

Construction

# d<sup>2</sup> Dura Riser System

Design and Supply or Turn-Key Contract Installation



d<sup>2</sup> Dura Riser

Dura Composites is the leading designer, manufacturer and installer of steel-supported GRP riser flooring systems for new builds or refurbishments. Our unique patented d<sup>2</sup> system is Class B fire-rated, 20mm Ball Fall Test compliant, proven Live Load tested and 25% lighter than anything else on the market.

**Unlocking the Power of Composites**  
**» For the Construction Industry**

**dura**<sup>®</sup>  
**composites**





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Dura Riser in Grey

## About Us

Dura Composites is a leading supplier of composite products with 25 years' experience in delivering durable, performance-improving and cost-effective composite solutions to a wide range of industries.

We help companies of all sizes unlock the power of composites, and our client base includes businesses in the Industrial, Construction, Rail, Transport, Landscaping, Marine and Leisure sectors.

Our success is driven by our commitment to innovation and by empowering our staff to inspire, educate and problem-solve for customers.

In 2020, Dura Composites was awarded the Queen's Award for Innovation in recognition of our achievements at the forefront of composite material technology.

Dura Composites' products are available through a well-established global distribution network and many products can also be purchased via our online shop.





# The d<sup>2</sup> Dura Riser System

## The ultimate safety solution for service riser and lift shaft voids

Riser voids (the openings which are left to accommodate mechanical and electrical services on multiple floors of a building) can provide real safety challenges for contractors. In the UK, the most common kind of fatal accident to workers continues to be falls from a height, being struck by a moving vehicle and being struck by a moving object, between them accounting for over half of all fatal accidents to workers in 2020/21.

Data source RIDDOR (Health and Safety Executive).

Something as innocuous as a tape measure dropped from height in a riser shaft can tragically kill, and statistics show that a 500g object dropped from 15m has the same impact energy as a 75kg washing machine.

Dura Composites offers a comprehensive Riser supply and install service utilising our purpose-designed Dura Riser GRP Grating products and galvanised steel framework to help reduce the risk of death or serious injury on construction sites.

Our Dura Riser solutions can eliminate the need for scaffold handrails, netting or timber shuttering and can be 'Post-fixed' or 'Cast-in' to concrete as a fully structural solution. From our d<sup>2</sup> product range we offer Glass Reinforced Polymer (GRP) grating that meets the requirements of the 20mm Ball Falling Test, as well as versions with a completely solid surface for maximum debris defence.



**For details and technical information please call +44 (0)1255 443110.**

Please Note: All colour swatches 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 colour swatch 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.




# Defining Your Riser Strategy

As a construction project progresses from a client's statement of need, through design and construction and into operation and use, project teams seek increased certainty regarding criteria such as layout, fit, cost and performance.

This means that building services design must be integrated into the overall building design from an early stage, particularly on complex building projects.

The detection of clashes between Mechanical and Electrical services and other building components can be a significant cause of delays and variations on site, not just in terms of the physical placement of the services themselves, but also in terms of ensuring safe access to allow the M&E contractor to connect those services. This is the reason that you'll often hear our competitors championing how their solutions force M&E design to early completion as they simply aren't flexible enough to be modified on site as requirements change.

But in truth, even the best planned projects are subject to last minute M&E changes, and when it comes to making your riser voids secure, you need a solution that can accommodate these changes on-site without the fear of ballooning cost. With Dura Composites you can get full budget pricing in as little as 48 hours.



GRP supports are not the ideal method for Riser applications

## Should I use GRP supports?

Unlike some of our competitors, we do not recommend the use of GRP supports as there is a risk that these can be accidentally cut during the fitting of services, causing the riser to fail. Our Dura Riser steel framework and Dura Riser GRP grating are the perfect combination as they are lightweight, strong, safe and easy to adapt for M&E services.



# The Dura Composites Riser Strategy is simple:

## 1. Design for all stages of the building lifecycle

Our galvanised steel framework and GRP grating covers offer the perfect combination of strength, safety and adaptability on site. Unlike competitor solutions, there is no need to cut service holes ahead of time or to crane heavy steel framework into position and the system is infinitely adjustable to allow for millimetre by millimetre changes. All components of the Dura Riser system are also suited to manual handling and can be adapted for use with unusual substrates such as hollow or clay pot.

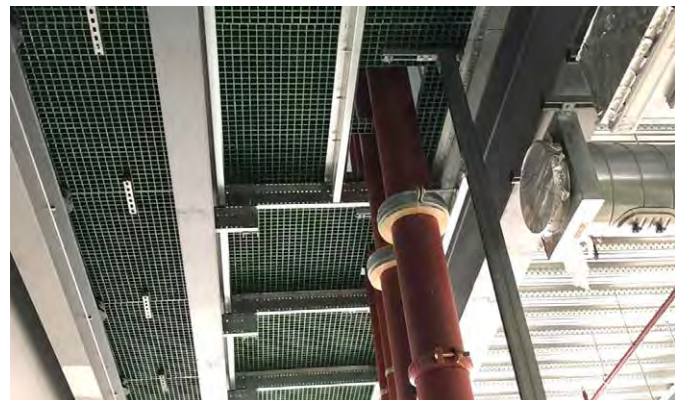
Dura's system is ideally suited to modular construction and enables safety requirements to be more easily met and policed. Not only is there a reduced risk of trips, slips and falls - particularly as work at height is reduced - but there is also a reduction in onsite activity.



## 2. Reduce the risk wherever possible

Whilst no standard exists specifically for riser void protection, our Dura Riser system is designed to comply with the rigorous standards set out in BS 4592-0:2006 + A1:2012. Service cut outs can be made "just in time" to minimise the risk for on-site personnel, and our mini mesh gratings comply with the European Ball Falling test requirements.

Dura Riser Grating features our best ever gritted surface which is tested to over 1 million footfalls (in accordance with BS 7976-2:2002+A1:2013) and outperforms all other products in the market when it comes to durability and anti-slip properties.



## 3. Keep it simple

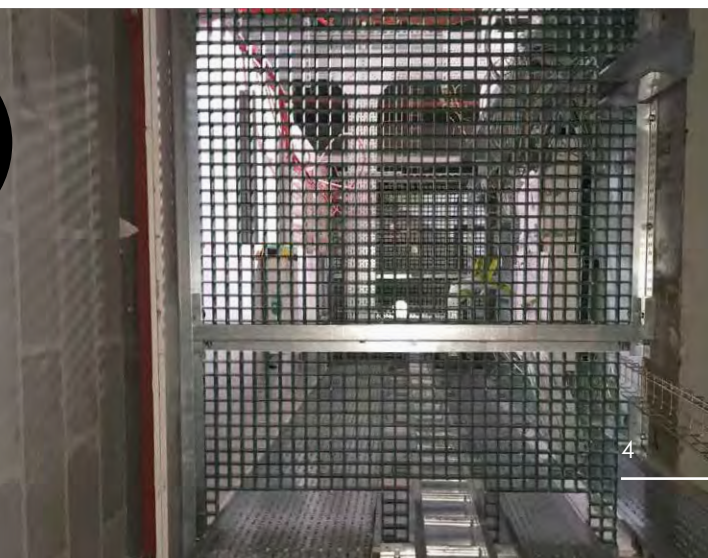
Our standard Dura Riser steel framework comprises of four innovative patent pending components that can be used in a wide range of scenarios for risers with a span of up to 3 metres. We offer both a supply-only and a fully-installed solution. Where service penetrations are required, additional supports may be needed, and our experienced team can also create and install bespoke solutions for complex riser voids. No hot works permits are required for cutting service holes on site, thanks to the non-conductive and non-sparking properties of the Dura Riser grating.

## 4. Safer at the point of need - for less money

Dura's Riser solutions are a safer option than corrugated plastic, plywood and netting and prove more cost-effective in the long run as they offer much needed flexibility to construction teams. There's no need to remove and replace heavy cover plates, and no significant contribution to construction waste. Using Dura Riser 41mm Solid Top grating eliminates the need for additional coverings such as corrugated plastic, netting or plywood, saving even more cost.

## Why are steel supports plus GRP grating the perfect combination?

With its innovative Dura Riser product range, Dura Composites has created the perfect marriage between a strong steel framework system and a safe and durable GRP floor covering. Our patent pending Dura Riser system provides collective protection which actually eliminates the risk of falling from height because the void is covered at the exact moment of installation and services can be cut in situ without the need for costly removal of cover plates or adjustment to the supports.





# Dura Composites' Unique Perforated Pre-Coated Steel Framework Solutions

## Weather Resistant System Allows for Easy Drilling and Rebar Adjustment for Rapid Secure Installation

Dura Composites' Post-Fix galvanised steel framework system is ideal for use in situations where the riser void covering needs to be fixed to an existing structure such as a reinforced concrete slab or core wall. Designed to work seamlessly with our Dura Riser GRP flooring products, the Patent Pending framework is supplied in sections for easy handling on site and can be assembled by our highly qualified install team for immediate protection. Supports can be added retrospectively to suit the changing requirements of the Mechanical and Engineering Design and the perforation within the framework means that it's more likely that rebar will be avoided during installation.

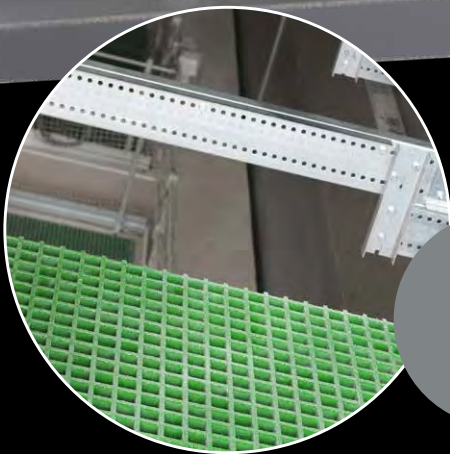
Extra supports can be added or supports adjusted at a later stage to suit M&E design.







Bespoke solutions can also be achieved using our standard Dura Riser components as shown in the image above.



**Patent  
Pending**

Our Dura Riser framework and grating solutions are installed as part of the 'second fix' processes. As experts in innovation our testing and experience has led us to develop a patent pending solution that's unique in the marketplace. The perforations in the steel allow for easy drilling and help to avoid rebar within the concrete during installation whilst retaining strength.

For scenarios where a non-conductive framework material is mandatory, Dura Composites' GRP angle and profile may be suitable for use in place of the Dura Riser framework. Your Dura representative would be happy to advise on your specific site conditions.

