

Storyhouse

Complete	Area	Client	Architect
2017	UK England	Kier Construction Cheshire West Council	Bennetts Associates Ellis Williams Architects

Chester's Cultural Centre, known as Storyhouse, combines an 800-seat auditorium with a studio theatre, cinema and library. It has been described as 'A powerful, modern and forward thinking vision' as well as 'One of the most exciting projects in England at the moment.'*

The development centres around an Art Deco Odeon cinema, which had fallen into disrepair since closing in 2007. In restoring this Grade II listed building, many of the original period features have been kept, including ceiling coving and distinctive plaster light fittings. This carefully renovated section of the complex now houses the foyer, a 150-seat studio theatre and Chester's main public library.

In addition, a new extension has been affixed to include space for the main theatre. By siting the flytower and new auditorium separately to the listed portion of the building, the prominent brick façade has been preserved. The site is particularly sensitive from architectural and archaeological perspectives because it is within the historic Chester City walls and contains remains of a roman road.

(* Sir Peter Bazalgette, Chairman, Arts Council)



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Services provided

Sandy Brown was appointed to provide acoustic advice in relation to the proposed development. The Key acoustic considerations for the project included:

- environmental noise ingress
- acoustic performance of the building envelope to control noise egress
- internal sound insulation
- room acoustics and finishes
- building services noise and vibration.

Special acoustic features

For the Cultural Centre, the main acoustic challenge was to create conditions suitable for theatre use, film screenings, a library, offices and a bar – and to craft solutions with the flexibility for these areas to be used simultaneously, yet without disturbance to one another. Additional complexities were added by the intent to use the foyer for occasional events with amplified music and the location of the site, which is inside Chester's area of archaeological importance.

For sound insulation performance between spaces, key adjacencies were highlighted between:

- the theatre to the studio theatre
- the cinema to the library
- the cinema to the bar
- the cinema to offices above.

One of the most complex areas of the acoustic design was the main theatre auditorium, where a number of factors had to be contemplated. These included:

- reverberation time
- use of reflectors to strengthen sound
- provision of variable absorption through use of acoustic finishes such as blinds, drapes and panels
- avoiding defects such as echoes or sound focussing.

Among the acoustic methods employed in the main auditorium was the use of overhead reflectors to provide additional early energy to the tiered seating areas at the rear, and reflectors along the sides and the first and second floor balcony fronts to provide diffusion.

