



Stadium & Arena Construction

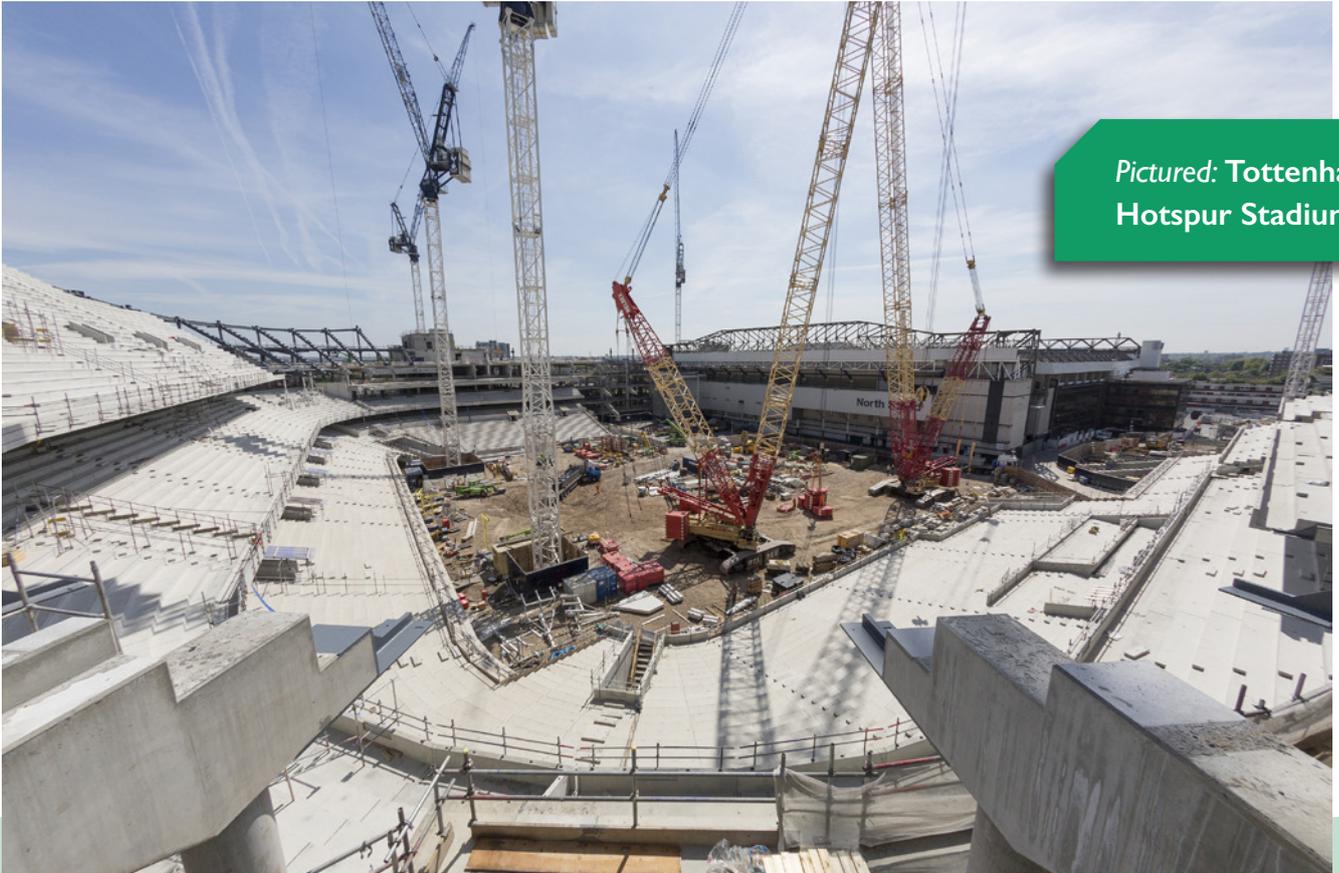


Macrete Ireland Ltd is one of the UK's foremost precision precast concrete manufacturers. From our design and manufacturing facility in Northern Ireland the company supplies innovative bespoke products and structures to the construction industry's main contractors throughout Britain and Ireland. Since 1979 the company has developed sustainable long-term strategic partnerships with our client base; and our range of reinforced and pre-stressed materials and bespoke coastal protection components can be found in many of the UK's most prestigious railway, civil engineering, water, utility, marine and sports stadia projects and schemes.



