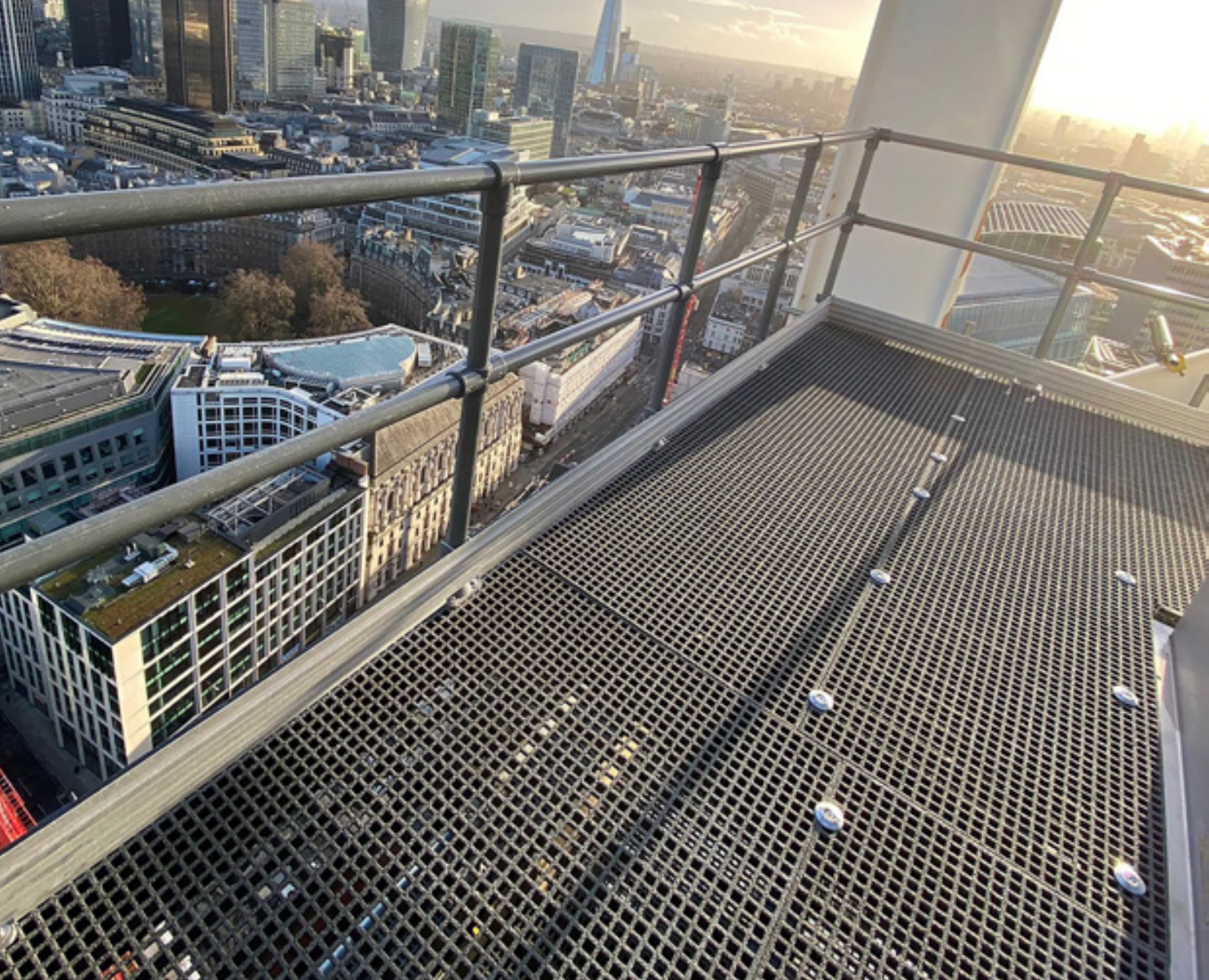


High Rise

High Rise Solutions

d²



High performance composite product solutions for High Rise buildings, including riser voids, balconies & terraces, plant maintenance & access.

Unlocking the Power of Composites™
» for Multi-Storey Buildings

dura™
composites

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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 446830**.



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:

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.

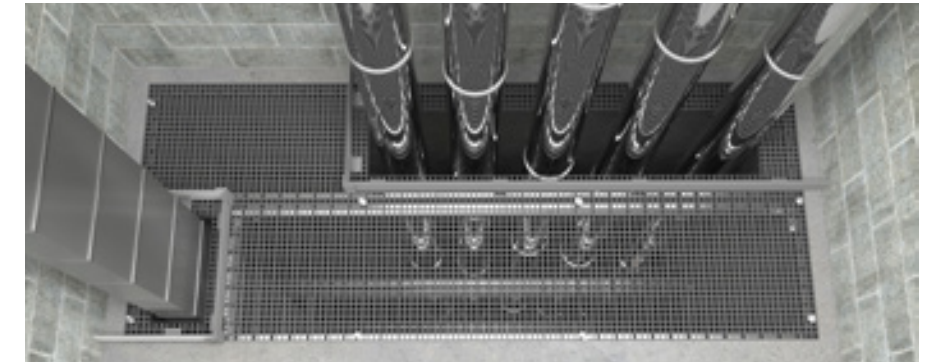
Proven.

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



Our Product Applications

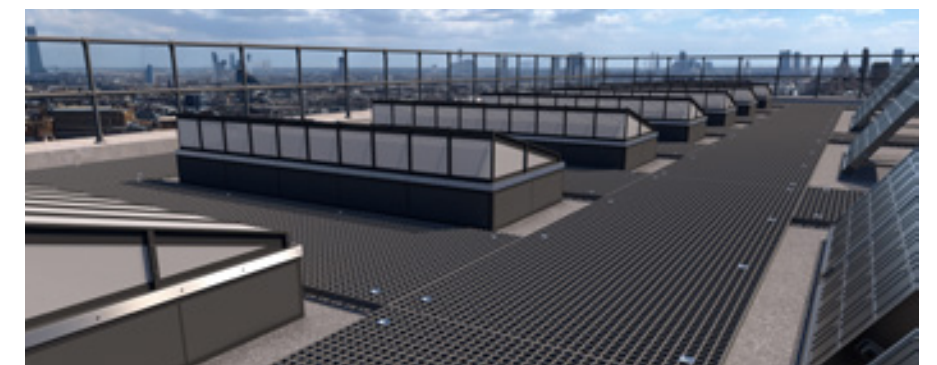
Discover the diverse range of innovative applications our products offer, designed to enhance your install efficiency, save money, and meet the requirements of your high rise building project.



Riser Voids



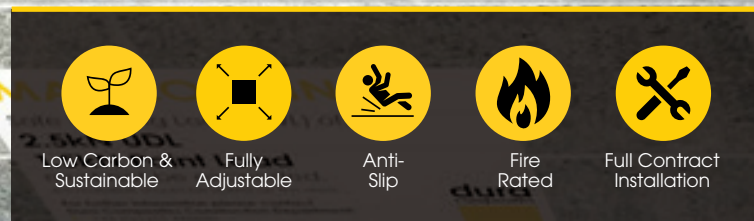
Balconies & Terraces



Structural Flooring & Walkways



Plant Maintenance & Access



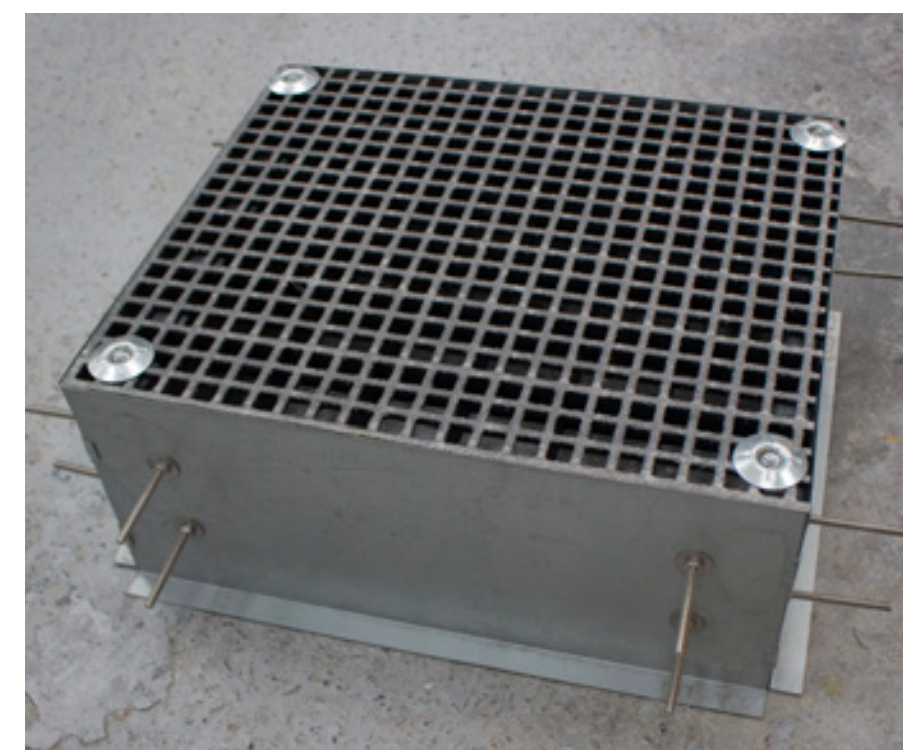
Our Product Solutions

Our Riser System and Cast-In Modules can help you:

- Eliminate the void
- Protect from falling objects
- Reduce slips and trips
- Achieve safe working loads
- Enable compatibility with your fire strategy
- Reduce on-site operations



d² Dura Riser System



d² Dura Riser Cast-In Modules

Riser Voids

Dura Composites is your one-stop solution for Riser Void Safety. We offer design, supply and installation for Service Risers. Our patented d² Dura Riser system is fully adjustable, has a Class B fire rating, proven live load testing and a 33% reduction in carbon. Safe right from the moment of installation, without the need for costly adjustments to accommodate M&E changes.

