IBP Awards Architecture Writer of the Year 2019 submission

Isabelle Priest *Assistant editor* RIBA Journal

Articles:

'Back to black' (RIBA Journal, October 2018)

This article was produced for our October 2018 Houses special, the first special of its kind in RIBA Journal and was the lead article for the section of five houses selected. The piece reviews a house on the Isle of Skye designed by Mary Arnold Forster for a couple moving from Oxford to transform their lives. The building harks back to the Highland long black houses of a pre-English Scotland to find a way of living appropriate for contemporary family life. It picks up ideas of Scottish nationalism emerging in the region's architecture. The article was one of our most popular articles ever online.

'Heaps of history' (RIBA Journal, July 2019)

Buildings are not just about creating experiences or containing functions but can also be about changing mindsets. 'Heaps of history' takes readers to a little-known part of France that was once the principal centres for coal mining but more recently had become depressed, uncared for and the butt of stereotyped jokes. The article reviews a part open-air museum, part social housing scheme in one of the former mining villages built by one of the first coal companies when the area was still very much agricultural. Atelier d'Architecture Philippe Prost's renovation and new building have helped explain to local people the cultural significance of their history and changed the perception of an area nationally.

'Morality tale' (RIBA Journal, August online)

This article reviews Mikhail Riches' Stirling Prize shortlisted Goldsmith Street project in Norwich. The scheme, commissioned by the council is one of its first 100% social housing schemes for decades, and is 100% Passivhaus certified too as a means of keeping running costs for residents low. The article outlines how the extra thought and energy, as well as higher quality materials, required to achieve its thermal performance are brave but there's an underlying hopelessness to it all because of the continuing discounts and possibilities of the government's policy of Help to Buy.

Buildings

Black Shed

This unassuming home on Skye is a deeply thoughtful and spiritual interpretation of the Highland – possibly providing answers for modern families too Words: Isabelle Priest Photographs: David Barbour



For a fleeting moment I'm worried. I've spent most of the previous day getting here, and as I drive over the craggy terrain on the five-mile single track road from Broadford, the pair of black sheds that begins to emerge – that can only be what I've come to see – look like they might be a disappointment. Is all I'm really looking at two quite basic constructions of black-coated corrugated aluminium sheeting just beside the road? 'This is architecture too,' I remind myself as I run through the rain and galvanised steel gate up the drive.

I hadn't thought much about the exterior when we chose it for this special issue. Now I wonder if that was a mistake. From the outside The Black Shed, as it is known to its owners, architect-turned-academic Helena Webster and liberal rabbi Judith Rosen-Berry, is just that. (Its architect Mary Arnold-Forster calls it 'Heaste' after the crofting community where it is located.)

With the smaller building, a workshop, sitting parallel to the road and the larger main

one perpendicular to it for privacy, the project doesn't look like much. It isn't supposed to – not to appear modest in its surroundings but, at the owners' request, so that it be typical of them – a single form and materiality common to the rusting tin buildings all around; the chapel over the road, village halls built elsewhere on Skye, animal shelters and barns.

At first view (the weather doesn't allow a double take) I'm not sure whether it is just, God forbid, a cheaply built house. But this is actually a heavily intellectualised, even polemical, home.

'It had got to the point where it was time for a change,' explains Webster. 'Either move institutions, job positions, or do something else. Judith too was getting dragged in the wrong direction. We haven't got children, so we decided to do something mad': find a plot, commission a house, quit their jobs and move from Oxford, where they had lived for much of their lives, to the Scottish Highlands.

About this time Webster was also writing



Buildings Black Shed

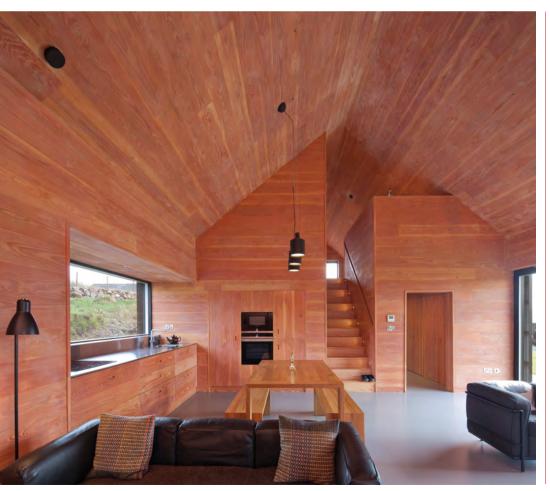
We always joked about having a one-room house with a huge table down the middle

Below Webster fought hard not to have a bathroom upstairs but Rosen-Berry has always wanted a timber tub.





