

RAMBOLL HQ
Southampton



GIFFORD HQ

Southampton

This is a new low-energy headquarters building designed within a 'commercial green' ethos. The studio building provides open plan office space for 150 engineers on two floors. A new brick reception wing mediates between the client's current office, a 19th century coach house, and the larger studio building. The wing houses a double-height reception and exhibition area. In meeting its energy targets, the building will be the most energy efficient office in the UK.

This new development provides Ramboll with a unique facility at its headquarters campus in Southampton. The design balances a low energy approach with financial viability and is an exemplar in the application of a Commercial Green concept.







The brief was to produce a building that reflected the aims and values of the Ramboll organisation by providing high quality innovative and sustainable accommodation at a comparable cost to traditional office buildings. The massing of the new studios needed to be sensitively designed to compliment the existing brick buildings on the site.

The commercial Green approach developed by Ramboll minimises energy losses through the building fabric whilst ensuring a comfortable environment for those working in the building. The key was in the detail of the external envelope. This was super insulated, with the glazing optimised to ensure good natural light whilst minimising solar gain and glare at IT workstations.

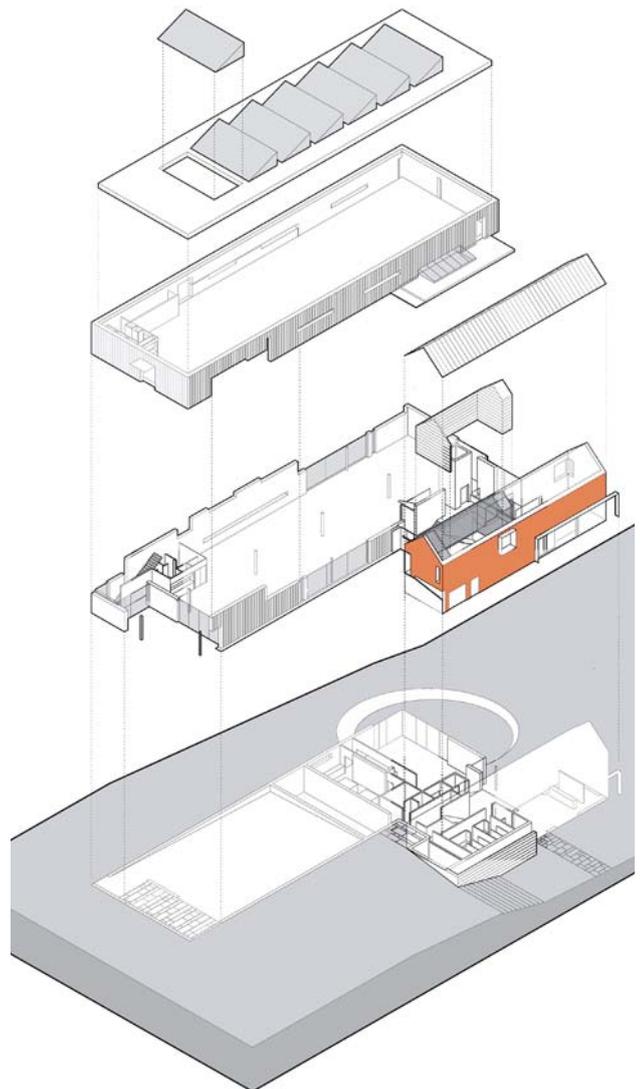
The wall construction was developed with TRADA to provide a highly insulated robust breathing wall system. This construction permitted the use of horizontally banded windows that provide connectivity to the surrounding countryside.

