### **CASE STUDY**



Vue Cinema, The Rock, Bury

Main Contractor: Laing O'Rourke

Acoustic Consultant: Buro Happold Acoustics

Architects: BDP

HEROCK

# Challenge

The Rock is Bury's premier shopping and entertainment destination, a state of the art retail and residential development designed to rejuvenate Bury town centre. Consisting of 1700 ultra comfortable stadium seats spread across ten screens, The Rock's VUE Cinema features the latest in cinema innovation, right down to the bits you can't see, including its innovative acoustic isolation system.

There were 2 key elements to this challenge – the cinema would require a box in box system with the internal acoustic walls installed around the perimeter of the floating floors. Each screen was a different size and shape meaning that each would require bespoke design. Meanwhile the bowling alley was a more complex element as the details of the exact equipment required were not known about until later on in the process. The design of the isolators and the slab reinforcement would need to tie up with the varying load characteristics of the equipment geared around a light load at the user end of the lanes combined with a heavy load at the pinsetter end of the lanes.

We welcomed Acoustruct's flexible and professional approach as well as the clear technical superiority of the Farrat Acoustic Floating Floor System.

Billy McNicholas Project Manager, Laing O'Rourke Construction



CS-Cinema&Bowl-The Rock-r1

# Solution

As part of a comprehensive solution Farrat supplied bespoke acoustic isolators to support the seating steelwork. The company provided a high level of service taking loading

AcouStruct

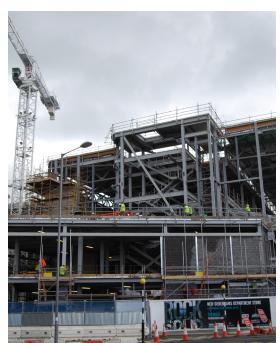
information from the structural engineer, baseplate sizes and locations from the steelwork contractor and then providing individual bearings to provide consistent natural frequency performance with a wide range of space and loading constraints. Farrat then individually labelled and packed up all the key elements of kit (including acoustic washers and bearing pads) on carefully organised pallets ensuring no mistakes were made and thereby optimising the installation process.

For the floors Farrat had to work around a number of other trades during the installation process as the building was still under construction and therefore not watertight. Meticulous planning and pragmatic site management ensured that this did not negatively affect the installation though. Due to the amount of concrete already being poured by Farrat it proved to be more efficient for the company to also pour all the adjoining concrete making up the circulation areas. This meant covering all eventualities such as planning for all interfaces across the entire floor such as escalators and isolated cinema seating columns and leaving trenches for services etc.











## **Key Facts**

- 10 screen Cinema: 1130m<sup>2</sup> Acoustic Floating Floor
- ) 24 lane Bowling Alley: 1387m<sup>2</sup> Acoustic Floating Floor
- 170 m<sup>3</sup> of concrete was poured in 1 day to create the bowling alley slab
- ) 3000m<sup>2</sup> void filled circulation area floors
- ) 640m<sup>3</sup> of concrete supplied and poured



**Farrat Isolevel Ltd** Balmoral Road, Altrincham, Cheshire, WA15 8HJ, England, UK T. +44 (0) 161 924 1600 F. +44 (0) 161 924 1616 E. sales@farrat.com **www.farrat.com**  Global experts in Vibration Control, Thermal Isolation & Precision Levelling Solutions for Construction, Industry & Power Generation