



# Decking & Cladding



Dura Deck Aluminium in Anthracite  
Dura Cladding Flush Resist in Alaskan Cedar

Attractive, non-combustible decking and cladding solutions for new builds, refurbishments, and remedial projects on tall buildings. Durable, fire-safe and compliant with high-rise legislation.

**Unlocking the Power of Composites™**  
**» for New Builds & Refurbishments**

**dura™**  
**composites**



# Contents

Why Choose Composites?	2
Decking	3
Dura Deck	4
Inspire (Porcelain)	5
Accessories	7
Aluminium	9
18mm Free-Drain	10
18mm Positive-Drain	11
27mm Positive-Drain	12
Trims	12
Cladding	13
Dura Cladding	14
Flush Resist (Composite Timber)	15
Trims	17
Flush Aluminium	19
Trims	21
Aluminium Substructure	23
Dura Aluminium System	24
Dura Bearers	25
Dura Pedestals	26
Value Added Services	27
The Dura Difference	30

**d<sup>2</sup>** Safer.  
Stronger.  
Greener.  
Proven.

Discover the d<sup>2</sup> product range from Dura Composites - the next generation of performance-improving composites.

Available exclusively from us and our carefully selected distribution partners, d<sup>2</sup> products feature unique designs, new material technology or manufacturing methods AND deliver class-leading performance.

## Why Choose Composites?

With over 25 years’ experience as designers, manufacturers and suppliers of industry-leading products, we’ve had time to develop superior decking and cladding ranges that provide a cost-effective, attractive, and future-proof solution for new builds and refurbishments, balconies, terraces and other outdoor spaces.

Whether you’re looking to install a balcony deck, complete remedial cladding works to meet the latest fire regulations or add a raised terrace, we’ll provide low maintenance, eco-friendly solutions that will make any space look great and will never need painting or treating.

The full range suits all applications and budgets and includes A1 fire-rated luxury porcelain decking, A2 fire-rated aluminium decking, cladding, bearers and pedestals and composite timber cladding. We have a large stockholding available for immediate despatch.

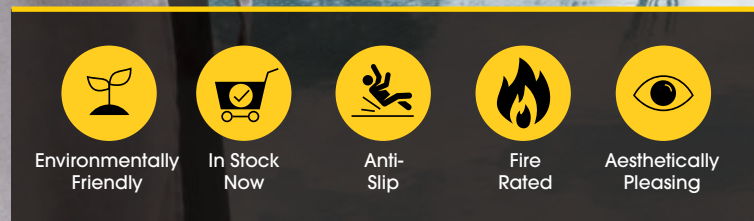


For additional details and technical information please visit [www.duracomposites.com](http://www.duracomposites.com) or call **+44 (0)1255 440298**.

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.





## Decking

Whether you're looking to install a balcony deck that meets the latest fire regulations or to add a podium or rooftop terrace with great aesthetics, we can provide a fire-rated low maintenance, eco-friendly solution that will make any space look great.

## Dura Deck® Range

With 25 years experience in the marketplace, we've had time to develop the best decking ranges to provide a cost-effective, attractive, and future-proof solution for gardens, terraces and other outdoor spaces.

Whether you're looking to install a garden deck, construct a balcony or add a terrace, we'll provide low maintenance, eco-friendly solutions that will make any space look great and will never need painting or treating.

The Dura Deck range suits all applications and budgets and includes A1 fire-rated luxury porcelain decking known as Dura Deck Inspire, and A2 fire-rated aluminium decking (Dura Deck Aluminium).

Both ranges can be installed on an A2 fire rated substrate using our patented Aluminium Substructure which consists of our Dura Bearers and Pedestals. We have a large stockholding available for immediate despatch. For more information on the Dura Aluminium Substructure System take a look at page 24.







# 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 new 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 for maintenance or similar.

Measuring 1.8 metres in length and 200mm in width, these products are the only porcelain options available that achieve the authentic appearance of timber planks, rather than the 'slab' effect typically associated with porcelain. This unique design sets a new standard for quality and style in the market.



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	N/A	N/A	N/A
Fascia Top Clip	29.8	160	50			
Fascia Bottom Clip	50	173	50			
Fascia Cover Strip	24.1	1200	17			
Wall Clip	38	45.5	19			



# Accessories

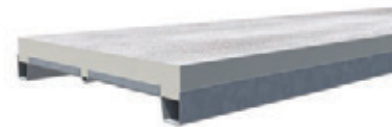
Dura Deck® Inspire has a range of intelligently designed accessories so you can be sure of a simple and efficient way to start, install and finish your balcony decking or terrace design.

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.



