

Stowe Music School

Complete	Area	Client	Architect
2014	UK England	Stowe School Limited	Nick Cox Architects

Stowe School in Buckinghamshire is a co-educational boarding and day school for pupils aged 13-18.

The development of new music facilities saw a purpose-built two storey building added to the school's estate opposite the Roxburgh Theatre. The brief was to create a building entirely in keeping with the grandeur and beauty of the historic school, but which would house state-of-the-art music performance, rehearsal and recording space.

The music school provides:

- a 200 seat recital hall for symphonic concerts and chamber music
- Sony recording studio with associated 'live' and 'dead' performance spaces
- 8 practice rooms
- dedicated piano and percussion rooms
- library with one of the largest collections of musical scores in any school in the UK.

The school is named by Steinway and Sons as a school of distinction for its commitment to excellence, providing only Steinway instruments from classroom to recital hall and was the winner of a RIBA regional Award for its architectural design.



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Services provided

Sandy Brown was commissioned to provide the acoustic design for the development of Stowe's new music facilities from client brief to RIBA Stage D, with a monitoring role for the design development by the contractor. The key aspects of the acoustic design were:

- auditorium acoustic design
- internal room acoustics and the acoustic character of each space
- the school's desire to exceed the performance requirements set out in BB93- Acoustic Design for Schools
- building envelope, including a design for mixed mode ventilation strategy
- building services noise and vibration.

Special acoustic features

The initial client brief was developed through liaison with the school, represented by the director of music and head master. An audio demonstration was undertaken to provide an immersive impression of the standards of separation and type of construction that could be used between the teaching spaces. As a consequence, standards far better than those required by BB93 were adopted for the teaching and practice spaces.

The music school also houses an auditorium that accommodates up to 200 people. Performances in the hall encompass a wide range of musical genres, including symphonic concerts, choral and chamber music. The hall is a reverse fan shape, which provides strong lateral energy. Support is provided to the stage area, which was designed to accommodate the whole school orchestra, from suspended acoustic reflectors. Diffusers and sound absorbent panels have been used in this key

space to balance clarity, warmth and reverberance within the auditorium to a level appropriate for the given volume.

All of the music accommodation needed to be free from echoes and other acoustic defects. At Stowe we achieved this through using a combination of sound absorbing and sound diffusing treatments depending on the level of reverberation appropriate for the specific space.

Within the music block, the design features a large amount of internal glazing, namely between:

- the piano room and entrance foyer
- the recording studio to the rock band room and small ensemble; and
- the small teaching rooms to stairwells.

High standards of separation were sought between the recording studio control room and adjacent recording spaces. Here high performance glazing was supported in independent frames over a wide airspace of varying depth was used to achieve the performance requirements. However, subject to maintaining suitable separating between rooms, it was the school's desire that noise egress to the circulation spaces be allowed so as to give a sense of vibrancy to the school. The level of separation between the piano room and lobby is consequently deliberately limited through the use of full height double glazing, while the adjacent music uses are protected by a lobbied door arrangement.

Sandy Brown's design for the music school has created facilities that the school describe as 'a wonderful addition'.*

* <https://vimeo.com/24866740>