

SMARTWaste case studies: reducing construction waste



Two extraordinary property developments - Chiswick Park and the Greenwich Millennium Village - are from different market sectors but share the goal of reducing waste during construction.

Chiswick Park

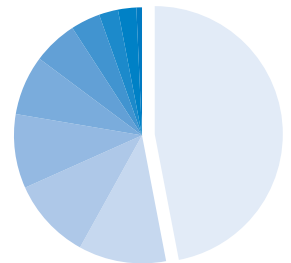
Chiswick Park is a 1.5 million square feet office development for 7,000 people with an on-site leisure club, lake, roads and public facilities. Developed by Stanhope Properties and designed by Richard Rogers Partnership and Ove Arup Partners, construction is managed by Bovis Lend Lease and incorporates a host of innovative features.

SMARTWaste was used on the project to identify the sources and types of waste, measure the quantities of waste and evaluate the causes. It gives immediate feedback, so maximising the time available for finding ways of reducing site waste - SMARTWaste also provides the waste benchmarks and data needed to do this and to identify priorities for materials recovery.

The implementation of SMARTWaste started in July 2000 with an observer on site giving weekly feedback reports to a BRE Environmental Manager. These, plus monthly client and contractor reports, provide the focus for guidance on practical waste minimisation and management strategies. Waste composition and levels are summarised in the chart below.

Overall waste composition% July-November 2000

46.7%	Packaging
11.0%	Miscellaneous
10.2%	Plaster & Cement
9.3%	Insulation
7.5%	Timber
5.6%	Metal
3.7%	Plastic
2.4%	Concrete
2.3%	Ceramic
0.7%	Inert



Bin distribution and retrieval system

BRE specified a bin distribution and retrieval system (BDRS) for the 200 waste bins on site. The BDRS provides a daily routine of collecting bins and monitoring waste effectively. This system is easily adaptable and can be applied to a range of projects using bins for waste.

Material waste management strategy

On completing the data collection for the initial waste benchmark, BRE provided a material waste management strategy (MWMS) to be adopted during phase 2 of the Chiswick Park project and future projects. The MWMS identified key waste products, the causes of the waste and its varying costs. Minimisation and management recommendations were also provided.