Full data
including L/200
& 0.5 deflection
available here:



d² Dura Riser System

Our patented, steel-supported GRP (Glass Reinforced Polymer) Riser flooring system will help you take the hassle out of Risers and is designed for all construction stages and methods. Known as the d² Dura Riser System, it 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.

Our bespoke first-class safety, riser solutions on new builds or refurbishments together with our highly experienced team offer a tried and tested one-stop-shop for Riser safety – including design, material supply & install.

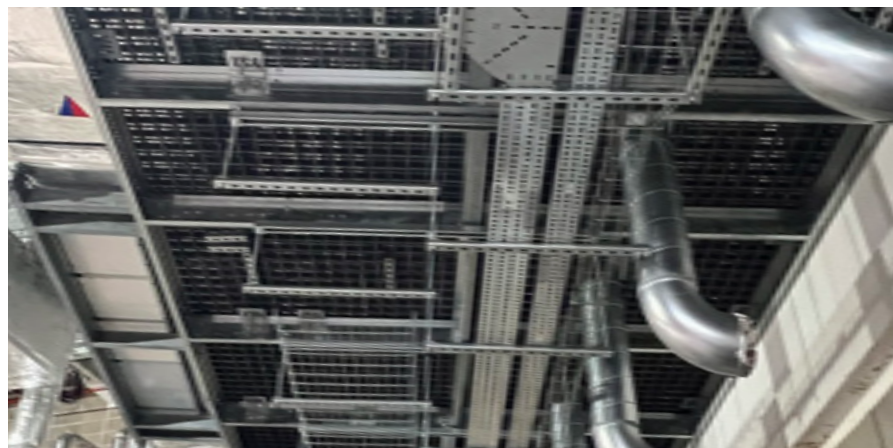


Unlike competitor solutions, there is no need to cut service holes ahead of time or to crane heavy framework into position, and the system is infinitely adjustable to allow for millimetre by millimetre changes. All components of the d² Dura Riser solution are also suited to manual handling and can be easily adapted for use with unusual substrates.

Interface with Fire Strategy

If the fire strategy in your risers make install a challenge, we have a high-performance solution that will make for a secure install and preserve your fire protection. We've developed a way to connect our system through firewalls, and can work with your fire stop designers to provide an interface to secure our system within your existing strategy.

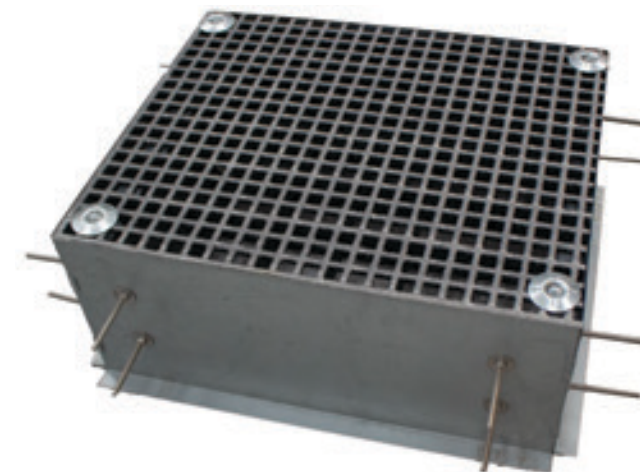
Here's who we've already done it for:



Dura Cast-In Modules

Our Cast-In Modules are pre-assembled boxes which form the opening in the concrete floor and are built by us to the correct bespoke length, width and height of each void and slab, and then shipped ready for immediate installation. If you're new to the world of risers, it's the perfect way to upskill your team.


The Modules can be flat packed for assembly on site, or completely pre-built for lifting into place with maximum speed and minimum risk. Pre-planning your use of Cast in Modules allows for more efficient use of labour on site, leading to reduced costs.




The d² Dura Riser System Perimeter is fixed to the inside of the Cast-In Modules for the d² Dura Grating to sit on, or the module sides can be made with a bend flange at the top for the Dura Grating to rebate into the slab. Once the temporary floor is removed post-pour, the Cast-In Modules are held in place with bolts that key into the concrete.









Environmentally
Friendly




In Stock
Now



Anti-
Slip



Fire
Rated



Aesthetically
Pleasing

Balconies & Terraces

Our intelligently designed patented decking and cladding products offer fire-rated properties which are essential for protecting both residents and the buildings themselves. They are particularly suited to remediation projects where an A2 fire rating is required by law, such as for multi-storey building cladding, terraces and balconies.

Our Product Solutions

Our high-quality cladding and decking materials enhance resilience, safety and longevity, reducing the risk of incidents that could jeopardise the safety of residents and the buildings themselves.





Dura Deck® Inspire

The Dura Deck Inspire collection consists of unique 1.8m long A1 fire-rated porcelain deck planks ideally suited to applications where the building height exceeds 11m.

It is compliant with recent changes in legislation for medium rise and high rise buildings and has a long design life that’s perfect for a wide range of applications such as balcony decking. The planks are UV colour stable, do not scratch, warp or rot, and weigh just 14kgs each, meaning they are easy to manoeuvre around your site safely.



The product can be easily fitted to concrete balconies using Dura’s proven aluminium sub-frame system, but as a market first, we have also developed a patent-pending plank retainer system for installing Dura Deck® Inspire on open steel framed balconies. The retainer enables a floating decking system to be installed under self-weight, without the risk of planks falling should a breakage happen. The Dura Deck Inspire Plank Retainer also helps prevent wind uplift and facilitates the quick removal of the decking should it be required.

Our long length 1.8 metre and 200mm wide unique planks mean that a floating area of 3m² can be installed in less than 3 minutes! We test extensively for features such as anti-slip, reaching higher performance than the R11 standard offered by others.



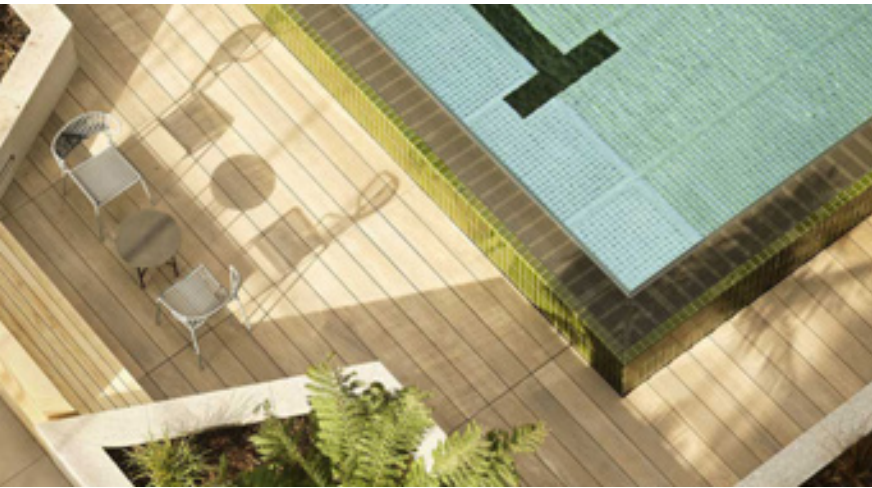
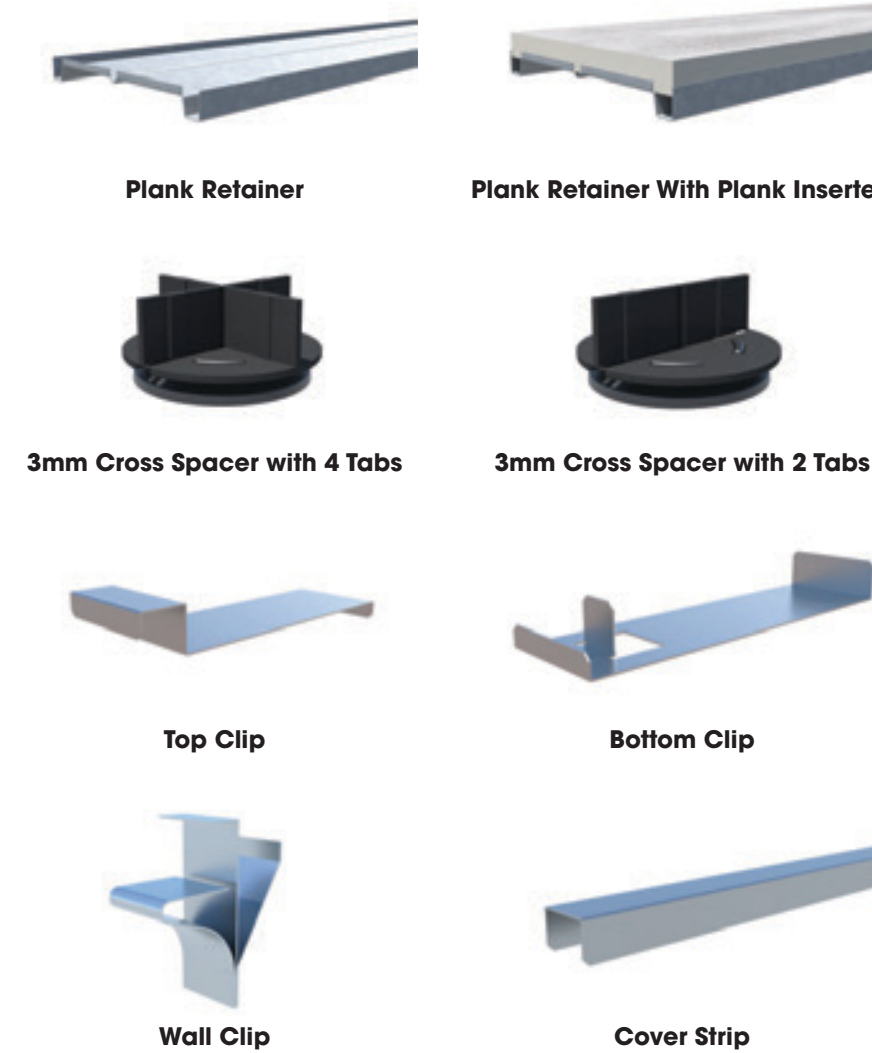
Product	Thickness (mm)	Length (mm)	Width (mm)	Visible Face Width When Installed (mm)	Max Span (mm)	Weight per Length (kg)
Dura Deck® Inspire						
Inspire Boards	20	1800	200	200	600	14
Plank Retainer			0.9			3.2
3mm Cross Spacer	22.8	N/A	50			
Fascia Top Clip	29.8	160	50			
Fascia Bottom Clip	50	173	50	N/A	N/A	N/A
Fascia Cover Strip	24.1	1200	17			
Wall Clip	38	45.5	19			

