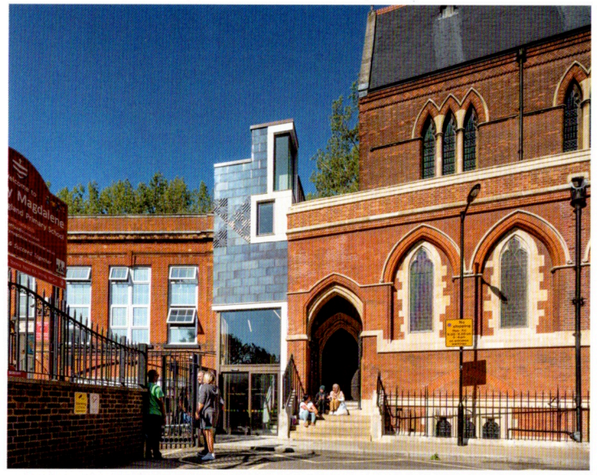
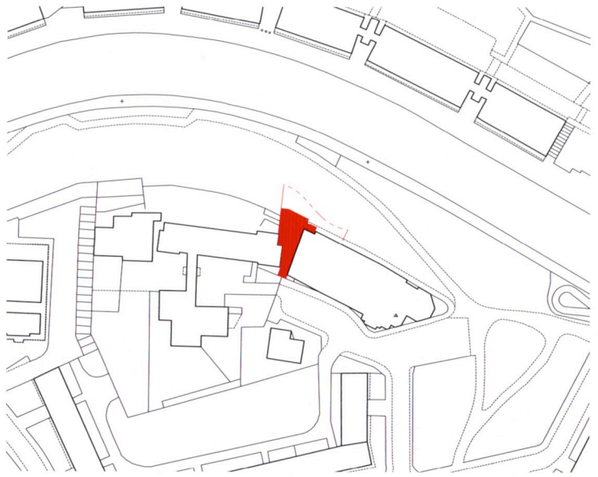
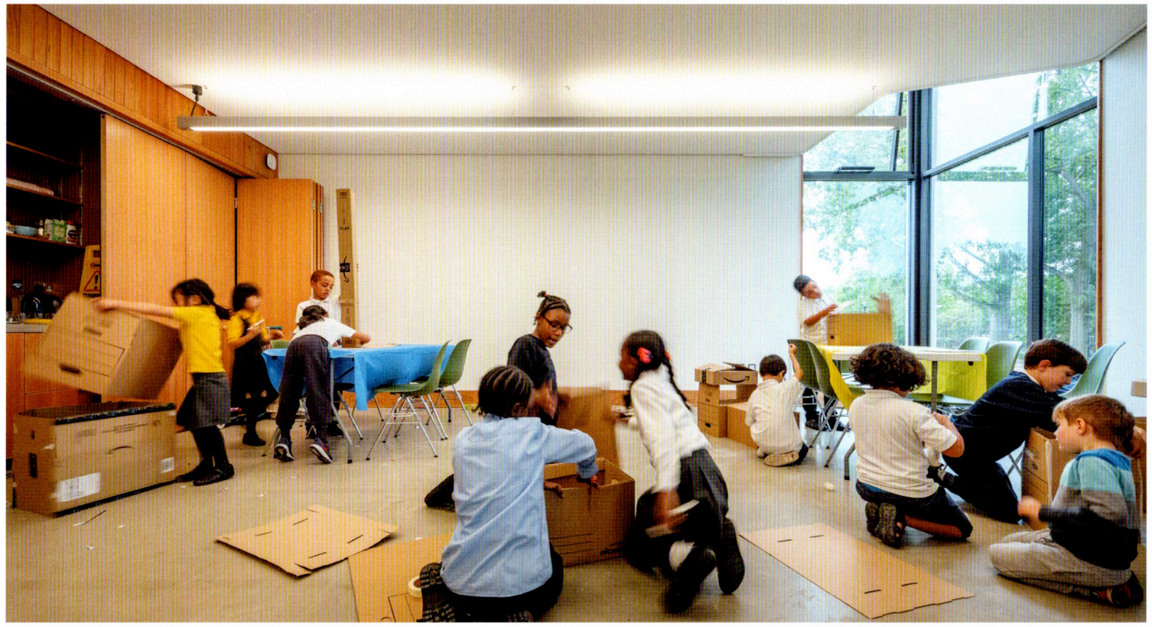


Building study

A broad church

Dow Jones has combined the restoration of St Mary Magdalene Church in west London with the addition of a new building opening it up to community uses





This project extends and opens up a Victorian church for wider community use, and examines how our existing, under-used buildings can become more available and work harder. The scheme combines a new building, containing a café, education room, bar and WCs, with the restoration of GE Street's Grade I-listed church. This has removed it from the Heritage at Risk register, cleaning the extraordinary painted ceiling and reactivating the undercroft. The project's overarching ambition has been to provide access – physical and cultural – to an under-used building, opening it up to its local community for other uses.

