## breglobal

## Results

Development Name: 27 Kings Mews, WC1N 2JB

**Dwelling Description:** Detached dwelling (external terrace appearance) with basement

Name of Company: Code Consultancy Services Ltd

Code Assessor's Name: Steven Knight

Company Address:

Code Consultancy Services Ltd

Tel 0207 608 5524 M: 07768 814554. Steven@codeconsultancy.co.uk.

www.codeconsultancy.co.uk

Notes/Comments:

Report Version 2.0: This pre-assessment covers the proposed detached dwelling, which externally appears as a terrace. This dwelling will meet code level 4, provided the specifications mentioned are implemented or alternative credits are sought when detailed design/construction is carried out.

## PREDICTED RATING - CODE LEVEL: 4

Mandatory Requirements: All Levels

 % Points:
 68.20%
 - Code Level: 4

 Breakdown:
 Energy
 - Code Level: 4

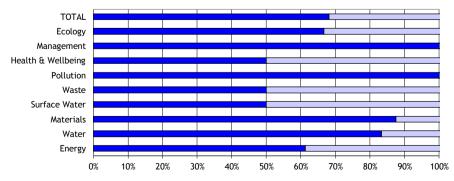
 Water
 - Code Level: 6

.....

TOTAL **Ecology** Management Health & Wellbeing Pollution Waste Surface Water Materials Water Energy 0% 10% 20% 70% 100% 30% 40% 50% 60% 80% 90%

Graph 1: Predicted contribution of individual sections to the total score and percentage of total achievable score

Graph 2: Predicted percentage of credits achievable: Total and by Category



NOTE: The rating obtained by using this Pre Assessment Estimator is for guidance only. Predicted ratings may differ from those obtained through a formal assessment, which must be carried out by a licensed Code assessor.

© BRE Global Ltd, 2010. The BRE Global name and logo are registered trademarks owned by BRE Global Ltd and may not be used without BRE Global's written permission. Permission is given for this estimator to be copied without infringement of copyright for use only on projects where a Code for Sustainable Homes assessment is carried out. Whilst every care is taken in preparing this estimator, BREG cannot accept responsibility for any inaccuracies or for consequential loss incurred as a result of such inaccuracies arising through the use of the estimator tool.

CATEGOR	1 ENERGY Overall Level: 4	Overall Score	68.20		Evidence Required
% of Section Credits Predicted: 61.29		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	on to Overall % Score: 22.30 points	19.0 of 31 Credits	Level 4		required.)
Ene 1 Dwelling Emission Rate	Credits are awarded based on the percentage improvement of the Dwelling Emission Rate (DER) over the Target Emission Rate (TER) as calculated using SAP 2009. Minimum standards for each Code level apply. The Code energy calculator can be used to calculate a predicted score.			Fabric and construction details to be confirmed in detail at design stage.  Boiler: Worcester Greenstar Cdi 25 Cdi or similar Efficiency 90%+	SAP worksheets
	What is the predicted number of credits?  OR Are zero net CO <sub>2</sub> emissions achieved?	3.0 of 10 Credits	Level 4		
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Efficiency (kWh/m²/yr) of the dwelling. Minimum standards apply at Code levels 5 and 6. The Code energy calculator can be used to calculate a predicted score.    Enter the predicted score	5.0 of 9 Credits	-	Fabric specification to be improved over building regulations and airtightness to be good, aim for air permeability of 3.0 and window u-values of around 1.2.	SAP worksheets
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel consumption.  Select whether the EDD monitors electricity and/or fuel  None Specified Primary Heating only  OR Electricity only  OR Electricity and primary heating fuel	2 of 2 Credits	-	Smart meters with a compliant display device are specified	Manufacturers information

Issue		Credits	Level	Assumptions Made	Evidence Required
	One credit is awarded for the provision of either internal or external secure drying space with posts and footings or fixings capable of holding 4m+ of drying line for 1-2 bed dwellings and 6m+ for dwellings with 3 bedrooms or greater.  Will drying space meeting the criteria be provided?  Yes  OR  NO  O	1 of 1 Credits		Internal drying lines are specified in the bathrooms to give 6m+ of line with adequate ventilation.	Plans and specification
Ene 5 Energy Labelled White Goods	Credits are awarded where each dwelling is provided with either information about the EU Energy Labelling Scheme, White Goods with ratings ranging from A+ to B or a combination of the previous according to the technical guide.  Select the appropriate option below  EU Energy labelling information only A+ rated appliances A+, A and B rated appliances Combination of compliant rated white goods with EU Energy Labelling Scheme	2 of 2 Credits	-	Fridges and freezers will be A+ rated Washing Machines and Dishwashers will be A rated	Copy of leaflet and confirmation of supply to all dwellings
Ene 6 External Lighting	Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with appropriate control gear    Space Lighting	2 of 2 Credits	_	Code compliant EXTERNAL space lighting specified dedicated low energy lamps are specified with controls to ensure they aren't left on during the day. The luminous efficacy of the lamps will be greater than or equal to 40 lumens per circuit watt.	electrical drawings