Accessories

Dura Deck® Inspire has a range of intelligently designed accessories so you can be sure of a simple & efficient way to start, install and finish your balcony decking or terrace design.

Each accessory will not only add a professional appearance to your finished decking area, but can also help increase its functionality. Our top and bottom clips for example will hold planks securely in position, whilst our cover strips will provide a neat finish to an exposed edge.

To find out more on the installation of Dura Deck Inspire Accessories, take a look at the Dura Deck Inspire Technical Manual.



Dura Deck® Aluminium

Due to its lightweight design and ease of installation, Dura Deck Aluminium is perfect for high-rise terraces and balcony applications. Its outstanding class A2 s1 d0 and A2fl-s1 fire rating and compliance with EU and UK government recommendations means it's great for buildings over 11 metres in height.

Available in 3 beautiful matt-finish colours, Anthracite, Cedar and Mist, each aluminium board has a double skin with an extensively tested anti-slip surface and uniform underside to provide an attractive in-built soffit detail. With a minimum 60 year life expectancy and low maintenance requirements, Dura Deck Aluminium is also a perfect solution for public spaces.

For more information, please refer to the Dura Deck Aluminium Technical Manuals.



Matt-Finish Surface Texture of **Free-Drain 18mm** in Mist

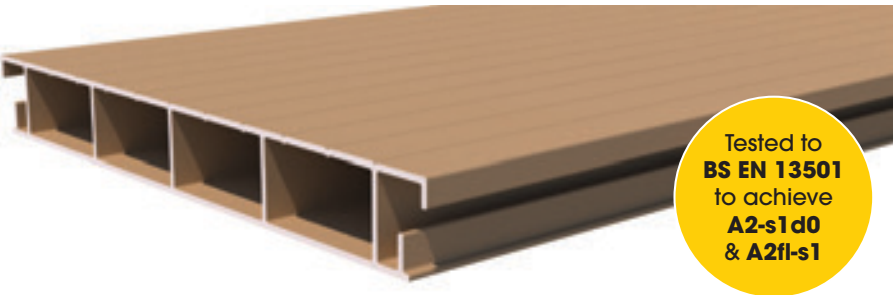


18mm Free-Drain

This free draining decking solution allows water to drain through the gaps between the planks onto the area below. Dura Deck Aluminium Free-Drain 18mm is ideal for replacing degraded or non-compliant timber on balconies, low level terraces and walkways or new build balconies less than 6m² that do not require water management (Patent No. GB 2584725).

Spanning up to 850mm between centres based on a 2kN point load, the decking boards feature a unique design which is particularly suited for use with 'slide-on' cassette balconies, minimising the need for on-site finishing.

The lightweight nature of the boards make them ideal for projects where access restrictions make remedial work tricky using traditional materials. The V-Groove surface is cool in hot weather and has low slip potential in all directions.

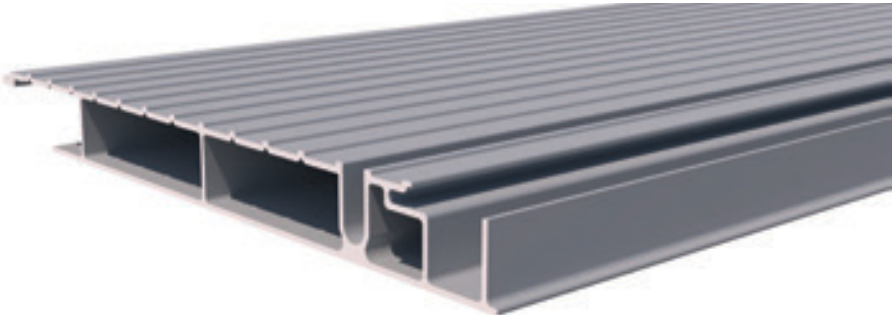


Product	Thickness (mm)	Length (mm)	Width (mm)	Visible Face Width When Installed (mm)	Max Span (mm)	Weight per L/M (kg)
Dura Deck® Aluminium 18mm Free-Drain						
18mm Free-Drain	18		150	150		1.26
Start Stop Trim		3660	21.3	15		0.12
Main Trim	9.1		27.6	6-10	850	0.18
		50				0.18
Cut Down Trim	19.2	3660	22	15		0.13
End Closure Trim	19		45	10		0.22

18mm Positive-Drain

Dura Deck Aluminium Positive-Drain 18mm deck boards meet the requirement for positive drainage, especially on stacked balconies of over 6m².

Water is guided to a gutter through the patented chanel (Patent No. GB 2584725). Spanning up to 1050mm between centres on a 2kN point load, the decking boards feature innovative shadow gaps and a reeded surface for a traditional deck look.



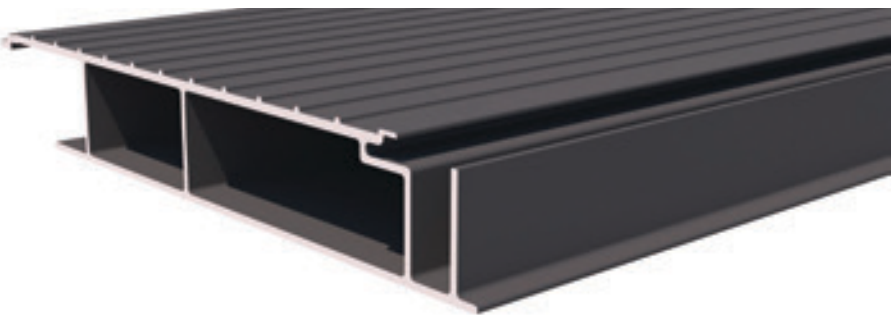
Product	Thickness (mm)	Length (mm)	Width (mm)	Visible Face Width When Installed (mm)	Max Span (mm)	Weight per L/M (kg)
Dura Deck® Aluminium 18mm Positive-Drain						
18mm Positive-Drain			183	150		1.51
Starter Trim	18	5800	41	20	1100	0.46
Finishing Trim			28	37		0.24
End Closure Trim	19		45	10		0.22

27mm Positive-Drain

Perfect for balcony projects with in-built drainage trays where non-compliant timber is being replaced and large spans are required. Other suitable applications include commercial walkways and pedestrian bridges. Spanning up to 1400mm between centres on a 2kN point load, the decking boards feature a 27mm profile which means fewer structural supports are required for the balcony or terrace build-up, saving time and money.

The innovative tongue and groove interlocking design features a hidden fixing channel which hides the fixing screws and makes installation quick and easy.

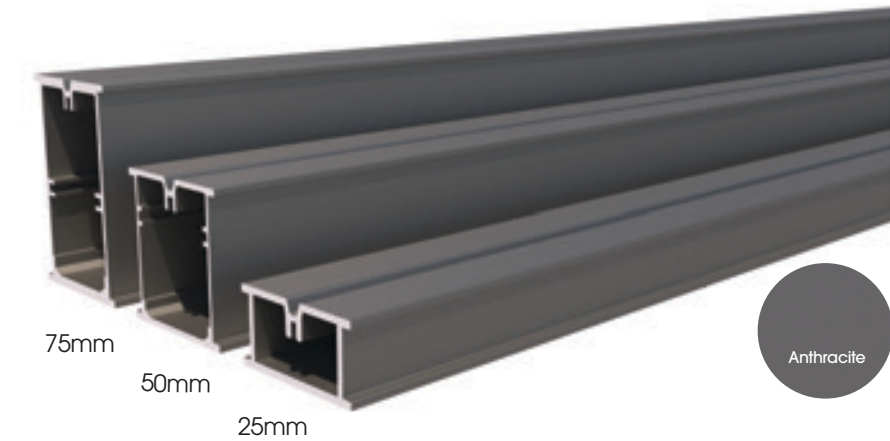
Dura Deck Aluminium Positive-Drain 27mm deck boards meet the requirement for positive drainage as water is guided to a gutter through the in-built patented channel design (Patent No. GB 2584725).



