PRESENTATION BROCHURE





design and build worldwide

BS EN ISO 9001:2008 • BS EN ISO 14001:2004 • BS OHSAS 18001:2007 • FULLY CE COMPLIANT FOR EXECUTION CLASSES 1 TO 4
JOHN REID & SONS (STRUCSTEEL) LTD trading as REIDsteel, REIDglazing & REIDmarine • Company Registration No: 617773

Four times winner of The Queen's Award for Enterprise International Trade

REIDsteel

JOHN REID & SONS (STRUCSTEEL) LTD

Rizon Hangar,
Biggin Hill Airport, UK

The 89m clear span incorporates an underslung crane to aid maintenance operations.

The hangar complex also includes extensive FBO facilities.

About us

REIDsteel is a trading name of John Reid & Sons (Strucsteel) Ltd - Company Registration No: 617773.

We have built a solid, worldwide reputation for providing outstanding value and exceptional service in the design, fabrication and erection of bespoke steel framed structures, our cladding and integrated glazing systems, along with personnel and vehicle doors.

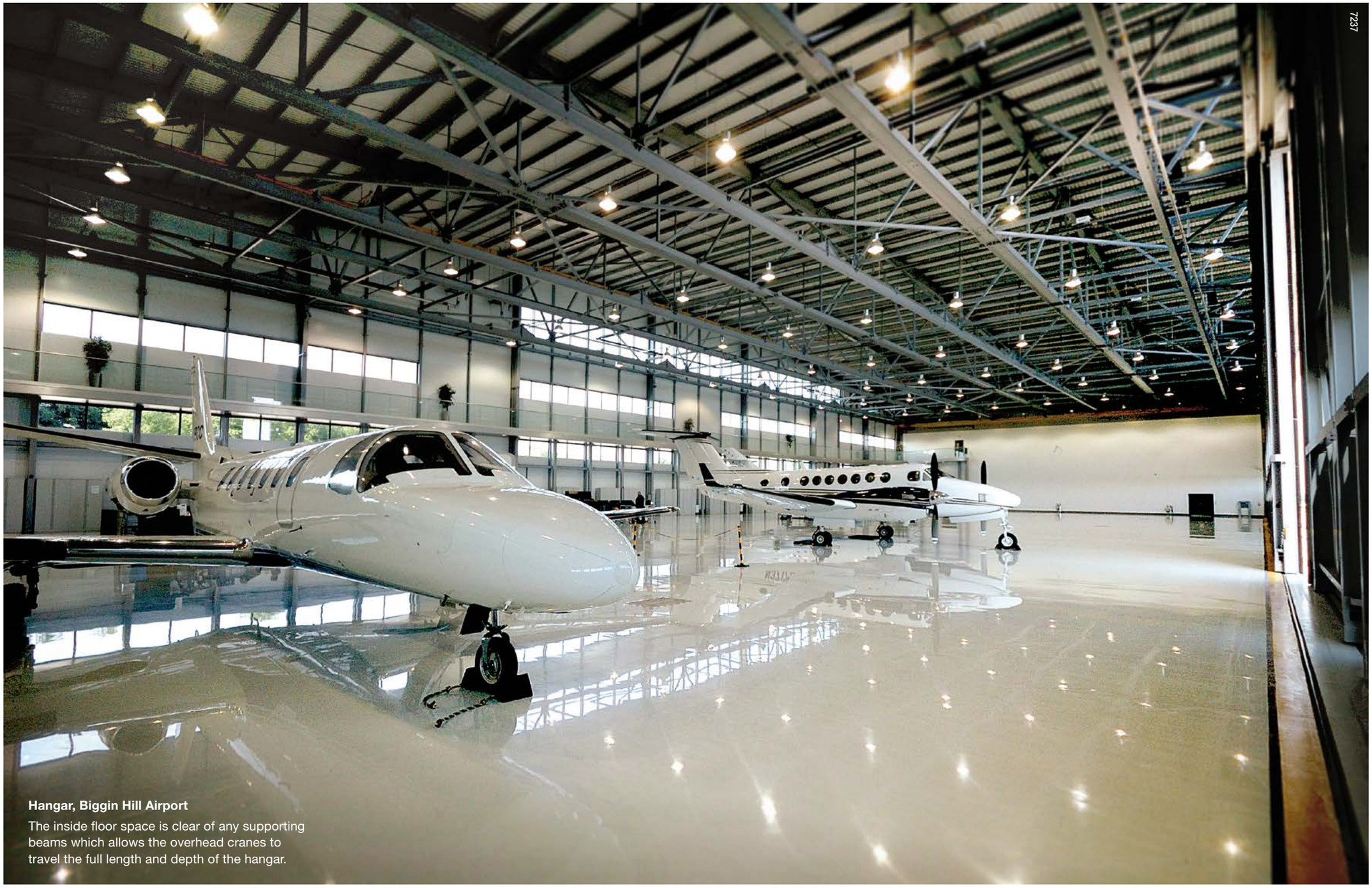
Combining the above resources effectively has placed us in a strong position within the industry and has resulted in many major contracts.

These are just a few clients that have experienced the level of professionalism and service that we are able to offer. They can remain confident that their investment will be looked after, delivered to site, and erected efficiently, on time in a cost effective manner, making us their first choice when placing their next order.

REIDsteel
JOHN REID & SONS (STRUCSTEEL) LTD

Four times winner of the Queen's Award for Enterprise International Trade

FULLY CE COMPLIANT FOR EXECUTION CLASSES 1 TO 4
BS EN ISO 9001:2008 • BS EN ISO 14001:2004



Hangar, Biggin Hill Airport

The inside floor space is clear of any supporting beams which allows the overhead cranes to travel the full length and depth of the hangar.

