

BRILLIANT BUILDINGS

THE GASCOIGNE NEIGHBOURHOOD

No-one left behind

How Willmott Dixon and Be First are working together to deliver an exciting future for Barking residents



A NEW TEMPLATE FOR COUNCIL-LED REGENERATION

One of the best things about regenerating the 1960s-built Gascoigne neighbourhood in east London is that it's a once-in-a-lifetime project. It's not just the scale, it's the ambition behind it. The guiding ethos is the vision of Barking and Dagenham Council's leader Darren Rodwell that "no-one is left behind". That feeds through to every aspect of what we do, how we do it, and the people that come with us on this amazing journey.

The Gascoigne neighbourhood will set the bar higher for future council-led regeneration. It will challenge the idea that affordable housing should look or feel different from private housing, inside or out. Led by Barking and Dagenham's direct delivery developer, Be First, the neighbourhood's multi-phase renewal is addressing other key questions, such as how to deliver low-carbon and net-zero-carbon homes, which cost less to run and achieve better levels of comfort than standard homes. It is also championing standardisation and offsite construction.

As well as better quality homes, our work here is creating opportunities for social mobility. I'm proud that we have many people from the local community working for us, and proud of the fantastic contribution they are making. We see their lives changing, and they in turn are changing our team dynamics and our approach.

When the new Gascoigne neighbourhood emerges, the legacy will be long-lasting and widespread. And the learning we take will also make us a better, more diverse business.

