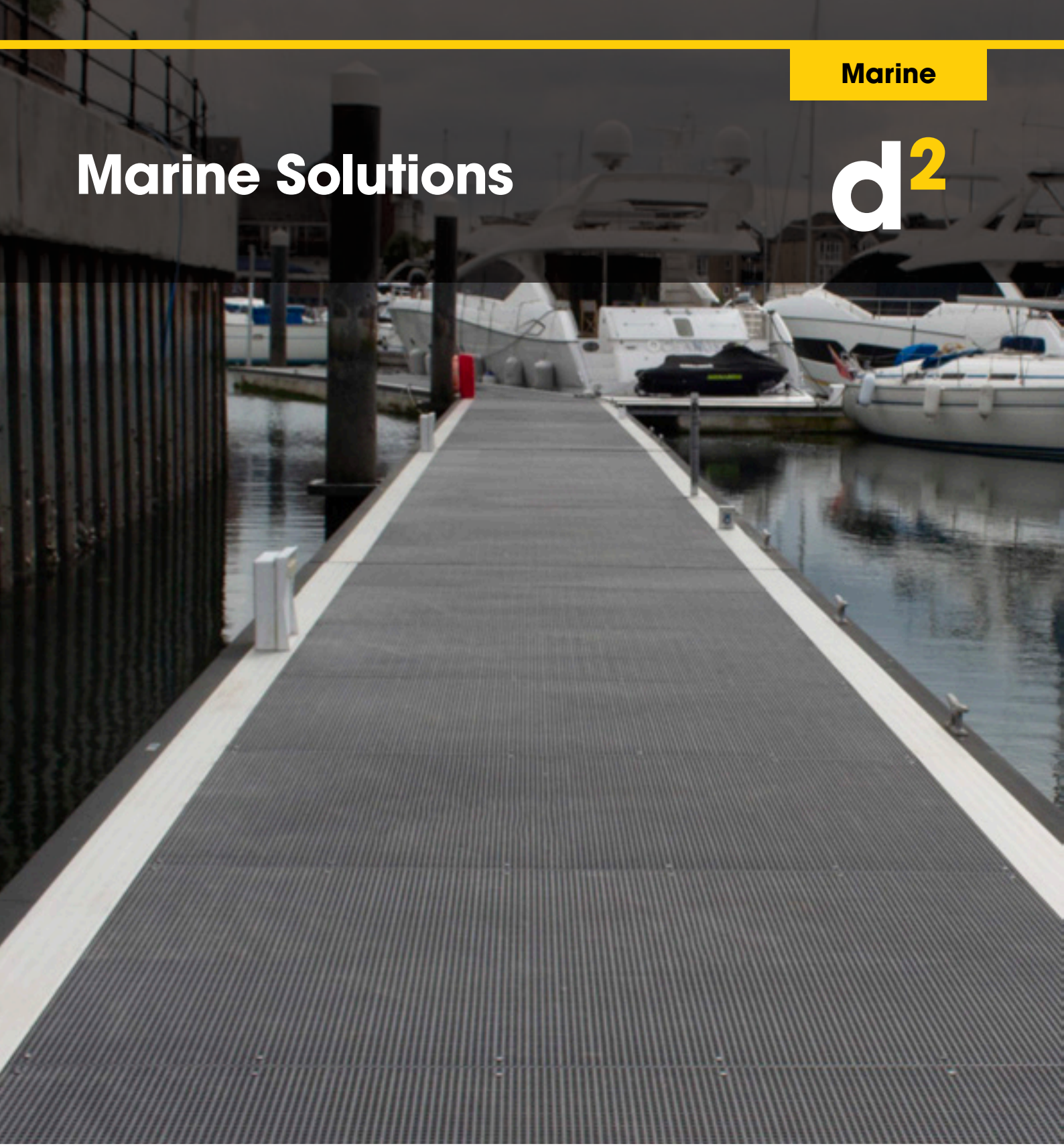
Marine

Marine Solutions



High performance GRP solutions — Grating, Ladders, Handrailing, Access Structures and more. Engineered for ports, marinas, aquaculture, piers, promenades.

The Lowest Carbon Walkways In The World
» for the Marine Industry

dura composites™

Contents

About Us d²

Discover the d² product range from Dura Composites - the next generation of performance-improving composites. Available exclusively from Dura Composites, d² products feature unique designs, new material technology or manufacturing methods AND deliver class-leading performance.

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

We are three times award winners of the King's Award for Enterprise Innovation in recognition of our achievements at the forefront of composite material technology. Dura Composites' products are also available through a well-established global distribution network. Your local distributor can be found on our website.

Why Choose Composites?

We are a leading designer, manufacturer and supplier of lightweight but high strength flooring panels. Made from high-performance GRP, aluminium or porcelain, our tried and tested solutions improve safety throughout tall buildings.

Built-In Sustainability

Dura's GRP products offer substantial reductions in carbon and are fully recyclable - an industry first! Low life cycle costs stem from their maintenance free, corrosion resistant and impact resistant characteristics compared with traditional materials. They also have a design life in excess of 60 years and a reassuring 25 year product warranty.

Advanced Product Performance

Composites have been around since the 1930s, and were first developed for use within boat hulls, plane fuselages and wings. Today's composites are used in a wide range of solutions from bridges to oil rigs and water slides to drum sets, and the design possibilities are vast.

One of the most popular emerging composites of the past 40 years has been Glass Reinforced Polymer (also known as GRP or fibreglass), which is a resin-based composite that's reinforced with a glass fibre. We have a proven track record in supplying innovative GRP solutions for a variety of projects across the globe, including open mesh grating, duct covers and safety access ladders.

For additional details and technical information please visit **www.duracomposites.com** or call **+44 (0)1255 423601**.

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.

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

d² Safer. Stronger. Greener. Proven.

Through our unrivalled design, technology and manufacturing innovations we have developed a unique range of products that can't be found anywhere else and are ideal for countless heavy duty applications such as walkways, service risers, balconies and for use within access structures.

Here's why we're different:

Our d² Grating is **100% recyclable!** More info on page 27!

Safer.

Up to 33% lighter, better for manual handling and efficient installation.

Stronger.

Up to 50% larger spans or loads. Lighter or smaller products can be used to reduce project scale.

Greener.

33% less embodied carbon AND we'll recycle it for you.

Proven.

Over 1 million live tests and simulations help you make the safest choice for your project.

Marine Sector Expertise

We have over 25 years' experience in designing, manufacturing and supplying fibreglass products for the marine sector and our industry-leading 25 year warranty makes us the supplier of choice for a variety of projects in Ports, Marinas, Commercial Shipping, Aquaculture, Piers, Boardwalks and Promenades.

Our unique non-corrosive and anti-slip d^2 GRP grating, duct covers, fenders, ladders, handrailing and structures have a proven ability to withstand the effects of marine conditions better than traditional materials such as timber or steel.

When used as marina, walkway or pontoon flooring, the anti-slip surface of our d^2 grating and slab products is tested to withstand even the wettest, oiliest and iciest conditions, thus ensuring a safe and highly durable walkway that allows access throughout the year. Incredibly, the low slip potential of the surface has been rigorously tested and proven to reduce by a mere 5% after 1.1 million footfalls.

The load capacity is extremely high and provides excellent impact resistance and exceptional traction on walkways subject to tidal inclines. Our market-leading d^2 Dura Grating is available in standard open mesh, mini mesh and micro mesh variants and also with a solid top finish for applications where maximum strength and no light transmittance are required.

For marine and waterside environments that are more tailored to leisure users, we also offer a porcelain decking solution known as Dura Deck® Inspire which combines the traditional appearance of timber with the durability of an engineered composite.

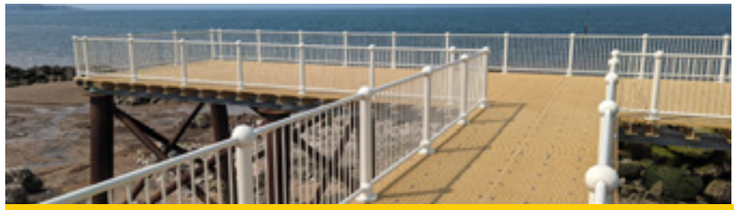
Marinas

Shipping & Ports

Aquaculture & Fisheries

Waterway Infrastructure

Water & Waste



Piers & Promenades

Environmentally Friendly

Low Life Cycle Costs

Anti-Slip

Fire Rated

Easy Installation

Ask our team to calculate your project's **d² Carbon Saving**

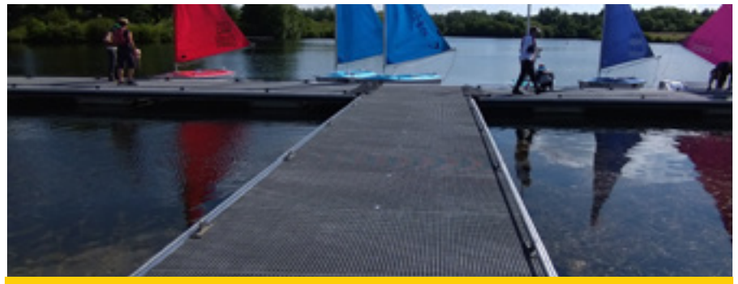
Full data including **L/100** & **0.5 deflection** available here:

d² Dura Grating

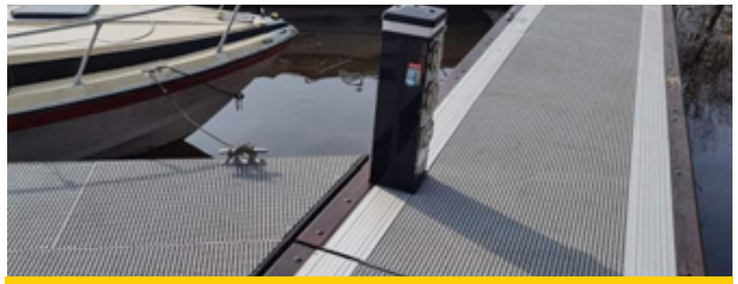
Manufactured using advanced composite technology that removes embodied carbon without compromising on performance. Our walkway products feature one of the highest degrees of slip resistance ever measured for a walking surface especially in wet, oily or adverse weather conditions, and can be used to replace steel, metal or wood. Common applications for our products include footbridges, roof walkways, ramps, trench covers and raised catwalks.