**Plank Retainer**



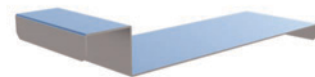
**Plank Retainer With Plank Inserted**



**3mm Cross Spacer with 4 Tabs**



**3mm Cross Spacer with 2 Tabs**



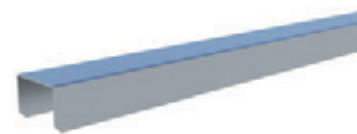
**Top Clip**



**Bottom Clip**



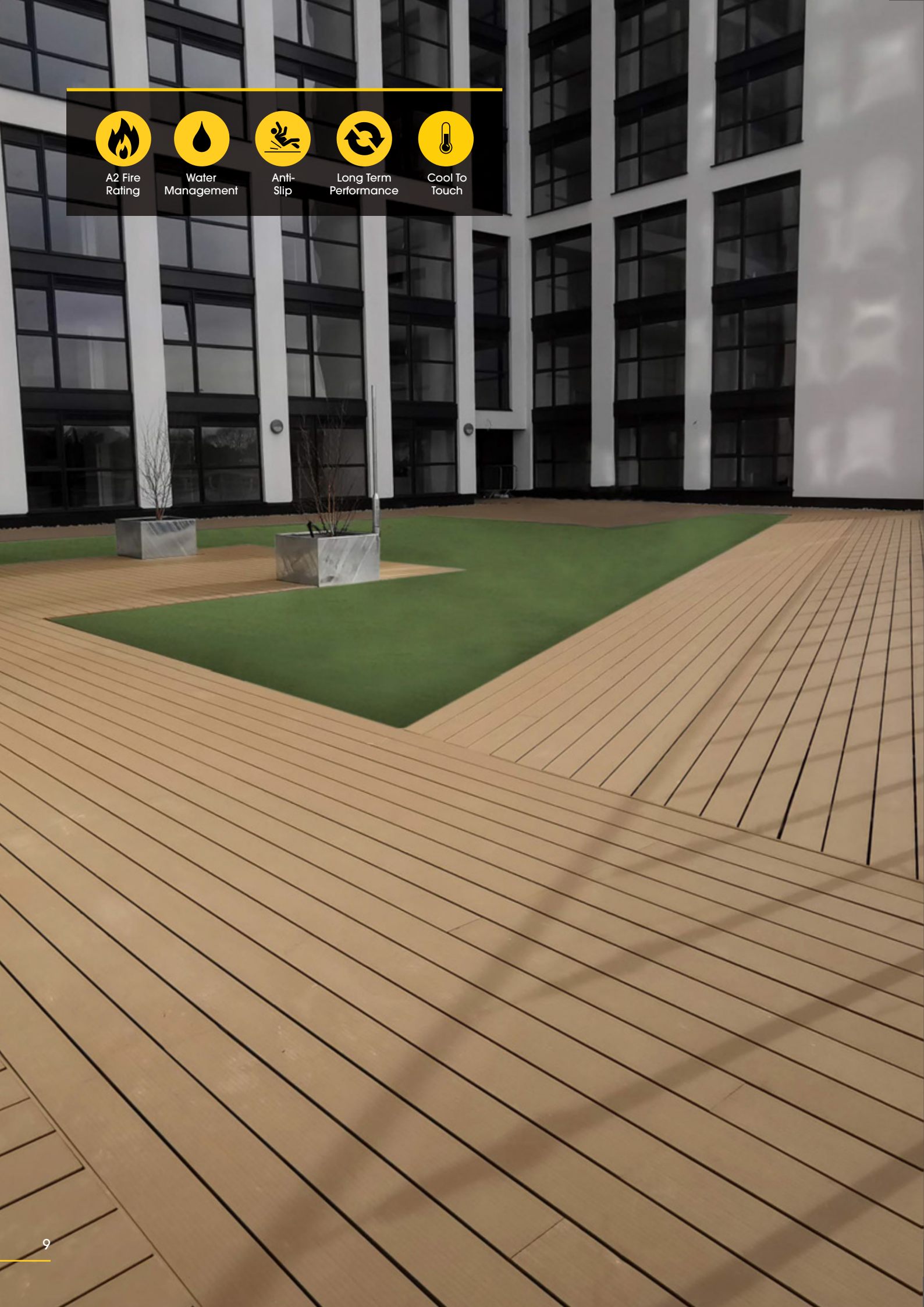
**Wall Clip**




**Cover Strip**












A2 Fire Rating




Water Management



Anti-Slip



Long Term Performance



Cool To Touch

# Dura Deck® Aluminium

Due to its lightweight design and ease of installation, Dura Deck Aluminium is perfect for hi-rise terraces and balcony applications. Its outstanding class 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.



