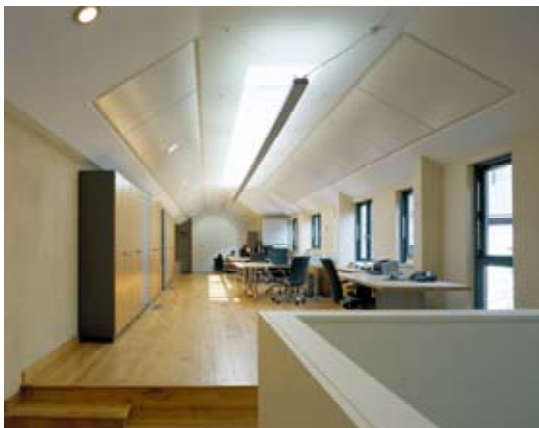




### Project Description and Aims

Birkenhead Mews is situated in a fine period terrace dating from the early nineteenth century. The buildings were to be extensively renovated and refurbished to the highest standard to provide comfortable and contemporary office accommodation. Because of the age of the structure and its historic interest, the client specified materials that were in keeping with the original wherever possible, but which also provided high standards of performance and a sophisticated modern appeal. The client also wished to achieve good indoor air quality and to ensure that summer overheating of the building was minimised without the need for mechanical ventilation.



### NBT role in project

NBT provided design support to the architect at various stages of the project. Technical support was given to the contractor as work progressed on site.



### Birkenhead Mews - London

Client: Foursome Investments Ltd

Architect: ORMS

Contractor: Kilby & Gayford

Size of Contract: £1.1m

### Performance:

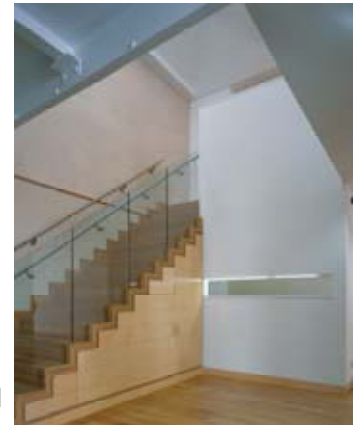
The roofs were designed with a U-value of 0.20 W/m<sup>2</sup>K. This was achieved using Pavatex Woodfibre board as infill between the roof trusses. This ensured that heat loss and summer overheating within the building were considerably reduced. In addition NBT supplied a two coat clay plaster system with a coloured clay top coat which acted as the decorative finish but which also ensured good moisture regulation and indoor air quality. Externally Beeck silicate paint was used on the masonry. This ecological paint allowed the walls to “breathe” and ensures long term performance (typically 25yrs) with virtually no maintenance being required.

### Buildability:

Most of the work was straightforward and progressed well. One problem which was encountered however was ensuring that the Woodfibre boards were cut accurately to fit the space between the trusses. This proved to be a slow process with more wastage than planned. In future NBT have suggested the use of pre-shaped boards to make the work easier and less wasteful.

### Environmental:

Woodfibre boards have an excellent ecological profile and are manufactured from 99.5% recycled pinewood and 0.5% paraffin (to enhance water resistance) and contain no glue or wood preservers. The boards are non toxic or irritant and contain no substances which can off-gas. The boards will compost naturally and therefore require no special precautions to be taken on final disposal. Clay plasters are manufactured from naturally occurring minerals and contain no toxic substances and have very low embodied energy. Beeck silicate paint is extremely long lasting, UV stable and contains no petrochemical solvents or VOC's.



### Design Issues:

From Client: This was a high profile project in respect of sustainability and building performance. The use of NBT's products helped us to achieve both our ecological and performance objectives.

### Build Issues:

Instruction was required in the application of the clay plasters and the Woodfibre boards. Progress after this initial period was satisfactory and the finished results surpassed the clients expectations.

### Cost:

Commentary: Costs were in line with budget and as this was a prestigious project represented good value for money.



“The Science of Nature—The future of Construction”

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