Biggin Hill Airport, Kent - 89 Metre Clear Span Hangar

Built for Rizon Jet, this FBO and maintenance facility focuses on travel for senior executives, high-ranking government officials and professionals.

The 4300m^2 hangar has an 89 metre door width consisting of six 14.9 metre x 9.6 metre electrically powered doors, which can be operated independently. This allows 58 metres to be opened left, right or centre at any one time.

The hangar is also served by two 2T overhead travelling cranes, which run the whole length of the 90 metre building.

A striking visual feature of the hangar is the natural light in the two floor office areas, made possible by curtain walling running the whole of one end of the building. All the steelwork, the glazing and curtain walling was designed, made and installed by REIDsteel.

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Glazing
✓	Hangar Doors
✓	Personnel / Entrance Doors

Tubular Production Facility, UK

The 40m clear span structure has been designed so that the 3rd and 4th crane (both 50T) act in tandem at 6000mm centre to centre of hooks to give a 100T lift capability.

6,840m² Tubular Production Facility

Situated upon the north bank of the river Tees, this state of the art, automated tubular production facility for the rolling & welding of large diameter tubulars, and the construction of foundations - monopiles, tripods, jackets and transition pieces - for the renewables and energy industries.

REIDsteel designed, fabricated and erected the 'V' braced tied portal frame which spans 40m x 171m, 18m to external eaves.

REIDsteel also designed, fabricated and erected the doors, crane beams, insulated roof and single skin wall cladding.

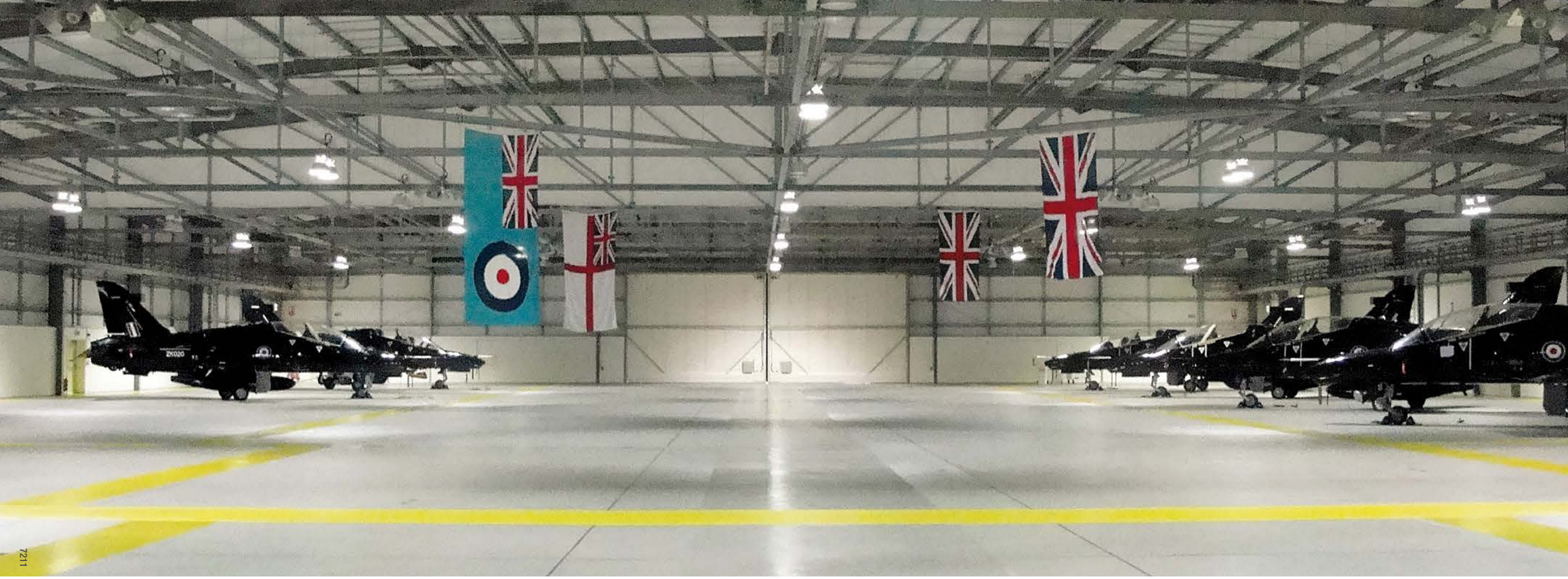
The structure has been designed to integrate with TAG's manufacturing process and subsequently incorporates 4 travelling overhead gantry cranes for the moving and lifting of large steel plates and tubular sections during fabrication.

Following fabrication, the large diameter tubes can be safely removed from the facility and transported out through REIDsteel's electronically operated 20m wide x 14m high slab sliding hangar doors at the gable end.

Despite the challenges of the harshest winter for 31 years triggering near Arctic conditions during the mainframe erection & cladding installation, REIDsteel completed the job ahead of schedule and on budget.

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Hangar Doors
✓	Personnel Doors



Royal Air Force, Valley Airport, Anglesey - Hangar & Squadron Building

The Squadron Building, Valley Airport, Anglesey

The Squadron Building during construction.

The 155m long x 55m clear span Maintenance Hanger (left) houses the latest generation of Hawk Trainers for use by the RAF, Royal Navy and Army Air Corps

The 2500m² Squadron building (above & right) contains flight simulator, classroom and gym facilities.

The Squadron Building

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Personnel Doors

7160

Lufthansa Technik, Malta

The official opening of the new MRO facility for LTM took place in one of the new 26m high hangars. We designed and supplied the three 91m span hangars and the bottom rolling multi-leaf hangar doors.

Lufthansa Technik, Malta - 280 metre wide maintenance hangar


7160


7160


7160

Lufthansa Technik Malta specialises in the maintenance and repair of Airbus, Boeing and other large aircraft.