Pictured: Manchester United
FC Old Trafford External
Lift Cores





**Pictured: Tottenham
Hotspur Stadium**

Our previous experience indicates the skills and experience that we can bring to any contract. Through early contract involvement with our customers, we can benefit the overall scheme, for example:

- Cost savings can be achieved.
- Responsiveness can be increased through economies of scale and the availability of more resources.
- Increased capacity and expertise mean that more can be achieved for less.
- Waste can be reduced by better decision making.

By promoting a culture of honesty and integrity, through collaborative working processes we can assist both our customers and us in gaining a competitive advantage in the marketplace.

By developing a common understanding of our combined aims and objectives, we believe we can assist our customers in bringing innovation to the works that we would deliver together.



Innovative Construction

Through its' extensive contract history, Macrete Ireland Ltd has developed a detailed contract methodology for taking a stadium build from initial design concept through to delivery of the manufactured components to site. Along with the skilled trade personnel and dedicated technology required to deliver your scheme, our in-house specialist design team can help you achieve the precise type of construction you want using the latest BIM design software, allowing full stakeholder input at all stages of the design process.

With over 30 stadia contracts completed to date, ranging from small local developments to large football and rugby stadiums and indoor arenas throughout the UK & Ireland including the new Tottenham Hotspur stadium, Macrete Ireland Ltd has gained immense experience of detailed structural design, component manufacture and just in time delivery techniques. Our spacious 45-acre site allows for storage, loading and shipping of materials in specific sequence to ensure optimum efficiency for our customers on site.

Macrete Ireland Ltd has developed a standardised stadia component inventory which is similar in principle to other general stadia layouts. However, given the construction industry's continuing innovation in architectural and structural design, bespoke components can be designed and manufactured to meet specific contract requirements.

*Pictured: Kia Oval
Cricket Ground,
One Oval Square*



Sustainable Construction

Our core strategic objective is to be recognised as a major provider of precast concrete technology, products, services and solutions. We recognise the environmental impacts arising from our business activities and are committed to reducing these through effective environmental management. Through innovation and a proactive attitude to energy reduction we have decreased our carbon emissions by commissioning a wind turbine and solar PV array to produce around 50% of our electricity requirements. We are also fully powered by 100% renewable energy sourced from local generation.

The company also utilises, as far as is practicable, adjustable steel stadia moulds from one scheme to the next. By doing this our clients can benefit from significant cost savings as well as reducing or removing the need for new timber moulds to be constructed, or new steel moulds to be fabricated for each stadium construction contract. Whilst this contributes greatly to our sustainability ethos, our clients also benefit from the high standard of quality finish afforded by steel mould manufacturing.

Macrete Ireland Ltd provides high quality sustainable concrete which is designed to meet current and future environmental requirements. Ordinary Portland Cement (OPC) is the main constituent of concrete manufacturing and producing OPC involves considerable energy expenditure. Accordingly, using a waste product that can substitute for OPC can bring effective environmental and sustainability benefits. The concrete mix used for all precast concrete stadium units is produced by replacing part of the OPC content (up to 50%) with Ground Granulated Blast Furnace Slag (GGBS), a material which constitutes a very low carbon footprint as it is a by-product material of the iron and steel industry. Consequently, concrete mixes for these precast concrete stadium units have a much lower level of embodied CO₂ than other concrete products using standard OPC mixes. In addition to these environmental benefits, the use of GGBS also improves the performance of the finished product by making it more durable and aesthetically lighter in colour.