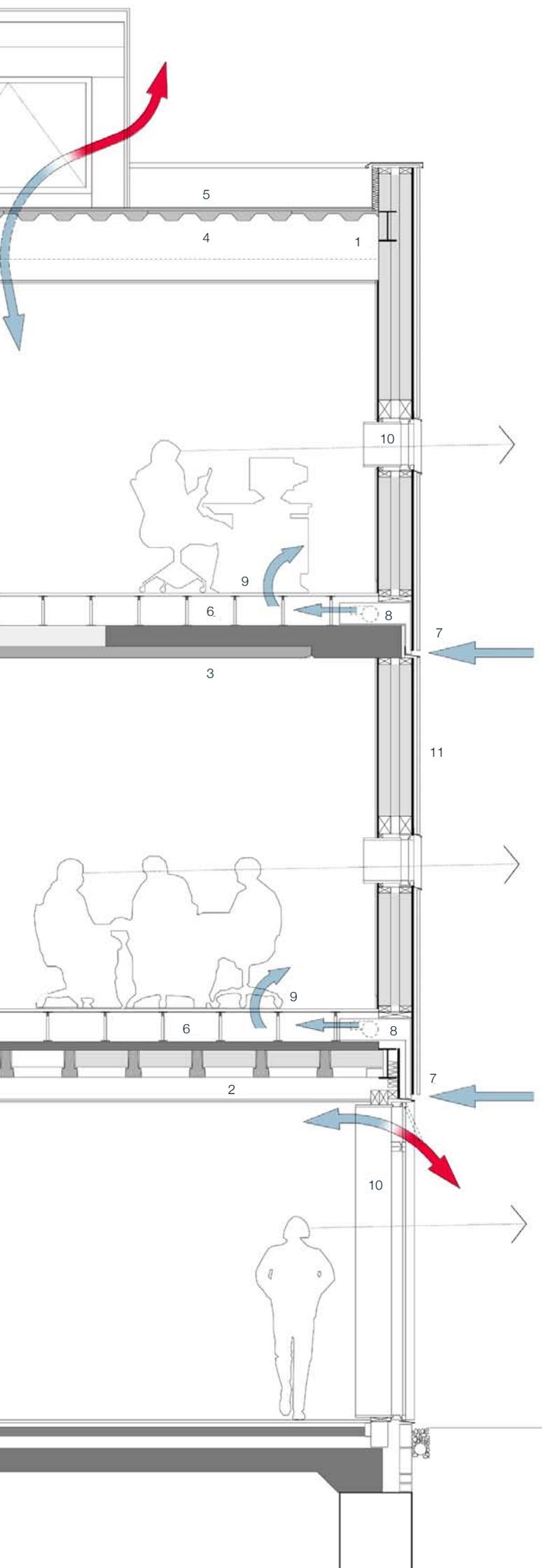
At roof level thermal mass was enhanced through the use of appropriate lining boards.

Fresh air is introduced into the building via the plenum formed by the 290mm deep raised access floor. The air is supplied by low pressure fans drawing in through vents in the cladding and discharging into the office through swirl diffusers. The air is cooled or warmed by passing over an underfloor heating/cooling system integrated within the raised access floor.

Exposed thermal mass was an integral part of the building services design. At ground floor level this was achieved through having an exposed concrete ceiling. An extended structural grid of 9.6m was achieved by the innovative use of a pre-cast concrete soffit, an in-situ post tensioned concrete topping and tubular steel columns.

A flush inner face to the walls was achieved by using steel columns contained within the walls.





Typical section through the external envelope

- 1 steel frame
- 2 beam and block floor with 75mm screed
- 3 pre-cast concrete shuttering with post tensioned concrete slab
- 4 composite roof panel
- 5 single ply flat roof membrane
- 6 floor plenum
- 7 air intake duct
- 8 fan unit
- 9 swirl diffuser
- 10 'velfac' composite window system with PPC aluminium reveal
- 11 verticle cedar cladding



Project Details

Location
Southampton SO40 7HT

Completion Date
2005

Contract Value
£2.4m

Area
1700 sqm

Awards

Winner
Best Office Project
Building Services Awards
2005

Winner
David Alsop Award
Institution of
Structural Engineers
2005

Project Team

Client
Gifford (Now Ramboll)

Architect
Design Engine

Structural Engineer
Gifford (Now Ramboll)

Building Services Engineer
Gifford (Now Ramboll)

Quantity Surveyor
Gentle Consulting

Specification Writer
Design Engine

Fire Engineering Consultant
Gifford (Now Ramboll)

Acoustic Consultants
Gifford (Now Ramboll)

Landscape Consultants
Plincke

Furniture Consultants
Design Engine

CDMC
Gentle Consulting

Building Control Approved
Inspector
STMC

BREEAM Assessor
Gifford (Now Ramboll)

Main Contractor
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