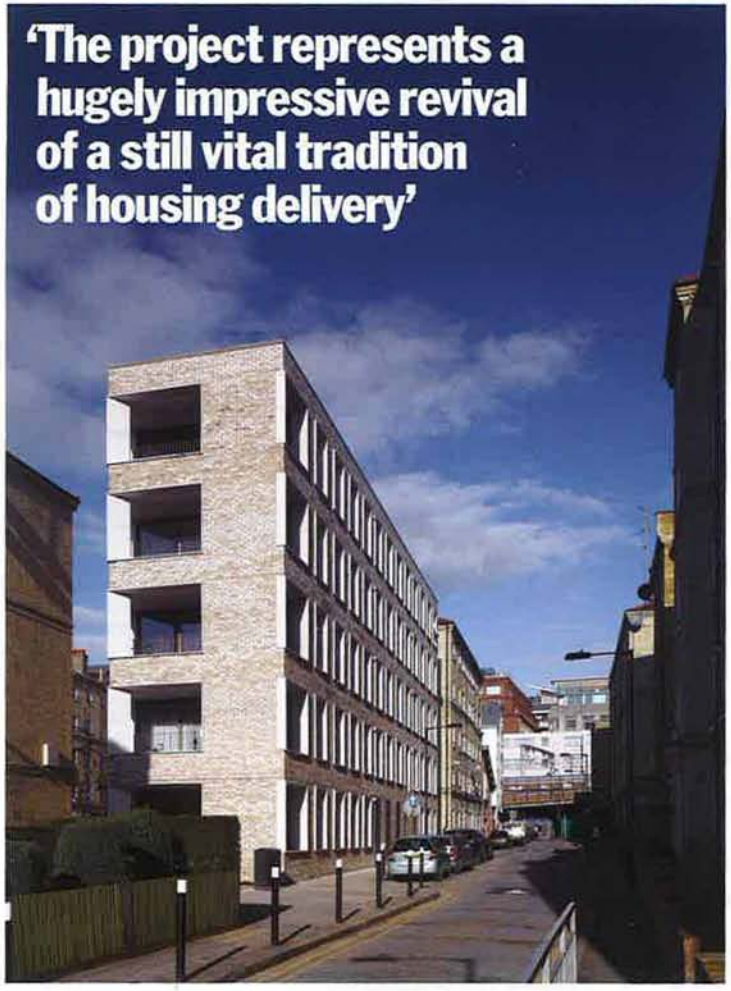
Photography **Nick Kane**

RIBA STIRLING PRIZE 2015

DARBISHIRE PLACE

NIALL MCLAUGHLIN ARCHITECTS

'The project represents a hugely impressive revival of a still vital tradition of housing delivery'



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1. The variegated brick used on the facade complements the coloration of the existing housing blocks
2. Living rooms open out on to sheltered balconies

