2010

Christ's College Guildford

DSDHA

Location
Guildford, UK
Floor area
7,350m²
Cost
£14.4 million

Speaking in Otterlo, the Netherlands, in 1959, Louis Kahn argued that architects should move away from the search for form and strive to understand the natural 'wish to exist' of a building. In this light, DSDHA's design for Christ's College Guildford secondary school attempts from the outset to write the essay of 'what the suburban school should be'.

DSDHA researched the suburban school model, predictably finding strung-out, disparate, low-rise buildings. Believing this to be the wrong answer, the practice pursued a civic idea of drawing the activities of the school together, centring the local community around the public activity of learning. Many benefits – communal, architectural, sustainable and economic – flow from this starting point.

Approached along a typical suburban avenue, Christ's College becomes the visual focus. Its clear form of civic plum brickwork eschews the domestic, setting up a positive interaction between the activities of learning and living. Varying window formats accentuate its proud mid-rise presence. A newly formed pedestrian and vehicular lane links east to west; at the eastern end of the lane, Christ's College and DSDHA's previously completed Pond Meadow School spatially and architecturally join in a conversation. The lane links the entrances of the schools with the suburban street pattern, relieving those relentless walks to school.

I arrived before 8am on my visit; enthusiastic early-bird teachers waved me in through a continuous glazed corner bay staff room. In many new schools, staff have retreated from the entrance zone, yet here they are part of the welcome. On entering, you sense the idea of 'school as a small city', of which Dutch architect Herman Hertzberger is a proponent. Looking in, you immediately anticipate the heart of the building,

'The atrium is a town square where students coexist in informal territories'
TONY MCGUIRK

known as the 'atrium' by the students.

The atrium is a sort of town square where students at workstations, a class of trampolinists and the lunch set-up coexist in informal territories. A trio of big spaces – the library, the theatre and the sports hall – order the big activities into a highly compact arrangement. A 'grand escalier' peeled out of the atrium wall takes you up the building, where you notice that the organisation of the atrium provides the curtilage to efficiently accommodate the necessary wrap of classrooms and staff offices.

The classroom environment, with fair-faced block walls and exposed flat slabs, is a bold choice by DSDHA, but the bare look borders on the bland. Visual uplift is provided by the creative composition of windows, including floor-to-ceiling glazing. The personality of the fenestration is important to DSDHA's architecture, influencing both exterior and interior. Dramatically deep reveal windows convey a civic gravitas while hosting an air plenum and a heat exchange unit, providing heat recovery in a 'breathing wall' through perpend slots in the bricks. Thus, each classroom is an autonomous environment.

Christ's College has a seamless quality, which began with its 'wish to exist' as a suburban school and developed into an architecture in touch with the potential of its learning population. Over-designing a building like a school often results in its activity being subsumed and constrained. At Christ's College, one breathes into the other. *Tony McGuirk, chairman, BDP*

Left and right The plum-coloured brick entrance and the triple-height timber-clad atrium are emblematic of DSDHA's sensual design approach for Christ's College

BOTH IMAGES: DENNIS GILBERT

Q&A Deborah Saunt, director, DSDHA

You have judged many prestigious awards including the RIBA Gold Medal and the Manser Medal. How did it feel to face the Stirling Prize jury?
It's an honour. I've experienced first hand how tough the competition is and how closely judges scrutinise each entry, so I felt proud and humbled that the work of so many talented and committed people on this modest project had been recognised. In a way it feels like we're representing the key role architecture plays in everyday life.

DSDHA has designed a number of schools for very different clients. How did the brief for Christ's College Guildford emerge?
The brief was part of a larger project to design an educational campus that also comprised Pond Meadow School next door (which won an RIBA Award in 2009), so we were responsible for designing part of a neighbourhood as well as a specific building. The brief sprang from the idea of creating one unified identity for the school, replacing the worn out 1960s buildings on the site.

Which buildings and architects inspired the design of Christ's College? Are any of them on this year's shortlist?
In terms of contemporary architectural inspiration, we were particularly impressed by Peter Märkli's work in Zurich – such as the Im Birch School, which we visited – and by more timeless examples of beautiful masonry buildings like the Hotel Particulier in Paris.

How was the school received by teachers and pupils?
It's been very well received. We carried out feedback sessions soon after it was completed and talked to staff, pupils and local people. We're really pleased that it works well and that different audiences genuinely seem to value its architectural qualities, as well as its functionality.

How will the recent Building Schools for the Future cuts compromise the generosity and quality of school design in the future?
Ultimately, the procurement method used is irrelevant compared to the investment that has to be made. Architects can work with any budget. Above all, schools are critical civic institutions that represent a child's first interface with public life and give them a sense of society's values. If a nation invests in its children, it invests in the future.

