

# CASE STUDY

## THE O2 ARENA, LONDON

### SPECIFICATION

The design of the O2 Arena's roof had to incorporate state-of-the-art acoustic engineering to eliminate virtually all nuisance ambient noise (bass thumping) outside the arena while ensuring as near perfect acoustics as possible inside the structure. This means that local residents and visitors to the surrounding shops and leisure complex are not disturbed by events in the arena.

The complex roof design featured several layers of different density barrier materials to deaden even the lowest bass frequencies, all carried on special acoustic deck structures. The insulation design also specified a series of bespoke acoustic infills.

### INSTALLATION

To help fulfil the project's specialist profile requirements, ROCKWOOL brought AIM on board to provide technical assistance. This included joint attendance at design meetings.

AIM subsequently manufactured the

ROCKWOOL profiles to an exact design, which removed the need for cutting on-site and ensured the infills fitted perfectly – in spite of them being produced to bespoke dimensions.

Fully perforated aluminium acoustic trays were filled with ROCKWOOL RW6 insulation, cut to profile and faced with black tissue and supported on 200mm Rigidal structural deck. The structural deck troughs were filled with ROCKWOOL RW4 insulation, with ROCKWOOL Acoustic membrane over a 50mm Rigidal intermediate deck.

### EVALUATION

Lawrence Allen - Regional Sales Manager - South, ROCKWOOL, discusses his experience of working with AIM: "The team at AIM were absolutely excellent. From the technical insight at design through to manufacture and delivery, they performed to exacting standards.

"From a logistics perspective, we had to operate within very specific delivery times at

the arena – which AIM fulfilled faultlessly.

"Highly responsive to technical queries, their proactivity played a key part in the successful delivery of the project. Moreover, from a commercial stance – they provided a superior level of service whilst remaining competitive on the job.

"Their attention to detail was apparent from start to finish as well. The materials were delivered to site in protective packaging which helped to reduce the risk of damage and maintained the highest quality standards."



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