

# Clifford Chance, UK



## Floating Floor CDM-ISO-LAT-SPECIAL



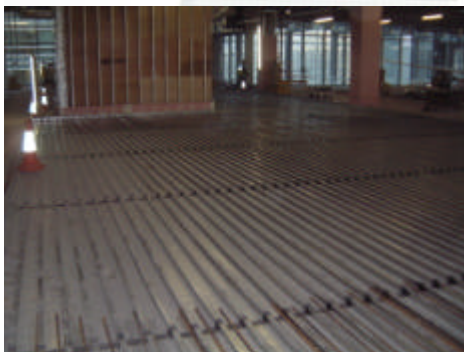
**Main Contractor**  
**Architect**  
**Acoustic Consultant**  
**Area**

**Canary Wharf Contractors Ltd**  
**Gensler**  
**Sandy Brown Associates**  
**500m<sup>2</sup>**

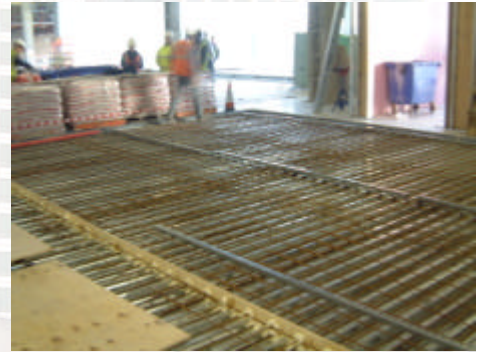
HQ5, one of the new impressive towers in Canary Wharf, is home to the new offices of Clifford Chance. On the 6<sup>th</sup> floor of the building are 2 aerobics rooms and 2 squash courts. These rooms are directly above important board and training rooms and the client did not want to hear the sound of squash balls hitting walls or its staff jumping up and down in an aerobics class to loud music.



The acoustic consultants, Sandy Brown, specified that there had to be a concrete floating floor with an overall performance of 16Hz. Architecturally, however, the whole system had to be 134mm thick to allow the squash courts to be the recommended international height.



To meet the stringent acoustic and architectural requirements and to provide a fast and economical solution CDM-UK used the CDM-ISO-LAT-SPECIAL system with composite decking. This allowed a 100mm concrete slab to be supported on a 134mm airspace. The natural frequency of the bearings was 8Hz and with the combined stiffness of the bearings and the trapped air layer giving a system natural frequency of 16Hz.



The floor was designed to support all internal constructions for the aerobics rooms and squash courts. These constructions included heavy 7m high blockwork walls to create full box-in-box constructions, therefore avoiding the possibility of any structure-borne noise or vibration being transmitted to adjacent spaces.



## CASE STUDY – CDM-ISO-FLOOR

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