Anthracite

Cedar

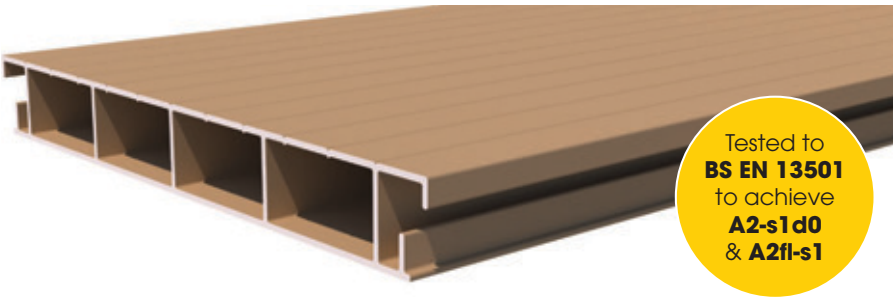
Mist

## 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	3660	150	150	850	1.26
Start Stop Trim	9.1		21.3	15		0.12
Main Trim		50	27.6	6-10		0.18
	Cut Down Trim	19.2	3660	22		15
End Closure Trim	19	45		10		0.22

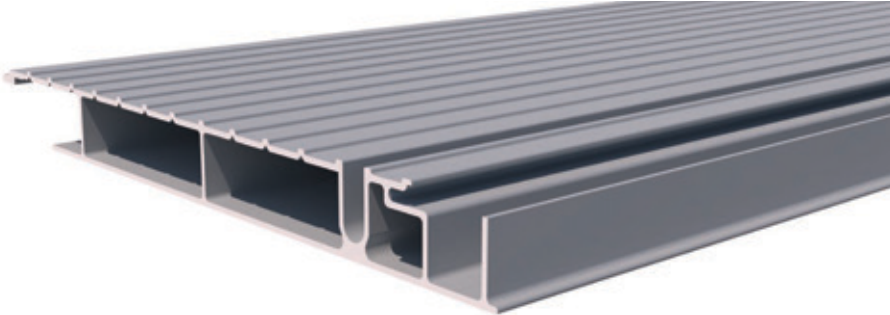




## 18mm Positive-Drain

Dura Deck Aluminium Positive-Drain 18mm deck boards meet the requirement for positive drainage, especially on stacked balconies of over 6m<sup>2</sup>.

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.



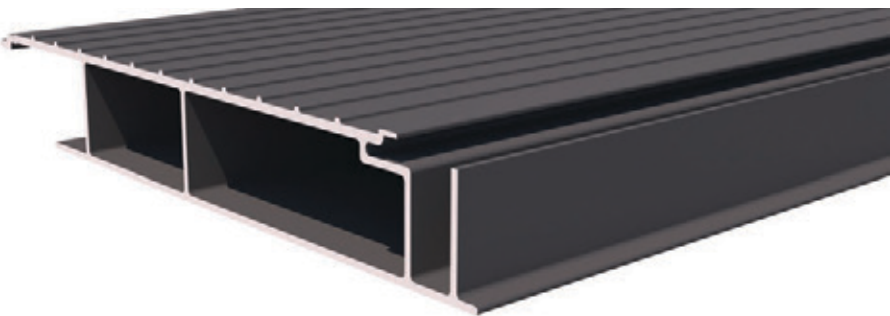
Product	Thickness (mm)	Length (mm)	Width (mm)	Visible Face Width When Installed (mm)	Max Span (mm)	Weight per L/M (kg)
Dura Deck® Aluminium 18mm Positive-Drain						
18mm Positive-Drain	18	5800	183	150	1100	1.51
Starter Trim			41	20		0.46
Finishing Trim			28	37		0.24
End Closure Trim	19		45	10		0.22

## 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	27	3660	178	150	1400	2
Starter Trim			61.2	41		0.84
Finishing Trim			53	38		0.47
End Closure Trim	28		45	10		0.27

## Trims

Available in 3 coordinating colours, the Dura Deck Aluminium trims allow for maximum versatility to suit any design. Incredibly lightweight and easy to handle it means fitting is safer for installers.

Trims are powder coated to match your deck boards, providing a durable finishing touch that's hassle free and sure to impress.

### Free-Drain 18mm Trims

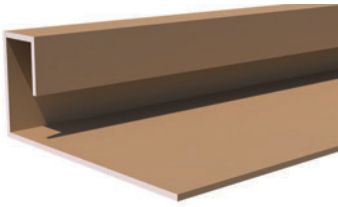
The trims available for the Free Drain 18mm Dura Deck Aluminium are as follows:



Start/Stop Clip



Main Clip



End Closure Clip

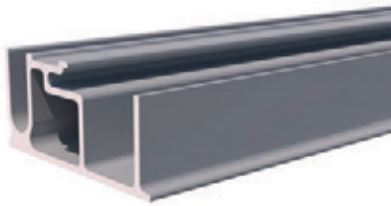


Cut Down Clip



### Positive-Drain 18mm Trims

The Positive-Drain 18mm Dura Deck Aluminium uses the following trims:



