

CONSTRUCTION, CIVIL & STRUCTURAL ENGINEERING

Hammarsdale-based rubber recycler dampens the sound in London gyms

GYMS are noisy with heavy weights banging on the floor, bodies jumping and thumping, trainers screeching and music blaring. Vibrations from equipment and weight drops infiltrate the structures of buildings.

In cities like London, where gyms share high-rise buildings with residents and other businesses, legislation to control acoustics has been tightened.

Mathe Group and Van Dyck, South Africa's largest radial truck recycler and only moulding company that produces rubber flooring products from the resulting rubber crumb, has turned this into a growing export opportunity, according to CEO, Dr Mehran Zarrebini.

In the industrial hub of Hammarsdale, over 4,000 sqm of acoustic rubber tiles are produced each month for gyms in South Africa and the United Kingdom.

A partnership with UK company, Instaflor, which dates back to 2006, has seen the development of a complex acoustic flooring system specifically designed for fitness studios and gyms. This not only solves acoustic issues but also deals with the loadings of fitness equipment and the impact of free weights.

It relies on an acoustic subfloor system that has been specially developed and tested. It is proven to exceed UK building regulations for airborne and impact sound caused by exercise equipment and activity.

The floor rests on acoustic cradles, made from recycled local rubber crumb. This versatile cradle system can be adjusted to ensure a level floor at the required height, overcoming any uneven areas in the structural floor and avoiding the need for messy levelling screeds. The completed system has the added advantage of creating an underfloor

void for installing services such as underfloor heating.

"Our Hammarsdale facility is a pivotal export hub with many of our manufactured products being distributed internationally. Collaborative efforts with Instaflor SA and Instaflor UK are instrumental in the sales and marketing of our acoustic flooring solutions, highlighting our global reach and the international demand for our products," says Zarrebini.

He explains that Mathe Group's acoustic flooring offering also includes shock pads that are used for heavy lifting areas. Acoustic tiles are placed over these shock pads and in other areas across each gym.

Shock pads are manufactured using waste products from tyre retreaders which are sieved to separate out fibres of the correct length.

Acoustic cradles and underlays are made using a similar process that relies on polyurethane and rubber

crumb from recycled radial truck tyres produced on-site.

He says that the less sophisticated South African gym market has not evolved to the point where acoustic equipment is prioritised. Top-end gyms are purchasing shock pads for weight areas whilst most others are just using rubber tiles for heavy traffic areas at this point.

However, Zarrebini believes that, as more and more gyms are located in mixed-use residential buildings and in hotels and resorts, there will be greater emphasis on containing noise.

"We are working closely with our partner, Instaflor, in the UK where they have done all the testing and have the relevant literature. We can adapt that for use in South Africa," he says.

According to Zarrebini, the UK is a particularly strong market for Van Dyck with containers regularly

leaving via Durban's port. A shared language and timeline, together with a reputation for good customer service and the ability to order smaller volumes are added advantages.

"The beauty of this product is that customers can consolidate different products into one container. They can buy the cradles, shock pads and tiles and also our acoustic underlay product and pack everything in a single container for export. If they were buying from China or other south-east Asian countries, they would need to purchase a container load of each product," he adds.

In addition to selling to the UK, Van Dyck has also sold acoustic gym products into Africa, having completed large installations in Botswana and Mauritius as well as in the Seychelles.