# Code for Sustainable Homes

**Technical Guide November 2010 - Full Technical Guide**

**Pre-Assessment Report**




**Report Reference:**

| | |
|---|---|
| **Site Registration:** | **TBA** |
| **Site Name:** | **Withington Road** |
| **Assessor Number:** | **STRO002989** |
| **Company:** | **County Inspections** |
| **Assessor:** | **Steven Leahy** |

# Code for Sustainable Homes
## Pre-Assessment Report (Report Reference: )

| Site Details | |
|---|---|
| Site Name: | Withington Road |
| Site Registration: | TBA |
| Site Address: | Withington Road |
| | |
| | Chorlton cum Hardy |
| City/Town: | Manchester |
| County: | Greater Manchester |
| Postcode: | M21 0YA |
| No. of Dwellings: | 1 |
| No. of Dwelling Types: | 0 |
| Planning Authority: | Manchester City Council |
| Funding Body: | |

| Assessor Details | |
|---|---|
| Company: | County Inspections |
| Assessor Name: | Steven Leahy |
| Cert Number: | STRO002989 |
| Address: | 3 Victoria Avenue |
| | |
| | Hadfield |
| City/Town: | Glossop |
| County: | Derbyshire |
| Postcode: | SK13 1BJ |
| Tel: | 07721 414813 |
| Email: | s.leahy@countyinspections.co.uk |

| Client Details | |
|---|---|
| Company: | |
| Contact Name: | Niaz Ahmed |
| Job Title: | |
| Email: | |
| Tel: | |
| Address: | |
| | |
| | |
| City/Town: | |
| County: | |
| Postcode: | |

| Architect Details | |
|---|---|
| Company: | Derek Buckley Architectural Services |
| Contact Name: | Derek Buckley |
| Job Title: | Architect |
| Email: | derek.buckley@ymail.com |
| Tel: | 07525 143171 |
| Address: | 15 Greaves Street |
| | |
| | Mossley |
| City/Town: | Ashton Under Lyne |
| County: | Greater Manchester |
| Postcode: | OL5 0QH |

| Developer Details | |
|---|---|
| Company: | |
| Contact Name: | TBA |
| Job Title: | |
| Email: | |
| Tel: | |
| Address: | |
| | |
| | |
| City/Town: | |
| County: | |
| Postcode: | |

| Dwelling ID | Plot No. | Address | Social Unit |
|---|---|---|---|
| 1 | 1 | 297 Withington Road | No |

Development Summary & Ratings

| Dwelling ID | Dwelling Type | Description | Level | Score |
|---|---|---|---|---|
| | | 297Withington Road | 3 | 57.7180635 |

## Deviations from Standard

No deviations from standard

## Score Sheet for Withington Road

| | ENE | | | | | | | | | WAT | | MAT | | | SUR | | WAS | | | POL | | HEA | | | | MAN | | | | ECO | | | | | Summary | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Dwelling ID** | **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** | **Score** | **Level** |
| 1 | 3 | 3.9 | 2 | 1 | 2 | 2 | 2 | 2 | 0 | 3 | 1 | 13 | 0 | 0 | 2 | 2 | 4 | 0 | 1 | 1 | 2 | 0 | 4 | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 57.72 | 3 |

