

Raag St Pancras Ltd

13 Britannia St, London

CODE FOR SUSTAINABLE HOMES PRE-ASSESSMENT REPORT

Project No. TBC

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Revision 02

Produced By: G Kent

BRE Assessor No: GK04



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Results

Development Name:

Dwelling Description:

Name of Company:

Code Assessor's Name:

Company Address:

John Packer Associates, Hayworthe House, Market Place, Haywards Heath, RH16 1DB

Notes/Comments:

PREDICTED RATING - CODE LEVEL: 4

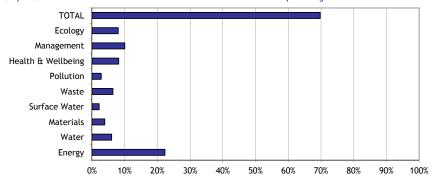
Mandatory Requirements: All Levels

 % Points:
 69.76%
 - Code Level: 4

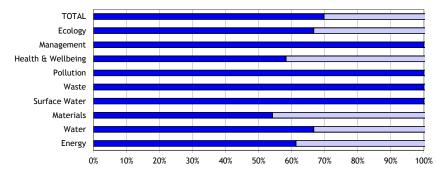
 Breakdown:
 Energy
 - Code Level: 4

 Water
 - Code Level: 4

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.

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CATEGOR'	Y 1 ENERGY	Overall Level: 4	Overall Score	69.76		Evidence Required
% of Secti	on Credits Predicted: 61.29		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	on to Overall % Score: 22.30 p	ooints	19.0 of 31 Credits	Level 4		required.)
Ene 1 Dwelling Emission Rate	Dwelling Emission Rate (DER) ov calculated using SAP 2009. Min		3.0 of 10 Credits		The energy and sustainability report provided confirms that at least a 25% reduction in CO2 emissions should be achieved over Part L 2010 requirements.	
Ene 2 Fabric Energy Efficiency	(kWh/m²/yr) of the dwelling.	d Detached O	5.0 of 9 Credits		The building fabric will benefit from low u-values and air tightness, therefore a moderate fabric energy efficiency is assumed at this stage.	
Ene 3 Energy Display Devices		000	2 of 2 Credits		Each apartment will be separately metered and therefore it is believed that energy display devices can be easily installed to educate the occupants on energy consumption.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 4 Drying Space	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	1 of 1 Credits	-	Retractable drying lines could be provided in bathroom areas over baths. 4m of lines are required per dwelling.	
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 rated washing machine and dishwasher B rated tumble dryer or washer dryer EU Energy labelling information provided	1 of 2 Credits	-	It is currently uncertain whether white goods will be provided within the apartments. At the very least information regarding the energy efficiency labelling scheme will be provided within each apartment.	
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 None provided OR Non Code compliant lighting OR Code compliant lighting None provided OR Non Code compliant lighting OR Code compliant lighting OR Soccial lighting OR Code compliant lighting and controls *Statutory safety lighting is not covered by this requirement	2 of 2 Credits	•	There will not be a great deal of external lighting as external areas are limited. However external lighting around the entire site will be designed to meet all of the requirements set out under CSH and BREEAM 2011. This lighting will be automatically controlled.	

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 Less than 10% of demand OR 10% of demand or greater OR 15% of demand or greater	2 of 2 Credits		It is proposed that heating to the apartments is provided by gas fired micro CHP via buffer tank. This should provide a significant reduction in CO2 compared to a conventional solution.	
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 stored per dwelling	2 of 2 Credits		A total of one cycle space per one bed apartment and two spaces per two bed aprtments will be provided Two credits will therefore be achieved.	
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	1 of 1 Credits		Each of the dwellings shall be suitably equipped with all that is required to achieve the credit. An average daylight factor of at least 1.5% will be achieved in the rooms where the home office is located.	

	/ 2 WATER Overall Level: 4	Overall Score	1.5		Evidence Required
_	on Credits Predicted: 66.66	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
	on to Overall Score: 6.00 points	4 of 6 Credits	Level 4		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 OR <= less than 80 litres/ person/ day			Low water sanitary fittings shall be provided in each of the apartments. Predicted water consumption is determined using a calculator tool and it is difficuelt to predict the result at this stage. However it is assumed that the minimum level required to achieve Code level 3 will be met.	
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		-	The apartments do not benefit from external areas and therefore water butts are not required. This credit will be achieved by default.	