Below The 'all space' enhanced by the asymmetry of the first floor opening and with the kitchen set into a bay.



an essay for the Traditional Dwellings and Settlements Review, and becoming increasingly interested in the houses designed by Rural Design and Dualchas trying to create a modern vernacular based on traditional local blackhouses. These were single-storey longhouses with curved ends and rush or heather roofs, where animals lived at one end, people at the other, and functions were defined by elements – hearth, chairs, box beds – not rooms.

'I wanted to get away from the two-up, two-down of our Edwardian house in Oxford. I'd always felt constrained by it because it was built at a certain time for a certain family unit that we didn't conform to,' explains Webster. 'We always joked about having a one-room house with a huge table down the centre where you could sleep at one end, work in the middle and eat at the other. In lifestyle it came from a different place, but almost went back.'

Finding a site took three years, but eventually the couple went back to Mary Arnold-Forster who was working at Dualchas but now has her own practice. She gave them the keys to her house to look around and they gave her a slideshow of things they liked, including Scott's Arctic hut, Zumthor's alpine chalets and Le Corbusier's Villa La Roche.

Entering the house at the gable end from



the torrent outside, in contrast to the perceived thinness of the exterior, this is the kind of building where you can shut the door and let the weather whirl silently behind you – protected by the thickness of the walls, closeness of the space, warmth and homely smell of the Douglas fir lining. The house is about being inside, physically and mentally.

Yet, as I hang my coat on one of the five pegs and see the tree trunk block to help me take off my shoes, I realise it is also incredibly practical. 'This is Dotty the dog's bathroom,' says Webster as she pulls across a pocket door on the other side of the neat cube hall and opens one to her right. 'We can come in from a walk and wash her without her dirtying everywhere.'

Ahead, the hall squeezes through to a tunnel-like corridor, lined on one side with horizontally stacked books, on the other by timber cupboards for the many coats required to live here. To the right is another pocket door to the only non-utility room in the house – a two-person study with a box bed for guests sneaked in. 'Mary kept wanting us to have more bedrooms, but we were adamant there shouldn't be any rooms that could be shut off,' recounts Webster.

At the end of the corridor, at the midpoint in the plan, with the visitor by then in full anticipation of what lies beyond, an entranceway releases into a double-height space that





This is the owner's crucial 'all space'. At ground level the squat plan feels intimate, but look up and it is majestic

Top The guest box bed is inspired by traditional Highland ones that protected linen from falling soot.

Middle The two-part composition. The owners hope to create a further mezzanine in the workshop for a library.

Bottom Looking back from the corridor to the front door.

reaches to the rafters and stretches back up behind the full length of the house at first floor level. In one corner, a sofa and armchairs are arranged around the TV next to a wood-burning stove, in another, by the kitchen set into a bay, is a table with bench seating. A central stair leads to the mezzanine where the main bedroom and a study balcony overlook the void.

True to the longhouse, you can see from one side to the other. This is the owners' crucial 'all space' – for working, resting and eating. At ground level the squat plan feels intimate but look up and it is majestic. A few carefully punched windows mean sunlight blasts straight down the corridor from the glazed front door in the morning and tracks round during the day to create modulated light and shadows across the smooth grey resin floor.

But the all-timber lining is what makes the difference to this project. The wide horizontal boards have a cosy quality. They effortlessly mould into bookshelves, cabinets and stairs, filling the spaces with a radiant pink hue – unglamorously caused by the fire retardant, but that does set the house apart from the Swiss chalets it references.

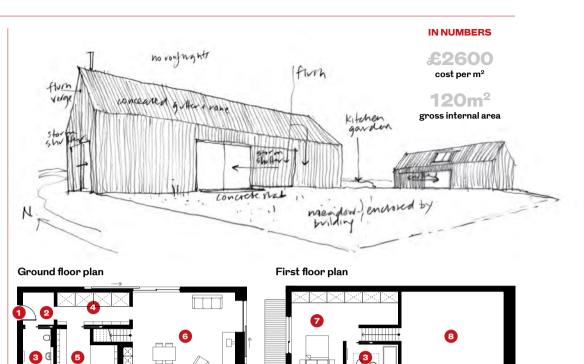
The collectedness and serenity of the spatial experience, however, disguises the polemic of its being – its intentions, what it says and means for Skye, the Highlands and

This building is part of a movement trying to assert a more authentic cultural regeneration

Scotland. This architecture is part of a movement trying to assert a more authentic cultural regeneration that supports Gaelic speaking too - for that reason planners here can't get enough of it.