Our Product Range

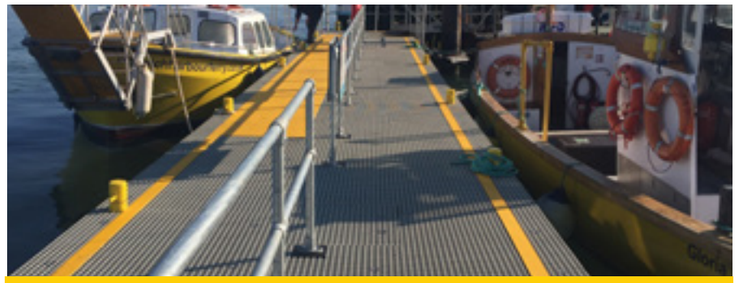
Both our d² Dura Grating walkway products allow contractors to take advantage of their lightweight handling and workability using standard tools. Both products benefit from short lead times and rapid installation speeds. In addition to improving safety standards, Dura Composites' GRP walkways provide excellent chemical resistance, are easy to install, offer long term durability and the lowest embodied carbon in the industry. Bespoke panel sizes and colours are available, minimum order quantities apply.



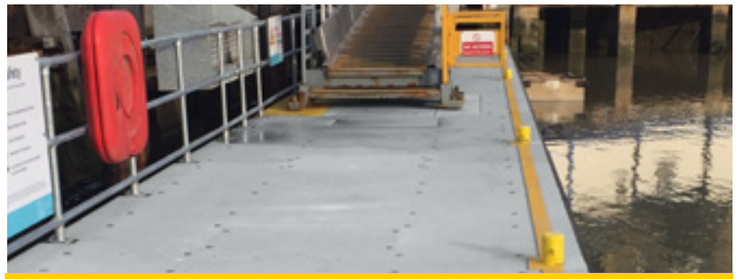
Micro Mesh



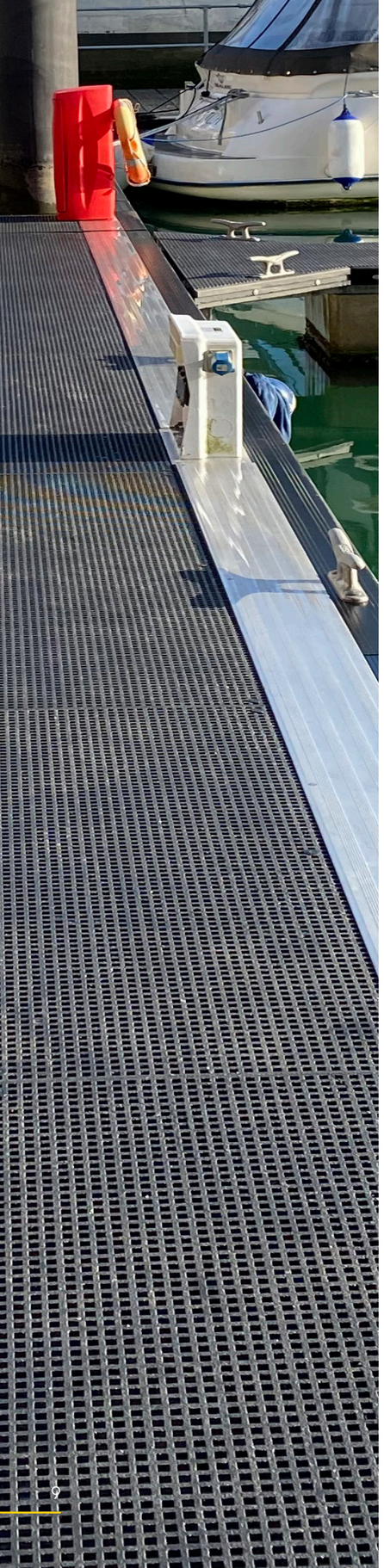
Mini Mesh



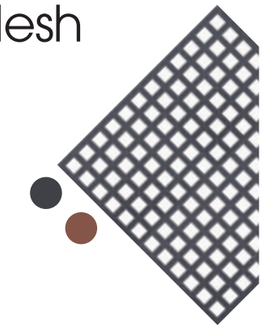
Standard Mesh



Solid Top



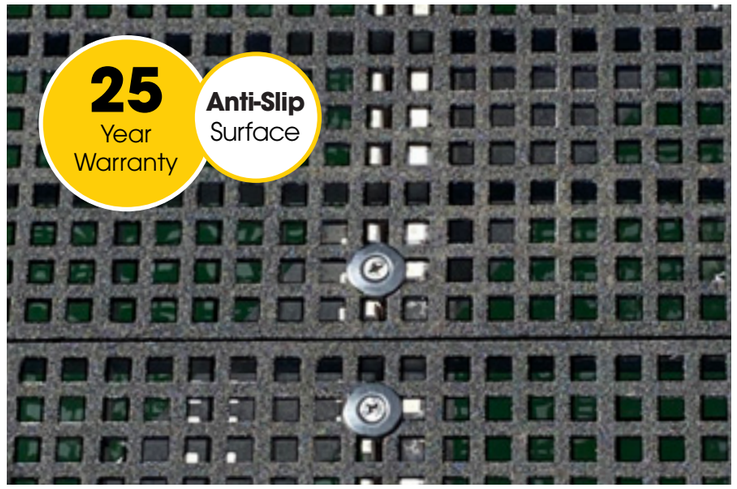
d² Dura Grating Micro Mesh



Dura Composites Micro Mesh GRP grating features an anti-slip surface with a new finer grit which is ideal for public and other recreational areas. The 10.5mm x 10.5mm open mesh prevents virtually all objects from falling through and is suitable for a wide range of footwear.

d² Dura Grating Micro Mesh is available in Dark Grey as standard, with Sand and other colours available as special order. Minimum order quantities apply. If your project requires access ramps, 23mm Micro Mesh can be easily combined with other heavy grit products in the range.

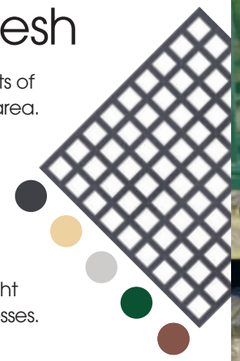
For more information refer to the d² Dura Grating Brochure.



Product	Length (mm)	Width (mm)	Weight (kg/ sqm)	Open Mesh Size (mm)	Max Span (mm) at 1.5kN Point Load
23mm	3042	1041	11.5	10.5 x 10.5	660
	4076	1300			
	4076	1560			

Load data based on deflection of L/100 using a point load of 1.5kN.

d² Dura Grating Mini Mesh



Dura Composites Mini Mesh GRP grating has all the benefits of our Standard Dura Grating but with a smaller open mesh area.

The smaller openings of our Mini Mesh Dura Grating prevents small objects from falling through, and complies with BS EN14122 Category B and the European 20mm Ball Falling Test requirement.

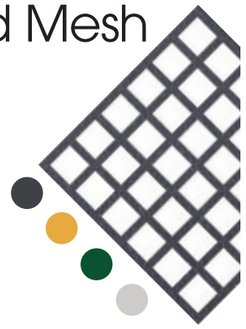
Mini Mesh Dura Grating is available in Dark Grey, Sand, Light Grey, Green and Yellow colours and in a variety of thicknesses. For further information please refer to the table below.

For more information refer to the d² Dura Grating Brochure.

Product	Length (mm)	Width (mm)	Weight (kg/ sqm)	Open Mesh Size (mm)	Max Span (mm) at 1.5kN Point Load
23mm	3012	1029	11.1	13 x 13	630
	4033	1269			
	4033	1511			
30mm	3007	1027	15.2	13 x 13	1280
	4027	1267			
	4027	1567			
35mm	3030	1041	13.2	19.5 x 19.5	1590
	3667	1200			
45mm	3030	1041	15.3	19.5 x 19.5	2210
	3667	1200			
55mm	3030	1041	19.0	19.5 x 19.5	2500
	3667	1200			

Load data based on deflection of L/100 using a point load of 1.5kN.

d² Dura Grating Standard Mesh



Our Standard Mesh GRP grating is most suited for use within commercial applications as a walkway or slipway solution to help minimise the risk of slips, trips and falls.

