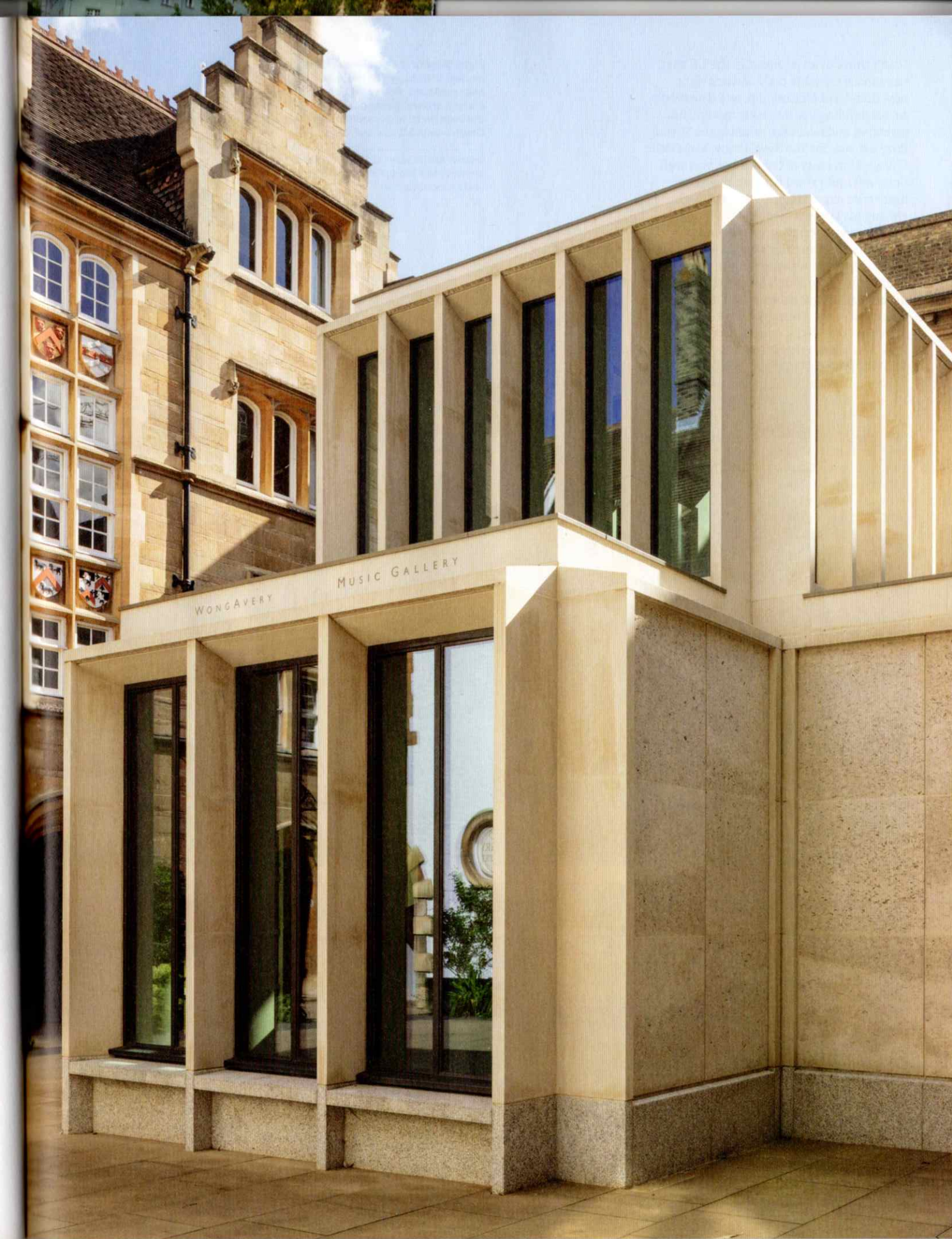


Works

Wong Avery Gallery

Níall McLaughlin Architects' exquisite music practice and performance space for Trinity Hall, Cambridge, may be diminutive in scale, but it joins a small pantheon of modernist projects that can be considered total works of art, says John Pardey

Photographs by Nick Kane



I can't think of an architect in the UK that has a more enviable body of work right now than Niall McLaughlin; and deservedly so, his buildings are intensely thoughtful, inventive, and beautiful. Winning the Stirling Prize last year for The New Library, Magdalene College, University of Cambridge, was well deserved and raised his own bar even higher; so expectations were sky-high visiting his latest project.

At the very first glance of the latest addition to McLaughlin's enviable Oxbridge canon, my mind was thrown back to Rome and Donato Bramante's exquisite and highly influential Tempietto set within a small courtyard of the Church of San Pietro in Montorio; one of the masterpieces of High Renaissance Italian architecture. The WongAvery Gallery (let me refer to it as simply the Song School, as described on Niall McLaughlin Architects' website, with no disrespect to the funders who made it possible) is not circular like the Tempietto, but cruciform like early Christian churches. However, it is the relationship to the courtyard that embraces it that is insistent. A jewel in a crown.

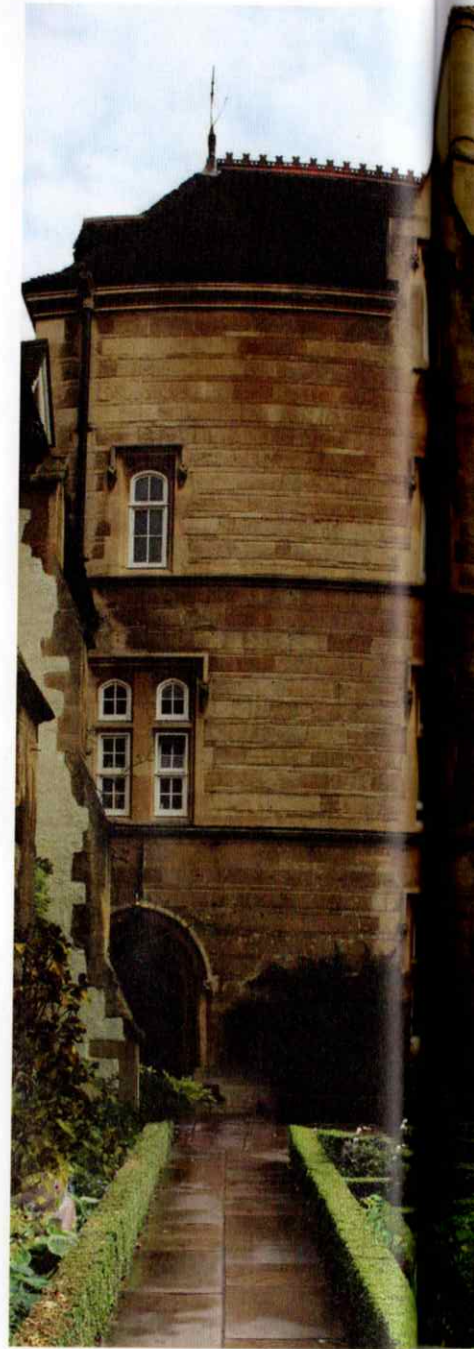
Bramante had mined Roman history, including the Temple of Vesta in Tivoli and the Temple of Hercules Victor in Rome, as precedents for his perfect circular piece of sculpture.

