

# d<sup>2</sup> GRP Access Structures

Standard & Bespoke Fabrications



HAND-BUILT  
IN THE UK



Fabricated Vehicle Wash Bay, Dura Profile

Cost-effective, practical and safe Glass Reinforced Polymer (GRP) platforms, walkways, access structures & bespoke fabrications constructed from our market leading d<sup>2</sup> E23 Grade Dura Profile and Dura Grating.

**Unlocking the Power of Composites™**  
**» for GRP Fabricated Structures & Platforms**

**dura**™  
**composites**





Fabricated Embankment Staircase, Dura Profile

## About Us

Dura Composites has extensive expertise in the use of composite products for projects of all shapes and sizes.

Our team of skilled technical salespeople, CAD designers, fabricators and support staff are dedicated to quality management, continuous improvement, health and safety, and to delivering cost effective solutions for our wide-ranging client base.

Our services cover all aspects of the project lifecycle from feasibility studies and detailed design to cutting, fabrication, assembly and installation.

We maintain an extensive list of patents, design registrations and trademarks and our fabrications have been hugely influential in a wide range of industries including energy production and rail infrastructure.

If you have a project you would like to discuss with us, please call Chris Tate on +44 (0) 1255 446824.





# GRP Access Structures

Heavy duty, non-conductive, non-corrosive and chemically resistant access structures fabricated in the UK to provide a safe, cost-effective and durable alternative to steel.

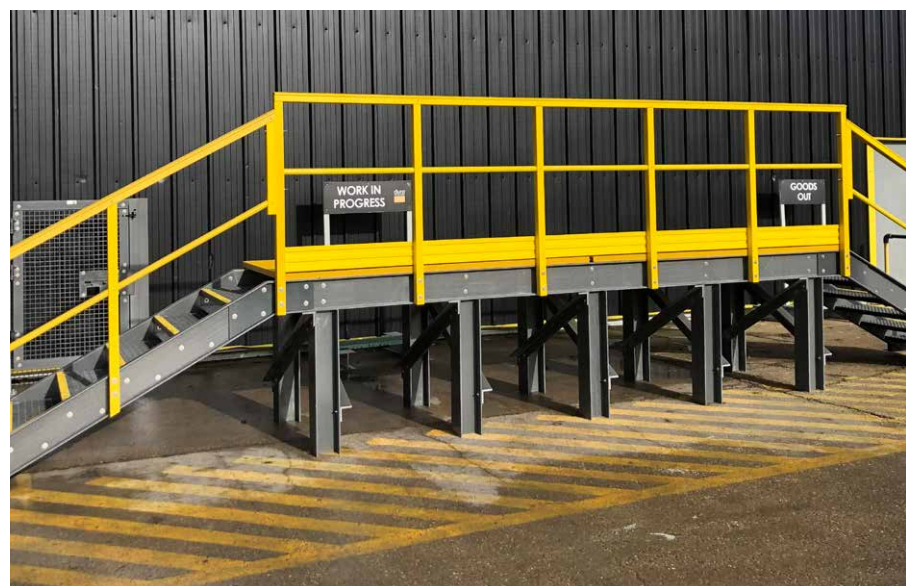
Our fabrications are constructed from the latest GRP composite product design, technology and manufacturing techniques known as the d<sup>2</sup> product range, and are suited to all types of industry.

The d<sup>2</sup> product range of performance-improving composites is exclusively available from Dura Composites and is fast becoming the new industry standard.

Developed from our 25 years' experience, d<sup>2</sup> products feature unique designs, new material technology or manufacturing methods AND deliver class-leading performance. Read on to discover more...

d<sup>2</sup> products extensively used in our fabrications include E23 grade GRP Dura Profile and 45mm mini mesh but other Grating thicknesses are available to meet client specific loading requirements.

All flooring components of our fabrications have been anti-slip tested for the equivalent of over 1m footfalls, achieving anti-slip scores of more than 63 in the wet even after 1m footfalls.