Product	Thickness (mm)	Length (mm)	Width (mm)	Visible Face Width When Installed (mm)	Max Span (mm)	Weight per L/M (kg)
Dura Deck® Aluminium 27mm Positive-Drain						
27mm Positive-Drain			178	150		2
Starter Trim	27	3660	61.2	41	1400	0.84
Finishing Trim			53	38		0.47
End Closure Trim	28		45	10		0.27

Dura Bearers

Aluminium Dura Bearers offer a simple and long-life decking substructure solution for gardens, balconies and large commercial projects. Unlike timber subframes, which can twist, rot or warp over time, Dura Bearers are made from 6063 grade aluminium (T6) and have a greater strength-to-size ratio than traditional materials.



Available in three sizes (25mm, 50mm and 75mm), Dura Bearers can be installed directly onto hard surfaces, such as concrete or paving, as well as onto soft surfaces such as soil, sand or grass, (provided the area has been compacted and bricks, pavers or concrete slabs are placed beneath the bearers at suitable intervals).

When combined with our Dura Pedestal range as a complete A2 fire rated system, they can be used on sloping or uneven ground with gradients of up to 10° Degrees - which is equivalent to an amazing 1:6 fall!

Product	Height (mm)	Width (mm)	Length (mm)	Weight per Length (kg)
Dura Bearer				
Dura Bearer	25	48	3660	3.4
	50			3.5
	75			6.1

For information on spans, please refer to the Aluminium Decking Substrate Technical Manual.

Dura Bearers can also be used as A2 fire rated cladding battens to increase the fire safety of your cladding project.



Dura Pedestals

Aluminium Dura Pedestals have an A2 fire-rating and a unique patent pending design which helps overcome even the most complex of installation challenges. Available in 8 different variants, the Anthracite coloured pedestals are designed to work seamlessly with our aluminium Dura Bearers to provide the most economical A2 rated support system on the market.



Unlike plastic pedestals, the Dura Pedestals have a single unit construction, with no fiddly separate components (such as bearer holders, slope correctors or spacers) to unpack and assemble. The tripod design features enhanced stability to mitigate the risk of rolling and can be butted up to the wall or edge without the need for cuts.

If your project requires a fall, or if your substructure is not level, each pedestal includes handy visual notches at 5mm intervals so you can easily secure your bearers at your desired height.

Aluminium Pedestal Pads

This Aluminium Pedestal Pads can be used in conjunction with our Dura Pedestals for added protection when using waterproofing membrane or roof felt.



Lightweight and easy to install, it features drainage holes to prevent water stagnation and can be easily removed and re-used as required.

For more information on the Dura Aluminium System, refer to the Aluminium Decking Substrate Technical Manual.

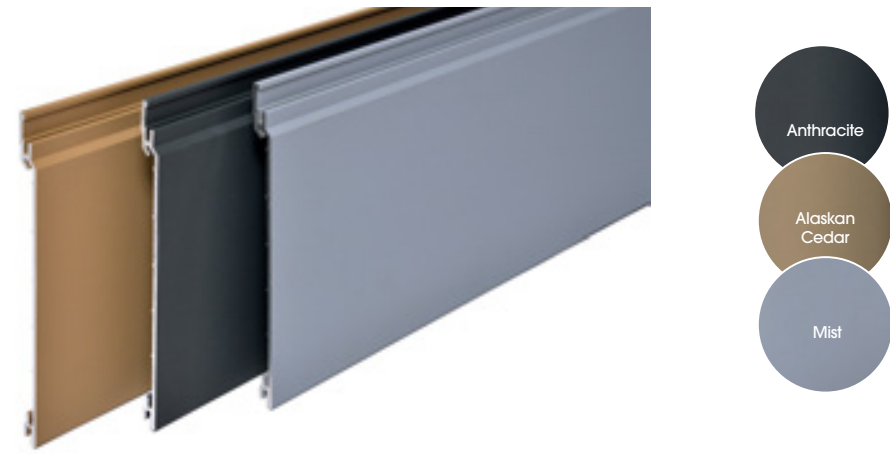
Product	Height (mm)	Length (mm)	Weight (kg)
Dura Pedestal			
Dura Pedestal	25.5	150	0.27
	36.5		0.28
	50.5		0.33
	85.5		0.5
	117.5		0.58
	152.5		0.66
	187.5		0.75
	222.5		0.83
Dura Pedestal Pad			
Pedestal Pad	2	270	0.2



Dura Cladding Flush Aluminium

Dura Cladding Flush Aluminium is available in contemporary colours including Cedar, Anthracite and Mist as standard, and Canvas and Copper as special order. The flush fitting design provides a decorative skin that is simple, clean and modern.

As well as wall cladding, Dura Cladding Flush Aluminium can be used for soffits, or to clad exposed framework on the underside of balconies. The 3660mm planks are lightweight and require minimal maintenance over their long lifecycle.



Dura Cladding Flush Aluminium is an A2 fire-rated cladding system which can be installed either vertically or horizontally with no overlap. It offers a versatile solution that meets the needs of high-rise, public sector and domestic cladding projects. When used with our aluminium battens and cladding trims the cladding planks create a safe, low-maintenance cladding solution that's fire-rated (in accordance with BS EN 13501-1:2018) for maximum peace of mind.

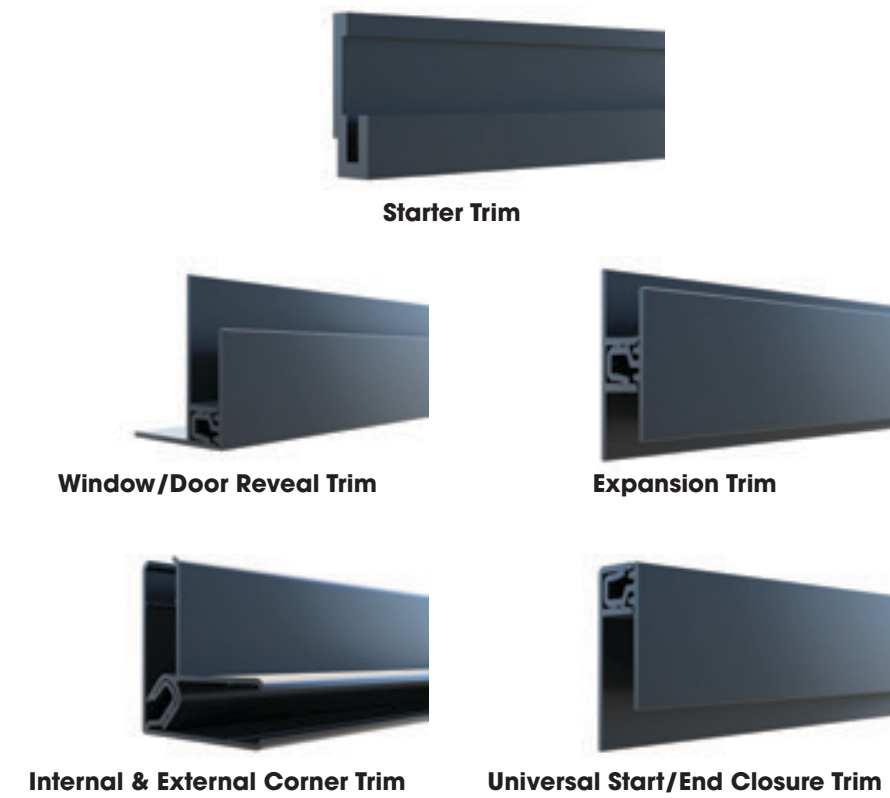
Product	Thickness (mm)	Length (mm)	Visible Face Width when installed (mm)	Maximum Fixing Span (mm)	Weight/ Lin m (kg)
Dura Cladding Flush Aluminium					
Dura Cladding Flush Aluminium	11	3660	150	600	1.19
Starter Trim	7.5		Hidden On Installation		0.19
Expansion Trim	14		21.5		0.32
Reveal Trim	30		39		0.46
Corner Trim	40		40		0.22
Universal End Closure Trim	14		30		0.37
Back Joint Trim	N/A		N/A	N/A	N/A

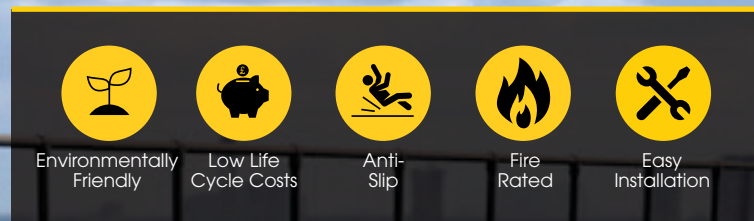
2 Part Trim System

The Dura Cladding Flush Aluminium range includes a simplified range of fast-fit 2 part aluminium trims. There are 6 aluminium trim styles, Internal/External is reversible, all of which are low profile and powder coated to match or complement the colour of the Cladding planks.

All trims are available in Cedar, Mist and Anthracite. Installation of the cladding begins with adding all bearers, followed by base part trims, followed by cladding planks then finally outer part trims.

To see how the 2 Part Trim Systems fit together, take a look at the Dura Cladding Flush Aluminium Technical Manual.