The resurrection of the blackhouses is underpinned, as Webster explains in her article, by a discourse that converges to mean a better pre-English/Union identity, and provides evidence of an independent strand of architecture that finds more commonality with the longhouses of northern Europe than the Victorian 'white houses' on Skye, perceived as English - though Heaste's architect and owners are all English and I have





spent enough time on Skye to see English influence is helping finance the island's change in direction.

I don't see this as regrettable but celebratory. The modern vernacular houses being designed on the west coast of Scotland are compelling, particularly as a group. Examined at an individual level they aren't always enough architecturally - as with my first impression here. Heaste has, however, laid various external, international, pointers on its shores - the Arctic tent, the Parisian house that combine to add a crucial bit of wider intelligence to the design and expand the genre.

Heaste, though, is also important at a personal level that could have greater resonances as well. Webster and Rosen-Berry say it is a house that fits them, how they want to live, who they feel they are. The couple have been together for more than 20 years, but it is while living here that they have been moved to marry. As buildings in Scotland do not have to be licensed for weddings, their 'all space' will be for marrying too.

With the primariness of its apex lined in wood, surrounded by water, wilderness and wild weather, the space speaks of Heidegger's fourfold of what it means to dwell and summons ideas of the first places of devotion as clearings in the forest. What more could you want from a house than that?

- Entrance 1
- 2 Hall 3 Bathroom
- 4
- Library/storage corridor 5
- Study/guest bedroom 6 'All space' living, dining,
- working, kitchen 7

Below Barn-like and lit

up at night.

Main bedroom 8 Void

> Client Helena Webster and Judith Rosen-Berry Architect Mary Arnold-Forster Architects Main contractor Allen Cowe Builders **Civil and structural** Engineer IPM Associates Douglas fir Dinesen **Cladding** Plannja





Heaps of history

RIBA International Prize nominee Philippe Prost's restoration of a mining village in northern France is helping transform the area's reputation too, as vegetation reclaims the once menacing slag heaps Words: Isabelle Priest This image : Antéale





When you're driving south along the A1 from Lille in northern France, or coming from Paris in the opposite direction, there's a moment when the relatively flat, uninteresting landscape recedes and suddenly you're in a valley formed by mountainous slag heaps. Nothing prepares you for it. One minute there's nothing, the next slag heaps are everywhere – all sizes, types and forms, conical, plateau, truncated and 'modern'.

Thirty years ago, the sight might have caused rear seat passengers in the car to hunker down and hold on tight. The mounds loomed large and dark above the landscape and so did everything they stood for. Man's activities prised nature from this place until they suffered the same fate. But today, green-



Buildings Open air museum

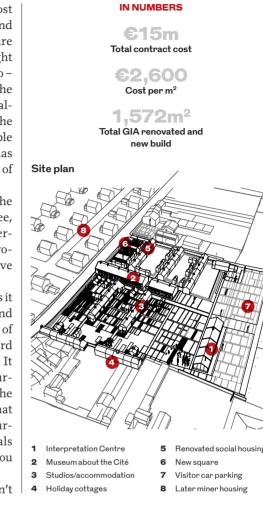
ing at their bases, the slag heaps are the most visible remnants of a period in our social and industrial history whose passing people are just about coming to terms with. The fraught political ending that took place decades ago – strikes, unemployment and upheaval as the government closed down the then nationalised coal industry – has blown away with the coal dust and an appreciation of the people and places which enabled that history has descended, accompanied by a sprinkling of money and remembrance.

Now, when you cross that point on the motorway, it's not just slag heaps you see, there is also a sign explaining you are entering a UNESCO World Heritage Site – a protected landscape status that most would have found laughable until very recently.

The bassin minier – valley of miners – as it is known, stretches in an arc 120km long and 20km wide from the Belgian border east of Valenciennes over the départements of Nord and Pas-de-Calais to the west of Béthune. It was awarded its status in 2012 as a cultural, evolving, living heritage. It's not just the slag heaps (51 of the circa 350 are listed), that matter though, it's the whole set-up – the urbanism, methods of construction, materials and ways of life that look so ordinary until you think twice about them.