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 7 Low or Zero Carbon Technologies	Credits are awarded where there is a 10% or 15% reduction in $CO_2$ emissions resulting from the use of low or zero carbon technologies.  Select % contribution made by low or zero carbon technologies			Solar Thermal panels are specified.	SAP calculations and manufacturers details
	Less than 10% of demand O OR 10% of demand or greater OR 15% of demand or greater O	1 of 2 Credits	-		
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements.  Fill in the development details below  Number of bedrooms:  Number of cycles stored per dwelling*  * if you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles	2 of 2 Credits	-	assumed 3 bedrooms and code compliant cycle storage will be provided for 2 cycles in dedicated internal store (due to lack of external space).	space calculations
Ene 9 Home Office	A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements.  Will there be provision for a Home Office?  Yes  OR  NO  O	1 of 1 Credits	-	Home office will be specified (in first floor bedroom) to be code compliant. Will have adequate ventilation e.g. Opening window of at least 0.5m2. Daylight factor of at least 1.5%. Minimum 1.8m of wall space to fit a desk, space for a chair and filing cabinet or shelves. Telephone point and 2 double power sockets.	Specification document and plans

CATEGOR	7 2 WATER Overall Level: 4	Overall Score	68.20		Evidence Required
% of Sect	% of Section Credits Predicted: 83.33		Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	on to Overall Score: 7.50 points	5 of 6 Credits	Level 6		required.)
Wat 1 Indoor Water Use	Credits are awarded based on the predicted average household water consumption, calculated using the Code Water Calculator Tool. Minimum standards for each code level apply.  Select the predicted water use / Mandatory Requirement  greater than 120 litres/ person/ day  OR ≤ less than 120 litres/ person/ day  OR ≤ less than 110 litres/ person/ day  OR ≤ less than 105 litres/ person/ day  OR ≤ less than 90 litres/ person/ day  OR ≤ less than 80 litres/ person/ day	5 of 5 Credits	Level 5 AND Level 6	Standard code compliant fittings are specified, with flow restrictors. Typical specification gives WC dual flush 4/2.6 litres, Bath capcity to overflow 170 litres, Shower flow rate 8 litres/min, Kitchen sink taps 6 l/min, Washing machine with consumption 8.17 litres/kilogram or less, Dishwasher with 1.25 litres per place setting or less to be installed, basin taps 4 litres/min. Rainwater harvesting system is specified, which reduces consumption further.	Specification
Wat 2 External Water Use	A credit is awarded where a compliant system is specified for collecting rainwater for external irrigation purposes. Where no outdoor space is provided the credit can be achieved by default.  Select the scenario that applies  No internal or communal outdoor space  OR Outdoor space with collection system  OR Outdoor space without collection system	0 of 1 Credits	-	The only outdoor space is a balcony approx 8 m2.	Specification

<b>CATEGOR</b>	7 3 MATERIALS Overall	Level: 4	Overall Score	68.20		Evidence Required
	on Credits Predicted: 87.50		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Mat 1 Environmental Impact of Materials	Mandatory Requirement: At least three of the elements must achieve a Green Guide 2008 R Tradable Credits: Points are awarded on a sc Green Guide Rating of the specifications. The Calculator can be used to predict a potential sc Will the mandatory requirement be Enter the predicted score  What is the predicted number of credits and points.	five key building ating of A+ to D. ale based on the e Code Materials core.  met?   1:	1 of 24 Credits 3 of 15 Credits	All Levels	Assumptions made based on similar materials and availability. This covers the roof, external and internal walls, upper and ground floor, windows. The online site http://www.bre.co.uk/greenguide gives ratings for all elements - A/A+ used where possible.	required.) Specification documents and drawings
Mat 2 Responsible Sourcing of Materials - Basic Building Elements	Credits are awarded where materials used in telements are responsibly sourced. The Calculator can be used to predict a potential so	Code Materials core.	5 of 6 Credits	-	Assumptions made based on similar materials and availability. Timber will have third party certification scheme e.g. FSC for Forest Stewardship Council. Concrete and other materials, will have Environmental Management Scheme certificates such as ISO 14001, BES 6001.	Specification documents and drawings. Suppliers will only be used who can provide all certificates for the chain of custody, to show materials from sustainable forests and production.
Mat 3 Responsible Sourcing of Materials - Finishing Elements	Credits are awarded where materials used elements are responsibly sourced. The Calculator can be used to predict a potential so Enter the predicted Score  What is the predicted number of cre	Code Materials core.	3 of 3 Credits	-	Assumptions made based on similar materials and availability. As above but for finishing items such as Kitchen furniture, architraves etc.	Specification documents and drawings