Structural Flooring & Walkways

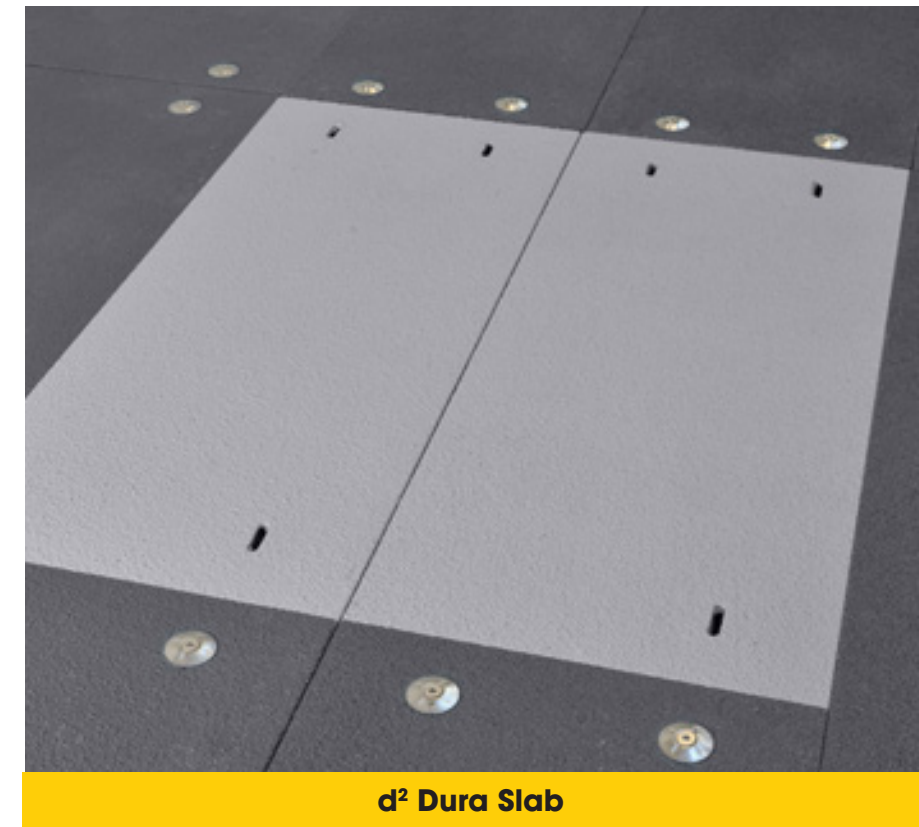
Manufactured using advanced composite technology that removes embodied carbon without compromising on performance. Our walkway products feature one of the highest degrees of slip resistance ever measured for a walking surface especially in wet, oily or adverse weather conditions, and can be used to replace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

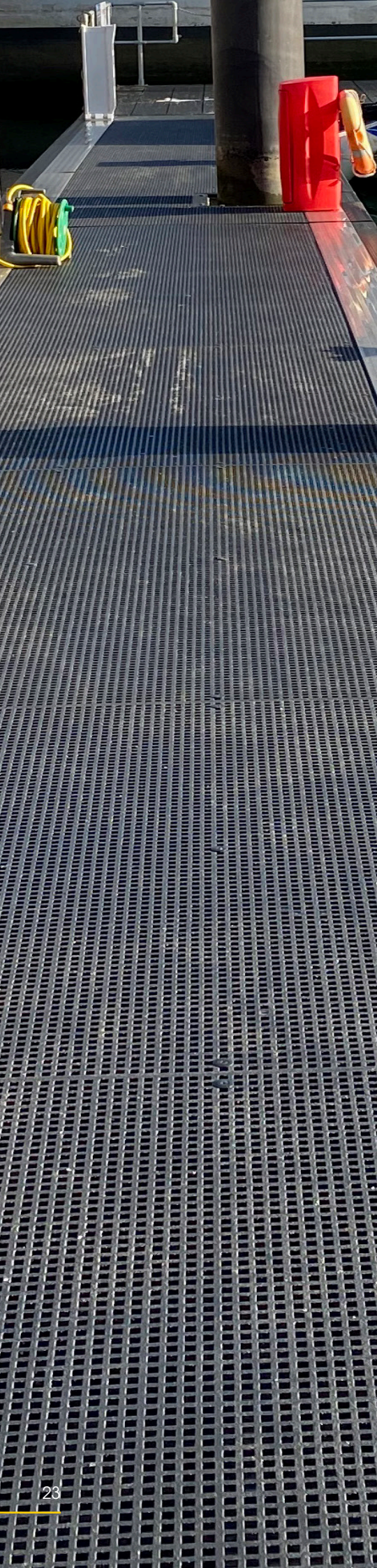
Full data
including L/200
& 0.5 deflection
available here:



Our Product Solutions

Both our d² Dura Grating open mesh and Dura Slab solid surfaced structural 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.



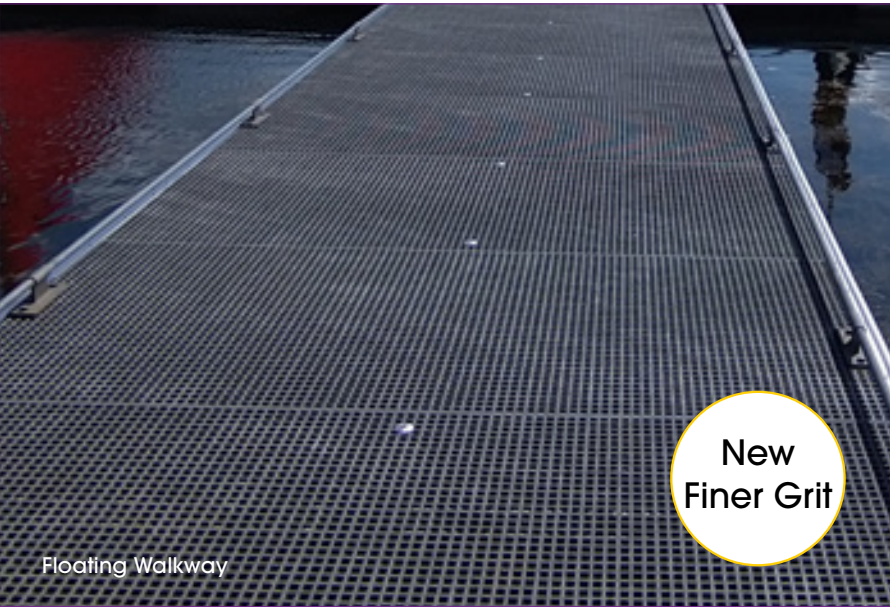
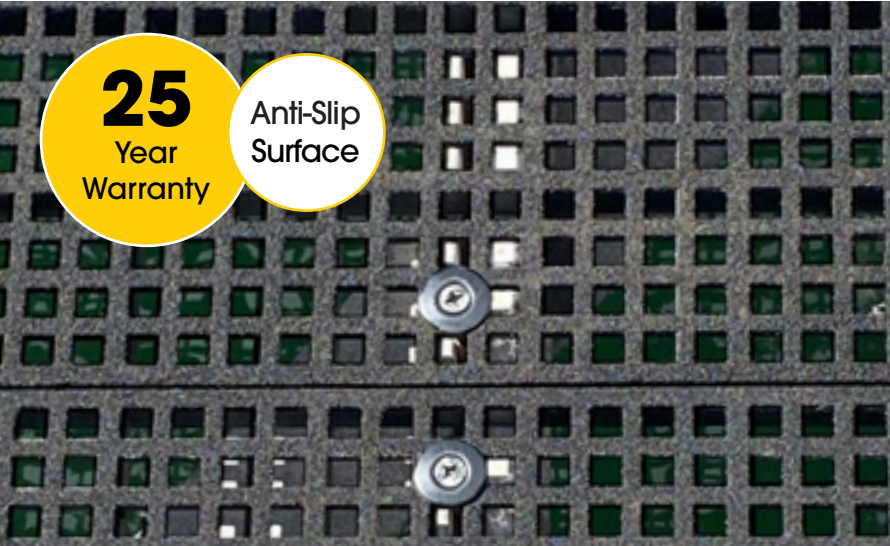
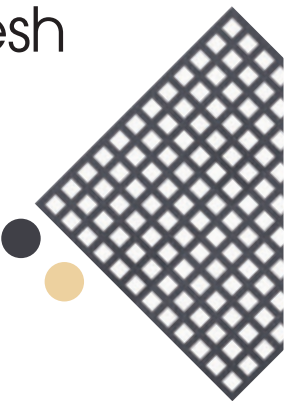


d² Dura Grating Micro Mesh

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
d² Dura Grating Micro Mesh					
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.

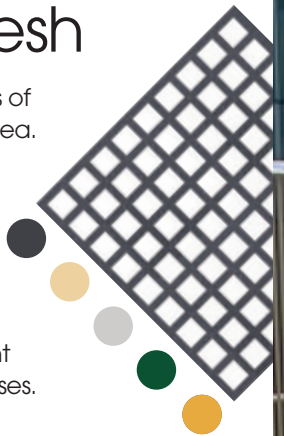
d² Dura Grating Mini Mesh

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
d² Dura Grating Mini Mesh					
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.





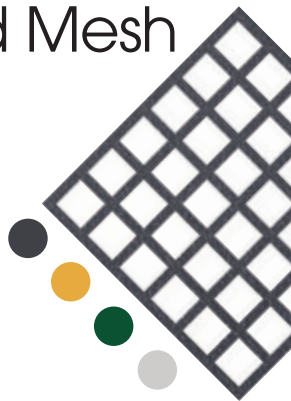
d² Dura Grating Standard Mesh

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
d² Dura Grating Standard Mesh					
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.

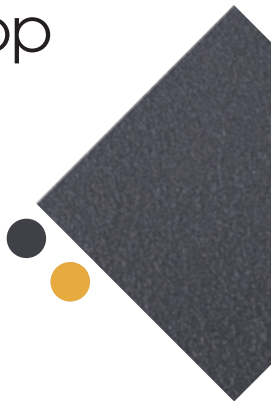
d² Dura Grating Solid Top

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.



Product	Length (mm)	Width (mm)	Weight (kg/ sqm)	Open Mesh Size (mm)	Max Span (mm) at 1.5kN Point Load
d² Dura Grating Solid Top					
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.





