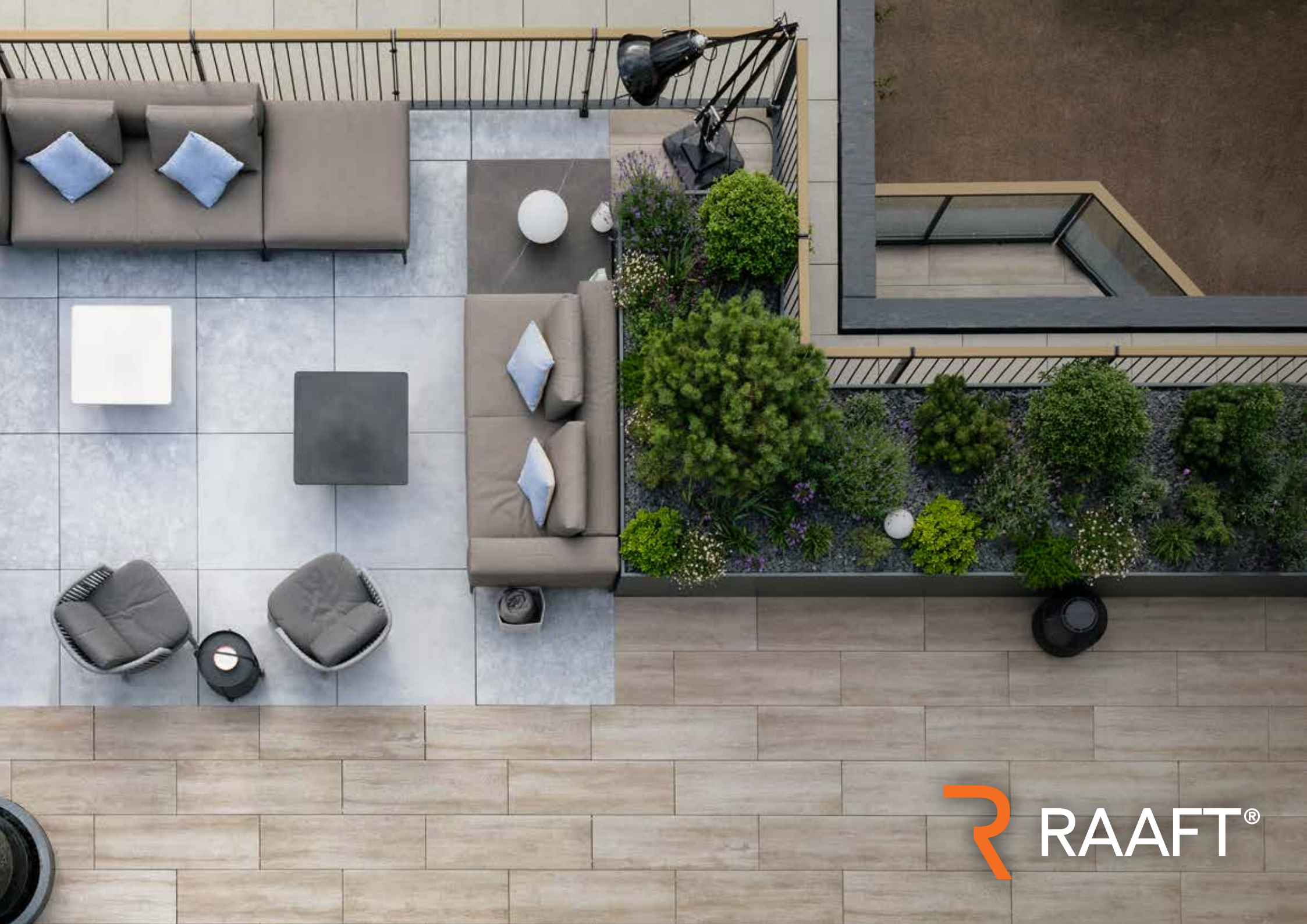

RAAFT®

# Roof Terrace Guide

We make outstanding terraces through creative, versatile systems.

Behind our intuitive system, there's an innovative team.

Our team of technical consultants, project managers, product designers and construction professionals, all backed up by an invaluable support team work together to give you a complete service.

RAAFT®

# Contents



RAAFT®

# Our Story

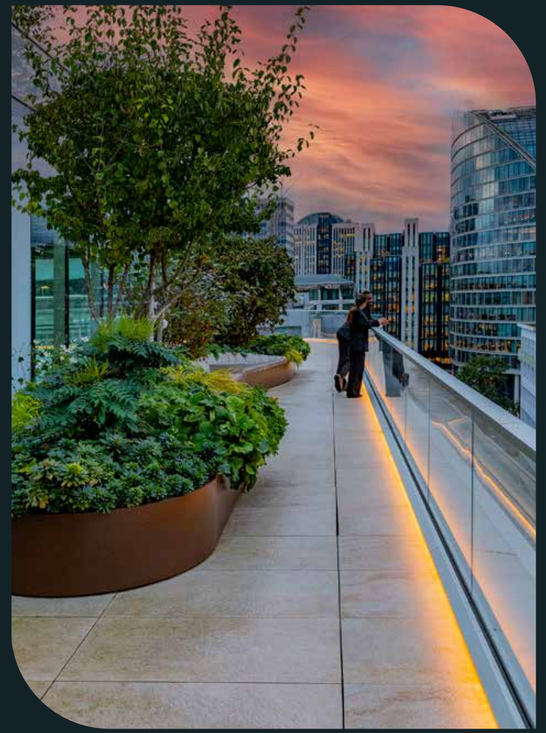
Raaft® has been creating amazing outdoor spaces since 2008. We don't just want to improve how things are done, we want to solve new challenges by turning a problem on its head and exploring new and interesting ways to fix it. We continue to move forward and stay at the forefront of innovation.

The sustainable upgrading of urban environments has always been one of our top priorities. We continually research, develop and improve our products to deliver environmentally sustainable spaces.

bsi. ISO 9001 Quality Management FS 696700

positive planet Certified Planet Positive

RAAFT®



# Our Vision

Raaft® terrace systems will be the first choice for commercial terrace fit-out globally.

# Our Mission

Making outstanding terraces through creative, versatile systems.

We enable design creativity, and reduce risk, through providing a complete, customisable roof terrace fit-out system, engineered to work together, and last for a lifetime.

Kensington Building, London

The Raaft® Terrace System is Tested to Broof(t4)



# Fire-safe Terrace System

## When does a terrace need to be fire-rated?

The Grenfell Tower fire of 2017 revealed serious deficiencies in fire safety regulations relating to external construction materials, particularly cladding. Amended regulations introduced the following year, applied to all buildings with residential or institutional accommodation, 18 metres or more above ground level. Further amendments mean the regulations now apply to roof terraces at a height of 11 metres or more.

According to the regulations, all materials used on the exterior of the building must comply with Euroclass A1 fire rating – non-combustible materials that make no contribution to the fire. To attain this rating, the materials must demonstrate under testing that they do not produce smoke or burning droplets when exposed to fire.

Subsequent changes in 2019 placed external fire performance under the European classification system BS EN 13501-5, CEN-TS 1187 (t4). To comply with this standard, products are exposed to thermal attack with burning brands, wind and radiant heat to gauge external fire spread and penetration by fire.

To achieve BROOF(t4) classification, materials must show no fire penetration within 60 minutes. It must also show no flame spread of more than 0.38 metres across the surface, and burn for less than 5 minutes after the test flame is withdrawn from the sample.

While Raaft® terrace systems provide solutions that fully comply with these regulations, architects should always seek advice from fire engineers assigned to the project to ensure compliance.

**The materials considered as reaction for fire Classes A provided in Decision 94/611/EC without the need for testing include:**

- Natural stone
- Porcelain (including pressed and extruded products, glazed or unglazed)
- Aluminium and aluminium alloys
- Iron, steel, stainless steel with an inorganic surface coating (e.g. zinc)
- Powder-coating compounds used on aluminium and steel contain no volatile organic compounds (VOCs) so they still fall within Class A2.

# Designing Roof Terraces

Design considerations and common challenges.

## WIND UPLIFT

When air passes across a horizontal surface it creates a pocket of negative air pressure. If this is lower than the air pressure below the surface, a force may be generated that is capable of lifting the surface; similar to how aircraft wings function.

Flat roofs are often fitted with an inverted insulation or warm roof layer which can be subjected to wind uplift. To prevent this, the layer should be weighted down at a rate of 80kg per square metre using ballast, sand bags or heavy pavers.