CATEGORY -	4 SURFACE WATER RUN-OFF Overall Level: 4	Overall Score	68.20		Evidence Required
% of Section	Credits Predicted: 50.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
_	n to Overall Score: 1.10 points	2 of 4 Credits	All Levels		required.)
Management of Surface Water Run- off from developments	Mandatory Requirement: Peak rate of run-off into watercourses is no greater for the developed site than it was for the predevelopment site and that the additional predicted volume of rainwater discharge caused by the new development is entirely reduced as far as possible in accordance with the assessment criteria. Designing the drainage system to be able to cope with local drainage system failure. Tradable Credits: Where SUDS are used to improve water quality of the rainwater discharged or for protecting the quality of the receiving waters.			The existing site is brownfield, with buildings which will be demolished. The impermeable area is 100% pre-development and will remain the same post development.	Specification and site investigation reports
	Mandatory Requirement Will the mandatory requirement be met?				
	Select the appropriate option  No SUDS  No runoff into watercourses for the first 5 mm of rainfall  Runoff from hard surfaces will receive an				
	appropriate level of treatment	0 of 2 Credits	All Levels		
Flood Risk	Credits are awarded where developments are located in areas of low flood risk or where in areas of medium or high flood risk appropriate measures are taken to prevent damage to the property and its contents in accordance with the Code criteria in the technical guide.  Select the annual probability of flooding (from PPS25*)  Zone 1 - Low  OR Zone 2 - Medium  OR Zone 3 - High	2 of 2 Credits		The site does not yet have an allocated postcode, however it is assumed to be WC1N 2JB which appears to be in a low flood risk zone. This will be confirmed at a later stage.	EA flood map
	Select the apropriate option(s)  Low risk of flooding from FRA**  All measures of protection are demonstrated in FRA  Ground floor level and access routes are 600 mm above design flood level	Z OI Z CI EUILS	-		
	* FRA - Flood Risk Assessment				

CATEGORY	5 WASTE	Overall Level: 4	Overall Score	68.20		Evidence Required
% of Sectio	n Credits Predicted: 50	.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors
Contribution	on to Overall Score: 3.3	20 points	4 of 8 Credits	All Levels		if required.)
Was 1	Mandatory Requirement: should be sized to ho containers provided by t calculated from BS 590 adequate internal and/ o  Mandatory Requirement  Will the minimum be accessible to o  Internal Recyclable househ  Where there is no	The space provided for waste storald the larger of either all externed the Local Authority or the min capacion of the content of the Local Authority or the min capacion of the content of the Local Authority or the min capacion of the Local Authority or the Local Authority of the Ministry of the Local Authority of the Lo	nal city		Internal recyling bins will be a fixed in unit with 3 recyling bins, of capacity 7 litres or greater each and total capacity of 30 Litres. Internal storage of 60 litres will also be provided. The site does not have any external space which can be allocated to bin storage, so internal storage is being specified and L.A recyling schemes are in place to remove recycling and waste from the kerbside.	Plans and specifications
	scheme Internal storage ( Local Authority collection S	(capacity 60 litres)	2 of 2 Credits			
	Pre-collection so Internal storage (	(capacity 30 litres)	0 of 4 Credits	All Levels		
	3 separate intern (capacity 30 litre AND Houses	s)	0 of 4 Cooding			
	Flats Private recycling	operator of waste collected	0 of 4 Credits			