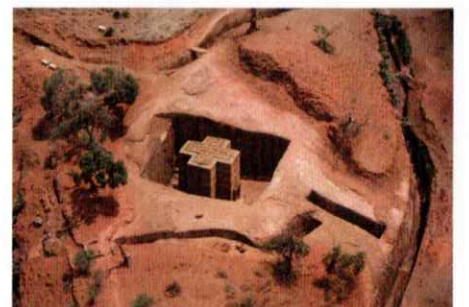
McLaughlin explains that the brief was to replace a modest lean-to built in the early part of the 20th century by Albert Richardson (not his finest) that sat against the south wall of the court, in order to provide a space for music practice, occasional performances, and crucially, to house the College's ancient and rare harpsichord.

Trinity Hall was founded in 1350 and is the fifth oldest, as well as one of the smaller Colleges in Cambridge. It is sandwiched between Trinity and Clare Colleges, and its gardens run down to the River Cam – hailed by author Henry James as 'the prettiest corner of the world'.

Right: View of the site showing the modest lean-to, which has now been replaced. Accessed through a small arched passageway, the courtyard is surrounded by Grade I- and II-listed buildings.

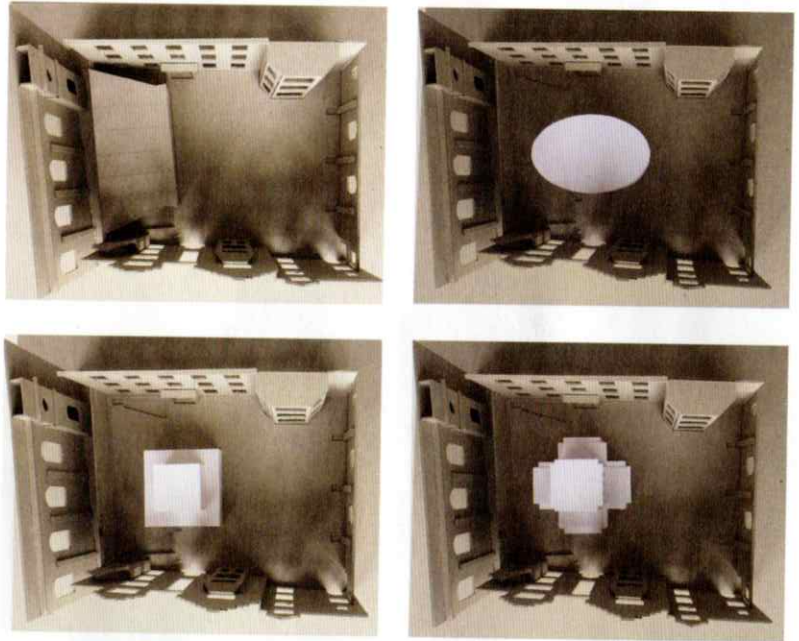
Below: Aerial view of the courtyard showing the WongAvery Gallery under construction.





Left to right: Precedents include Donato Bramante's Le Tempietto de San Pietro in Montorio, Rome, the octagonal Tower of the Winds in the Roman Agora, Athens, and the rock-hewn Church of Saint George in Lalibela, Ethiopia.

Right and opposite: Courtyard maquette studies and sketch plans. The dominant 'object within a space' concept passed through circular and square iterations before the final cruciform plan was adopted.