The hangar is 280 metres wide in three clear spans of 91.5 metres. It is 90 metres deep with a clear height of 26 metres under all the steelwork, fronted with 18 electrically operated door leaves, the largest two doors being 26 metres high by 91.5 metres wide.

The facility can accommodate two Airbus A380s and many narrow body aircraft simultaneously as well as having a number of workshops within it.

In addition to Lufthansa and Air Malta aircraft, customers include: Spanair, AirOne, BMI, Germanwings, Fly Niki, Privat Air, Arik Air, Wizz Air, SunExpress and Livingston Energy Flight.

REIDsteel

✓	Structural Design / Detailing
✓	Erection Supervision
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Glazing
✓	Hangar Doors
✓	Personnel / Entrance Doors

Hangar Extension, Bournemouth, UK

With a clear span of 100m and a depth of 12m, the 140 tonne truss was lifted into position using a 500T crane and a 1000T crane.

Expanding hangar usage with new doors & extensions

If there is a need to improve your existing hangar because the current door structure is no longer sound or because the size is too small for the aircraft you want to house then you could consider a structurally independent extension and new doors.

Short ‘Pod’ Extension (as per the T2 example shown right) - These are suitable where the existing hangar can accommodate the larger aircraft but the current door is too small.

Longer Extension (as per the example shown left/below) - These extensions are most suited to instances where neither the existing door nor the existing hangar will house the tail of a new taller and longer aircraft. Where this occurs we can construct an extension which is high enough and deep enough to house the tail fin and add new hangar doors to the front of the extension.

7899

7899

This extension has a clear span of 100m, is 12m deep and 22m high to the eaves.

Once the pre-assembly work had been carried out, the 140T truss was lifted into position using a 500T and a 1000T crane. Taking advantage of a perfectly still day, we were given the green light to go ahead with the lift, and erected the roof steel in one day.

Once all the steelwork and cladding was completed the fabric door was installed.

REIDsteel

Hangar extension work as follows:

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Cladding

6975

In order to house a BAe 146 with a 26.2m wing span and a Dassault Falcon 900 with a 19.3m wing span, new doors and an extension were required for this T2 hangar at Biggin Hill Airport.

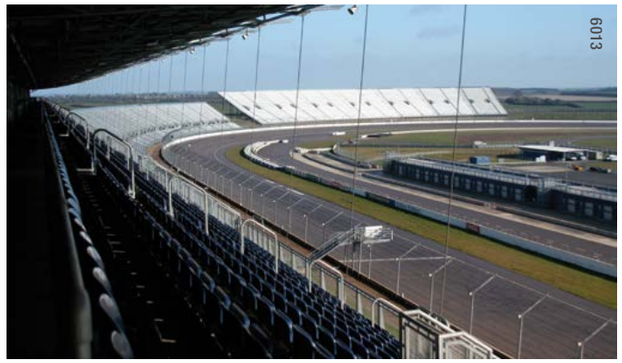
The new bottom rolling, multi-leaf doors have six leaves on three tracks, giving an entrance 30 metres wide and increasing the door height to 9.25 metres from a previous height of just over 7.5m.

The steel frame of the door hood is constructed independently from the existing hangar steel frame. We erected the steel, fitted the cladding and wired and commissioned the electrically operated doors whilst maintaining access into the hangar for plant and concreting works.

REIDsteel

Hangar extension work as follows:

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Cladding
✓	Hangar Doors



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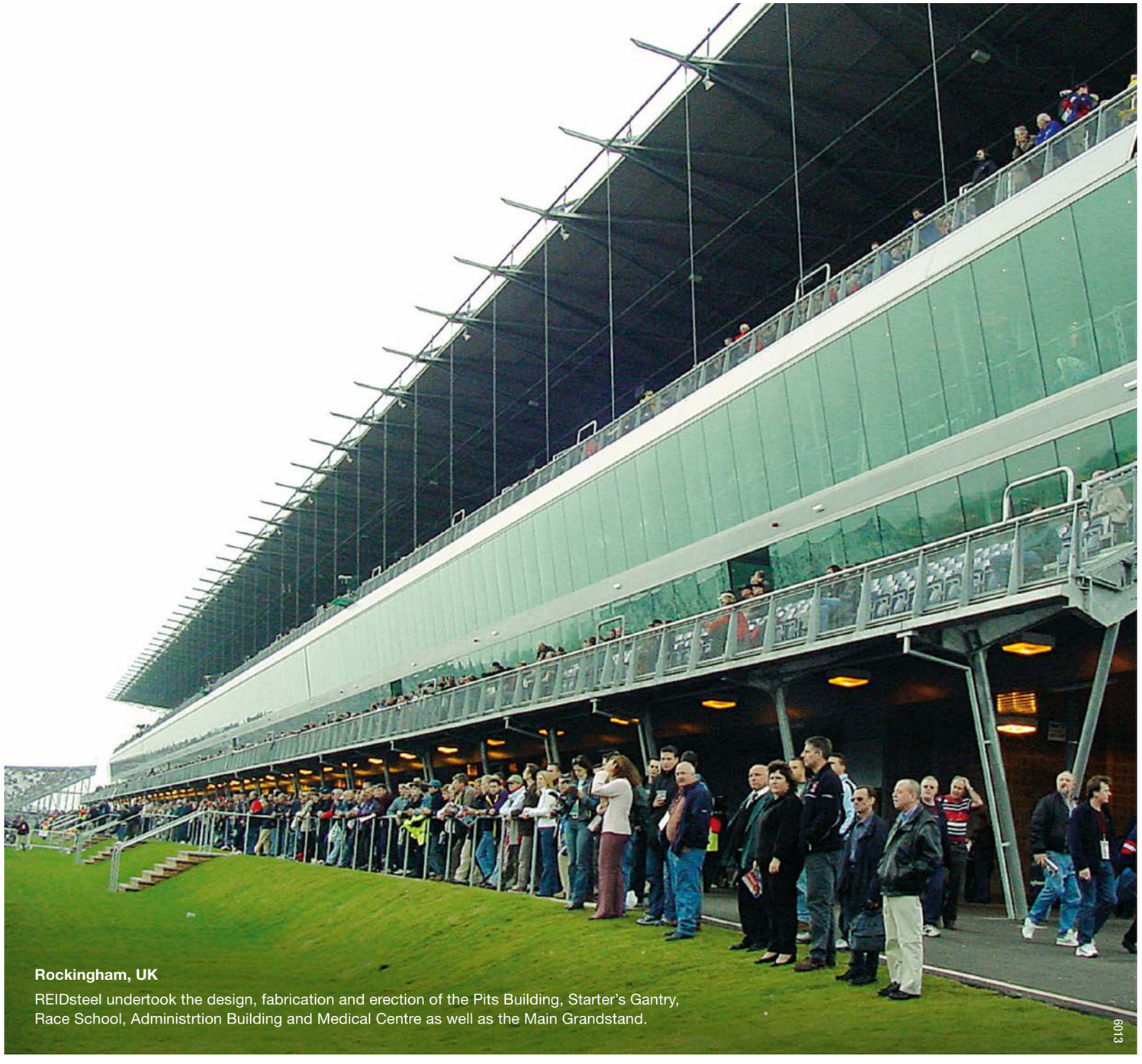


