

Fitness First

Location:	Fitness First, Manchester Central
Approximate area:	172m ²
Acoustic consultant:	Red Acoustics
Completion date:	September 2009



Background

This Fitness First gymnasium is located on the first floor of a Premier Inn Hotel in the heart of Manchester. TVS was contracted to investigate and then to provide a solution to unwanted noise resulting from the gym's activities which was affecting both hotel residents above and the restaurant and coffee shop below.

TVS undertook a thorough site acoustic and vibration survey and trialled a sample section of acoustic flooring. It was concluded that general noise from gym work, along with shock vibrations from the regular impact of free weights being dropped, could only be controlled by the installation of a bespoke floating acoustic timber floor system, complete with a Regupol sports flooring finish and impact absorbing underlay.

Solution

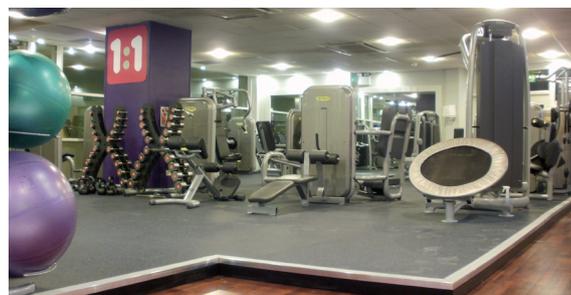
TVS worked with Fitness First, their team of architects and refurbishment contractors, to design, supply and install specialist acoustic timber floors. The work was completed over three nights to limit disruption to the gym and its members.

The floor structure installed included: 50mm cubed acoustic isolators laid on predetermined centres across the concrete sub-floor and separated by low-density glass wool; a covering layer of 18mm plywood; two layers of 12.5mm plasterboard; and another layer of 18mm plywood. TVS also supplied and installed a vibration-absorbing underlay which was inserted between the top layer of plywood and the Regupol Everoll final floor covering.

The finished acoustic floors resembled low-level stages that were highly effective in controlling noise, vibrations and shock impacts and proved an acceptable solution for the hotel and other parties involved.

"TVS offered a technical solution to a very awkward structural noise problem that, if left untreated, could have threatened the closure of the gym. The TVS timber floating floor system isolated the shock being transmitted into the building structure and resulted in noise levels in bedrooms above being dramatically reduced to a level acceptable to both Premier Inn and its guests."

Simon Webster – Acoustic Consultant, Red Acoustics



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