

# Block beauties

They tick a lot of boxes, but the journey for used tyre blocks in construction has not been easy, discovers **Andrea Height**

■ FOR EIGHT YEARS DENNIS SCOTT HAS BEEN TRYING TO CONVINCING THE UK OF THE BENEFIT of reusing tyres destined for landfill as an environmentally-friendly construction material. Scott is director at Northern Tyre Recycling, based in Scotland, which produces tyre bales known as URRO (Used Rubber Recycling Operation) blocks. It takes about 15 minutes to compress 110 used tyres into one URRO block, with a compression ratio of six tyres into one.

What this does is create a low density construction material with good load bearing properties that is also permeable, allowing water to drain through. As the blocks are also uniform in size, they are easy to build with and place, which can translate to reduced construction time and therefore reduced cost.

Scott first heard about URRO blocks via the internet, where they had been used in the US, and was immediately taken by them. In the US, Scott says the blocks have been used in large scale projects, such as the construction of freeways. "They were used in Fort Worth in Texas on highway embankment stabilisation, where they worked superbly," he explains.

While Scott sees URRO blocks as the ideal solution to finding a useful second life for tyres, he has found it something of a challenge to convince others. "We're up against bureaucracy and red tape all the way," he says. "It's not helped by the Environment Agency (EA) and Brussels – they are geared with protecting the

## APPLICATIONS FOR URRO

■ Road sub bases ■ Retaining walls ■ Gabions and waterway control ■ Mud slide and erosion control ■ Soil elevation ■ Shock absorption for foundation walls, firing ranges and bunkers ■ Sound barrier along motorways and railways ■ Impact barrier for racetracks

environment, which is necessary, but they don't look at the business side of things."

His point goes back to the argument of when waste ceases to be waste and becomes a product, with the tyre blocks falling into this hazy area.

"I don't blame the EA. I blame the people who run the agency. They should be looking at the products being recycled and the impact these products can have on industry in a positive way and by working with industry, making life easier for the use of these products," he says.

"There should be laws and legislation to promote the use of recycled material first. There's not enough support for people like us and those producing rubber crumb," he adds. Scott is against the use of tyres as fuel for the cement industry. "We're trying to break down the barriers. There's still a stigma attached to using recycled material," he adds. As well as trying to convince the likes of the regulatory bodies of the benefits of URRO blocks, there is also the need to convince those who specify such materials.

"The biggest problem with the civil engineering industry was the use of recycled material as an alternative to aggregate," he says. But the tide seems to be turning, Scott reveals he is in talks with large civil engineering companies which could soon see hundreds of thousands of blocks specified for use in big projects. The release of the 'Publicly Available Specification (PAS108) for the production of tyre bales for use in construction' last year also helped the plight. "That has been the greatest benefit to our industry," he says.

To help secure the future of tyre blocks, Scott is currently in the process of putting forward a consultation document for Defra, requesting that the blocks be given an exemption and freed from their waste tag. If this is granted, it should help pave the way for greater acceptance and use of URRO blocks – making all the years of struggle worthwhile. ■

Upgrade works to Merseyside Waste Disposal Authority's Sefton Meadows Household Waste Recycling Centre, where URRO blocks are being used, is due to be completed next month. Here, the blocks offer considerable cost savings and were ideally suited for use on the soft soil base of the site

