

Back to school

The auditorium at St Peter's School in Mumbai has been given a state-of-the-art upgrade. **Caroline Moss** listens

FOR AN ESTABLISHMENT THAT BEGAN LIFE AS A CHOIR

school for the parishioners of St Peter's Church, it's fitting that the modern-day St Peter's School boasts a brand new, architect-designed auditorium.

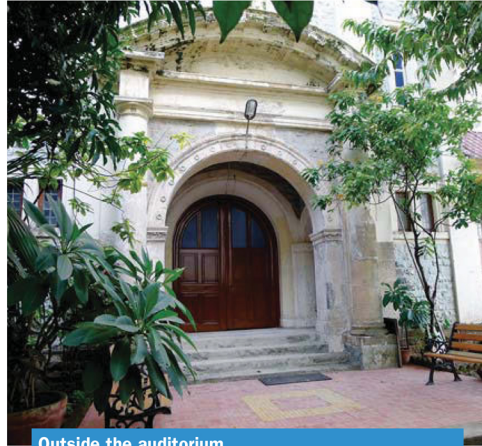
The school was founded and built in 1874 by the Cowley Fathers, who had been charged with the care of destitute children in the parish. By 1905 the original premises had been claimed by the Bombay Port Trust for the extension of railway tracks, and the government granted a site on which to establish a new school. Five years later, St Peter's High School for Boys and Girls was opened and occupies the site to this day. The school continues to offer quality education, in many cases at concessional rates, to children of all communities regardless of religion, caste or creed.

Drama plays a large role in the school's curriculum, and the school had an existing hall that was used for concerts as well as examinations. When the decision was taken to upgrade this hall, architect Maneck K Gilder explained that it would be much more functional to designate it specifically for one purpose or the other.

'They quickly gave us the go ahead to design a new auditorium,' explains Mr Gilder, who was recommended by one of the school's board members who was familiar with his company's work. 'We pretty much had a free hand in working on the design. We showed them a 3D image of what we'd like it to look like, which was approved.'

The school was clear that it wanted the 516-seat auditorium to be used strictly for its own events, and not hired out for commercial purposes. So Mr Gilder's design took into account its main usage: assemblies, presentations, school plays and concerts, PTAs and other meetings. As it didn't need to operate as a multifunction commercial space, this meant that the budget could be spent in the areas it was most needed, and provide the best quality for the school's purposes.

While Mr Gilder had worked on a wide variety of corporate and residential interiors across the city, this was the first auditorium he'd designed. 'We wanted to make sure we had



Outside the auditorium

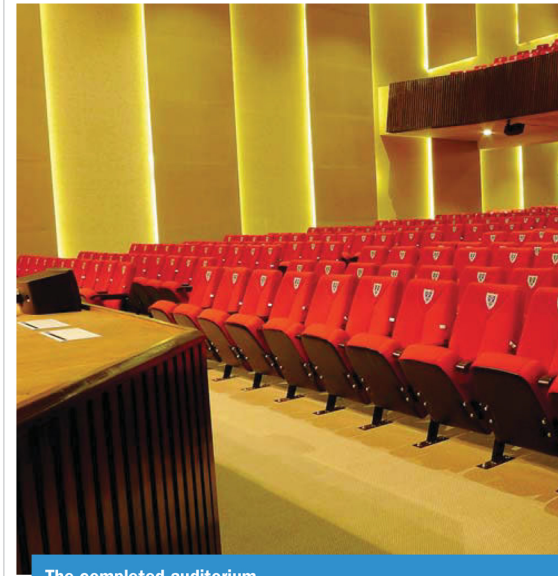


Munro's Vignyan Beera with architects Diana Reporter and Maneck Gilder

the correct team onboard before we took this project on,' he says. 'We'd not really done any work with acoustics in the past.'

A musician cousin of Mr Gilder's recommended Kapil Thirwani from Munro Acoustics India to assist with this. 'Working with Munro Acoustics was a decision I haven't regretted,' he says. 'Once I was confident we had the right set of people on board we took up the project.'

The main challenge of the job for Mr Gilder was working within the constraints of the building, such as the roof truss and its limitations, which were already in place and couldn't be altered. 'I had to deal with the existing 1970s building, for which there were no structural drawings available,' he



The completed auditorium

explains. 'Therefore we had to bring on board a structural consultant to review the feasibility of the project, given the additional loads on the existing building.'