Rockingham, UK

REIDsteel undertook the design, fabrication and erection of the Pits Building, Starter's Gantry, Race School, Administrtion Building and Medical Centre as well as the Main Grandstand.

6013

250 metre multi-tier grandstand, Rockingham, UK.

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Glazing
✓	Personnel Doors

The grandstand at Rockingham Motor Speedway, Corby, Northampton is a quarter of a kilometre long. The main grandstand houses the race control, the press centre, commentary boxes, 50 corporate hospitality suites for 1000 visitors, a restaurant and a private club in addition to seating for 7000.

The rear view of the grandstand (bottom far left) shows the intricate steelwork for the stairs and barriers, all designed, fabricated and fitted by REIDsteel. This, coupled with the shadowline cladding, gives the structure its unique style.

Our grandstand construction projects have ranged from small sports stands locally to large stadium construction projects like Aston Villa Football Club's Villa Park Stadium, where we undertook the design and build for two of the stands, including the Holte End.

Alperton Limited, Ship Repair Facility, Libya

115m long by 61.5 meter span ship repair facility showing the internal firefighting walkways. Due to the exposed nature of the site, all steel was hot dip galvanised.

Alperton Limited, Ship Repair Facility, Libya

This ship repair facility is 115m long, with a 61.5 meter span. It is 30m to the external eaves.

Two lines of internal props support three 10 Tonne electrically operated travelling cranes - each with full downshop travel.

There are internal firefighting walkways, 12m high from finished floor level, external walkable eves gutters with permanent perimeter roof edge protection.

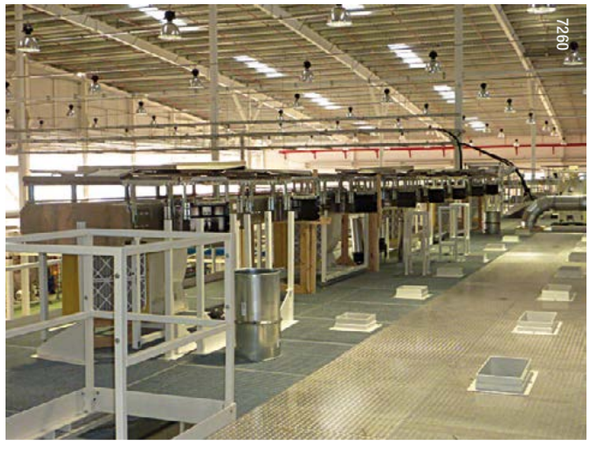
All hot rolled structural steel was prepared and galvanised to BS EN ISO 1461 (85 microns thickness; 610 gm zinc/m).

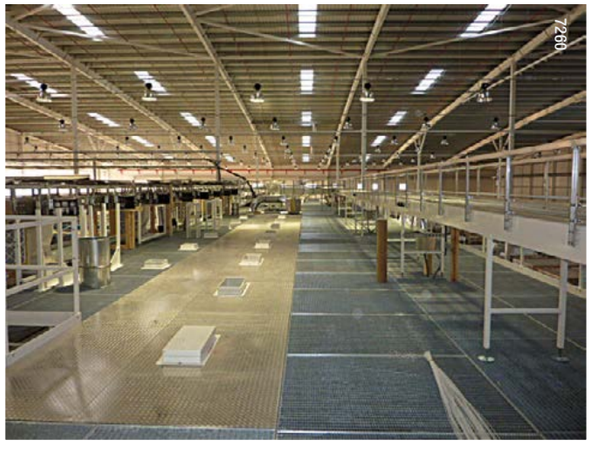
REIDsteel

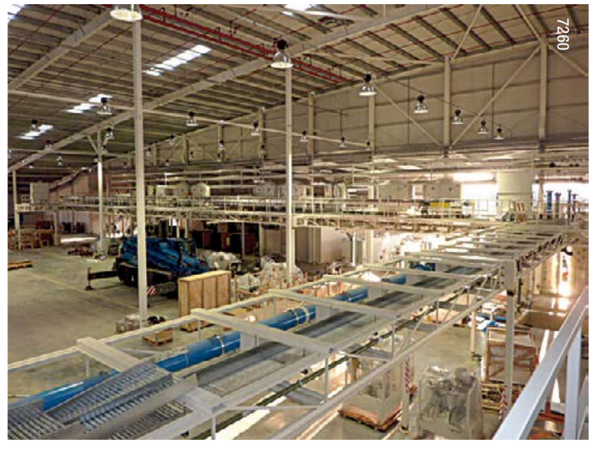
✓	Structural Design / Detailing
✓	Structural Steelwork
✓	Roof & Wall Cladding

Crown Packaging, Slovakia

This facility for manufacturing beverage cans incorporated a high level of service openings in the roof as well as internal service support gantries..