Summary Score Sheet

Dwelling Type: 297 Withington Road

Dwelling ID: 1

| | Credit Score | Credits Available | Score Assessment Sub Total | Credits Available | % | Weighting Factor | Points Score |
|---|---|---|---|---|---|---|---|
| **Energy & CO2 Emissions** | | | | | | | |
| ENE 1 Dwelling Emission Rate | 3 | 10 | 17.9 | 31 | 57.74 | 36.4 | 21.02 |
| ENE 2 Fabric Energy Efficiency | 3.9 | 9 | | | | | |
| ENE 3 Energy Display Device | 2 | 2 | | | | | |
| ENE 4 Drying Space | 1 | 1 | | | | | |
| ENE 5 Energy Labelled White Goods | 2 | 2 | | | | | |
| ENE 6 External Lighting | 2 | 2 | | | | | |
| ENE 7 Low or Zero Carbon Energy Technologies | 2 | 2 | | | | | |
| ENE 8 Cycle Storage | 2 | 2 | | | | | |
| ENE 9 Home Office | 0 | 1 | | | | | |
| **Water** | | | | | | | |
| WAT 1 Internal Water Use | 3 | 5 | 4 | 6 | 66.67 | 9 | 6 |
| WAT 2 External Water Use | 1 | 1 | | | | | |
| **Materials** | | | | | | | |
| MAT 1 Environmental Impact of Materials | 13 | 15 | 13 | 24 | 54.17 | 7.2 | 3.9 |
| MAT 2 Responsible Sourcing (Basic Building Elements) | 0 | 6 | | | | | |
| MAT 3 Responsible Sourcing (Finishing Elements) | 0 | 3 | | | | | |
| **Surface Water Run-off** | | | | | | | |
| SUR 1 Management of Surface Water Run-Off from Site | 2 | 2 | 4 | 4 | 100 | 2.2 | 2.2 |
| SUR 2 Flood Risk | 2 | 2 | | | | | |
| **Waste** | | | | | | | |
| WAS 1 Household Waste Storage and Recycling Facilities | 4 | 4 | 5 | 8 | 62.5 | 6.4 | 4 |
| WAS 2 Construction Site Waste Management | 0 | 3 | | | | | |
| WAS 3 Composting | 1 | 1 | | | | | |
| **Pollution** | | | | | | | |
| POL 1 Global Warming Potential of Insulants | 1 | 1 | 3 | 4 | 75 | 2.8 | 2.1 |
| POL 2 NOx Emissions | 2 | 3 | | | | | |
| **Health & Wellbeing** | | | | | | | |
| HEA 1 Daylighting | 0 | 3 | 5 | 12 | 41.67 | 14 | 5.83 |
| HEA 2 Sound Insulation | 4 | 4 | | | | | |
| HEA 3 Private Space | 1 | 1 | | | | | |
| HEA 4 Lifetime Homes | 0 | 4 | | | | | |
| **Management** | | | | | | | |
| MAN 1 Home User Guide | 3 | 3 | 3 | 9 | 33.33 | 10 | 3.33 |
| MAN 2 Considerate Constructors Scheme | 0 | 2 | | | | | |
| MAN 3 Construction Site Impacts | 0 | 2 | | | | | |
| MAN 4 Security | 0 | 2 | | | | | |
| **Ecology** | | | | | | | |
| ECO 1 Ecological Value of Site | 1 | 1 | 7 | 9 | 77.78 | 12 | 9.33 |
| ECO 2 Ecological Enhancement | 1 | 1 | | | | | |
| ECO 3 Protection of Ecological Features | 1 | 1 | | | | | |
| ECO 4 Change of Ecological Value of Site | 2 | 4 | | | | | |
| ECO 5 Building Footprint | 2 | 2 | | | | | |
| | Level Achieved: 3 | | Total Points Scored: 57.72 | | | | |

| Evidence for ENE 1 (Dwelling Emission Rate) |
|---|
| Improvement above Part L Building Regulations 2010. 3 credits allocated |
| 3.0 credits achieved with a 25.40% reduction in dwelling emission rate |
| **Assumptions for ENE 1** |
| |

| Evidence for ENE 2 (Fabric Energy Efficiency) |
|---|
| Detached<br>3.9 credits allocated |
| Fabric energy efficiency of 55.3 achieved through the use of low u-values for external elements |
| **Assumptions for ENE 2** |
| |

| Evidence for ENE 3 (Energy Display Device) |
|---|
| Correctly specified display device showing current primary heating fuel consumption data.<br>Correctly specified display device showing current consumption data. |
| Correctly specified display device for both electricity and mains gas |
| **Assumptions for ENE 3** |
| |

| Evidence for ENE 4 (Drying Space) |
|---|
| Compliant external drying space |
| Compliant washing line to be installed in rear garden |
| **Assumptions for ENE 4** |
| |