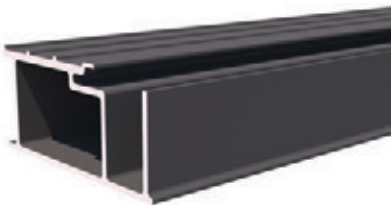
Starter Trim



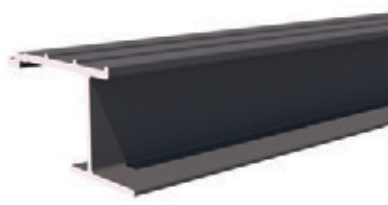
Finishing Trim

### Positive-Drain 27mm Trims

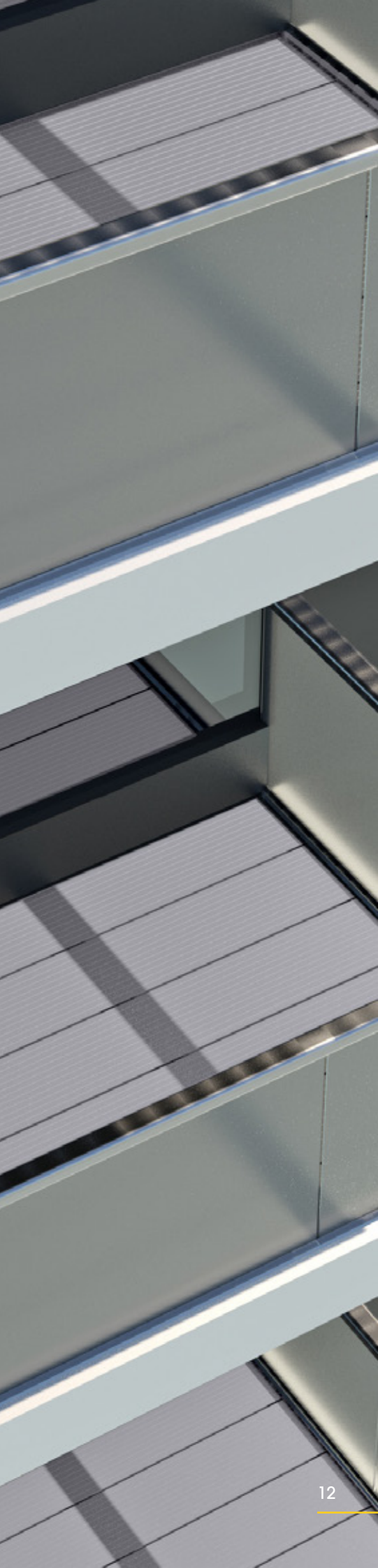
For the Positive-Drain 27mm Dura Deck Aluminium this is what you'll need:



Starter Trim



Finishing Trim







- Environmentally Friendly
- Colour Stable
- Horizontal/Vertical Install
- Fire Rated
- Patented Design

## Cladding

From realistic wood-look cladding with great aesthetics and low maintenance requirements, or cladding that meets the latest A2 fire regulatory requirements for high rise buildings, we've got a great solution for you. Both systems can be installed both horizontally or vertically to suit the look of your project.

## Dura Cladding Range

Whether you're planning a commercial, residential, new-build or refurbishment cladding project, we have durable, simple to install, cost-effective and environmentally friendly solutions to meet your needs in our Dura Cladding range which achieves the highest possible fire classification for a composite timber or WPC product (B s1 d0).

Dura Cladding Flush Resist has all the natural beauty of timber cladding, but none of the maintenance drawbacks. Made from an eco-friendly mix of reclaimed timber and polymers, its high-performance composition is great to look at and great for the environment too. Unlike wood cladding, it never needs painting or treating and is easier to work with than other cladding alternatives such as fibre cement, which can be brittle and lack the textural feel of natural wood.

If your project requires an A2 fire rating, high-performance Dura Cladding Flush Aluminium delivers a host of advantages versus traditional materials and is the number one choice for architects, specifiers and homeowners looking for an attractive but futureproof solution with an A2 fire rating.