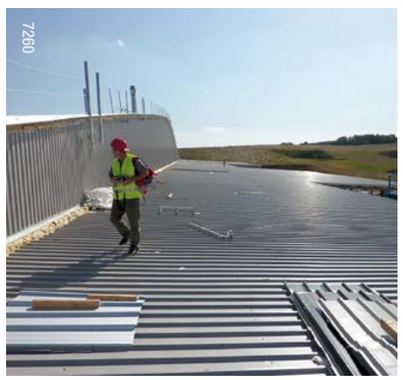




Crown Packaging, Beverage Can Manufacturing Facility, Slovakia

This 10,500m² facility in Kosice, Eastern Slovakia for beverage can manufacturing. The structural steelwork, edge protection system, steel walkways, roof and wall cladding, glazing, personnel and vehicle doors, were all loaded into containers at REIDsteel's offices in Christchurch, Dorset. They were then shipped to site by road and sea, and unloaded and erected by local labour under the close supervision of our senior erection managers.

Since completion of this project, our client has placed yet a further order with us to extend the main production area.



REIDsteel

✓	Structural Design / Detailing
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Glazing
✓	Vehicle Doors / Loading Docks
✓	Personnel Doors

Asfordby Storage & Haulage, Distribution Centre, Melton Mowbray, Leicester

This 276,000 cubic metre high bay warehouse was designed, made and erected by REIDsteel for the automated storage, co-packing and distribution of consumer products.

It has a span of 106m, is 155m long and has a clear internal height in excess of 17m, containing robotic storage and retrieval cranes and racking, and substantial goods in and out areas. At one end, the robotic system feeds a 2 storey processing and despatch zone.

In all there are eleven main areas, several multi-storey, covering 4.5 acres. Each area was a building in itself; but with the added complication of them all interlinking with each other; and with conveyer systems passing between them.

REIDsteel worked closely with the client and architect, but also had to work as a close team with the mechanical engineers, conveyor and racking engineers, electrical engineers and fire engineers.

REIDsteel provided and erected as part of the main building, duct supports steelwork and service apertures, conveyor platforms and supporting steelwork, electrical cable steel support systems and tram lines of supporting steel for the sprinkler system. Having this ready in place before the fit-out ensured speedy and efficient installation. Reid's also made and fitted all the aluminium windows and curtain glazing.

About 8000 hours of design and drawing work were needed to take the project from an empty field to the completed and clad structure and we plotted some of the complicated ductwork in 3D to ensure a safe passage around the maze of steelwork.

The 1200 tonne steel structure used 55,000 bolts (11 tonnes) and required 30,000m^2 of cladding, plus 20kms of beams and box section, 27kms of purlins and 4.6kms of bracing. Reid also provided 20 flights of stairs, 20 sectional doors, 5 dock levellers, 5 fire roller shutters, 4 rapid rolling crash-out doors and a dozen personnel, fire doors and glazed doors.

The whole project was finished on budget and on time.

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Glazing
✓	Vehicle Doors
✓	Personnel Doors

Steel Warehouse Buildings

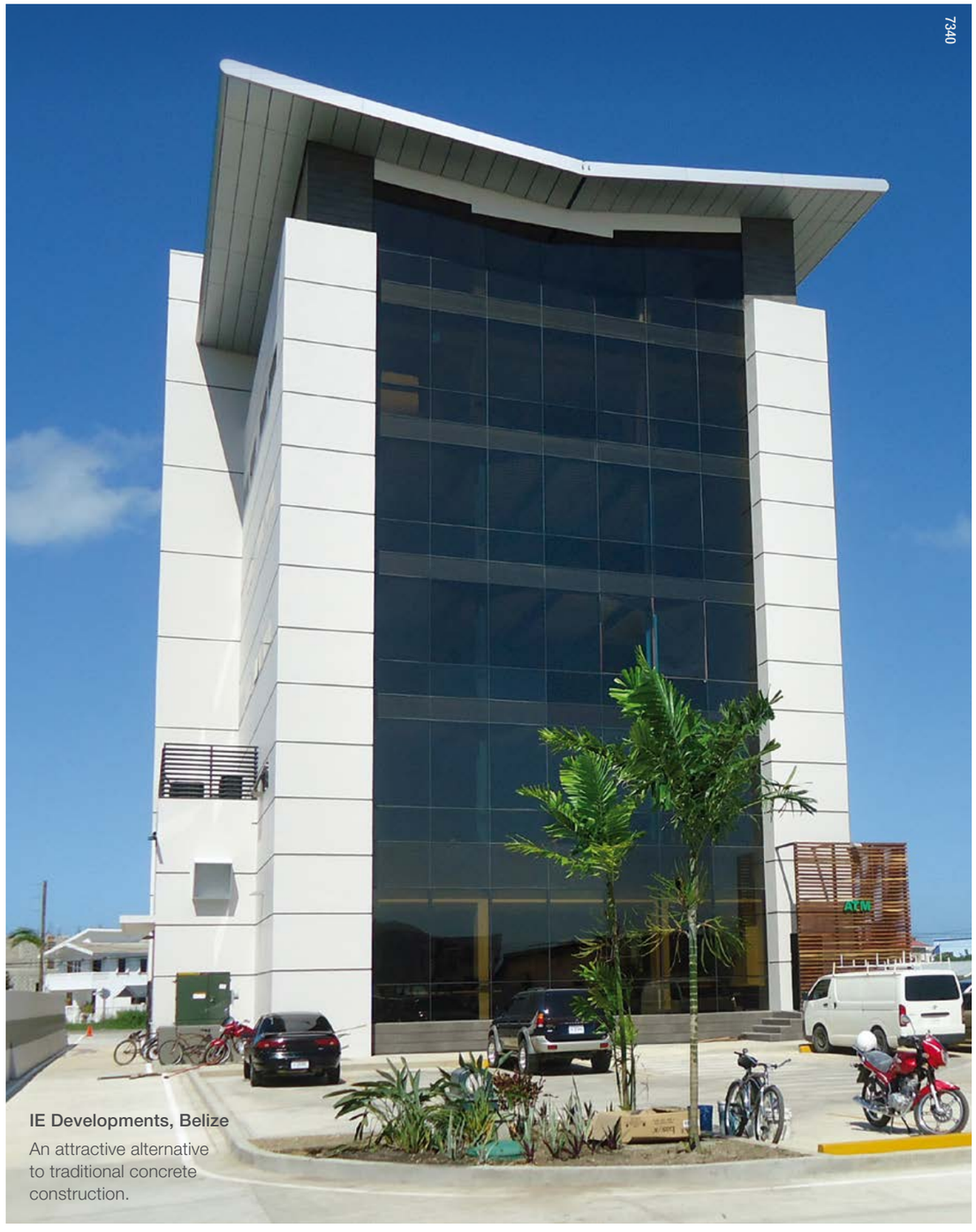
REIDsteel design and supply steel warehouse buildings for both industrial and commercial use.