Dura Grating Standard Mesh is available in Dark Grey, Yellow, Green or Light Grey as standard, and in thicknesses of 26mm, 38mm and 50mm. The uniform construction of Dura Grating provides excellent bi-directional mechanical properties and is safe to walk on in all directions.

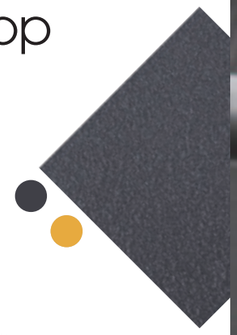
Standard Dura Grating is light, strong and non corrosive and can be supplied with a full range of stainless steel clips, clamps and hold down fixings to suit all situations.

For more information refer to the d² Dura Grating Brochure.

Product	Length (mm)	Width (mm)	Weight (kg/ sqm)	Open Mesh Size (mm)	Max Span (mm) at 1.5kN Point Load
26mm	3043	993	10.3	32 x 32	860
	3669	1239			
38mm	3054	996	13.2	31 x 31	2500
	3664	1224			
50mm	3052	1057	15.7	28 x 28	2770
	3682	1267			
50mm Rectangular Mesh	978.5	765	34	43 x 16	Full Panel

Load data based on deflection of L/100 using a point load of 1.5kN.

d² Dura Grating Solid Top



Dura Composites Solid Top GRP grating is lightweight with an extremely good anti-slip walking surface, suitable for wheeled trolleys or equipment often used in loading and storage areas.

One of the key benefits of Solid Top grating is the exceptional breaking strength under lateral force. The uni-directional continuous fibreglass reinforcement offers numerous advantages including rigidity, shock resistance, with no permanent deformation after overloading. These factors provide excellent mechanical strength and safety in wet environments.

Solid Top Grating is available in Dark Grey and Yellow. See the below table for our available thicknesses.

For more information refer to the d² Dura Grating Brochure.

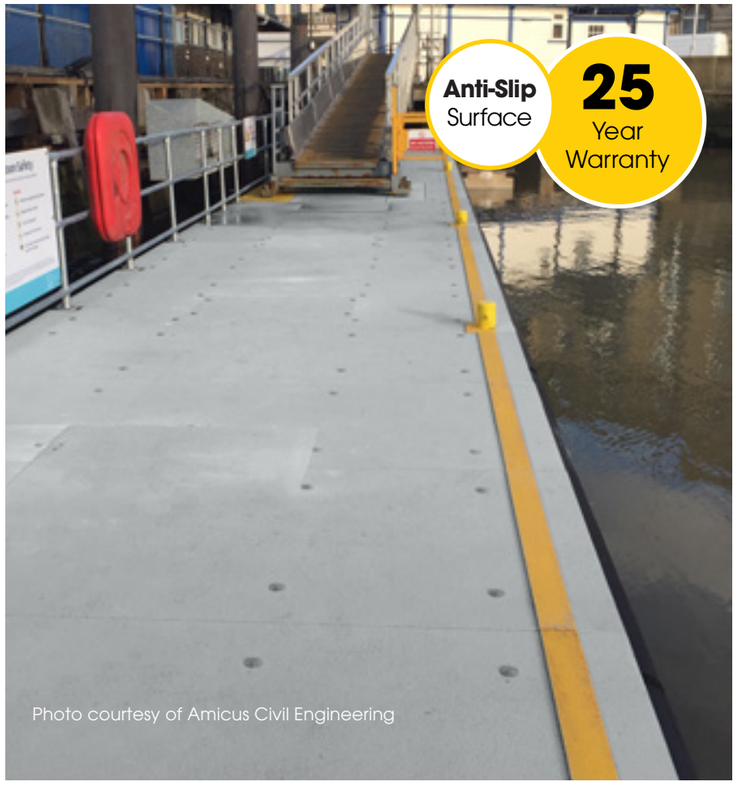
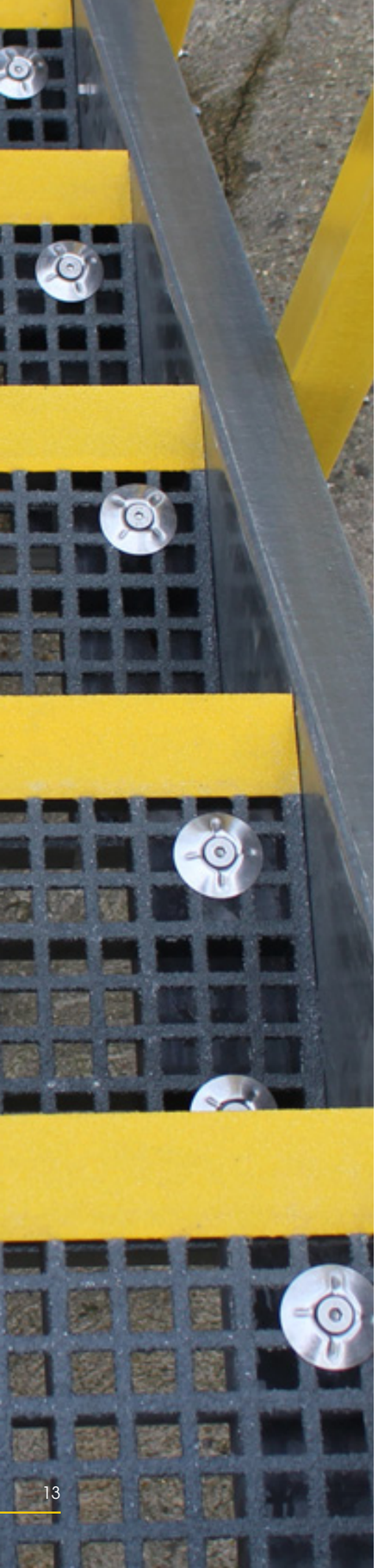


Photo courtesy of Amicus Civil Engineering

Product	Length (mm)	Width (mm)	Weight (kg/ sqm)	Open Mesh Size (mm)	Max Span (mm) at 1.5kN Point Load
29mm	3699	1239	16.7	None	1450
	3043	993			
41mm	3663	1224	21.09		2100
	3054	996			
53mm	3682	1267	22.9		22.9
	3052	1057			
53mm Rectangular Mesh	978.5	765	37		Full Panel

Load data based on deflection of L/100 using a point load of 1.5kN.



Fixing Options

A wide range of stainless steel fixing solutions are available to cater for the huge number of applications that d² Dura Grating is suited to. Below are some of the most common fixing types for marine projects including surface mounted and panel joining fixings.

For more information please request a copy of our Technical Installation Manual from your Dura Composites Representative or view the fixing details on our website.

Common Fixing Options

Micro Dome Washer

Suitable for:
23mm Micro Mesh
23mm Mini Mesh

Small Dome Washer

Suitable for:
23mm Micro Mesh
All Mini Mesh

Large Dome Washer

Suitable for:
23mm Micro Mesh
All Mini Mesh
All Standard Mesh
All Solid Top

M Clip

Suitable for:
23mm & 30mm Mini Mesh

J Clamp

Suitable for:
23mm, 35mm, 45mm, 55mm Mini Mesh
All Standard Mesh

G Clamp

Suitable for:
23mm Mini Mesh
All Standard Mesh

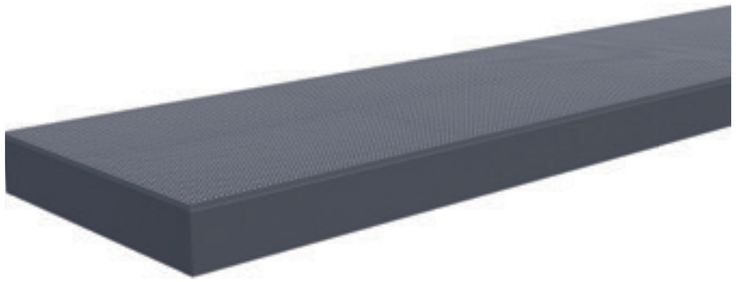
Squared Recessed Clip

Suitable for:
All Standard Mesh

Modular GRP Fixed Jetty Kits

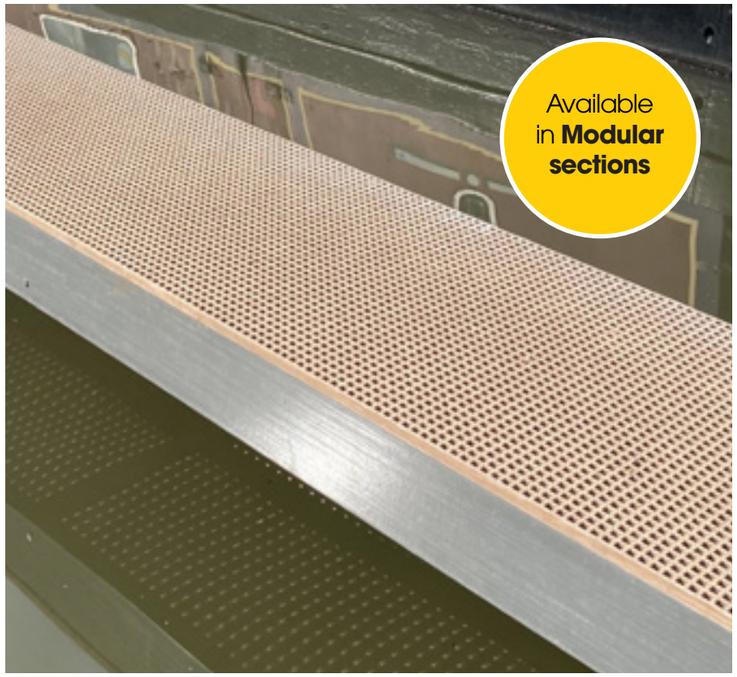
Don't leave the fate of your timber bearers to chance! Our modular GRP fixed jetty kits for inland waterways offer a reliable alternative. Replace your bearer systems with our sustainable full GRP system including grating walkways, boasting a 60-year design life. Supplied in convenient modular sections, our system saves both time and money. Invest in our solution and see returns within 10 years, thanks to reduced labour costs and zero maintenance.