© Image courtesy of Glencairn Properties





Class B  
Fire Rating



UV Colour  
Stable



Stain  
Resistant



Easy  
Installation

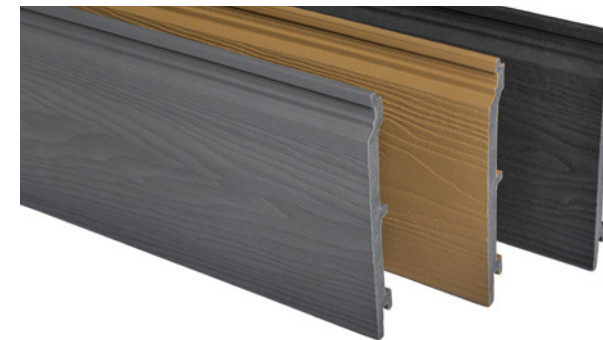


Sustainable  
Materials

## Dura Cladding Flush Resist

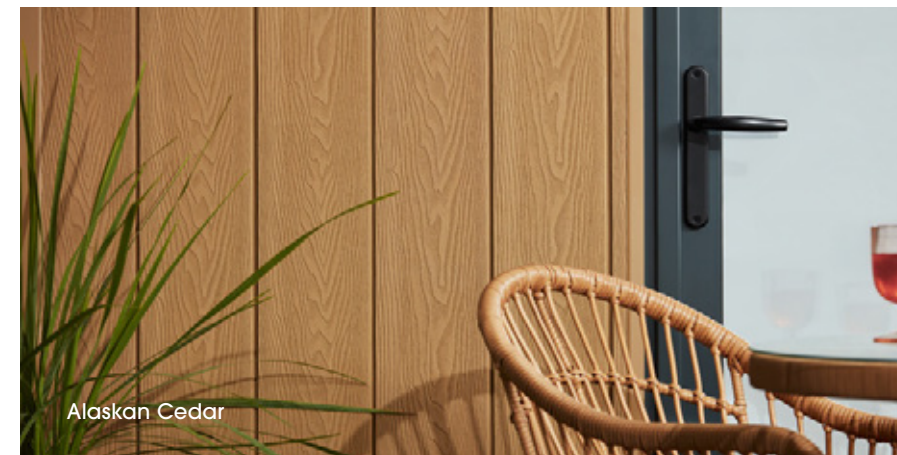
By choosing co-extruded composite timber Dura Cladding Flush Resist with its 360° protective armour for your project, you'll be investing in a 'fit-and-forget' solution that requires minimal ongoing maintenance during its long design life. Ideal for low-rise commercial or domestic use; new build and refurbishment projects that require a Class B-s1,d0 fire rating in accordance with BS EN 13501-1:2018.

Dura Cladding Flush Resist comes in three beautiful colours which can be used to create eye-catching designs. Whilst most cladding is designed to be installed either horizontally or vertically - with Dura Cladding Flush Resist, both orientations can be achieved easily using the same product profile.



The full Dura Cladding Flush Resist composite cladding system includes an innovative range of custom made aluminium trims and battens as well as no-fuss fixing screws, for ultimate ease of installation and sleek low-profile finish.

Each board colour has been tested in accordance with BS EN 13501, earning a Class B fire rating. For reference, only Dura Composite's Aluminium Cladding offers better resistance to fire! This guarantees a industry-approved material that's ideal for any property under 11 metres in height, including holiday lodges, clubhouses, golf clubs, garden rooms, garages and much more.



Product	Thickness (mm)	Length (mm)	Visible Face Width when installed	Maximum Fixing Span (mm)	Weight/ Lin m (kg)
Dura Cladding Flush Resist					
Dura Cladding Flush Resist	18	3660	150	600	2.07
Internal Trim	1.5		19.5		0.89
Reveal Trim			20		0.47
External Trim			35.6		0.72
Expansion Trim			21.5		0.40
Start/End Trim			20		0.35





## 2 Part Trim System

The Dura Cladding Flush Resist Fire Rated composite cladding system includes an innovative range of custom-made aluminium trims, as well as no-fuss fixing screws, for ultimate ease of installation.

The cladding planks are supplied with pre-drilled slotted fixing holes for added simplicity and accuracy. No fixing clips or fittings are needed, making installation straightforward and hassle-free.

The Dura Cladding Flush Resist range also uses self-drilling aluminium screws which have been specially selected for use with our cladding planks to streamline the cladding installation process due to their precision and ease of use when using aluminium bearers/battens.

Available in 3 coordinating colours, these trims allow for maximum versatility to suit any design. Incredibly lightweight and easy to handle makes fitting hassle-free and safe for installers. Designed to suit all install scenarios, this 2-part trim system range includes 4 different profiles eliminating the need for difficult cuts and improving efficiency.

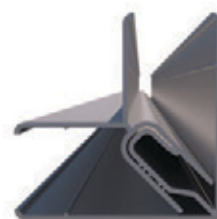
To see how the 2 Part Trim Systems fit together, take a look at the Dura Cladding Flush Resist Technical Manual.



**Window/Door Reveal Trim**



**Expansion Trim**



**Internal & External Corner Trim**



**Universal Start/End Closure Trim**







# Dura Cladding Flush Aluminium

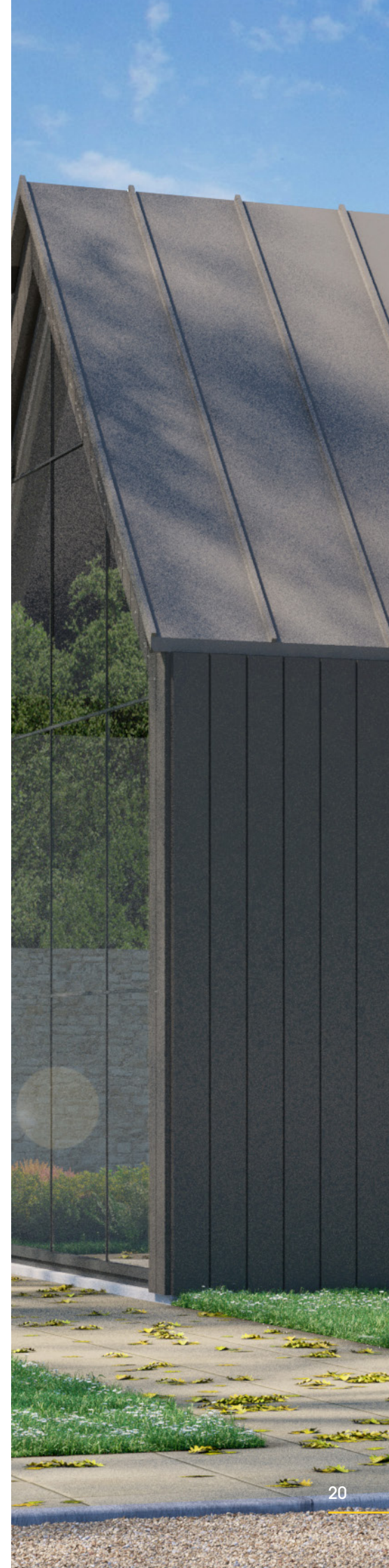
Dura Cladding Flush Aluminium is available in contemporary colours including Cedar, Anthracite and Mist as standard, and Canvas and Copper as special order. The flush fitting design provides a decorative skin that is simple, clean and modern.