Our Dura Riser framework is now also available featuring a breakthrough precoated steel for enhanced protection. The specific composition of this coating (3% Mg and 3.5% Al) is crucial as it leads to the formation of a very dense, stable, and durable layer of protection. The compact layer acts as a barrier to corrosion, preventing the underlying steel from coming into contact with the ambient environment. The result is highly effective corrosion protection, even in the harshest conditions. Dura Riser precoated steel is also able to "self-heal" on cut edges, where corrosion typically begins. This "self-healing" property ensures it performs at least three times better than normal galvanizing products.

Dura Riser precoated steel provides the high level corrosion resistance of stainless and aluminium at a significantly lower cost. It's extended durability, combined with the excellent lifecycle of d<sup>2</sup> Dura Grating as a riser void covering also results in reduced maintenance which saves money over the life of the project. It is also 100% recyclable and does not contain any harmful elements. It is REACH compliant and an environmental product declaration (EPD) is also available on request. For more information on the specific properties of the precoat, please contact your Dura Composites representative.

## Making a service riser secure depends on multiple variables such as span, load & environment.

## Dura Composites can help support you at every stage of your construction project.



## Dura Riser Box



Suits **Modular**  
Construction



## Suited to Offsite & Modular Construction

The Construction industry's strategy (Construction 2025 published by the BIS) set the goal of reducing the time from inception to completion of a project by 50% and reducing costs by a third. This will require a much greater degree of off-site manufacturing in factory environments and the reduction of labour.

The Dura Riser Box can be delivered flat-packed for assembly on-site, or completely pre-built for lifting into place with maximum speed and minimum risk. Opting for pre-built units can help on projects with shorter construction schedules where safety, quality, time and cost parameters still need to be met.

## Key Benefits of Pre-Assembled Units:

- Quality Checked product delivered ready to install for peace of mind
- Improvements in speed of installation
- Increased efficiency
- Improvements to systems/processes on-site
- Removes element of risk during assembly (one less operation on site)
- Reduced material wastage





# d<sup>2</sup> Dura Grating Products

Our innovative **d<sup>2</sup> Dura Grating** products are suited to every industry. Each variant is compliant with British Standards and offers superb efficiencies versus traditional materials.

## d<sup>2</sup> Dura Grating 38mm, 50mm Standard Mesh



**d<sup>2</sup> Dura Grating** Standard Mesh has several open hole sizes depending on panel thickness and is our most cost effective open mesh flooring solution.

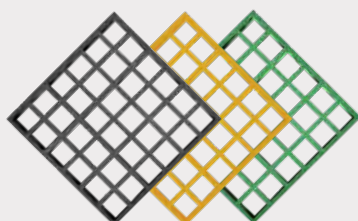
It is available in a 38mm or 50mm thickness in Dark Grey, Yellow and Green and provides excellent bidirectional mechanical properties.

As with all our gratings, it can be supplied with a full range of galvanised steel clips, clamps and hold down fixings to suit all situations.

Patent Pending Patent Application  
No: GB 19 04928.7



**31mm &  
28mm holes**



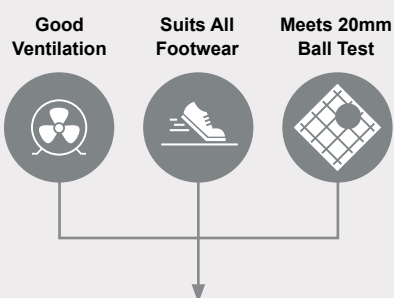
## d<sup>2</sup> Dura Grating 35mm, 45mm, 55mm Mini Mesh



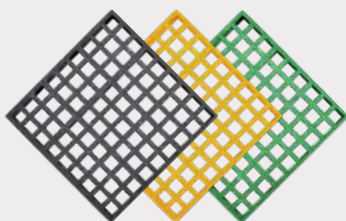
**d<sup>2</sup> Dura Grating** Mini Mesh has all the benefits of our d<sup>2</sup> Standard Mesh grating but with a smaller open mesh area depending on panel thickness.

The smaller holes of this product prevent objects such as screws, nuts and bolts from falling through, and the aperture sizes comply with BS 4592 and the European 20mm Ball Falling Test. The unique patent pending design allows for improved visual inspection of the substructure below. **d<sup>2</sup> Dura Grating** Mini Mesh is available in a 35mm, 45mm and 55mm thickness in Dark Grey, Yellow and Green.

Patent Pending Patent Application No:  
GB 19 03941.1



**19.5mm holes**



## d<sup>2</sup> Dura Grating 29mm, 41mm, 53mm Solid Top

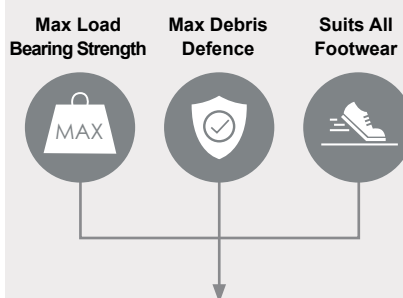


**d<sup>2</sup> Dura Grating** Solid Top is a great choice for situations where no light transmittance, drainage or visual inspection of the area underneath the grating is required.

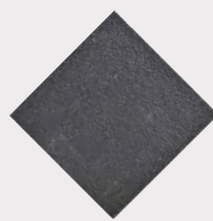
The gritted, anti-slip properties and up rated surface of **d<sup>2</sup> Dura Grating** Solid Top provides higher opacity values than open mesh grating and the solid surface prevents all objects and debris from falling through. Available 29mm, 41mm and 53mm thickness in Dark Grey only.

Other colours available by special order.

Patent Pending Patent Application  
No GB 19 04928.7



**Solid surface**





# How does d<sup>2</sup> differ from other Glass Reinforced Polymer (GRP) grating?

## d<sup>2</sup> - When Performance Matters

d<sup>2</sup> Dura Grating is part of the d<sup>2</sup> product range - the next generation of performance-improving composites, available exclusively from Dura Composites.

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.

### 1. Unique Design



Our next generation GRP mesh grating has an improved strength to weight ratio.

### 2. Fire Rating



d<sup>2</sup> Dura Grating is first in the industry to be produced as Class B BS EN13501 as standard, superseding BS 476.

### 3. Proven Anti-Slip



Uses high spec surface materials instead of traditional angular quartz. Tested to 1.1 million footfalls, with low slip potential and max durability.

### 4. Colour Fade



Use of hi-tech resin systems and application techniques means d<sup>2</sup> Dura Grating's colour is consistent and long lasting.

### 5. Ball Fall Test Compliant



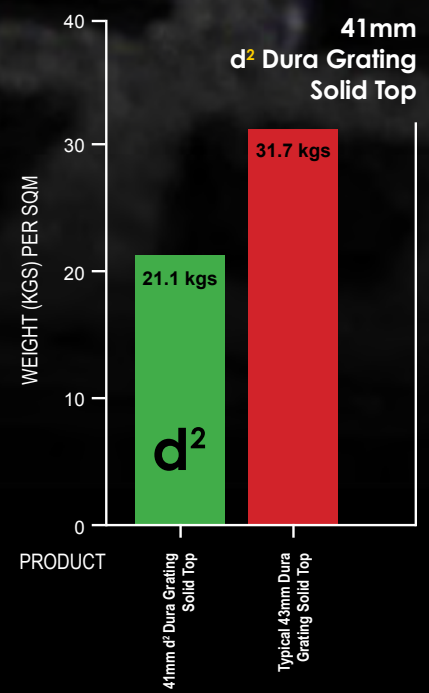
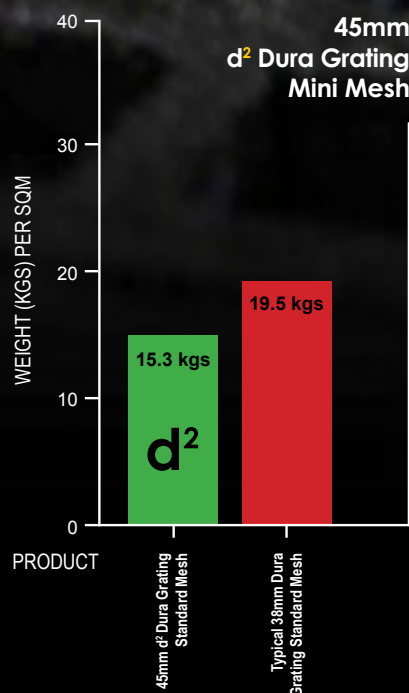
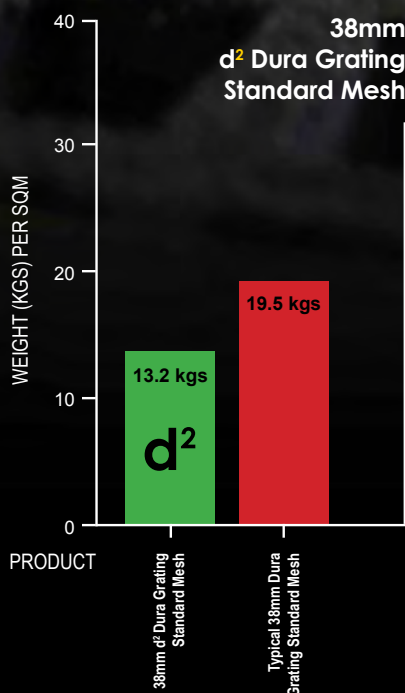
d<sup>2</sup> Dura Grating offers small open holes ensuring compliance with 20mm Ball Fall Test. Suitable for a wider range of footwear.

## Up to 33% lighter for easier handling on site

38mm Standard Mesh, d<sup>2</sup> Dura Grating = 13.2kg vs Traditional 38mm Standard Grating = 19.5kg.  
A 6.3kgs weight saving and 32.3% lighter to manually handle.

45mm Standard Mesh, d<sup>2</sup> Dura Grating = 15.3kgs vs Traditional 38mm Standard Grating = 19.5kg.  
A 4.2kgs weight saving and 21.5% lighter, despite being 30% stronger with a greater spanning distance.

41mm Solid Top, d<sup>2</sup> Dura Grating = 21.1kg vs Traditional 43mm Solid Top Grating = 31.7kg.  
A 10.6kg weight saving and 33.4% lighter to manually handle.





# d<sup>2</sup> Dura Grating Product Information

Designed, developed and manufactured by Dura Composites, **d<sup>2</sup> Dura Grating** offers outstanding safety, performance and durability and is more cost-effective than traditional GRP grating in almost every scenario. Use the table below to find the right panel size for your project.