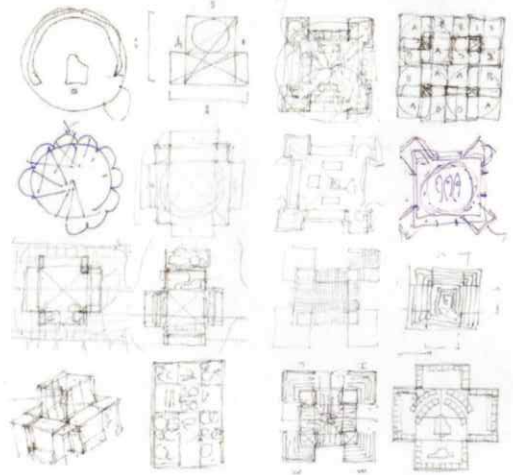


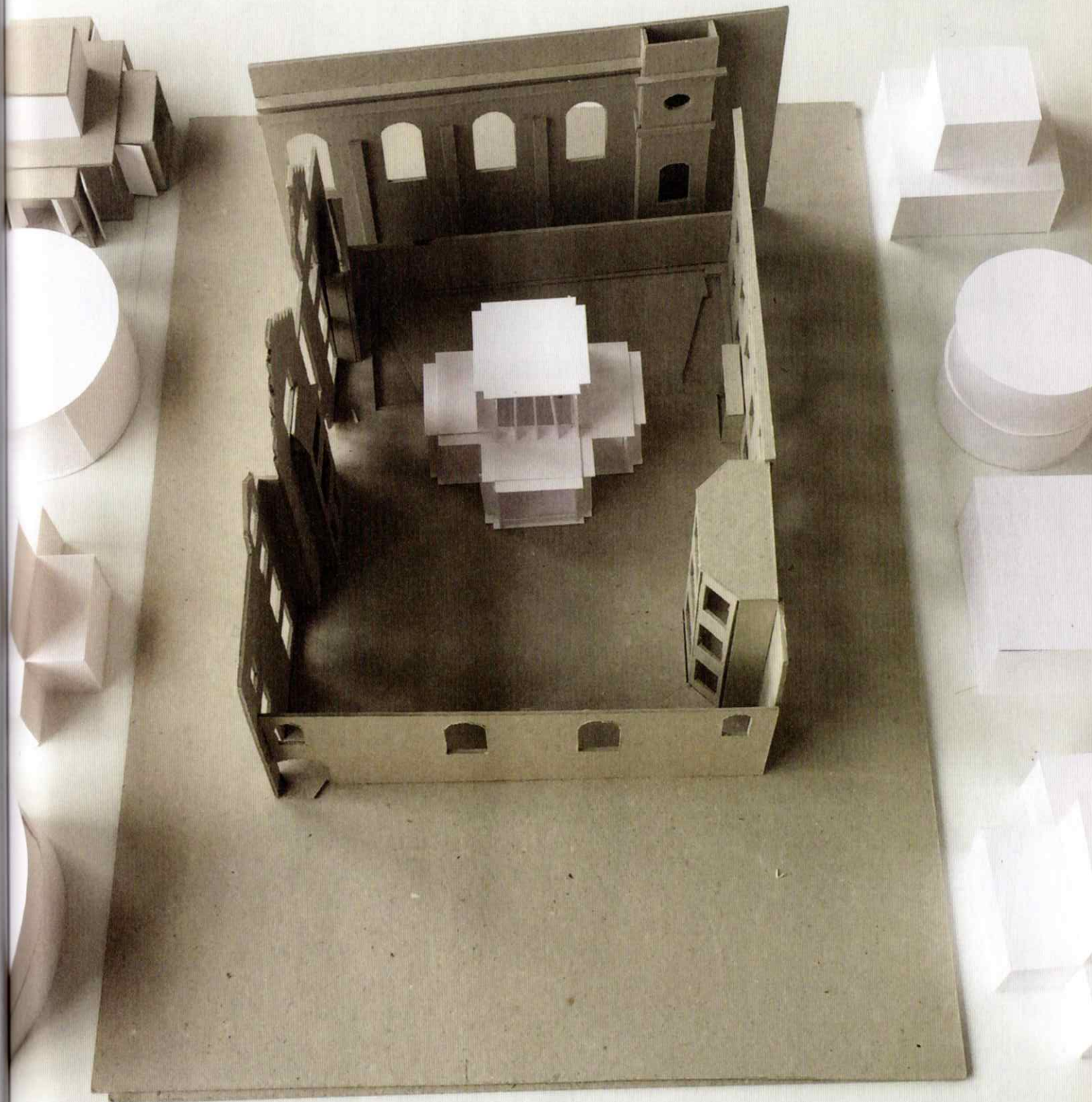
The site for the new building is the original Entrance Court (the entrance was switched to the larger Principal Court in the 19th century), so is surrounded by Grade I- and II-listed buildings. Its only connection to the outside world is a small arched passageway through the Alfred Waterhouse designed wing onto Trinity Lane.

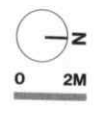
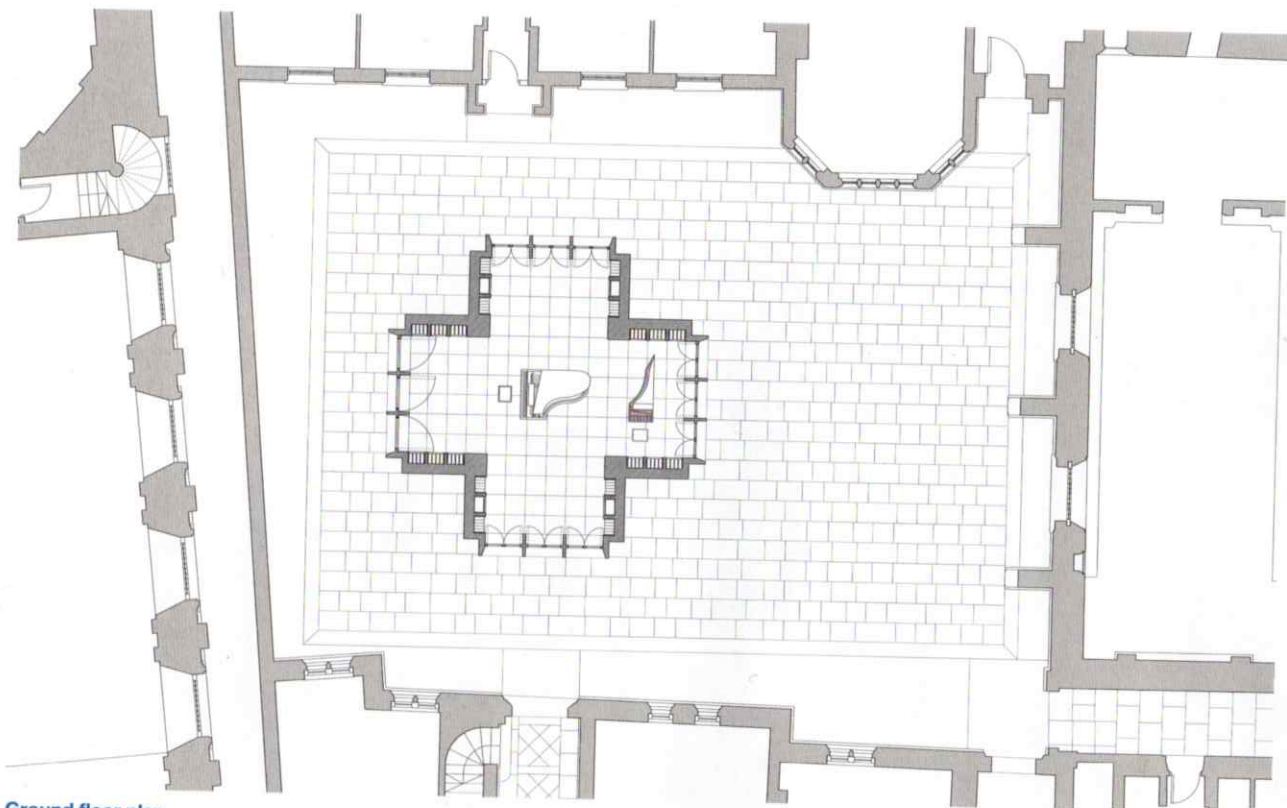
The courtyard is tiny, measuring only 17x22 metres in plan, so the idea of replacing the lean-to was quickly ruled out in favour of a 'Tempietto' solution: placing an object within the space. Diagrams reveal the journey from a circular plan, through to a square, to a cruciform or Greek Cross (the latter providing secondary spaces that allowed for storage of a large collection of sheet music), so the building became a series of stone bookcases supporting itself and its lantern.

How this project actually got built is something of a miracle in itself, as the only access is through a 1.5-metre-wide gated passage, making it something of a 'ship in a bottle'. A mini-digger was the only piece of powered machinery used, the rest of the work relied on manual labour, like the buildings that surround it. Somehow a 2.5-metre deep, 3-square-metre basement (for air conditioning plant) was excavated, and a legion of wheelbarrows took out the spoil. If that was not enough, every single part of the building was brought in by hand and assembled, with the largest pieces being the precast copings across the four wings or transepts.