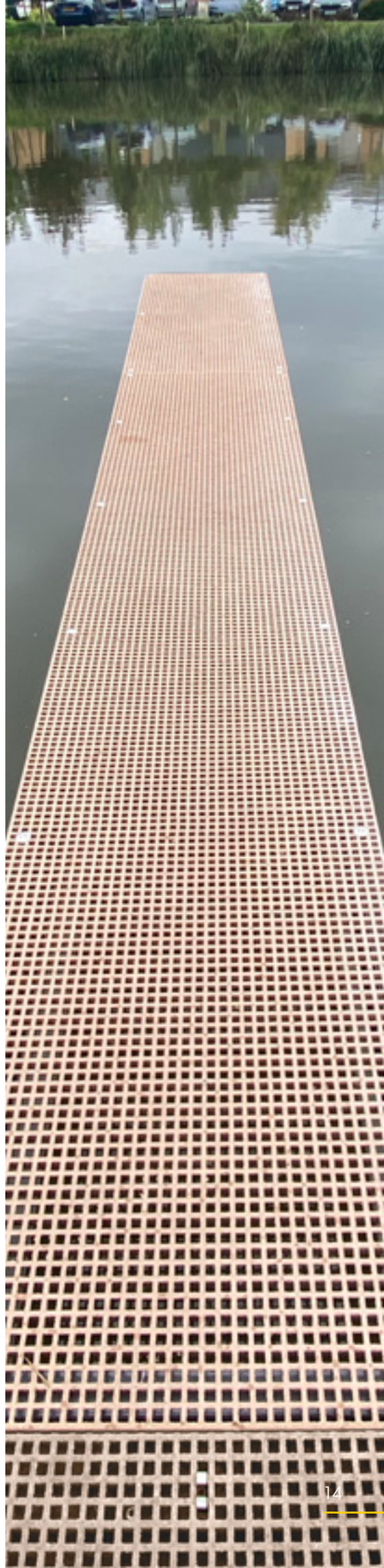
We can supply in component format, pre-cut kits or fully fabricated in 3 metre or 6 metre sections to reduce on-site construction time. Pre-cut kits or pre-fabricated modules allow for immediate installation upon delivery to the marina to minimise disruption to waterway traffic and reduce overall project timelines.



With our GRP fixed jetty kits, your overall project costs will be lower due to reduced labour and zero maintenance or replacement costs compared to the traditional 10 year replacement cycle of timber bearers. You'll also save costs on the regular inspections you currently perform on your existing timbers to ensure the safety of your marina users.

A fully off-site manufactured inland waterway jetty and pontoon structure with pre-added GRP decking surface is more environmentally friendly as no on-site waste management is needed, and the decking surface and substructure system has up to 50% less embodied carbon than competitor products AND is fully recyclable.





Fully Recyclable | Long Term Performance | Anti-Slip | Heavy Duty | Fully Fabricated

Maintenance & Access Structures

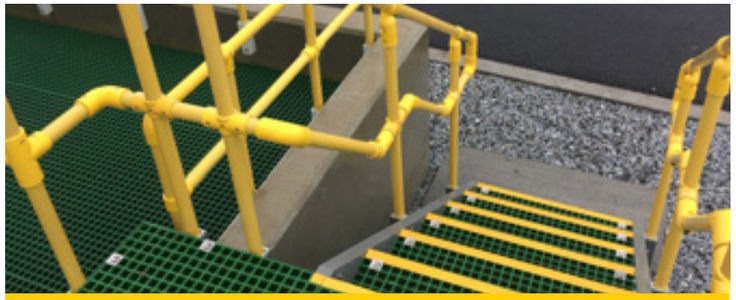
We design, supply and install bespoke GRP plant access systems and walkways for new and existing buildings, providing safe, year-round access to equipment for maintenance, repair and servicing.

Our Product Solutions

Our Maintenance and Access structures use our market-leading d^2 Dura Profile, Dura Grating and Dura Handrailing components. We provide the most comprehensive material data in the industry, to help engineers have confidence in designing safe structures with our d^2 composite products.

Step Overs

Elevated Platforms



Safety Handrailing

Ladders

Access Structures

Our specialist in-house teams can design specific structures made from Dura Profile components around a customer's requirements and can fully support modular installation methods if required.

All structures are fabricated in the UK at our state-of-the-art SmartFAB Centre and fabricated structures can be supplied with detailed dimensions and weights, including footprint size, to ensure it will fit within your overall design.

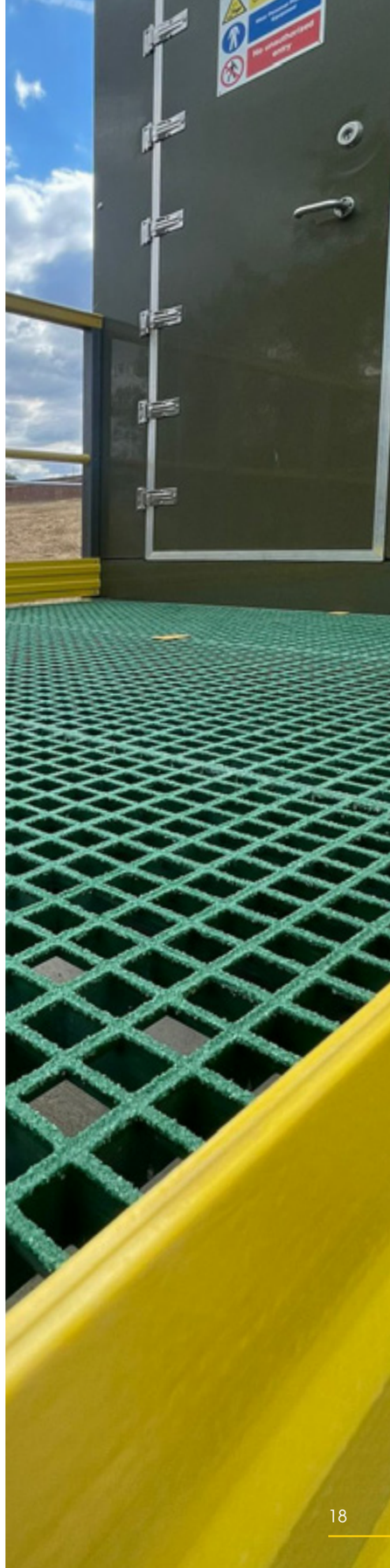
For more information, please see our d^2 GRP Access Structures Brochure.

Elevated Platforms

We deliver high-performance access structures at height, including GRP Machine Access Platforms, Driver Access Platforms, Mezzanines, Embankment Staircases, Maintenance Platforms, Gantries or any other heavy-duty non-conductive structure required in the high-rise environment.

We use the latest machinery to standardise our fabrication processes to ensure quality, consistency, efficiency and safety. Choosing a fully fabricated GRP elevated platform solution from Dura Composites significantly reduces the man-hours on site and can help to compress a project schedule.

Check out our **Seafood Hatchery Case Study!** Page 30



d² Dura Profile

d² Dura Profiles offer superior manufacturing standards and intelligent design optimisation. They exceed the E23 Grade of BS EN 13706 by as much as 50%, allowing for smaller, fewer components to be used to enhance project efficiency and lower costs.

Our designs use less raw material without compromising strength, delivering up to 50% lower embodied carbon versus alternative profile solutions. We carry a large stockholding available for immediate despatch or for use in our fabrications, including Angles, Channels, I-Beams, Box and Tube sections.