Product Range	Depth (mm)	Open Hole Size(mm) /Open Area	Panel Sizes (mm)	Colour	Weight (kg/m <sup>2</sup> )
Standard Mesh	38mm d <sup>2</sup>	31 / 66%	3054 x 996 3664 x 1224	Dark Grey / Yellow / Green	13.2
	50mm d <sup>2</sup>	28 / 63%	3052 x 1057 3682 x 1267	Dark Grey / Yellow / Green	15.7
Mini Mesh	35mm d <sup>2</sup>	19.5 / 54%	3030 x 1041 3667 x 1200	Dark Grey / Yellow / Green	13.2
	45mm d <sup>2</sup>	19.5 / 54%	3030 x 1041 3667 x 1200	Dark Grey / Yellow / Green	15.3
	55mm d <sup>2</sup>	19.5 / 54%	3030 x 1041 3667 x 1200	Dark Grey / Yellow / Green	19.0
Solid Top	29mm d <sup>2</sup>	None	3699 x 1239 3043 x 993	Dark Grey	16.7
	41mm d <sup>2</sup>	None	3663 x 1224 3054 x 996	Dark Grey	21.1
	53mm d <sup>2</sup>	None	3682 x 1267 3052 x 1057	Dark Grey	22.9

## Maximum Spans for Common Load Criteria

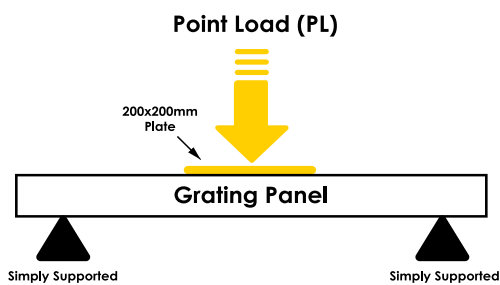
Product Range	Depth (mm)	Max Span 1.5kN Point Load @ 1% deflection	Max Span 1.5kN Point Load @ 0.5% deflection	Max Span 2.5kN Uniformly Distributed Load (UDL) @ 1% deflection	Max Span 2.5kN Uniformly Distributed Load (UDL) @ 0.5% deflection
Standard Mesh	38mm d <sup>2</sup>	2500mm	880mm	1390mm	1040mm
	50mm d <sup>2</sup>	2770mm	1800mm	1700mm	1300mm
Mini Mesh	35mm d <sup>2</sup>	1590mm	870mm	1180mm	900mm
	45mm d <sup>2</sup>	2210mm	1330mm	1560mm	1180mm
	55mm d <sup>2</sup>	2500mm	2280mm	1940mm	1490mm
Solid Top	29mm d <sup>2</sup>	1450mm	830mm	1190mm	920mm
	41mm d <sup>2</sup>	3400mm	1960mm	1770mm	1280mm
	53mm d <sup>2</sup>	Full Panel	2600mm	2150mm	1630mm



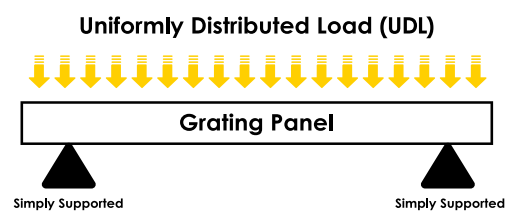
# Proven Load and Deflection Values Based On Live Testing Program

Determining the correct GRP riser flooring product depends on the load criteria and surface finish requirement selected by the designer.

Dura Composites is the only company that LIVE load tests its unique products to systematically determine the performance levels. Other companies use generic industry tables despite the huge variation in performance from manufacturer to manufacturer for moulded grating.



A **Point Load** is any static load considered to act over a small or concentrated area when compared to the extent of the surface to which the load is applied. It is sometimes referred to as a Line Load.



A **Uniformly Distributed Load** or **UDL** is one where the load is considered evenly distributed across a defined area.

Please find opposite tables showing the deflection values assuming a 0.5% (L/200) criteria for **d<sup>2</sup> grating** products. Green means that the product meets the 0.5% criteria, amber means it does not. For more details on other **d<sup>2</sup> products** or to use the **Dura Composites** Online Product Selector, consult your **Dura Composites** representative for details.





# Standard Mesh

## d<sup>2</sup> Dura Grating 38mm Standard Mesh

Point Load (kN)	Clear Span										
0.5% / L/200	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm	1300mm	1400mm	1500mm
1.0	0.8	0.9	1.1	1.4	1.8	2.3	2.7	3.0	3.4	3.7	4.0
1.5	1.5	1.7	2.0	2.6	3.4	4.1	4.9	5.6	6.4	7.1	7.8
2.0	2.0	2.4	2.9	3.7	4.7	5.8	6.9	8.0	9.1	10.3	11.4
2.5	2.5	3.0	3.8	4.8	6.0	7.3	8.8	10.3	11.8	13.4	14.9
2.5	2.8	3.6	4.5	5.8	7.2	8.8	10.6	-	-	-	-
UDL (kN/m <sup>2</sup> ) at 0.5% or L/200											
2.5	0.5	0.8	1.3	2.1	3.1	4.5	6.3	8.6	11.2	14.1	17.4

## d<sup>2</sup> Dura Grating 50mm Standard Mesh

Point Load (kN)	Clear Span										
0.5% / L/200	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm	1300mm	1400mm	1500mm
1.0	0.3	0.3	0.4	1.5	0.6	0.8	1.0	1.1	1.4	1.6	1.8
1.5	0.5	0.7	0.9	1.1	1.4	1.7	2.0	2.4	2.9	3.3	3.9
2.0	0.7	1.0	1.3	1.7	2.1	2.6	3.0	3.7	4.3	5.0	5.9
2.5	0.9	1.3	1.8	2.3	2.8	3.4	4.1	4.9	5.7	6.7	7.8
2.5	1.2	1.7	2.2	2.8	3.5	4.3	5.1	6.1	7.2	8.4	9.8
UDL (kN/m <sup>2</sup> ) at 0.5% or L/200											
2.5	0.3	0.5	0.7	1.2	1.8	2.6	3.6	4.9	6.4	8.4	10.7

# Mini Mesh

## d<sup>2</sup> Dura Grating 35mm Mini Mesh

Point Load (kN)	Clear Span										
0.5% / L/200	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm	1300mm	1400mm	1500mm
0.5	0.7	0.8	0.9	1.0	1.3	1.7	2.1	2.6	3.1	3.7	4.3
1.0	1.1	1.4	1.9	2.4	3.0	3.8	4.6	5.6	6.6	7.8	9.2
1.5	1.4	2.1	2.8	3.7	4.6	5.8	7.0	8.4	10.0	11.8	13.9
2.0	1.8	2.7	3.7	4.9	6.2	7.7	9.3	11.2	-	-	-
2.5	2.3	3.4	4.7	6.1	7.8	9.6	-	-	-	-	-
UDL (kN/m <sup>2</sup> ) at 0.5% or L/200											
2.5	0.8	1.1	1.8	2.9	4.5	6.5	9.1	12.3	16.4	21.3	27.4

## d<sup>2</sup> Dura Grating 45mm Mini Mesh

Point Load (kN)	Clear Span										
0.5% / L/200	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm	1300mm	1400mm	1500mm
0.5	0.4	0.6	0.7	0.9	1.0	1.2	1.5	1.8	2.2	2.6	3.2
1.0	0.8	1.1	1.4	1.7	2.1	2.5	2.9	3.5	4.3	5.1	6.1
1.5	1.1	1.6	2.1	2.6	3.1	3.7	4.4	5.3	6.3	7.4	8.8
2.0	1.5	2.1	2.7	3.4	4.1	4.9	5.8	6.9	8.2	9.7	11.3
2.5	1.8	2.5	3.3	4.2	5.1	6.1	7.2	8.6	10.1	11.8	13.7
UDL (kN/m <sup>2</sup> ) at 0.5% or L/200											
2.5	0.4	0.6	1.0	1.5	2.3	3.2	4.5	6.2	8.3	10.8	13.6

## d<sup>2</sup> Dura Grating 55mm Mini Mesh

Point Load (kN)	Clear Span										
0.5% / L/200	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm	1300mm	1400mm	1500mm
0.5	0.2	0.3	0.3	0.3	0.4	0.5	0.6	0.8	0.9	1.1	1.2
1.0	0.4	0.5	0.6	0.8	0.9	1.1	1.4	1.6	1.9	2.2	2.6
1.5	0.5	0.7	0.9	1.1	1.4	1.7	2.1	2.5	2.9	3.4	4.0
2.0	0.7	0.9	1.2	1.5	1.9	2.3	2.8	3.3	3.8	4.5	5.3
2.5	0.8	1.1	1.5	1.9	2.4	2.9	3.4	4.1	4.8	5.6	6.6
UDL (kN/m <sup>2</sup> ) at 0.5% or L/200											
2.5	0.2	0.3	0.5	0.8	1.3	1.8	2.5	3.4	4.5	5.9	7.5

KEY: ● Deflects less than 0.5% ● Deflects more than 0.5%



# Solid Top

## d<sup>2</sup> Dura Grating 29mm Solid Top

Point Load (kN)	Clear Span										
0.5% / L/200	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm	1300mm	1400mm	1500mm
0.5	0.8	0.8	0.9	1.2	1.6	2.0	2.6	3.1	3.8	4.5	5.4
1.0	1.3	1.5	1.9	2.5	3.3	4.2	5.2	6.3	7.6	9.0	10.6
1.5	1.9	2.6	2.9	3.8	4.9	6.3	7.8	9.5	11.3	13.4	-
2.0	2.4	3.0	3.9	5.0	6.6	8.3	10.4	-	-	-	-
2.5	3.0	3.7	4.8	6.3	8.1	-	-	-	-	-	-
UDL (kN/m <sup>2</sup> ) at 0.5% or L/200											
2.5	0.8	1.0	1.6	2.7	4.2	6.3	8.9	12.2	16.3	21.1	26.7

## d<sup>2</sup> Dura Grating 41mm Solid Top

Point Load (kN)	Clear Span										
0.5% / L/200	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm	1300mm	1400mm	1500mm
0.5	0.5	0.5	0.6	0.8	0.1	1.3	1.5	1.5	1.5	tbc	tbc
1.0	0.9	1.0	1.2	1.6	2.1	2.5	2.8	2.9	3.1	3.1	3.2
1.5	1.3	1.5	1.8	2.3	3.0	3.7	4.0	4.3	4.6	4.7	4.9
2.0	1.6	1.9	2.3	3.0	3.7	4.5	5.2	5.7	6.0	6.3	6.6
2.5	1.9	2.3	2.9	3.6	4.5	5.4	6.2	6.9	7.5	7.9	8.2
UDL (kN/m <sup>2</sup> ) at 0.5% or L/200											
2.5	0.3	0.6	0.9	1.5	2.1	3.0	4.0	5.2	6.7	8.5	10.6

## d<sup>2</sup> Dura Grating 53mm Solid Top

Point Load (kN)	Clear Span										
0.5% / L/200	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm	1300mm	1400mm	1500mm
0.5	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.5	0.6	0.8	0.9
1.0	0.5	0.5	0.6	0.7	0.8	0.9	1.1	1.3	1.6	1.9	2.2
1.5	0.6	0.7	0.9	1.0	1.2	1.5	1.8	2.1	2.5	2.9	3.4
2.0	0.7	0.9	1.1	1.4	1.6	2.0	2.4	2.8	3.3	3.9	4.5
2.5	0.8	1.1	1.4	1.7	2.1	2.5	3.0	3.5	4.1	4.8	5.6
UDL (kN/m <sup>2</sup> ) at 0.5% or L/200											
2.5	0.5	0.4	0.4	0.6	0.9	1.4	2.0	2.7	3.6	4.7	6.0

KEY: ● Deflects less than 0.5% ● Deflects more than 0.5%

d<sup>2</sup> Dura Grating uses Orthophthalic Polyester Resin as standard - a general purpose economic resin with good corrosion and chemical resistance that is suited to less harsh environments. Other resins are available on request but may be subject to additional lead times. Please consult our chemical resistance data to ensure you choose the most appropriate product for your application.