Wind uplift can also create challenges where decking or tiles are laid on a supporting framework, particularly if the location is exposed to wind currents such as on high-rise buildings. This can be partly mitigated by using heavier decking products, but these limit the choice of products available and increase the bearing weight on the roof structure.

Raaft® porcelain decking and tile products feature a groove cut unobtrusively into the edge of the product. When used in combination with Raaft®'s patented aluminium joist with stainless steel anti-uplift clips, this provides sufficient resistance to the levels of wind uplift commonly experienced in the UK.

Refer to page 60.

## WATERPROOFING AND DRAINAGE

When installing landscaping products on a roof terrace or podium, it is important that the integrity of the structure's waterproofing is not compromised by drill-through fixings, and that water from precipitation and irrigation is allowed to drain freely.

The Raaft® system is designed to make terraces appear fully integrated within the building's construction without fixings. All components, from the decking and tiles to the support panels beneath planters and raised planter areas, are designed to allow efficient drainage across the entire terrace. By using our patented Venice clip, water will be able to escape effectively to create efficient drainage.

## SLOPE CORRECTION

We offer the slope corrector which addresses the challenges posed by uneven terrain. These devices are strategically placed to correct and stabalize slopes. By redistributing and managing water flow, slope correctors help prevent erosion,soil movement,and drainage issues. Whether applied in landscaping projects projects,or residential areas, slope correctors play a crucial role in maintaining the integrity of slopes, ensuring long-term stability, and promoting effective water management for a safer and more sustainable environment.

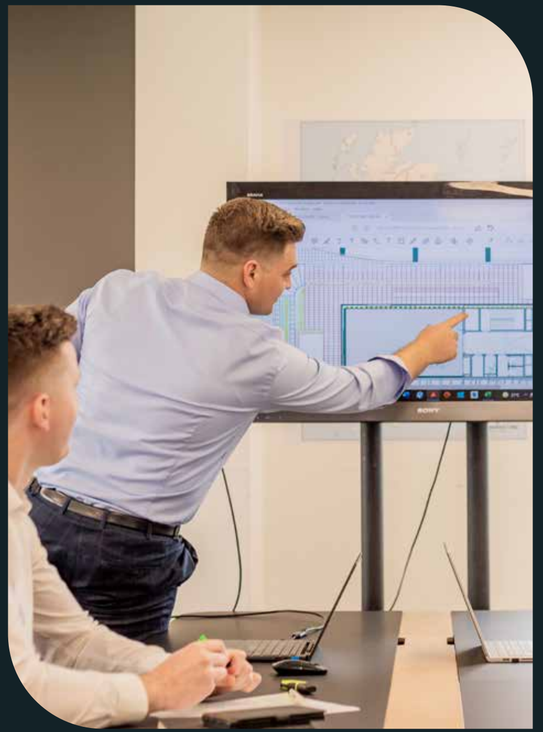
## WEIGHT LOADING

Some landscaping products, particularly large planters with soil at full saturation level, can exert large downward forces. To mitigate localised weight loading, the Raaft® system spreads the weight of landscaping products across a framework of load-bearing joists and support pedestals. With data provided by your project's assigned structural engineer, we can help you calculate safe weight loading and distribution across your terrace.

## SERVICE ACCESS

Following installation of a terrace system, access to the space below will still be required for servicing and maintaining rooftop mechanical and electrical equipment and supply systems, checking and repairing insulation and waterproofing layers and cleaning out drainage gullies.

The Raaft® system has been designed so that all components - even heavy planters – can be easily removed to enable full access to all areas under the terrace for servicing, maintenance and cleaning.



# The Value of Roof Terraces

As the demand for housing continues to rise across the UK and available land is becoming scarcer and more expensive, developers are choosing to build higher rather than wider. But this also brings new challenges as architects strive to create healthy, attractive residential environments where every square metre needs to be accounted for. One feature that many high-rise buildings commonly share is flat roof spaces. Once neglected, these areas are now enjoying popularity for their potential as roof gardens and terraces. In May 2016 the magazine Horticulture Week reported that green roof spaces in London doubled in the previous three years. So, what are the factors driving this expansion?

## ADDED VALUE

Developers want to maximise the return on their investment and to do that they must boost the value of the property. In 2015, estate agent Marsh & Parsons suggested that a roof garden could add as much as 12% to the value of a property in London, rising even to 25% in Chelsea – excellent return from a space once ignored and neglected.

## RESIDENT ACQUISITION AND RETENTION

In a competitive, active housing market, developers and landlords must stay ahead of the curve if they are to win and keep residents. Once considered a luxury affordable only to the wealthy, roof gardens are now becoming a common feature on the checklist of apartment-living buyers and tenants.

## RESIDENT BENEFITS

Access to a private or communal outdoor space within the bounds of the property enhances residents' lifestyle experience through a feeling of connection with nature and separateness from the bustle, crowding and lack of privacy of the urban environment.

## ENVIRONMENT

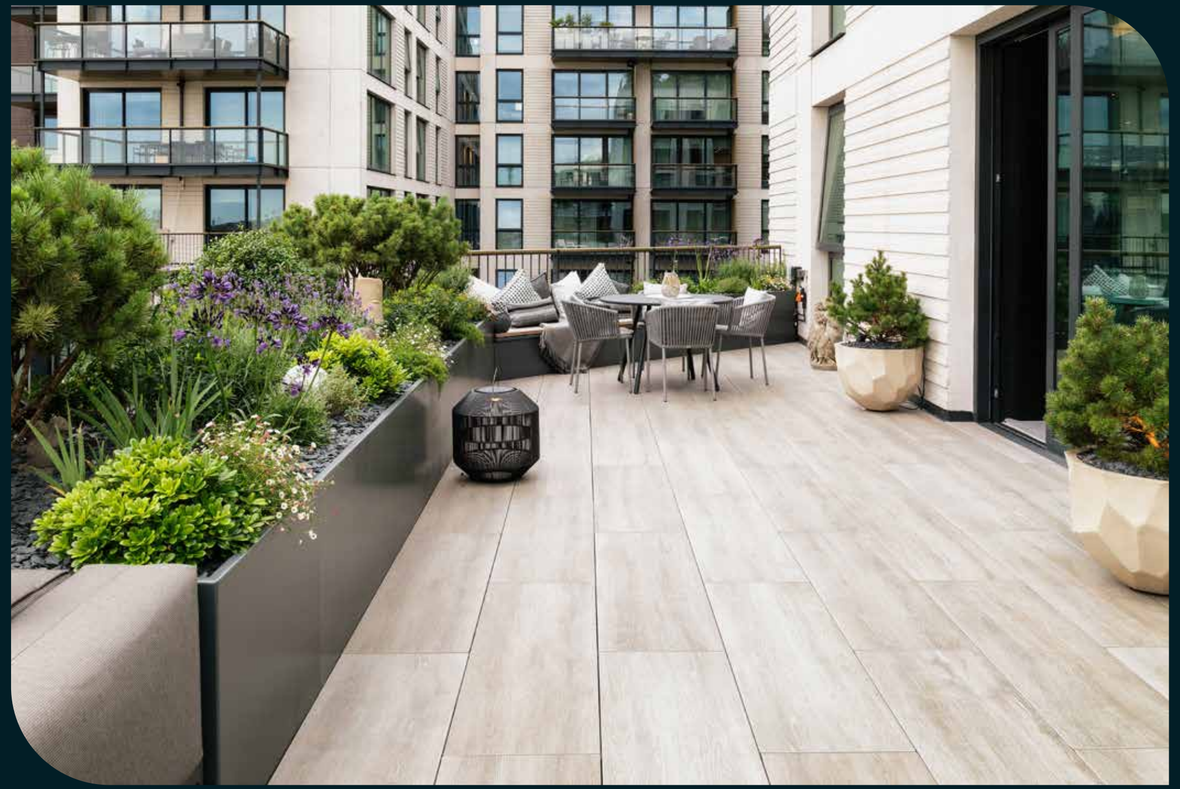
A roof garden can contribute so much positively towards improving the environment in urban areas, providing ecological habitats and wildlife corridors, better air quality and rainwater harvesting.

## SOCIAL BENEFITS

Access to outdoor green spaces is a key factor in improving and maintaining mental and physical well-being for everyone living or working in high density urban areas, but it is easy to neglect this important time if every visit to the nearest green space involves a long walk and preparation. Having these amenities on the doorstep – or rooftop – means they can be enjoyed for brief periods throughout the day to maximise their therapeutic value.

