws Gray	12158519	See PCR Hard copy folder: Doc. ref: TS-04 see PCR electronic folder "WAS 2" for PDF "Confirmation of ongoing SWMP and Construction Site Impacts" See PCR electronic folder "MAN 3" for s/s "Graphing Chart for water usage" see PCR electronic folder "MAN 3" for email "Fwd Site Inspection Sheets"	
2	Site procedures for minimising air/dust and water pollution	letter: from Gower Homes Ltd: re: Confirmation of ongoing SWMP and Construction Site Impacts	10/09/14		
3	Measurement/consumption records	Graphing Chart for water usage - The Sidings/Gower Homes Ltd	Mar 14 to Sept 14		
4	Measurement/consumption records	Site Inspection Sheets	07/11/14		

Description of Features Relating to Issue & Suggested Improvements

The site has been inspected, and site evidence shows procedures for the on-going best practice for the prevention of air/dust pollution, and prevention of surface water/ground water pollution. The main contractor has confirmed that they are managing site timbers to avoid new timbers. They are also monitoring water usage on site, charting usage against target. Two CSH credits are awarded.

Issue:Man4 Security

Max Credits:2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Compliance to Secured by Design section 2		Complete	2.00	3,2,1

Ev.No.	Evidence Type	Evidence Title	Version	Location
1	User Defined Evidence Type	Invoice: External Doors - Kent Supplies Ltd	395150	See PCR Hard copy folder: Do c. ref: TS-09
2	Detailed Documentary evidence from the developer confirming all recommendations have been incorporated	Letter: from D Bailey (Gower Homes Ltd) re: Secured by Design	10/09/14	See PCR electronic folder "MAN 4" for PDF "Secured by Design Confirmation of commitment"
3	Detailed Documentary evidence from the developer confirming all recommendations have been incorporated	SBD report The Sidings Stansty Rd Railway Rd Wrexham	23rd May 2014	See PCR electronic folder "MAN 4" for doc. "SBD report The Sidings Stansty Rd Railway Rd Wrexham"

Description of Features Relating to Issue & Suggested Improvements

The site has yet to be certified for Secured by Design, however the client has made the application, and is undertaking all recommendations to ensure compliance to at least section 2. In the absence of Police certification or sign-off, the client has provided evidence of the compliance of the as-built site to requirements. Two CSH credits are awarded.

Category: Ecology

Issue:Eco1 Ecological Value of Site

Max Credits:1

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
1	Ecologist: Original Site of low ecological value	Complete	1.00	7,1,2,5,3,4
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
2	User Defined Evidence Type	CfSH Ecology Template: The Sidings, Wrexham (Joe Whittick/Ecologist)	25/08/14 (version 2)	See PCR electronic folder "Ecology" for PDF "CSH - The Sidings, Wrexham (1525)"
				See PCR electr

3	User Defined Evidence Type	Ecologist: J W Ecological - APP ENDIX 1 - Planting Species Lists	12/06/14	onic folder "Ecology" for PDF "APPENDIX 1 - Planting Species Lists" See PCR electronic folder "Ecology" for PDF "CV - Joe Whittick, JWE" See PCR electronic folder "Ecology" for email "Fwd The Sidings Wrexham for Gower Homes"
4	User Defined Evidence Type	Ecologist: J W Ecological - CV - Joe Whittick, JWE	2014	
5	User Defined Evidence Type	email; from Ecologist to Gower Homes Ltd re: confirmation of As-built (to-date) landscaping	25/08/14	
7	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham.... rave (Gower Homes Ltd)	M Forged 22/08/14	See PCR hardcopy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

A suitably qualified ecologist has been employed, and identified that the original site was of low ecological value, with no ecological features existing or to consider on the site. One CSH credit is awarded.