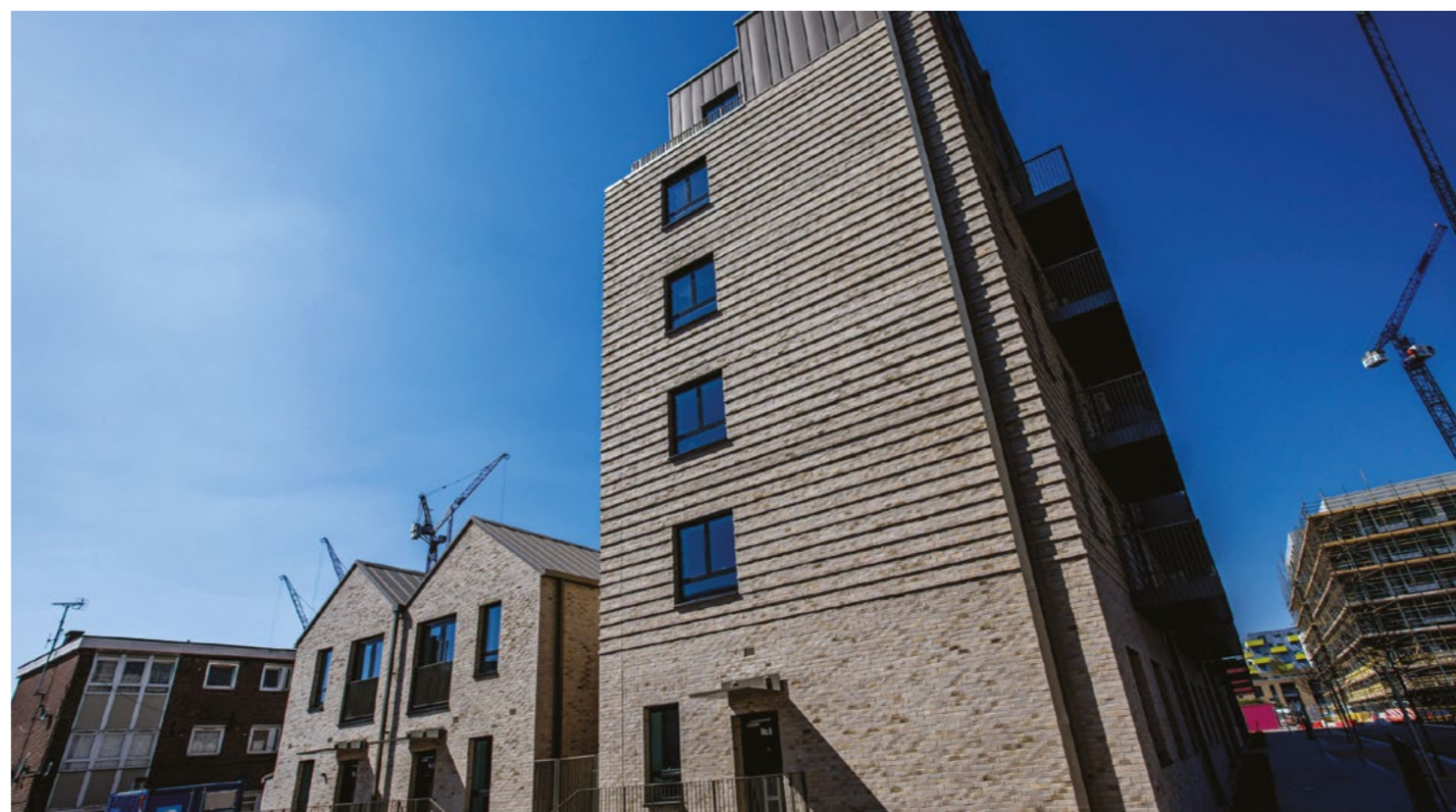


Steve Kitchen
Director of delivery, Willmott Dixon

This page: Completed homes in phase three of the renewal programme. In total, the new neighbourhood will deliver over 1,800 homes.

Opposite, top: Some of the 22 local apprentices who have worked with Willmott Dixon on the project.

Opposite, bottom: Pupils from Greatfields School helped to create artwork for the site hoardings.



Laying the groundwork for growth

How we are enriching lives and driving social mobility to leave a strong legacy for local residents

Park life

Designed with students from Greatfields School and created with local residents, Everdove Park is a "meanwhile park" – there on a temporary basis but showing the value of community spaces throughout the development programme.



Building lives

We are holding multiple interventions and events that create opportunities to deliver jobs, apprenticeships, work experience and skills for people from the local area.

Designed for better lives

The design of the Gascoigne neighbourhood pushes the boundaries of what affordable housing, and the associated public realm, looks like, to create homes that everyone can be proud of.

Net zero carbon

Pushing beyond the Building Regulations, the neighbourhood features homes that are net zero carbon in operation, and a project that uses offsite construction to meet Passivhaus airtightness standards.

Barking revival

The reimagining of the Gascoigne neighbourhood is at the heart of the council's multi-dimensional strategy to regenerate Barking town centre and the wider borough.



AMBITION AND VISION SHAPE BARKING AND DAGENHAM'S FUTURE

The regeneration of the Gascoigne neighbourhood is part of a far-reaching and ambitious plan to transform Barking and Dagenham. It is central to a strategy to reinvigorate the town centre into a creative district attracting people and jobs, and providing new space for growth.

The council plans to build 50,000 homes and create 20,000 jobs by 2037. This bold and imaginative vision makes the most of the borough's young population, providing living and working spaces for artists, film makers and other creatives.

Alongside the town centre regeneration

sit a raft of other initiatives: the expansion of Dagenham Docks, the creation of a media, science and technology hub at Dagenham East, the regeneration of Dagenham Heathway and development of Thames Road. There are further plans to run the A13 underground to free up space at ground level.

The concept of the 15-minute neighbourhood is at the heart of the plans. Pioneered in Paris, this is where everything is within 15 minutes of their home. Green spaces and connections are crucial so that active journeys, on foot or by bike, dominate.

"OUR OBJECTIVE HAS ALWAYS BEEN REGENERATION SO THAT NO-ONE IS LEFT BEHIND."

DARREN RODWELL, LEADER, BARKING AND DAGENHAM COUNCIL

Below: Willmott Dixon's team is delivering more than 500 homes across a mix of low-rise blocks.

In 2017, Barking and Dagenham set up Be First to oversee that journey. Now, it is the largest builder of council homes in London, responsible for 20 percent of all those under construction.

The Gascoigne neighbourhood is central to this vision of change and growth. The renewal of the 1960s-era towers and apartment blocks has been a long-term project. In 1999, the estate received an index score of 11.1 for social deprivation, placing it within the top 500 deprived places in the country. Its problems were further highlighted in 2004 by the BBC Panorama series, Tackling Tomorrow's

"WHEN WE WALK AWAY FROM HERE, IT WILL NOT LOOK ANY DIFFERENT TO A BERKELEY HOMES DEVELOPMENT."

STUART GRAY, SENIOR PLANNER, WILLMOTT DIXON

Tearaways, which followed the struggles of young people on the estate.

But change was coming. In 1999, the three tallest tower blocks were torn down and residents campaigned for the area to be demolished and rebuilt. Their wishes were granted when Barking and Dagenham opted to redesign and regenerate rather than upgrade what was already there.

The regeneration will deliver over 1,800 homes. Designed by top-tier architects and comprising a mix of tenures, these homes will compete with any private development and challenge the concept of "affordable" housing.