## ECONOMIC BENEFITS

This adaptable outdoor area enhances a property's visual appeal and practicality. An intelligently designed roof terrace can enhance energy efficiency, offering insulation and lowering heating and cooling expenses, thereby strengthening the economic benefits tied to this feature.



# Economic Impact

Adding a roof terrace will generally add value to commercial or residential developments, both in terms of property value and tenant retention.

Designed to be retrofitted to an existing or new building, the Raaft® modular roof terrace system is quick and easy to install without disturbing or damaging the building's fabric or requiring structural alterations. It is also a very sturdy system that promises a long, low-maintenance product lifetime thanks to its extruded aluminium support frame and durable composite and porcelain decking and tile options.

Raaft® terrace systems are designed and manufactured to give many years of hard-wearing, low-maintenance commercial and residential use that will repay the initial investment time and again.



# Social Impact

For office workers and residents of apartment buildings without gardens, a roof terrace can provide a relaxing outdoor space to enjoy living plants, fresh air and natural sunlight. With proper planning, it can combine secluded areas where privacy is preferred with communal space for socialising.

A roof terrace incorporated into a commercial building can provide an area where employees can enjoy work breaks, lunchtimes and socialising with colleagues or clients in a pleasant environment, away from the desk but still on the premises. The advantages are clear – where there's a better work environment, productivity increases and lost workdays are fewer.

Residential developments can incorporate roof terraces as communal or private areas used for outdoor recreation, entertaining and socialising. Raaft® terrace systems have been used in a wide variety of commercial and residential development projects, creating outdoor areas for relaxation and socialising that complement their surroundings.

# The Raaft® Commitment to Environmental Sustainability

Installing roof terraces with planters can have a positive impact on the environment

- Plants absorb and store carbon, helping to reduce air pollution.
- Planted roof terraces can help to regulate the temperature of buildings and reduce the amount of energy used for heating and air conditioning.
- Plants and planted areas also absorb rainfall and release it more slowly than hard surfaces, reducing the risk of flooding.
- They can restore biodiversity, habitats for pollinators and create wildlife corridors to heavily developed urban areas.
- They can even be used to grow edible plants, reducing the carbon footprint of the weekly food supply.

The Raaft® terrace system is also designed and manufactured with the environment in mind, using recyclable extruded aluminium for the support frame and a choice of low-maintenance composite and porcelain decking materials and tiles.

Architectural design and construction are both innovating and returning to traditional products and methods that place a lighter burden on the planet's natural resources, reduce carbon footprint and ensure long-term sustainability. As we strive to become a global market leader, we recognise our responsibility to provide roof terrace and podium systems that support these goals and to contribute towards a better environment for the future of our communities.

All Raaft® products are developed and manufactured with the environment at their heart, using materials chosen for their:

**Durability** – to reduce the frequency of replacement due to damage or wear and tear

**Renewability** – to decrease the use of finite natural resources

**Proximity** – to reduce carbon footprint before, during and after manufacture

**Recyclability** – to ensure a high percentage can be reprocessed at the end of the products' lifespan

We are committed to achieving net-zero carbon emissions across all our commercial operations, and we donate a percentage of our profits to support tree-planting programs as our contribution towards reforestation, improving air quality, and increasing carbon dioxide absorption.



## The Urban Greening Factor

### What is the Urban Greening Factor?

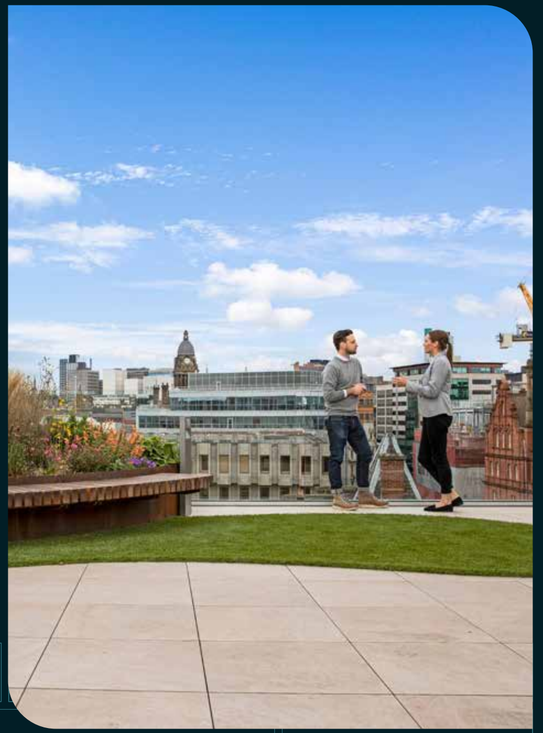
London's Urban Greening Factor (UGF) ensures future development in the capital that includes green landscaping of sufficient quantity and quality to contribute to its vision of a Green Infrastructure (GI) – a "network of green spaces… planned, designed and managed to deliver a range of benefits". These include:

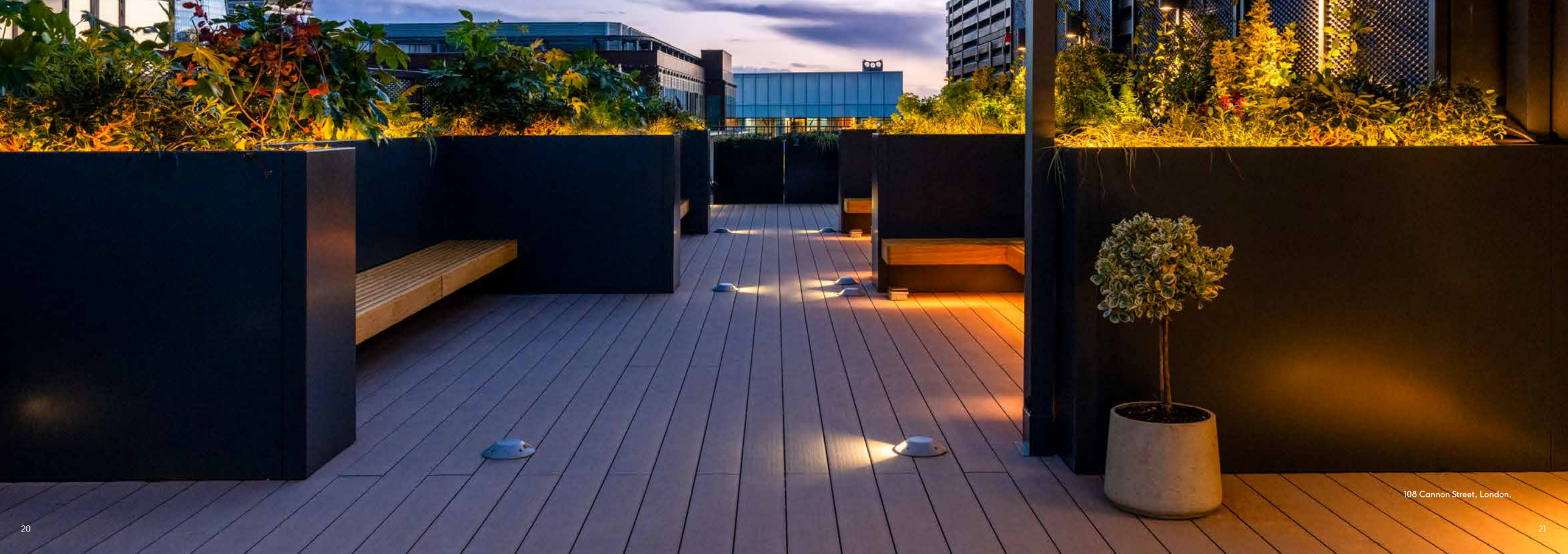
- healthy living
- flood mitigation
- improved air and water quality
- urban cooling
- enhanced biodiversity and ecological resilience

Based on similar schemes implemented elsewhere in the UK and internationally, the UGF aims to ensure green cover is incorporated into all built environment development design and planning from the outset.

### How do roof terraces contribute to the Urban Greening Factor?

The Urban Greening Factor delivers offset greening (mandatory under the Biodiversity Net gain policy) at the place of development where there might be insufficient ground-level footprint for traditional green spaces such as parks and gardens.





108 Cannon Street, London.

# The Complete Terrace System

Our flexible terrace system comprises of recyclable products that are engineered to work together so you can build what's right for your space. From a Class A fire rated sturdy base to the perfect decking and tile combination and finishing with fabulous planters brimming with natural beauty.