Dura Slab

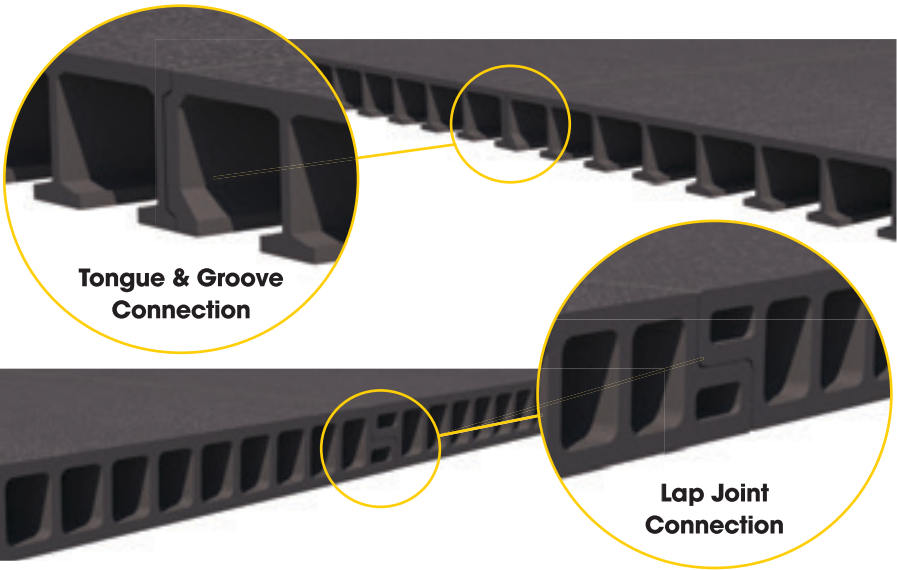
We are experts in the design, manufacture and supply of heavy-duty floor slabs. Our Glass Reinforced Polymer (GRP) Dura Slab panels offer a low maintenance, durable, fire-rated and simple to install composite alternative to heavy & cumbersome concrete flooring or short-life Plywood.

With an innovative design that can include either manual lifting eyes or mechanical lifting arms, Dura Slab has an excellent strength to weight ratio. When used as seating or concourse flooring, its lightweight nature means routine inspections of the substructure can be made easily.

Dura Slab Connections

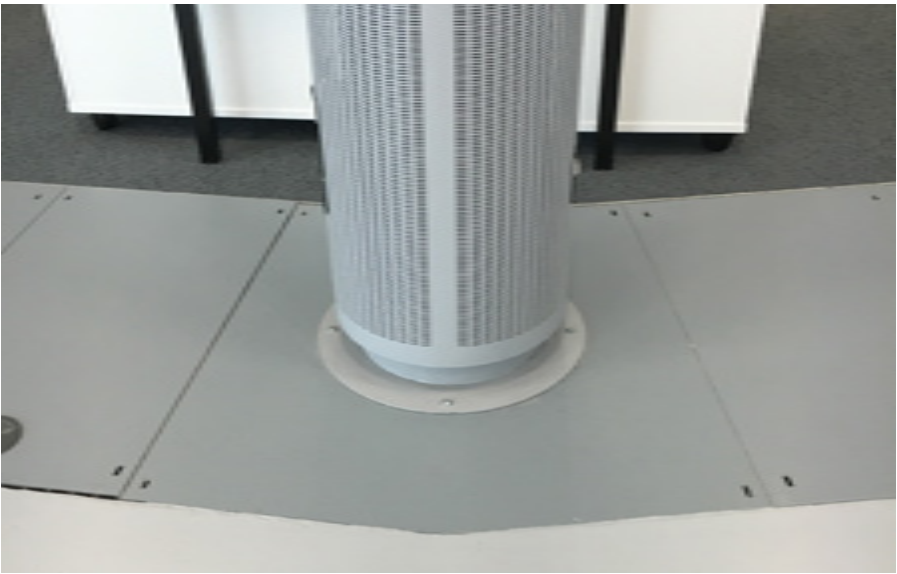
We offer two connection types; Dura Slab Open has a tongue and groove connection suited to narrower spans or pedestrian loading and Dura Slab Closed has a lap joint solution catering for vehicular loads and wide spans.

When used as heavy duty flooring, its lightweight nature means routine inspections of the substructure can be made easily and panels removed as necessary.



Dura Slab Open (Pultruded Solution)					
Product Type	Standard Compliance	Length (mm)	Width (mm)	Panel Weight (kg)	Solution Image
18mm	BS 6399-1:1996 C2 & C5	3660	600	30	
20mm			502	23	
30mm			508	24	
40mm (28kg)			500	28	
40mm (31kg)				31	
40mm (64kg)			1037.5	64	

Please note some products shown in the above table may be subject to special conditions or extended lead times. Please consult your Dura Composites Representative.



Dura Slab Closed (Pultruded Solution)					
Product Type	Standard Compliance	Length (mm)	Width (mm)	Panel Weight (kg)	Image
45mm	BS 6399-1:1996 C2 & C5 EN 124 Class A	3660	725	67	 Top Panel Bottom Panel
50mm	BS 6399-1:1996 C2 & C5 EN 124 Class B		500	72	 Top Panel Bottom Panel
75mm	BS 6399-1:1996 C2 & C5 EN 124 Class C	3800	650	135	 Top Panel Bottom Panel
100mm (Easy Lift)	BS 6399-1:1996 C2 & C5 EN 124 Class B	6000	375	67	 Top Panel Bottom Panel
100mm	BS 6399-1:1996 C2 & C5 EN 124 Class C	2800	650	142	 Top Panel Bottom Panel

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



Fully Recyclable

Long Term Performance

Anti-Slip

Heavy Duty

Fully Fabricated



Plant Maintenance & Access

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 Plant Maintenance and Access structures use our market-leading d² 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 d² 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 East Anglian HQ and fabricated structures can be supplied with detailed dimensions and weights, including footprint size, to ensure it will fit within your overall planned design.

For more information, please see our d² 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.





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
Web Stiffener (Male Section)	6010			Dark Grey	69.7
Web Stiffener (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 HQ 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			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.



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



Case Study

GRP Riser Flooring & Hanging Gantries

20-22 Ropemaker Street

London EC2A 1RS

Built by Skanska, 20-22 Ropemaker Street is a mixed-use commercial scheme, worth £240 million which occupies a prominent corner site just north of Moorgate Station in London. The building includes 22 office floors, 5 accessible roof terraces, and 3 basement levels for retail servicing, plant, & facilities management.

Internally and above ground floor, the building's steel frame consisted of fabricated beams supported by CHS columns. The beams feature bespoke web openings to accommodate services.

The **d² Dura Riser** system was configured to seamlessly interface with the substructures that made up the edges

of these openings and specialised connection details were designed that allowed our installation team to fit to the fire protected structural members, whilst maintaining the 120 minute fire rating.

The **d² Dura Riser** system utilised its built-in adjustability, to overcome any variation in the M&E services' final positioning. The system has fire ratings of Class A1 on substructure and Class B for the gratings.

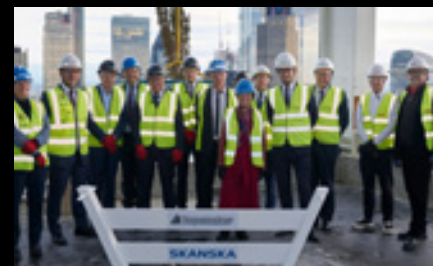
This project benefited from enhanced safety measures by selecting a grating that complied with the 20mm Ball Fall Test and proven Live Load testing.

The **d²** products impressive reduction

in carbon vs traditional materials, aligned with the project's sustainability objectives.

We also installed hundreds of square metres of GRP mini mesh to form rooftop access decks. These were paired with bespoke light weight GRP access structures that are very low upkeep due to GRP's resistance to weathering and corrosion.

This package therefore enabled the safe future maintenance of plant equipment.

GRP Riser Framework & d² Mini Mesh Grating

50 Finsbury Square

London EC2A 1HD

Built to offer both commercial and office space, this building is located just minutes from Moorgate and London Liverpool Street Station.

It features prime office areas and three amenity spaces: a large business lounge, a town hall with amphitheatre, and a rooftop pavilion with a beautifully landscaped terrace.

To ensure riser void safety on the project, it was crucial to preserve the fire strategy during installation whilst still accommodating the existing building. Therefore, we collaborated with Mace to develop a connection detail that interfaced with the existing structure,

facilitating the installation of the **d² Dura Riser** system while maintaining the building's fire safety protocols.

Continuous collaboration with Mace was paramount throughout the project, with clear communication being our top priority.

Our on-site team have extensive experience in both new build and refurbishment projects and were able to work effectively alongside Mace to provide everything that was needed for a smooth and stable installation.