*Pictured: Bristol City FC
Ashton Gate Stadium*

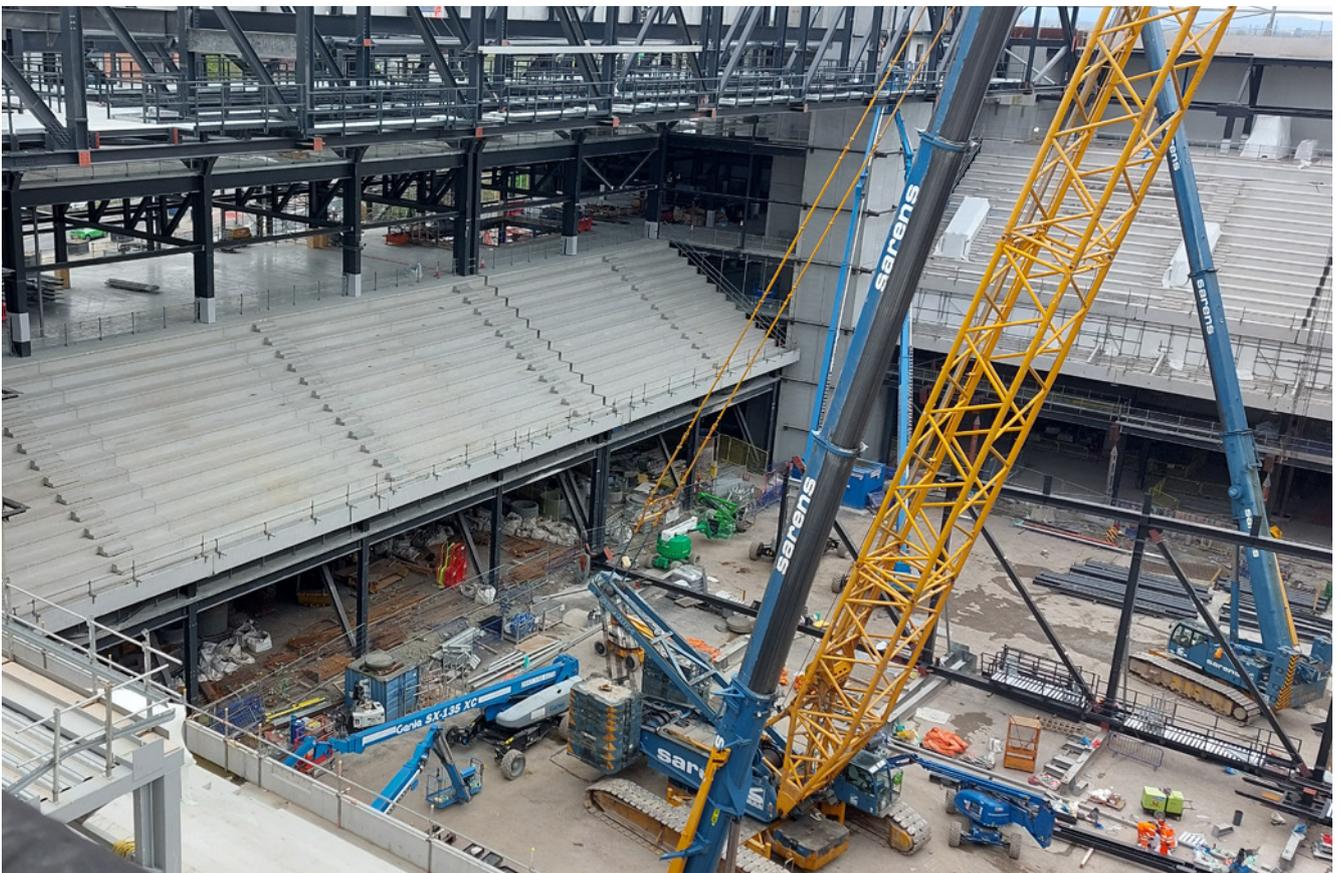


Recent Stadium and Arena work completed

Co-Op Live Arena Manchester

The arena, due to open in April 2024, will have the largest maximum capacity of any indoor arena in the UK.

For two years between June 2021 and July 2023 Macrete Ireland Ltd delivered over 2,800 individual precast components, including terracing, slabs, wall units, step blocks, wall panels, parapets and U-shaped units on a just in time basis direct to site. Along with the designers and main contractor, Macrete Ireland Ltd worked to develop a bespoke precast solution to realise an exceptional architectural vision. These innovative design solutions allowed for terracing spans of up to 11m in length being achieved. The precast components were also designed and manufactured to achieve the high level of performance required in relation to fire resistance and acoustics.