Our team of experts will guide you through every step in creating the perfect terrace space in your next project.

- 30-year warranty
- Recyclable products
- Easy to install
- Screwless system
- One stop shop
- Fire rated

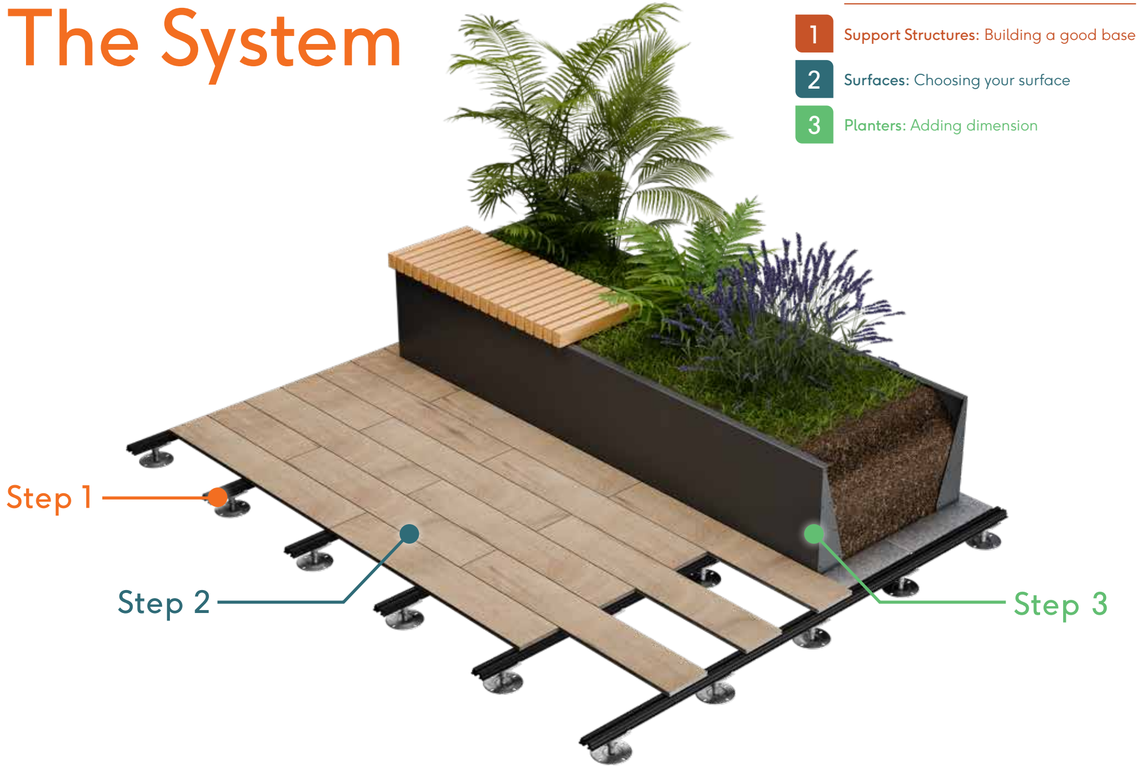
# The System

STEP KEY

1 **Support Structures:** Building a good base

2 **Surfaces:** Choosing your surface

3 **Planters:** Adding dimension

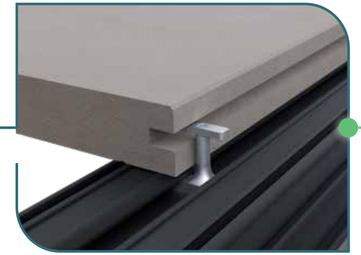



# Built in a Simple 3 Step Process

## Step 1

### Building a good base

A good quality support structure is key to creating a sturdy, safe terraced area. As roofs are rarely flat or level, our Raaft® system is the perfect solution.



## Step 2

### Choosing your surface

Our surfaces include Terrafina Composite Decking, Atria® Porcelain Tiles, and Farrino® Porcelain Decking and are available in many styles, colours, effects and finishes.

## Step 3

### Adding dimension

A terrace can easily be transformed into a garden with layers of interest and a feeling of permanence by adding planters.

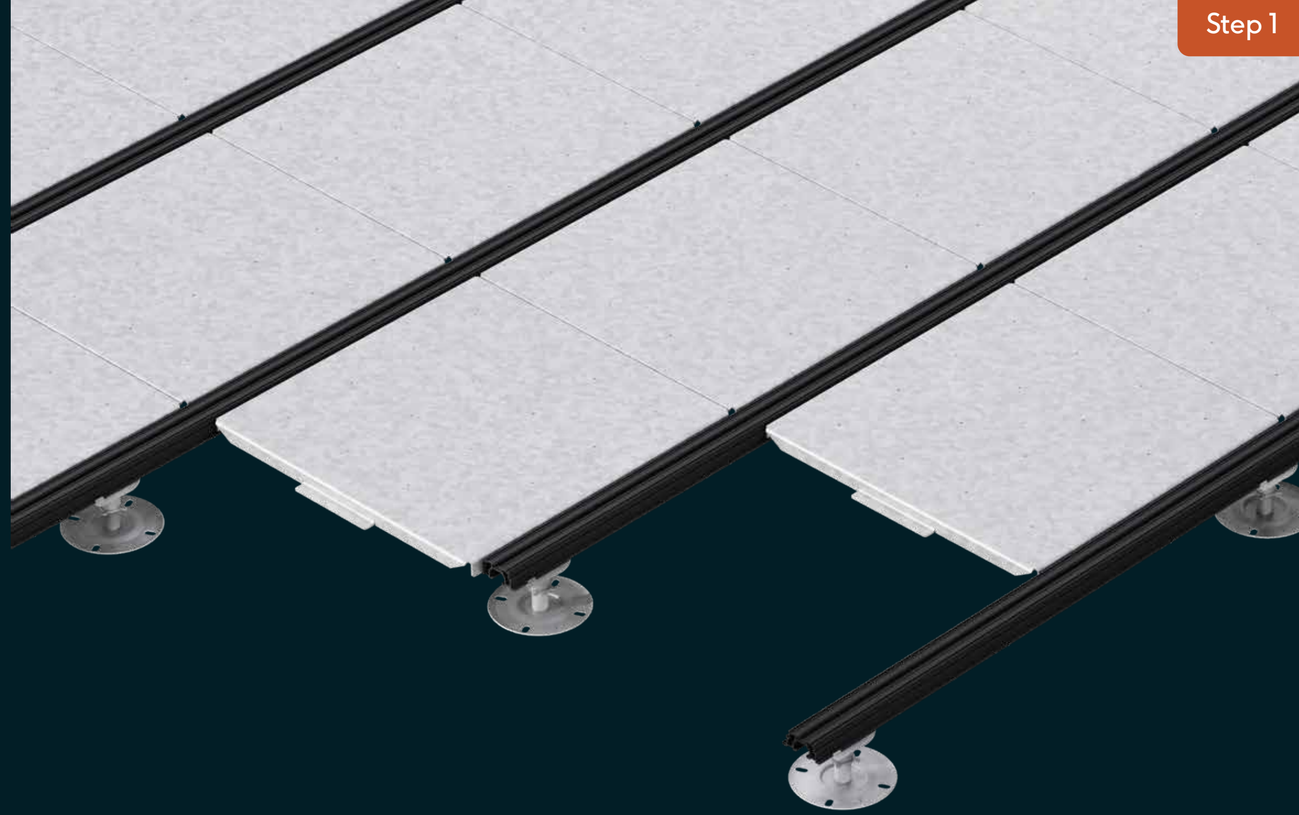
# Step 1

## Building a Good Base.

A good quality support structure is key to creating a sturdy, safe terraced area. As roofs are rarely flat or level, our Raaft® system is the perfect solution.

- Longevity
- Easy to install
- Recyclable products
- Screwless system





# Support Structure








# Versijack Adjustable Pedestal

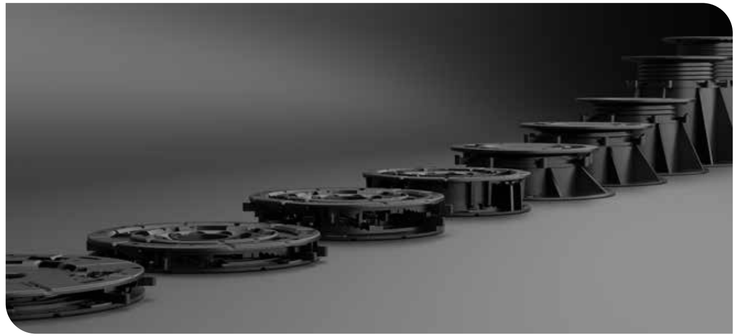
Our range of height adjustable decking and paving pedestals are easy to use and engineered for high performance. While they have been designed to complement the Farrino®, Terrafina and Atria® external flooring systems, they also work with other types of decking and paving. The Adjustable Pedestals are height and slope-adjustable making them suitable for almost any environment.