Issue		Credits	Level	Assumptions Made	Evidence Required
Was 2 Construction Site Waste Management	A credit is awarded where a compliant SWMP is provided with targets and procedures to minimise construction waste. Credits are available where the SWMP include procedures and commitments for diverting either 50% or 85% of waste generated from landfill.  SWMP details  Does the SWMP include:  + No SWMP  + SWMP with targets and procedures to minimise waste?  + SWMP with procedures to divert 50% of waste  + SWMP with procedures to divert 85% of waste			A Site waste management plan will be provided as required, however the percentage of waste to be diverted from landfill will not be calculated until design stage, so no credits are assumed for now.	
Was 3 Composting	A credit is awarded where individual home composting facilities are provided, or where a community/ communal composting service, either run by the Local Authority or overseen by a management plan is in operation.  Select the facilities available  No composting facilities  On Individual composting facilities  OR Communal/ community composting*?  Local Authority  OR Private with management plan  * including if an automated waste collection system is in place	1 of 1 Credit	-	The LA provide a service.	copy of composting leaflet and details of compost bin

CATEGORY 6 POLLUTION	Overall Level: 4	Overall Score	68.20		Evidence Required
% of Section Credits Predicted: 100,00%		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribution to Overall Score: 2.80 points		4 of 4 Credits	All Levels		required.)
Pol 1 Global Warming Potential (GWP) of Insulants  A credit is awarded where all is substances (in manufacture AND in of less than 5.  Select the most appropriate option  All insulants have a GWF  OR Some insulants have a GWF	stallation) that have a GWP less than 5 WP of less than 5 O	1 of 1 Credits	-	Will be specified to comply. All standard insulation typically complies, but this will be stipulated when ordering.	Specification document.
Pol 2 NOx Emissions  Credits are awarded on the basis of the operation of the space and wat dwelling.  Select the most appropriate option  Greater than 100 mg/kWh OR Less than 100 mg/kWh OR Less than 70 mg/kWh OR Less than 40 mg/kWh OR Class 4 boiler OR Class 5 boiler  OR All space and hot requirements are met 1 not produce NOx emission	r heating system within the	3 of 3 Credits	-	A low Nox gas boiler, with Nox emmisions of less than 40 mg/KwH is specified.	Manufacturers information.

<b>CATEGOR</b>	7 THEALTH & WELLBEING Overall Level: 4	Overall Score	68.20		Evidence Required
% of Secti	on Credits Predicted: 50.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	on to Overall Score: 7.00 points	6 of 12 Credits	No level		required.)
Hea 1 Daylighting	Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky.  Select the compliant areas  Room  Kitchen: Avg DF of at least 2%  Living Room*: Avg DF of at least 1.5%  Dining Room*: Avg DF of at least 1.5%  Study*: Avg DF of at least 1.5%  W  80% of working plane in all above rooms receive direct light from the sky?	1 of 3 Credits	ı	Daylighting calculations will be done. It is assumed that the kitchen will not apply, but detailed calculations will be done to confirm this at design stage.	
	Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.				
Hea 2 Sound Insulation	Credits are awarded where performance standards exceed those required in Building Regulations Part E. This can be demonstrated by carrying out pre-completion testing or through the use of Robust Details Limited.  Select a type of property			Can be awarded by Default as it is detached. (in construction terms)	
	Detached Property Attached Properties: - Separating walls and floors only exist between non habitable spaces  - Separating walls and floors exist between habitable spaces  O	4 of 4 Credits	-		
	Select a performance standard  Performance standard not sought  Airborne: 3db higher; Impact: 3dB lower  OR Airborne: 5db higher; Impact: 5dB lower  OR Airborne: 8db higher; Impact: 8dB lower  O				

Issue		Credits	Level	Assumptions Made	Evidence Required
Hea 3 Private Space	A credit is awarded for the provision of an outdoor space that is at least partially private. The space must allow easy access to all occupants.  Will a private/ semi-private space be provided?  Yes, private/semi-private space will be provided  OR No private/semi-private space	1 of 1 Credits	·	There is accessible private space. This is achieved on the balcony, which is 1.5m by approx 5.5m, giving greater than 1.5m2 per bedspace. There is a level threshold and no steps from the house to this area.	Plans
Hea 4 Lifetime Homes	Mandatory Requirement: Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6.  Tradable credits: Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme.  Mandatory Requirement  Dwelling to achieve Code Level 6?  Lifetime Homes Compliance  All Lifetime Homes criteria will be met  OR Exemption from LTH criteria 2/3 applied  Credit not sought	0 of 4 Credits	No level	Not sought	