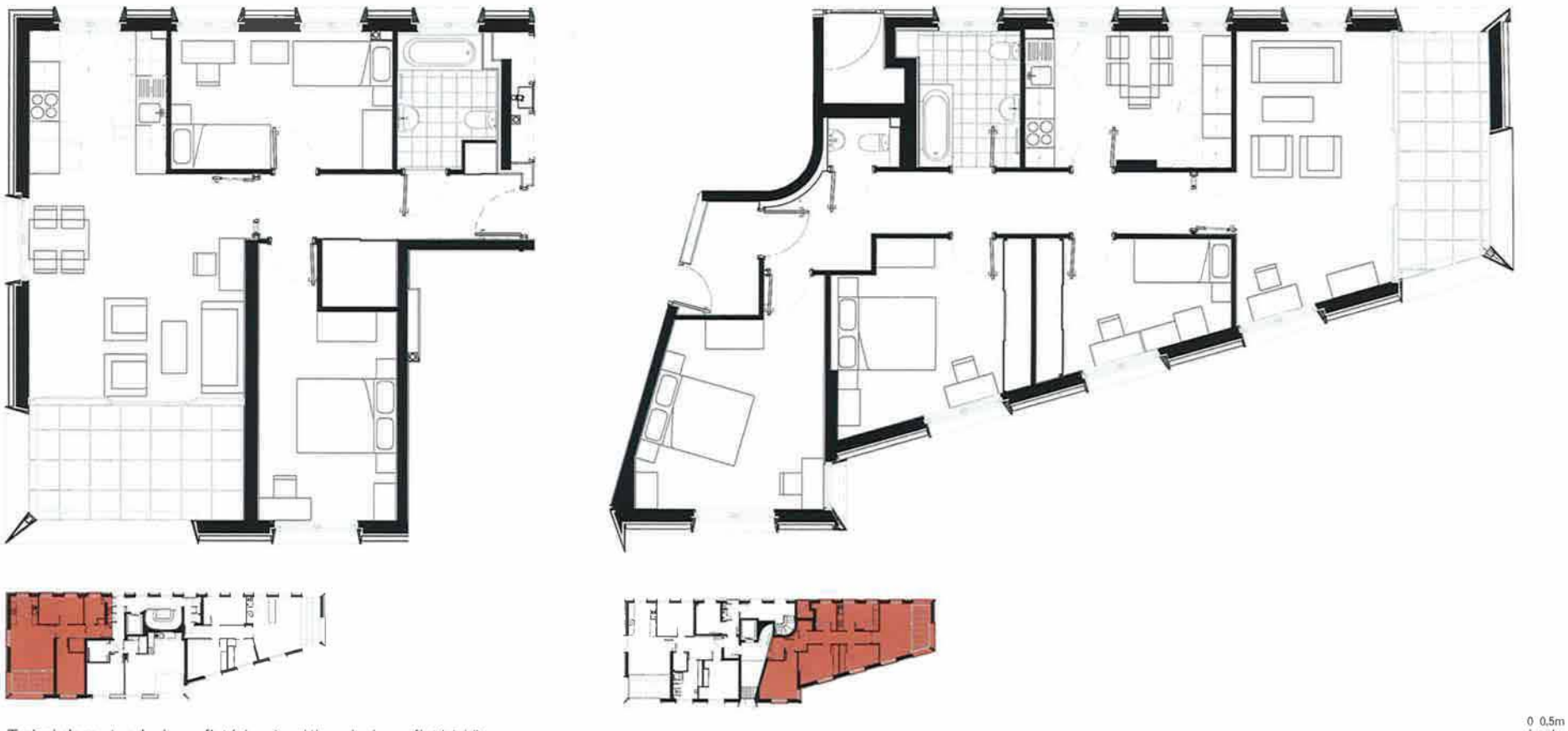
Ten years separate Darbishire Place from the last building that Niall McLaughlin Architects (NMA) designed for the Peabody Trust – an apartment block in the wilds of Silvertown, East London, distinguished by disco-bright dichroic cladding. Along with Ash Sakula's neighbouring polycarbonate-clad terrace and Bill Dunster's eco-pop BedZED, it was the product of a moment when Peabody was energetically shaking up the received image of social housing. The project holds up well, but the maintenance of the bespoke cladding systems of other products of this period has proved more taxing. In the interim, the housing provider has reviewed its architectural priorities, with projects such as Haworth Tompkins' Peabody Avenue (2011) and Pitman Tozer's Mint Street (2014) marking a return to the use of brick. Darbishire Place might be seen as offering further evidence of that shift, but McLaughlin denies that brick construction was stipulated by his client. Rather, he argues, it was the only obvious response to the task of providing an infill block within one of Peabody's original 19th-century estates.

