

Recording Studio Acoustics

SonaSpray acoustic decorative treatment corrects recording studio acoustics

Recording studio acoustics are critical to the **quality** of **sound**. Too much **reverberation** ie reflected noise can **distort** recorded or transmitted presentations as microphones may pick up a sound more than once with a delay in between.

SonaSpray decorative finish applied to ceilings and/or walls **absorbs noise** instead of reflecting it [as with hard surfaces] resulting in the **correct** recording studio **acoustics**.

The absorption coefficients of the range of finishes at various thicknesses are listed on our website, alternatively we can assist with acoustic calculations.



CNN use **SonaSpray K-13** in recording studios around the world including the central London studio [as photo].

SonaSpray K-13 is applied to the profiled studio ceiling in the chosen colour of dark silver grey. This **controls** the recording studio **acoustics** and gives maximum headroom for the studio equipment.



SonaSpray is:

- An acoustic decorative absorber of noise applied to almost any surface
- Available in a range of finishes from textured to smooth
- Through coloured and available in a range of colours
- Fire rated to BS476 Class 1 to part 7 and Class 0 to part 6
- Lightweight; SonaSpray K-13 at 25mm thick weighs 1.8kg/mtr²

Rain noise on roofs can be a problem when designing recording studio acoustics. Acoustic laboratory tests on a thin [26guage] **corrugated steel** roof sprayed with 50mm of **SonaSpray K-13** to the underside then heavily rained upon showed the following **noise reductions**.

Frequency Hz	63	125	250	500	1k	2k	4k	8k	dBA
Ceiling only sprayed	6	7	8	6	11	14	16	16	9
Ceiling & walls sprayed	7	7	13	15	25	31	34	40	18

Octave-Band Sound Pressure Level

The test states: The sound level reductions bought about by treating the ceiling appear to be related primarily to damping of structural vibration by **SonaSpray K-13**, and secondarily to damping of sound inside the enclosure. The treatment of the walls further damps the sound

inside the enclosure, by greatly increasing the average **sound absorption** coefficient of the enclosure interior surfaces.

Copies of test available on request

Music Recording Studios

Recording studio acoustics also sometimes require a solution to a **different noise problem** i.e. **noise transmission** through walls floors and ceilings:

When a major touring band decided to take a break to record a new album they commissioned a new purpose built recording studio with living quarters in a secret location. There was concern of noise being transmitted through the roof and being a nuisance to neighbours. The **builder** filled the ceiling voids with **mineral wool** slab but this achieved only **minimal improvement** to the recording studio acoustics.

The builder contacted **Oscar Acoustics** to install their **SonaCel** isolated ceiling system, proven in installations across Europe.

SonaCel is a ceiling system fixed with isolated rubber mounts preventing **noise** from travelling through the ceiling in the form of vibration.

Sonacel **solved** the problem and the band free to record.

See SonaCel on our website.

Article by D.Mack of Oscar Acoustics. For more advice on Acoustic Solutions and noise Insulation go to <http://www.oscar-acoustics.co.uk>