Product Type	Length (mm)	Width (mm)	Image	Colours:	Weight (kg)
Angle	6000	50 x 50 x 6.35		Dark Grey	6.9
		76 x 76 x 9.5		Dark Grey	15.4
		102 x 102 x 12.7		Dark Grey	27.4
		152 x 152 x 12.7		Dark Grey	42.2
Box	6000	50 x 50 x 6.35		Dark Grey	13.2
		50 x 50 x 5		Yellow	8.4
		64 x 64 x 6.4		Dark Grey, Yellow	16.7
		76 x 76 x 6.35		Dark Grey	21.1
		101 x 101 x 8		Dark Grey	34.1
Box Channel	6000	203 x 55 x 8		Dark Grey	36.6
Channel	1000	25 x 14 x 3		Dark Grey	0.3
	6000	100 x 60 x 5.5		Dark Grey	13.1
		203 x 55 x 9.5		Dark Grey	31.8
		254 x 72 x 12.7		Dark Grey	53.4
Round Tube	6000	38 x 32		Dark Grey, Yellow	3.8
Top Rail	6000	71 x 60 x 4.5		Dark Grey, Yellow	7.9
Wide Flange Beam	6000	152 x 152 x 9.5		Dark Grey	48.9
		203 x 203 x 12.7		Dark Grey	86.3
		305 x 305 x 12.7		Dark Grey	129.0
Variable I Beam (Male Section)	6010			Dark Grey	69.7
Variable I Beam (Female Section)	6010			Dark Grey	32.6

Isophthalic resin as standard. Available in Orthophthalic resin by special order only, MOQ applies.

d² Dura Ladders

Our GRP (Glass Reinforced Polymer) Ladders are made from high strength, low weight and non-conductive material and come in 3 standard stock sizes. GRP Dura Ladders are manufactured from pultruded profiles of immense strength and durability and are lightweight and chemically resistant. Robust, rot resistant, rigid and very stable, they offer the ultimate safety solution.

The ladder stringers are shaped for easy grip and the rungs have an anti-slip serrated surface. Brackets are included to attach the safety ladder to a wide range of structures. Dura Composites' GRP Ladders outperform conventional steel, aluminium and wooden alternatives across all key criteria thanks to their high strength to weight ratio, low maintenance requirements, corrosion, electrical resistance and low installation costs.

Manufactured from the Dura Profile structural beam range, we can make bespoke safety ladders to meet specific customer requirements. Our experienced team can provide design support and CAD drawings from initial concept stage through to fabrication at our SmartFAB facility.

d² Key Clamp Handrailing

Dura Composites offer a high quality, non-conductive GRP handrail system complete with all fittings. Our system is lightweight and easy to handle and offers low maintenance costs as it does not require painting or galvanising.

Available in high visibility yellow (RAL 1023) or grey (RAL 7043), it can be installed quickly, safely and easily in a range of environments such as high-voltage areas.

The latest innovation in our d² product portfolio includes pre-assembled components which dramatically speed up on-site installation times .

Dura Key Clamp Modular Handrailing (Sold by Length)

Component	Dimensions	Image	Colour	Weight (kg)
Handrail Tube	6000 x 50mm O/D x 35 I/D		Yellow Dark Grey	11.4
Kick Plate	3010 x 150 x 5mm (L x W x Th)		Yellow Dark Grey	4.5
Box Profile	6000 x 64 x 6.4mm (L x W x Th)		Yellow Dark Grey	17.5

Dura Key Clamp Modular Handrailing (Sold by Component)

Component	Dimensions	Image	Colour	Weight (kg)
3 Way Tee	Fits 50mm Handrail Tube		Yellow Dark Grey	0.10
3 Way Directional			Yellow Dark Grey	0.28
60˚ 3 Way Tee			Yellow Dark Grey	0.13
4 Way Tee			Yellow Dark Grey	0.15
4 Way Directional			Yellow Dark Grey	0.35
60˚ 4 Way Cross			Yellow Dark Grey	0.16
Vertical Multiple (Adjustable)			Yellow Dark Grey	0.33
90° Elbow			Yellow Dark Grey	0.19

Dura Key Clamp Modular Handrailing (Sold by Component)

Component	Dimensions	Image	Colour	Weight (kg)
120° Elbow	Fits 50mm Handrail Tube		Yellow Dark Grey	0.17
150° Elbow			Yellow Dark Grey	0.13
Adjustable Elbow			Yellow Dark Grey	0.32
Base Foot			Yellow Dark Grey	0.28
Top Cover			Yellow Dark Grey	0.03
Infill Connectors			Yellow Dark Grey	0.17
4 Way Universal			Yellow Dark Grey	0.60
Extended 3 Way Tee			Yellow Dark Grey	0.18
Spigot Tube	300 x 34.5 x 7.75mm (L x W x Th)		Dark Grey	0.56

Isophthalic resin as standard. Available in Orthophthalic resin by special order only, MOQ applies.

Pre-Assembled Parts

Dura Composites now offer pre-assembled 1.1m high handrail components in a waterproof palletised crate system. Pre-assembling 3 key parts (Mid Upright-Side Mount, End Upright-Side Mount, Mid Upright-Top Mount) not only speeds up deliveries but adds huge improvements to on-site installation speed.

Mid Upright | End Upright | Mid Upright (Top Mount) | Side Upright* | Corner Upright**

* Supplied from stock, arrives partially assembled in a waterproof palletised system.
** Longer lead times may apply for these types.

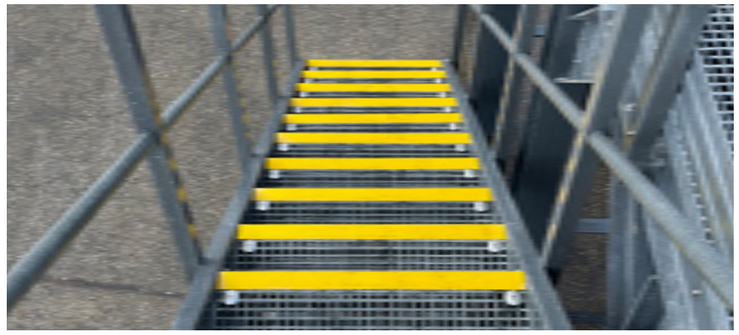
d² Dura Tread Nosing Strips

Dura Tread Nosing Strips can be applied to a variety of stair tread materials such as concrete, wood, chequer plate or GRP grating to help mitigate the risk of slipping, tripping and falling.

Quick and easy to install, Dura Tread Nosing Strips have a tough anti-slip gritted surface and are available in both Yellow and White to maximise visibility of the stair edge. Each piece is 1830mm long as standard and the profile dimension is 55mm x 55mm with a thickness of 4mm.

Choose Dura Tread Nosings for a quick, cost effective solution to improving safety in slippery or hazardous areas, and for areas used by the public.

Product	Length (mm)	Width (mm)	Height (mm)	Thickness (mm)	Weight (kg)	Colours
Nosing Strips	3660	55	55	4	2.57	Yellow White



d² Dura Tread Anti-Slip Strips

Super-fast and easy to install, these 50mm strips can provide additional grip to almost any surface to give you peace of mind. Whether it's for timber pontoon decking, lakeside walkways, outdoor steps or access ramps, our gritted strips can be affixed to your existing floor surface to help mitigate the risk of slipping, tripping or falling.

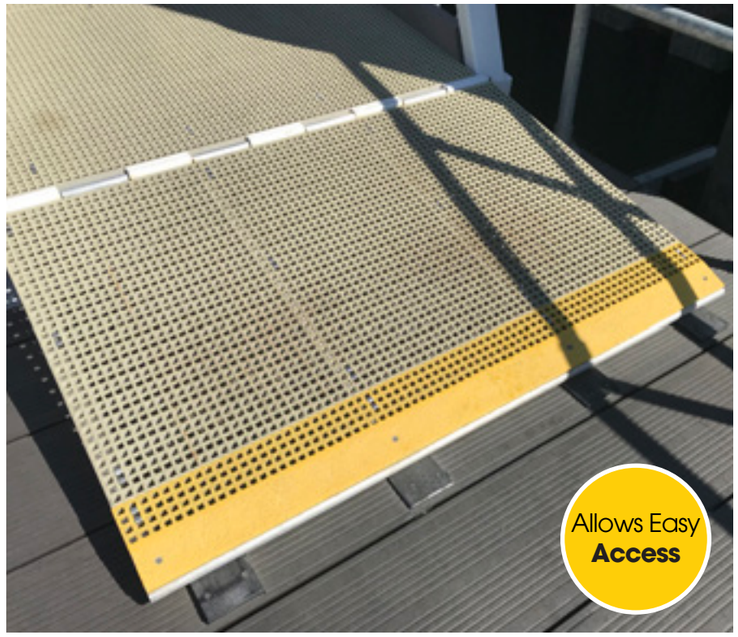
Available in yellow, black or dark grey and can be easily combined for easy demarcation of transitional areas, differing floor levels, or to maximise visibility against the existing structural flooring material.

