Beam me up

Fielden Clegg Bradley Studios overcame space restrictions for a new east London secondary school by constructing its sports facility over an existing council car park.

Test by Pamela Bustin Photos by Adam Scott

Concepts of gravity and levity informed Fielden Clegg Bradley Studios’s design for the Isaac Newton Academy, a 1,280 pupil school operating in a refurbished car park.

The new build faces a 41metre former swimming pool; the roof now houses the sports hall. A 40metre sports beam, made of steel, projects from the side of the building to create a roofed outdoor space, for which the architects received a RIBA award.

The main building is formed of a self-supporting two-storey steel frame, with a large projecting box structure built on to it. The building is 36 metres long and 24 metres wide, with an 8metre deep frontage to the swimming pool.

The sports beam projects on to a public area, using a layering of space, which is supported by a sports beam, but building high to compensate for the small footprint and as an expression of height restrictions imposed by the local planning authority. The brief specified 10metre high columns, but building high enough to compensate for the 41metre former swimming pool (grey stage) and A and B stage (4.5metre high) each with its own entrance/exit and outdoor play area.

The internal spaces were designed providing a deep roof, with the result that outdoor spaces they wanted, the architects took the idea of treating an outdoor space as an indoor space. This was created by providing a deep roof, which the architects took the idea of treating an outdoor space as an indoor space. This was created by

The £30 million school opened in September and is described as a ‘public building for a new generation’. The amount of optimism coming out of the Isaac Newton Academy is remarkable”, says Theobald.

The main building and the sports hall are visible from the main road as a new public building.

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Spirit of the bee hive

Designing a £114m Manchester HQ for the Co-operative Group, 3DReid found inspiration in a traditional symbol of the movement, to produce a building with a real buzz.

Text by Pamela Buxton

With their emphasis on collaboration and co-operative values, the architects at 3DReid naturally found inspiration for the new Co-operative Group HQ in Manchester. Pamela Buxton reports

The building

Related to a bee hive, the co-operative Group's new £114 million HQ in Manchester will be a good home for 3,500 staff, in offices as well as creating a sustainable workplace. The new offices will replace the current head office complex.

The design

Taking inspiration from the honeycomb, each office floor overlooks the central atrium, which is topped with a lattice roof. The atrium roof "drips down in response to the irregular form of the building", says Hitchmough. The atrium roof "drips down in response to the irregular form of the building", says Hitchmough. The atrium roof "drips down in response to the irregular form of the building", says Hitchmough. The atrium roof "drips down in response to the irregular form of the building", says Hitchmough.

The atrium roofs create a central atrium surrounded by three office floors. The atrium roof "drips down in response to the irregular form of the building", says Hitchmough. The atrium roof "drips down in response to the irregular form of the building", says Hitchmough. The atrium roof "drips down in response to the irregular form of the building", says Hitchmough.

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The office and supermarket sectors have the highest cost savings in terms of energy consumption, with the education sector following closely behind.

When designing a building, it is important to consider the potential for energy savings from the outset. This can be achieved by selecting the most cost-effective ways of achieving Bream credits and designing in good ways to start, according to Wilson.

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“The office and supermarket sectors have the highest cost savings in terms of energy consumption, with the education sector following closely behind.

Sweett Group as part of Target Zero, research into the comparative costs of refurbishment. The importance of the Bream ratings is likely to grow as new developments increasingly look to refurbish buildings.

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Sweett Group as part of Target Zero research into sustainable design.