# Ours is the only product range that is BS 4592 20mm Ball Fall Test and BS 7676 1m footfall anti-slip compliant

Standards are used to establish consistent protocols that can be universally understood ensuring the reliability of the materials, products and services people use every day.

Adherence to standards can make it easier to understand and compare competing products, but with such a broad range of standards out there covering fields as diverse as health and safety, the fire performance of materials, and safe access to machinery and equipment, it can be hard to ascertain which standards may affect the material selection for your particular project.

The list below highlights the suitability of **d<sup>2</sup> Dura Grating** for some of the main standards in common usage for GRP flooring.

## British Standard Guide

Standard	Application	Duty	Point Load	Area (mm)	UDL	Deflection	Opening Size	Most Suitable d <sup>2</sup> Dura Grating Product	38	41	45	Areas
BS4592-0:2006 +A1:2012	Flooring, stair treads and handrails for Industrial use	General Heavy	1.5 kN 1.5 kN	200x200	5 kN/m <sup>2</sup> 7.5 kN/m <sup>2</sup>	L/200 or 10mm	20mm for places where people are working otherwise max 35mm	38mm d <sup>2</sup> Dura Grating or 45mm Mini Mesh d <sup>2</sup> Dura Grating (in case of proximity to working personnel)	✗	✓	✓	Working
									✓	✓	✓	Non-Working
BS-EN-ISO 14122-2	Safety of machinery - permanent means of access to machinery	-	1.5 kN	200x200	2 kN/m <sup>2</sup>	L/200	20mm for places where people are working otherwise max 35mm	38mm d <sup>2</sup> Dura Grating or 45mm Mini Mesh d <sup>2</sup> Dura Grating (in case of proximity to working personnel)	✗	✓	✓	Working
									✓	✓	✓	Non-Working

**BS 4592 'Flooring, Treads & Handrails for Industrial use'** states that any opening should prevent the passage of a 35mm diameter sphere except where the grating is above a place where people are working as opposed to occasionally passing, then the openings should prevent a 20mm diameter sphere from passing through.

**BS EN ISO 14122 "Safety of machinery" - "Permanent means of access to machinery"** states that openings should prevent a 35mm sphere for occasional passage underneath and a 20mm diameter sphere for spaces that are more regularly worked.

### Norsok Working Environment Standard

**d<sup>2</sup> Dura Grating** also meets the specific requirements of the Norsok Working Environment Standard developed for the Norwegian Offshore Sector. This standard requires that grating used for Floors, Deck, Surfaces & Platforms shall not allow a ball of more than 20mm diameter to fall through. The 20mm grating open hole limit applies wherever there are persons working beneath the grating. If there is no-one working below the maximum opening can be 35mm in diameter.

## The Only GRP Grating Tested to BS 7976 1m Footfall Test With Score of Minimum 62 in Wet

### Impressive Anti-slip Results

**Dura Grating's** anti-slip surface features a high specification composition which achieves ultra low slip potential in both wet and dry conditions. The slip potential of the surface is proven to reduce by a mere 5% after 1 million footfalls (in accordance with BS 7976-2:2002+A1:2013) whilst still achieving an impressive score of 62 in the wet against the low slip potential threshold of just 36.



# Industry-Leading Fire Performance

The fire safety of construction sites and buildings depends heavily on the types of materials used.

Dura Composites' **d<sup>2</sup> Dura Grating** is the first in the industry to be produced as Class B as standard (in accordance with BS EN 13501-1).

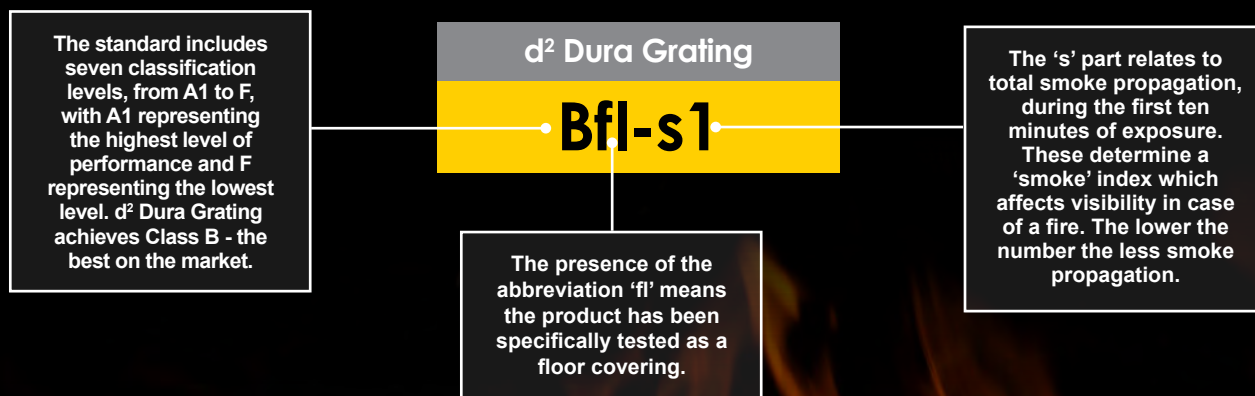
European Standard EN 13501-1 provides the reaction to fire classification procedure for all products and building elements. According to this Standard, reaction to fire is the response of a product in contributing by its own decomposition to a fire to which it is exposed, under specified conditions (and is not to be confused with the fire resistance). The Euroclass system focuses on the combustibility of materials, not only the spread of flames.

The process for classification under this standard involves a combination of up to five rigorous tests designed to

assess the product on a range of characteristics, including combustibility, heat levels, flame spread and smoke release. Once tested, the product receives an official classification of its fire rating, known as a Euroclass rating.

From best performing to worst performing, the Euroclass system is: A1, A2, B, C, D, E and F. It also provides additional classification (typically associated with reaction to fire classes D – B) for smoke production (from s1 (little or no smoke) to s3 (substantial smoke)) and flaming droplets/particles (from d0 (none) to d<sup>2</sup> (quite a lot)).

## Understanding European Classification (BS EN 13501):



The fire classification of d<sup>2</sup> Dura Grating is B fl-s1 means that the product contributes to a fire to a very limited extent and has been tested for use as a flooring application.

When considering the fire performance of any material for your project, please ensure that you confirm with your chosen manufacturer (through the supply of test certificates), what tests have been undertaken, and what results were achieved.



# Helping You Retain Up To 120 Minutes Fire Rating and Beyond

## Fire Rated Beam Connections



Working with our clients and leading providers of fire compartmenting systems, we have developed a number of connection details that allow us to interface with shaft wall substructure without interfering with the performance of the fire protection. This allows us to install the Dura Riser System without compromising fire strategy.

For more details, consult our Riser Installation team.

## Phenolic Grating

We also offer Dura Composites Phenolic fire-resistant GRP grating by special order which is engineered to withstand prolonged fire exposure without sustaining structural damage. Phenolic grating can achieve maximum fire resistance, low smoke and low toxic fume emissions and is ideal for use in high fire risk areas of buildings. It is available in a dark russet colour for easy identification on-site.

## Fire Stopping Compound

Dura Risers can be configured so we can work with providers of market-leading fire stopping compound products to ensure that the effective seal within fire rated walls and floors can offer critical fire stopping protection.

### Standard Grating



### Solid Top Grating

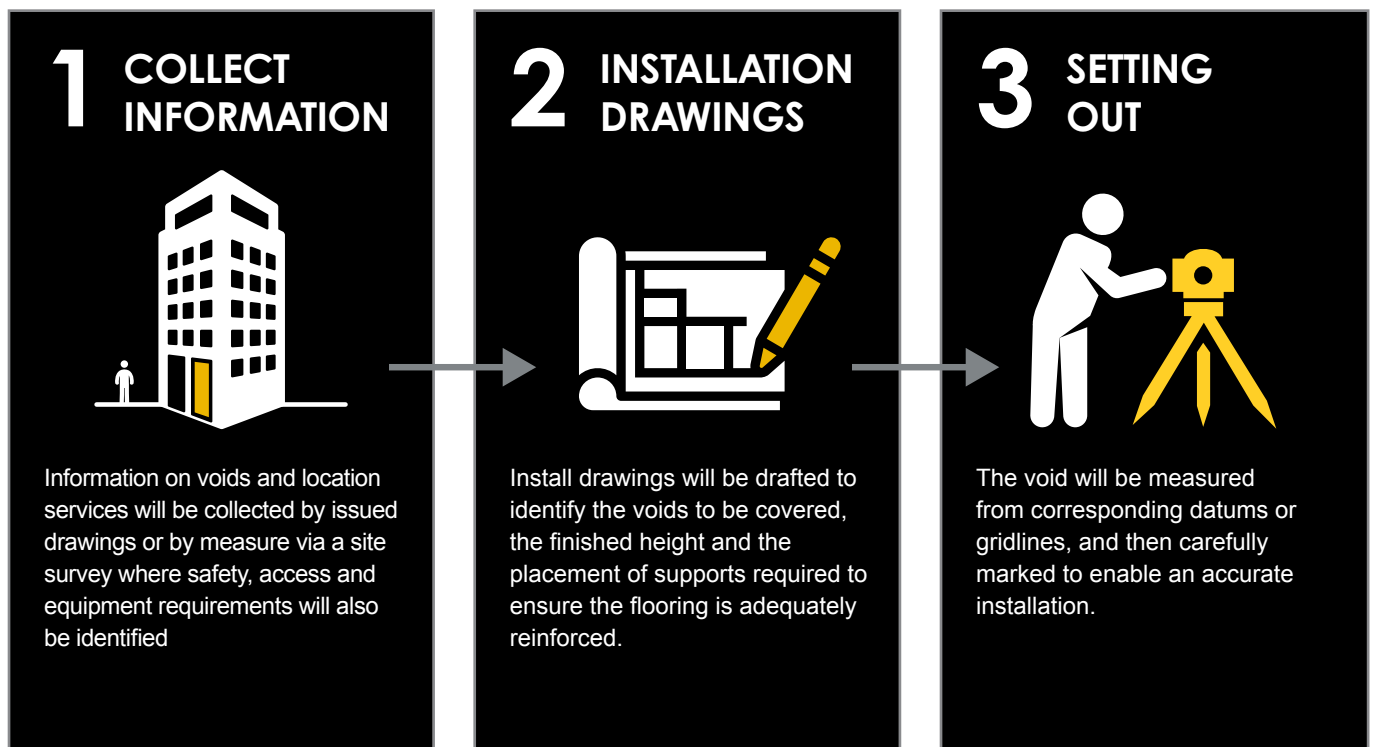


For more information on our fire safety and fire stopping products, please contact your Dura Composites representative on +44 (0)1255 446830.