Words Jay Merrick
Photography Anthony Coleman

The most interesting architects are, at root, builders for whom the impulse to design can never be separated from the question of what materials and methods will be practically and meaningfully suitable for a particular project. To them, even the roughest early sketches of form imply materialities and structural configurations – especially when the sites involved are challenging.

This was certainly the case when George Edmund Street was designing and building St Mary Magdalene Church in Paddington between 1867 to 1872. He described its plan form – obtusely angled north side, straight south side, asymmetrical apse at the east end, off-centre octagonal needle spire – as 'a most prosaic and commonplace compliance with a "hard must" which fortunately the architect of a Gothic building need never object to obey'.

The 'hard must' in this case was the position of the church, about 60m from the south edge of the Regent's Canal near Little Venice. The neighbourhood around the church was rebuilt in the 1960s and Pevsner noted then that it was 'no longer obvious that Street had to cope with a very restricted sloping site falling at an acute angle between two roads'. After post-war slum clearance in the area, one historian described the church as 'marooned, looking like some vast liner moored on the canal, amid the council flats of the Warwick Estate'.

The steep two-storey north-to-south fall, and a small asymmetrically trapezoid site between St Mary's west end and the north range of the church-aided primary school, was the physical 'hard must' faced by Dow Jones Architects in designing the church's Grand Junction scheme. The project was led

by the church, its vicar Henry Everett, and the Paddington Development Trust. It was funded by a £3.6 million Heritage Lottery grant and other donations approaching the ultimate £7 million cost.

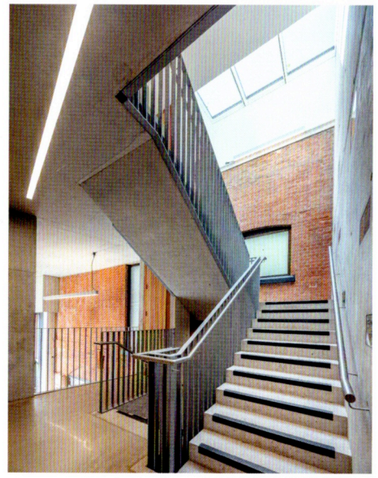
Its purpose is to reactivate this once physically at-risk church's sacred and secular relationship with the surrounding community. This, too, is a 'hard must', dating back to Charles Booth's first London poverty maps in 1886, which designated most of the housing around St Mary Mags – as it's known – as inhabited by poor or very poor people. And yet in that very year, as many as 1,000 people attended both morning and evening services at this Anglo-Catholic church; in 1902, the figure was around 400. Today, the church stands in Westminster's Westbourne ward, the second most deprived in London, where more than 40 per cent of children are impoverished.

'There was a really conscious attempt to make the building reach out before it was

finished,' says architect Biba Dow. Ten local volunteers took part in the pre-planning design group; other locals supported the builders; there were history research volunteers; and artist Linda Florence created decorative tiles for lavatory cubicles, designed by children and based on ornate tile-patterns in the nave.

Dow and fellow practice co-founder Alun Jones's first encounter with the church was starkly instructive. 'It was very desolate,' she recalls. 'It had a congregation of about 25 people and most of the time it wasn't open. It didn't have running water or lighting. So it was about how to make this stranded church useful, and about cultural access.' There were no lavatories, the clerestory windows leaked, rainwater drained into the crypt, and the electric wiring was dangerous.

The practice, working with conservation specialist Caroe Architecture, responded to two fundamental requirements: to repair



and renovate the building's internal (and some external) fabric; and to squeeze the new community-facing building into the fillet between the church and the school.