Tallaght

Macrete Ireland Ltd completed the design, manufacture, delivery & installation of the new North Stand at Tallaght Stadium Dublin, home to Shamrock Rovers FC. The company's pivotal role in this scheme was recognised with a "Highly Commended" award in the Concrete Society Northern Ireland Region Awards 2023.

Overcoming the challenge of fusing structural stability, aesthetics and commercial feasibility was achieved through innovative design and concealed connections via unique manufacturing solutions. This approach integrated precast elements, eco-friendly materials and innovative techniques, demonstrating a modern construction process that balances functionality, aesthetics and sustainability.

Employing these methods, we engineered, produced and installed a stand entirely composed of precast concrete components. Ingenious hidden connections, notably in raker beams, columns and rafter units, eliminated the necessity for a conventional steel frame, which is the standard method of stadium construction.

The Concrete Society Awards Judging Panel was "impressed by the stand's exclusive reliance on precast concrete. The project's clean visual appeal, coupled with concealed connections, delivered an aesthetically pleasing result. The company's dedication to sustainability was evident through the use of ground granulated blast-furnace slag (GGBS) in concrete mixes and employing steel reinforcement with high recycled content."



Liverpool FC Anfield Road Stand Extension

Macrete Ireland Ltd were appointed in August 2021 to carry out the design, manufacture, and delivery of the precast components for the expansion of the Anfield Road Stand at Liverpool FC. When the stand opened in December 2023 the overall stadium capacity increased by 8,500 to a total of 54,000.

With over 2,000 individual unit pieces including terracing, steps, walls, stairs, slabs, lift shafts and internal stability cores delivered to site on a just-in-time basis we are proud of our association with this iconic stadium refurbishment.



Tottenham Hotspur Stadium

Macrete Ireland Ltd was contracted to manufacture and deliver precast concrete units for the construction of the New White Hart Lane Stadium.

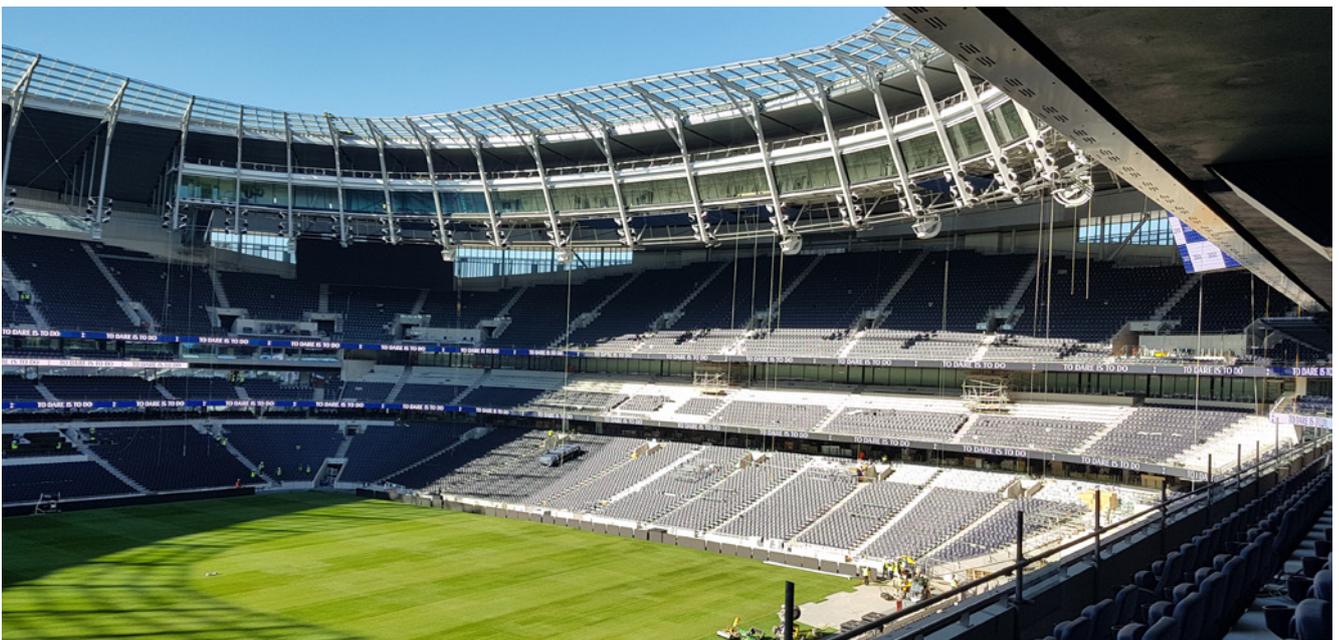
The project scope entailed the construction of a completely new structure on a brownfield site directly adjacent to their existing stadium, consisting of an entirely precast concrete main stadium bowl with a steel and glass canopy structure mounted above the seating area.

