

# Recycled Aggregate Reduces Environmental Impact of Sustainable Building Center



## Client: Wolseley UK

## **Groundwork Sub-Contractor:** Flair Build

## Materials and processes used:

SuperSleve clay drainage and recycled aggregate

# Why:

Implement sustainable drainage systems Showcase environmentally sound working practices

Reduce costs and maintain quality

# **Case Study**

Following the decision by Wolseley UK and its appointed Consulting Engineer, Fulcrum Consulting, to specify Hepworth Building Products' SuperSleve drainage system, Hepworth was asked to advise the sub-contractor on ways of improving the sustainability of the project on site.

### Application

The site investigation report identified that the lower level sub-soils at the Sustainable Building Center were of a sandy nature and did not contain any large stones. Hepworth confirmed that the sub-soil would provide a supply of low cost pipe bedding and surround material.

Unfortunately, insufficient quantities were being excavated on site to be used throughout the project and therefore Hepworth suggested that a local supply of recycled aggregate be selected as the next most sustainable option.

These principles made the development more sustainable by preserving primary aggregate resources and reducing costs, without compromising the build quality of the development.

#### **Testimonials**

Allan Homewood of Fulcrum Consulting (a company member of the UK Green Building Council) said "Our approach to sustainability is the application of an integrated engineering design to buildings and infrastructure to provide the optimum solution for each of our clients' particular needs".

Allan continues "we have known for some time that SuperSleve clay pipes themselves provide a sustainable installation and was an obvious choice for this project, as it embraced the client's ideal of a sustainable building. But in addition to this, it is also sustainable in installation as recent research has demonstrated that suitable recycled construction demolition material can be used as a replacement pipe bedding and surround material. This reduces the need to import primary aggregates, thus reducing the overall amount of embodied energy in the building."



On the use of recycled aggregate, Lou O'Malley from Flair Build said: "Hepworth was very involved with this project from the start and spent a lot of time advising us how to implement a sustainable drainage system. The technique that really impressed us was the use of recycled aggregate. Not only did this process save money, it also reduced installation time with less bedding required. Hepworth's advice helped us to be more efficient and environmentally aware. We will definitely use the techniques, including the use of recycled aggregate where possible, in the future".

#### Conclusion

Paul Wydell, Product Manager at Hepworth Building Products said: "If more developers thought about sustainability in this way we would all be in a greater position to support good environmental practices."

He adds: "This project proved that if you assess the site before construction starts you can reduce its carbon footprint further and reduce cost without reducing quality."





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