CATEGORY	3 MATERIALS Overall Level: 4	Overall Score	69.76		Evidence Required
% of Section	on Credits Predicted: 54.16	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contributi	on to Overall Score: 3,90 points	13 of 24 Credits	All Levels		required.)
ental Impact of Materials	Mandatory Requirement: At least three of the five key building elements must achieve a Green Guide 2008 Rating of A+ to D. Tradable Credits: Points are awarded on a scale based on the Green Guide Rating of the specifications. The Code Materials Calculator can be used to predict a potential score. Mandatory Requirement Will the mandatory requirement be met? Enter the predicted score What is the predicted number of credits?		All Levels	The architect is fully aware of the Green Guide to Specification and will ensure that building elements specified achieve A or A+ ratings where possible. This may not be possible in all areas, therefore 10 credits are assumed at present.	
Mat 2 Responsible Sourcing of Materials - Basic Building Elements	Credits are awarded where materials used in the basic building elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Enter the predicted Score What is the predicted number of credits?	2 of 6 Credits	-	The contractor will be required to ensure that as many materials as possible are ISO14001 or similar certified. However it is difficult to manage the procurement of all materials that subcontractors use and therefore 2 credits are currently assumed.	
Mat 3 Responsible Sourcing of Materials - Finishing Elements	Credits are awarded where materials used in the finishing elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Enter the predicted Score What is the predicted number of credits?	1 of 3 Credits	-	As above.	

CATEGORY	4 SURFACE WATER RUN-OFF Overall Level: 4	Overall Score	69.76		Evidence Required
% of Section	n Credits Predicted: 100.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribution	on to Overall Score: 2.20 points	4 of 4 Credits	All Levels		required.)
Sur 1 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. Desiging 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 a car park and there will be no change in the man made impermeable area of the site as a result of development, therefore the mandatory requirement will be met. It is likely that attenuation in some form will be required in order to meet planning requirements, therefore it is assumed that appropriate attenuation measures will be incorporated into the detailed design.	
	Mandatory Requirement Will the mandatory requirement be met?				
	No Substitute appropriate option No Substitute appropriate option No runoff into watercourses for the first 5 mm of rainfall Runoff from hard surfaces will receive an appropriate level of treatment	2 of 2 Credits	All Levels		
Sur 2 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 is deemed to be in an area with a low risk of flooding. A full Flood Risk Assessment will need to be undertaken by a consultant to confirm this.	
	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 CIEURS			
	** FRA - Flood Risk Assessment				

CATEGORY 5	WASTE Overall Level: 4	Overall Score	69.76		Evidence Required
% of Section	Credits Predicted: 100,00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
	to Overall Score: 6.40 points	8 of 8 Credits	All Levels		required.)
Storage of non- recyclable waste and recyclable	Mandatory Requirement: The space provided for waste storage and no Local Authority or the min capacity of either all exters and the sized to hold the larger of either all exters containers provided by the Local Authority or the min capacity of the min capacity of the min space and adequate internal and/or external recycling facilities. Mandatory Requirement Will the minimum space be provided and be accessible to disabled people? Internal Recyclable household waste storage Where there is no external recyclable waste storage and no Local Authority collection	nal city		It is believed that the local authority provides a post collection sorting recycling collection scheme. The apartments will be provided with a dedicated area where a recycling bin with a total capacity of at least 30L will be installed.	
	scheme Internal storage (capacity 60 litres) Local Authority collection Scheme	0 of 2 Credits			
	Post Collection sorting Internal storage (capacity 30 litres) Pre-collection sorting Internal storage (3 separate bins, capacity 30 litres)	4 of 4 Credits	All Levels		
	External Storage, no Local Authority collection scheme 3 separate internal storage bins (capacity 30 litres) AND Houses External Storage(capacity 180 litres) Flats Private recycling operator 3 or greater types 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? O + SWMP with procedures to divert 50% of waste + SWMP with procedures to divert 85% of waste			The contractor will be required to develop a compliant SWMP and to ensure that at least 85% of construction waste is diverted from landfill.	
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 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	-	Composting facilities will be provided both internally and externally.	