BUILDING PLACES, BUILDING LIVES – HOW WE’RE DRIVING SOCIAL MOBILITY



Willmott Dixon is working with Be First and two other contractors on the Gascoigne neighbourhood redevelopment. We are responsible for several of the phases, which will see our housing specialists deliver more than 500 homes across a mix of low-rise blocks close to Barking town centre. This giant project will be complete by the middle of this decade and act as a catalyst for the borough’s biggest change in a generation.

Yet, this is also about transforming people’s lives. For this, we must be part of the community, working with many talented local people to create Gascoigne’s future.

That’s the job of our social mobility team led by Natalie Sidey. Their work has ranged from interventions to boost wellbeing and building resilience in schoolchildren, to delivering job-seeking skills and providing work experience, training and employment. We have welcomed 22 local apprentices on site, totalling 548 apprentice weeks across all phases.



“THE PEOPLE WE HAVE RECRUITED FROM THE BOROUGH ARE NOW COMING BACK OUT WITH ME TO RECRUIT MORE PEOPLE LOCALLY.”

NATALIE SIDEY, SOCIAL VALUE MANAGER, WILLMOTT DIXON

Some of the highlights ...

■ Ashutosh Patel and India Cormack are among the local apprentices developing their skills with our team at Gascoigne. Ashutosh, who has a degree but was unemployed, is now our document controller and India is about to become a management trainee.

■ Over 16 months, 20 students from Greatfields School worked on the design of Everdove Park, transforming a derelict, boarded-up space into a bright community garden and play area. Their skills, confidence and teamwork grew with the project.

■ We ran a five-week Women in Construction programme with 17 girls from Greatfields School. While they designed their dream houses, women from our business visited, talked about their varied roles and answered the girls’ many questions.

■ We ran an enrichment programme for 120 college students, covering areas such as job roles, upskilling and writing CVs. Some of the students then joined us for work experience.

■ Working in collaboration with another framework contractor, we renovated an overgrown garden at Barking Learning Centre to create a new learning and family space.

■ We support local foodbank Humdum UK with donations and volunteering.

■ We were the sole supporter of a three-day Budding Brunel programme run by the Construction Youth Trust in November 2021. Some of the 21 students on the course are now undertaking work experience with us.

■ Working with a local artist from Studio 3 Arts, students from Greatfields School created artwork for the site hoardings to celebrate the heritage and aspirations of the area.

■ We have started a two-year mentoring programme with six Year 9 boys, aiming to increase their resilience and confidence.

The more involved we are, the more opportunities arise. For instance, we found out that a volunteer on one of our garden projects has a masters degree in engineering but had been out of work for a while. We arranged for them to work with one of our supply chain partners to regain confidence and employability skills.



Above: Willmott Dixon has engaged with local schools, giving site tours and supporting learning.

Above left: We worked with students from Greatfields School on designing Everdove Park, transforming a derelict space into a community garden and play area.

Left and below: India Cormack and Ashutosh Patel from the Gascoigne neighbourhood are forging careers at Willmott Dixon.



COLLABORATION THE KEY TO OFFSITE SUCCESS

With construction product prices and labour shortages on the rise, there has never been a more urgent need to improve productivity. At the Gascoigne neighbourhood, Willmott Dixon and Be First have adopted several approaches to achieve this, including systematic collaboration, offsite construction and standardisation.

Collaborative behaviour begins with our customer and designers in pre-construction, and continues throughout the project. Weekly, monthly and quarterly workshops with our supply chain help to flag up interface issues and get commitment and buy-in from those delivering the work. And for the client and contractor, this approach brings certainty to hit major milestones and end dates.

Early collaboration between designers and the supply chain is an essential part of offsite construction. For instance, the concrete frames at the Gascoigne neighbourhood are a hybrid of in-situ and precast units, with all of the vertical elements such as lift shaft walls and twin wall panels manufactured offsite. Switching from in-situ to precast concrete for these elements has a significant impact on build times – cutting between two and three days per cycle – but requires early interaction to ensure the openings and fixings are designed and manufactured correctly.

Other offsite-manufactured elements include utility cupboards and balconies. On future phases, Be First is looking to bring its framework contractors in earlier – RIBA Stage 2 rather than Stage 4 of design – which could bring further opportunities to design in viable offsite elements.

