

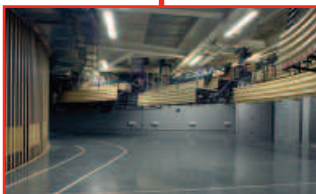
The Sage Theatre



With its dramatic shell-like form, the glistening stainless steel clad façade of The Sage, Gateshead, stands alongside the River Tyne with spectacular views over the river and beyond into Newcastle. The dramatic flowing roof houses three performance theatres, each with its own unique design.



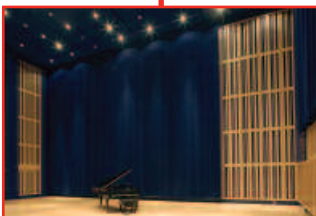
These individual designs create different acoustic effects, which will all require some variation, depending on the style of music being performed. For example, acoustic performances, such as opera singers and orchestras will require the shape of the auditoria to achieve considerable amplification for their performance, whereas this increase in volume will distort any performances utilising electronic amplification.



Street CraneXpress Ltd were given the responsibility of providing the mechanical engineering package for all the lifting equipment, lighting bars, and acoustic ceiling panels to facilitate these acoustic changes and the theatre's required handling capabilities.

Within Hall One, the main performance auditoria, Street CraneXpress designed, built and installed the winching systems for six moving acoustic ceiling panels, which act as large sound deflectors. Each 14Tonne panel can be individually positioned at heights ranging anywhere between 10m and 21m, meaning that the ceiling can be adjusted to suit the type of music being performed and create the optimum acoustic environment specifically required by the performers on stage.

Street CraneXpress also supplied Hall One with a large array of additional handling equipment. This included eighteen chain hoists for rigging additional set equipment such as curtains or projection screens for conferences, and four high speed point hoists which can be controlled from the stage flying console and so used during performances for changing backdrops etc. Six lighting bars were then installed between the acoustic ceiling panels which can be lowered to stall level for the rigging and alteration of lights.



Above Panel 2 Street CraneXpress installed three speaker hoists, each carrying an array of speakers for an amplified performance. Trapdoors in the panel open up to allow them to be lowered through.

Street CraneXpress then motorised sound absorbing curtains, which can be deployed to cover 90% of the wall area at the touch of a button, depending upon whether the event requires a "dry" acoustic, sound reinforcement or amplification. All the curtains retract into storage pockets concealed with the fabric of the building.

Street CraneXpress also motorised the theatre's platform risers, which are a series of metal frames and wooden boxes that can be used to create a raked stage effect. They are able to provide a variety of arrangements at different levels for various orchestra configurations and a completely flat floor can be achieved by storing all the risers in the area to the rear of the platform.

Hall Two is a more compact venue, decagon shaped and with dark rich décor to create a more intimate atmosphere, similar to what would be

expected from a Jazz Club. Street CraneXpress designed, built and installed sound absorbing acoustic banners, that lower from the ceiling down to stalls level, into the space behind the balconies. These allow the acoustics to be controlled as required for the particular performance. Hall Two was also fitted with hand wind winches for lowering lighting and speaker bars.

The Northern Rock Foundation Hall, a smaller shoe-box hall with a high degree of flexibility, was designed as the primary rehearsal space for the Northern Sinfonia Orchestra. The acoustic requirements are similar to those in Hall One in order to reconstruct the ambience in Hall One when the musicians move from one hall to the other.

Street CraneXpress motorised the Hall's acoustic drapes. These can be deployed by the conductor, and are able to cover 100% of the wall area to introduce acoustic absorbency, or adjusted to make the sound more analytical for the purpose of rehearsal. As with Hall One, all the curtains retract into storage pockets concealed with the fabric of the building.