CATEGOR	Y 8 MANAGEMENT Overall Level: 4	Overall Score	68.20		Evidence Required
	on Credits Predicted: 100.00%	Credits Level		Assumptions Made	(The below cells can be formatted by assessors if
Contribution to Overall Score: 10.00 points		9 of 9 Credits	All Levels	•	required.)
Man 1 Home User Guide	Credits are awarded where a simple guide is provided to each dwelling covering information relevant to the 'non-technical' home occupier, in accordance with the Code requirements.  Tick the topics covered by the Home User Guide  Operational Issues?  Site and Surroundings?  Is available in alternative formats?	3 of 3 Credits		Code compliant Guide will be produced	
Man 2 Considerate Constructors Scheme	Credits are awarded where there is a commitment to comply with best practice site management principles using either the Considerate Constructors Scheme or an alternative locally/nationally recognised scheme.  Select the appropriate scheme and score  No scheme used Considerate Constructors  OR Best Practice: Score between 24 and 31.5 O  OR Best Practice+: Score between 32 and 40  Alternative Scheme*  OR Mandatory + 50% optional requirements O  OR Mandatory + 80% optional requirements O  * In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.	2 of 2 Credits	-	Best practice plus score will be aimed for.	
Man 3 Construction Site Impacts	Credits are awarded where there is a commitment and strategy to operate site management procedures on site as following:  Tick the impacts that will be addressed  Monitor, report and set targets, where applicable, for:  CO₂/ energy use from site activities  CO₂/ energy use from site related transport  water consumption from site activities  Adopt best practice policies in respect of:  air (dust) pollution from site activities  water (ground and surface) pollution on site  80% of site timber is reclaimed, re-used or responsibly sourced	2 of 2 Credits	-	The water meter and electric meter readings will be done and procedures adopted to minimise pollution due to dust and water.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Man 4	Credits are awarded for complying with Section 2 - Physical			Will consult with the ALO and follow recomendations.	
Security	Security from Secured by Design - New Homes. An Architectural				
	Liaison Officer (ALO), or alternative, needs to be appointed				
	early in the design process and their recommendations				
	incorporated.				
	Secured by Design Compliance				
	Credit not sought O	2 of 2 Credits	-		
	OR Secured by Design Section 2 Compliance				

CATEGORY 9 ECOLOGY Overall Level: 4		Overall Score	68.20		Evidence Required
% of Section Credits Predicted: 66.00%		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribution to Overall Score: 8.00 points		6 of 9 Credits	All Levels		required.)
Eco 1 Ecological Value of Site	One credit is awarded for developing land of inherently low value.  Select the appropriate option  Credit not sought  OR  Land has ecological value  OR  Land has low/ insignificant ecological value*	1 of 1 Credits	-	There are no existing ecological features, as the site is 100% built-up.	
	* Low ecological value is determined either a) by using Checklist Eco 1 across the whole development site; or b) where an suitably qualified ecologist is appointed and can confirm or c) produces an independent ecological report of the site, that the construction zone is of low/ insignificant value; AND the rest of the development site will remain undisturbed by the works.				
Eco 2 Ecological Enhancement	A credit is awarded where there is a commitment to enhance the ecological value of the development site.  Tick the appropriate boxes  Will a Suitably Qualified Ecologist be appointed to recommend appropriate ecological features?  AND Will all key recommendations be adopted?  AND 30% of other recommendations be adopted?	0 of 1 Credits	-	assume not sought	
Eco 3 Protection of Ecologica Features	A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value.  Type and protection of existing features  Site with features of ecological value?  OR Site of low ecological value (as Eco 1)?  AND All* existing features potentially affected by site works are maintained and adequately protected?  *If a suitably qualified ecologist has confirmed that a feature can be removed due to insignificant ecological value or poor health conditions, as long all the rest have been protected, then this box can be ticked.	1 of 1 Credits	-	Is awarded by default	

Issue		Credits	Level	Assumptions Made	Evidence Required
Eco 4 Change of Ecological Value of Site	Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be:  Change in Ecological Value  Major negative change: fewer than -9  Minor negative change: between -9 and -3  OR  Neutral: between -3 and +3  Minor enhancement: between +3 and +9  Major enhancement: greater than 9	2 of 4 Credits		This will be achieved due to no increase in impermeable area and no existing features - assessor to provide calculations at later stage. If a green roof is permitted, this could allow for an additional credit to be awarded.	
Eco 5 Building Footprint	Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is:  Ratio of Net Internal Floor Area: Net Internal Ground Floor Area  Credit Not Sought  OR Houses: 2.5:1 OR Flats: 3:1  OR Houses: 3:1 OR Flats: 4:1  OR Houses & Flats Weighted (2.5:1 & 3:1)  OR Houses & Flats Weighted (3:1 & 4:1)	2 of 2 Credits		The ratio is 3.47:1, which gives maximum credits.	