The commission emerged from studies that NMA and Haworth Tompkins undertook into the feasibility of developing 42 plots within Peabody's landholdings – sites that had previously been deemed too small to warrant the housing provider's attention. In the main, their investigations confirmed that view, but of those that NMA explored, Darbishire Place and another, now under development in Leytonstone, proved viable propositions. The estate in Shadwell where Darbishire Place stands is the work of Henry Astley Darbishire, the architect responsible for many of Peabody's earliest developments and after whom NMA's building is named. It comprises an ensemble of five-storey mansion blocks – originally close-packed, but less so now as a result of wartime bombing. Two blocks were lost. The site of the one in the centre of the estate was redeveloped as a play area. Darbishire Place replaces the other, completing a corner of what is now a generously dimensioned square.

The older buildings' use of solid masonry registers in their deep window reveals, which have been painted white to mitigate the impact on daylighting. NMA's building reinterprets that motif, setting its windows to the back face of the cavity wall and framing them in white precast concrete surrounds that project at the front. On first visiting the site, McLaughlin found the walls of the existing buildings had been heavily discoloured by pollution and – having been assured by Peabody that it had no intention of cleaning them – specified a brick of a similar dark grey. However, shortly before construction commenced, the Darbishire buildings were indeed cleaned, prompting an urgent revision to a lighter hue. Matching the neighbouring fine jointed gault bricks proved unaffordable but the richly variegated brick that was ultimately selected offers an attractive complement to the pale honey colour of the neighbouring blocks.

Thirteen apartments are distributed to either side of a stair, with the larger units terminating in a triple-aspect living room that opens on to a balcony. NMA has recessed these spaces into the body of the building and carried brickwork up to the same height as the adjacent window sills, screening the bikes, fridges and other clutter that residents have stored outside. Again the openings are framed in precast units, with the posts on the corners rotated through 45 degrees – a refinement that optimises the sight lines from within the apartment. The practice did not win every battle: the precast surrounds are not the single units that it had intended, while a 50mm gap between the winding top-lit stair and its enclosing walls fell victim to health and safety anxieties. However, these niggles aside, the project represents a hugely impressive revival of a still vital tradition of housing delivery. While not the kind of building that typically graces RIBA Stirling Prize shortlists, of all this year's contenders Darbishire Place is arguably the one of greatest relevance to the future of architecture in the UK.

Ellis Woodman is AJ critic-at-large and director of the Architecture Foundation



Typical plans – two-bedroom flat (*above*) and three-bedroom flat (*right*)