| Evidence for ENE 5 (Energy Labelled White Goods) |
|---|
| A+ rated fridge & freezers or fridge/freezer<br>A rated washing machine and dishwasher AND B rated washer-dryers & tumbles dryers, or EU energy efficiency labelling scheme leaflet where washing machines and/or dishwashers not provided |
| A+ rated fridge, freezer (fridge / freezer), A rated washing machine & dish washer with EU labelling information |
| **Assumptions for ENE 5** |
| |

| Evidence for ENE 6 (External Lighting) |
|---|
| Complaint space lighting, no security lighting installed |
| Space lighting will be low energy bulbs with both daylight & movement sensors |
| **Assumptions for ENE 6** |
| |

| Evidence for ENE 7 (Low or Zero Carbon Energy Technologies) |
|---|
| Contribution of low or zero carbon technologies greater than or equal to 15% |
| 15.02% contribution achieved from the use of a 2.68 kWp PV array and a 2.1m2 solar panel array |
| **Assumptions for ENE 7** |
| |

| Evidence for ENE 8 (Cycle Storage) |
|---|
| 4 bedrooms or more - Storage for 4 cycles per dwelling |
| Secure storage for 4 cycles in garden store |
| **Assumptions for ENE 8** |
| |

| Evidence for ENE 9 (Home Office) |
|---|
| Credit not sought or no compliant home office |
| |
| **Assumptions for ENE 9** |
| |

| Evidence for WAT 1 (Internal Water Use) |
|---|
| Internal water use less than or equal to 105 litres per person per day |
| 105 litres per person per day achieved through the use of flow restrictors, efficient washing machine & dishwasher and low capacity baths |
| **Assumptions for WAT 1** |
| |

| Evidence for WAT 2 (External Water Use) |
|---|
| Compliant individual rainwater collection system |
| Rainwater butt provided with disabled access |
| **Assumptions for WAT 2** |
| |

| Evidence for MAT 1 (Environmental Impact of Materials) |
|---|
| Mandatory requirements met: At least 3 elements rated A+ to D, 13 credits scored |
| 13 credits achieved through the use of modern construction methods compliant with the BRE Green Guide |
| **Assumptions for MAT 1** |
| |

| Evidence for MAT 2 (Responsible Sourcing (Basic Building Elements)) |
|---|
| Zero credits or credits not sought |
| |
| **Assumptions for MAT 2** |
| |

| Evidence for MAT 3 (Responsible Sourcing (Finishing Elements)) |
|---|
| Zero credits or credits not sought |
| |
| **Assumptions for MAT 3** |
| |

| Evidence for SUR 1 (Management of Surface Water Run-Off from Site) |
|---|
| Mandatory Met: Peak rate of run-off and annual volume of run-off is no greater for the developed than for the pre-development. The system has also been designed for local drainage system failure.<br>No discharge to watercourse(s) for rainfall depth up to 5mm.<br>Run-off from all hard surfaces shall receive an appropriate level of treatment (as per the SudS manual) to minimise risk of pollution. |
| Suitably qualified Hydrologist to produce the necessary calculations and report |
| **Assumptions for SUR 1** |
| |

| Evidence for SUR 2 (Flood Risk) |
|---|
| Low flood risk - zone 1 |
| Suitably qualified Hydrologist to produce the necessary calculations and report |
| **Assumptions for SUR 2** |
| |

| Evidence for WAS 1 (Household Waste Storage and Recycling Facilities) |
|---|
| Mandatory requirements met: Adequate storage of household waste with accessibility in line with checklist WAS 1. Local authority collection: After collection sorting with appropriate internal storage of recyclable materials |
| 450 litre total capacity of external storage to be provided as well as 30 litre capacity of fixed internal storage |
| **Assumptions for WAS 1** |
| |

| Evidence for WAS 2 (Construction Site Waste Management) |
|---|
| |
| |
| **Assumptions for WAS 2** |
| |