## Suitable For

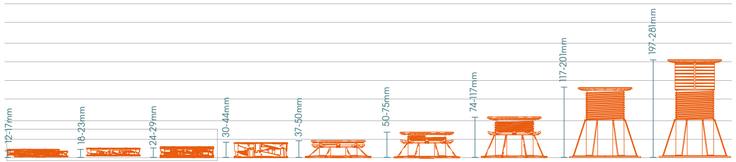
- Use with paving or decking.
- Excellent load bearing capability.

## Benefits

- Easy to install, and lightweight.
- Supports Green Building certification.
- Made from recycled plastics.
- Progressive height increments.
- Top and/or bottom slope correctors.
- Easily removed and reused.
- Gradient adjustable.



## Plastic pedestals height variations



# Preventa® Fire-Rated Pedestal

Preventa® Raaft® Fire-rated Adjustable Pedestals are simple to install and will provide the ideal support for the Raaft® Fire-rated Terrace System, Class A Fire-Rated modular terrace system. These height-adjustable metal pedestals are designed for supporting Raaft® aluminium Joists in the external terrace support structure system. Engineered to support pavers and decking, reducing material, construction, and lifestyle costs.

Fire-rated pedestals are made from zinc-coated steel and are available in a range of nine adjustable heights. The flat base diameter ensures an even load distribution. Each pedestal height is easily adjustable to suit the substrate conditions. An integral locking ring provides ultimate stability. The pedestals are non-combustible and corrosion-resistant.

## Suitable For

- Use with the entire Raaft® Fire-Rated Terrace System for the ultimate non-combustible fully modular terrace.
- Use with paving or decking.
- Excellent load bearing capability.

## Benefits

- Class A Fire-rated.
- Made from fire and corrosion-resistant zinc-coated steel.
- Easy to install.
- Flat base diameter ensure an even load distribution.
- Available in a range of progressive height increment.
- Easily removed and reuse.

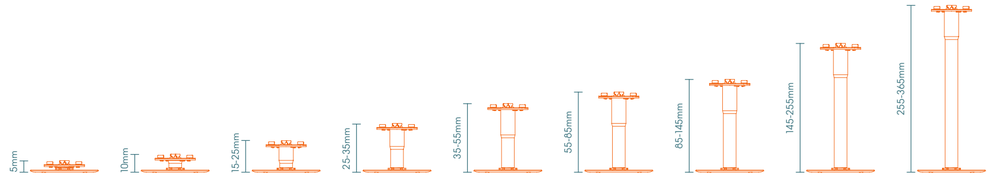
The Raaft® Terrace System is Tested to Broof(t4)







# Available in a Range of Progressive Height Increments




| HEIGHT RANGE MIN - MAX | 5mm | 10mm | 15-25mm | 25-35mm | 35-55mm | 55-85mm | 85-145mm | 145-255mm | 255-365mm |
|---|---|---|---|---|---|---|---|---|---|
| WEIGHT PER PED | 0.30kg | 0.50kg | 0.50kg | 0.56kg | 0.58kg | 0.64kg | 0.71kg | 0.88kg | 1.06kg |
| WEIGHT CAPACITY | 12kN | 12kN | 12kN | 12kN | 12kN | 12kN | 12kN | 12kN | 12kN |
| CARBON EMBODIMENT | 1.09 | 1.18 | 1.22 | 1.33 | 1.36 | 1.55 | 1.36 | 1.55 | 1.55 |
| CODE | 345001 | 345002 | 345003 | 345010 | 345011 | 345012 | 345013 | 345014 | 345015 |

## Accessories

| PRODUCT | CODE |
|---|---|
| Joist to pedestal connector | 342010 |
| 50mm extender | 342013 |
| 100mm extender | 342014 |
| Preventa® 4-Way 4mm Tile to Pedestal Spacer Tab. External Finish. | 342015 |
| 150x150mm EPDM compression pad | 342012 |

Joist to pedestal connector

Extender

Metal tile spacer

EPDM compression pad

# Preventa® Aluminium Joist

The Raaft® Terrace System is Tested to Broof(t4)

30mm joist

Raaft® Preventa® Aluminium Joists provide a platform for decking, paving, and other surfaces. Our Joists feature an innovative rail design which greatly increases the speed of installation.

This rail reduces the need for pedestals which greatly increases the speed of installation. All joists are available in a cost-effective external finish.

## Suitable For

- Raaft® Terrace System.
- Decking Products.
- Natural / Porcelain Tile Products.
- Steel Planter Systems.
- Floor Structure Panels.
- Artificial Grass.

## 30 year guarantee

See our terms and conditions for more information.

## PRODUCT INFORMATION

| HEIGHT | DESCRIPTION | LENGTH | FINISH | SKU |
|---|---|---|---|---|
| 30 mm | Preventa® aluminium joist | 2.4 m | Black powder coated | 301016 |





Step 1

## Benefits

- Simple to install.
- Supports Green Building Certification.
- Reduces need for ground levelling or steps.
- Reduces quantity of pedestals.
- Lightweight.

# Aluminium Support Joist

## To suit Timber Decking

Rigid aluminium joist for use as a support structure for the Raaft® range of terrace products, including Floor Structure Panels, Composite Decking and Atria® Porcelain Tiles.

Available in Brown powder coat (RAL 8028) or Milled aluminium finish (silver).

50mm joist

### Benefits

- Simple to install.
- Supports Green Building Certification.
- Reduces need for ground levelling or steps.
- Lightweight.

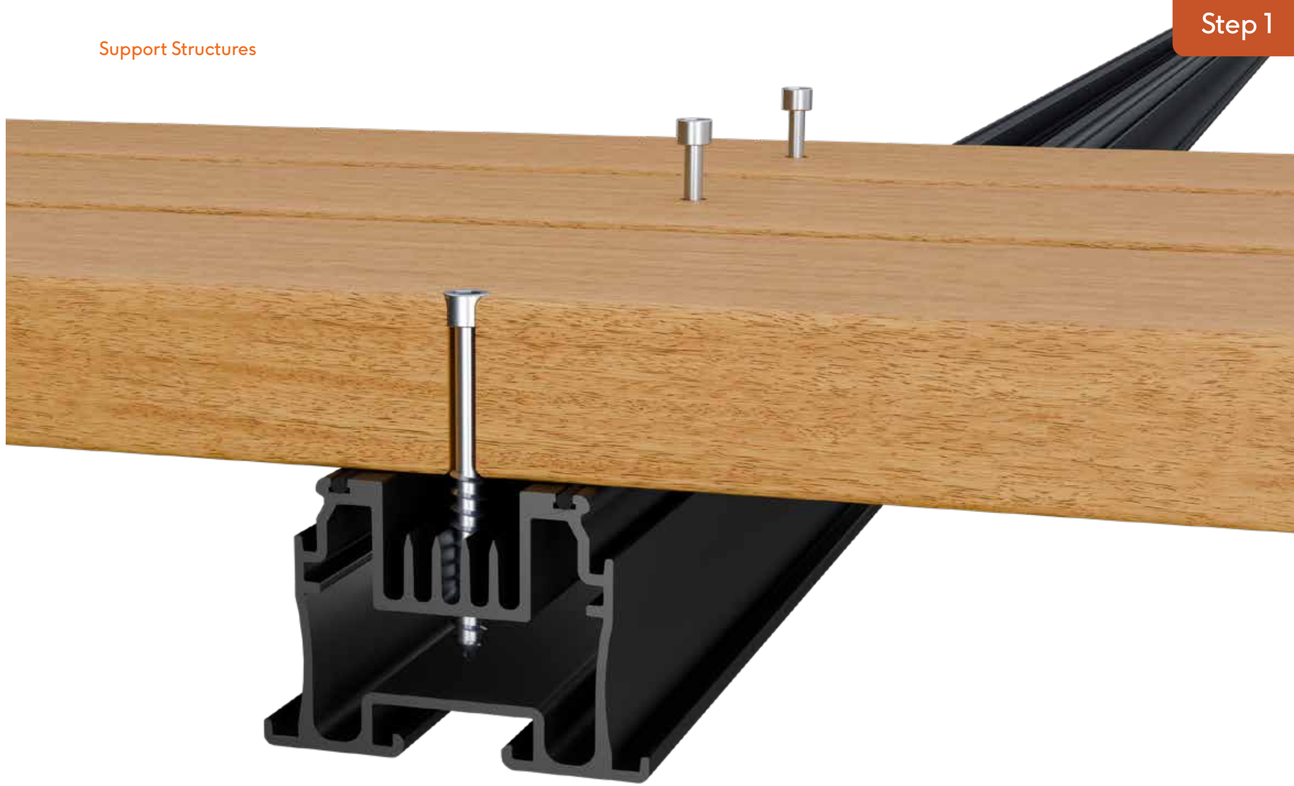
### PRODUCT INFORMATION

| HEIGHT | DESCRIPTION | LENGTH | FINISH | SKU |
|---|---|---|---|---|
| 50 mm | Aluminium support joist to suit timber decking | 2.4 m | Black powder coated | 303010 |