Coal mining on an industrial scale didn't





begin here in France, but the characteristics that developed in this region are unusual and intensive. The huge mural in the new centre of interpretation designed by Atelier d'Architecture Philippe Prost (AAPP) in Bruay-la-Buissière shows how from the 1720s deeper mines, advancing methods and greater volumes transformed a primarily rural landscape into an industrial one of pits, shafts, processing plants and worker housing.

Land was cheap so industrialists bought it speculatively to test for coal. If none was found, they would use it for equipment and ancillary buildings or housing for the vast numbers of people required to work in the mines, who came from all over the world. Buildings were mostly low-rise and horizontal because they cost less. Consequently in addition to the slag heaps the UNESCO valley contains 800 models of workers' housing; 80,000 homes spread over more than 700 mining villages or estates. Most of them were made using the red clay from the companies' land, fired using their own coal and designed by their own engineers.

AAPP's Interpretation Centre is in one of the earliest of these villages, la Cité des Électriciens, built by the Bruay Mining Company between 1856 and 1861. By 1918 production was 4.5m tonnes a year and the firm employed 20,505 people. But when the Open air museum

Buildings

This is the simplest type of architecture with its roots in agricultural buildings

houses were built, most of the miners would have been former agricultural day labourers. Without alternative reference points, the architecture of the Cité was equally transitional – 43 low, long narrow houses of 30 to 50m² in seven 'barreau' or terraces of four or five, some back-to-back, designed to accommodate families plus their chickens and rabbits.

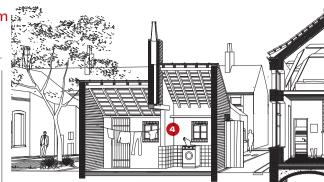
'We are at the first rung of the ladder,' explains Prost. 'This is the simplest type of architecture which has its roots in rural and agricultural buildings.' Each plot had a garden for growing vegetables, a fruit tree and house with a coal bunker in the cellar, open living space on the ground floor and bedrooms in the attic. Other facilities – the bakehouse, latrines, washhouses and wells – would initially have been communal before private outhouses were built by the company to improve hygiene and thereby productivity.

Today people from outside the bassin minier view it with new curiosity and wistfulness. But as recently as 2008, in the film Bienvenue chez les Ch'tis, this Cité played the role of a depressed, sparsely populated town of outrageously coarse and uncivilised people, a comical send-up of how the rest of France stereotyped this part of the north. The pits closed in Bruay in 1969 (coal mining finished across northern France in 1991) and it was in a state of 'extreme dilapidation'.

Yet the film became the highest grossing in France and shone a spotlight on what a unique and culturally significant place it is. By the time Prost arrived on the project after winning a competition in 2013, the last miner's widow had just departed, and walls moved if you touched them.

The aim of the project was to restore the site to its early condition. Half of it has been reinstated as social housing by Maisons et Cités. The other half has become a type of open-air museum, which director Isabelle Mauchin says was conceived to communicate to locals the importance of the mining valley and why it has been awarded protected status. It is a gateway for visitors to the region too.

As the architect of the lauded Ring of



Section through renewed house.

- 1 Living space
- 2 Bedroom
- 3 Cellar
- 4 Utility and drying room5 Mine
- **Below** View of the bedroom from the bathroom of one of the new holiday lets.

Bottom Some areas of wallpaper and flooring have been preserved in the museum about how people lived in the village.



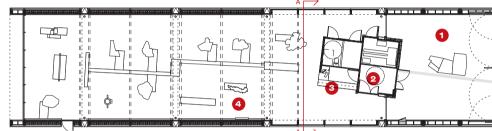
Remembrance nearby, for Prost the project is therefore a memorial and rescue. The inhabited houses have been refurbished and extended to provide modern accommodation with low fenced gardens and a square to the road. The rest of the site is open to the public. The largest terrace of back-to-backs is now the museum of the Cité itself, its collection of artefacts showing who lived in the village and what life was like. Openings between the 10 houses create a series of linked spaces that recall the previous houses but give a level of continuity to the exhibition - photographs, audio, news cuttings, snapshots of the layers of wallpaper and lino that were found in situ when the project began. You can peek down the horrendously steep stair to the cellars and enter two bedrooms as they would have been, washed with green and ultramarine.