| Evidence for WAS 3 (Composting) |
|---|
| Individual compositing facility/facilities |
| Compost bin with disabled access to be provided |
| **Assumptions for WAS 3** |
| |

| Evidence for POL 1 (Global Warming Potential of Insulants) |
|---|
| All insulants have a GWP of less than 5 |
| All insulants uses will have a GWP of less than 5 |
| **Assumptions for POL 1** |
| |

| Evidence for POL 2 (NOx Emissions) |
|---|
| Class 5 boiler |
| Class 5 mains gas condensing boiler to be provided with no secondary heating or mechanical ventilation with heat recovery |
| **Assumptions for POL 2** |
| |

| Evidence for HEA 1 (Daylighting) |
|---|
| Credit(s) not sought |
| |
| **Assumptions for HEA 1** |
| |

| Evidence for HEA 2 (Sound Insulation) |
|---|
| Detached property |
| The property is detached so credits awarded by default |
| **Assumptions for HEA 2** |
| |

| Evidence for HEA 3 (Private Space) |
|---|
| Individual private space provided |
| Enclosed rear garden with approx 100m2 of private space |
| **Assumptions for HEA 3** |
| |

| Evidence for HEA 4 (Lifetime Homes) |
|---|
| |
| |
| **Assumptions for HEA 4** |
| |

| Evidence for MAN 1 (Home User Guide) |
|---|
| All criteria inline with checklist MAN 1 Part 1 - Operational Issues will be met<br>All criteria inline with checklist MAN 1 Part 2 - Site and Surroundings will be met |
| Home user guide provided that provided full information for operational issues as well as the site and surroundings |
| **Assumptions for MAN 1** |
| |

| Evidence for MAN 2 (Considerate Constructors Scheme) |
|---|
| Credits not sought |
| |
| **Assumptions for MAN 2** |
| |

| Evidence for MAN 3 (Construction Site Impacts) |
|---|
| |
| |

| Assumptions for MAN 3 |
|---|
| |

| Evidence for MAN 4 (Security) |
|---|
| Credit not sought or no secure by design undertaken |
| |
| **Assumptions for MAN 4** |
| |

| Evidence for ECO 1 (Ecological Value of Site) |
|---|
| Construction zone site has been identified as low ecological value by a suitably qualified ecologist, all land outside the construction zone, but in the development site will remain undisturbed |
| Suitably qualified Ecologist will be appointed to provide the necessary report and advice to achieve credits |
| **Assumptions for ECO 1** |
| |

| Evidence for ECO 2 (Ecological Enhancement) |
|---|
| Key recommendations and 30% additional recommendations by a suitably qualified ecologist |
| Suitably qualified Ecologist will be appointed to provide the necessary report and advice to achieve credits |
| **Assumptions for ECO 2** |
| |

| Evidence for ECO 3 (Protection of Ecological Features) |
|---|
| Land of low ecological value as identified under ECO 1 |
| Suitably qualified Ecologist will be appointed to provide the necessary report and advice to achieve credits |
| **Assumptions for ECO 3** |
| |

| Evidence for ECO 4 (Change of Ecological Value of Site) |
|---|
| Neutral: Greater than -3 and less than or equal to +3 |
| Suitably qualified Ecologist will be appointed to provide the necessary report and advice to achieve credits |
| **Assumptions for ECO 4** |
| |

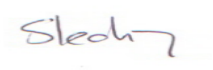
| Evidence for ECO 5 (Building Footprint) |
|---|
| Housing ration of 3:1 |
| Total floor area = 358.43m2 divided by building footprint of 114.50m2 = 3.13:1 so 2 credits achieved |
| **Assumptions for ECO 5** |
| |

## Assessor Declaration

I Steven Leahy, can confirm that I have compiled this report to the best of my ability, I have based all findings on the information that is referenced within this report, and that this report is appropriate for the registered site.

To the best of my knowledge all the information contained within this report is correct and accurate. I have within my possession all the reference material that relates to this report, which is available for inspection by the client, the clients representative or Stroma Certification for Quality Assurance monitoring.