The renovations of the nave, chancel, apse, and undercroft have very obviously transformed these once semi-derelict volumes. There were detailed repairs and restorations to the highly ornate painted and tiled surfaces in the nave and chancel, the most striking of which are depictions of saints on the vaulted ceiling. The undercroft's geometrically luscious concrete and brick-pillared structure – Street's massive slope-mediating table, on which the nave and apse stands – has been meticulously restored, and Dow Jones has inserted lighting and heating and ventilation systems without compromising the wonderfully atmospheric character of what is now an event space.

The new gap-filling building rises four storeys, beginning at the undercroft floor

level. The core structure is cast concrete, and its envelope is formed with precast trabeated, ashlar-like concrete elements, glazing, and shimmering black, metallic-effect ceramic tiles, mostly smooth but with some embossed patterning derived from the geometries of the nave's decorative floor tiles.

The architectural exploration for this building produced many drawn and modelled iterations. In some, the north façade was flat, or brick-panelled; one version proposed a gold-coloured ceramic envelope. But ultimately, explains Dow, 'the church is brick and stone, so something like stone is used for emphasis in a planar way. And something like brick, but glazed, and bringing internal decoration outside.' This was a thoroughly contextual design response, mollifying Historic England and the Diocesan Advisory Committee.

The very narrow south-facing elevation is glazed to about 1.5-storeys, and the key external feature is a lantern rising from its south-east corner. The much wider, mostly glazed north elevation, pushes out beyond the line of the church, with a similar lantern at its north-west corner, slightly cranked in plan – an echo, perhaps, of the church's subtly cranked north side. These two pop-ups, and the almost entirely tiled west flank, send an obvious signal: step this way, something new and inclusive is happening here.

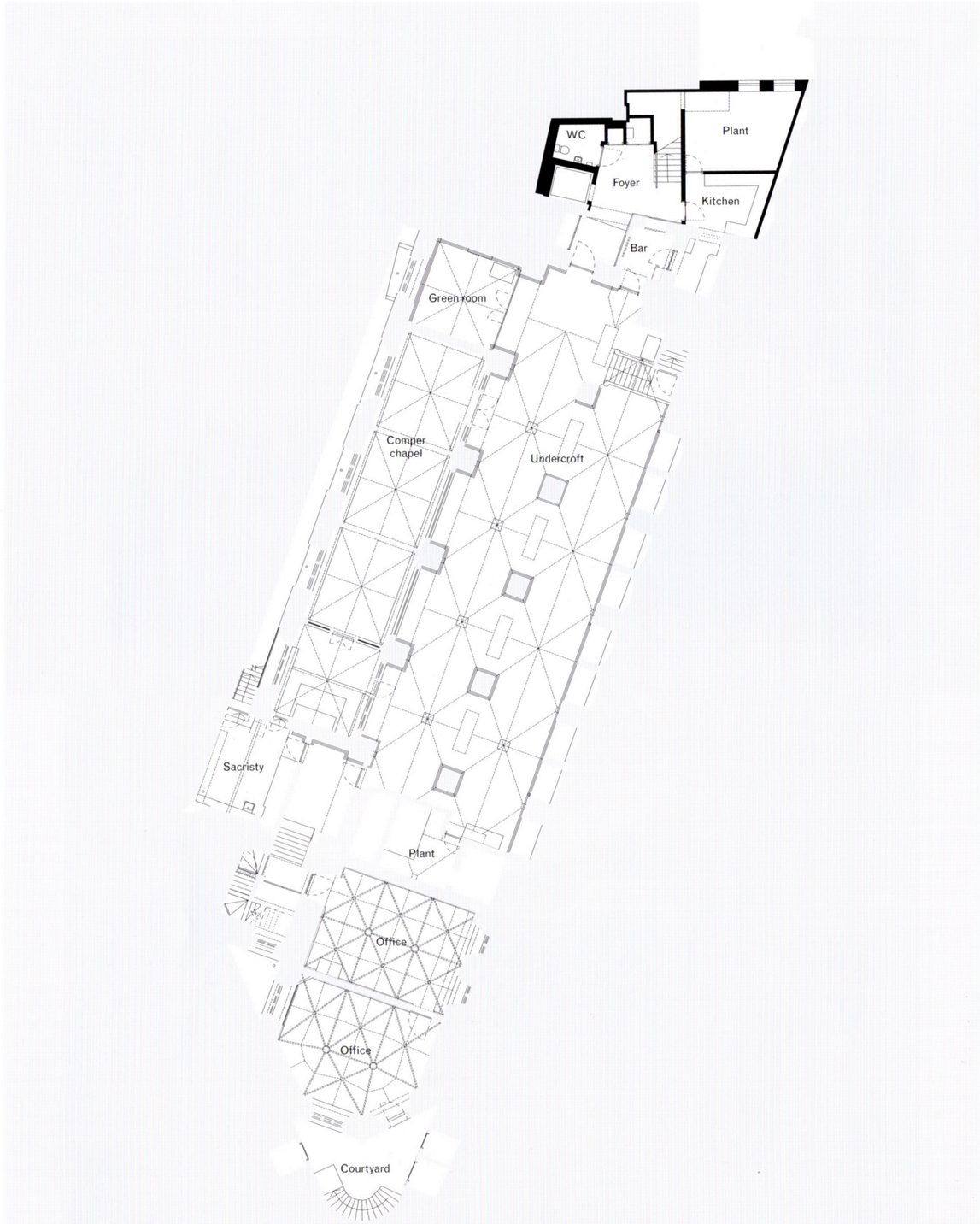
Inside, the concrete staircase and the lift core rise in more or less the middle of the plan, past historic timeline panels set into the walls, which should be bigger. The connection of the double-height reception volume with the top-lit staircase volume is very effectively decompressing, and there are direct connections to the nave (punched through its only undecorated wall) and the undercroft.

