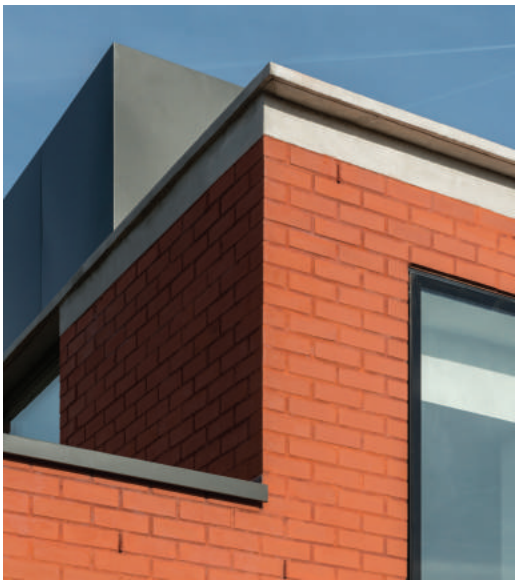
AJ

Homes

Three schemes by Proctor & Matthews, Mole Architects and 31/44 Architects

27
9 770003 846165
£10



Building study

Defying convention

31/44 Architects' Red House brings a highly unusual contemporary end to a stolid Victorian terrace

This project is a speculative, new-build, end-of-terrace house in East Dulwich, south London, on a small brownfield plot formerly occupied by a double garage and yard at the end of a typical Victorian terrace, ubiquitous in London's suburbs. The brief called for a design that would successfully terminate the terrace while offering contemporary living accommodation. It has made a unique home out of a seemingly awkward urban site. Its realisation might be viewed in the context of an emerging movement by independent developers to densify London through fine-grain, incremental development.

Words Jay Merrick
Photography French & Tye and Rory Gardiner

A quarter of a mile north of Camberwell Old Cemetery, where one of the more impressive headstones announces the final resting place of Mr and Mrs Achilles, we find an admirable Hector of a street. It is composed of physically modest but solidly built 19th-century terraces, some with added-value heritage paint over their pleasantly weathered yellow stock bricks.

The two-storey houses run uphill from a corner anchored by the hipsterish Herne Tavern – steampunk vapers and Dapper Dan beard oil presumably de rigueur – and a gluten-free organic ice cream parlour, signalling upward social and professional mobility. At the top of the street, we encounter a new three-level house whose architecture one could imagine had been the work of a Jolly Decent Victorian Architect Who Became More Than Jolly Interested In Euclid.

The 120m² site, scrap land at the end of the terrace once partly occupied by a garage, is geometrically vague – a not quite regular L-shape whose south-east-facing street edge is also angled. The architectural response produced by Will Burges, co-founder of 31/44 Architects, is bold in the contextual abstractions of form and elevations visible from the street and quite original in the arrangement of the internal volumes. The key planning requirements were a place-sensitive design, and no loss of amenity or privacy for nearby houses. The developer, Duncan Blackmore of Arrant Land, supported 31/44's novel design approach.

The plan geometry of the ground floor rooms – roughly speaking, two interlocking trapezoids butted against a rectangular space – generates further angularities. On the first floor a rectangular bedroom sits behind the skewed, street-facing elevation, with a trapezoidal bedroom overlooking the not quite rectangular courtyard garden at the back of the property. A second trapezoidal bedroom sits on top of the first-floor version. The plan and section of the house are particularly effective in terms of the qualities of light created in several of these unusual spaces, most notably in the full-height reception volume and across the ground floor.

Approaching the house, first impressions are dominated by its 150mm-thick cast-concrete façade up to first-floor height, which includes a relatively large, rounded arch above a ground-floor window, based

on the arched doorways of the other houses in the terrace. Most of this portion of the elevation – the cast elements weigh about a tonne and were craned into position – has a three-dimensional decorative surface whose layers of geometric patterning are derived from typical Victorian entrance tiling.