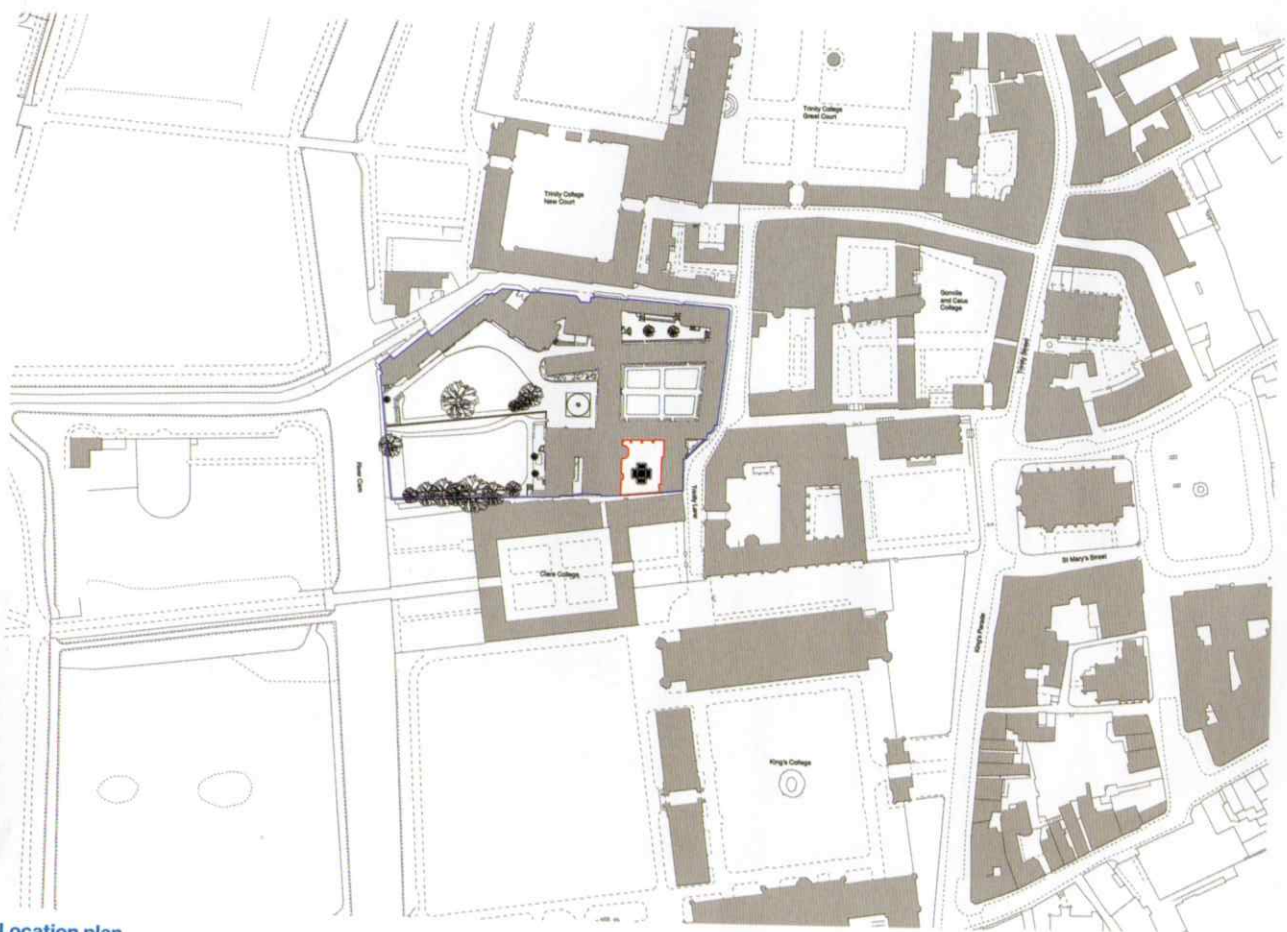
The plan is based on a grid of 1.1 metres, subdivided to 550mm (the standard spacing for audience chairs) with the Portland stone mullions following this rhythm. The bookcase corners are made from in-situ concrete clad in textured 'Grove Whitbed' Portland stone resembling travertine. To avoid the soft stone getting its feet wet and staining, the building sits on a Cornish granite plinth. This neatly echoes one of the hallmarks of the Modern Movement where buildings divorced themselves from the cold, damp earth and used a recessed plinth to demark the manmade from the site; the abstract from nature.



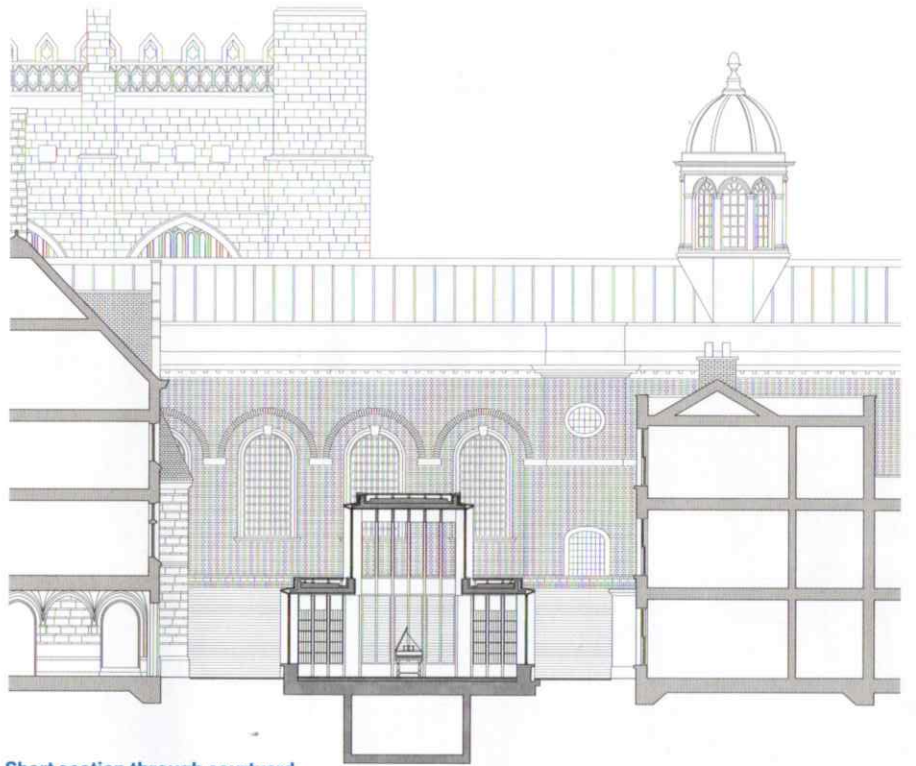




Ground floor plan



Location plan



Short section through courtyard



Long section through courtyard



Left: Severely restricted access to the 17x22 metre site meant that the only piece of powered machinery available was a mini digger. The rest of the work relied on manual labour.



