

YouTube Space, London

Complete	Area	Client	Architect
2016	UK England	Google	Allford Hall Monaghan Morris

YouTube Space London is a specially created facility where YouTubers and vloggers can learn, connect and create. Its purpose is to allow content contributors to improve the quality of their posts by providing them with high quality studio and editing spaces and technical assistance from studio staff.

Set inside parent company Google's office at 6 Pancras Square, YouTube Space London has two fully-isolated double-height studios and a third single height isolated studio, an isolated sound control room, production control room and training and edit facilities.

The primary studios were designed with a focus on broadcasting with the capability for music performance. The largest Studio can also be used as a cinema/screening room with a Dolby Atmos surround sound system and 4k screening facility.

Replacing their previous facilities at Central St Giles, YouTube Space London spans 20,000 sq. feet, making it the largest YouTube Space in Europe.



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Services provided

Sandy Brown was appointed to provide the acoustic design for Google's office at 6 Pancras Square. As part of the project, we were also commissioned to advise on the YouTube Space at the basement, basement mezzanine and lower ground floors of the building, from conception to completion.

The key acoustic design requirements were driven towards providing very low-noise, acoustically sensitive spaces, included:

- achieving very high levels of sound insulation between the primary studios such that amplified music performance could take place in one without giving rise to disturbance in the directly adjacent, highly sensitive, other studio.
- the design of a very quiet, low air speed ventilation system for all three studios such that air conditioning noise would not interfere with recordings
- the development of a bespoke, durable acoustic wall treatment system that provides reverberation control across the frequency range whilst maintaining the architectural aspirations and functionality

Special acoustic features

Isolated box-in-box structures were incorporated in order to provide very high levels of sound insulation around the studios. These comprised jack-up floating concrete floors, a combination of light and heavyweight partition elements and fully independent lids.

The complex mechanical services design incorporated highly attenuated air paths, low-noise ductwork, acoustic lagging and isolated connections in order to deliver conditioned air into the high-load studios whilst maintaining very low services noise levels. Early adoption of appropriate acoustic principles was key to achieving the required zonal allowances for the strategy to be successful.

The bespoke acoustic wall treatment was developed in order to provide broadband reverberation control in the studios using a combination of porous and panel absorbers, all contained within a durable architectural finish to maintain the aesthetic intent. The modular absorbers can be re-distributed within the studios in order to vary reverberation and provide a flexible acoustic environment to the end user.

Acoustic commissioning was undertaken upon completion with a 13 kW PA system in order to generate sufficient low frequency sound to accurately measure the sound insulation performance of the studio walls.