

St Crispin's School

Headteacher Ms Ginny Rhodes
London Road, Wokingham, Berkshire, RG40 1SS

Telephone: 0118 9781144

E-mail: contact@crispins.co.uk Web: www.crispins.co.uk



Peter Joel Associates Ltd
67 A Telfor Way
Thurnby
Leicestershire
LE52LX

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Dear Peter,

The following project related information will be publicised in a case study for the above project:

- A basic description of the project and building:

The new building provides state of the art teaching accommodation for the science department as well as dual use spaces for other school curriculum and community use. To replace the existing tennis courts lost by building the new science block, a new MUGA is provided within the school grounds.

- BREEAM Rating and score:

At Design Stage the project achieved BREEAM rating "Very Good" with a score of 58,74%

- The key innovative and low-impact design features of the building:

The building footprint and design forms an external courtyard space that will be used for outdoor science experiments and learning that is directly accessible from the new accommodation. It is partly covered and allows for various types of experiments and presentations. The lecture forum space has a large glazed opening and opens out on to this space, so offers views into and out for science curriculum observation.

On the courtyard glazing using coloured window film, a large scale version of the Periodic table has been applied which functions as a learning tool as it underlines the building's purpose by providing a display of part of the science curriculum. Bat and swift boxes are incorporated into the external cladding panels which offer students an understanding of ecology and can be incorporated into the biology curriculum.

A PV (photo-voltaic) system is provided on the roof to add to the renewables target. The output of the panels will contribute to reduced electrical demand and provide a useful learning tool with a meter located for students to understand the energy provided by the system and how this provides natural energy.

The ventilation strategy uses ground-air heat exchangers with local variable speed mechanical flow boost; known as a Rehau system. This method employs passive ventilation derived from air ducts buried approximately 1.5 metre below ground, with air in via inlet ducts located above ground level. This air will pass through the ground buried duct loops and will be either cooled or warmed by the surrounding ground temperature dependant on the external ambient temperature.

- Basic Building Cost:

1,644.37£/m²

- Services Costs:

639.71f/m²

- External Works:

135.06f/m²

- Gross floor area:

1684m²

- Total area of site:

9 hectares

- Function areas and their size:

Lecture Theatre / Multi Use 209m²

Staff Room 61m²

Science Labs 772m²

Prep Rooms 94m²

Area of circulation 389m²

Area of storage 22m²

- % area of grounds to be used by community (where relevant):

3%

- % area of buildings to be used by community (where relevant) :

12.5%

- Predicted electricity consumption:

19.51kWh/m²

- Predicted fossil fuel consumption:

23.01kWh/m²

- Predicted renewable energy generation:

3.78kWh/m²

- Predicted water use:

5.50m³/person/year

- Steps taken during the construction process to reduce environmental impacts, i.e. innovative construction management techniques.

The following steps were taken during the St Crispin's Science block project:

- Local subcontractors and resources used to reduce CO₂ omissions.
- Use of local suppliers where possible whilst keeping to specifications.
- Monitoring of water and electricity usage during works.
- Environmental toolbox talks to all site operatives on a regular basis.
- Encouragement of car sharing where reasonable practicable.
- Environmental awareness training to DCL management.
- Segregation of waste on site.

- A list of any social or economically sustainable measures achieved/piloted:

The new MUGA provides a new resource for the community thus seeking to improve user's health and promote social interaction.

The Rehau and PV systems contribute to reducing the school's overall energy usage.

The case study will be published through one of the following means:

- a. Developer's own website, publicly available literature or press release
- b. Industry/sector or Government/Local Authority sponsored website or information portals.
- c. DCSF/LSC website or school/college website/literature.

Yours sincerely,

Ms G Rhodes

Headteacher