



SPECIAL PROJECTS



Providing a bespoke solution to your structural requirements
Useful Structures Special Projects can deliver the right building for you - whatever your application, whatever your plans or ambitions . . . when structural innovation and truly huge clear spans or heights are required, Useful Structures Special Projects can deliver.

fast, cost-effective, relocatable multi-purpose buildings

David Beckham Football Academy



Project Objectives

To design and build a relocatable structure in Greenwich, London, to house the David Beckham Football Academy, along with the necessary changing rooms, offices and a museum.

Challenges

Permanent building specifications to allow the structure to remain in-situ for 5 – 7 years, and yet using components which would enable it to be removed and relocated at the end of this period

The Solution

A mixture of exciting architecture, to create an urban design using existing engineering Infrastructure which complies with all local planning requirements.

The use of standard components on site allowed the building to be erected in the shortest possible time, just 20 weeks from design brief to handover.

The Result

- A superb, large, clear-span, steel-framed, permanent yet relocatable building, used by up to 250 people for up to 12 hours per day, delivered on time and within budget.
- Two bays, each 76 metres wide by 100 metres long and an eave height of 11.5 metres, providing a total covered playing area of 15,200 metres (approx 161,000 sq feet).
- As the need for foundations has been kept to a minimum, once relocated, the existing site will be returned to a clean site with the minimum of time, effort and cost.

The Eden Project Ice Rink Canopy



Project Objectives

To design and build a relocatable structure, for winter use only, as an ice skating rink.

Challenges

The structure had an overall lead time of 8 weeks from order with an on-site build time of just 10 days.

The Solution

The iconic architecture of Tim Smits' Eden Project demands a visually exciting solution for any ancillary structure and this innovative ice rink canopy is no exception!

Covering an area in excess of 2000 sq metres (approx 21,200 sq feet), a steel-framed building with a 900g/sq metre heavy duty membrane roof was constructed.

The Result

Due to its popularity and versatility, the engineering of the original winter ice rink has now been revisited to create a permanent solution which can also host year round events, exhibitions and summer shows, including a spectacular proscenium arch.

Devonport Dockyard



Project Objectives

To design and install a relocatable structure, in which to build ocean-going craft.

Challenges

The building had to have:

- An unusually high eave height of 16.5 metres with a ridge height of 19.5 metres.
- Sliding panels to enable major shipbuilding components to be delivered by tower crane through the roof.
- A removable gable end to enable craft to easily leave the building for sea trials.

The Solution

A remarkable building which conforms to all building regulation requirements.

The steel framework has an extraordinary load carrying capacity so, if necessary, an overhead crane could be suspended from it. An interesting addition to the building was the installation of a sacrificial internal liner to protect the steel framework and membrane walls from paint whilst the craft was being sprayed. With a 6 week procurement time from order and 14 day build time on-site, the entire project was completed within 8 weeks.

The Result

Due to the success of this project, the structure may shortly be relocated and a further one built in its place.

Premiership Football Club Training Academy



Project Objectives

To design and build a structure capable of being easily and quickly removed during the summer months, and re-erected for the football season on an annual basis.

Challenges

- The time frame was tight: handover within 20 weeks from design brief to build.
- The relocatable structure had to cover an existing artificial football pitch without damaging the surrounding fence, and had to comply with the FIFA recommendation for indoor football centres.

The Solution

- An air supported building spanning 7,700 sq metres (approx 81,000 sq feet) which is both temporary and permanent; built to a permanent building specification to allow the structure to remain in-situ 12 months of the year, but with the flexibility and engineering to enable rapid dismantling and rebuild as and when required.
- The building took approximately two weeks to erect including the installation of lighting, and approximately four days to dismantle. This short time frame minimised disruption to the training ground.
- Using a ground anchor system, foundations were kept to a minimum, saving both time and money.

The Result

Because of the flexible nature of the structure, the club have the option to relocate or it will be sold realising the residual value in the asset. The buildings simple foundation strategy allows it to be used at almost any other location.

Bespoke structures have been used where modular solutions will not perform in terms of design, dimensions, size or function and where a unique, bespoke approach with the added advantage of relocatability is needed.

We will take your brief and select from our unique range of relocatable building solutions, embracing the most innovative structures in either Aluminium or Steel or Air Supported technologies. Having agreed a building type, Useful Structures can often provide a budget costing and indicative drawings, but for any more complex projects a different approach is required.

In this case you will receive a "ball park" budgetary figure and draft plans for your consideration, all at no cost. Clients can then choose to either terminate or postpone the project or to commission Useful Structures to proceed with a detailed proposal including Architects Drawings, Engineering and Structural Calculations and a fully inclusive Cost Plan. A fee is agreed in advance for this work which is 100% refundable when the project proceeds.

The Useful Structures Special Projects offer includes structures for professional sports training facilities, large concert venues, exhibition halls, and football academies where spans of over 70 metres and huge eaves heights can easily cover a whole full size football pitch with room to spare. Any commercial or industrial application that specifies massive size and the ability to relocate in either the short or long term, is also ideal for the Special Projects approach.

The complete design and build service means that your building can be bespoke to your exact requirements whatever the width, length or height specifications.

fast, cost-effective,
relocatable multi
purpose buildings



What happens next

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