Issue:Eco2 Ecological Enhancement

Max Credits:1

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.
1	Ecologist Recommendation implemented	Complete	1.00	9,8,1,2,5 ,6,3,4,7
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)" See PCR electronic folder "Ecology" for PDF "CSH - The Sidings, Wrexham (1525)" See PCR electronic folder "Ecology" for PDF "APPENDIX 1 -
2	User Defined Evidence Type	CfSH Ecology Template: The Sidings, Wrexham (Joe Whittick/Ecologist)	25/08/14 (version 2)	
3	User Defined Evidence Type	Ecologist: J W Ecological - APP ENDIX 1 - Planting Species List	12/06/14	

		S	Planting Species Lists" See PCR electronic folder "Ecology" for PDF "CV - Joe Whittick, JWE" See PCR electronic folder "Ecology" for PDF "sidings_05_101_01_planting (v1.1)" See PCR electronic folder "Ecology" for PDF "sidings_05_101_02_planting (v1.1)" See PCR electronic folder "Ecology" for email "Fwd The Sidings Wrexham for Gower Homes"
4	User Defined Evidence Type	Ecologist: J W Ecological - CV - 2014 Joe Whittick, JWE	
5	User Defined Evidence Type	sidings_05_101_01_planting v1.1	
6	User Defined Evidence Type	sidings_05_101_02_planting v1.1	
7	User Defined Evidence Type	email; from Ecologist to Gower Homes Ltd re: confirmation of As-built (to-date) landscaping 25/08/14	
8	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd) 22/08/14	See PCR hardcopy folder: doc. ref: TS-02
9	Detailed Documentary evidence stating the planting schedule	Planting Schedule - The Sidings 2	See PCR electronic folder "Ecology" for PDF "sidings_v2_schedule "

Notes and Further Information

This is a phased PCR report; confirmation of "to-date" progress and approval by Ecologist used to support awards.

Description of Features Relating to Issue & Suggested Improvements

A suitably qualified ecologist has been employed, and has undertaken a pre-development survey/report. The Key recommendations and >30% additional recommendations have been included in the landscaping design, and at this early stage the planting/set-out is consistent with the inclusions; and the ecologist confirms they are happy at this early stage of the initial progress to meet the inclusions. One CSH credit is awarded.

Issue:Eco3 Protection of Ecological Features

Max Credits:1

Specification

ID	Description	Status	Credits	Ev.No.
1	No loss of ecological features	Complete	1.00	6,3,1,2,4,5
<u>Related Evidence</u>				
Ev.No.	Evidence Type	Evidence Title	Version	Location
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built	See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"
2	Copy of Ecologists report highlighting the required information	CfSH Ecology Template: The Sidings, Wrexham (Joe Whittick/Ecologist)	25/08/14 (version 2)	See PCR electronic folder "Ecology" for PDF "CSH - The Sidings, Wrexham (1525)"
3	User Defined Evidence Type	Ecologist: J W Ecological - APPENDIX 1 - Planting Species Lists	12/06/14	See PCR electronic folder "Ecology" for PDF "APPENDIX 1 - Planting Species Lists"
4	User Defined Evidence Type	Ecologist: J W Ecological - CV - Joe Whittick, JWE	2014	See PCR electronic folder "Ecology" for PDF "CV - Joe Whittick, JWE"
5	Copy of Ecologists report highlighting the required information	email; from Ecologist to Gower Homes Ltd re: confirmation of As-built (to-date) landscaping	25/08/14	See PCR electronic folder "Ecology" for email "Fwd The Sidings Wrexham for Gower Homes"
6	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14	See PCR hardcopy folder: doc. ref: TS-02

Description of Features Relating to Issue & Suggested Improvements

A suitably qualified ecologist has been employed. The ecologist identifies that the pre-development site was without ecological feature and the development has not resulted in the loss of any existing ecological feature. One CSH credit is awarded.

Issue:Eco4 Changes in Ecological Value of Site

Max Credits:4

<u>Specification</u>				
ID	Description	Status	Credits	Ev.No.