The light-filled ground-floor café and the first-floor education room are off the north side of the stairwell, with a volunteers' room on the south side above the reception volume. There are two incidental but pleasing touches: the exposure of the once-external corniced brick wall of the school, which now forms part of the interior surface of the reception space; and table-tops which carry images derived from the original stained glass designed by Henry Holiday.

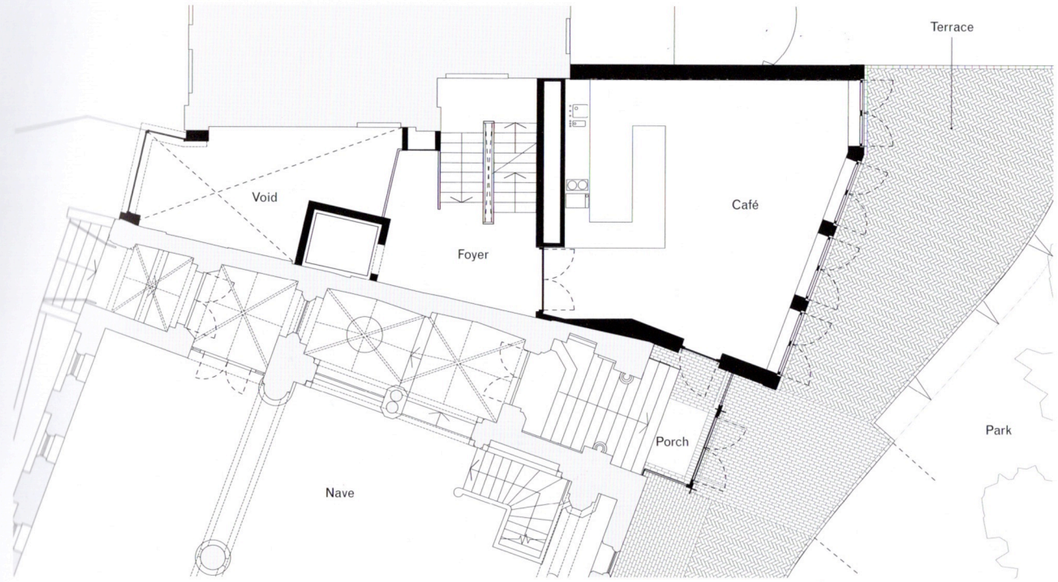
The project awaits its final pièce de résistance: the restoration of the St Sepulchre crypt chapel, originally by Ninian Comper – 'a lovingly created world of painstakingly accurate perpendicular detail' according to Pevsner, which once left the poet John Betjeman and the artist John Piper awestruck.