We offer worldwide design and supply of standard steel portal warehouses; propped steel portal warehouses; high bay warehouses and wide span steel framed storage warehouses

We use the highest quality British or European steel, which can be hot dip galvanized for added protection if required. Our steel frame structures can be constructed to accommodate overhead cranes and gantries, and we have specialist knowledge of designing to withstand high wind speeds, seismic loads or even arctic snow loads.

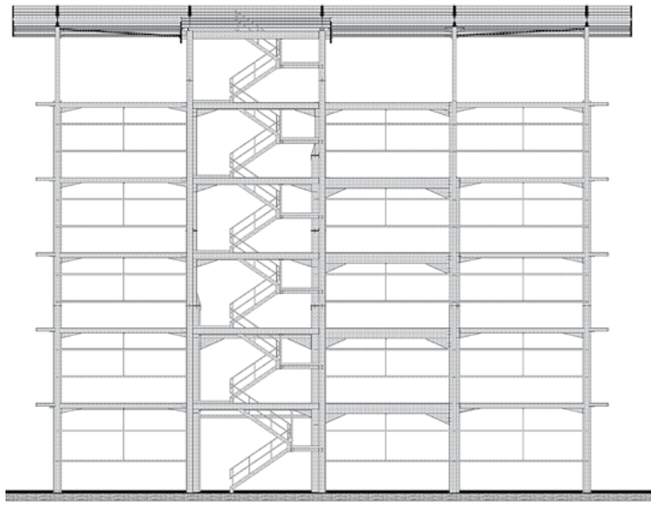
REIDsteel

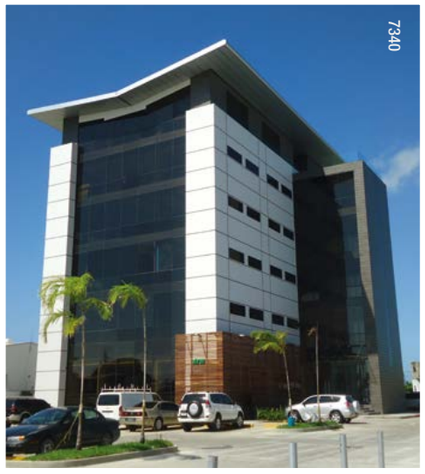
✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Glazing
✓	Personnel Doors



IE Developments, Belize

An attractive alternative to traditional concrete construction.





IE Developments, Belize and Carisbrooke Shipping, Isle of Wight

Not all steel buildings have to look like steel buildings. The following two examples are built on steel frames but offer an attractive alternative to traditional concrete construction.

Left:

The Matalon Business Center is a multi storey office building supplied for the heart of Belize's newest Business Center.

REIDsteel provided all the structural steelwork with composite metal decking floors together with the metal roof, stainless steel soffits and stairs.

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Personnel Doors

Right:

Situated next to the chain ferry in Cowes, Isle of Wight, this complex office building for Carisbrooke Shipping utilises standard composite and thermatile panels to mimic a more costly traditional construction of render and stone.

This was a design build project for REIDsteel who supplied and installed the steelwork, cladding and glazing to a demanding programme and budget.

The main Contractor was Stoneham Construction Ltd.

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Glazing
✓	Personnel Doors

Reservoir Cover, UK
During parts of the erection process the reservoir was drained, but much of the roof cladding was carried out over the refilled reservoir requiring some bespoke cladding and safety techniques.

Reservoir Cover

Covering an area equivalent to nearly four Wembley football pitches, this 190m x 130m reservoir cover was constructed using over 26,000m^2 of roof cladding and 15.5km of galvanised box section roof purlins. Construction was completed within 30 weeks.

The cover was constructed to prevent the growth of algae in stored pre-treated water in an existing bankside raw water reservoir.

Although the reservoir was drained for the majority of the work, initial parts of the erection process were carried out over water.

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Roof & Wall Cladding
✓	Vehicle Doors

8319

Interserve Bridge, Rotherham: 46m bridge being lifted into position prior to being finished with a concrete deck. Once the new bridge was secured in position the old bridge was removed.