Willmott Dixon has been working towards standardisation with the development of its Yellow Book – an in-house guide to design,



installation and quality best practice which is updated with feedback from projects. The Yellow Book seeks to improve productivity and reduce health and safety risks. It is bearing fruit on the Gascoigne neighbourhood, where our supply chain partners are already familiar with much of its contents.

As the work of Collida, our in-house specialist Passivhaus division, shows, standardisation and offsite construction can also come together to create low-carbon buildings (see overleaf).

Above: The hybrid in-situ and precast concrete frame required early interaction between designers and manufacturers.

Right: Group chief executive Rick Willmott visited Gascoigne to see the latest progress first-hand.



“GOOD, EARLY COLLABORATION HAS ALLOWED US TO PURCHASE AT A FIXED PRICE WITH OUR SUPPLY CHAIN, AND THEREFORE REDUCE THE BUSINESS RISK.”

STUART GRAY, SENIOR PLANNER, WILLMOTT DIXON

“THE BEAUTY OF COLLABORATION AT THE DESIGN STAGE IS THAT WE CAN REALLY UNDERSTAND OUR CUSTOMERS’ GOALS AND CONSTRAINTS, AND THAT MEANS WE CAN BETTER DELIVER WHAT THEY NEED.”

AARON PEARSON, PROJECT DIRECTOR, WILLMOTT DIXON

CUTTING CARBON - AND ENERGY BILLS

For Be First, creating low-carbon homes makes perfect sense: as well as contributing towards carbon-cutting goals, it means residents' bills will be lower.

All homes are linked into the area's recently upgraded district heating system and many have photovoltaic (PV) panels on the roof to supply electricity needs. However, Be First is pushing further with its low-carbon ambitions as the first phases of Gascoigne East progress.

For instance, the fourth of the six blocks that Willmott Dixon is building will be zero carbon in operation. As well as adding PV to the roof and beefing up the U-values of the fabric of the building, the team took a hard look at all the interfaces and potential thermal bridging junctions to ensure there would be no unwanted hot air leaks.

Going Passivhaus

One of the smaller blocks, containing eight homes, will be constructed by Collida (see box). This approach combines extreme airtightness – to Passivhaus levels – with offsite construction methods.

For Be First, Willmott Dixon and Collida, this pilot project will investigate how offsite might be used on future phases. With resource shortages and rising costs, the relative cost of offsite construction is falling, especially when efficient design for manufacture and assembly is enabled by early collaboration.

The team is deploying a variety of means to reduce the project's embodied carbon. These include early waste reduction workshops; the reuse of demolition waste in the new

development; suppliers operating a closed-loop system where waste goes back to the factory; early grid connections to avoid the use of generators and diesel to power site offices; and using hydrotreated vegetable oil rather than diesel to power onsite equipment.

The use of offsite elements also helps with the reduction of waste and further reduces embodied carbon. Using precast vertical elements in the concrete frame allows the replacement of a high proportion of carbon-heavy cement with ground granulated blast-furnace slag (GGBS); this can be difficult to use for in-situ concrete since it takes longer to cure, slowing progress.

Looking more broadly, one key aim is to reduce carbon emissions from transport by encouraging travel with bikes, scooters and on foot around the neighbourhood and the town centre. The ample bike storage provision in completed blocks is testament to this.

Other strategies under consideration include technologies such as anaerobic digestion to further decarbonise Barking's district heating system.