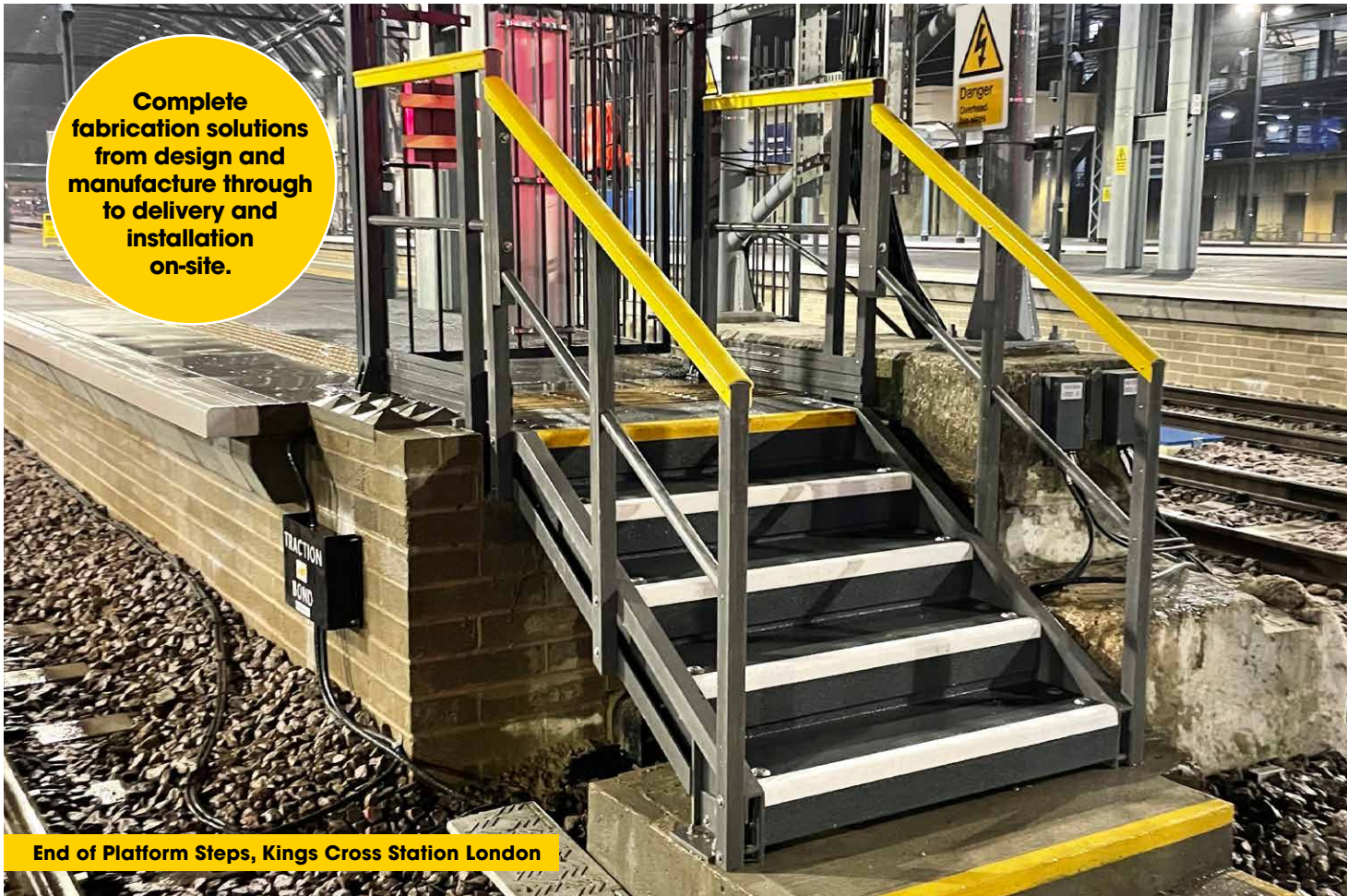


**For details and technical information please call +44 (0)1255 446824.**

Please Note: All product colours and images shown in this document are intended as a representation only and should not be considered as an exact colour match. We would recommend ordering a product sample so you can assess colour suitability before placing your order.

Dura Composites' manufacturing process results in a high level of colour consistency although some variation in colour may be apparent across products from different production batches.