Signed:



Steven Leahy
County Inspections
27 November 2012

## Information about Code for Sustainable Homes

The Code for Sustainable Homes (the Code) is an environmental assessment method for rating and certifying the performance of new homes. It is a national standard for use in the design and construction of new homes with a view to encouraging continuous improvement in sustainable home building. The Code is based on EcoHomes©.

It was launched in December 2006 with the publication of 'Code for Sustainable Homes: A stepchange in sustainable home building practice' (Communities and Local Government, 2006), and became operational in England from April 2007.

The Code for Sustainable Homes covers nine categories of sustainable design. Each category includes a number of environmental issues. Each issue is a source of impact on the environment which can be assessed against a performance target and awarded one or more credits. Performance targets are more demanding than the minimum standards needed to satisfy Building Regulations or other legislation. They represent good or best practice, are technically feasible, and can be delivered by the building industry. The issues and categories are as follows:

- Energy & CO2 Emissions
  - Dwelling Emission Rate
  - Building Fabric
  - Internal Lighting
  - Drying Space
  - Energy Labelled White Goods
  - External Lighting
  - Low or Zero Carbon Technologies
  - Cycle Storage
  - Home Office
- Water
  - Internal Water Use
  - External Water Use
- Materials
  - Environmental Impact of Materials
  - Responsible Sourcing of Materials - Basic Building Elements
  - Responsible Sourcing of Materials - Finishing Elements
- Surface Water Run-off
  - Management of Surface Water Run-off from the Development
  - Flood Risk
- Waste
  - Storage of Non-Recyclable Waste and Recyclable Household Waste
  - Construction Site Waste Management
  - Composting
- Pollution
  - Global Warming Potential of Insulants
  - NOx Emissions

- Health & Wellbeing
  - Daylighting
  - Sound Insulation
  - Private Space
  - Lifetime Homes
- Management
  - Home User Guide
  - Considerate Constructors Scheme
  - Construction Site Impacts
  - Security
- Ecology
  - Ecological Value of Site
  - Ecological Enhancement
  - Protection of Ecological Features
  - Change in Ecological Value of Site
  - Building Footprint

The Code assigns one or more performance requirements (assessment criteria) to all of the above environmental issues. When each performance requirement is achieved a credit is awarded (with the exception of the four mandatory requirements which have no associated credits). The total number of credits available to a category is the sum of credits available for all the issues within it.

Mandatory minimum performance standards are set for some issues. For four of these, a single mandatory requirement is set which must be met, whatever Code level rating is sought. Credits are not awarded for these issues. Confirmation that the performance requirements are met for all four is a minimum entry requirement for achieving a level 1 rating. The four un-credited issues are:

- Environmental Impacts of Materials
- Management of Surface Water Run-off from Developments
- Storage of Non-Recyclable Waste and Recyclable Household Waste
- Construction Site Waste Management

If the mandatory minimum performance standard is met for the four un-credited issues, four further mandatory issues need to be considered. These are agreed to be such important issues that separate Government policies are being pursued to mitigate their effects. For two of these, credits are awarded for every level of achievement recognised within the Code, and minimum mandatory standards increase with increasing rating levels.

The two issues with increasing mandatory minimum standards are:

- Dwelling Emission Rate
- Indoor Water Use

For one issue a mandatory requirement at Level 5 or 6:

- Fabric Energy Efficiency

The final issue with a mandatory requirement for Level 6 of the Code is:

- Lifetime Homes

Further credits are available on a free-choice or tradable basis from other issues so that the developer may choose how to add performance credits (converted through weighting to percentage points) achieve the rating which they are aiming for.

The environmental impact categories within the Code are not of equal importance. Their relative value is conveyed by applying a consensus-based environmental weighting factor (see details below) to the sum of all the raw credit scores in a category, resulting in a score expressed as percentage points. The points for each category add up to 100.

The weighting factors used in the Code have been derived from extensive studies involving a wide range of stakeholders who were asked to rank (in order of importance) a range of environmental impacts. Stakeholders included international experts and industry representatives.