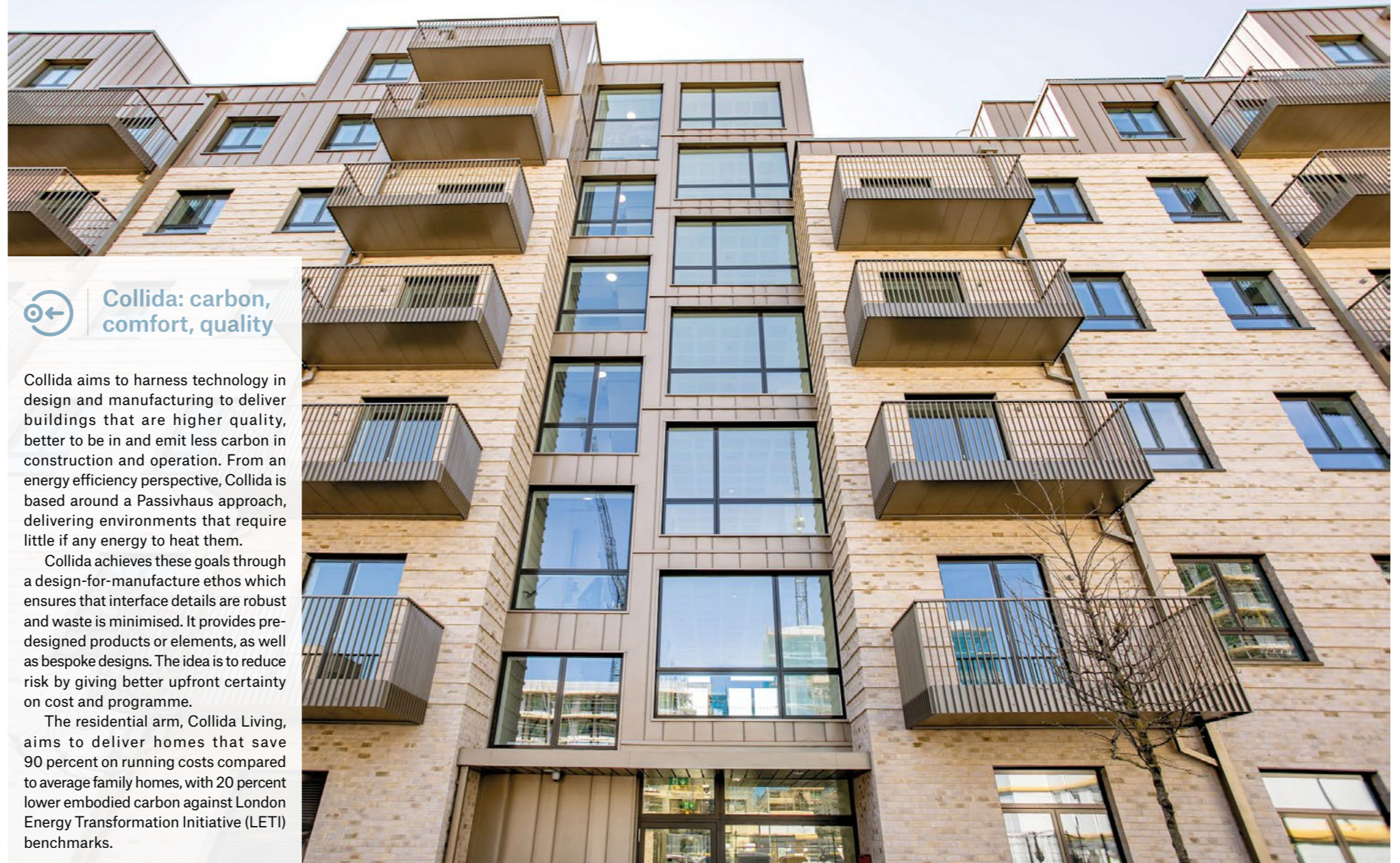
Below: A focus for Be First and Willmott Dixon is on homes that are zero carbon in operation. As part of this, Willmott Dixon's Collida will construct eight homes to Passivhaus levels, using offsite construction methods.

Right: Phase three's completion unlocks more new high-quality homes for local people.



“USING FUTURE CLIMATE-READY DESIGNS MEANS THAT WE WILL ALSO BE SAVING LARGE AMOUNTS OF ENERGY AND COST FOR THE RESIDENTS.”

KETAN DALVI, SENIOR SUSTAINABILITY MANAGER, WILLMOTT DIXON



Collida: carbon, comfort, quality

Collida aims to harness technology in design and manufacturing to deliver buildings that are higher quality, better to be in and emit less carbon in construction and operation. From an energy efficiency perspective, Collida is based around a Passivhaus approach, delivering environments that require little if any energy to heat them.

Collida achieves these goals through a design-for-manufacture ethos which ensures that interface details are robust and waste is minimised. It provides pre-designed products or elements, as well as bespoke designs. The idea is to reduce risk by giving better upfront certainty on cost and programme.

The residential arm, Collida Living, aims to deliver homes that save 90 percent on running costs compared to average family homes, with 20 percent lower embodied carbon against London Energy Transformation Initiative (LETI) benchmarks.



WILLMOTT DIXON

SINCE 1852

**BRILLIANT
BUILDINGS**

Willmott Dixon is a privately-owned contracting and interior fit-out group. Founded in 1852, we are family-run and dedicated to leaving a positive legacy in our communities and environment. Being a large company means we can create a huge and lasting positive impact on our society. This is not only done through what we build and maintain; it's achieved through the fantastic efforts of our people who make a major contribution to enhancing their local communities.

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