Creating Places for People.

BDP designs and creates inspiring places for people. With international teams of architects, engineers, designers, and urbanists, we work from studios throughout the UK, and in Ireland, the Netherlands, the UAE, India, and China, on projects around the world.

Founded in 1961, BDP is now the largest interdisciplinary design-led firm in Europe and has won over 750 awards for design quality from international and national bodies.

Our designers focus on designing buildings and environments for the future to confront the reality of a finite planet. We challenge ourselves to create better environments for everybody using five goals as our starting point for the design process:

- to act as climate shapers to create protective and positive environments for people to enjoy
- to take a creative approach to energy, with natural and technological methods for the use and reuse of energy and resources
- to design in a user-inclusive style, engaging in a learning centred approach with the occupiers of our buildings and places
- to cross-fertilise our knowledge from different cultures, maximising the advantages of being international, interdisciplinary and multi-sector
- to promote and create liberating buildings, places and communities for people to use and adapt over time.
BDP specialises in architectural and building acoustics. Teams in Manchester and London serve all BDP studios worldwide as well as undertaking many projects by direct client appointment.

Our success results from our interdisciplinary working environment which provides a unique level of understanding of design and engineering.

We combine scientific analysis, creative design skills and practical experience. Our involvement in projects ranges from small-scale noise assessments to full consultancy on major long-term schemes.

We also provide a client advisory role, to ensure that informed decisions can be made, the best value and low energy solutions are achieved and our clients’ expectations are exceeded.
Acoustics plays a crucial role in the design of transformational educational spaces. The flexibility required from open plan teaching spaces, multi-function assembly halls and heart-space atria necessitates careful design to ensure function is not compromised by form. As well as the bold open-plan spaces, quiet retreats are required to support personalised learning objectives.
The Saltire Centre is a wireless social learning environment comprising a busy hub atrium with transition to four floors of group and individual study areas via bridges and attenuating ‘portals’ at entrance doors. Dense arrays of sound-absorbing baffles localise activity noise to a monastic hush, along with low energy, low noise air transfer systems.
Acoustic testing is mandatory for completed apartments, hotels, student halls and hospital residences. BDP’s acoustics team members are registered ANC testers and hold Institute of Acoustics membership.
BDP’s studio in Piccadilly Basin was the first naturally ventilated and night time cooled building in Manchester to achieve a BREEAM ‘Excellent’ rating. The acoustic louvres assist the sustainability driven design to ensure comfortable internal conditions in a city centre location.
Working closely with the design team we achieved workable and aesthetically suitable acoustic solutions for professional services firm PricewaterhouseCoopers, in its new London offices. All possible acoustic BREEAM credits were achieved in design and BDP ensured that the project was the first building in London and the first major office in the UK to be awarded the new elite standard BREEAM ‘Outstanding’.

The lack of services noise from the low energy chilled beam air-conditioning system posed a risk to speech privacy within open plan floor plates. To counter this we provided an active noise-masking system with concealed speakers in the ceiling artificially raising the background noise level. The users are not aware that the system even exists, but they have excellent speech privacy at their desks.
From environmental impact assessment to commissioning testing many years later, acousticians played a significant role in making the £165m Victoria Square development sensational.

We monitored construction noise and vibration during early piling, even during the explosive demolition of a 20-storey office building on the site. Strict regimes were agreed with the city authorities to protect nearby law courts and commercial premises.

Sophisticated multi-slab isolation and screening separate the landlord’s plant from multiplex cinemas, shops and apartments which top the complex.

Modelling studies and auralisations complemented the architects’ visual walk-throughs, and allowed accurate prediction of the aural atmosphere awaiting those queuing to go up the ‘lily pads’ under the central dome.
Designing auditoria for speech and music has great challenges for the acoustician; our approach is a combination of art, science, and experience. At indigO₂ at the O₂ arena on the Greenwich peninsula the acoustic according to The Daily Telegraph, ‘is absolutely immaculate’.
Theatre Severn, Shrewsbury
with architects Austin-Smith:Lord

"THE MOST RAVISHING AND SUCCESSFUL NEW PERFORMANCE SPACE I HAVE VISITED... THE ACOUSTIC IS SPOT-ON."