Project data

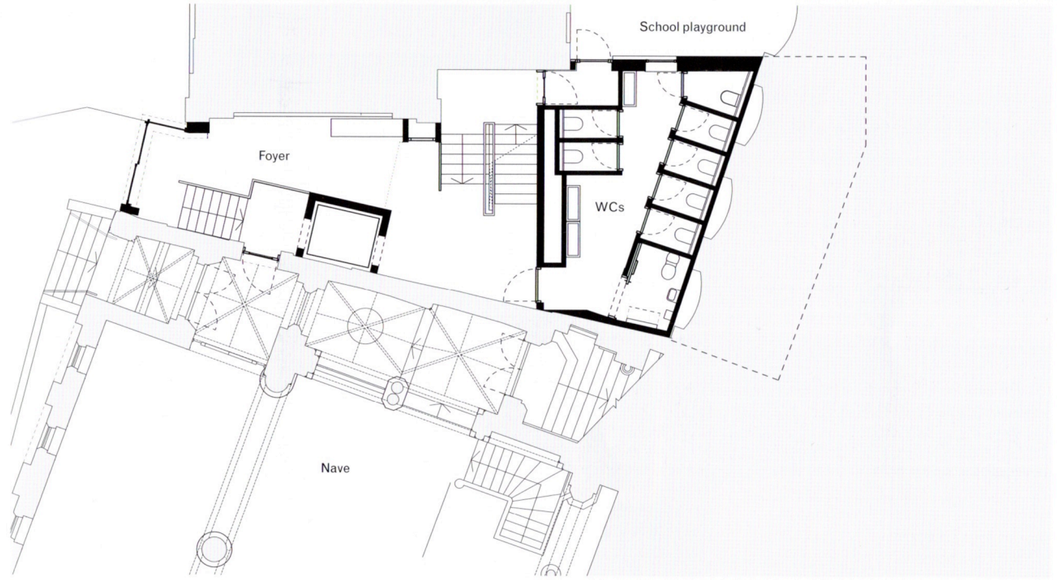
Start on site July 2017
Completion July 2019
Gross internal floor area
Church 11,50m²; new building 314m²
Construction cost £3.5 million
Construction cost per m²
£2,191 (new building)
Architect Dow Jones Architects
Client The Paddington Development Trust and the vicar and Parochial Church Council of St Mary Magdalene Church, Paddington
Structural engineer Momentum
MEP consultant Max Fordham
Quantity surveyor William G Dick
Project manager Gardiner & Theobald
CDM co-ordinator Stroma
Approved building inspector Assent Building
Main contractor Lengard
CAD software used Vectorworks
Conservation architect Caroe Architecture
Heritage consultant Alan Baxter
Access consultant Access=Design
Catering consultant Lynda Brewer
Artist Linda Florence
Interpretation Simon Leach Design



Undercroft plan



Canal level plan



Ground floor plan

Section A-A

Architect's view

Uniquely, this project is a collaboration between the parish and a community development trust, sharing a building and a programme for social mission. This is the first example of a church remaining a place of worship and sharing its building with a secular body, made possible by a 2011 Pastoral Measure. So we have worked with two clients: the vicar, Henry Everett, and his parochial church council; and Paddington Development Trust, a community trust which supports local residents with employment, training and education.

When GE Street designed his church, it was the last building plot in a densely urban site, hemmed in by flat-fronted Georgian houses in multi-occupancy. Slum clearance in the 1950s and a changing community left the church disconnected, both physically and culturally. Our building provides an alternative reading of the church, and a new way in. Wider access seems particularly important at a time when accessible, free and welcoming public buildings are under threat after a decade of funding cuts, and when the environmental benefits of working with existing buildings are increasingly urgent.

The interesting part of the project for us was how to make a new building that was both neighbourly to the church, reconnecting it to its surroundings, and that developed its own architectural identity distinct from the church. Large lantern windows announce activity and articulate corners, and the choice of two materials – concrete and faience – turns the church inside out.

We have done as little work as possible in the church itself, other than cleaning and repairing, and installing services, bringing an under-used 150-year-old building into life, with all the whole-life carbon benefits of reuse. In terms of material choices, we have used timber – a carbon store – as much as possible for interventions in the church and for the new building. All materials have been chosen to be self-finishing; where possible, we have left walls unplastered and unpainted, reducing the need for additional materials and maintenance. UK-based manufacturers were sought wherever possible, such as the faience made by Darwen Terracotta in Blackburn.

The scheme has been used as a pilot project under the Diocese of London's Generic Building Solutions programme, Route 2050, a strategic long-term plan adopted by the Diocese of London with the aim of reducing energy use and CO_2 emissions of all its buildings. This plan is part of the Church of England's national Shrinking the Footprint campaign, looking at reducing the energy use and carbon emissions of every church, congregation and church member.