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-s1 d0 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	N/A	0.22
Universal End Closure Trim	14		30		0.37
Back Joint Trim	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, 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, and then finally the outer part trims.

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



**Starter Trim**



**Window/Door Reveal Trim**



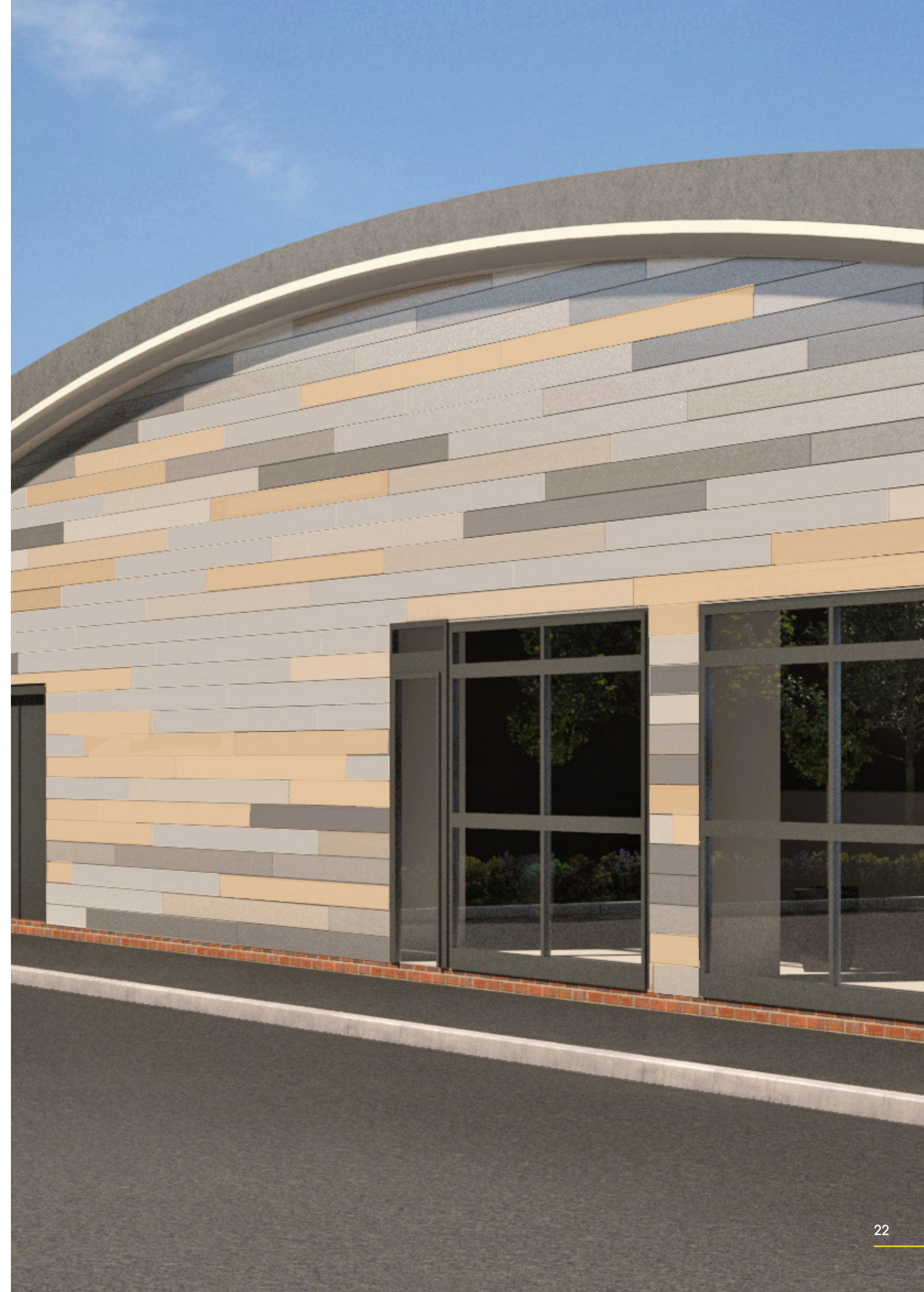
**Expansion Trim**



**Internal & External Corner Trim**



**Universal Start/End Closure Trim**





A2 Fire Rating

High Performance

100% Recyclable

Versatile Design

10 Year Warranty

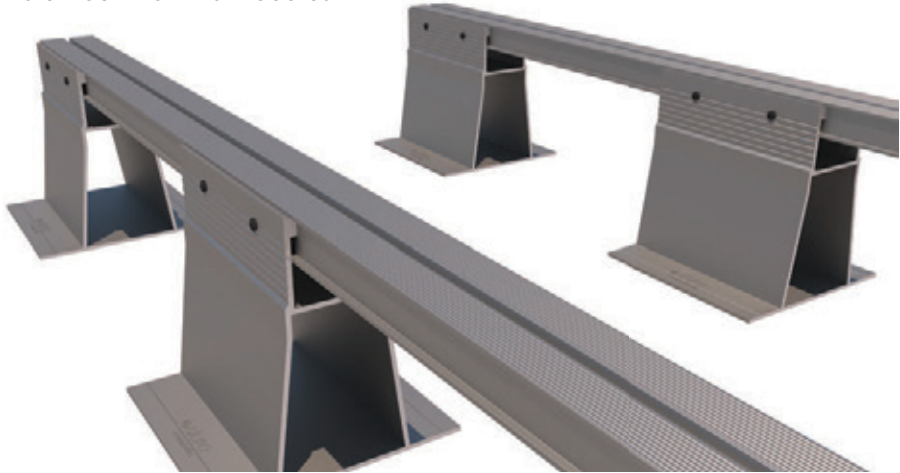
# Dura Aluminium System

Use any Dura Bearer with any Dura Pedestal to create 48 different combinations. Installation is faster, easier and more stable than with fiddly plastic pedestals. A precise height can be created (which can be as small as a 10mm adjustment when installing any bearer option in combination with the 25.5mm pedestal).