Our **d² Dura Riser** system eliminates the need for pre-cut service holes or heavy framework adjustments. Its

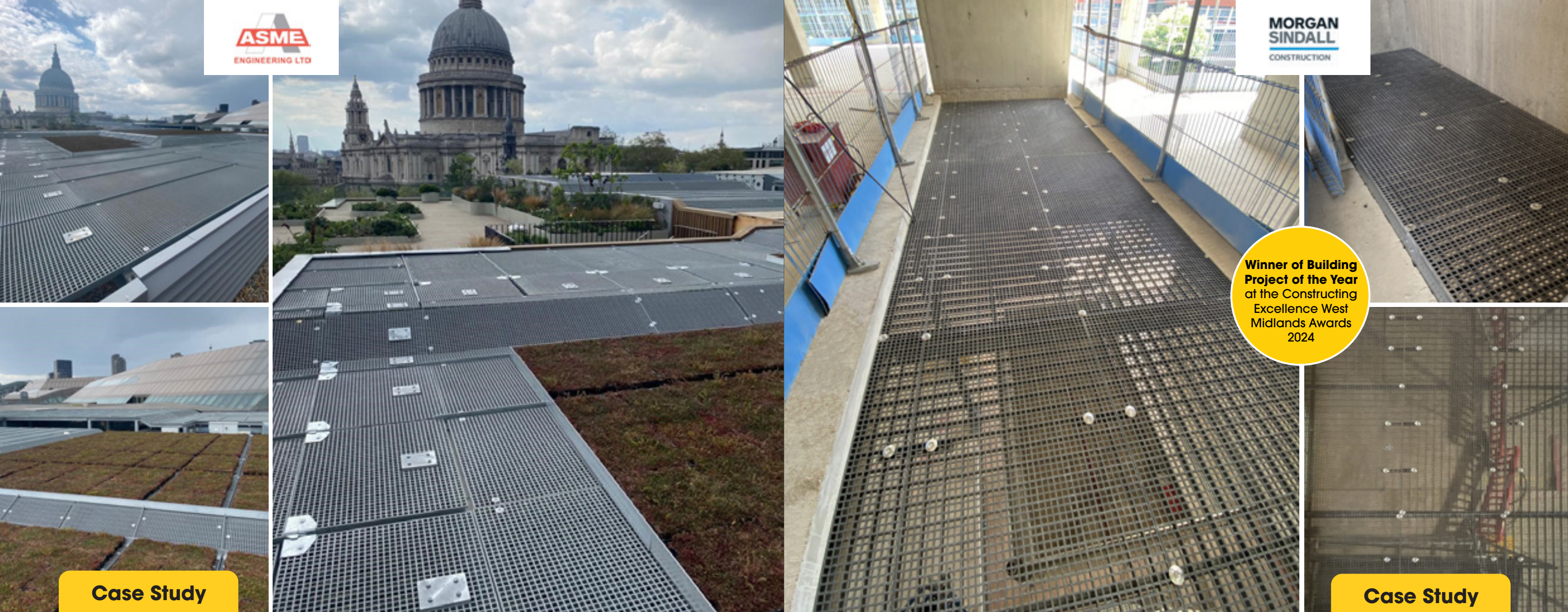
flexibility allows precise, millimetre-level modifications.

Designed for manual handling on multi-storey sites like Finsbury Square, it easily adapts to unconventional substrates. The lightweight system also facilitates simple M&E alterations.

Additionally, the GRP grating used has up to 33% lower embodied carbon compared to other GRP products, and installation waste is recyclable by Dura Composites.



Case Study



GRP d² Dura Grating

Cannon Street

25 Cannon Street, London, EC4.

Occupying a prominent island site directly opposite one of London's most famous landmarks, 25 Cannon Street is a five-storey, neoclassical office building with a design which is respectful of its location in the heart of the City of London.

Views of St Paul's Cathedral and other landmarks on the city skyline are protected by planning controls. A policy known as 'St Paul's Heights' protects and enhances important local views of the Cathedral from a range of vantage points, including from the building at 25 Cannon Street.

Buckley Gray Yeoman was selected to deliver a comprehensive modernisation of the 168,000 sq ft office, with ASME Engineering chosen to commission and install screening to the plant equipment on the rooftop which would be compliant with St Paul's Heights policy.

ASME Engineering turned to Dura Composites to design and supply Glass Reinforced Polymer horizontal screening panels to protect the equipment housed on the rooftop from the elements, whilst maintaining airflow with minimal visual impact and allowing for access by maintenance personnel.

A combination of **Dura Grating 50mm**



Standard Mesh and d² Dura Grating 45mm Mini Mesh were used to meet the distinct requirements of the various areas, with the larger hole-sized product providing the correct level of ventilation for the Air Handling Units, and the smaller hole sizes of the mini mesh providing privacy in other areas of the roof to minimize the impact on the views of St Paul's.

Non-conductive, lightweight and requiring minimal maintenance, the Dura Grating panels were supplied with powder coated fixing clips and hinged access panels, and offered the perfect strength-to-weight ratio for the project.

Steel-Supported GRP Riser Flooring

University of Birmingham

Molecular Sciences Building, Birmingham, B15

This £60 million project to construct a new Molecular Sciences building is a partnership between the University of Birmingham and Morgan Sindall Construction. The aim of the project is to strengthen the University's research capabilities and foster an environment for research and education.

The site was originally a sports facility known as the Munrow Building and had more recently been used as a car park. Designed by Associated Architects, the new 12,790 sqm hub building is a concrete and steel frame structure.

Morgan Sindall Construction turned to Dura Composites to supply and install

its patented steel-supported **GRP riser flooring system** and **d² Dura Grating**. This ensured the 6 metre by 2.5 metre riser void coverings on each floor were installed to the correct standards and that project timelines were met efficiently.

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 to help reduce the risk of death or serious injury on construction sites.

In this project, a combination of **45mm Mini Mesh and 35mm Mini Mesh d² Dura Grating** products were used as the



structural flooring surface to meet the differing load requirements of the various areas, supported by our patented steel framework system which offers the perfect combination of strength, safety and adaptability on site.

Morgan Sindall Construction worked closely with the University and Architects to minimise the building's carbon footprint. They estimate they so far have saved over 260 tonnes of carbon through efficient design development.



Case Study



GRP d² Dura Grating

Oriel Eye Care Centre

London, EC1V 2PD

The Oriel Eye Care Centre, a collaboration between Moorfields Eye Hospital NHS Foundation Trust, the UCL Institute of Ophthalmology, and Moorfields Eye Charity, marks a significant advancement in eye care services.

Bouygues, a leading construction firm, was selected to oversee the project, focusing on safety, efficiency, and sustainability in its design and construction.

For the riser fall protection within the centre, Bouygues chose **Dura Riser Cast-In Modules**. These pre-fabricated modules, featuring d² Dura Grating,

are designed to be cast into concrete, providing a structural solution that minimises the risk of falls and injuries during construction and throughout the building's life.

The solid top grating used in these modules also reduces air circulation between floors, lowering the risk of cross-contamination, a critical factor in healthcare settings.

Pre-built by Dura's in-house team, the modules minimised on-site assembly, further streamlining the construction process. The design also ensures the modules can withstand heavy loadings, including support for formwork panels

and access by Mobile Elevating Work Platforms (MEWPs).

Commenting on the installation, Katherin Round, Civil Works Engineer said:

"The team found the Dura Riser Cast-In Modules very easy to install and found that it worked a lot better for the team compared to the post fix option.

We look forward to using them on future projects".



Dura Aluminium Balcony & Rooftop Decking

11 Goulston Street

London, E1 7TP

The Goulston Street development is a 6-storey apartment building designed for residential living, that offers a prime commuting location just a 10-minute walk away from London Liverpool Street Station.

The Brennan Group has over 30 years of experience and constructing inner-city residential projects in a multitude of locations and decided to opt for our 18mm free-draining Dura Deck Aluminium due to its outstanding A2 s1 d0 Fire Rating (BS EN 13501) and compliance with EU and UK government recommendations, which means it's great for buildings 11+ metres in height.

A 30-year warranty, 60-year design life, best-in-class slip resistance and aesthetic appeal have all added value to the building, with the contractors loving the product and describing it as 'ideal' for this Balcony Decking and Rooftop Decking project.

The Anthracite colour helped create a pleasing visual design for the building while meeting all of the safety protocols necessary for the construction.

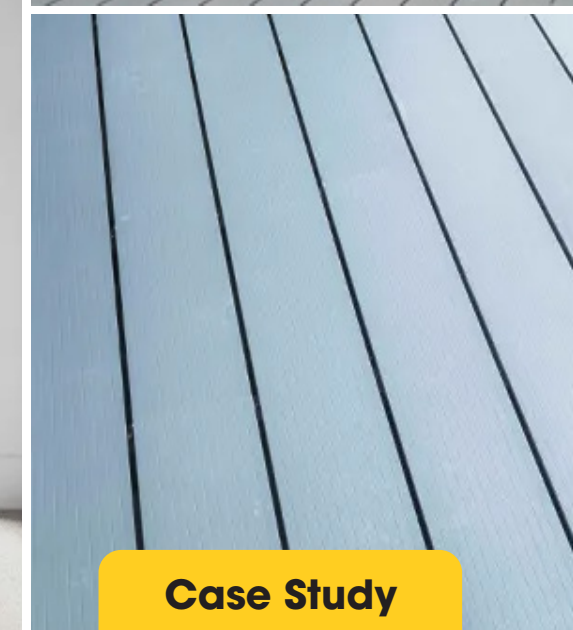
The **18mm Dura Aluminium Decking Free-Drain** comes in lengths of 3.66 metres with matching fixings and finishing trims.

It is easy to install, creating a clean look that requires minimal upkeep over its long lifetime.

Highly suitable for use on new build roof terraces, balconies and podium areas as well as for refurbishment projects, Dura's Aluminium Decking supported the creation of a modern, safe and slick living space for this stunning project.

Brett Mella, Quantity Surveyor at Brennan Group said:

"We will continue to use Dura, their products continue to be manufactured to the highest quality and the service provided is unrivalled."