The quality of the casting, made by Cambridge Architectural Precast, is excellent and was produced using a silicone mould and a fine, thoroughly vibrated concrete mix. The smooth terracotta look accurately matches the colour of the bricks in the top half of the elevation. The surface radiates tactility from about 30m away, but stops short of seeming overwrought. Indeed, the closer you approach, the more politely patternbook – and delicate – it seems.

The most significant architectural decisions concerned the unusual modelling of the building's form as a whole. About a third of the ground-floor segment of the front façade steps out at an angle and is faced with a rebuilt and extended yellow-brick wall, which follows the pavement line. The wall is topped with a slim concrete capping, which angles back and widens out as a canopy over the slightly dropped entrance threshold, and continues through the round-arched window to the right of it. A nicely blocky, brick-coloured bin store forms a cornerpiece at the pavement edge. A small, partly glazed setback near the top of the front elevation allows natural light to wash down into the full-height reception volume.

The angled canopy and entrance step-down is rather cowl-like and the one feature in the frontage that is not contextually derived; it is modestly Modernist. The practice had noted that Policy 3.39 of the London Plan says: 'For individual buildings the SPG [Supplementary Planning Guidance] will cover issues such as "arrival", including the importance of creating active frontages, entrances and shared circulation spaces.' The words 'arrival' and 'active' are stimulating, yet also vague. Burges responded by stretching the threshold envelope.

The west side of the house is modelled with a double step; the front bedroom on the first floor sits at an angle across the otherwise orthogonal plan of the west and northern segments of the ground floor,


VK57 HMC

whose roof and courtyard walls create a second, perimeter step.

These multiple, stacked angularities in the plans have not produced an internal spatial riddle. Quite the reverse. Opening the front door, one is greeted with a satisfying bifurcation: on the right, pale stained oak stair treads in a white-painted staircase begin their ascent; on the left, there is a long, light-punctuated view through the kitchen to the small, high-walled courtyard at the back. In other words, privacy to the right, collective conviviality to the left.

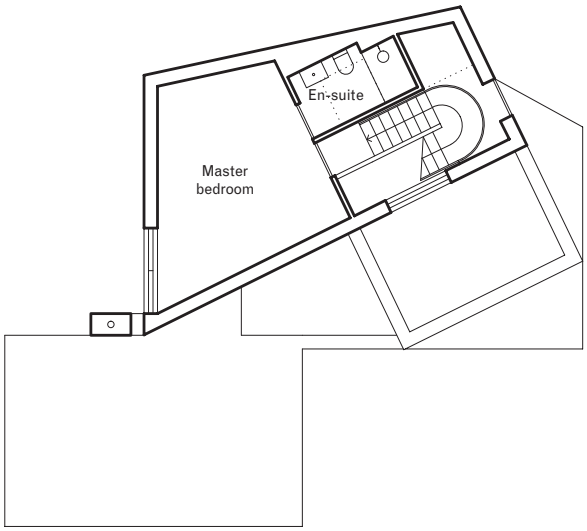
The design of the tall entrance volume is extremely effective, and it's a pleasure to be in. The staircase rises in a radiused sweep, but stands well clear of the front wall, and does not – apart from barely noticeable steel structural flanges – quite touch the side walls. Light streams in from the toplight, from the arched ground-floor window, and from an oversized street-facing window half-way up the stairs. There is an equally large window at the top of the stairs, facing west. The detailed composition of the staircase, and the reception volume as a whole, probably owe something to Stirling; they shout (in a good way): 'Axo!'

The ground floor drops 900mm from pavement level and Burges has been adroit in the way he has brought light into its spaces. The first floor sits askew across the orthogonal ground floor on the west side and this has created a trapezoidal courtyard – glazed, accessible, and elegantly planted – in the centre of the ground-floor plan. There is another, partly top-lit triangulation where the house's south-west meets the pavement. There are glazed, wood-slatted rectangular cut-outs in the flat roof of the volume, which projects west from the kitchen, and the right-angled walls facing the courtyard are largely glazed. The overall effect is that this hunkered-down ground floor seems as much about being outside as inside – a considerable architectural-cum-experiential achievement.

