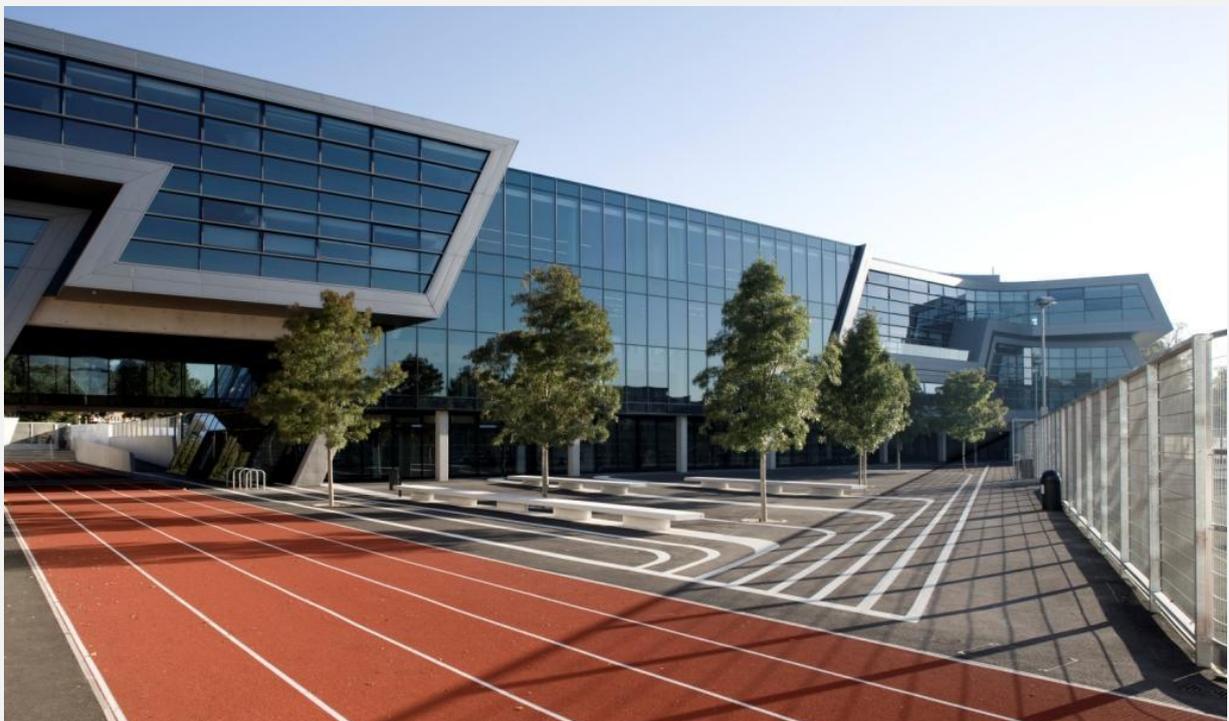


Evelyn Grace Academy

Complete	Area	Client	Architect
2010	UK England	ARK Academy Projects Limited	Zaha Hadid Architects

Owned and operated by the children's charity Absolute Return for Kids (ARK), the Evelyn Grace Academy is part of the English Academy programme. It won the prestigious RIBA Stirling Prize in 2011 for making the greatest contribution to the evolution of architecture over the past year.

Covering an area of 10,745 m² the building is divided into four smaller schools that share central commons space and ground floor arts, music and sports facilities. Located on a very tight site, the ground floor areas were fashioned as a podium, visually lifting the ground level upward where the schools rise as visually separate entities, thus reducing the visual scale of the building. A 100 m running track stretches under from one side to the other. Inside the S-shaped architectural form, classrooms are organised traditionally on both sides of wide corridors, which provides simpler compliance with good acoustic and education practice.



Services provided

Sandy Brown Associates was engaged to provide full design acoustic advice in relation to the proposed development, including:

- sound insulation, particularly the connections of floors and walls to the curtain wall facades
- room acoustics
- building services noise and vibration
- a ventilation strategy that maximised natural ventilation where possible
- commissioning testing.

Special acoustic features

The school is located between two main residential roads and near a train line. Computer noise modelling was used to predict façade noise levels and their effect on the background noise in the building, which informed the ventilation strategy that allowed natural ventilation where possible.

The facade construction using stick curtain wall components has special detailing to ensure flanking sound insulation meets the requirements including specialist solid and rubber fill elements to the mullions at walls and expanding foam at mullions passing each floor slab.

In addition, music and drama studios, fitness studios, changing rooms, common halls and the kitchen each had additional sound insulating features incorporated into the design to improve their acoustic performance to meet and exceed the BB93 requirements. Acoustic finishes were incorporated to ensure a suitable internal acoustic environment, but fewer of these finishes were needed due to the advantageous architectural shaping of a number of rooms with angled walls.