Opposite: Based on a 1.1-metre grid, the building reads as five cubic volumes, with a single cube above to create a satisfying geometry. The latter, which takes the form of a lantern, gives the impression of a much larger building, but measures only 3.3-metres square.





The cruciform plan allows for performances to take place in the middle, below a tall lantern reaching up to the light, with audience seating in the bays or 'transepts'. The architects were faced with a Tardis-like problem of needing maximum volume for acoustics, yet minimal scale for the setting. The lantern provided volume without occupying more space in the courtyard. Overall, the form reads as five cubic volumes, with a single cube above to create a satisfying geometry. The façades of the lower-level bays each have three, tall glazed panels, while above, the lantern has six on each side. From a distance, the building has a strongly classical appearance in form and materials, but closer up reveals a neat contemporary edge, with fine stone mullions, patinated brass frames and McLaughlin's signature splayed reveals to the outside of each bay.

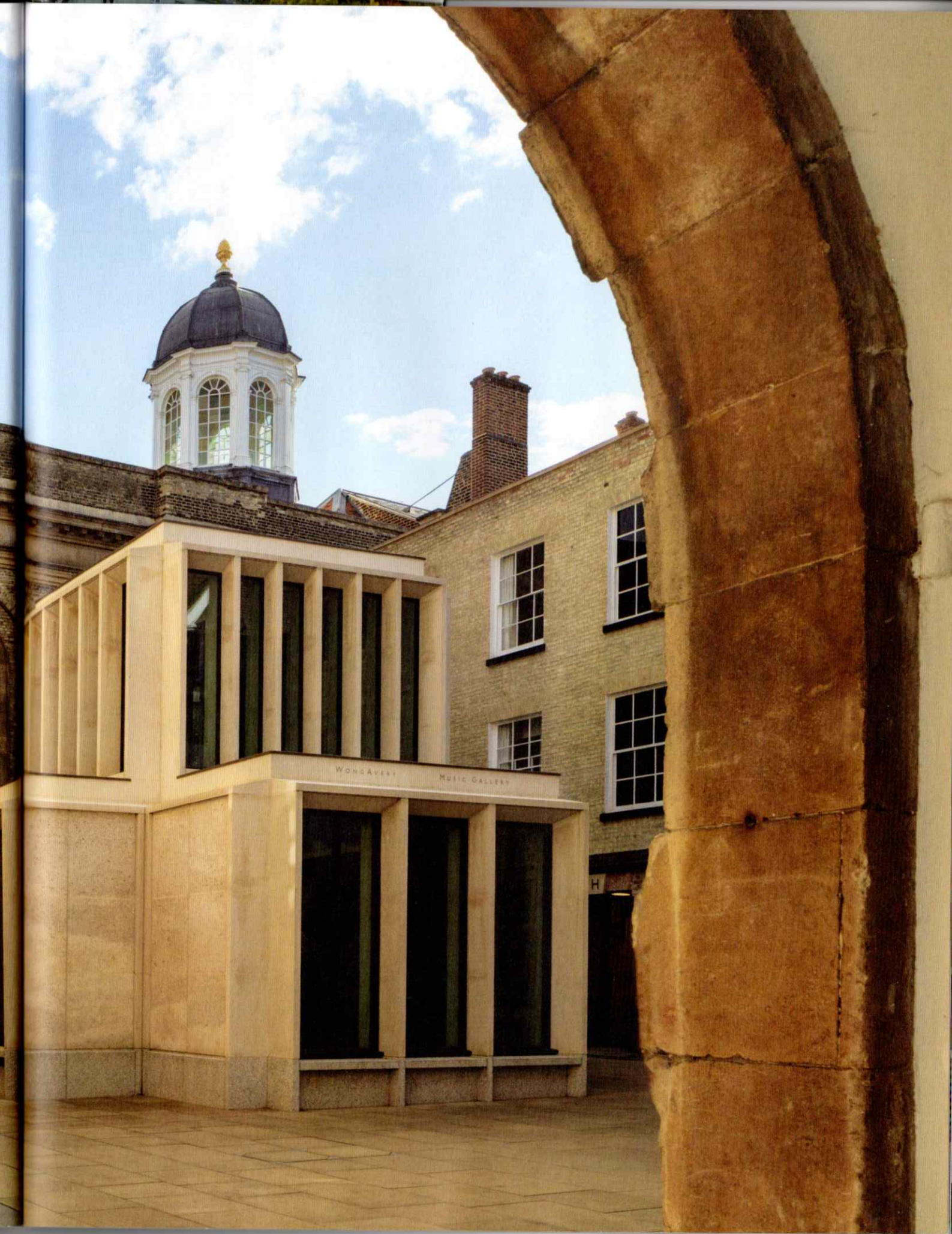
Inside, the lantern gives the sense of a much larger building and even makes you think of great cathedrals, but it is a mere 3.3-square-metres. This little building packs a punch, a Tardis indeed.

The spirit of Louis Kahn looms large over many of McLaughlin's buildings. The New Library at Magdalene

College echoes Kahn's Exeter Library with its 'served and servant' spatial planning, brick carapace, fine joinery elements, carrels set by the windows, and the soaring central atrium crowned by geometric beams. Here in the Song School, the use of stone for every element makes for a beautiful sculptural form. But the lantern with its fine 75mm wide mullions that reach up and then interlace as a lattice above the central space is only made possible by the introduction of a thin steel RHS structure hidden within the elements to accommodate lateral wind loads. Here, the beams are hung and pinned by steelwork, not something Mr Kahn would have cared for, but the effect is stunning.