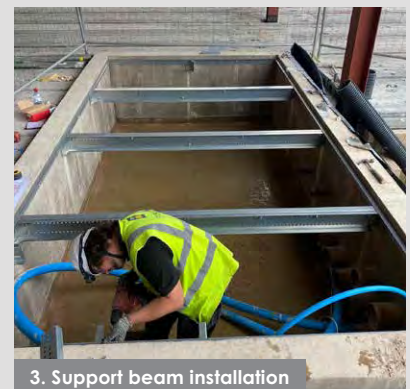
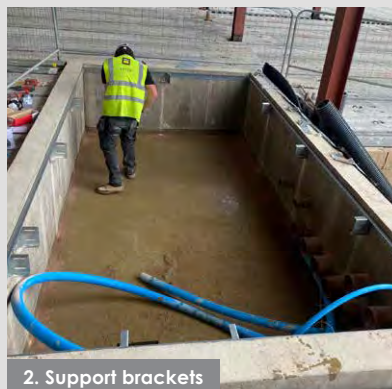
# Dura Riser Installation Steps

With over 25 years' combined experience, our Riser Installation Team are fully equipped and trained to install our bespoke patent pending riser safety solutions on high-rise new builds and refurbishments.

The Dura Riser system can be installed without delay - offering immediate riser protection and enabling the site to be fully operational instantly. Our experienced team can help ensure that your M&E requirements are factored into the build at the specification stage to help save you time and money.



## Phases of Build



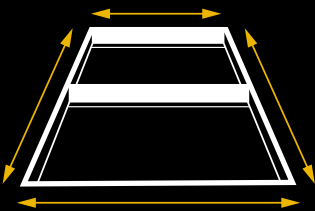


## Value Added Services

Dura Composites offers a structural design engineering service, both as a stand-alone design or as part of a larger integrated design scheme. Our Dura Riser design package includes layout drawings with secondary supports, and the option of FEA simulations and service cut out reports.

All covered under Dura Composites Public Liability Insurance. We also have full design capabilities, offering PI insurance for bespoke designs.

### 4 INSTALL SUPPORTS



The Dura Riser Framework is installed into the substrate of the void using approved fixings. Support will be offset by the thickness of the grating to allow the correct finished height.

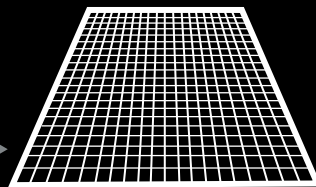


#### STEP 4 BUILD PHASES



4. Intermediate beam installation

### 5 INSTALL GRATING



The Dura Riser grating will be cut to size and rested upon the supports, then clipped down to prevent uplift.

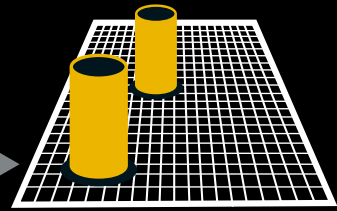


#### STEP 5 BUILD PHASES



1. Grating installation

### 6 CUT OUT FOR SERVICES



If your installed Dura Riser flooring solution has reached the next project stage, our experienced team are on hand to assist and ensure the structural integrity of your riser solution isn't compromised when the mechanical and electrical services are added.



2. Finished solution



## Dura Riser Flooring - Case Study

# Commercial Road, London

27 Commercial Road, London E1 1LD

Dura Composites products were selected for 27 Commercial Road by Ardmore, one of the largest family-owned construction groups in the UK. Ardmore are responsible for delivering hundreds of major projects and specialise in London-based multiphase regeneration schemes, high-rise developments, luxury residential projects and bespoke hotels.

Commenting on the installation of the Dura Riser, **Danut Bojian, Construction Manager at Ardmore Construction** said;

*"The Cast-In Dura Boxes and Dura Riser were easy to install on this project and were delivered to site in numbered*

*kit format already made to size, so it was simple for us to fit each one as the concrete was poured.*

*The durable anti-slip grating prevents objects and debris falling through and has a strong, anti-slip surface, so follow on trades will benefit from a great safety solution that's easy to work with when it comes to installing the services. From our point of view, it was great that hot works permits weren't required and that the Dura team gave us all the advice and support we needed to make the risers safe in an efficient and cost-effective way."*







## Dura Riser Flooring - Case Study

# Elephant Park, London

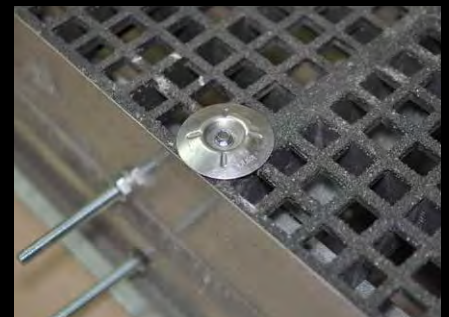
Elephant & Castle, Central London SE17

Elephant Park is a new mixed-use development in Elephant & Castle, London SE17 and is one of London's largest regeneration schemes. The project is being completed in multiple phases and is a partnership between Lendlease and Southwark Council.

Dura Composites products were selected for this phase of Elephant Park by AJ Morrisroe & Sons, specialists in civil engineering, groundworks and sub and superstructure RC frame construction.

Commenting on the installation of Dura Riser, James Wibberley, project Engineer at Morrisroe said;

*"The Dura Riser proved ideal for the project as they were delivered to site ready-made for quick installation. Dura Riser negates the requirement for heavy lifting equipment and significantly reduce installation costs, as service holes can be cut in situ without the need for post fixing or hot works permits. The team at Dura Composites offer superb technical and CAD support, and we look forward to working with them on future phases of Elephant Park and on other projects."*





## Dura Riser Flooring - Case Study

# Embassy Gardens, London

Nine Elms, London SW8 5BL

Embassy Gardens is a 15-acre mixed-use development in Nine Elms, London. The development includes nine apartment buildings along with office, retail and community spaces. The project is a joint venture between EcoWorld and Ballymore, and the mast plan was developed by Terry Farrell and Partners. Phase 1 is now complete, with Phases 2 and 3 under construction.

Building Services Company Briggs and Forrester were appointed as the M&E contractor and chose Dura Composites for the complex job of installing secondary supports to allow cut outs to be made to the various GRP grating riser platforms already in situ. Prior Dura Composites surveying the site and making their recommendations, no provision has been made for the service supports needed for mechanical and electrical services to pass through

on various floor levels whilst still maintaining the integrity of the riser. The Dura Riser Team carried out the required work quickly, proficiently and to a high standard and in accordance with all required Health and Safety criteria.

**Paul Petrilli, Quantity Surveyor at Briggs & Forrester Engineering Services Ltd;**

*"Due to the nature and intricacy of the requirements to stabilise and re-enforce the platform steel in our services riser on all ten levels, we had to investigate the market to find an appropriate specialist that we could trust, to ensure the works were carried out correctly and properly.*

*The comprehensive and detailed proposal we received from Dura Composites which identified the weak*

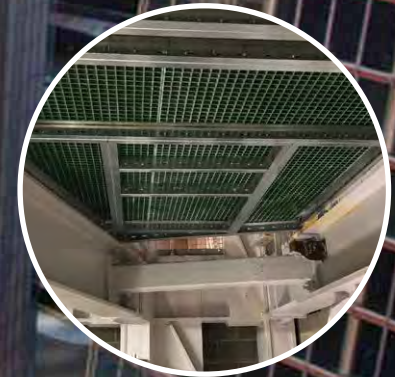
*points in the platform structure and how to overcome them was both commercially and structurally viable, leading Dura Composites to be our preferred bidder during the tender process.*

*Once the contract was awarded and the Scope of Works was finalised Dura Composites mobilised within days, kept us continuously informed of their progress, and also identified any Health and Safety risks during the installation. Once the works were completed, they also identified how the additional structural supports would be monitored and maintained.*

*In the view of the proficiency of their installed works, Dura Composites are now a valued part of our Supply Chain and I wouldn't hesitate to recommend them for Riser Installation works".*



## Dura Riser Flooring - Case Study



# Shard Place, London

London Bridge Street, London SE1 9SG

Shard Place is in the third phase of the £3.5 billion redevelopment of the estate next to London Bridge station, known as Shard Quarter. When completed in late 2020, Shard Place will provide a range of flats alongside amenities including a cinema, spa, and private roof garden. The building will appear to 'float' nine metres above ground providing 13,000 sq ft of public space and 12,000 sq ft of retail space.

Reinforced concrete frame and groundwork specialists Getjar were appointed as the formwork contractor by the principal contractor Mace and chased the Dura Riser install team to take on some of the complex install challenges for the service risers. Prior to the appointment of Dura Composites, Getjar had been installing GRP into a

number of voids, but selected Dura to provide specialist installation support to address the service cut outs required for the M&E phase of construction. Dura's unrivalled expertise and full install capabilities meant they could deliver a bespoke solution for a large triangular shaped riser on all 26 storeys that required the use of galvanised steel supports and bracketing in conjunction with Dura Riser to allow for cut outs to be performed whilst maintaining the integrity of the riser.