Step 1



# Bracing Strut


30mm Joist Bracing Strut (500mm)

The Raaft® Terrace System is Tested to Broof(t4)

## PRODUCT INFORMATION

| BRACING STRUT HEIGHT | CENTRES | SKU |
|---|---|---|
| 30 mm | 600 mm | 304065 |
| | 500 mm | 304066 |
| | 450 mm | 304067 |
| | 400 mm | 304068 |
| | 300 mm | 304069 |





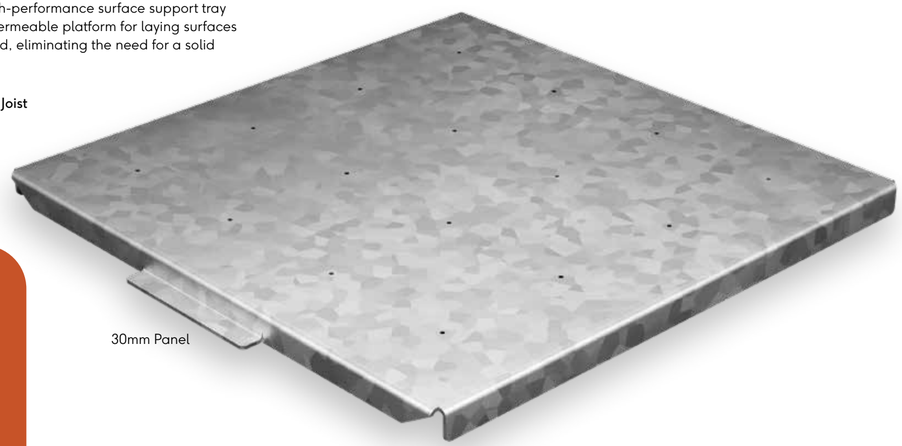


## The benefits to using Bracing Struts are:

# Structa Floor Panel

Available in *28mm and 48mm, high-performance surface support tray system that provides a sturdy and permeable platform for laying surfaces and installing planters off the ground, eliminating the need for a solid construction such as concrete.

*** to be installed on 30mm or 50mm Joist**



30mm Panel

## Suitable For

- Steel Planter Systems.
- Artificial Grass.
- Resin Bound Products.
- Rubber safety surfacing as another finish (i.e. for running tracks etc.).

The Raaft® Terrace System is Tested to Broof(t4)



Step 1

A support structure is installed on top of a concrete base. Artificial turf is placed onto the Floor Structure Panels which are easily connected to the side of the Joists. A simple installiation requiring minimal bolts and screws.

## Resin

A resin layer of your choice is applied over a mesh separation layer, which is positioned atop the Raaft system's floor structure panels. This layered construction complies with the BRoof(t4) certification.





## Dutch Clay Pavers

Dutch clay pavers of your choice are laid over a Geotex Acoustic Membrane which is positioned atop the Raaft system's floor structure panels.

# Slope Corrector

## For Roof Terraces

Solving your sloping needs. This product serves its purpose when there is a need for a slope or slope adjustment. This design feature distinguishes the product as a distinct accessory rather than an entirely separate pedestal. Our terrace system has been designed to overcome any obstacles.

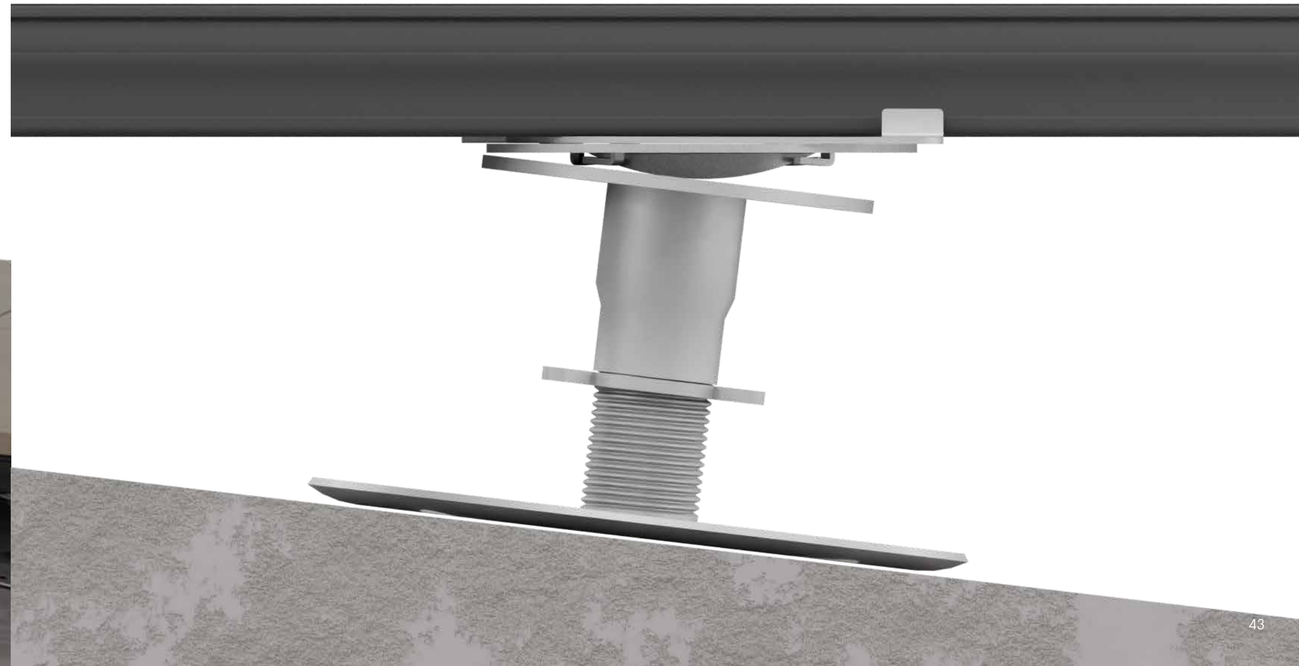
Uneven or sloping surfaces pose a common challenge in construction projects, leading to potential safety hazards and complications during the installation of raised flooring or outdoor paving. Water pooling on such surfaces can result in slippery conditions and damage. The use of a slope corrector addresses these issues by providing a practical and adaptable solution, ensuring a level and stable final surface while facilitating efficient drainage.

A slope correctors  primary purpose is to ensure a level and stable final surface, compensating for irregularities in the underlying substrate. The use of slope correctors eliminates water pooling issues, enhances safety, and contributes to long-term stability. These systems are easy to install, adaptable to various surfaces, and are commonly integrated into pedestal systems, offering a cost-effective and efficient alternative to extensive site preparation.









# The Raaft® Terrace System is Tested to Broof(t4)

Aluminium joists are used ontop of adjustable pedestals to support the equal weight of porcelain tiles or decking, floor structure panels and planter systems. To the right you can see bracing struts between the joists which support the weight load and ensure even spacing between each joist.

Below you are able to see the typical structure and placement of the support structure and flooring.




Step 1

# Step 2

## Choosing Your External Flooring.

Our external flooring include Terrafina Composite Decking, Atria® Porcelain Tiles, Farrino® Porcelain Decking and Aluminium Decking and are available in many styles, colours, effects and finishes.