Elsewhere, the former miners' houses have become studios, gallery spaces and accommodation for artists in residence, as well



JULIEN LANOO (2)





as five holiday lets. Here, again, the approach has been to knock multiple homes together to make bigger, more contemporary spaces. If ceilings had collapsed the spaces have been left double-height.

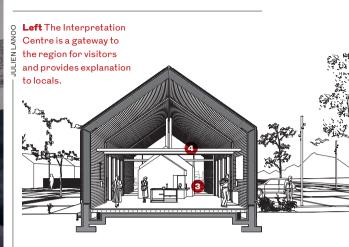
The only new building is the interpretation centre, which sits on the footprint of a temporary shelter to house refugees, built by the mining company during World War I and destroyed by fire in the '90s. Volumetrically it is a replica of the larger barreau, constructed using lighter, more sustainable materials of today; wood, recycled denim insulation and glazed tiles. The design bridges inside and out, providing an open space that, Prost discovered, would not have been possible within any of the old terraces because of their fragile condition. The new building's glazing repeats the rhythm of the houses opposite and its red glazed tiles transfigure the brick as a rainscreen. A reception cabin at the threshold playfully recalls the outbuildings.

Overall, from the exterior the project is masterful – faithful and inventive. The gardens have also been recreated by landscape designer FORR to demonstrate how miners used their plots, based on analysis of hundreds of photographs and intense research into the flora found, including dozens of grains brought by immigrants. The new centre feels very much of the red and black, clay and coal it was intended to evoke. The restor-

Interpretation Centre ground floor plan.

- 1 Covered entrance
- 2 Lobby3 Reception
- 3 Reception4 Main exhibition space

Below The outhouses (right) were added later. Each is a series of attached buildings with a latrine, washhouse and chicken coop. Credits **Architect** Atelier d'Architecture Philippe Prost **Client** Communauté d'agglomération de Béthune-Bruay, Artois-Lys Romane **Engineer** Verdi Ingénierie **Landscape** FORR **Exhibition design** Du&Ma with Catherine Mariette



Interpretation Centre, section A-A.

ation transports you to an in-between time at the dawn of the industrial revolution in this part of France: semi-bucolic, communal, if portrayed quaintly.

However, when it comes to the interiors of the restored buildings, too much has been stripped away, joined together, plastered over, concreted and renewed. The buildings have lost touch with their previous lives and inhabitants; they have been sanitised into generic contemporary spaces. Surely the charm of renting one of the cottages is to live, just for a few days, like a miner may have done, a bit cramped but cosy? That cannot be undone, but the project is still an enjoyable, important and admirable one that raises the profile of the mining valley and shows there is more to it than just its slag heaps – a change of mindset that could be useful elsewhere.



28

Mopality tale

Mikhail Riches' Goldsmith Street is everything social housing should be, but Right to Buy could scupper its fine intentions Words: Isabelle Priest Photographs: Tim Crocker OLDSMITH STREE



Right The seven rows of terraces are now complete, with a further 12 flats due in the second phase at the top corner of the park.

Left View along Goldsmith Street of one of the apartment blocks. Each has its own external space and front door.

IN NUMBERS





£14.9m construction cost



29kg/m² Estimated total CO₂ emissions equivalent You've probably seen Mikhail Riches' Goldsmith Street, Norwich in the press: it's on the Stirling Prize shortlist of six. But before we get into the details of what makes it an interesting and deserving project, there are two things you need to know.

The first is that this 93-dwelling scheme, of 45 houses and 48 apartments, is 100% social housing – not affordable, not shared ownership, not with separate private and social playgrounds, just good old social rent housing that Norwich council built itself. The second crucial fact is that even though residents only finished moving into their new homes in June, they can immediately purchase them through Right-to-Buy – with a government discount. There is some ringfencing of what Norwich spent to build them but if the value of the homes goes up, the council will have to observe discounts of up to £82,800, which means the maximum allowance has more than doubled since 2012.

The backdrop to the project is that Norwich City Council has a housing waiting list of about 4,000 people. On top of what it already provides it needs to build an extra 270 homes a year, 240 of which must be socially rented while 30 can be shared ownership. Although the council owns a quarter of the city's total stock, roughly 15,000 homes (a quarter privately rented, the rest mainly owner occupied), before 1984 it owned 25,000, which was then 50% of the total. And it still loses about 150 homes through Right to Buy every year, so just to stand still it needs to build 420. Between it and housing 30



associations, the council plans to provide 180 in 2019.