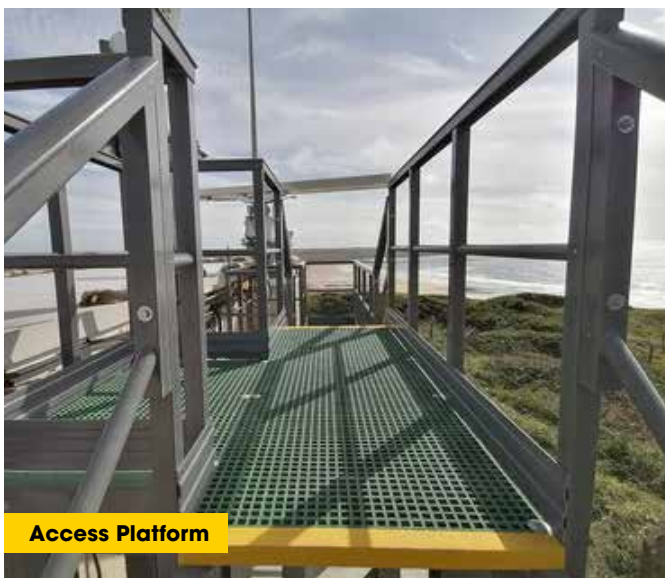
**End of Platform Steps, Kings Cross Station London**



**Driver Access Platform**



**Driver Access Platform (DAP), South Harrow Sidings London**

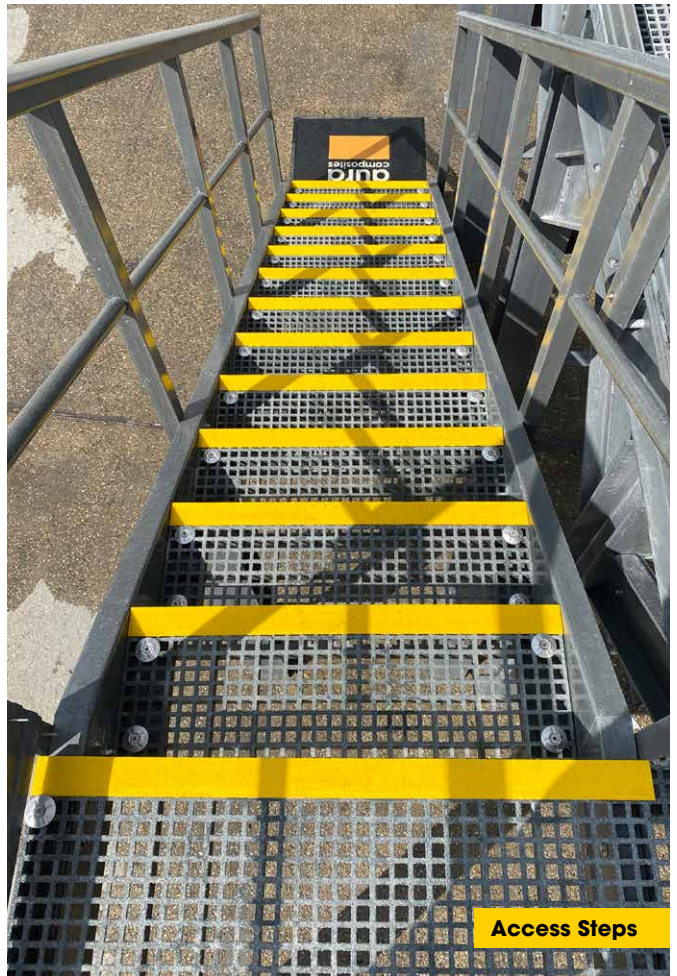


**Access Platform**





**Standard Duty Step Overs**



**Access Steps**



**Ladder with Cage & Landing**



**Minimal maintenance & impact and corrosion resistant**

**Access Platform**



**Machine Access**



**Gantry Walkway**





# Fabrication Services

We have extensive knowledge of every aspect of GRP fabrications and our first-class fabrication facilities at our East Anglia HQ enable us to construct even the most complex projects safely, reliably and to the highest standards.

We have supplied fabrications to a wide range of demanding environments including the UK defence sector, water industry, power generation industry, rail, electrical, manufacturing, and materials handling sectors.

Services available in-house include:

- Finite element analysis
- Engineering calculations
- Design optimisation
- Design troubleshooting
- 2D and 3D designs
- CNC cutting
- Drilling
- Off-site assembly

**Save time on site by utilising the skilled team at Dura Composites to build your bespoke fabrications:**

Our specialist fabrication teams have a wealth of experience in working with a range of composites, boasting an impressive project portfolio fabricated within our 600 sqm workshop.

Our fabrication experts use the latest technology, such as computer numerical controlled (CNC) machines, to produce intricate and bespoke designs.