**Paul McNamara, Contracts Manager at MH Getjar Ltd;**

*"We have found Dura Composites to be extremely knowledgeable, informative, accommodating and professional throughout our engagement with them, on this and a number of other projects."*

*Their design service is quick and offers good advice and an efficient scheme, which is then followed up by a professional installation team who are flexible to the changing needs of site conditions on a daily basis and most importantly are willing to work with us to deal with variations and challenges along the way.*

*Our end clients are also complimentary of the services Dura Composites offers from a management and Health and Safety perspective.*

*It's pleasing to see a forward-looking and innovative company who are investing in Research and Development to provide a service tailored to the construction industry for everyone's benefit by reducing installation time and material costs".*





# Understanding Composites

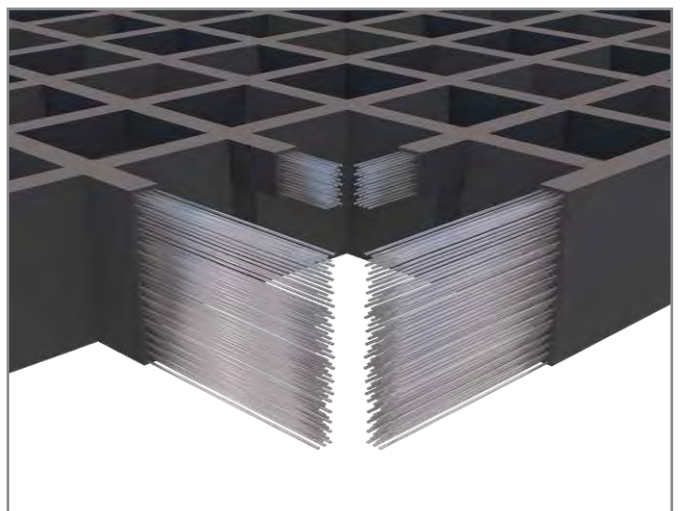
## Safer at the point of need

Although the word “composite” may sound technical, it's really just an umbrella term to describe materials that have been put together to make something that is superior than the original form in some way - making it stronger, easier to handle or corrosion resistant for example.

Composites that you will have heard of, but perhaps didn't realise were composites include steel (commonly known as an alloy), which is made by combining iron and carbon. It has been in use as a building material since the late 1800s and first became popular for building skyscrapers thanks to its strength and durability.

One of the most popular emerging composites of the past 40 years has been Glass Reinforced Polymer (or GRP), which is a resin-based composite that's reinforced with a glass fibre, and is sometimes also known as fibreglass. The combination of the high-strength glass fibre and highly-resilient polymer ensures that it's strong, lightweight and both chemical and corrosion resistant. It can also be produced with phenolic properties for use in high risk areas and does not conduct electricity or necessitate the use of hot works permits – making it suitable for a vast range of construction applications.


Our **Dura Riser d<sup>2</sup> grating** boasts a bonded coating of hi-spec grit which greatly enhances the safety & durability of the product and offers incredible slip resistance in all directions and conditions. The result of 25 years experience in the composites marketplace, Dura Composites Riser products are available exclusively from us, and can be installed by our highly qualified team.








# Installation Options & Fixings

A wide range of fixing solutions are available to cater for the huge number of applications that our Dura Grating is suited to. These are as follows:

Perimeter Frame					
Product Type	Size (mm)	Image	Length (mm)	Linear Meter Weight (kg)	Full Weight (kg)
Dura Riser Magnelis Coated Perforated Angle	40 x 80 x 2.5		2000	2.1	4.3
			3000		6.4
			6000		12.8

Support Beams					
Product Type	Size (mm)	Image	Length (mm)	Linear Meter Weight (kg)	Full Weight (kg)
Dura Riser Magnelis Coated Perforated Channel	40 x 50 x 2.5		2000	4.2	8.4
			3000		12.6
			6000		25.5

Brackets					
Product Type	Size (mm)	Image	Length (mm)	Linear Meter Weight (kg)	Full Weight (kg)
Dura Riser Magnelis Coated G-Bracket 150	120 x 128 x 141 x 3		N/A	N/A	1.4
Dura Riser Magnelis Coated Packer 150	120 x 62.5 x 2.5		N/A	N/A	0.12

## Dura Riser Framework Fixings

Code	Description	Installation Recommendations
BFX02157	M10 Zinc Plated Throughbolt - 80mm	Angle to Concrete; 500mm Centres
FX02080	M10 Zinc Plated Hex Head Concrete Screw - 80mm	G Bracket to Concrete; 2 per Bracket
BFX02166	M10 BZP Hex Head Set Screw 30mm, Nyloc Nut, 2 Washers	Channel to G Bracket / Back to Back Channel Fixings

## Dura Riser Grating to Framework Fixings

Code	Description	Installation Recommendations
BFX02165	M8 Pre-Galvanised Extra Large Dome Washer	All Grating; 1000mm Centres
BFX03002	5.5mm BZP Hex Head Self Drilling Tek Screw - 70mm	For 38-50mm Grating; 1000mm Centres

## Dura Riser Grating to Concrete Substructure Fixings

Code	Description	Installation Recommendations
BFX02154	M6 Philips Head Tapcon Counter Sunk Screw - 70mm	For 38-45mm Grating; 1000mm Centres

## Dura Riser Panel to Panel Joining Bars

Code	Description	Installation Recommendations
DP05060	Pre-Galv Channel Slotted 41x41x2.5mm - 350mm	Used at 500mm Centres
BFX03005	M8 BZP Hex Head Set Screw Fully Threaded - 50mm	For 38mm Grating; 2 per Joining Bar Assembly
BFX03006	M8 BZP Hex Head Set Screw Fully Threaded - 70mm	For 41-55mm Grating; 2 per Joining Bar Assembly
BFX01040	M8 Nylon Captive Channel Nut	2 per Joining Bar Assembly

# Cost Saving GRP Access Solutions for the Construction Industry

## Flexible, Lightweight & Non-Conductive Access Structures

Access platforms and structures are an important provision for keeping maintenance and engineering workers safe, and allow them to work in comfort around equipment without the risk of falling or injury.



The Construction Design and Management (CDM) Regulations of 2015 require designers to eliminate or reduce risks to those involved in maintenance as far as is reasonably practical and to design safe structures in accordance with the Eliminate-Reduce-Inform-Control (ERIC) framework. Core principles of ERIC include:

- Eliminating the need for maintenance as part of the design by using materials with suitable durability; or if that is not possible,
- Designing the structure so that future maintenance is reduced
- Designing the structure so that when maintenance is required it can be carried out safely

Dura Composites offers a range of Access Structures made from our non-corrosive, non-conductive and lightweight GRP which provide exceptional strength, toughness and consistency, making them a logical

and cost-effective alternative to steel, aluminium, wood or other conventional materials.

Access Structures which can be produced from Dura Composites GRP profiles include:

- Fixed access ladders (also known as a hooped ladder)
- Ship's staircases and companionway ladders
- Access gantries
- Stepovers (also known as Up and Overs)
- Edge protection with handrailing
- Fixed platforms
- Mobile Platforms
- Air Handling Unit inspection platforms
- Water equipment and electrical plant access platforms

Dura Composites' fabrications can be delivered to site in complete form, or in manageable sections for final assembly on location. If open mesh walkways

and treads are required, these can be selected from our anti-slip gritted GRP Dura Grating range in line with your load bearing and span requirements.







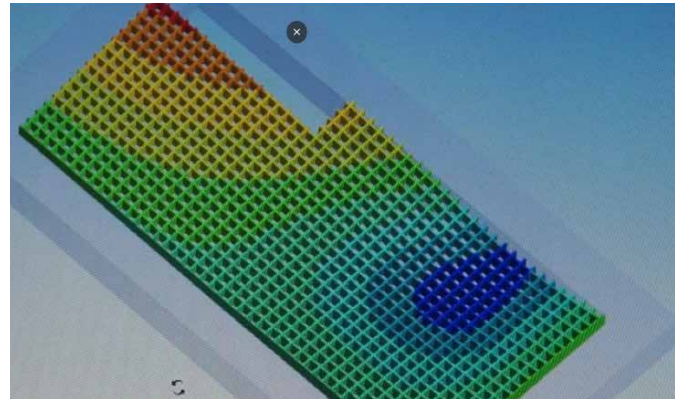


# From Concept to Reality: The Dura Composites Method



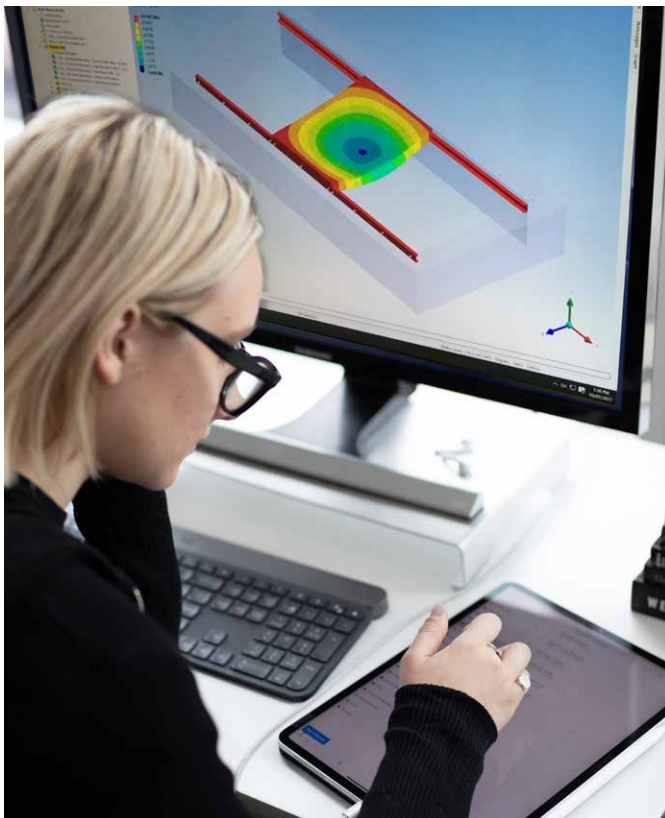
## Concept Design

We utilise our multi-disciplined team to produce innovative concept solutions that solve customer issues.



## Design Optimisation

If you need it smaller, stronger or lighter, we can make it happen using verification and analysis tools such as a Finite Element Analysis (FEA).



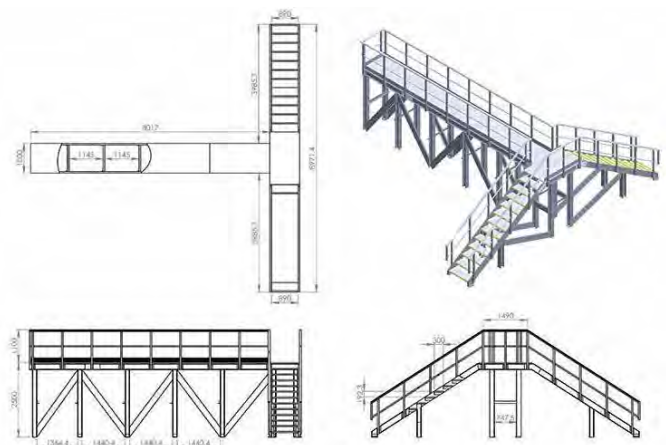
## Fabrication Drawings

To turn designs into reality once the detailed 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.