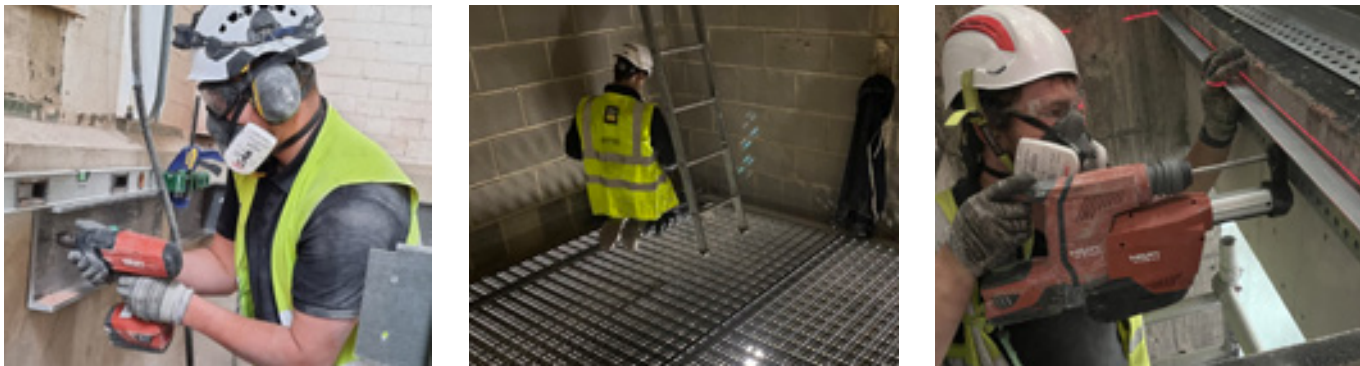


Case Study



Fully Certified & Accredited Installation Service

Accelerate project delivery with our professional installation service
If you prefer not to install yourself, we have a dedicated installation team with the necessary qualifications and experience to make sure your project is speedy, efficient, and hassle-free. Our Operations Service Team technicians are IPAF and PASMA qualified, and our Site Managers receive superb feedback on their professionalism and dedication. Our installation services include riser void coverings, high rise balconies and Glass Reinforced Polymer (GRP) fabrications.



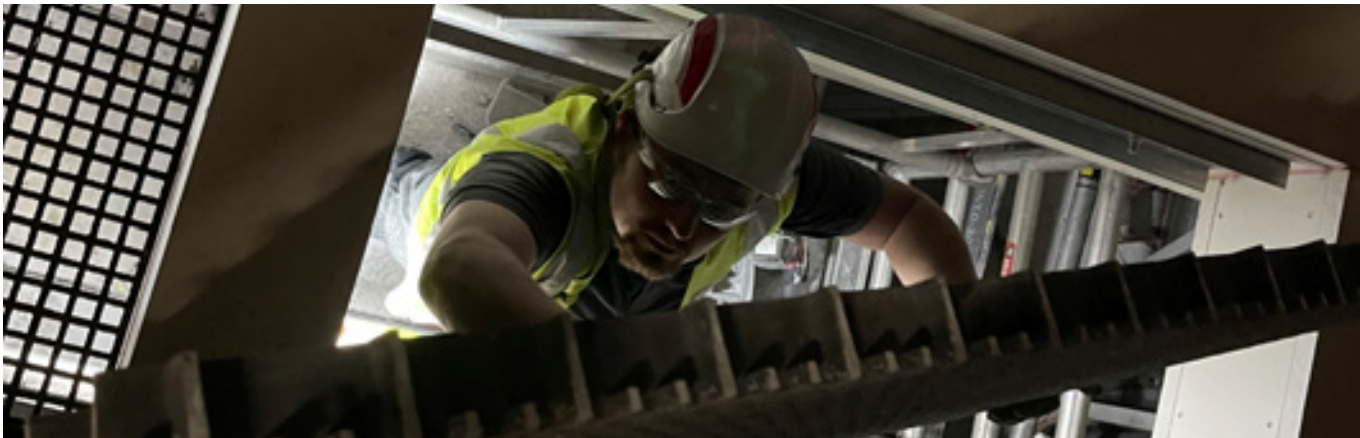
Contract installation for Riser Voids
We offer a turnkey solution for our riser void fall protection solutions. Our riser operations service team are fully equipped and trained to install our safety solutions on high-rise new builds, refurbishments and civil infrastructure projects. We ensure that your M&E requirements are factored in at the specification stage to save you time and money. We'll ask the right questions right at the outset of the project, checking for example whether the risers will be installed before or after the void is formed, whether you need the materials to be cut or drilled off site, and when your service cut outs will be required.



Remediation works on High-Rise Balconies
For existing balconies and terraces that are no longer compliant with building regulations due to the ban on combustible materials, we can help you achieve compliance with the updated safety requirements using our own dedicated specialist in-house installers of our Dura Deck Inspire porcelain and Dura Deck Aluminium decking systems for balconies, terraces, and walkways. The flexibility offered by our ranges ensures that developers and contractors have the freedom to bring their creative visions to life while adhering to the highest standards of functionality and safety.

Other Installation Services
We also 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.

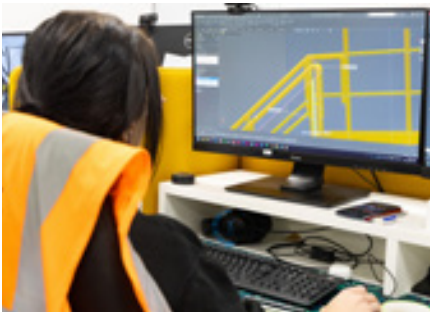
For help with installation of composite product solutions for High Rise buildings, including riser voids, balconies & terraces, plant maintenance & access, get in touch with us today on +44 01255 446830.



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 as 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.





Let Dura Composites Unlock the Power of Composites for Your Next Project

Dura Composites is one of the world’s leading suppliers of composite materials.

Here are a few great reasons to work with us:

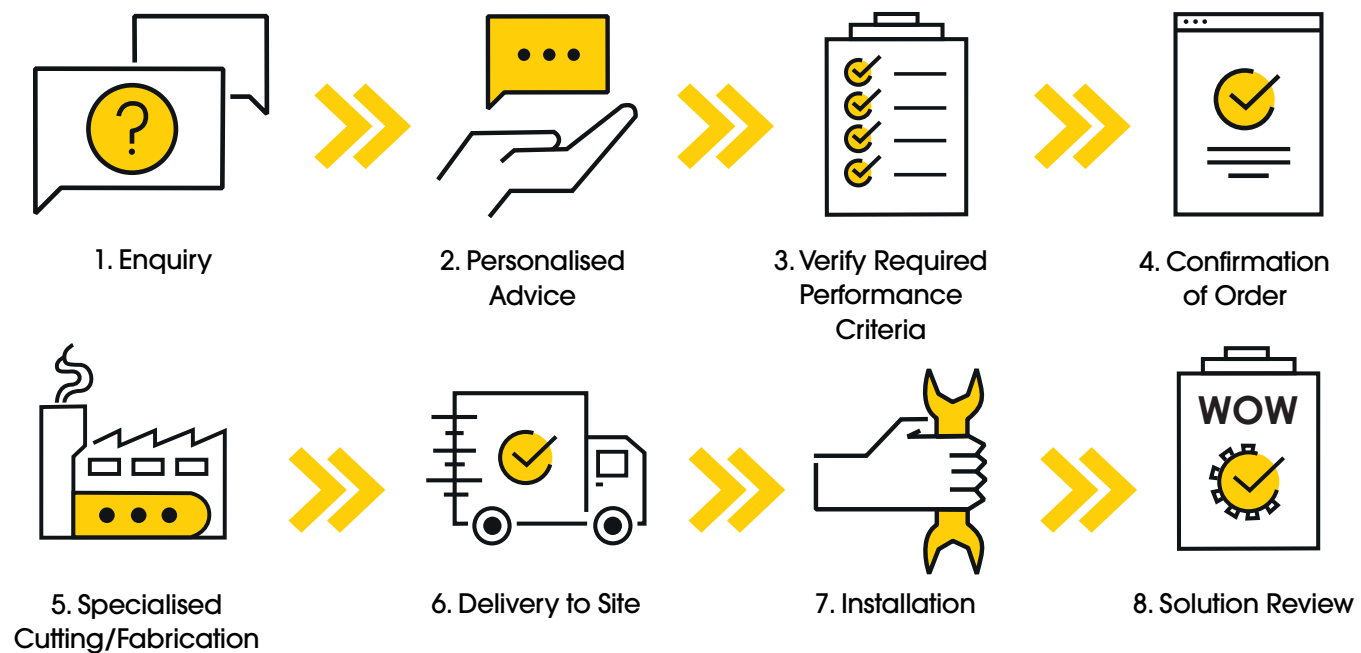
- 1

Unique products backed up by demonstrably better specification
 - We can help support your design services across all phases of the project lifecycle by providing detailed technical specifications for our award-winning product range.
 - Our live load testing data is available within our searchable Online Product Selector database to help you make decisions based on real data to ensure maximum safety for your project.
- 2

We only offer the right solution
 - We believe that decisions on which products to use should be based on facts, not guesses or theories.
 - Whatever your scenario, you can be confident that we’ll help ensure your project will meet the load performance and specification needed, otherwise we won’t supply it!
- 3

25 Years of Multi-Industry Expertise
 - We’ve had a reputation as leaders in innovation for over a quarter of a century and take a collaborative approach to working with our Public and Private sector clients. We were awarded the prestigious King’s Awards for Enterprise in 2017, 2020 and 2024 in recognition of our success in growing and championing the use of composite materials across the globe.
 - Our added value services include in-house Design and Structural Engineering teams who can be utilised both for stand-alone design and as part of larger integrated design scheme.
 - Our specialist cutting and fabrication teams offer a full range of services to ensure you can install with confidence.

Your process with us at Dura:





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www.duracomposites.com

Unlocking the Power of Composites™ » for Multi-Storey Buildings

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

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