CATEGOR	6 POLLUTION Overall Level: 4	Overall Score	69.76		Evidence Required
% of Secti	on Credits Predicted: 100.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	on 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 insulating materials only use substances (in manufacture AND installation) that have a GWP of less than 5. Select the most appropriate option All insulants have a GWP less than 5 OR Some insulants have a GWP of less than 5 OR No insulants have a GWP of less than 5	1 of 1 Credits	-	The contractor will be required to ensure that all insulation products used in construction will have a GWP of less than 5 in both production and composition.	
Pol 2 NOx Emissions	Credits are awarded on the basis of NOx emissions arising from the operation of the space and water heating system within the dwelling. Select the most appropriate option Greater than 100 mg/kWh OR Less than 100 mg/kWh OR Less than 70 mg/kWh OR Class 4 boiler OR Class 5 boiler OR All space and hot water energy requirements are met by systems who do not produce NOx emissions	3 of 3 Credits	-	The proposed heating strategy utilises gas fired CHP. This has very low NOx emissions when ofsetting the NOx from dispaced grid electricity. Therefore maximum credits should be achievable.	

CATEGOR	7 7 HEALTH & WELLBEING Overall Level: 4	Overall Score	69.76		Evidence Required
% of Secti	on Credits Predicted: 58.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	on to Overall Score: 8.16 points	7 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% Dinning Room*: Avg DF of at least 1.5% Study*: Avg DF of at least 1.5% V 80% of working plane in all above rooms receive direct light from the sky? Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.	2 of 3 Credits		In some apartments the kitchens are to the rear and some may not achieve the required daylight factor. However, it is believed that all other rooms will comply.	
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 Detached Property Attached Properties: - Separating walls and floors only exist between non habitable spaces - Separating walls and floors exist between habitable spaces Select a performance standard Performance standard ont sought Airborne: 3db higher; Impact: 3dB lower OR Airborne: 5db higher; Impact: 5dB lower OR Airborne: 8db higher; Impact: 8dB lower	1 of 4 Credits	-	The proposed construction should achieve airborne sound insulations values and impact sound insulation values 3dB higher and 3dB lower than Building Regs respectively. This will ned to be confirmed by the acoustic consultant.	

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	0 of 1 Credits		The apartments will not be provided with outside space. Therefore this credit cannot be awarded.	
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?	4 of 4 Credits	No level	Each of the dwellings will be designed in accordance with all of the requirements of Lifetime Homes, therefore maximum credits will be achieved.	
	All Lifetime Homes Criteria will be met OR Exemption from LTH criteria 2/3 applied Credit not sought				

CATEGORY 8 MANAGEMENT Overall Level: 4		Overall Score	69.76		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: 10.00 points		9 of 9 Credits	All Levels		required.)	
Home User	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	-	A home user guide is to be produced to inform dwelling occupants about their home. The contractor will be required to compile this using information provided from various members of the project team.		
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.			At present it is assumed that the tender documentation will include a requirement for the successful contractor to register with CCS and achieve a score of at least 32 (with no less than 3 scored in any section).		
	No scheme used Considerate Constructors OR Best Practice: Score between 24 and 31.5 OR Best Practice: Score between 32 and 40 Alternative Scheme* OR Mandatory + 50% optional requirements OR Mandatory + 80% optional requirements * In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.	2 of 2 Credits	-			
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: CO ₂ / energy use from site activities CO ₂ / 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	-	This credit relates to the operation of the site during construction. All requirements to achieve these credits as detailed can be placed upon the contractor within the tender package. It is assumed at present that all requirements except the monitoring of construction traffic should be achievable.		

Issue		Credits	Level	Assumptions Made	Evidence Required
Man 4 Security	Credits are awarded for complying with Section 2 - Physical 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 OR Secured by Design Section 2 Compliance	ι		A security consultant (Architectural Liaison Officer) will be consulted to ensure that the building is designed with all security issues considered. The principles of secure by design will be met.	

CATEGORY 9 ECOLOGY Overall Level: 4 Ove		69.76		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	-	The existing site is a brownfield site / car park and so can be deemed as low ecological value.	
* 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?	1 of 1 Credits	-	An ecologist will be appointed as part of the BREEAM assessment and therefore the recommendations made will also be relevant to the CfSH assessment.	
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	·	There are no existing ecological features on site, therefore this credit will be achieved 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	-	The existing site has no ecological value and the proposed development has no ecological value. Therefore the change in ecological value will be zero.	
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)	1 of 2 Credits		The apartments are provided over six floors, with four of the thirteen at ground level. Therefore the ration of footprint to fllor area will be just over 3:1.	