Product	Height (mm)	Heights Achieved with 25mm Bearer		Heights Achieved with 50mm Bearer		Heights Achieved with 75mm Bearer	
		Min Height (mm)	Max Height (mm)	Min Height (mm)	Max Height (mm)	Min Height (mm)	Max Height (mm)
Dura Bearer & Pedestal Combinations							
Dura Pedestal	25.5	28	38	53	63	78	88
	36.5	38	53.5	53	83.5	78	103.5
	50.5	53	65.5	53	88	78	113
	85.5	88	100.5	88	123	113	148
	117.5	120	132.5	120	155	145	180
	152.5	155	167.5	155	190	180	215
	187.5	190	202.5	190	225	215	250
	222.5	225	237.5	225	260	250	285

The Aluminium Substructure has been designed as the perfect solution for all our Dura Deck ranges. Below illustrates how the substructure would be set up for our Dura Deck Aluminium boards.



When using the Aluminium Substructure with Dura Deck Inspire, the Bearer is turned upside-down to create adherence to the 3mm Cross Spacers.



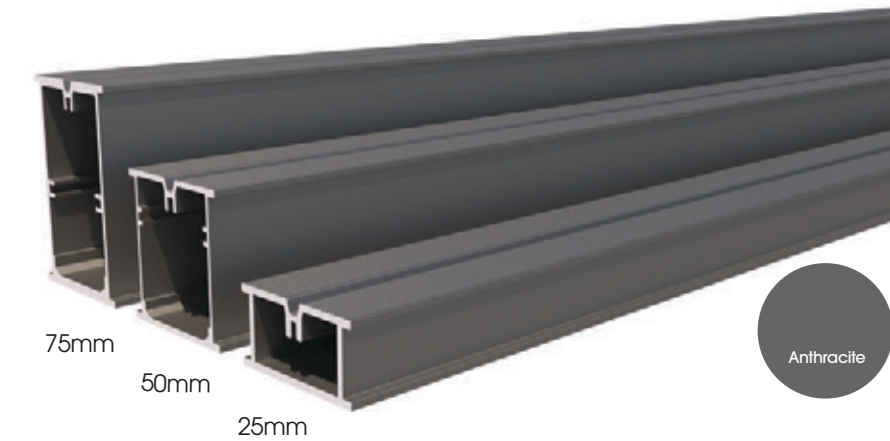
## Aluminium Substructure

Our Aluminium Decking Sub-Structure and Support System consists of A2 fire-rated and height-adjustable support pedestals and bearers in varying heights, which can be easily combined to suit all project needs.