Number of shortlisted schools since 1996

5

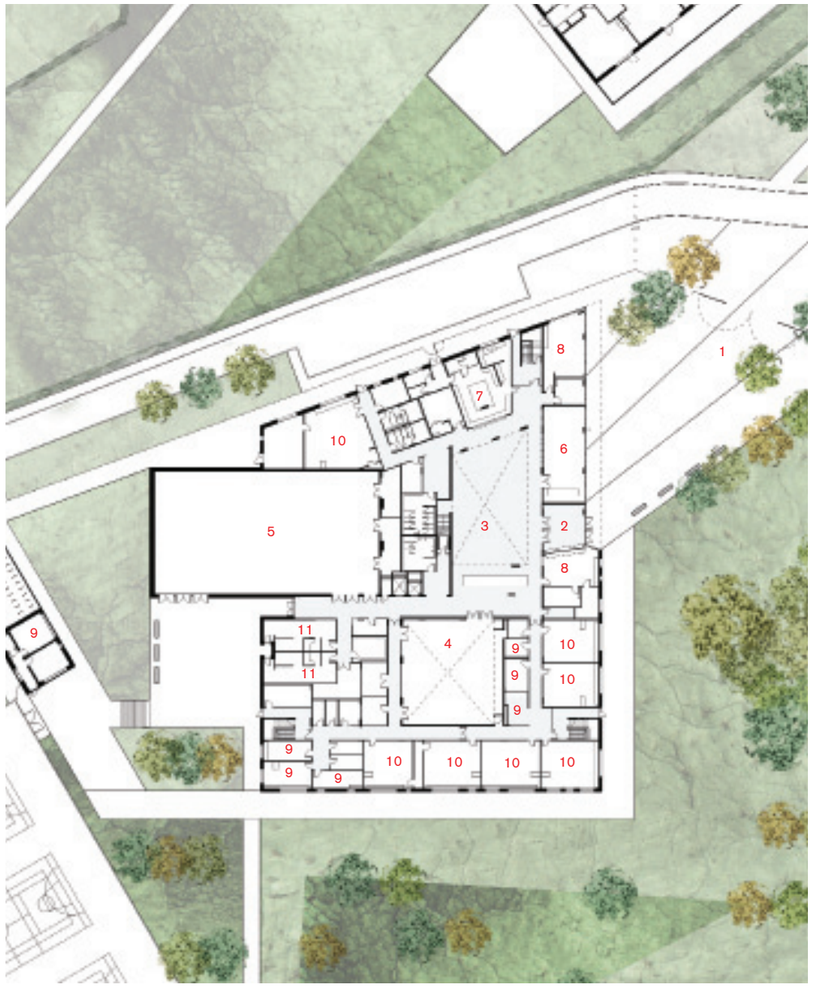
Above The brick walls are deeply recessed at window openings
Below left Supergraphics serve as way-finding through the school
Below right Christ's College sits alongside Pond Meadow special needs school, also by DSDHA

The latest odds for Christ's College to win the Stirling Prize are 6/1. How do you rate your chances?
For us, it's fantastic that two schools are on the shortlist and that people are becoming more aware of how good architecture can make a difference. Getting this far is reward enough!

ALL IMAGES HÉLÈNE BINET

South-west elevation

Ground-floor plan



1. Main entrance
2. Reception
3. Atrium
4. Theatre
5. Sports hall
6. Library
7. Kitchen
8. Staff room
9. Group teaching spaces
10. Classrooms
11. Changing rooms

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Opposite The long 'Roman' bricks are finished with a semi-glazed tone, picking up on the materiality of the nearby townscape

DENNIS GILBERT

Credits

Start on site June 2007
Contract duration 20 months
Gross internal floor area 7,350m²
Form of contract Design and build
Total cost £14.4 million
Cost per m² £1,960
Client Diocese of Guildford, Christ's College, Surrey County Council
Architect DSDHA
Structural engineer Adams Kara Taylor
M&E consultant/lighting design Atelier Ten
Quantity surveyor/project manager/CDM coordinator Davis Langdon
Landscape design Townshend Landscape Architects
Main contractor Wates Construction
Annual CO_2 emissions 24.17kg/m²