Sitting in one of the handmade chairs made by furniture designer Luke Hughes, set upon the Purbeck stone floor slabs inscribed with the 1.1-metre grid, the space is enriched by the bookcases to the projecting bays. These contain the College collection of sheet music, which is held in plywood boxes like magazine racks, each faced with a lacquered brass panel and a single pull knob that adds a tactile quality to the act of finding music. Each wall has 15 boxes, although in four

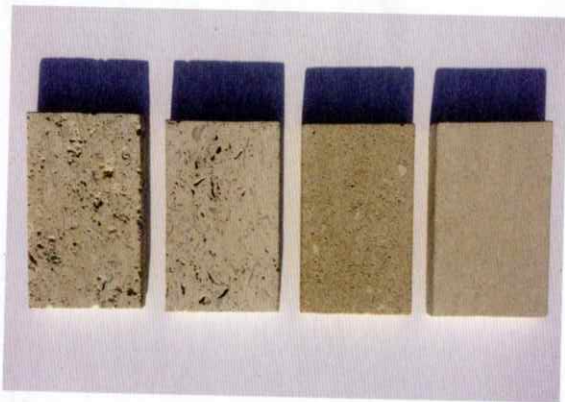




WONDVERI MUSIC GALLERY

Right: The building sits on a plinth of Cornish granite, while the 'bookcase' corners are constructed from insitu concrete, clad in Portland stone.

Below: Stone samples of varying textures. The Grove Whitbed Portland stone employed in the final specification resembles travertine.

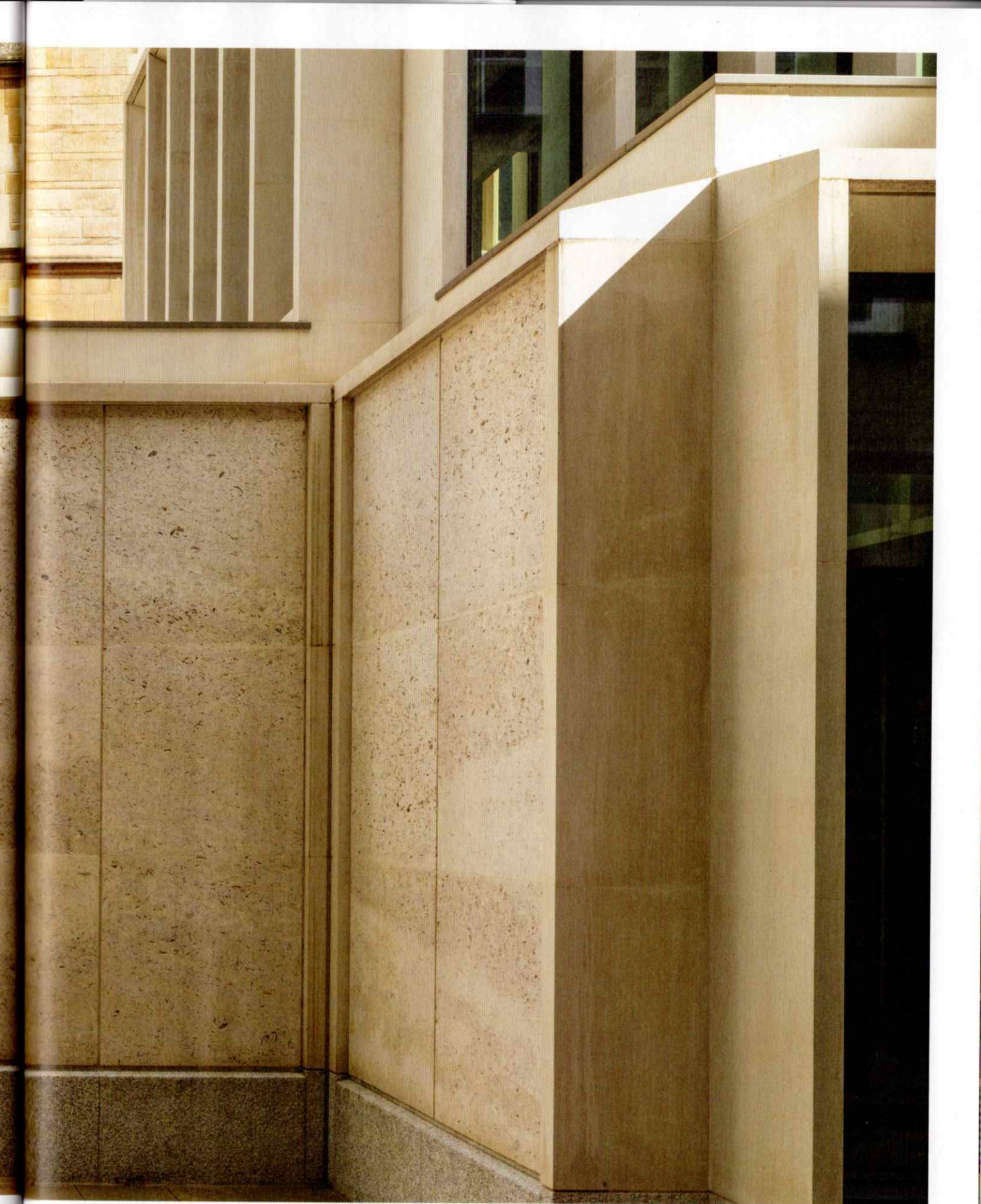


locations the central bay is blank as it contains ventilation ducts. The lower bays have ventilation grilles from the plant space below that deliver air at the right humidity and temperature for the treasured and delicate harpsichord. The glow of the brass brings a touch of golden light into the room.