Steel Bridges

REIDsteel bridges are designed and constructed to British Standard 5400 Highway Bridge Loading Specification or other National Codes. Our Steel Bridges are designed to suit a range of applications and come in a variety of types dependent upon your specific requirements. They can be shipped and erected world-wide.

Our standard steel bridge designs are normally supplied with galvanised profiled decking and trims, to act as in-situ shuttering to accept reinforced concrete roadways, or you can have non-slip galvanised steel decks.

Arun Bridge, Nepal: Due to the remote nature of the location, the bridge was designed to be constructed without the use of heavy lifting plant. The two halves were cantilevered out from the banks to meet at the middle

Above: Pedestrian bridge under construction. *Above right:* The crossing via our highway bridges is via a pedestrian walkway which is kept separate from the main highway section

REIDsteel

✓	Structural Design / Detailing
✓	Erection or Erection Supervision
✓	Structural Steelwork
✓	Vehicle Roadways
✓	Pedestrian Pathways

Sports Buildings

Thruxton Hospitality Building – Hampshire

John Reid & Sons Ltd (REIDsteel) is near completion of this flagship hospitality centre at the iconic Thruxton Motorsports Centre. The state-of-the-art complex in Hampshire will include a restaurant, bar, exhibition gallery, function rooms, hospitality suites, catering facilities, viewing terraces and a balcony.

Project architect is the Chapman Partnership, which specialises in the motorsport and automotive, leisure and entertainment industries and they conceived the project design to strongly reflect Thruxton's racing connections.

REIDsteel has designed, manufactured and supplied all of the steelwork, cladding and glazing for this modern, two-storey building alongside local contractor Mata Construction.

The £1.5m centre's innovative design includes a grand atrium and entrance lobby to reflect the dynamism of motorsport and Thruxton's rich motoring heritage.

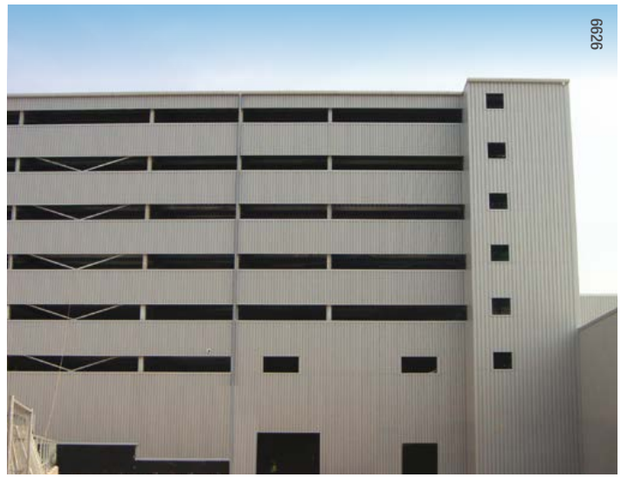
Civic Centre Sports Complex, Belize City

REIDsteel produced this structurally optimized steel frame from hot rolled sections, hot dip galvanized to resist corrosion and minimize maintenance costs.

Designed to seat 4000 during sporting events and 5000 during other events, there is a helipad (which is a FIBA regulation, for emergency use).

The interior height can accommodate proper volleyball use (36 feet clear) for competition and the court area is large enough to host 3 simultaneous practice courts indoor and there are 2 more courts outside for public use as well.


6629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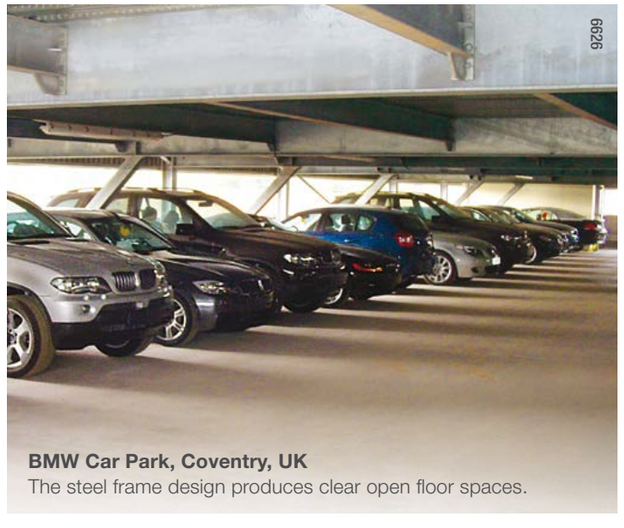
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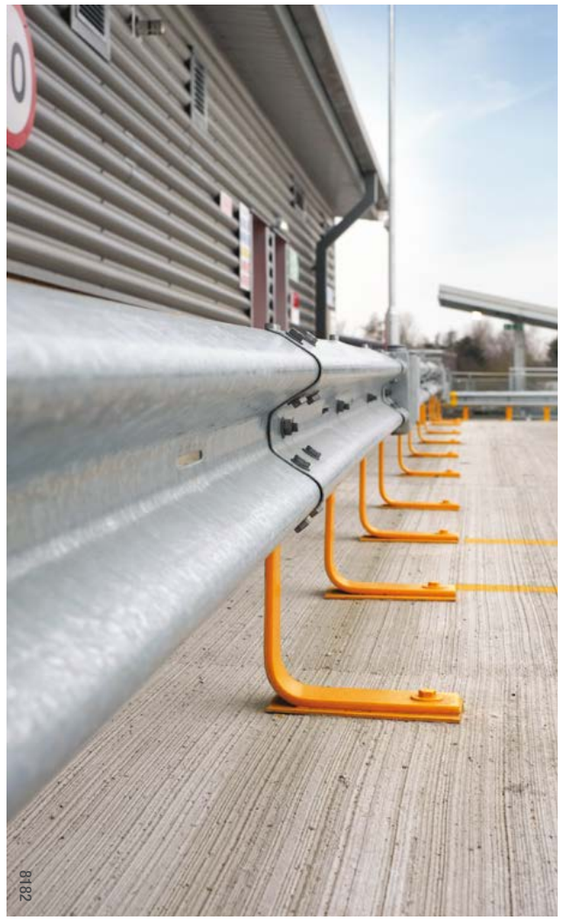
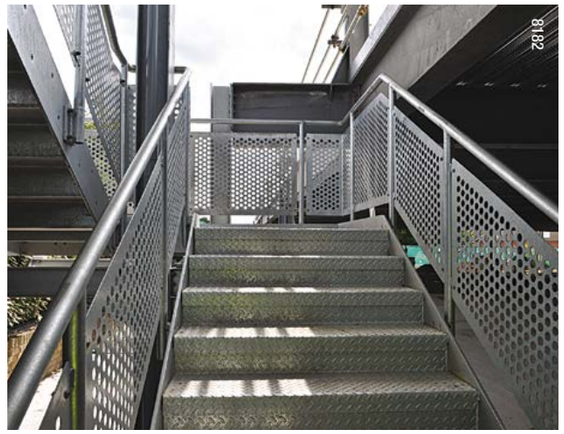
BMW Car Park, Coventry, UK
The steel frame design produces clear open floor spaces.