It is also important to note that achieving a high performance in one category of environmental impact can sometimes result in a lower level of performance for another. For instance, if biomass is used to meet heating demands, credits will be available for performance in respect of energy supplied from a renewable source, but credits cannot be awarded for low NOX emission. It is therefore impossible to achieve a total percentage points score of 100.

The Code uses a rating system of one to six stars. A star is awarded for each level achieved. Where an assessment has taken place by where no rating is achieved, the certificate states that zero stars have been awarded:

| Code Levels | Total Points Score (Equal to or Greater Than) |
|---|---|
| **Level 1** ★☆☆☆☆☆ | **36 Points** |
| **Level 2** ★★☆☆☆☆ | **48 Points** |
| **Level 3** ★★★☆☆☆ | **57 Points** |
| **Level 4** ★★★★☆☆ | **68 Points** |
| **Level 5** ★★★★★☆ | **84 Points** |
| **Level 6** ★★★★★★ | **90 Points** |

Formal assessment of dwellings using the Code for Sustainable Homes may only be carried out using Certified assessors, who are qualified ‘competent persons’ for the purpose of carrying out Code assessments.

| Energy & CO2 Emissions |
|---|
| **ENE 1:**Dwelling Emission Rate<br>**Available Credits:**10<br>**Aim:**To limit CO2 emissions arising from the operation of a dwelling and its services in line with current policy on the future direction of regulations. |
| **ENE 2:**Fabric Energy Efficiency<br>**Available Credits:**9<br>**Aim:**To improve fabric energy efficiency performance thus future-proofing reductions in CO2 for the life of the dwelling. |
| **ENE 3:**Energy Display Device<br>**Available Credits:**2<br>**Aim:**To promote the specification of equipment to display energy consumption data, thus empowering dwelling occupants to reduce energy use. |
| **ENE 4:**Drying Space<br>**Available Credits:**1<br>**Aim:**To promote a reduced energy means of drying clothes. |
| **ENE 5:**Energy Labelled White Goods<br>**Available Credits:**2<br>**Aim:**To promote the provision or purchase of energy efficient white goods, thus reducing the CO2 emissions from appliance use in the dwelling. |
| **ENE 6:**External Lighting<br>**Available Credits:**2<br>**Aim:**To promote the provision of energy efficient external lighting, thus reducing CO2 emissions associated with the dwelling. |
| **ENE 7:**Low or Zero Carbon Technologies<br>**Available Credits:**2<br>**Aim:**To limit CO2 emissions and running costs arising from the operation of a dwelling and its services by encouraging the specification of low and zero carbon energy sources to supply a significant proportion of energy demand. |
| **ENE 8:**Cycle Storage<br>**Available Credits:**2<br>**Aim:**To promote the wider use of bicycles as transport by providing adequate and secure cycle storage facilities, thus reducing the need for short car journeys and the associated CO2 emissions. |
| **ENE 9:**Home Office<br>**Available Credits:**1<br>**Aim:**To promote working from home by providing occupants with the necessary space and services thus reducing the need to commute. |

| Water |
|---|
| **WAT 1:**Indoor Water Use<br>**Available Credits:**5<br>**Aim:**To reduce the consumption of potable water in the home from all sources, including borehole well water, through the use of water efficient fittings, appliances and water recycling systems. |
| **WAT 2:**External Water Use<br>**Available Credits:**1<br>**Aim:**To promote the recycling of rainwater and reduce the amount of mains potable water used for external water uses. |

| Materials |
|---|
| **MAT 1:**Environmental Impact of Materials<br>**Available Credits:**15<br>**Aim:**To specify materials with lower environmental impacts over their life-cycle. |
| **MAT 2:**Responsible Sourcing of Materials - Basic Building Elements<br>**Available Credits:**6<br>**Aim:**To promote the specification of responsibly sourced materials for the basic building elements. |
| **MAT 3:**Responsible Sourcing of Materials - Finishing Elements<br>**Available Credits:**3<br>**Aim:**To promote the specification of responsibly sourced materials for the finishing elements. |