# Atria® Porcelain Tiles

## High performance, practical, and functional porcelain stoneware – concentrated in a tile that's just 20mm thick.

Atria® 20mm porcelain tiles are the perfect match on terrace and balcony projects thanks to the characteristics of the material and their thickness. Hard-wearing, frost-proof, and non-slip, the 20mm porcelain slabs are easy to fit and clean, do not change their appearance, whatever the weather, and are resistant to mildew, moss, and verdigris treatments.

- Anti-slip. For outdoor and wet environments.
- Easy to clean and proof. Resistant to salt, moulds, acids, alkalis.
- Resistant to stresses and abrasion. 500 kg/cm² of mechanical pressing and firing at 1250°C.
- Fast and easy to install.
- Suitable for raised accessed floors.
- Resistant to frost and sudden thermal changes.
- Unchanged by UV light and weather agents.

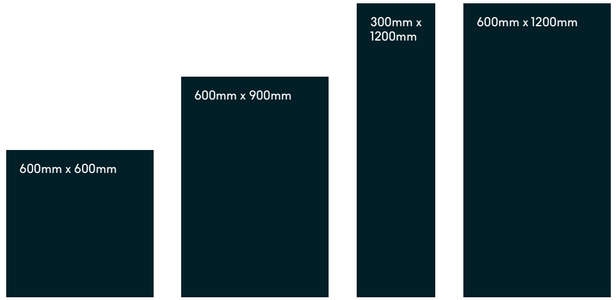
The Raaft® Terrace System
is Tested to Broof(t4)

# Atria® Porcelain Tiles

## Technical Specification

## Tile Size Range:

More tile sizes available upon request.




If you are looking for a specific size, please reach out to one of our technical team.





## Surfaces

**Lucca** Pearl
600x600mm, 600x1200mm

**Lucca** Beige
600x600mm, 600x1200mm

**Lucca** Grey
600x600mm, 600x1200mm

**Lucca** Ivory
600x600mm, 600x1200mm



**Modica** Fawn
600x600mm

**Modica** Ferro
600x600mm

**Modica** Pewter
600x600mm

**Modica** Silver
600x600mm

**Modena** String
600x1200mm

**Modena** Ivory
600x1200mm

**Modena** Smoke
600x1200mm

**Roma** Earth
600x600mm

**Roma** Lead
600x600mm, 600x900mm,
300x1200mm

**Roma** Natural
600x600mm, 600x900mm,
300x1200mm

**Roma** Copper
600x600mm

PLEASE NOTE: Tile collections are subject to change at short notice. Please call us before specifying or looking to purchase products. Visit raaft.co for our full range.

## Flooring

**Asti** Carbon
600x600mm, 600x1200mm

**Asti** Taupe
600x600mm, 600x1200mm



**Asti** Talc
600x600mm, 600x1200mm

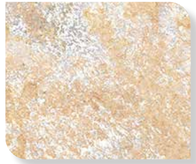
**Asti** Mushroom
600x600mm, 600x1200mm

**Asti** Smoke
600x600mm, 600x1200mm

**Florence** Silver
600x600mm

**Florence** Millstone
600x600mm

**Florence** Graphite
600x600mm



**Novara** Cameo
600x900mm

**Novara** Ember
600x900mm

**Novara** Ashen
600x900mm

**Novara** Slate
600x900mm

**Taranto** Charcoal
600x1200mm

**Taranto** Hessian
600x1200mm

**Taranto** Steel
600x1200mm

PLEASE NOTE: Tile collections are subject to change at short notice. Please call us before specifying or looking to purchase products. Visit raaft.co for our full range.





## Surfaces

**Padua** Thunder
600x600mm

**Venice** Anthracite
600x600mm



**Venice** Beige
600x600mm

**Venice** Grey
600x600mm

**Venice** Mocha
600x600mm



**Pavia** Cloud
600x600mm

**Pavia** Ochre
600x600mm

**Pavia** Urban
600x600mm

**Pavia** Shadow
600x600mm

PLEASE NOTE: Tile collections are subject to change at short notice. Please call us before specifying or looking to purchase products. Visit raaft.co for our full range.

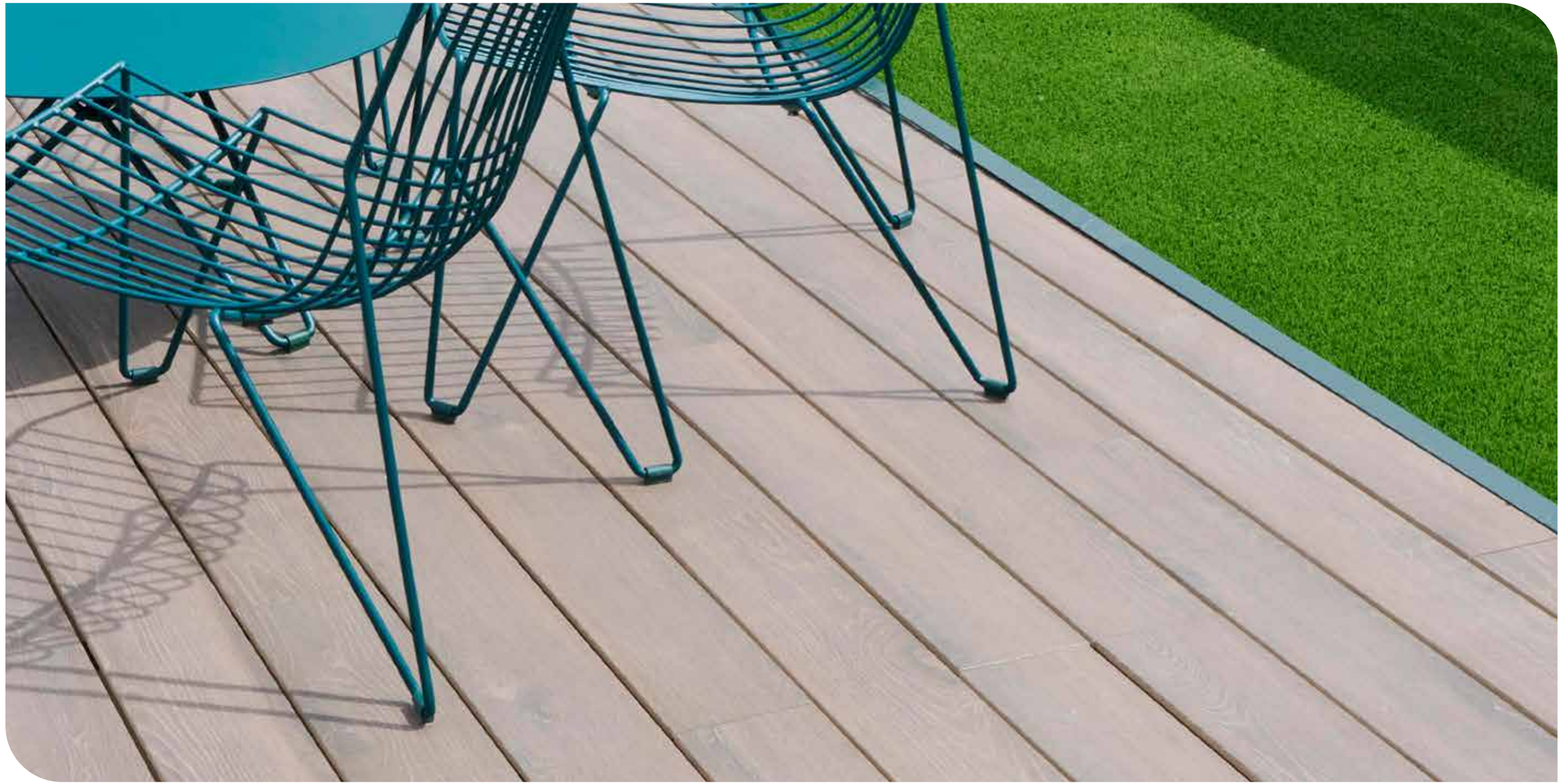
# Farrino® Porcelain Tiles

## High performance, practical, and functional porcelain decking – concentrated in a board that's just 20mm thick.

Meet Farrino®. The solution to fire and wind problems whilst boasting a high-end and elegant finishing touch.The Farrino® decking is a high-performance porcelain decking surface for your terrace or balcony. A highly resistant and long-lasting product which passes the BroofT4 British fire rating and incorporates a wind tie-down system.