0 0.5m

Annual CO_2 emissions

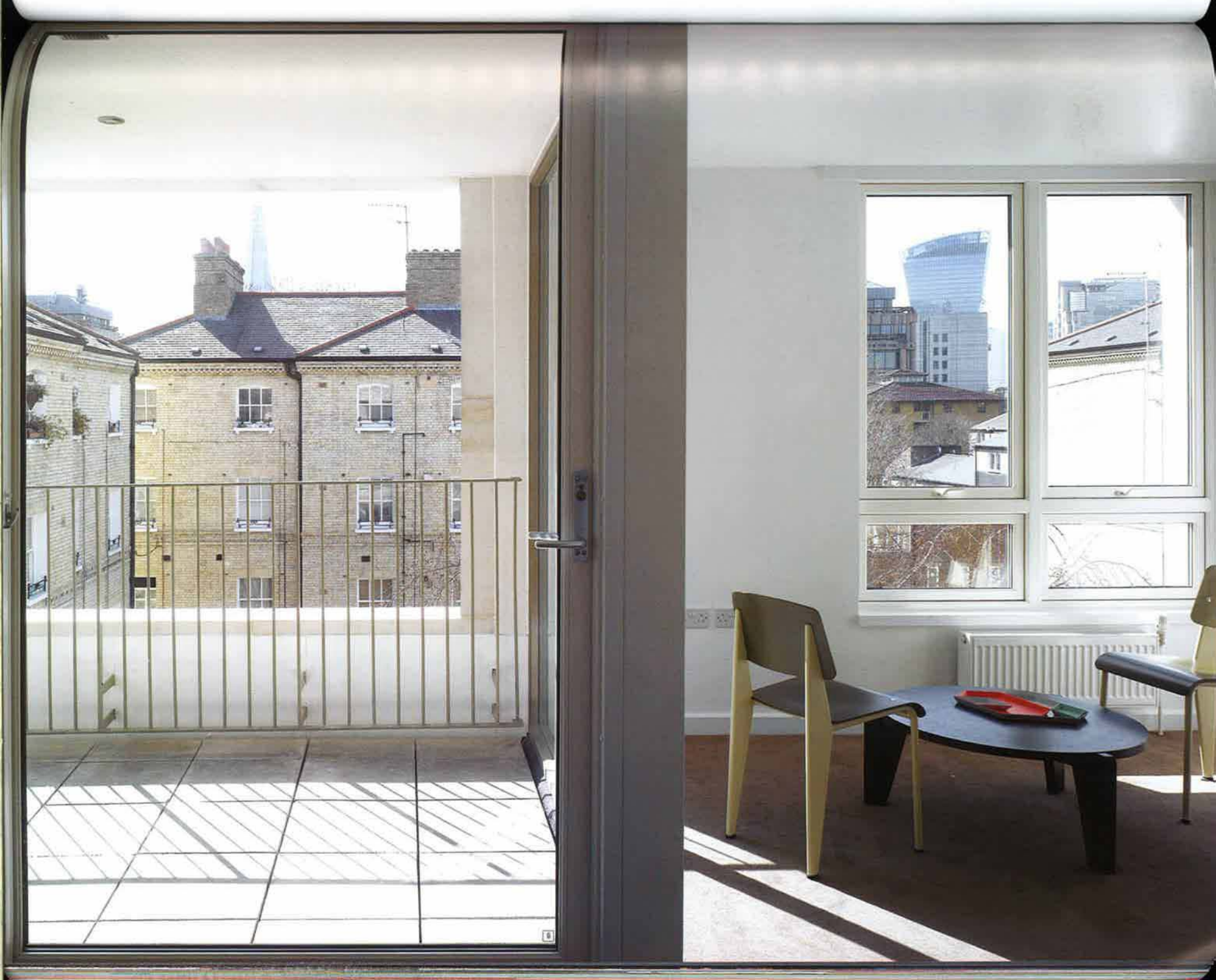
7.92kg/m²

If all new social housing was as thoughtfully designed as Darbishire Place, the green housing agenda would be well advanced. The approach of client Peabody Trust at Darbishire Place is to deliver consistently to a robust level – in this case Code for Sustainable Homes Level 4.

A 'fabric first' approach includes increased levels of insulation and airtightness (below 3m³/h.m²), double-glazed windows and careful detailing to minimise thermal bridging. The U-value of walls at 0.15 is half of the Building Regulations' maximum of 0.30. Recessed windows provide partial solar shading, which is particularly important on the long west elevation.

Responding to the existing context and the strength of the local community, the orientation and massing of the building form the fourth side of a courtyard. An inviting gesture which encourages people into the estate is an angled corner at the entrance that widens sight lines from the street into the courtyard, where a new tree has been planted.

Hattie Hartman, AJ sustainability editor



1. White internal ND NTech Villa 1.4 with RAL 7002 external aluminium windows, NorDan
2. Furlong Cabaret carpet on underlay in apartments
3. Vylon Plus vinyl for corridors, Tarkett
4. Black PPC covering for balustrades, Squires Metal Fabrications
5. Roofing membrane GoldsealT-O Black, IKO
6. AR361 set on rose door handle, Hoppe
7. Hydrocoat finish to stair treads, Nufins
8. Matt white bathroom tiles, Nicholls & Clarke
9. British standard paving balcony pavors, Charcon
10. Grit blast Portland GRC, mix code P100, GRC UK
11. Marziale bricks, Wienerberger

PHOTOGRAPHY BY STALE ERIKSEN

Níall McLaughlin, director, Níall McLaughlin Architects

The building has a traditional concrete frame with columns contained in the wall build-up. The external envelope is of insulated cavity-wall construction with a single skin of brickwork. A cavity, insulated stud wall and a zone for M&E installations follow this on the inside.