As per his standard practice for all projects, Mr Gilder spent a considerable amount of time coordinating with all consultants and contractors. Details were decided prior to starting the work at the site in order to minimise discrepancies during construction. This process continued once work had begun onsite, with twice weekly meetings held to review the progress of work, the minutes of which were recorded and sent to the client and the other agencies.

Mr Gilder was asked to raise the height of the proscenium, which was more than doubled from 2.1m to 4.8m. Previously, people sitting in the balcony hadn't been able to see the stage. This was compounded by the fact that the balcony parapet wall was very high, and coming into the line of sight of the audience; this wall has been lowered by 30cm.



The upper balcony delays

Some acoustic challenges were also posed by the building's structure, not least of all its tin roof. Mr Thirwani was at pains to point out that when the rains came, the resulting cacophony in the auditorium would drown out anything going on inside. Fortunately for him, it did rain heavily during his visit, and the client immediately recognised the need for an isolated ceiling. 'I also decided to try a new material which is used in the roofs of luxury cars, which deadens the sound from outside,' says Mr Thirwani. 'I lined the isolated ceiling with it, and it's done the job really well.'



The stage is flanked by left-right hangs of Bose Panaray 802 Series III speakers

When it came to the supply of equipment, Mr Gilder took Mr Thirwani's suggestions onboard. A main system of six Bose Panaray 802 Series III speakers, with two Panaray 402 Series IIs as under balcony fills, has been installed, together with two Freespace DS 100SE surface mount speakers as front-fill, two Bose Freespace DS 16S stage monitors, and a pair of Panaray 310M floor monitors. Subs are two RCF S8018s, with RCF IPS 2700,



Acoustic treatment was a crucial part of the refurbishment project



Bose loudspeakers provide reinforcement throughout the auditorium

1700 and 700 amplifiers driving the system. DSP is via a Bose ControlSpace ESP 880 engineered sound processing, and there is a Soundcraft EFX12 mixing console and dbx DriveRack 260 at front of house.

'Bose gave us a lot of support with this job, we had a good working relationship with them,' says Mr Thirwani. 'The system will give the school just what they were looking for, and the Bose DSP is very good.'

The auditorium is also equipped with a selection of AKG D5, WMS470, CGN99, H500 and CHM99 microphones, completing the simple but high quality sound system for the school. This professionalism extends to the lighting truss and controller supplied by theatrical consultancy Canara Lighting, the adjustable stage wings and high quality theatre seats.

Mr Gilder's first experience of working with an acoustic consultant was extremely positive. 'It was great and the whole thing went really smoothly,' he says. 'I listened to Kapil's input

and learned a lot on this project.'

Adds Diana Reporter, Mr Gilder's associate, 'From an acoustical point of view, we discovered a lot about the different materials and products available that we weren't aware of before. The client was very clear about the budget, and we have tried to give them the best we could, keeping that in mind. The final design comprises alternate bands of acoustical fabric and perforated gypsum boards, which are staggered to incorporate the hidden strip lighting for the walls and ceiling. The rear wall is a clever use of the same perforated boards fixed in varying depths to give a sculpted look while integrating the acoustical requirements.'

This project was a similarly smooth experience for Mr Thirwani. 'Maneck and Diana were extremely professional in the way they communicated with us and reported on the progress of the project,' he says. 'This job required a lot of planning, and if you hadn't worked with acoustics before, there were many considerations to take into account, such as the impact on where the A/C ducts were positioned, and other building elements. But Maneck worked really well with the construction contractors to sort out such details. It was stress free, he took on board everything that needed to happen, included it in his way of working and it all flowed really smoothly.'

The result is an extremely elegant auditorium, boasting a luxurious and spacious feel with lots of clean lines. 'That's what we're known for, It's our trademark look,' says Ms Reporter.

St Peter's School auditorium was inaugurated in late 2015; a very auspicious time in Mumbai, where the most important annual days in the school calendars are traditionally held between November and December.

'We have certainly entered a new spectrum with this auditorium, and I'm glad we took it up, as now I feel much more confident to take on the next one,' says Mr Gilder. 'After we had started work on this I realised that there are so many auditoriums in Mumbai. So maybe it will mark a new direction for us.'