The concrete mix used was designed to minimize the finishing work required to the units and to ensure a consistent unit quality. The mix has sustainability credentials to reduce its carbon footprint. In total, approximately 15,000m³ of concrete were used in the project, equating to 2,500 lorry loads. We also employ renewable energy sources to power our production facilities as a means of offsetting the carbon produced in the manufacturing process.

The result of this mix design was to create a material with the correct flow, working time and robustness that allowed for next day de-moulding and minimal finishing work, resulting in a blow hole free finish to the external faces of the units. The mix also met the aesthetic requirements for the new stadium, as it produced a lighter coloured concrete rather than the traditional grey mix.

The terracing units were designed to be both robust and relatively light, aiding both manufacturing and installation. This was achieved by increasing the unit steel content to allow the depth to be reduced, thus reducing the concrete volume. Terracing units were installed onto large precast raker beams, which presented challenges in terms of steel fixing, mould work, production and transport. The design had to be robust enough to support rows of terracing units, but light enough to be transported to London by road and installed using tower cranes. This was again achieved with a slight increase in reinforcement density resulting in reduced depth and overall volume.

There was little option but to transport the units by road as this was the most practical approach, allowing for greater control of the types of loads and the load frequency. Careful planning of each delivery ensured the maximum number of units on each trailer thus reducing the number of deliveries. Even so, there were still a significant number with around 1,600 sent to site over an 18-month period. We used our transport partners with the capability to deliver both multiple trailers and over-sized/heavy units to site to meet the demanding just-in-time installation programme.