Our hugely experienced team works with our customers from initial concept, through to CAD and fabrication to ensure that you benefit from a custom-fabricated system which meets your specific requirements. For advice and help with your planned design please contact us on +44 1255 446830.

## Streamlined Installation

Dura Composites can deliver to site with easily identifiable "per floor" bundles of product.







## Built-in Sustainability

It's not just the initial outlay costs that you should consider when deciding on a material for your project. It's important to consider the whole lifecycle of the material and all its associated costs, including installation, how long it will last and what kind of maintenance (if any) it will require to keep it functioning and looking its best.

Dura's GRP products offer considerably low life cycle costs due to their maintenance free, corrosion resistant and impact resistant characteristics compared with traditional materials and have a design life in excess of 60 years and reassuring 25 year product warranty.

Even after the products have been used for their intended purpose and reach the end of

their lifecycle in the original context, they can be up-cycled or repurposed in other ways. We are happy to advise all customers on their specific scenarios.



Dura Composites has achieved the internationally recognised ISO 14001 certification, the standard that specifies criterion for an effective environmental management system. Awarded by NQA, the ISO 14001 quality mark is aimed at enhancing the environmental performance of Dura Composites by controlling the company's impact on the environment as well as reducing resource use and improving overall efficiency.





Installed platform

## Fan Filter Maintenance - Case Study

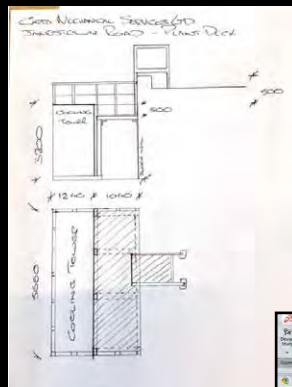
# Air Handling Unit Platform

Jamestown Road, London NW1

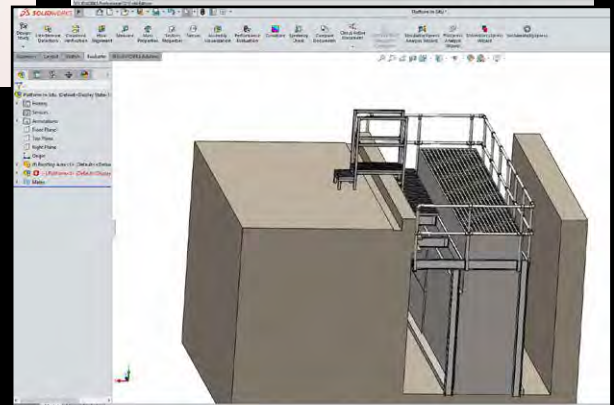
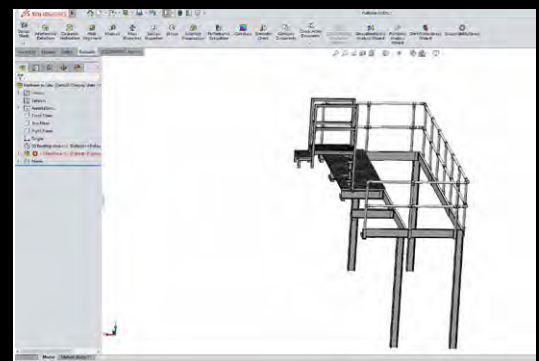
For this project, Dura Composites' client Capri Mechanical Ltd required an access platform to be erected along the side of an air handling unit (AHU) in order to safely access a set of fan filters at the top of the unit.

Access to the side of the unit was also required for periodic inspection, cleaning and maintenance, but this posed a challenge due to restricted access. Based on a sketch from the client, Dura Composites' in-house CAD team devised a clever, safe and robust structure that "hugged" the unit and positioned supporting legs on the outside corners.

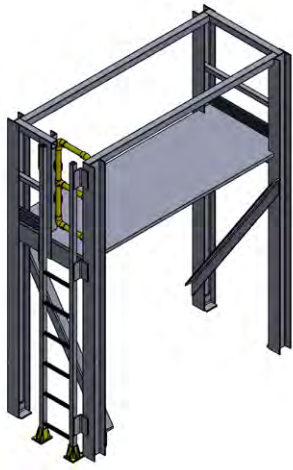
An access ladder with a step over was also constructed to allow entry from the roof onto the platform.



Initial client sketch







## Critical Electrical Equipment Inspections – Case Study

# Switchgear Unit Access

European Offshore Wind Deployment Centre, Aberdeen

The gas-insulated switchgear (GIS) at this windfarm protects the wind turbines from overloads and short circuits and is a critical piece of machinery. Instruments located on top of the switchgear must be regularly inspected and maintained, and safe access for on-site personnel is paramount – but site limitations in this instance presented complex challenges which Dura Composites were able to solve.

The shape and size of the unit made it impossible to use usual design methods, so following a consultation with their design team, Dura Composites' engineers were able to perform an analysis which resulted in the selection of a single heavy-duty handrail and beam to connect two end frames and support the floor panels.

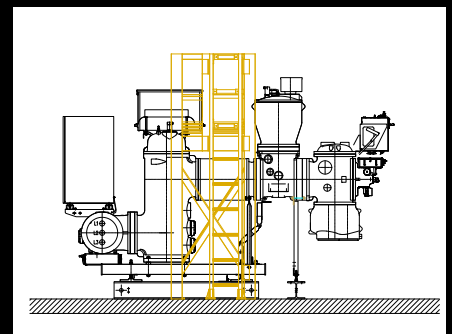
The finished design had several conflicts with the usual standards used to build plant access platforms, but with

their significant design, fabrication and installation expertise, Dura Composites was confident that it would meet the client's exacting requirements.

A design Risk Assessment was conducted to identify and mitigate and residual risk, and the design was altered to incorporate a self-closing door before being presented for approval.

With approval granted, fabrication could commence, with the Dura install team cutting the flooring panels in situ to allow them to fit around the tricky format of the switchgear.

Whilst the end client benefited from the elimination of residual risk when maintain the GIS, Dura Composites client J. Murphy & Sons also benefitted from a completely managed package that provided a hassle-free, safe and non-conductive bespoke solution to a complex problem.



*"The platform was delivered and installed as planned. We'd like to commend your installation team for a proactive approach and professional attitude."*

**Andrew Gaft MSc MIET MAPM**  
Project Manager, J. Murphy & Sons Limited



# Health and Safety

## Fully Certified and Accredited

We have a highly experienced workforce that embraces a "can-do" attitude. We are ISO 9001 certified – a quality management system that helps us continually monitor and manage quality in order to achieve, as well as benchmark, consistently high performance and service.

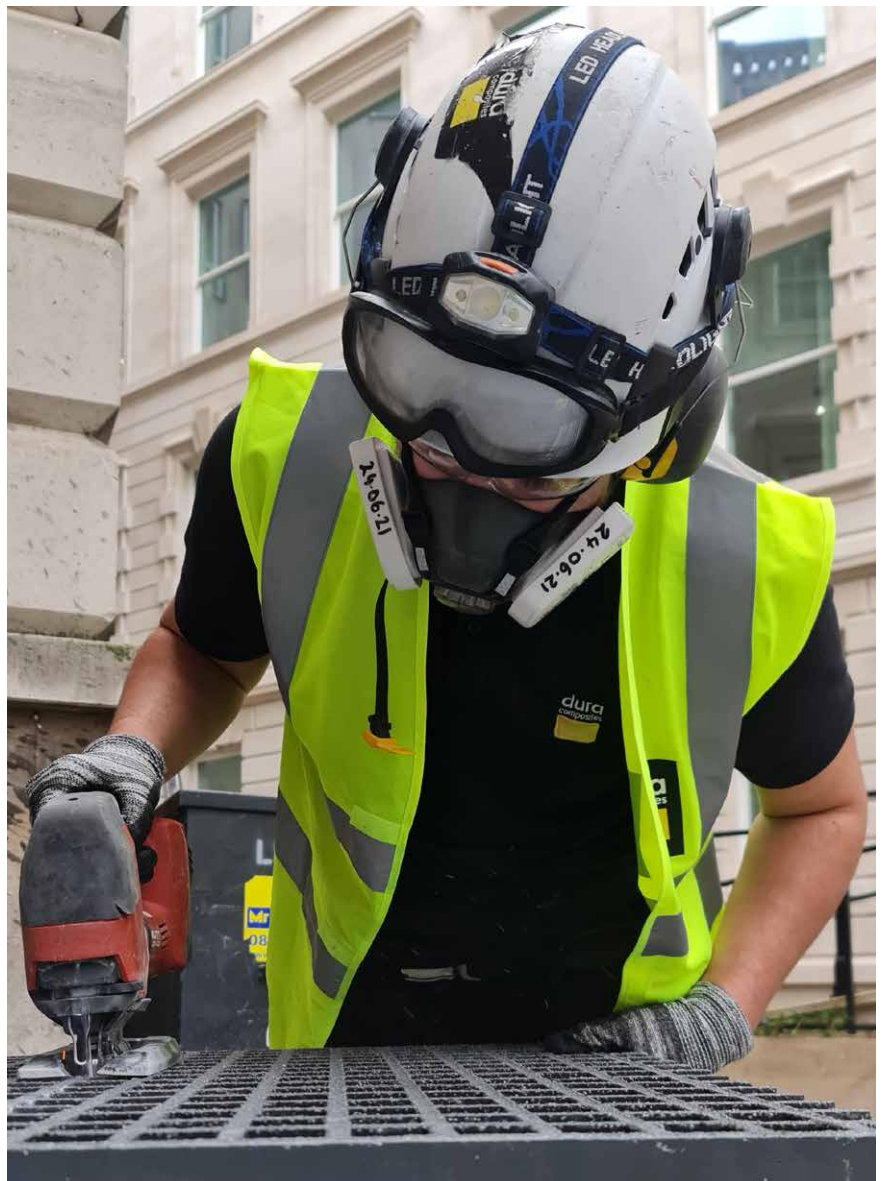


The Dura Composites GRP Riser Installation team is committed to maintaining health and safety standards across all of its working environments.

We invest in specialist health and safety training for all our staff, and our GRP installation operatives are IPAF and PASMA qualified.

We are pleased to have gained Achilles BuildingConfidence Advanced membership, ensuring our compliance with CAS and SSiP standards.