# 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 Pad 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	10	230	122



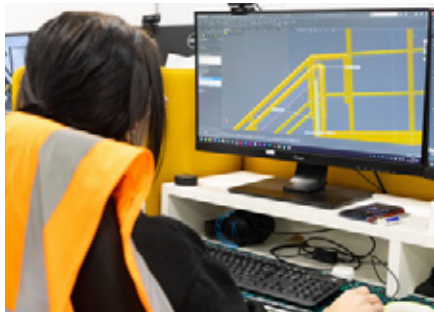


# Value Added Services

## Specialist Design Team

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

Using our 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.



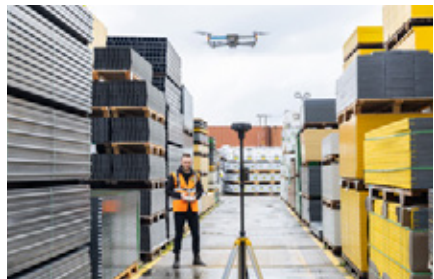
## 3D Laser Scanning

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.



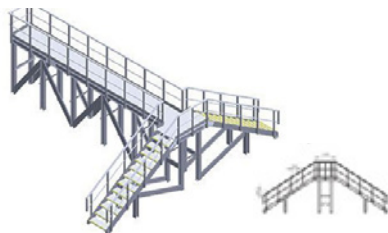
## Site Surveys

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 service to create exact measurements.



## Fabrication Drawings

To turn designs into reality once the design is approved, we produce a set of detailed fabrication drawings. These ensure that each component part is assembled efficiently, cost effectively and to the required performance criteria.







# 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:

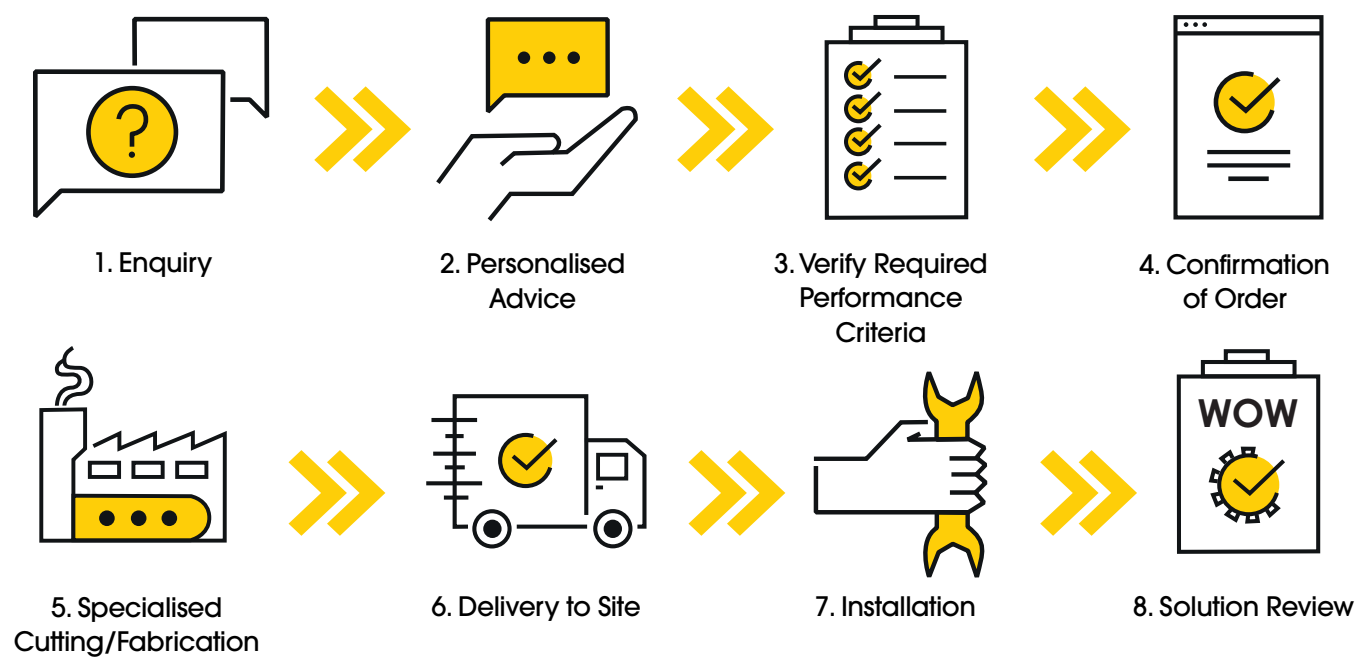
- 1

**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:







## Head Office

**Dura Composites Ltd**  
Dura House, Telford Road,  
Clacton On Sea,  
Essex, CO15 4LP  
United Kingdom

Tel: +44 (0)1255 440297  
Email: [info@duracomposites.com](mailto:info@duracomposites.com)

[www.duracomposites.com](http://www.duracomposites.com)

## Unlocking the Power of Composites™ » for New Builds & Refurbishments

Dura Deck® is a registered trademark of Dura Composites Limited in the UK.  
Due to our policy of continual improvement we reserve the right to change specifications at all times  
without prior notice.

© 2025 Dura Composites DECCLA01254

**dura**™  
**composites**