Commonly requested bespoke fabrications include Machine Access, Embankment Staircases, Vehicle Access Steps, Roof Walkways, Trackside Walkways, Mezzanines, Modular and Fabricated Handrailing, Gantries, Stepovers and Ladders.

Choosing a fabricated GRP solution from Dura Composites significantly reduces the man-hours on site and can help to compress a project schedule.



At Dura Composites we also offer a number of fabrications that can be easily specified on our website using our simple configurator.

We are well-equipped to supply repeat orders for standard fabrications such as our stepover access systems.

## Site Survey/Project Specification

Your journey with us starts at the very beginning of your project. We can be there on site or virtually to discuss the aims and requirements of your project. Our experience can often identify previously unforeseen design needs early in the project to avoid delays in later phases.





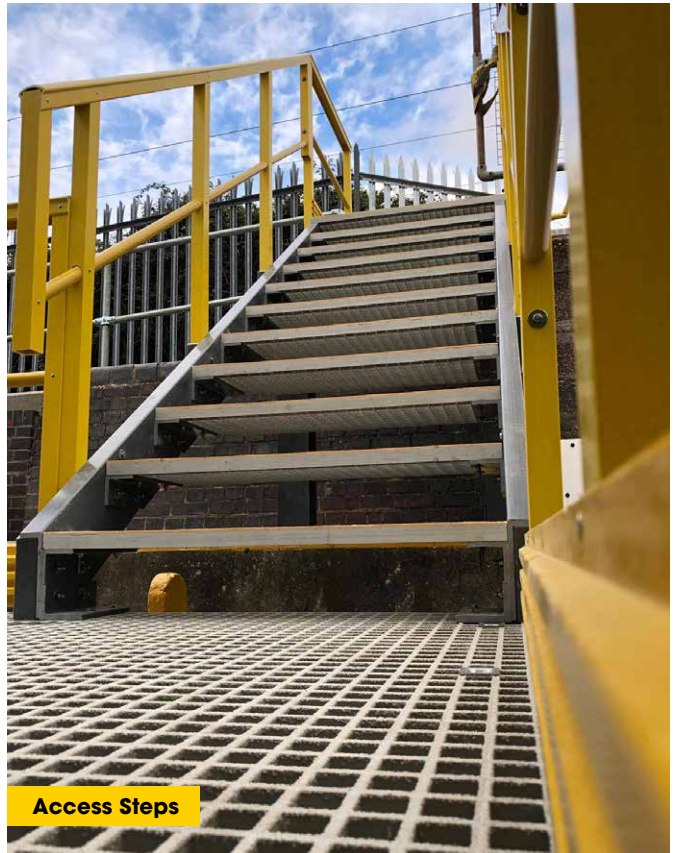
**Gates & Fencing**



**Equipment Access**



**Step-Over**



**Access Steps**



**Gantry**



**Ladder**



**Machine Access**

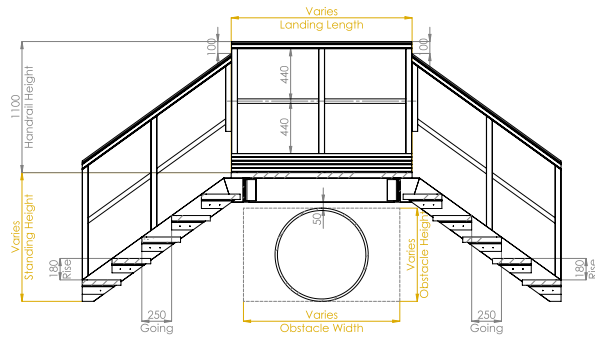


**Machine Ladder**

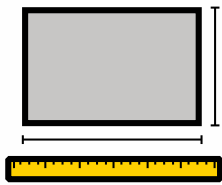


# Value Added Services

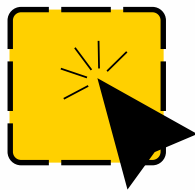
Customise, price, specify and buy your standard duty step-over access systems using our simple online tool at [www.duracomposites.com/tools](http://www.duracomposites.com/tools).



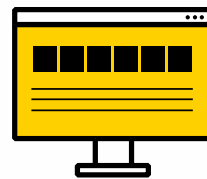
Our standard duty d<sup>2</sup> GRP Access Structures have been designed to the stair configuration, height, and obstacle width of your specific project. Simply select your project site parameters to view available step-over designs with pricing. Both straight and U-Shaped 180° turn configurations are available.