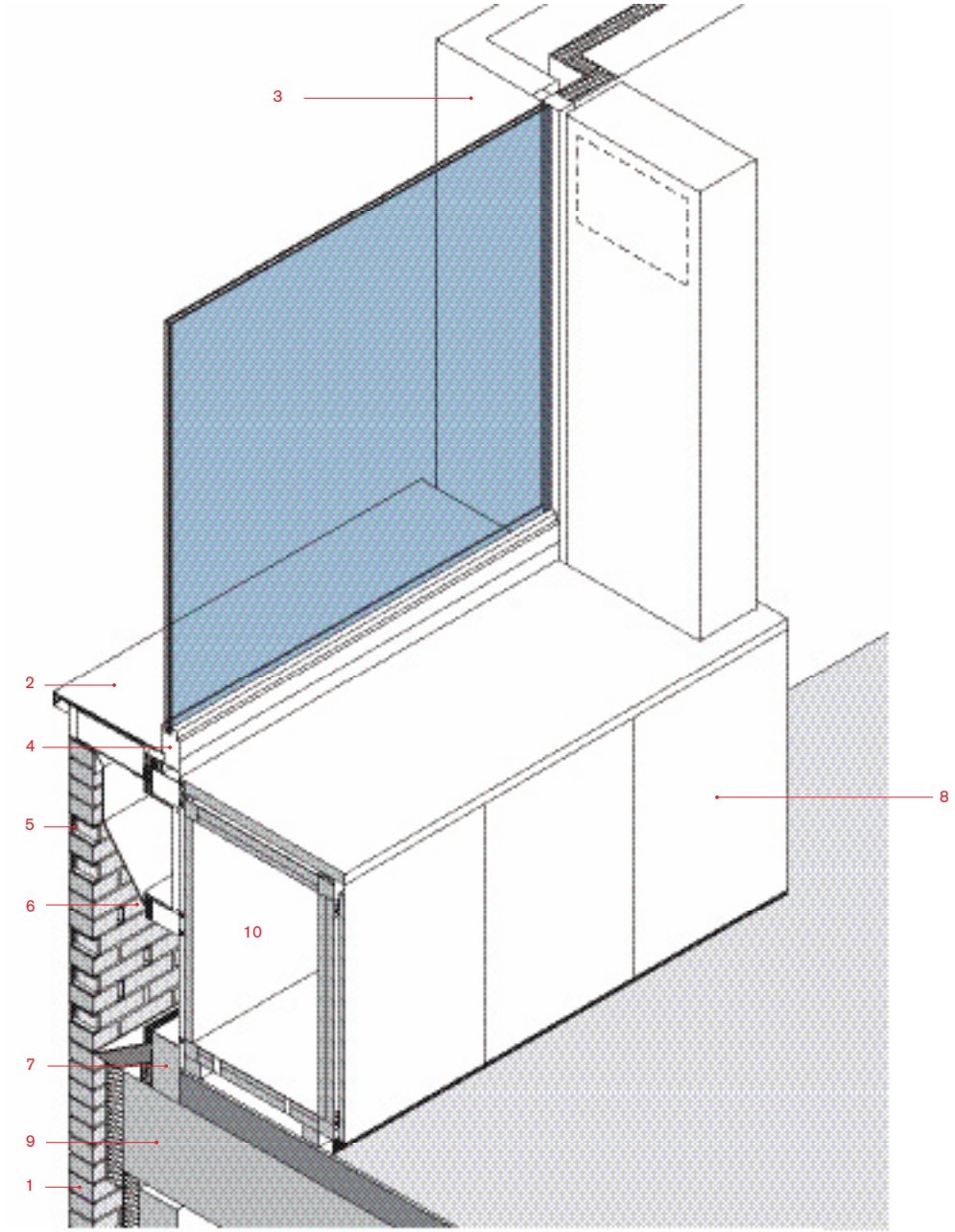
Christ's College Guildford
External wall detail

The external 'breathing wall' adapts traditional masonry technology to create a dynamic environmental facade. Beneath each classroom window, the brick perpends of the outer leaf are enlarged to create a 'dovecote' of ventilation openings, which allows the integrated heat recovery units in each classroom to function independently and provide comfortable environments for learning.

The system is controlled by temperature and CO_2 sensors. In winter, intake air is warmed in a heat exchanger using warm exhaust air from the classroom, avoiding the need for boilers or radiators. In summer, the system works in reverse, by stripping out warm air from inside classrooms and providing secure night ventilation to cool the structure. On winter mornings, it provides heat in recirculation mode, using a small electric heater until the room reaches the desired temperature.

The exposed concrete frame and blockwork walls provide thermal mass to regulate fluctuations in temperature.
Deborah Saunt, director, DSDHA

DENNIS GILBERT



1. Brick outer leaf of wall
2. Aluminium sill and head lining
3. Brick return
4. Aluminium window
5. Special ventilation opening in brickwork dovecote
6. Ventilation plenum
7. Concrete inner leaf of wall
8. Classroom heat recovery and ventilation unit
9. Concrete slab with screed topping
10. Heat exchange unit

0 100mm