The Stage
We have provided acoustic consultancy to major healthcare projects such as the Queen Elizabeth Hospital in Birmingham, one of the largest hospital projects in the UK.

Acoustic design is a key component in the quality and effectiveness of healthcare buildings. Research shows that noise and sound affects people both physiologically and psychologically. Good acoustic conditions maintain patient privacy and dignity and promote essential sleep patterns, as well as bringing benefits in terms of patient and staff morale.

Queen Elizabeth Hospital, Birmingham

LABC North & East Yorkshire Building Excellence Award 2011

Constructing Excellence West Midlands Award (Project of the Year) 2011
INNOVATION IN CONSERVATION

“IN THE GLEAMING ACOUSTICS OF THE TOWN HALL, THE ORCHESTRA SOUNDED MAGNIFICENT.”

The Independent on Sunday

Victoria Hall, Leeds Town Hall
At the Grade II* listed Manchester Town Hall and Central Library buildings, BDP is helping to extend and restore the buildings’ historic fabric. The complex transformation will allow for double the capacity of visitors and greater public access. All this with a low carbon approach, bringing the buildings up to modern environmental standards.

For Leeds Grand Theatre, invisible acoustic absorption on the rear wall of the refurbished Howard Assembly Room helps to control the reverberation time. Acoustic plaster is trowelled over a mineral fibre backing to provide a seamless clean aesthetic which works acoustically. The refurbishment provides a first class 400-seat venue for music making and a permanent home for Opera North.
The BBC has the most critical live broadcasting requirements involving the highest standards of isolation, separation, ventilation, noise control, diffusion and reverberation.

BBC Mailbox, with quadruple acoustic glazing (shown), is the home of the well-known radio programme 'The Archers' as well as radio studios, dubbing suites and edit rooms.

BDP was the independent commissioning acoustic engineer for the BBC facilities at MediaCityUK in Salford Quays and provided acoustic consultancy for a number of other recent broadcast studios.
We can advise on environmental protection issues providing guidance on general reviews on planning, abatement notices, guidance curbs on industrial premises, quarries, and windfarms.

At Ebbw Vale Learning Campus in Wales, the vision is to transform this former steelworks into several new educational facilities which will sit alongside a leisure centre, an arts centre, low carbon housing, offices and a wetland park. Working across the whole masterplan, this acoustic modelling is of a noise climate that doesn’t yet exist.
We use the most advanced computer modelling software and hardware available. These tools allow us not only to help realise innovative design solutions, but also to ensure that they are successful and cost efficient.

Models are used in many situations, from developing the finest acoustic conditions in specialist performing arts spaces to speech intelligibility analysis for large open-plan spaces in schools to demonstrate compliance with BB93 legislation.
Acoustics should be considered at the earliest feasibility stage. Using technology we can help masterplanners and urbanists sculpt the urban environment, creating positive soundscapes or an urban oasis.

Environmental noise modelling is used to calculate noise propagation accurately in 3-dimensions for analysis of external environments. The results or predictions can be presented in the form of colour-coded noise maps on building façades and the ground.

Prediction results can be used to inform ventilation strategies of new developments, exploring options for location and orientation of new buildings to maximise sustainable design.
As experts in the nuances of bidding and providing consultancy internationally, our teams are involved in several significant projects worldwide.

Recent work has included the international tennis centre in Kuwait and an eco-housing project in Nanjing, China.

We have been a regular site presence at the Qatar National Convention Centre, Doha; progressing an Arata Isozaki design involving a 4,000 seat multipurpose hall and a 2,500 seat conference auditorium, plus a score of smaller meeting rooms.
With 30 years in the industry we know the risks associated with poor acoustic design and how to solve the challenges in remediating it. We offer baseline noise and vibration surveys, noise impact assessments, design review/ VE advice, construction noise and vibration monitoring and acoustic testing.
PHOTOGRAPHERS
David Barbour
Sanna Fisher-Payne
Martine Hamilton-Knight
Daniel Hopkinson
Keith Hunter
Tim Soar
Gavin Stevenson

BDP.com