Biba Dow, director, Dow Jones Architects

Client's view

We are a partnership, of an Anglican parish church and a community development trust, and collaboration has been central to this project, with local people involved in various ways, so they now feel a sense of ownership.

The annexe enables the whole church to be used for a wide range of purposes, giving access both physically and also culturally (as a neutral space which provides a 'soft entry' to the church). Within the church, the undercroft has been transformed into a warm, welcoming space from the slum it was before, and its poured concrete vault (of 1865) gave the inspiration to lots of exposed concrete in the annexe. A keynote of GE Street's building was honesty, and that shines through Dow Jones's annexe as well. The glittering faience cladding announces the presence of the new building and strikes a totally modern note while also being a very Victorian material, and hinting at the glittering splendours inside the church. We are delighted with the pictorial tiles, illustrating the history of Paddington, designed by local people with artist Linda Florence, which ascend the staircase, and we take great pleasure in the light and space achieved in a very small building. The café creates a safe public space on Westbourne Green. The annexe is a building of great quality of which local people can be justly proud.

Henry Everett, vicar of St Mary Magdalene, Paddington, and Toby Gale, Paddington Development Trust

Conservation architect's view

The really fine judgements of historic buildings conservation do not easily play out thrillingly for architectural reportage. Nevertheless, two of our most obsessive specification judgements do 'read' in the finished works. Externally we had to decide how to repoint and repair GE Street's brickwork. Extensive research into the history of mortars led us to conclude that Street did some cunning work in his original mortars to 'suppress' the whiteness of the jointing and thus stress the monolithic masonry forms. Our new mortars, using hot-limes, initially were specified with the lime toned back with a PFA pozzolan applied after tending the new mortar. Doing samples, we discovered that this mortar set too rapidly and the surface failed. With Cliveden Conservation, we then devised a method using Keim silicate paint to achieve the right enduring appearance, which has blended very well into the overall appearance of the massive exterior walls.

Internally, the most challenging judgements concerned the conservation of the two great schemes of decoration: the Nave timber ceiling and the wonderous heavenly scenes of the Chancel masonry vaults. Both had received very unhappy treatments in the 20th century. There had been a particularly damaging, almost violent, scrubbing of the 1873 Daniel Bell decorative scheme. Deploying the conservators' 'six inches, six foot rule' we agreed the necessary retouching of decorative paintwork so that, close-to, the intervention is abundantly clear and honest, but the harmony of the whole is recovered when seen from further afield.

Oliver Caroe, conservation architect, Caroe Architecture

Performance data

On-site energy generation 0%
Heating and hot water load
57.28 kWh/m²/yr (new build)
Total energy load
78.64 kWh/m²/yr (new build)
Annual CO_2 emissions
46.6 kg/m² (whole site)
23.2 kg/m² (new build)
Water consumption 5 litres per person per day
Overall area-weighted U-value
0.26 W/m² (new build)

Working detail

We wanted the façade to reflect the church's richly decorated interior, acting as a beacon that would announce the church's new purpose to the community. The interior materials create a rich experience of contrasting colours, textures and lustre, and we were attracted by how the glazed tiles change and glitter as you move around the nave. We sought a material that would bring the same quality to the exterior of Grand Junction.

The material we chose to provide quality was faience: glazed terracotta, produced by Darwen Terracotta in Blackburn. The glaze we developed with them is highly reflective and reacts to changing light conditions, giving off a warm hue that ranges from gold to black. The relief frieze we developed to wrap around the building further enhances this, as its raised edges catch the light. The sheen and colour of the pointing complemented the faience to make a cohesive surface.

The façade is built as a rainscreen, which bears its own weight. The faience is supported by steelwork at each floor, and then retained by stainless-steel dowels, fixed back to the blockwork wall. The cavity contains a breather membrane and the insulation. The building's doors and windows use a slim steel-frame system, and are surrounded by precast concrete panels which match the church's Portland stone; both of which are fixed back to the building's primary structure by steel brackets. The building is finished with warm brown-coloured zinc flashings, sills and copings which further contribute to the building's warm, shimmering palate.

Wyn Lloyd Jones, project architect, Dow Jones Architects

North elevation

North façade envelope detail