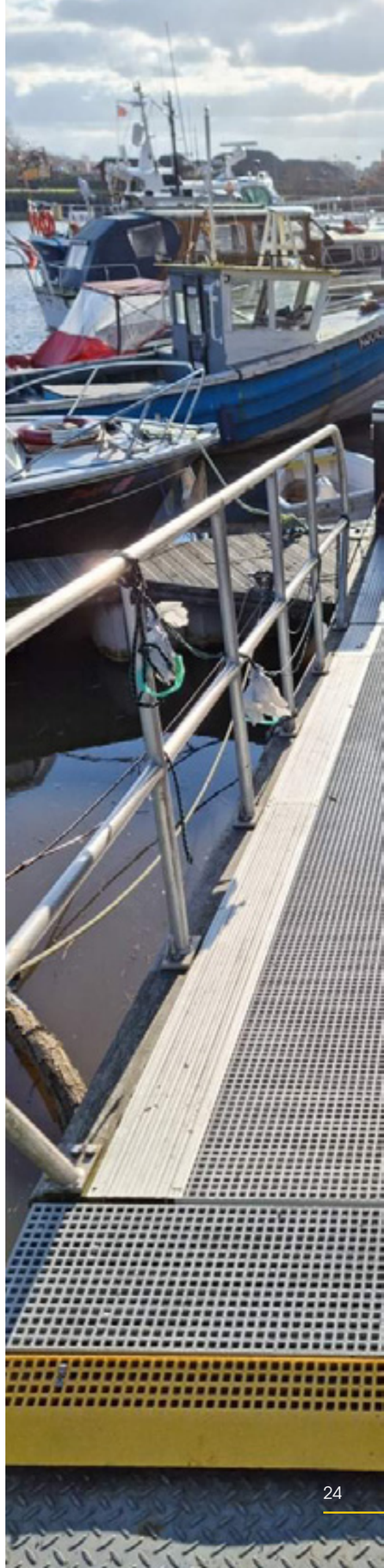
Product	Length (mm)	Width (mm)	Thickness (mm)	Weight (kg)	Colours
Anti-Slip Strips	3660	50	4	1.25	Yellow Black Dark Grey
	1200			0.41	

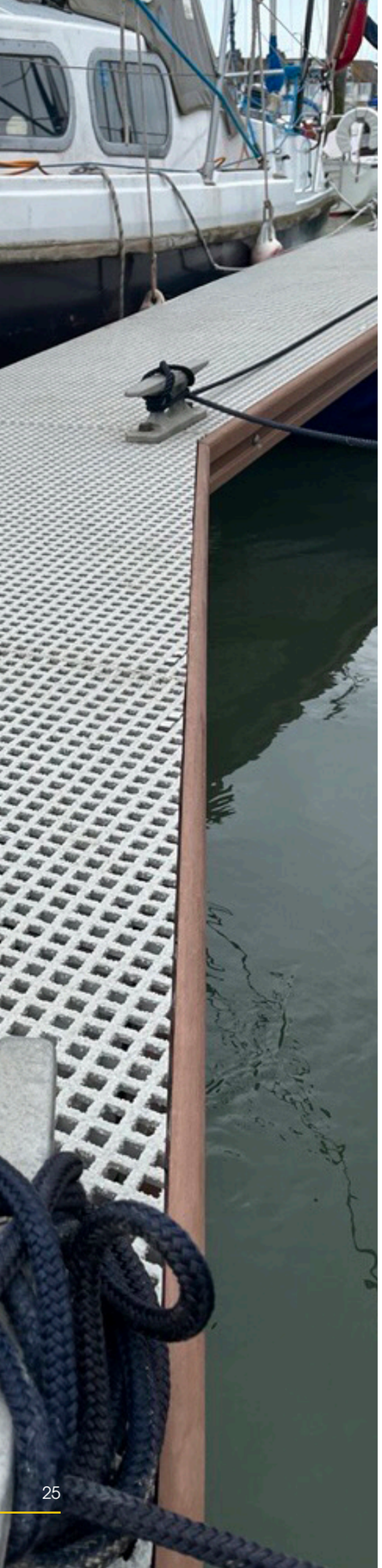
Deck Edging Ramps

Our 22mm pontoon deck edging ramps are ideal for providing trip-free pedestrian access along your pontoon or deck. Create easy access for trolleys, prams and pushchairs, wheelchairs and bikes with high visibility transition between pontoons and marina deck access ramps.

22mm edging ramps sit flush against our 22mm grating to provide seamless movement across surface-level changes. Currently available in 22mm thickness with 30mm and 38mm thicknesses also available (subject to extended lead times). 22mm edging ramps are available to purchase in lengths of 4047mm x 159mm wide and can be cut to your required lengths.







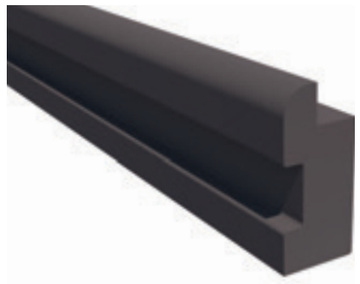
Dura Fender

As every marina owner and operator knows, good pontoon fenders are essential to the smooth running of marinas, as they add a much-needed layer of protection for boats during rough weather.

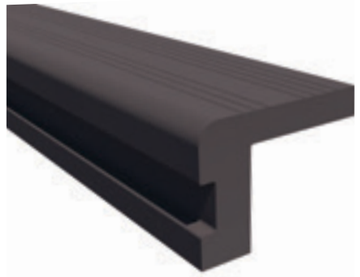
Traditionally these fenders are made from standard timber, which is prone to rotting and splitting and can become a safety hazard over time.

Dura Composites are the first in the world to offer a composite timber fender that has been developed to integrate into pontoons, with and without a duct cover. Further, they are available in Teak and Charcoal.

Dura Fenders help solve the inherent problems with traditional timber thanks to their lower water absorption rate which prevents the surface from becoming waterlogged and protects the boards from algae, mould and mildew.

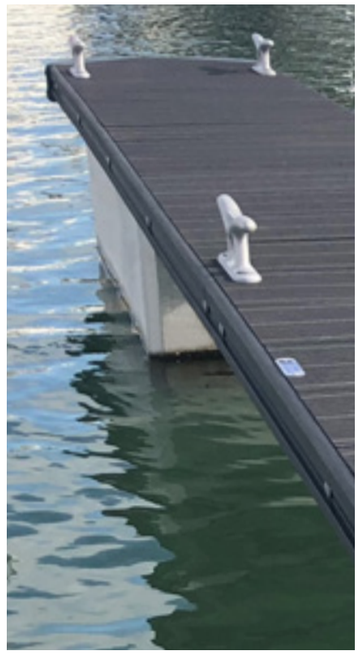


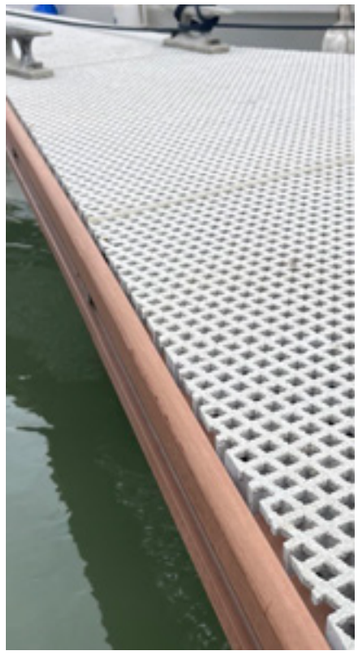
Dura Finger Fender



Dura Top Board Fender

Product	Length (mm)	Width (mm)	Thickness (mm)	Weight (kg)	Colours
Finger Fender	4000	100	45	17.24	Charcoal Teak
Top Board Fender		135	28	27.88	





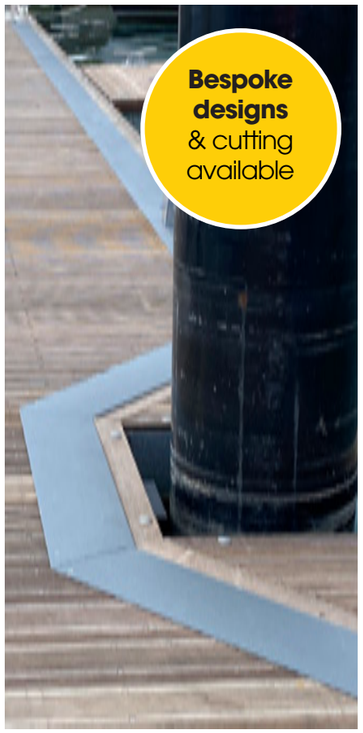
Dura Duct Covers

Dura Composites has utilised its expertise in composite technology to produce a world first – a highly anti-slip Duct Cover solution for Marinas made from high-performance Glass Reinforced Polymer (also known as GRP or fibreglass). GRP is fast becoming the material of choice in demanding marine environments, thanks to its incredible strength, lightness, ease of installation and excellent resistance to corrosion.

Dura Duct Covers are lightweight and allow for easy access and maintenance to be carried out to the cabling and equipment which runs through the service ducts which are commonly provided on both sides of marina walkways and pontoons.

Whilst duct covers have traditionally been made from anodised aluminium, these have a tendency to become very slippery when wet and are prone to theft, tarnishing and oxidisation – particularly in climates where extremes of temperature are common. By contrast, GRP Dura Duct Covers have superior anti-slip properties are non-conductive and have an excellent lifespan, making them cost-effective and environmentally sustainable.

Product	Length (mm)	Width (mm)	Thickness (mm)	Weight (kg)	Colours
Duct Cover	5050	220	39.6	16.66	Grey Yellow



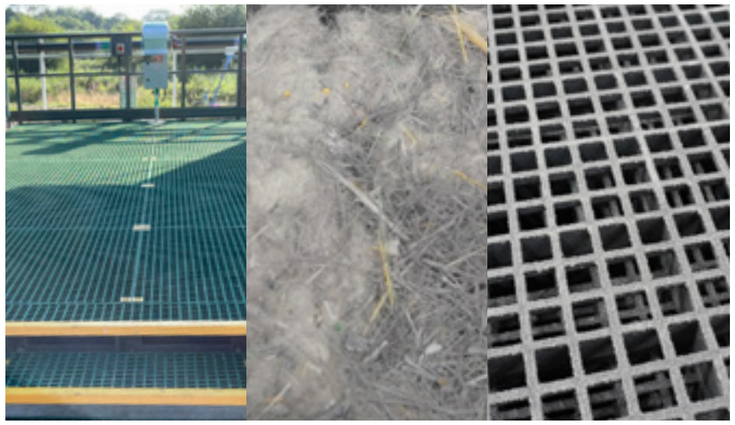
Bespoke designs & cutting available

Sustainability for Marine Projects

At Dura Composites, sustainability isn't an add-on — it's engineered into every product we create. Our award-winning d^2 range is purpose-built for the demands of marine environments, delivering outstanding durability alongside measurable carbon savings and long-term environmental value.