All installation teams are supervised by an SSSTS trained supervisor, and all operatives carry CSCS cards, so you can be confident that Dura Composites adheres to safe working practices on site.



As well as a full install service we also offer a quality assurance service for customers who wish to install themselves. Our operatives can attend site to ensure installations meet safety sign off criteria.





# BIM Objects

## Free BIM Objects for Architects, Designers and Specifiers

Dura Composites' products can be found on the **NBS Source platform** and can integrate seamlessly into your project workflow. We provide an additional level of enhanced product data in a consistent, structured format, available for use by architects, designers, engineer, contractors and specifiers.

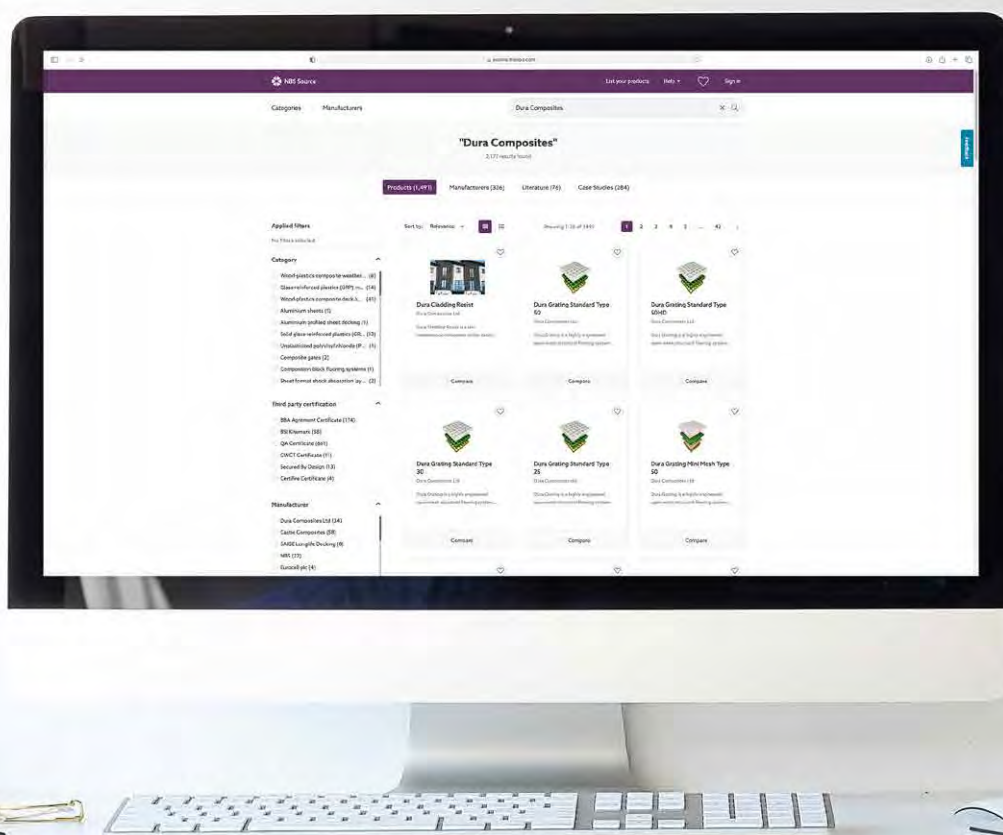
Our data-rich Dura Composites BIM Objects allow specifiers to see up-to-date, accurate data about Dura Composites products and to easily incorporate them into their overall design. Authored to the trusted NBS standard, each BIM Object details the various surface finishes, profiles,

sizes and colour options for each product, and provides specifiers and end clients with detailed information on how the products will perform during their expected lifecycle.

If you require any additional information or support, please contact us to discuss how our CAD team can work with your sales contact to unlock the power of composites for your project.

### Book our Riser Safety CPD Seminar

We also offer a range of CPD training materials which are delivered by our experienced team. Our Riser seminar aims to address riser void safety and design at the earliest possible stage, providing guidance on how to source and design safe and compliant systems for your building substructure.





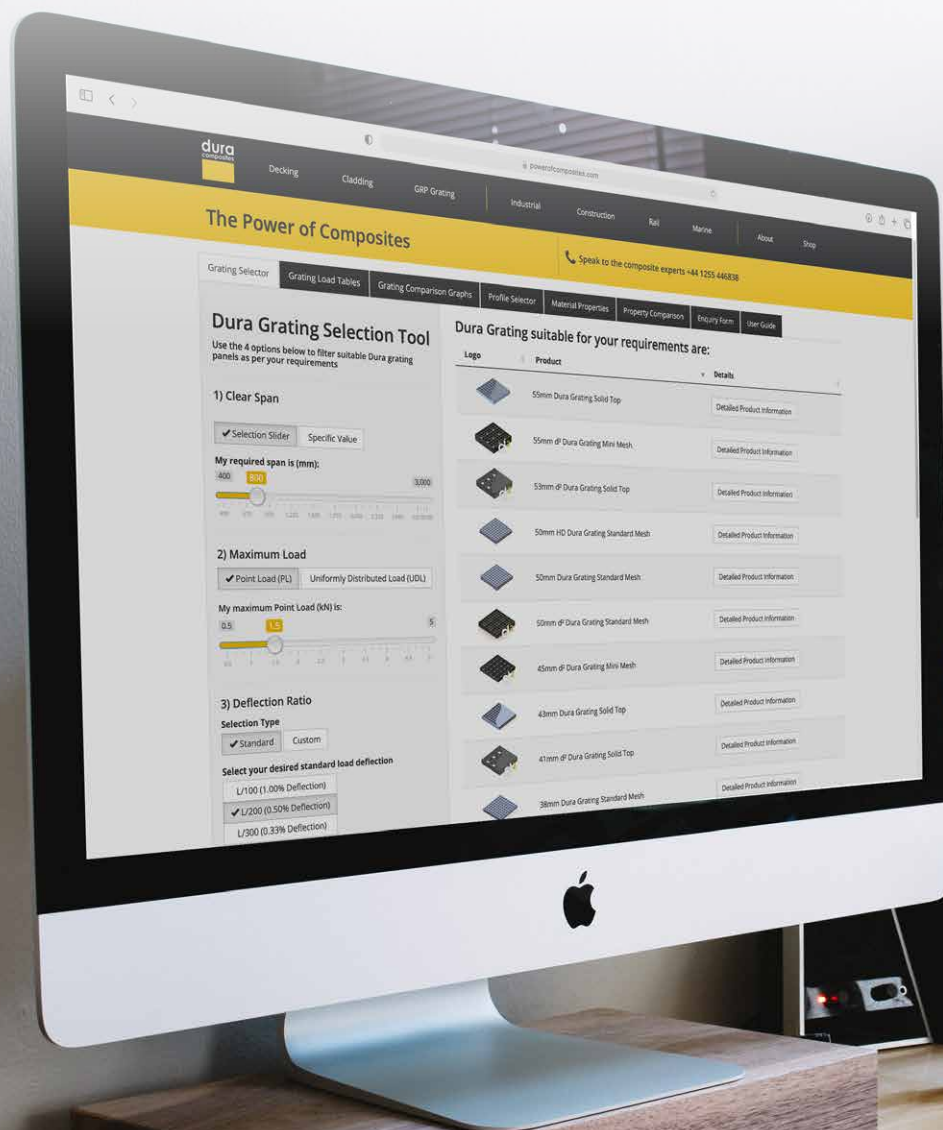
# Our in-house structural design capability is complimented by our product selector

This brand-new online tool helps unlock the world of composite products for a vast range of architects, engineers, project managers and designers. The result of years of extensive research and rigorous live and simulated testing, the online Interactive Product Selector is available now at [www.powerofcomposites.com](http://www.powerofcomposites.com) to help those within construction and asset management industries make fast and accurate decisions about the right product specification for their projects.

## How to Unlock the Power of Composites for Your Business

Users can compare products across the Dura Composites range with the click of a button, with easy to interpret graphs collated into a single view. BIM data files which feature product information can also be downloaded from the tool, allowing architects and specifiers to streamline the design, build and maintenance process to save time and money.

Once a range of suitable products have been identified, detailed product information can be accessed immediately such as drawings, dimensions, load tables and graphs unique to these products. The selected span and load criteria can be downloaded into a neat professional document for analysis and approval.



## What does the Site Feature?

Say goodbye to lengthy technical datasheets, protracted quotes, and sub-par results. Welcome to the future of composite grating. With this one, seamless tool, you are able to input your precise requirements and receive a bespoke GRP grating product to match, complete with market-leading data feedback so you can see the difference for yourself.



### GRP Grating Selection Tool

Create a list of grating products that meet your exacting criteria. Adjust the Load, Deflection and Fire Rating parameters accordingly; export detailed information such as Product Variations, Product Dimensions and Full bar guide.



### Create Bespoke Grating Load/Deflection Tables and Graphs

Select product and options to display customised information in downloadable assets to back up your specification. Adjust the load and span range and interval to create your very own dynamic load and deflection table.



### Grating Comparison Graphs

Compare the performance of grating panels against one another using a graphical format. Set Load Type between Point Load (PL) and Uniformly Distributed Load (UDL) then select an unlimited amount of products to compare.



### Profile Selector

Understand the performance of GRP profiles in comparison to traditional materials, for example using GRP instead of timber, steel or aluminium. Understand the specification and suitability of a product based on your intended application.



### Material Properties

The material data reported has been compiled to allow engineers and specifiers to quantify the material properties with those contained within specifications.



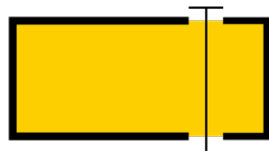
### Property Comparison

A visualisation of the difference between various properties for traditional materials versus our products. The values quoted are for representation only and are typical within the range of values for the given material.

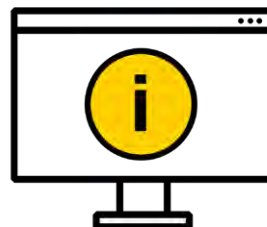
**So what are you waiting for? Unlock the Power of Composites and discover the Dura difference for yourself.**



**1. Register**



**2. Insert Specifications**



**3. Get Product Recommendations**



**4. Download Technical Data**

Visit [www.duracomposites.com/powerofcomposites](http://www.duracomposites.com/powerofcomposites) today



## Other applications for Dura Grating:

Industrial Flooring  
Walkways  
Platforms  
Assembly Lines  
Wash Bays  
Work Stations  
Stairs  
Protective Screening  
Offshore Platforms



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**Unlocking the Power of Composites**  
**» For the Construction Industry**

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

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**composites**