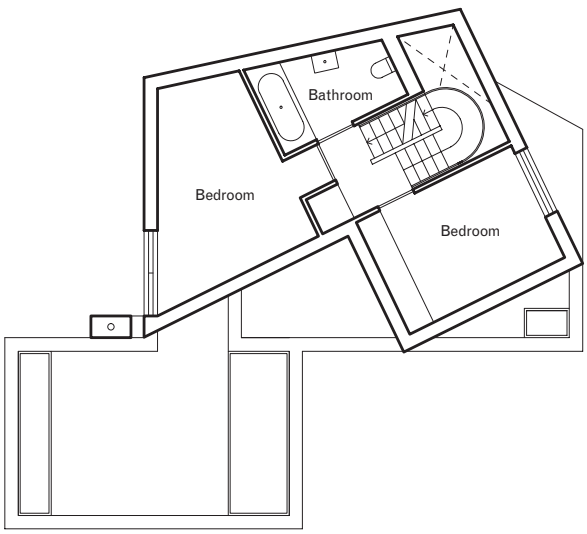
The only thing that ruffles 31/44's design is the chimney stack, which rises from a blocky concrete hearth and log store, but is slightly separated, externally, from the corner of the back courtyard. The reason given for this displacement is that the chimney, tied into the brickwork with concrete connecting slabs, signifies a pivot-point for the geometries of the architecture. Most occupants of the house, or descendants of Mr and Mrs Achilles, who might be passing along St Aidan's Road on their way to a curated pint of Transylvanian wheat beer at the Herne Tavern, would not automatically deduce that. In any case, isn't the trapezoidal courtyard the true geometrical locking-piece?

This remains, however, a notable and successful house design, yet more proof that, if developers took the trouble to use contextually intelligent architects, rather than cringing jobsworths, many thousands of fag-end sites in British cities could become virtuously domesticised.

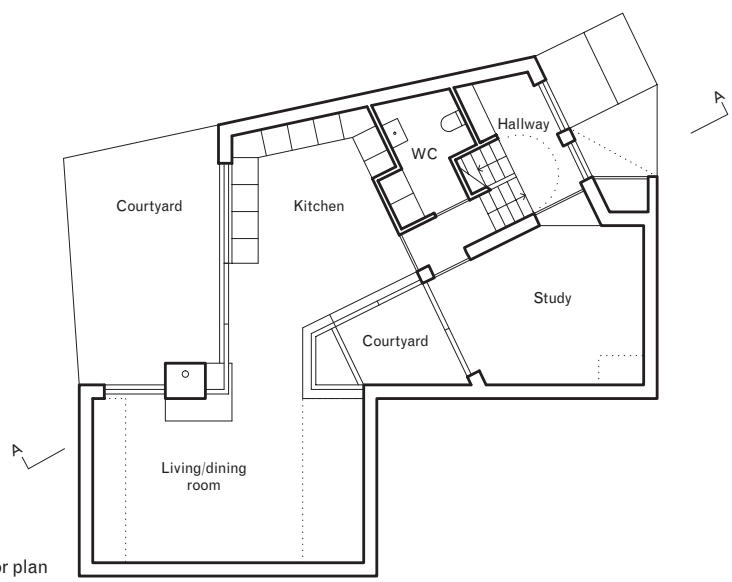
'One is greeted with a satisfying bifurcation: privacy to the right, conviviality to the left'



