

# GREEN CONSTRUCTION AWARDS 2007

GREEN BUILDING OF THE YEAR  
green supplier of the year  
**RECYCLING AWARD**  
Green innovation in construction products award  
GREEN MAJOR PROJECT OF THE YEAR  
GREEN INNOVATION IN CONSTRUCTION MATERIALS AWARD  
green contractor of the year  
GREEN CIVIL ENGINEERING PROJECT OF THE YEAR  
green small project of the year  
green sub contractor of the year  
**IMPACT AWARD**  
**GREEN BOOT AWARD**  
**OF THE YEAR**  
**BUILDER**  
**GREEN HOUSE**

Congratulations to  
Bovis Lend Lease for  
winning this year's Green  
Innovation in Construction  
Materials Award

Richard Roach  
020 7085 8629  
richard.roach@rbs.co.uk

[www.rbs.co.uk](http://www.rbs.co.uk)

**Make it happen**





**WINNER**

**BOVIS LEND LEASE  
RePlaS**

Millions of plywood sheets used for hoarding and concrete formwork on projects around the country are Forest Stewardship Council (FSC) certified. But once finished with, the adhesives they contain make them fit for little else other than landfill.

A project team consisting of Bovis Lend Lease, Land Securities, Capital Shopping Centres and 3DM got together to look at the possibilities of a new hoarding material that could not only reduce the waste it creates, but also find a use for recycled plastic in construction.

The St David's 2 retail development in Cardiff presented an ideal opportunity to trial materials

manufactured under a new process - Powder Impression Moulding (PIM) - at 3DM's nearby plant in Caerphilly. And the local economy benefited from the extra employment that was created.

A significant amount of mixed plastic from Waste Electrical and Electronic Equipment (WEEE) goes into the recycled plastic sheet - or RePlaS - which has an overall recycled content of 80 per cent, and a carbon footprint comparable to that of plywood. The board acquires some of the properties of the WEEE plastic, making it highly resistant to fire. It is also impervious to water and does not require painting. Joiners say they find it robust, flexible and easier to work with than plywood.

RePlaS proves to be cheaper per sq m than plywood and has the added advantage of being reusable. Alternatively, it can be recycled - theoretically, ten times before polymer enriching is necessary.

The project team are still working on the development of the board and have already come up with a graffiti-resistant version.

The judges were impressed by the innovative and practical work between client, developer and manufacturer and believe RePlaS has the potential to create a big market.

“good work with client, developer and manufacturer; innovative and practical”

**FINALIST ▼**  
**LHOIST**  
**Tradical Hemcrete**  
Tradical Hemcrete is a bio-composite building material made from an air-lime based binder with UK grown and harvested hemp shiv, the woody waste material derived from the plant of the same name.  
It offers low impact sustainable technology and can be mixed on site. Using a shuttering system it can be spray-applied to create cast in-situ walls, floor screeding, plaster and roof insulation. As a lime based product it is hard wearing and data suggests it offers better insulating properties than traditional brick and block.  
The hemp from which it is made is fast growing and captures carbon that becomes locked into the building during its construction.

**FINALIST ▼**  
**KNAUF DRYWALL**  
**Futurepanel**  
Futurepanel is a carbon-neutral plasterboard that contains at least 10 per cent recycled gypsum and 100 per cent recycled paper liner. Manufacturer Knauf Drywall believes it offers a huge opportunity for the industry to move towards tackling energy costs and Government targets.  
The plasterboard is produced to standard specifications and its carbon-neutral properties have multiple benefits. Its manufacture typically requires only 5.5 kilograms of CO<sub>2</sub> - amounts that are offset through investment in clean energy projects in developing countries. Wind turbines and combined heat and power (CHP) at the company's plants should see further reductions of CO<sub>2</sub> emissions.

**FINALIST ▼**  
**GREEN-TECH**  
**Walkergate Hospital**  
GT Greentree is an environmentally friendly and sustainable replacement for increasingly-scarce quality topsoil. The product has been developed in partnership with Yorkshire Water. It uses organic compost, processed green waste and local quarried sand - substances all previously classified as waste.  
It has no weeds, little or no stone, complies to BS3882 standard and has good water retention properties. Calculations suggest that 1 tonne of Greentree topsoil saves roughly 140 kilograms of greenhouse gas emissions.  
The manufacturers have established markets with a number of local authorities and contractors.

**FINALIST ▼**  
**AGGREGATE INDUSTRIES**  
**Enviroblock**  
Aggregate Industries' Enviroblock is an environmentally engineered building block produced from waste raw materials, with a recycled content of between 72 and 93 per cent.  
Its contents include recycled aggregate that would otherwise be diverted to landfill, and china clay stent, a by-product of china clay production. The block has achieved an A-rating through BRE environmental profiling.  
A range of three lightweight and three dense Enviroblocks is now available, which includes the recent addition of a new Paint Grade finish dense block.  
In the Green Guide to Housing Specification, the block achieved a minimum A-rating for its traditional cavity wall specification.