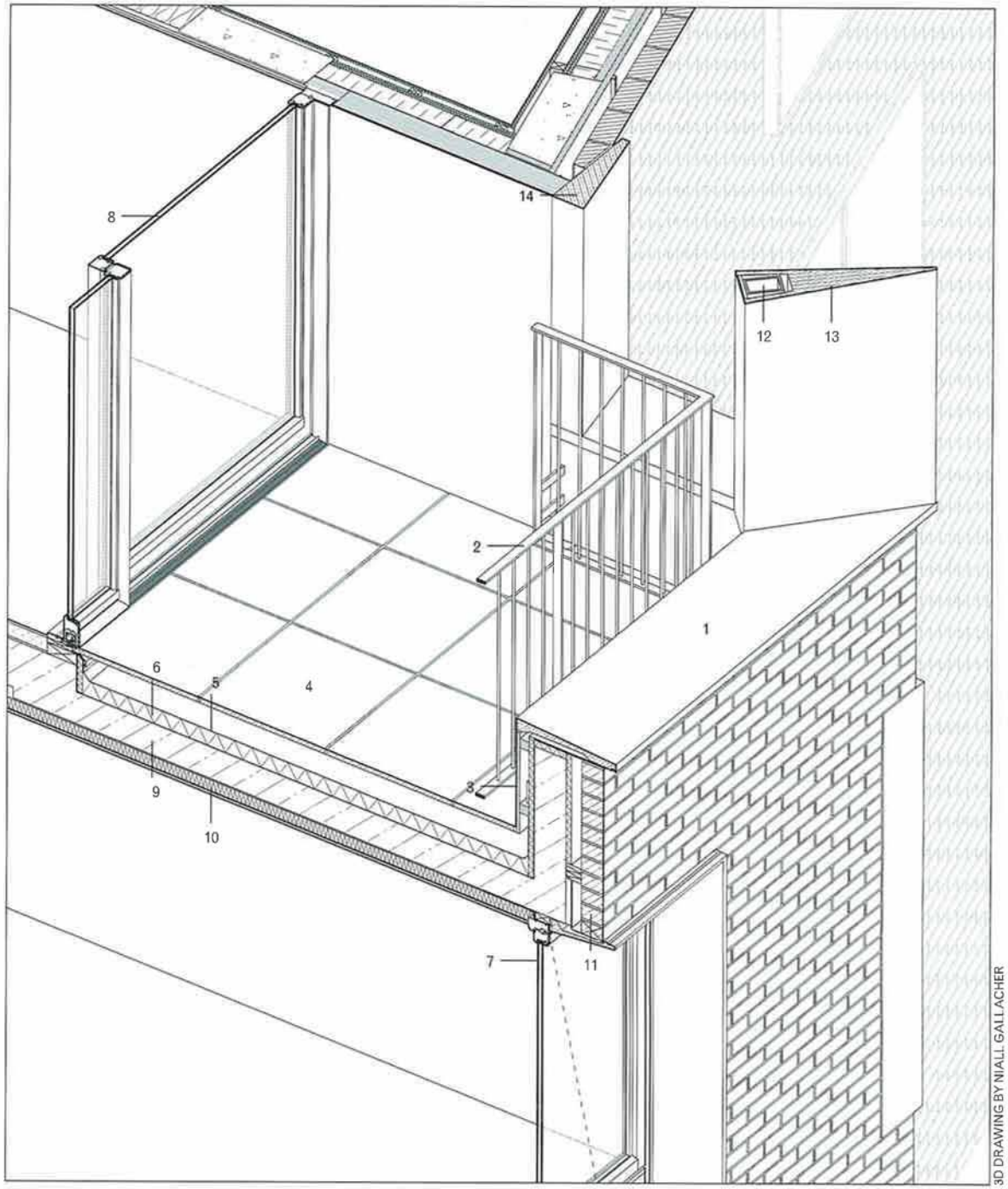
Delicate precast concrete units were fitted around all window and balcony openings. Small steel posts pick up the vertical loads at the corners of the balconies, allowing the fins to be as thin as possible and permitting maximum views out and daylight in.