From pontoons and jetties to coastal walkways, our GRP grating and access systems achieve up to 50% lower embodied carbon compared with traditional alternatives. Every eligible project is backed by independently verified Environmental Product Declarations (EPDs) and Carbon Savings Certificates, giving you the evidence you need to meet your ESG goals and strengthen Scope 3 reporting.

We're also committed to circularity in practice, not just principle. Our products are fully recyclable at end of life, and our UK-based scheme repurposes GRP waste — cutting landfill and reducing lifecycle emissions.



Installation brings further advantages. With lightweight, modular components, our systems reduce manual handling risks, speed up sequencing, and shorten time on site, helping marine contractors deliver projects more safely and efficiently.

And our sustainability promise extends beyond the products themselves. From biodegradable packaging to low-emission logistics, every stage of our operation is aligned with delivering cleaner, smarter marine infrastructure. To date, we've helped customers save more than 8 million kg of CO_2e, redefining what sustainable marine construction can achieve.

Find out more about Dura's **Sustainbility Priorities:**

Choose with Confidence

Upgrading pontoons. Refurbishing a marina. Raising safety and sustainability standards. Whatever your priority, the d^2 range of GRP walkways, ladders, and trench covers makes delivery simpler, safer, and smarter.

- Independently tested and verified
- Proven to outperform traditional materials
- Designed for compliance and longevity
- Available from stock with nationwide support

But when it comes to safety, not all suppliers are created equal. One key area you should **always** scrutinise is anti-slip performance.

Minimise Slips with Verified Grip

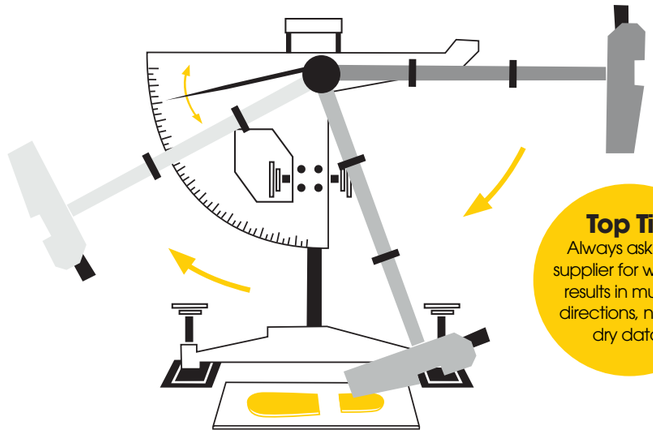
Slips and trips are the leading cause of workplace injuries in the UK, costing the NHS more than £130 million each year. In marine environments, where surfaces are often wet, contaminated, or algae-prone, the risk multiplies.

Traditional materials like timber, metal, or painted surfaces quickly lose their grip. That's why the HSE recommends the Pendulum Test—the gold standard for measuring slip resistance.

What is the Pendulum Test?

- Simulates a heel strike using a swinging arm with a rubber foot
- Measures resistance to provide a Pendulum Test Value (PTV)

A PTV of 36+ in wet conditions is classed as low slip risk



Top Tip
Always ask your supplier for wet test results in multiple directions, not just dry data.

Questions to Ask Any Supplier

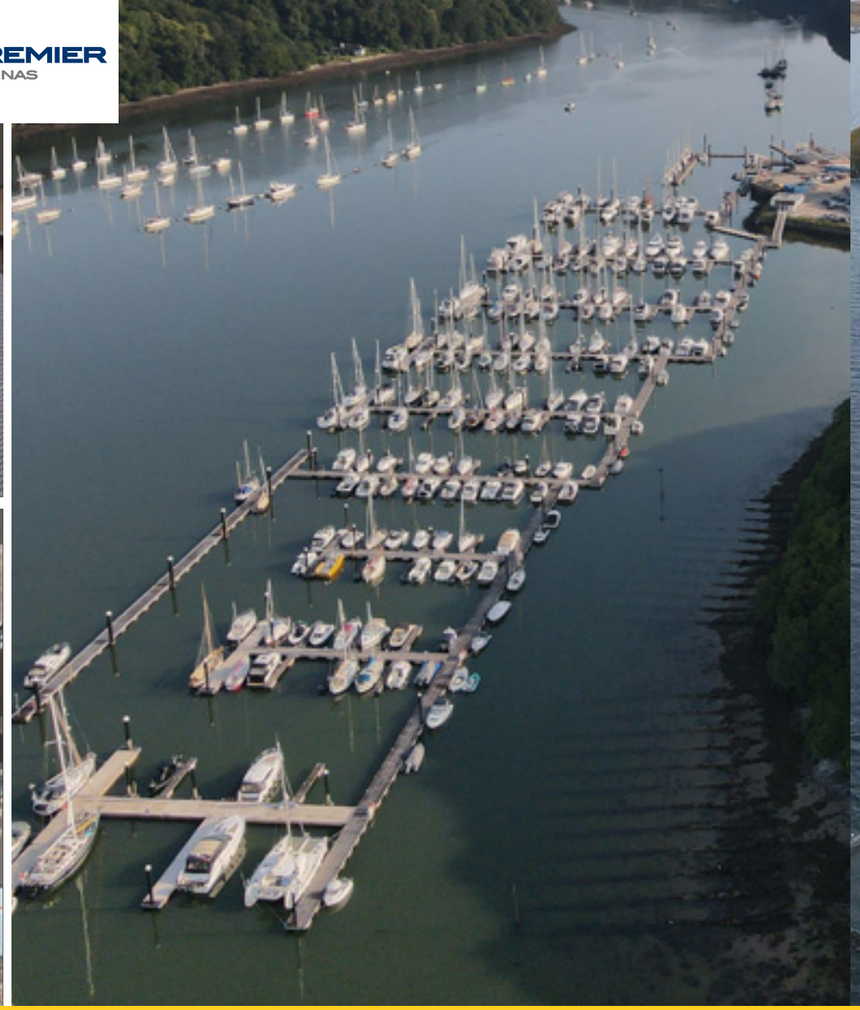
- Has it been tested to BS 7976-2:2002+A1:2013?
- What is the PTV in wet conditions?
- How does the anti-slip performance hold up over time?

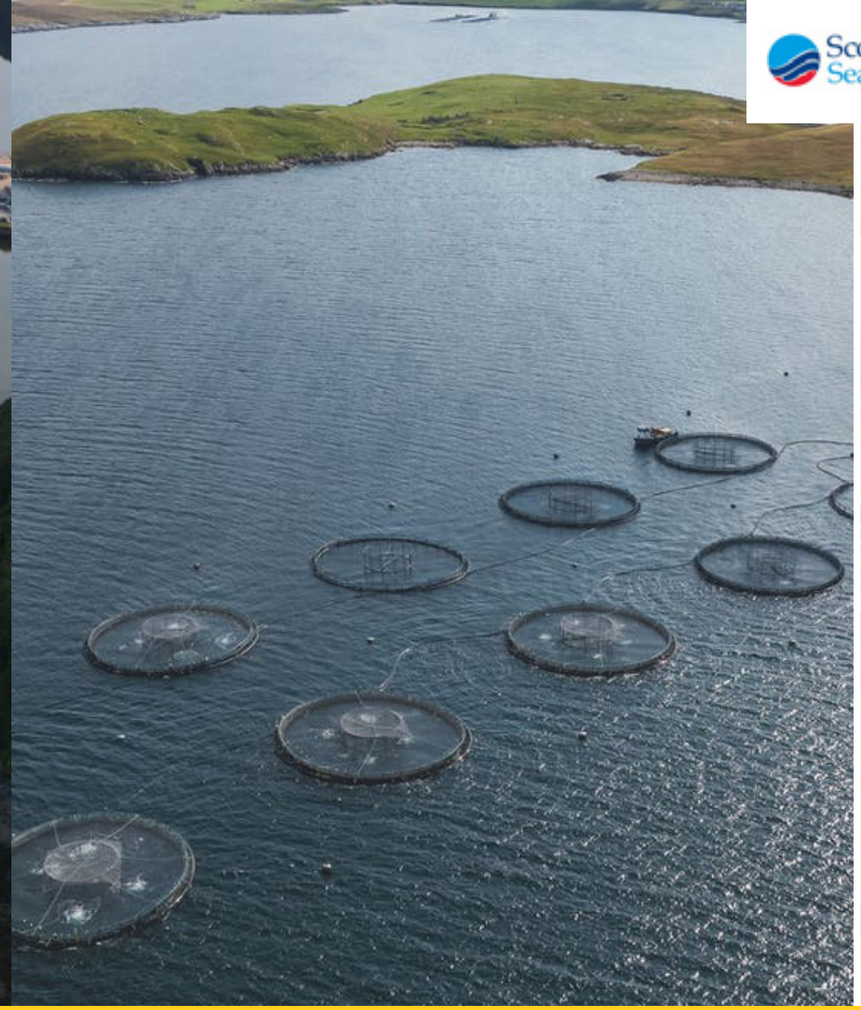
The d^2 Advantage

- PTV 62 in wet conditions (well above the low-risk threshold of 36+)
- Slip resistance proven over 1.1 million footfalls
- Independently tested in all directions, wet and dry
- Backed by a 25-year warranty

With d^2, you don't just tick the compliance box - you deliver a long-term, low-carbon, safer environment for marina users and contractors alike.

d2 grating insitu





Case Study

d² Dura Grating Mini Mesh

Noss-on-Dart Marina

Bridge Road, Kingswear, Dartmouth, TQ6 0EA.