Second floor plan

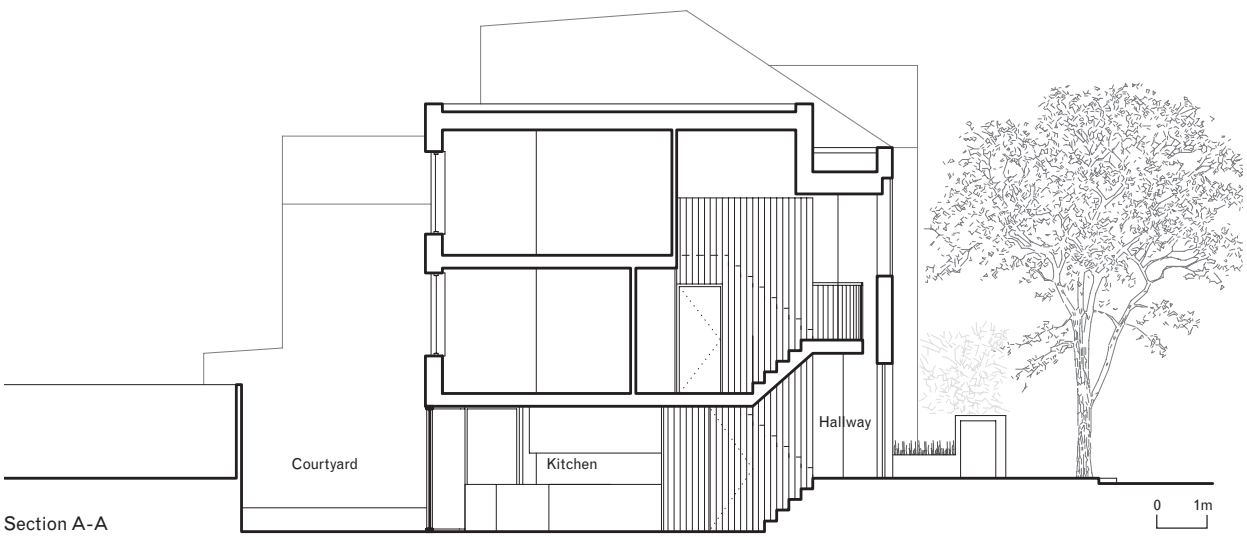


First floor plan



Ground floor plan

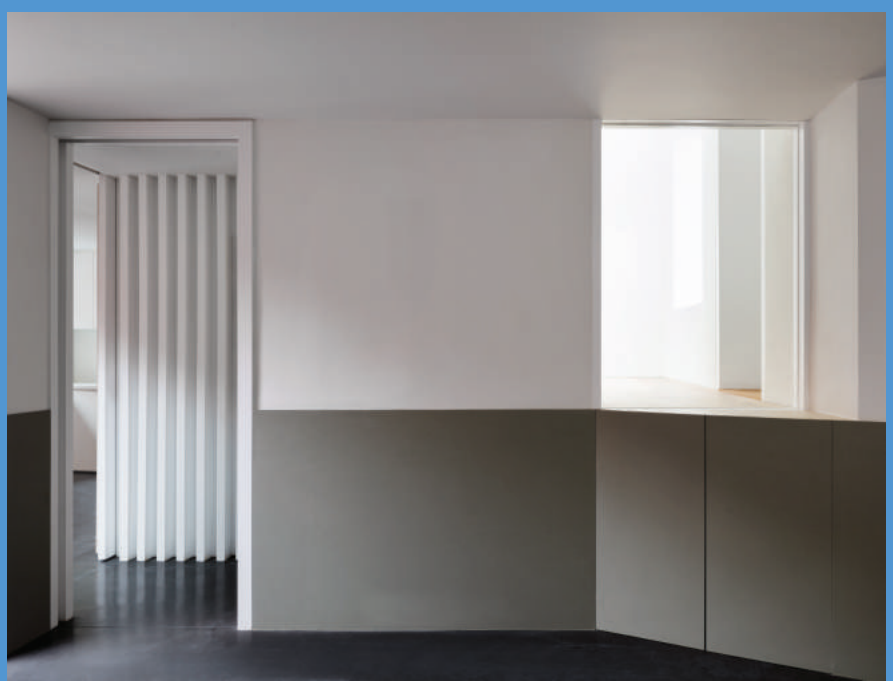
0 1m

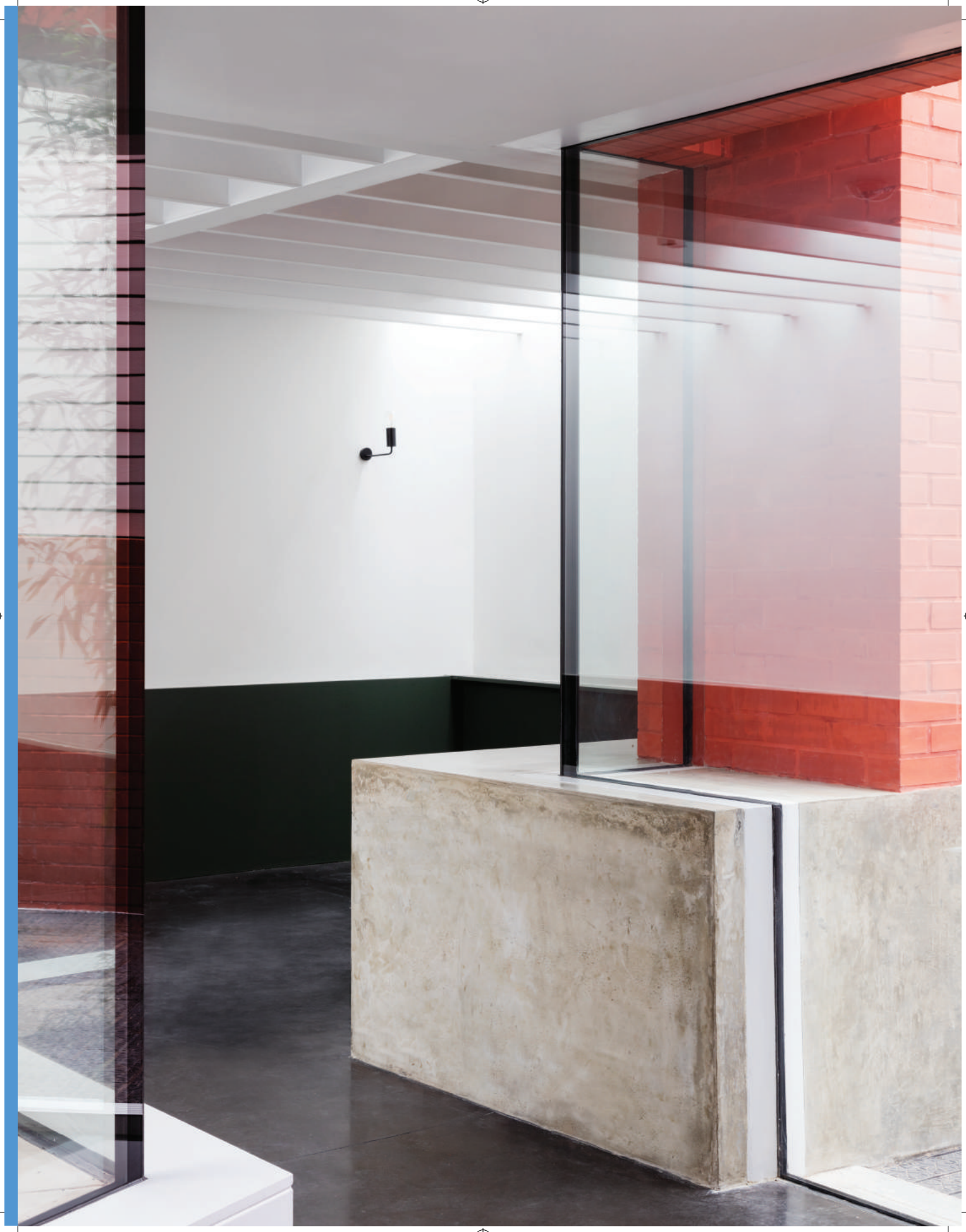


Section A-A

Project data

Start on site October 2015
Completion April 2017
Gross internal floor area 130m²
Construction cost £465,000
Construction cost per m² £3,577
Architect 31/44 Architects
Client Arrant Land
Structural engineer Elite Designers
Approved building inspector London Building Control
Main contractor Studio PL
CAD software used Vectorworks
Annual CO_2 emissions 15.05 kg/m² Dwelling Carbon Dioxide Emission Rate (DER)





Architect's view

The ambition of this project has been to design a contemporary dwelling that references and evolves the character and rhythm of the terrace while defying convention. Red House takes its name from the warm red brick, which is evident as a highlight brick in the existing terrace but is used here as the main building material to create impact.

