

# Case Study - Regufoam Structural Isolation



## Project Lateral

<b>Client</b>	Rainbow Pools
<b>Contractor</b>	Multiplex
<b>Acoustic Consultant</b>	Sandy Brown
<b>Base Size</b>	95m <sup>2</sup> - Stainless steel pool 68m <sup>2</sup> - Granite pool

### In brief

To prevent the transfer of vibration into the main building structure of Project Lateral, London, Regufoam materials were installed to isolate two swimming pool bases and water delivery pipes.

### Project scope

Project Lateral is an exclusive apartment development in London's Belgravia. Comprising two swimming pools in the basement area of the building, it was necessary to isolate the pool bases and water delivery pipes in order to prevent vibrations from travelling into the building structure and disturbing residents.

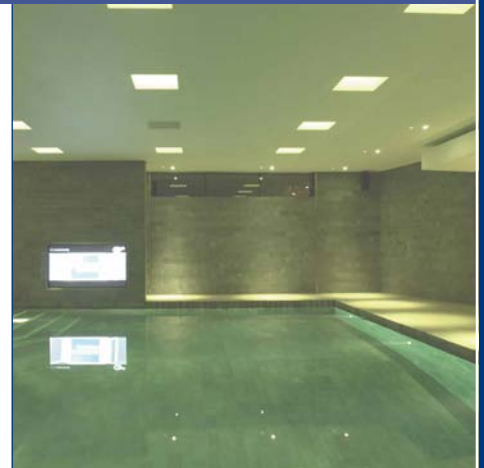
As both pools were butted to an external wall within the basement, a natural frequency of 8-12Hz was required to ensure adequate vibration control.

With one pool constructed of granite at 3.9 tons/m<sup>2</sup> and the other of stainless steel weighing 1.5 tons/m<sup>2</sup>, a combination of Regufoam material densities was necessary to achieve the performance criteria specified.

Regufoam 400 was installed to provide full base coverage of the granite pool and partial coverage for the stainless steel pool. Custom cut into triangular pieces, Regufoam 220 was bonded around the side walls to account for the increase in pressure towards the bottom of the pools.

### Benefits

- Excellent acoustic attenuation and vibration isolation properties
- Colour coded for ease of identification
- High damping ratios and low natural frequencies, even under light loads
- Individual form cut designs available upon request



Regufoam materials were installed to isolate two swimming pool bases to prevent the transfer of vibration into the main building structure



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