The figures are a long way off meeting demand, but Goldsmith Street's contribution was made possible by legislation that acted concurrently and in opposition to the increased discounts available to council tenants buying their homes: the 2012 Housing Revenue Account Reform that gave local authorities greater control over their income, debts and finances. It was the first piece in a jigsaw of restructuring that has led to some councils once again building socially rented housing rather than relying on housing associations to build affordable homes for them, as they had done for years.

When the RIBA competition for Goldsmith Street was launched by Norwich council in 2008, this had been the planned approach. The local authority backed the competition to instil a level of quality and ambition, but it would be the responsibility of two housing associations to deliver the 100 homes. The competition received 105 responses, from as far away as Japan. Mikhail Riches' scheme won because its proposal for 14m wide terraced streets based on the layout of the cherished Victorian

Norwich council decided to complete the scheme itself rather than relying on housing associations

Golden Triangle area nearby won a casting vote from a former tenant of the sheltered housing that once stood on the site - and because it was the lowest rise and had the greatest number of houses. But the credit crunch happened, and Norwich was unable to sell the site. It remained vacant until 2013 when, enabled by the 2012 legislation, the council decided to complete the scheme itself and called up Mikhail Riches again.

In the intervening years, however, the council had become interested in Passivhaus, particularly as a means of tackling the fuel poverty which is one of the priorities on its corporate plan. It had already started work on developments of two, eight and 10 Passivhaus homes, and asked Mikhail Riches to amend the original passive solar design to Passivhaus certification.

'At that point we had done a scheme called Clay Field in Suffolk which was passive solar,' explains Annalie Riches, founding director, Mikhail Riches. 'BuroHappold had done the post-occupancy and discovered the houses performed really well. Even with less stringent airtightness and U-values they had reduced fuel bills significantly for residents...But Passivhaus wasn't really known in this country. We hadn't had much experience in it, so it was a massive learning curve.'

The houses were already designed in south-facing terraces with 15° pitched roofs to avoid overshadowing in winter and get light into the rooms in low sun, but there were extra considerations, from no letterboxes in front

Credits Architect Mikhail Riches with Cathy Hawley Client Norwich City Contractor RG Carter Structural engineer Rossi Long Consulting M&E Greengauge Building Energy **Passivhaus consultant** WARM Low Energy **Building Practice** Landscape architect BBUK Studio Quantity surveyor Hamson Baron Smith Project manager Mer CDM co-ordinator Goddards CDM Approved building inspector Build Insight CAD software used ArchiCAD

'We were introduced to Passivhaus by Hastoe 'One of the other things was the quality aspect, that

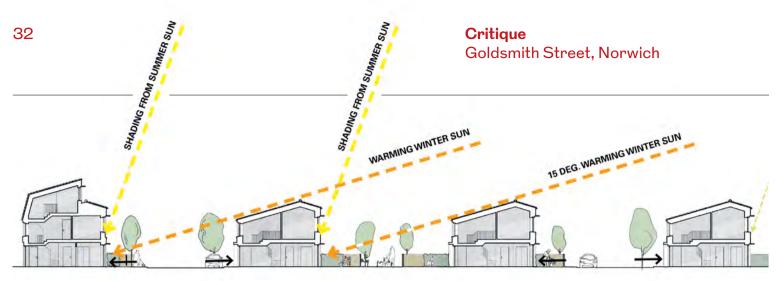
doors to having to redesign the gas supply and soil pipes because of airtightness and cold bridging. Housing Association - advocates who have done a number of schemes,' says Andrew Turnbull, senior housing development officer at Norwich. 'Then Broadland Housing took us to see theirs in north Norfolk and what won our councillors and senior managers over was speaking to the tenants who said it was a fantastic environment to live in. They talked anecdotally about health benefits including reduced asthma and eczema. you don't get a performance gap with Passivhaus. It does what it says on the tin and you hold the contractors to it



throughout construction so there's no getting out of it.'

Approached from Midland Street, off the main northwest thoroughfare out of the city centre, Goldsmith Street describes a series of seven terraces laid out eastto-west over a two-bay grid that reconnects routes and opens up what had been culs-de-sac. The estate unravels on a non-uniform 1.2ha plot that had been earmarked for development for a long time. It squeezes behind a stretch of tiny 1990s houses in the foreground and several midrise 1960s blocks of flats either side, some on their own mini ville radieuse landscaped settings, some in rows, as well as a flint walled church to the rear.