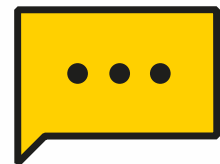
**1. Enter Obstacle Dimensions**



**2. Select Access Structure**



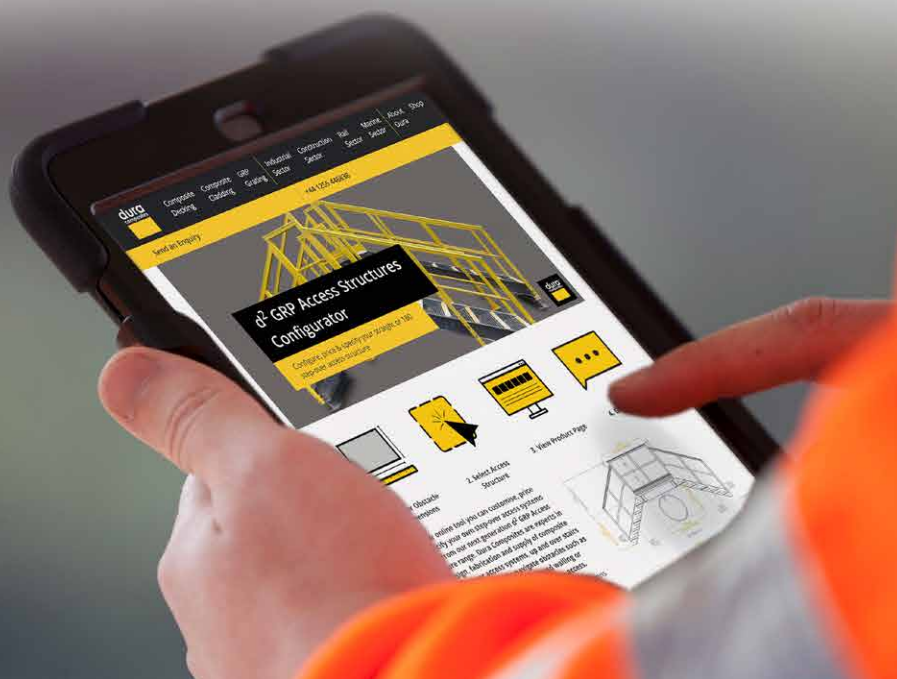
**3. View Product Page**



**4. Get in Touch**

All d<sup>2</sup> GRP Access Structures can be designed in conjunction with relevant standards for commercial and industrial use if required, and provide a safe, low maintenance, non-conductive and cost-effective alternative to metal or wooden structures.

If your requirement differs from the product options online, we also offer ¼ turn 90° structures and a bespoke design and fabrication service – simply get in touch for a quote on +44 (0) 1255 446824





# Value Added Services

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## CAD

Our Computer Aided Design (CAD) team use a variety of software including Inventor, Solidworks, Revit, 3Ds Max, Autocad and Navisworks to turn your ideas into reality. Working closely with the fabrication team, they can analyse, design and create bespoke fabrications tailored to your needs. Throughout the project they will be on hand to support you as you need them.



Using our CAD team can highlight any mistakes or clashes early on in the design phase and eliminate them before moving to the fabrication or site installation phase.

## CAE

Our computer-aided engineering services utilise a range of analysis tools to simulate the effects of different conditions on our composite products and structures using multiple simulated loads and constraints.

Our CAE tools are also used to analyse and optimise the designs created within CAD software.



## FEA

If you need structural efficiency gains in your designs we can make it happen using verification and analysis tools such as Finite Element Analysis (FEA).

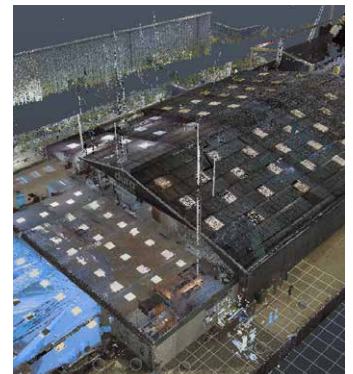
Our in-house Structural Engineering Team can support you with design optimisation and failure analysis to analyse the strength of complex structures and systems, determine individual component behaviour, and accurately predict how sections will react under structural and thermal loads.



## 3D Laser Scanning

Our 3D laser scanning service uses the latest in area scanning technologies to create an exact 3D replica of your project site or premises.