| Surface Water Run-off |
|---|
| **SUR 1:**Management of Surface Water Run-off from developments<br>**Available Credits:**2<br>**Aim:**To design surface water drainage for housing developments which avoid, reduce and delay the discharge of rainfall run-off to watercourses and public sewers using SuDS techniques. This will protect receiving waters from pollution and minimise the risk of flooding and other environmental damage in watercourses. |
| **SUR 2:**Flood Risk<br>**Available Credits:**2<br>**Aim:**To promote housing development in low flood risk areas, or to take measures to reduce the impact of flooding on houses built in areas with a medium or high risk of flooding. |

| Waste |
|---|
| **WAS 1:**Storage of non-recyclable waste and recyclable household waste<br>**Available Credits:**4<br>**Aim:**To promote resource efficiency via the effective and appropriate management of construction site waste. |
| **WAS 2:**Construction Site Waste Management<br>**Available Credits:**3<br>**Aim:**To promote resource efficiency via the effective and appropriate management of construction site waste. |
| **WAS 3:**Composting<br>**Available Credits:**1<br>**Aim:**To promote the provision of compost facilities to reduce the amount of household waste send to landfill. |

| Pollution |
|---|
| **POL 1:**Global Warming Potential of Insulants<br>**Available Credits:**1<br>**Aim:**To promote the reduction of emissions of gases with high GWP associated with the manufacture, installation, use and disposal of foamed thermal and acoustic insulating materials. |
| **POL 2:**NOx Emissions<br>**Available Credits:**3<br>**Aim:**To promote the reduction of nitrogen oxide (NOX) emissions into the atmosphere. |

| Health & Wellbeing |
|---|
| **HEA 1:**Daylighting<br>**Available Credits:**3<br>**Aim:**To promote good daylighting and thereby improve quality of life and reduce the need for energy to light the home. |
| **HEA 2:**Sound Insulation<br>**Available Credits:**4<br>**Aim:**To promote the provision of improved sound insulation to reduce the likelihood of noise complaints from neighbours. |
| **HEA 3:**Private Space<br>**Available Credits:**1<br>**Aim:**To improve quality of life by promoting the provision of an inclusive outdoor space which is at least partially private. |
| **HEA 4:**Lifetime Homes<br>**Available Credits:**4<br>**Aim:**To encourage the construction of homes that are accessible and easily adaptable to meet the changing needs of current and future occupants. |

| Management |
|---|
| **MAN 1:**Home User Guide<br>**Available Credits:**3<br>**Aim:**To promote the provision of guidance enabling occupants to understand and operate their home efficiently and make the best use of local facilities. |
| **MAN 2:**Considerate Constructors Scheme<br>**Available Credits:**3<br>**Aim:**To promote the environmentally and socially considerate, and accountable management of construction sites. |
| **MAN 3:**Construction Site Impacts<br>**Available Credits:**2<br>**Aim:**To promote construction sites managed in a manner that mitigates environmental impacts. |
| **MAN 4:**Security<br>**Available Credits:**2<br>**Aim:**To promote the design of developments where people feel safe and secure- where crime and disorder, or the fear of crime, does not undermine quality of life or community cohesion. |

| Ecology |
|---|
| **ECO 1:**Ecological value of site<br>**Available Credits:**1<br>**Aim:**To promote development on land that already has a limited value to wildlife, and discourage the development of ecologically valuable sites. |
| **ECO 2:**Ecological enhancement<br>**Available Credits:**1<br>**Aim:**To enhance the ecological value of a site. |
| **ECO 3:**Protection of ecological features<br>**Available Credits:**1<br>**Aim:**To promote the protection of existing ecological features from substantial damage during the clearing of the site and the completion of construction works. |
| **ECO 4:**Change in ecological value of site<br>**Available Credits:**4<br>**Aim:**To minimise reductions and promote an improvement in ecological value. |
| **ECO 5:**Building footprint<br>**Available Credits:**2<br>**Aim:**To promote the most efficient use of a building’s footprint by ensuring that land and material use is optimised across the development. |

## Disclaimer

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