Steel Frame Car Parks

Steel framing is lightweight, strong and slender, allowing large clear open floor spaces, with minimum floor to floor heights which produces a safe, easy to use and economical multi-storey car parks.

With long, clear spans, a steel framed car park can be designed around the car parking, and not the car parking designed around the structure which is the case with concrete car parks.





We were recently appointed by Volker Fitzpatrick to design, fabricate and erect a car park for a new Royal Mail office in Chelmsford, Essex.

The steel frame was designed in house and incorporated metal CF60 decking to the upper deck and the ramp which the contractor provided a concrete finish to.

We then installed the vehicle barrier system with anti climb mesh infill paneling and provided a steel staircase with architectural infill panels and a cantilevered roof structure.

All in all, a value engineered steel frame car park, designed and erected quickly complete with a barrier system.

REIDsteel

✓	Structural Design / Detailing
✓	Erection
✓	Structural Steelwork
✓	Cantilevered Roof Structure.
✓	Vehicle Barrier System

Dragon’s Teeth Security Barriers & Anti Vehicle Attack Gates

A

Impact tested to PAS 68

All our tests have been independently carried out by the Transport Research Laboratories (TRL) in Bracknell, who have a world class reputation in the defence and security sectors and are also responsible for developing the PAS 68 standard with the UK Government.

PAS 68 identifies impact test methods, tolerances, test vehicle and vehicle performance criteria that needs to be met in order to conform to the PAS 68 standard.

The chosen vehicle, which must be in roadworthy condition, is remotely driven into the barrier at a defined speed and with a specific load for the test. A variety of video and high speed camera footage is taken at up to 10,000 frames a second to ensure a complete analysis of the data can be carried out.

With the very real threat of world terrorism, it is vital that we design countermeasures to combat these threats to the commercial and military sectors. REIDsteel have a solid background in innovative design and are proud to have successfully tested a range of barriers and anti-lorry gates to the PAS 68 test specification.

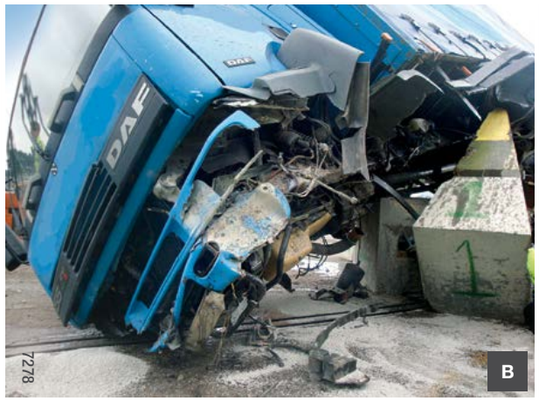
Dragon’s Teeth Security Barriers

The Dragon’s Teeth were initially designed for military applications, but their unique design is ideally suited in providing perimeter protection against VBIED (Vehicle-Borne Improvised Explosive Device) and other attacks to any commercial operations that have vulnerable boundaries such as airports, or the energy and utility sectors. As there is no need for foundations it is also appealing to major events organisers as a temporary reusable solution.

Dragon’s Teeth can be vinyl covered to allow for an improved appearance and strong visual branding opportunities.

Anti Vehicle Attack Gates

We then went on to design and successfully test a range of gates to either fit within permanent bollards or within our Dragon’s Teeth. The latter of which can be easily deployed as either permanent or temporary installations. These range from 3.5m width, up to the largest which is a twin leaf gate of 12m - wide enough to close off a four lane roadway.



B

C

REIDsteel Barriers during PAS 68 testing:

A (Above) 3.5m gate fitted within our Dragon’s Teeth

B Dragon’s Teeth barrier C 12m gate fitted to permanent bollards

D Temporary deployment of Dragon's Teeth and gate.

E Bollard gate installed at a power station as a permanent deterrent.

F 8.5m bollard gate awaiting covers. One of five gates (with clear openings from 5.5m to 10.5m) in a permanent installation for event control.

The construction was performed at night to minimise disruption to the general public.

REIDsteel

✓	Structural Design
✓	Structural Steelwork
✓	PAS 68 Rated

REIDsteel
JOHN REID & SONS (STRUCSTEEL) LTD

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REIDsteel is a trading name of John Reid & Sons (Strucsteel) Ltd - Company Registration No: 617773

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