The principal architectural move on the main elevation has been to appropriate the arched entranceway of the terrace into a large window on to a double-height hallway. The window is frameless, the arch is stripped of detail and the span is achieved with a precast, pigmented concrete panel, which is patterned to echo the decorative tiling of the floor thresholds in the entrances of the existing terrace.

The design achieves 130m² of space on a small plot by lowering the ground floor, creating a split-level three-storey house in the space of the two-storeys of its neighbour. In plan the unconventional ground floor is then 'pushed and pulled', creating a series of visually connected spaces interspersed with courtyards, which bring daylight and greenery deep into the plan.

Other key features include a wood-burning stove housed within a chimney, whose red brick stack rises up beyond the roofline; and a top-lit oak staircase that wraps the double-height entrance.

As a practice we share the same ambition as developer Arrant Land, to create carefully detailed and characterful homes, making opportunities out of difficult sites. It's unusual for a speculative developer to invest so much time and consideration in perfecting the details, but on this project a good working dialogue and an attentive client have allowed us to test ideas and make something quite unusual.
Will Burges, director, 31/44 Architects

Client's view

The site for Red House was previously a small workshop and a scrap of unused garden land. At a time when finding buildable sites for individual houses in nice parts of London was almost impossible, we had to buy the house next door in order to get our hands on the land that came with it.

The new building is required to resolve complex geometry imposed by the kink in the road and angled flank of the adjacent house, as well as needing to overcome challenges of privacy and overlooking, which had defeated a previous applicant.

Despite the constraints, we wanted to build an assertive piece of architecture that was justly confident of its place in the street without being disrespectful – and which shared something of the spirit, solidity, and decoration of the Victorian surroundings without veering towards any kind of pastiche.

The design evolved and gained strength over a period of discussion and model-making, and survived inevitable meddling at planning as well as the challenges of construction. As client, we understood that the successful delivery of an idea of this potency required every individual decision to be appreciated in the widest context, rather than as choices to be weighed and costed.

Our individual house projects have a dual function for us. They are distinct and highly specific pieces of architecture in their own right, but they also represent real-world research in which we hope to test principles and relationships, which can be deployed at a larger scale, including an ongoing second project with 31/44 and an almost complete apartment building with Denizen Works.
Duncan Blackmore, director, Arrant Land

Working detail

The detailed design of the entrance façade reinforces the design strategy: to produce a robust façade where the level of detail is commensurate with the neighbouring properties, but with a quieter presence.

The arch – an act of continuity to acknowledge the rhythm of the street – is used here as a window with a planter (and refuse store), creating a threshold to the street and a clear curtilage. The decision to incorporate an arch led us to specify concrete (as a more practical solution than a brick arch) and we subsequently introduced the idea of pattern into the malleable surface of the concrete panel.

Adjacent to the arched window, the doorway is one of a series of flush metal panels (including a store and utility cupboards) which are read as a 'shadow' in the façade (similar to the street's deep-set doors in their arched enclosures). The entrance area folds beneath an in-situ cast concrete canopy, which resolves the twisted geometry of the street and neighbouring buildings – the canopy draws together the street/garden wall, forms shelter for our new house and ends as a transom for the arched window.

It was our desire for the top of the arch to appear as a void and the lower pane to visibly function as an opening window. It appears relatively simple but it required precise co-ordination between the structural engineer, the window supplier and the specialist concrete fabricator, who each had to make adaptations to ensure this was achieved.

