



SUSTAINABILITY STATEMENT

for

**St Giles Gardens, Maesgwyn Road,
Wrexham.**

10 May 2012

submitted by

**MORRIS HOMES LIMITED
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Introduction

This sustainability statement is submitted in order to discharge Planning Condition 28 of Application No. WRO P/2008/0090.

As outlined in the design and access statement, these revisions are to improve the overall appearance and design of this parcel and provide a more marketable 'first time buyer' and 'family starter homes' mix of dwellings.

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Section 1

Commitment to Sustainable Design

At Morris we pride ourselves on combining exceptional build quality, high specification, good design with energy efficient homes. Our commitment to building sustainable homes and developments is reflected in our design and achievements:

Morris Homes has been voted 'Green Housebuilder of the Year' in the Green Construction Awards and we have secured a 'What House?' award for Best Energy Efficient Development.

We were the first housebuilder in the UK to comply with SAP 80+, the government's accreditation scheme for energy efficiency. Ensuring all our developments meet this standard.

Over 90% of our developments are 'brownfield sites', transforming derelict land into well designed, energy efficient developments whilst adding value to local areas and improving outlook.

We invest heavily in high quality landscaping and working with the local eco-systems, whilst protecting natural habitats and features. We appreciate the value that enhancing these features adds to a development, helping to create a sense of place. As a result we are a regular winner of the Daily Mail Green Leaf Awards.

Section 2

Current Site Building Standards

This site was approved under 2004 Building Regulations and as such is covered by a Full Plans Certificate. This enables us to build the entire development to these regulations and not to 2010 Building Regulations. At this time the construction details for key build elements are:-

- 1.** Insulated cavity wall.
- 2.** Standard non-condensing boilers.
- 3.** Basic polystyrene insulation within floor slabs.
- 4.** Minimal requirements for acoustic performance, with clear cavities to party walls and no sound deadening requirements to partitioning between habitable spaces and floors.
- 5.** No thermal performance requirements in regards to airtightness or following accredited construction details.

Section 3

Proposed Site Building Standards

Notwithstanding the exemption provided by the Plans Certificate, we propose to offer the following build improvements to the various plots to improve upon the energy efficiency of the proposed dwellings:

- 1.** Class 'A' high efficiency condensing boilers, with a NOx rating of 5 with insulated hot water cylinders. All radiators are fitted with thermostatically controlled valves and we incorporate zone controlled heating within larger properties. Improving the heating specification provide up to a third saving on energy bills within the home.
- 2.** Improved insulation performances to all build elements giving an overall increase to the buildings thermal performance. This enhances the thermal resistance to the floors, roof, glazing and external walls.
- 3.** Building in accordance with accredited construction details to ensure all elements of the build are thermally efficient. Reduced cold bridging and increased air-tightness will ensure the heating system works efficiently.
- 4.** Improved acoustic performance to dwellings following robust details and current sound penetration standards. Constructing party walls with Isover RD Party Wall Acoustic Batt provides on average improvement of 5db over existing standards. This product provides an enhanced performance above current requirements, greatly improving the acoustic performance of a dwelling. All other separating details such as floor and partition walls also meet current acoustic requirements.
- 5.** Possible weaknesses in the building envelope such as doors and windows will be enhanced. The addition of a GRP composite insulated doors with a u'value of 0.55 w/m²k (four times the thermal performance of timber door) and double glazed units achieving an increased u'value of 1.7 w/m²k.
- 6.** Energy efficient lighting both internally and externally. External lights are also fitted with passive infrared sensors to only activate with movement and to ensure they work efficiently and reduce energy bills.

Section 4

Responsible Sourcing of Materials and Environmental Impact

Due to substantial developments in insulation performance, issues regarding sustainability, and manufacturers awareness of these issues, Morris Homes are able to ensure that we build using materials from sustainable sources with very low environmental impact. The following are key build elements and materials used:-

- 1.** Insulation used within room-in-roof and floor slabs is Kingspan TF70 and Kingspan TP10, both have zero rated Ozone Depleting Potential (ODP).
- 2.** Party wall Isover acoustic batt RD is zero ODP and 89% recycled waste.
- 3.** All lagging required for services is done using Rockwool Mineral Wool Batts, which has zero rated Ozone Depleting Potential and zero Global Warming Potential.
- 4.** Timbers for all build elements such as floor, roof, stud-walls are from Forest Stewardship Council certified suppliers.
- 5.** All non-certified timber used is not on the list of timbers specified within the Convention on International Trade in Endangered Species of Wild Fauna and Flora document.
- 6.** Kingspan, Rockwool and Isover are all manufacturers that are committed to ensuring their manufacturing processes have the least amount of impact possible on the environment and they are all committed to developing technologies and methods to improve their processes further. For example Rockwool is manufactured using a state-of-the-art production process that does not use, and has never used, harmful gases such as CFCs, HCFCs, HFCs, in fact any 'blowing agents' that have Ozone Depleting Potential or Global Warming Potential.

Section 5

Site Waste Management

Morris homes adopt a strict site waste management scheme and all our sites are registered under Considerate Constructors Scheme'. At present materials are segregated as follows: -

1. 2 No 40 cubic yard skips on a 'roll on roll off' system. These are used solely for crushable inherit materials. These skips are recovered by our nominated waste contractor who segregates all materials off site and work to a minimum 90% recycling efficiency.
2. Inert materials such as brick/block/hardcore are crushed and re-used whenever possible on site. An example would be for road or driveway construction.
3. Plasterboard is dealt with as a separate item. Mini skips are provided to each plot and at the end of each day are emptied to 2 No 40 cubic yard skips, which are provided by the waste contractor. They all have a recycling agreement in place with Gypsum.
4. Timber pallets are either collected for re-use from site or are collected for recycling.
5. Hazardous waste is stored in a separate lockable container with 205 litre drums. This includes glues, paints, silicone tubes etc.

Site waste management details are provided to all principle and subcontractors at tender stage for reference. The site manager and team enforce this on site with regular 'toolbox talks' and regular skip inspections. The site waste management system is updated on a regular basis to reflect changing build conditions and clear notification and waste locations are designated and indicated on site plans located within the site office.

Section 6

Providing Information and Advice to Purchasers

At Morris Homes we understand that not only is it important to provide more sustainable developments but that it goes hand in hand with public awareness. We aim to provide as much information as possible within our home information packs to ensure purchasers are aware of possible cost savings and this can improve the environment.

Home Information Packs include the following information:

1. Gas boiler details, confirming specification and that by following the manufacturers' guidelines for heating controls, programmers and room thermostat settings they could reduce emissions and reduce their energy bills by a third. We recommend that in the in warmer months by merely reducing the temperature by one degree, they could provide an additional 10% saving.
2. They are advised that by fitting energy efficient light bulbs they could use up to 80% less electricity on lighting and this give a cost saving.
3. We also provide general advice regarding switching off of appliances and their eco label, and what this means to them.
4. We provide general guidance on reducing water consumption and also advise them that using the 'eco' setting on their dishwashers is more economical and uses less water than washing by hand.

Although these are simple suggestions we believe that it all helps with providing purchasers/homeowners with a good understanding of their home and how these small items are not just helping the environment but also reduces costs.

Section 7

Conclusion

We have proposed substantial build improvements to these properties, above our current requirement to construct to 2004 Building Regulations. We have also identified that the most beneficial improvement for prospective home owners given the current financial climate and the extreme changes in climate is providing class 'A' condensing boilers.

In general we feel that these proposals would greatly enhance the thermal and environmental performance of these dwellings and addresses a number of key issues within Wrexham Borough Councils Sustainability Design Brief.