A selection of other contracts delivered

Brighton & Hove Albion FC – capacity 30,750

Bristol City FC Ashton Gate Stadium – capacity 27,000

Leicester Tigers RFC Stadium – capacity 25,000

MK Dons FC Stadium – capacity 22,000

Brentford FC Community Stadium – capacity 17,250

Doncaster Rovers FC Stadium – capacity 15,000

Northampton Saints RFC Stadium – capacity 15,000

Salford City RLFC Stadium – capacity 12,000

Wolves FC, Stan Cullis Stand – capacity 8,000

Cardiff City FC, Upper Tier – capacity 5,000

Fulham FC Riverside Stand – capacity 4,000

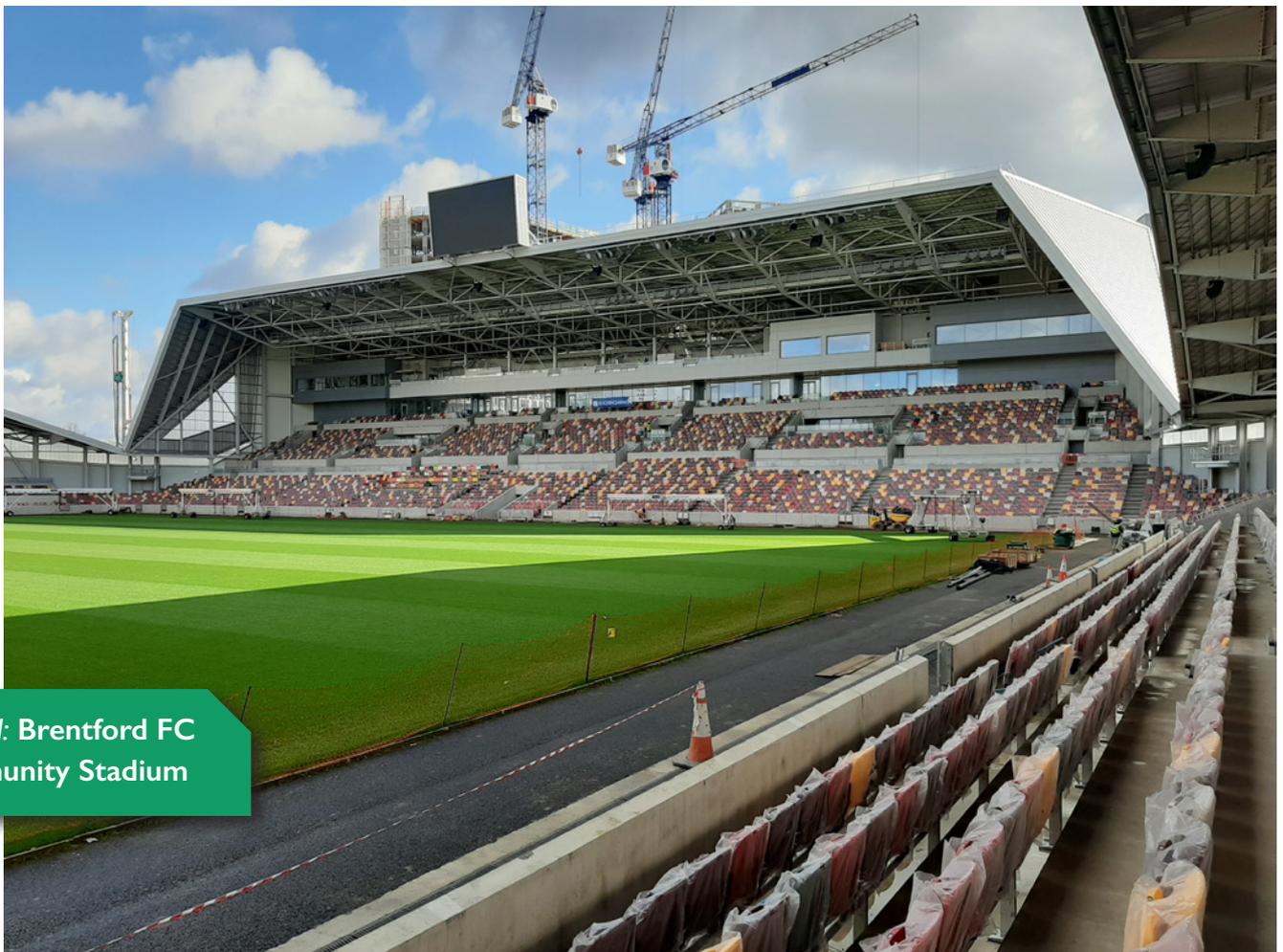
Swansea Indoor Arena – capacity 3,500

Finn Harps FC Stadium – capacity 2,200

Aughrim GAA Stadium – capacity 2,000

Cliftonville FC Stand – capacity 1,600

Derry City FC, Main Stand – capacity 1,000



*Pictured: Brentford FC
Community Stadium*



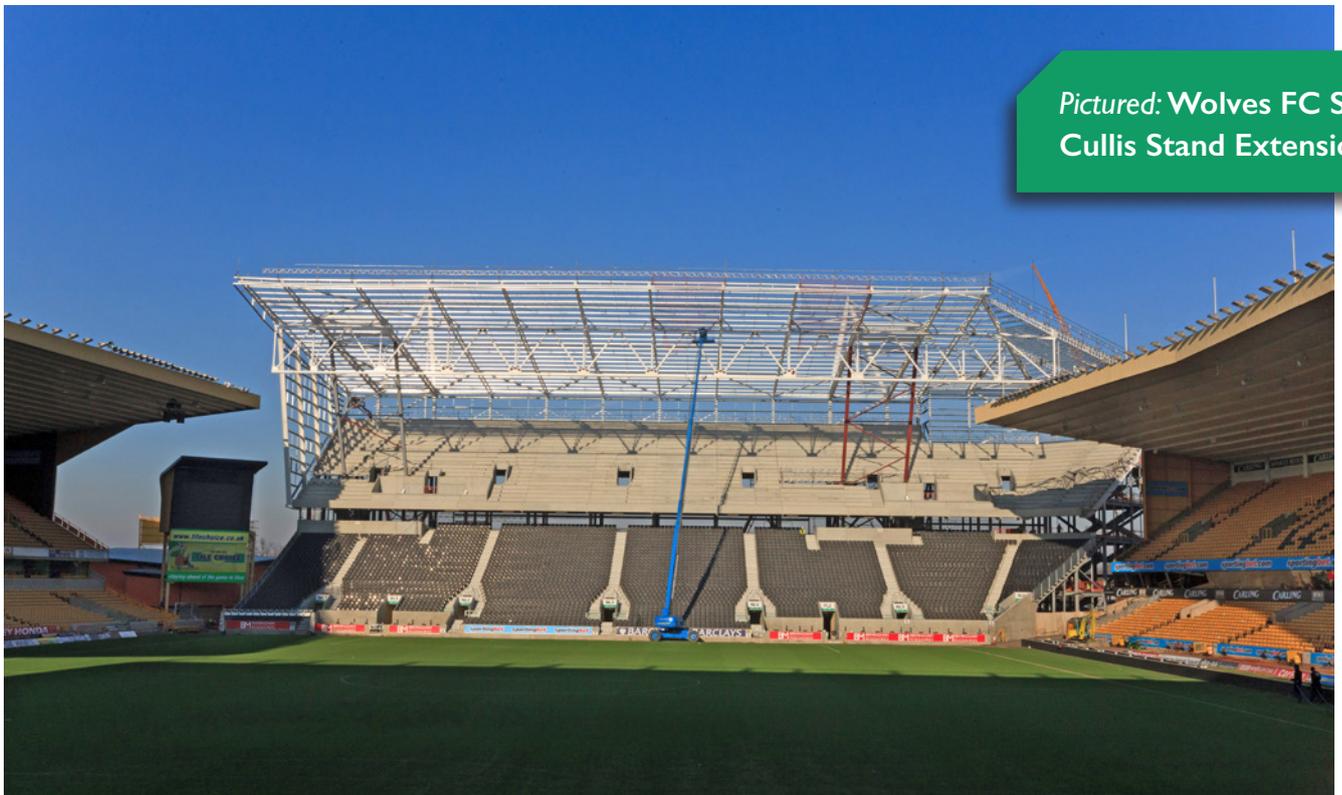
Our Commitment to You

We conduct all our activities professionally and with integrity and always act in accordance with fair business, marketing and advertising practices and take all reasonable steps to ensure the safety of our products and services. We take great care to be completely objective in our judgments and any recommendations that we give, so that issues are never influenced by anything other than the best and proper interests of our clients.

Our prices are always transparent and competitive for what we provide, which is a high-quality bespoke manufacturing service. We will always try to propose solutions which accommodate our clients' available budgets and timescales. We will agree our rates and schedules of additional charges clearly in advance, so that we and our clients can plan reliably for what lies ahead, and how it is to be achieved and financially justified. We always strive to cultivate long term mutually beneficial working relationships with our customer base and approximately 90% of our sales are with repeat customers.

The satisfaction of our customers is measured by the high percentage of repeat purchasing and by the testimonials we receive. We provide transparent and effective procedures that address customer complaints and contribute to fair and timely resolution of disputes without undue cost or burden to the customer.

The Macrete Ireland brand dictates a high level of quality, robust management systems and safe working environments. It is our goal to deliver all contracts on time, within budget and to the required quality. We operate a quality management system that is fully compliant with BS EN ISO 9001:2015, the company is also ISO 14001:2015, ISO 45001:2018 and CE mark approved, all of which are linked to the company business strategy.



Pictured: Wolves FC Stan Cullis Stand Extension



*Pictured: Salford RLFC
Stadium*