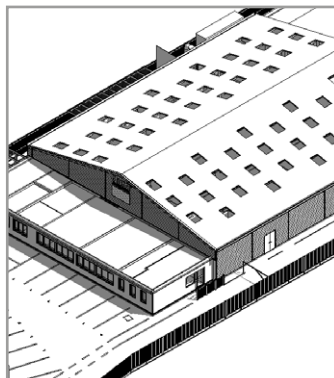
This can then be utilised by either Dura Composites' in-house designers to recreate your site specific requirements, or passed to your own internal team.



## Site Surveys

Our experienced team are available to attend site surveys to assess the detailed requirements of your fabrication project and to supplement and verify the site information provided as part of the initial client brief.

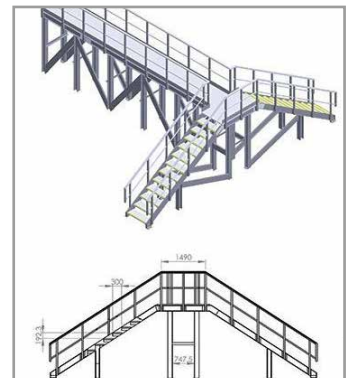
Initial site surveys for particularly tricky or challenging locations can be supplemented with our 3D laser scanning service to create exact measurements.



## Fabrication Drawings

To turn designs into reality once the design is approved, we produce a set of detailed fabrication drawings.

These ensure that each component part is assembled efficiently, cost effectively and to the required performance criteria.





# Dura Profile Components

The proven versatility of d<sup>2</sup> Dura Profile makes it a logical and cost-effective alternative to carbon, steel, aluminium, wood or other conventional materials.

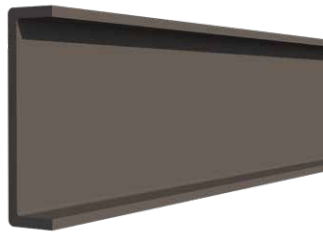
We carry a large stock holding of profile, including Angle, Channel, Box and Tube sections.

d<sup>2</sup> Dura Profile provides the engineer with a high degree of design freedom and offers exceptional material properties for a wide range of applications.

Profiles can be cut to specific sizes by our fabrication team, please speak to your Dura Composites sales representative to discuss your requirements.



**Angle**



**Channel**



**Top Rail**



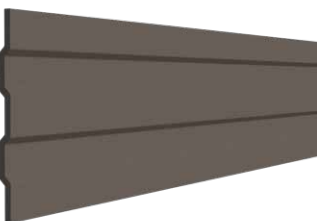
**Box Channel**



**I Beam**



**Tube**



**Kick Plate**



**WFB**



**Box**



**Web Stiffener (F)**



**Web Stiffener (M)**



**Web Stiffener (M & F)**



# How our skilled team construct our fabrications from our d<sup>2</sup> Dura Profile Components:



## Reasons to choose us



### Long-term performance

All individual components are individually tested to ensure performance. Handrail loadings achieve a 17mm Deflection at 0.36kN and landings achieve a 1.5kN Point Load / 2.5kN UDL @L/200. Stair tread Loadings achieve 6.1mm deflection at 1.51kN Point Load (100x100mm Square on the front edge – 800mm Clear Span).



### Exacting assembly

All fabrications are assembled in our state-of-the-art Fabrication Centre in East Anglia, UK, where Dura Composites is certified to ISO-9001 – the International standard for Quality Management.



### Anti-slip tested to 1 million Footfalls in all weathers

All flooring components have been anti-slip tested for the equivalent of over 1m footfalls, achieving anti-slip scores of more than 63 in the wet even after 1m footfalls.



### Belt and braces support structure

Our standard supporting framework utilises 203mm GRP channel or our unique 203 box channel, versus the commonly used weaker 150mm channel. Uniquely in the market, all our profile components meet the E23 grade performance requirement of the BS EN 13706 standard (which covers the specification of GRP pultruded profiles) and provides greater strength and consistent quality.



### Class B fire rating

d<sup>2</sup> Dura Grating GRP flooring achieves a classification of Bfl s1 – meaning very limited contribution to fire, with the lowest possible smoke emissions.





## Head Office

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**Unlocking the Power of Composites™**  
**» for GRP Fabricated Structures & Platforms**

Due to our policy of continual improvement we reserve the right to change specifications at all times without prior notice.

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