

ENVIRONMENTAL & SUSTAINABILITY POLICY

Extracted from VOLUME 5 - Social & Environmental Manual

1 Environment & Sustainability

1.1 Environmental Policy

1.1.1 Environmental Objectives

Medical Architecture actively promotes and demonstrates environmentally aware procedures in our day to day operations and in the consultancy offered to clients.

We will take a whole-life view when designing the built environment and managing the offices we work from. From Project inception to completion, Medical Architecture will consider the implications of strategic and detailed design decisions in terms of the carbon reduction economy.

We understand the need for Lean Thinking and wherever possible we will implement the principles of 'using a little, in the right place' and 'right first time' waste minimisation.

1.1.2 Management Commitment to the Environment

Medical Architecture work with members of our clients' supply chains to improve Environmental knowledge transfer and waste reduction. We use BREEAM Healthcare Guidance, Benchmarking, Key Performance Indicators and Post-Occupancy Evaluations to continuously improve our environmental outputs.

We meet or exceed all the environmental legislation requirements that relate to the Company and measure and monitor our performance against improvement targets. We are aware of the current trends to replace mainstream high energy use technologies with alternative lower energy and renewable technologies.

We keep ourselves and our clients aware of the appropriate environmental choices that can be made at every stage of a project. We ensure that appropriate environmental choices are made in the workplace and in the conducting of our business operations.

1.1.3 Communicating the Objectives

We are aware that we are in a period of rapid change and increasingly scarce resources, and follow developments in 'green' thinking and environmental policies nationally and internationally in response to this. Employees are consulted regularly to find new ways to meet these challenges in the work we do and the places that we do it. Working groups and 'champions' are selected from the staff to drive action plans forward and ensure continuous improvement.

1.2 Sustainability Statement

Our thinking:

- Sustainability really matters to us: we take a pragmatic approach to achieve best value for the client rather than to promote the unaffordable;
- It is holistic and far-reaching, from the desk to the city: No matter what the scale of the project, we look for innovative ways to encourage sustainable solutions that reduce waste and maximise long term gains;
- It is about maintaining balance, all systems in easy equilibrium: We like to avoid extreme proposals that then require extreme countermeasures;
- It is about the interdependence of things: We recognise that there are direct causes and effects resulting from sustainable interventions that need management and can't be done in isolation;
- It is about the long-term, from cradle to cradle: Quick fixes are often expensive in the long run. We look for steady, long-term and planned incremental solutions that endure and then have residual value at their end of life.

Our delivery:

- We have BREEAM Accredited Professional skills in-house: Having an AP in the Design Team helps maximise and streamline the achieving of credits under the new BREEAM 2011 guidance.
- We speak on sustainability at conferences such as IHEEM, EcoBuild, Design & Health and HaCIRIC: We have an expertise and trend awareness that brings value when developing the narrative for any project.
- We use in-house landscape and master-planning design skills to improve micro-climates: We know that joined up thinking with integrated landscaping can often give you more for less.
- We actively promote carbon reduction through our working practices: Our own Environmental Management system enshrines these basic principles.
- We design therapeutic and energy saving day-lit spaces with good views: We start from the premise that we are designing spaces in which people can give their best.
- We design for improved biodiversity and species protection: We take a long view that recognises the diversity and wealth that the natural world has to offer us and future generations.
- We design for future climate adaptation and spatial flexibility: It is important to be able to sequentially upgrade the assets we are building now, so they can easily and cheaply remain effective as the climate changes in the future. Simple measures incorporated at design stage, can allow the cost effective 'sweating of the asset' in the future.
- We design for pre-fabrication and modern methods of construction: If a construction programme can be shortened, or a bathroom pod standardised, we know how to use current systems to good effect. We keep half an eye on near future innovations as they emerge – always looking for the benefits they might bring.
- We run an Environmental Management System that achieves ISO 14001: 2004

Our track record;

- An exemplar research case study for the NHS SHINE – Bamburgh Clinic for the Northumberland Tyne and Wear NHS Foundation Trust: Working closely with the NTW team we delivered an Award winning scheme that still provides valuable insights into the practical aspects of sustainable building design.
- A research case study with Oxford Brookes University for the Technology Strategy Board's Design for Future Climate Adaptation programme – Edge Lane TIME project for Mersey Care NHS Trust: Here we won a place in the first tranche of 26 Case Study projects to better understand what Project Teams can do during the design and development process to get better value out of their projects as temperatures rise and extreme weather events such as flooding add new risks over time.

- Extensive prefabrication using sustainable timber framing and integrated services modules – Roseberry Park for Tees, Esk and Wear Valleys NHS Foundation Trust: This project was a first major BIM project for us and gave us the opportunity to really push forward with technical innovations in collaborative design management, clash detection, programming and economies of scale.
- HSJ Judges awarded our Ferndene project - HSJ Good Corporate Citizen Award – praising the use of community involvement and sustainable design. An inclusive consultation process led to a fully integrated design solution for a complex patient group with very special needs. The strategy resulted in a meaningful enhancement of the project for the health and well-being of staff, service users and visitors alike.

1.3 BREEAM

BREEAM is the world's foremost environmental assessment method and rating system for buildings since it was first launched in 1990. BREEAM sets the standard for best practice in sustainable building design, construction and operation and has become one of the most comprehensive and widely recognised measures of a building's environmental performance.

BREEAM for healthcare buildings was commissioned by the Department of Health and Welsh Health Estates, replacing NEAT (NHS Environmental Assessment Tool) as the preferred environmental assessment method and certification scheme for healthcare buildings in the UK.

The Department of Health require, as part of the Outline of Business Case approval, that all new builds achieve an 'Excellent' rating and all refurbishments achieve a 'Very Good' rating under BREEAM Healthcare.

The BREEAM scheme for healthcare buildings can be used to assess the following types of healthcare developments at both the Design and Post Construction stages of their lifecycle:

- Teaching/specialist hospitals,
- General acute hospitals,
- Community and mental health hospitals,
- GP surgeries,
- Health centres and clinics.

1.3.1 BREEAM Assessment

A BREEAM assessment uses recognised measures of performance, which are set against established benchmarks, to evaluate a building's specification, design, construction and use. The measures used represent a broad range of categories and criteria from energy to ecology. They include aspects related to energy and water use, the internal environment (health and well-being), pollution, transport, materials, waste, ecology and management processes.

The typical process of undertaking a BREEAM Assessment comprises of key stages. The workflow diagram below sets these against a typical building design and procurement timeline to show when key decisions have to be made by the client and the design team.

These key stages are:

- Deciding to carry out a BREEAM Assessment
- Appointing a BREEAM Assessor
- Appointing an Accredited Professional (AP)
- Carrying out the pre-assessment
- Registering the project
- Carrying out the design stage assessment
- Undertaking the post-construction stage assessment

Refer to the BREEAM folder within the *LIBRARY* Reference for further information and guidance.

1.4 Sustainability Checklist

A sustainability checklist has been created assist in identifying what sustainability issues need to be considered at different stages of the design process. This is found in each job folder within *Research\Guidance*



Signed
Christopher Shaw (Director)

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