Within this, the estate is split in two by Greyhound Opening, a central avenue that leads between the



Above Sectional diagram showing how the shape of the roofs allows year-round sun to warm the houses. two-storey terraces, past a pair of mesmerising largeleafed tumbling Indian bean trees on a green to the right, through to the site-width terrace at the back. Bookending every row of houses are taller three-storey, hipped-roof blocks of flats. Each apartment has its own front door, opening in plan onto a mega structure of closed-off twisting staircases which removes the need for communal areas that require maintenance and can be a source of conflict. These are all one-bed with their own terrace whereas all the houses have two bedrooms except for five wider dormered four-bed ones.

'Originally we designed two-bed apartments and three-bed houses, but the bedroom tax came in and they were removed in response to that,' explains Riches.

There are roughly two types of houses. Those entered from the south have a landscaped front garden and those entered from the north don't, butting straight up to the pavement with internal plantation window shutters provided by the council instead. All, however, have their own rear gardens, which back onto further resident-only closed-off landscaped alleys or ginnels, wide enough for children to play in, visible to parents over and through the slightly lower than standard slatted fencing. In one, children have put up a basketball net, in another hopscotch markings are fading. The spaces have been used for community barbecues and get-togethers too. Where possible Mikhail Riches and the planners have tried to get rid of cars and roads to foster a sense of community, replacing them with street gardens full of plants, flowers and young trees. The whole estate only has 70% capacity for parking and much of it seems empty.

The houses themselves are built with longevity in mind – a fabric first approach of textured buff brick, glossy black pantile roof tiles, triple glazed aluminium



Right Planners were concerned about privacy for the north-entered dwellings so the council decided to provide them all with indoor multiadjustable shutters. first and second floor plans 3 2

windows and Cadisch mesh electricity boxes, bin store panels and garden gates as well as tiny individual window brises-soleil. As you walk around the estate the most crucial corners are curved, streets are tree-lined, bollards are solid timber, flower beds are tucked into any in-between space and there are 15 front entrance colours to allow each house or apartment owner to identify themselves by their chosen colour. Despite a £1m value engineering exercise mid-way through the project, there is also enough special detailing to give the architecture itself some extra character - ghost window recesses, scraped out pointing and brick balcony balustrade perforations. The things that were dropped to bring the scheme into the ± 17.3 m total cost include the rear brick facades, replaced with render; zinc roofs replaced by tiles (far more appropriate for the Dutch-influenced Norfolk context); and ceilings in the bedrooms, so they are now open to the rafters, and more convenient for the council when residents move out.

It's impossible not to realise the houses and estate have been built with the uttermost respect for residents, community, architecture, context, wider environmental agenda and architects as well (it was even procured through traditional contract). The place looks and feels lovely. There have been, though, extra costs involved - it is estimated Passivhaus added 10-15%. But compared with many locations in the UK, the $\pm 1,875/m^2$ construction cost is very reasonable. Happily, the council wishes to build more using 2019 legislation that has lifted borrowing caps, and get closer to meeting the annual 420 home deficit. It's good news for the housing crisis.

Yet there's an underlying hopelessness to this project. Norwich City Council has gone above and beyond what's usual to create better spaces and communities, with

It hurts to think of the grand effort and ambition that built these houses being so easily exploited by politics

lower maintenance and upkeep. The ginnels are brave. It will have benefits beyond social housing, allowing Norwich planners to demonstrate to private developers 'the impossible' they can achieve too. But ultimately the whole scheme is a big risk for the council, which may not reap the rewards of its long-term view if the residents do choose to buy their homes. The council cannot use all the money paid to build more, and nationally 40% of ex-council homes end up in private rental with far higher rents - paid sometimes by the local authority itself.

It hurts to think of the grand effort and ambition that built these houses being exploited so easily and cheaply by politics. Councils should be building council houses, they should be able to provide local people with local homes and they should be constructing and designing them using quality materials and innovative ideas, ready for a different environmental future. But right now it doesn't make that much sense. There needs to be protection. It could start with scrapping Right to Buy for new-build homes.

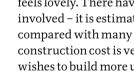
2 First floor apartment

A

Second floor apartment

Below The ginnels were considered a risk for the council as unmanaged space, but they are being adopted by residents.







Typical flat block: section and ground,

Ground floor apartment