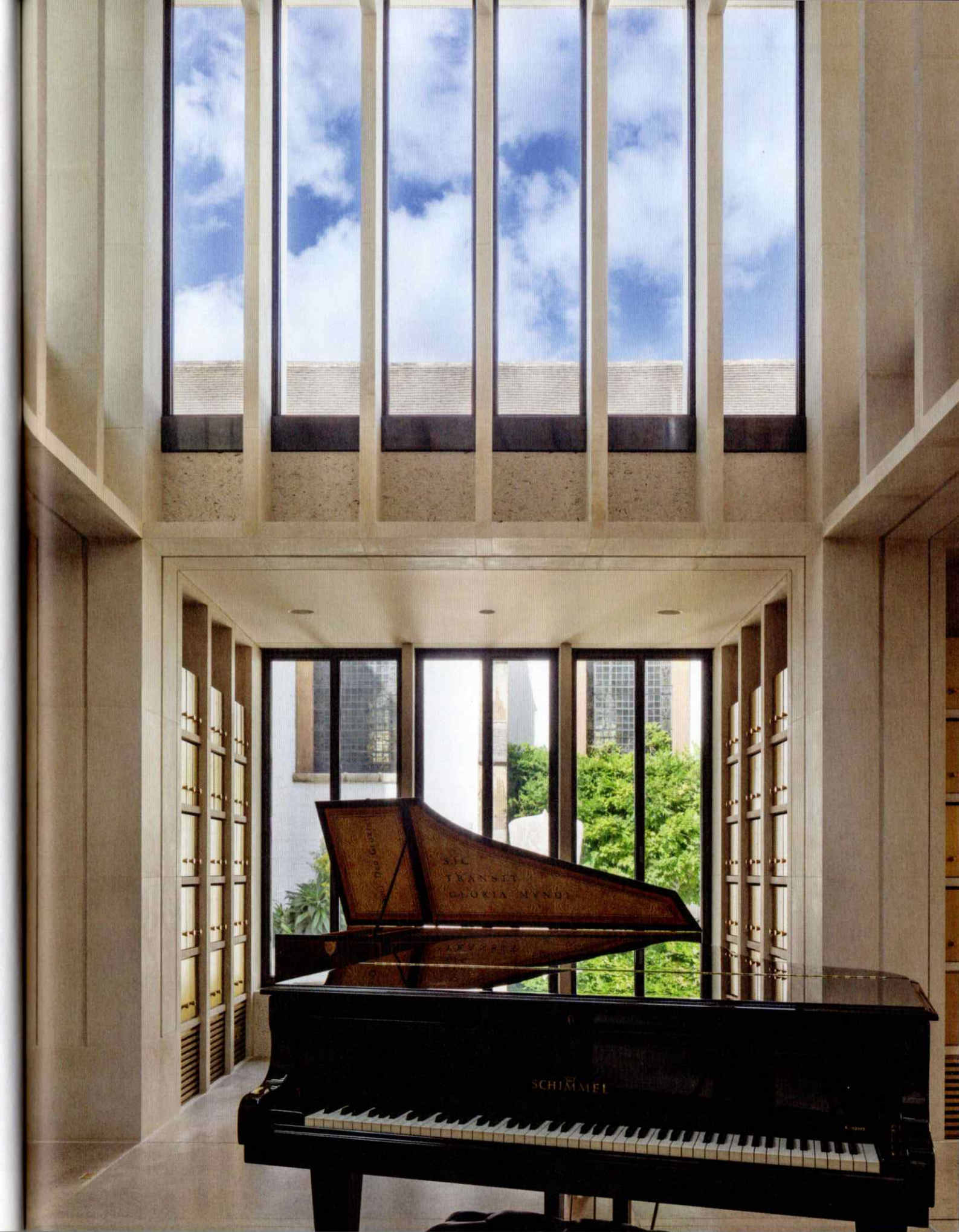
There is a palpable sense of the spiritual sitting in the modest space with its intimate scale beneath its lofty lantern. The senses are altered, it is hushed, ready for music, the light changes, the mood changes, a sense of history is evoked; quite something for such a small space. The last time I had that feeling was walking into Le Corbusier's Ronchamp Chapel where the first thing I felt compelled to do was to sit down quietly. The creamy stone interior complemented by the golden brass boxes has the feel of something ancient yet simultaneously contemporary. When the music comes, the space has good acoustics, and the lower windows can be opened so that the building can act as a bandstand to broadcast to a larger audience within the courtyard.

From the outside, the building looks like a chapel and despite my doubts about it sitting within such a small courtyard, it works. It is placed on the southern side in the shade of the adjacent Clare Hall, so that the sun can illuminate the north side of the courtyard. Careful observation revealed that the window heights align with the Richardson building fenestration to its east,











Above: Intended for music practice and occasional performances, the building also houses a rare and ancient harpsichord.

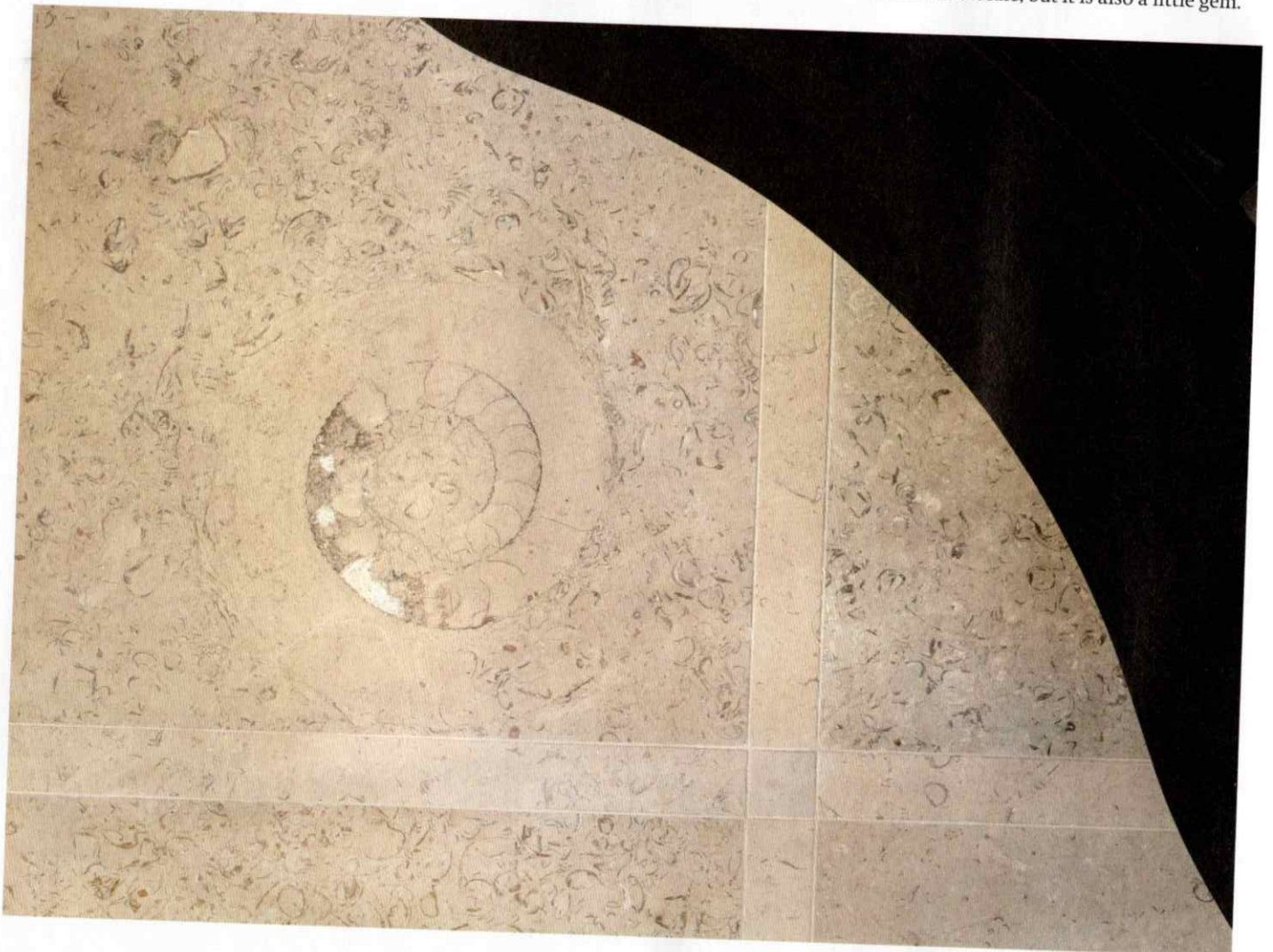
Below: Beautiful Purbeck stone floor slabs further articulate the building's 1.1-metre grid.