1	Ecologist Calculation - Completed site to achieve +5.6 species			Complete	3.00	8,1,2,3,5,6,7,4
Related Evidence						
Ev.No.	Evidence Type	Evidence Title	Version		Location	
1	User Defined Evidence Type	Drawings (matrix): Site layout/External, Unit layout/electrical/elevations/sections	As-Built		See PCR electronic folder "Drawings" for s/s "Drawings Matrix - The Sidings (as-Built)"	
2	Copy of Ecologists report highlighting the required information	CfSH Ecology Template: The Sidings, Wrexham (Joe Whittick/Ecologist)	25/08/14 (version 2)		See PCR electronic folder "Ecology" for PDF "CSH - The Sidings, Wrexham (1525)"	
3	User Defined Evidence Type	Ecologist: J W Ecological - APPENDIX 1 - Planting Species Lists	12/06/14		See PCR electronic folder "Ecology" for PDF "APPENDIX 1 - Planting Species Lists"	
4	User Defined Evidence Type	Ecologist: J W Ecological - CV - Joe Whittick, JWE	2014		See PCR electronic folder "Ecology" for PDF "CV - Joe Whittick, JWE"	
5	User Defined Evidence Type	sidings_05_101_01_planting	v1.1		See PCR electronic folder "Ecology" for PDF "sidings_05_101_01_planting (v1.1)"	
6	User Defined Evidence Type	sidings_05_101_02_planting	v1.1		See PCR electronic folder "Ecology" for PDF "sidings_05_101_02_planting (v1.1)"	
7	Copy of Ecologists report highlighting the required information	email; from Ecologist to Gower Homes Ltd re: confirmation of As-built (to-date) landscaping	25/08/14		See PCR electronic folder "Ecology" for email "Fwd The Sidings Wrexham for Gower Homes"	
8	Written confirmation that the dwelling has been constructed in accordance with design stage drawings/spec	letter: Confirmation of As-built - the Sidings, Wrexham....M Forge (Gower Homes Ltd)	22/08/14		See PCR hardcopy folder: doc. ref: TS-02	

Notes and Further Information

support awards.

Description of Features Relating to Issue & Suggested Improvements

An ecologist has been employed, and has identified that the on-going development and landscaping plan, will result in a +5.6 species improvements (per hectare) of the site as a result of the development. Three CSH credits are awarded.

Issue:Eco5 Building Footprint **Max Credits:**2

ID	Description	<u>Specification</u>	Status	Credits	Ev.No.
1	Credit not Sought		Complete	0.00	

Description of Features Relating to Issue & Suggested Improvements

Credit not Sought



Allocation of SpecIDs to Dwellings

Site: The Sidings

Plot	Address	ENE									WAT		MAT		SUR		WAS		POL		HEA				MAN				ECO				
		1	2	3	4	5	6	7	8	9	1	2	1	2	3	1	2	1	2	3	4	1	2	3	4	1	2	3	4	5			
40	Brunswick Court	6	6	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	3	1	1	2	1	1	1	1	1	1	1	1	
41	Brunswick Court	6	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	2	1	1	1	1	1	1	1	1	1	
42	Brunswick Court	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	2	1	2	1	1	1	1	1	1	1	1	1	
43	Brunswick Court	5	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	2	1	1	1	1	1	1	1	1	1	
44	Brunswick Court	6	6	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	3	1	1	2	1	1	1	1	1	1	1	1	1	
45	Brunswick Court	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	2	1	2	1	1	1	1	1	1	1	1	1	



Detailed Score Sheet

Site: The Sidings

	ENE									WAT			MAT			SUR			WAS			POL			HEA				MAN				ECO					SCORE SUMMARY				
PLOT	1	2	3	4	5	6	7	8	9	1	2	1	2	3	1	2	1	2	3	1	2	1	2	3	4	1	2	3	4	1	2	3	4	5	Ene Lvl	Wtr Lvl	M Req	Ovl Lvl	Ttl Pts			
40	1.30	6.10	1	1	1	2	0	0	0	4	1	12	4	1	1	2	4	3	0	1	3	2	4	1	0	3	0	2	2	1	1	1	3	0	3	4	No	3	61			
41	1.30	5.60	1	1	1	2	0	0	1	4	1	12	4	1	1	2	4	3	0	1	3	3	4	1	0	3	0	2	2	1	1	1	3	0	3	4	No	3	62			
42	1.50	3.80	1	1	1	2	0	0	1	4	1	12	4	1	1	2	4	3	0	1	3	1	4	1	0	3	0	2	2	1	1	1	3	0	3	4	No	3	58			
43	1.20	5.50	1	1	1	2	0	0	1	4	1	12	4	1	1	2	4	3	0	1	3	3	4	1	0	3	0	2	2	1	1	1	3	0	3	4	No	3	62			
44	1.30	6.10	1	1	1	2	0	0	0	4	1	12	4	1	1	2	4	3	0	1	3	2	4	1	0	3	0	2	2	1	1	1	3	0	3	4	No	3	61			
45	1.50	3.90	1	1	1	2	0	0	1	4	1	12	4	1	1	2	4	3	0	1	3	1	4	1	0	3	0	2	2	1	1	1	3	0	3	4	No	3	58			