Owned by Premier Marinas, Noss-on-Dart Marina is situated within an Area of Outstanding National Beauty in South Devon and is currently undergoing a £75m redevelopment which includes a boatyard, hotel and spa.

Updates to the Marina also include new boatyard facilities, the highlight of which is a closed loop boat wash-down water recycling system. Dura Composites was engaged by Premier Marinas to work with their engineering company to produce a composite floor structure around their travel hoist supported by large 305mm GRP Dura Profile beams between 6-10m in length.

The team chose the GRP material over steel due to its superior performance in corrosive salt-water environments. Unique in the market, Dura Profiles exceed the higher performance E23 grade requirement of the BS EN 13706 standard.

Dura carried out a full FEA study and CAD service to enable the fabrication and supply of materials to Teignmouth Maritime Services ready for installation. The lightweight nature of the GRP profiles versus steel meant that installation was much quicker and more efficient.

Also central to the efficient operation of the washdown and hoist are Dura Grating and Dura Platform 40 flooring made from moulded and pultruded

high-performance GRP panels which are unique in design to Dura.

The open mesh section utilises 55mm d² Dura Grating Mini Mesh in dark grey, which facilitates drainage whilst maintaining strength and unrivalled anti-slip properties. The solid surface sections were created using patented d² Dura Platform 40, which are crankable to create an in-built fall to aid water runoff.

Case Study

d² Dura Grating Platform & Handrailing

Seafood Hatchery

Girlsta Hatchery, Shetland, ZE2 9SQ.

Scottish Sea Farms (SSF) has spent £2 million on its Girlsta hatchery in Shetland, including safe GRP access structures to help workers navigate with ease. Formerly Grieg Seafood, this hi-tech salmon hatchery in the Girlsta area of the Shetland Islands is fed by water from the local loch and uses advanced recirculation technology to maximise water efficiency.

The facility is where the lifecycle of the salmon begins and is a major economic asset to Shetland's economy.

When tasked with coming up with a solution to allow access to one of the water treatment areas in the Recirculating Aquaculture System, Technical Manager Steven Nicolson turned to Dura Composites.

With over 25 years experience in the Marine industry, Dura Composites was able to work with Steven to devise a bespoke GRP grating platform and safety handrailing system to allow staff to gain access for water sampling and cleaning as well as access and egress when the system was shut down.

As this system is completely unique, it required a custom design and build. Using it's in-house CAD and Technical team, Dura Composites was able to design an anti-slip, safe and durable

solution using its state of the art Glass Reinforced Polymer (GRP) d² Dura Grating and handrail components.

The patented grating design offers the ultimate in safety and durability for aquatic environments and is a cost-effective alternative to timber platforms which degrade over time - and therefore result in hazardous walking conditions.

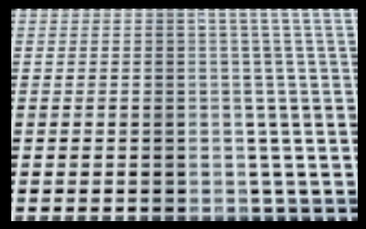
If you're looking for high specification materials with maximum longevity and safety for your marine or aquaculture project, why not get in touch?

Case Study

d² Dura Grating Mini Mesh

Gloucester Docks

The Docks, Gloucester, Gloucestershire, GL1 2ER.



Gloucester Docks are an historic feature in the city of Gloucester, with a rich history dating back to Roman times.

At over 40 miles from the coast, the docks are notably Britain's most inland port and have undergone huge transformations in the last decade, thanks to multi-million pound investments.

Now known as the Gloucester Docks Estate, the area consists of apartments, offices, attractions, bars, restaurants and pedestrianised public areas.

In this staircase and pontoon refurbishment, a set of former aged wooden structures were replaced with Dura Grating Mini Mesh panels in a light grey colour which offer a durable and safe staircase and pontoon alternative in both wet and dry conditions.

Used to access watercraft, the Mini Mesh grating surface is designed for regular use by boat users thanks to its safe anti-slip surface which has been tested to over 1 million footfalls.

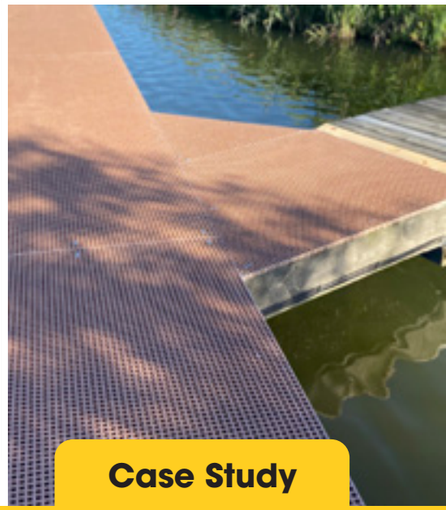
The small hole sizes within the panels allow for drainage and light transmittance and are suitable for all kinds of footwear.

The aperture sizes comply with BS 4592 and the European 20mm Ball Falling Test.

Made from hard-wearing Glass Reinforced Polymer, Dura Grating has a design life of up to 60 years and unlike the previous wooden solution will not degrade, rot or absorb water.

This upgrade not only enhances safety and longevity but also complements the modern aesthetic of the redeveloped estate.

The installation was completed with minimal disruption to dock users, ensuring continued access throughout the project.



Case Study

d² Dura Grating Mini Mesh

Mercia Marina

Findern Lane Willington, Derby, DE65 6DW.

Mercia Marina is Europe's biggest inland marina, comprising of 74 acres of retail and leisure facilities, holiday accommodation and nature trails located between the South Derbyshire villages of Willington and Findern. The Marina offers 260 residential moorings and is set to expand this number to 360 in response to increased demand.

Mercia Marina prides itself on providing boaters and visitors with the very highest standard of facilities. A popular destination for both tourists and residents, the marina featured extensive sections of timber pontoons which were aged and rotting due to repeated exposure to damp. Although a near-constant repair and replacement cycle was in place, it was clear that an alternative material with better longevity was needed to improve access and safety for visitors as well as to reduce ongoing marina maintenance costs.

The Marina selected GRP Dura Grating mini mesh in an attractive teak colour thanks to it's long maintenance-free lifecycle, gritted anti-slip surface and proven performance in marina locations. Over 2300 sqm has now been installed on the main walkways.

The installation was carried out in phases to minimise disruption to marina operations and ensure continued access for residents and visitors. Thanks to the lightweight nature of the GRP panels, the process was efficient and required no heavy lifting equipment, making it ideal for the sensitive waterfront environment.

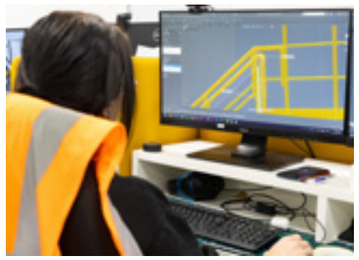
Feedback from marina users has been overwhelmingly positive, with many commenting on the improved grip underfoot and the visual appeal of the teak finish, which blends seamlessly with the natural surroundings. The upgrade has not only enhanced safety and accessibility but also reinforced Mercia Marina's reputation for delivering high-quality, sustainable infrastructure.

Our Value Added Services

Specialist Design Team

Our Design team use a variety of software including CAD, 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 Design team can highlight any mistakes or clashes early on in the design phase and eliminate them before moving to the fabrication or 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 a 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

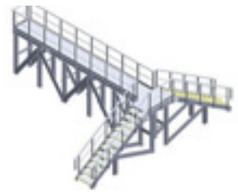
Our 3D laser scanning service uses the latest in area scanning technologies to create an exact 3D replica of your project site or premises. This can then be utilised by either Dura Composites' in-house designers to recreate your site specific requirements, or passed to your own internal team.

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 or aerial drone surveying services 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.



Global Infrastructure Solutions

With our Headquarters in the UK, we have a presence across the globe through our partnerships on every continent. We are committed to helping to answer the major challenges facing all major construction and infrastructure works around the world. Composite materials are a realistic long-term alternative across a wide range of applications replacing traditional materials.

Not in the UK?

Find your local distributor at **www.duracomposites.com/global-distributors** to connect with a regional expert.

Real-World Results. Global Impact.

Below are just a few of our marine case studies from around the world. Scan the QR codes to explore each project in detail, or visit **www.duracomposites.com/projects** to discover more.

September 2025

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