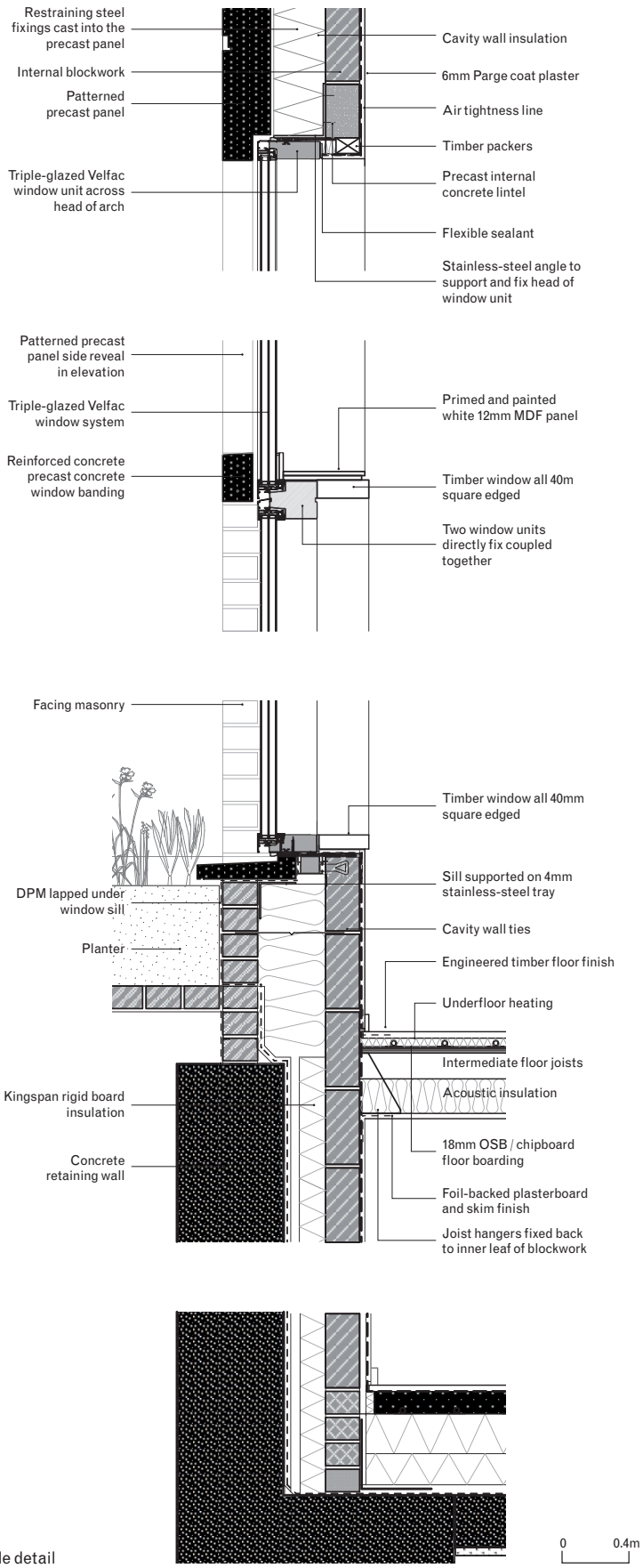
Kate Nicklin, architect, 31|44 Architects

Consultant's view

Cambridge Architectural Precast was asked to produce a deep, sculptured red-pigmented concrete panel, which we quickly realised would only be successful if cast using a rubber-lined mould for the feature face. So CAD modelling was carried out, followed by the production of a timber relief mould ready for the liquid rubber to be poured over.

After curing, the liner was stripped and placed inside a further timber mould and made ready for casting. A hand-formed reinforcement cage was made and fitted into the mould, followed by fixing points where required. Numerous colour samples were made to match the specified bricks and, with the sample approved, we were ready to make the cast. We made final pre-pour checks of the mould and then filled, vibrated and trowelled the concrete into place. After curing for three days the unit was lifted from the mould, the liner still adhering to the panel face. The liner was then peeled off, revealing a unit with all friable areas intact.

Martin Pinion, director, Cambridge Architectural Precast



Entrance façade detail