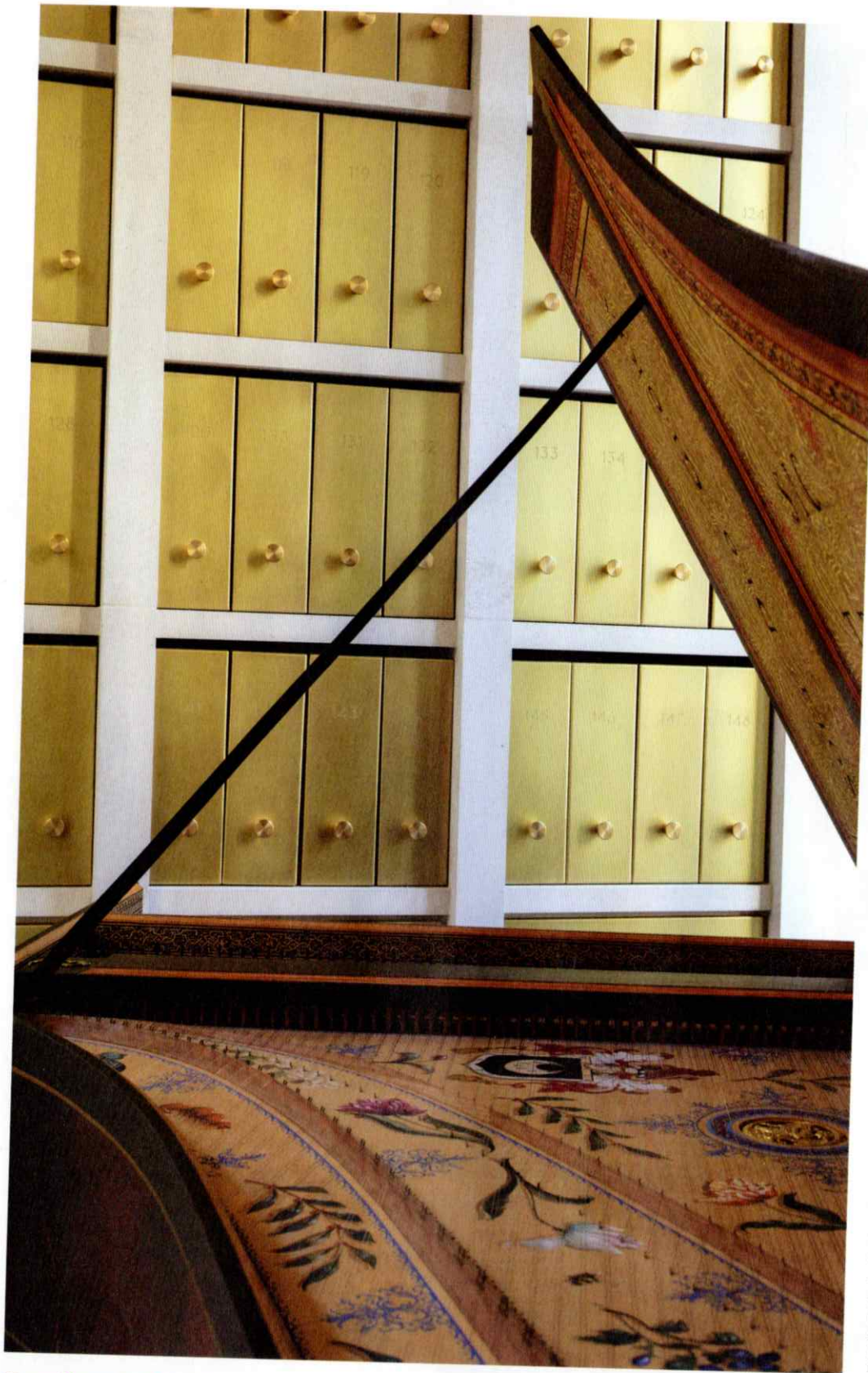
making it feel right, comfortable and settled in its place. This is reinforced by Kim Wilkie's landscape solution, which lays a carpet of York stone paving across the whole space, leaving only green edges. I was reminded of Kahn again, or more precisely Luis Barragán's advice to Kahn, to keep the central court of the Salk Institute open as a stone court, which was the masterstroke.

This little building joins a small pantheon of modernist projects that could be considered total works of art – like Adolf Loos' Kärtner Bar in Vienna (now known as the American Bar) with its rich stone-clad interior, Carlo

Scarpa's Brion-Vega cemetery with its essay in concrete and glass mosaic, and CR Mackintosh's Willow Tea Rooms where every surface, every element down to the cutlery was designed by the architect to make a unified whole.

Here, this beautifully detailed stone and glass building, with its shimmering brass and geometric form that holds its own against its historic setting, offers a complete work where everything has its place and nothing could change. It could be described as monumental despite its diminutive scale, but it is also a little gem.





Plywood boxes, each faced in lacquered brass with a single pull knob, house the college's sheet music collection.

Project team

Architect
Niall McLaughlin Architects
Contractor
Barnes Construction
Structural engineer
Smith & Wallwork
M&E engineer
Max Fordham
Acoustic engineer
Gillieron Scott
Landscape architect
Kim Wilkie
Stone consultant
Harrison Goldman

Selected subcontractors and suppliers

Stonemason
Brown and Ralph
Glazing
Wellington
Roofing
GRM
Aluminium flashings
Plasufix
Steelwork
BD Willett (Fabrications)
Brass interior fittings
Classic Barfitting
M&E installations
Eyres
Groundworks and hard landscaping
Bowie Construction
Portland stone cladding
Haysom
Granite
De Lank Quarry
Yorkstone paving
Johnsons Wellfield
Slate paving
Burlington stone
Precast concrete
Cambridge Architectural Precast
Window and door frames
Secco
Aluminium copings
Alumasc
Roof coverings
Bauder
Loose furniture
Luke Hughes and Co