The precast units are made from glass-reinforced concrete (GRC), reducing weight and easing transport and installation. They are fixed to the brickwork using resin anchors. A mixture of Portland cement, white cement and light aggregates was used to achieve their light colour. The units project forward from the bricks by about two inches, minimising water run-off on to the facade below.

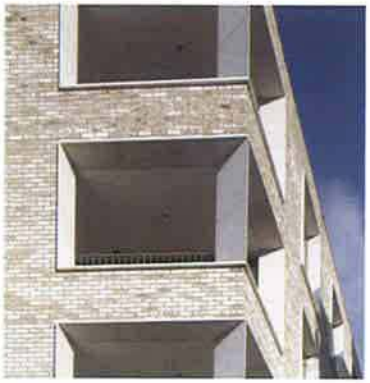
The windows are composite timber and aluminium. They are top-hung and have a fixed section at the bottom, allowing a relatively low sill height of about 500mm.

Balcony detail

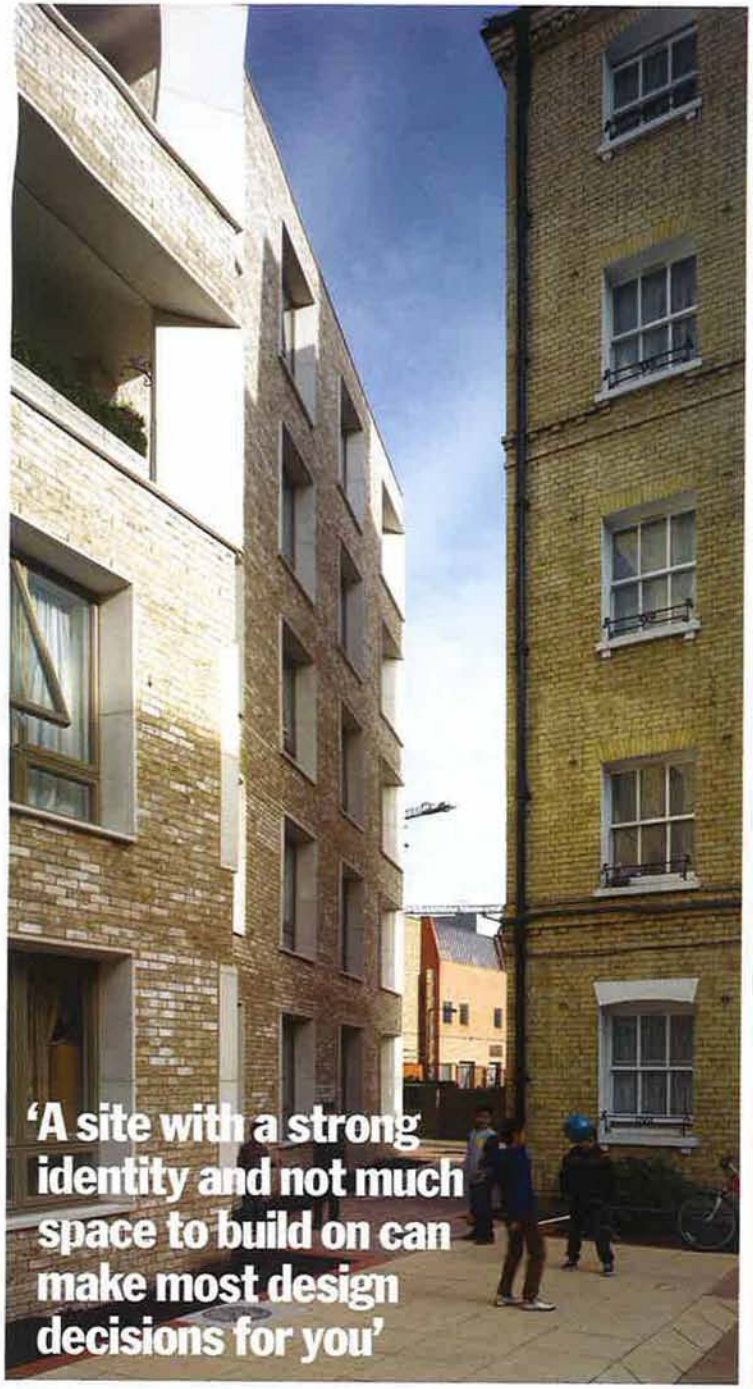
1. Glass-reinforced concrete (GRC) sill
2. PPC steel balustrade
3. Painted renderboard
4. Raised paving slabs with 10mm joints
5. Single-ply membrane adhered to rigid insulation
6. Insulation laid on concrete slab
7. NorDan NTech window
8. NorDan NTech sliding door
9. Reinforced concrete slab
10. Painted plasterboard suspended ceiling
11. Masonry leaf tied back to RC using resin fixed brick ties
12. RHS
13. GRC fin
14. GRC reveal



3D DRAWING BY NIALL GALLACHER



3. Precast GRC fins stand at the corner of each balcony



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4. GRC reveals and sills reflect the painted windows of the existing blocks

Project data

Construction cost
£2.3m

Gross internal floor area
1,084m²

Construction cost per m²
£2,122

Start on site **November 2012**
Completion **December 2014** Form of contract **Single-stage Design and Build** Client **Peabody Trust** Structural engineer **Ellis & Moore** M&E consultant **Nifes** QS/project manager/CDM co-ordinator **Pellings** Planning consultant **CMA Planning** Approved building inspector **BRCS** Main contractor **Sandwood Design and Build**

Niall McLaughlin, director, Niall McLaughlin Architects

Our original idea was to produce a building that respects and complements its urban context, one of Peabody's oldest estates in London. We wanted to continue the concept of 'open corners' while working with the height and massing of the existing blocks. The facade detailing takes its cue from the Henry Astley Darbishire-designed buildings with deep, white window reveals, a regular grid of facade openings and a prominent entrance portal off the courtyard rather than the street. Internally we were looking to provide clear layouts, with generous spaces and maximum daylight to flats and communal areas. Most units receive light from three sides with generous, covered balconies. A single core with a winding staircase connects all floors and is flooded with natural light. At the entrance of each flat there is a glazed door at the end of an extra-wide corridor with a window beyond.

The completed project retained all our initial ideas, except that we originally specified charcoal brick to match the existing buildings, which really showed the many decades of soot and other deposits upon them. But the existing blocks were recently cleaned, exposing the original buff colour of the gault bricks, so we adjusted the proposed brick accordingly.

We had a great start to this project, as we had already prepared many feasibility studies for Peabody, including one for this site. Once appointed, we took the time to investigate the site more thoroughly and reviewed the brief with the client and other stakeholders in depth. Consultation meetings were held with local residents at the community centre. When the design process was under way, we held regular design team meetings with the client's project manager, and project progress was reviewed by senior members of the Peabody development team at key stages.

What challenged us most was steering the project through a difficult procurement and construction process, in particular fitting 13 mixed-size units within a narrow and constrained site.

The most important lesson this project taught us was that a site with a strong identity and not much space to build on can seemingly make most design decisions for you.

Our practice is developing into a more collegiate organisation. This building was the outcome of a very productive collaboration with Tilo Guenther, one of my associates.

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