- Anti-slip. For outdoor and wet environments.
- Easy to clean and proof. Resistant to salt, moulds, acids, alkalis.
- Resistant to stresses and abrasion. 500 kg/cm² of mechanical pressing and firing at 1250°C.
- Fast and easy to install.
- Suitable for raised accessed floors.
- Resistant to frost and sudden thermal changes.
- Unchanged by UV light and weather agents.

The Raaft® Terrace System
is Tested to Broof(t4)



# Farrino® Porcelain Tiles

## Technical Specification

## Tile Size Range:

- 1600mm x 300mm
- 1200mm x 400mm
- 1200mm x 300mm
- 1200mm x 200mm

If you are looking for a specific size, please reach out to one of our technical team.





## Surfaces

**Parma** Cocoa
1200x200mm

**Parma** Flax
1200x200mm

**Parma** Mogno
1200x200mm

**Parma** Oak
1200x200mm

**Parma** Pearl
1200x200mm

**Parma** Smoke
1200x200mm

**Como** Brown
1200x300mm

**Como** Honey
1200x300mm

**Milano** Age
1200x300mm

**Milano** Box
1200x300mm

**Monza** Beige
1600x300mm, 1200x400mm

**Monza** Sand
1600x300mm, 1200x400mm

**Monza** Nut
1600x300mm, 1200x400mm

**Monza** Grey
1600x300mm, 1200x400mm

PLEASE NOTE: Tile collections are subject to change at short notice. Please call us before specifying or looking to purchase products. Visit raaft.co for our full range.

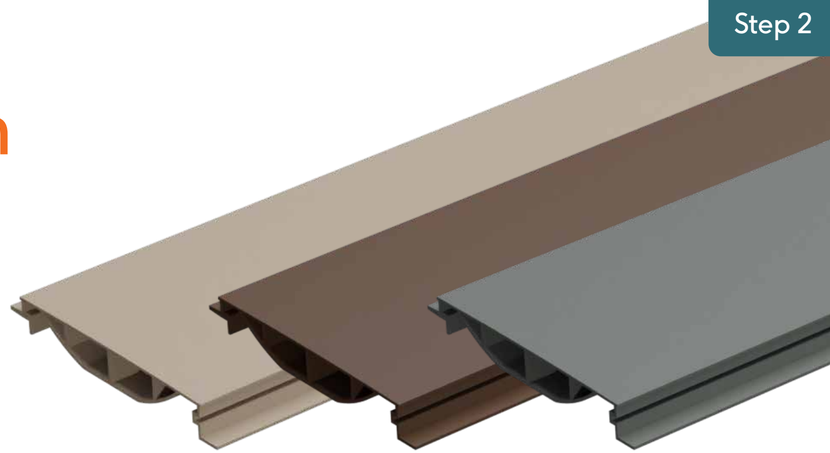




Flooring

# Aluminium Decking

## Technical Specification



## Starter Rail

| | | | |
|---|---|---|---|
| Height: | 20mm | Thickness | 1.5mm |
| Width: | 10mm - 17mm | Weight/Length: | 0.21kg/m |
| Length: | 4 m | | |

## End Cap

| | | | |
|---|---|---|---|
| Height: | 20mm | Thickness | 1.5mm |
| Width: | 21mm | Weight/Length: | 0.21kg/m |
| Length: | 4 m | | |

## Board

| | | | |
|---|---|---|---|
| Height: | 19mm edges and 20mm middle | Thickness | 1.5mm |
| Width: | 140mm | Weight/Length: | 1.54kg/m |
| Length: | 4 m | | |
| Slip Rating: | R11 | | |

| Colour | Almond | Brown | Beige Grey |
|---|---|---|---|

# Solve Wind Uplift Challenges with Atria® Porcelain Tiles

Products that claim to be resistant to wind uplift must meet **BS EN 1991-1-4: 2005 + + A1:2010 Eurocode 1 regulations,** so we put our tiles and clips to the test.

Following the **principles** of **BS 14437:2004,** the tests were conducted by independent testers BRE Group on both types of clip, fixing 600 x 600 mm, 20 mm thick Atria® + Porcelain Tiles, with two clips per tile attaching them to the Raaft® Aluminium Joists. Tests were also carried out on the Pedestal Joist Connectors. Testing applied an **uplift pressure** of **4536N/m²** and as the products were tested to destruction, no partial safety factors were used.

**The results were as follows:**

- Using **stainless steel clips,** the characteristic wind uplift resistance per clip was **738.1N**.
- Using **nylon clips,** the characteristic wind uplift resistance per clip was **51.6N**.
- By also fixing the tile with **Formoa 017FE hybrid polymer adhesive** the indicative wind uplift resistance per clip was **2943N**.
- The pedestal joist connector returned a wind uplift resistance of **71.0N**.

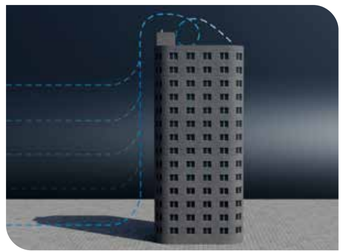
For more info on these test results please contact technical@raaft.co

N.B. It is the responsibility of the client, architect or contractor to obtain a wind load assessment if intending to use any surfaces that are not fastened together or to the support structure.

## What is wind uplift?

When air currents pass over a flat surface they create pockets of low air pressure, and because the air pressure underneath the surface is higher, the surface is pushed upwards towards the lower pressure area. This is the principle behind aircraft wings.

On a roof deck, where the deck surface is loose-laid into a supporting frame, this can result in the surface lifting from the frame and becoming unstable or damaged. In more extreme conditions, the surface components can cause damage to surrounding structures and even injury to persons.









## How Raaft® are improving wind uplift resistance

### Uplift resistant porcelain tiles

Our porcelain tile products are all characterised by design flair and premium quality porcelain manufacturing. Porcelain is a highly durable anti-slip surface resistant to scratching, staining and frost damage.

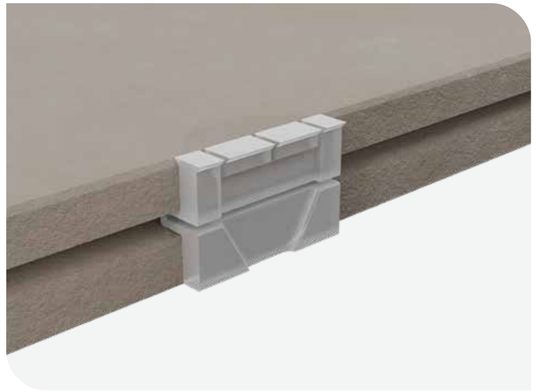
Atria® + wind-uplift tiles is an innovation based on our popular Atria® Porcelain Tiles, available in a fine selection of highly authentic wood, stone, concrete, and terrazzo effect finishes and a range of sizes to create uniform or random patterns.

### Anti-uplift clips

Atria® tiles feature a groove in the edge of the porcelain. Used in combination with our Raaft® Terrace System, our design-protected stainless steel or Nylon 12 RP anti-uplift clips fit unobtrusively into this groove and will prevent uplift at typical UK wind speeds.

# Solve Water Drainage

## Venice Clip



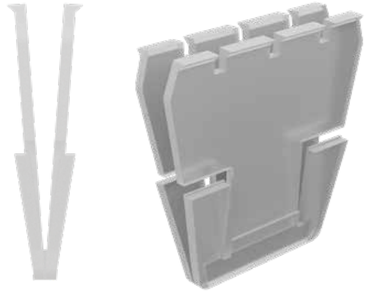
The genesis of our product stemmed from valuable feedback received from a domestic building grappling with water pooling issues on their porcelain tiles. After meticulous contemplation and design efforts spanning several months, the solution was crafted.

The predicament of water pooling takes on greater significance with the introduction of new materials to the UK market. Despite tiles boasting ratings of R11 or higher, the accumulation of water transforms into ice during winter, prompting the exclusion of porcelain from specifications on roof terraces nationwide.

Enter our innovative product, poised to address this challenge effectively. Raaft® now offers a solution enabling water drainage from tiles within a precise 1-hour timeframe, aligning seamlessly with NHBC 9.1.15 guidelines. According to these standards, standing water post-rain should neither exceed 5mm in depth nor cover an area surpassing 1m$^2$.

We prioritize subtlety, employing transparent materials, potentially matching Raaft's specified tiles. The retro-fit design facilitates swift and straightforward integration, rescuing existing projects plagued by water pooling on porcelain tiles. Moreover, this versatile product accommodates installations without wind uplift concerns.

During installation, especially in wind uplift scenarios, our design incorporates a clip securely inserted into the groove. This not only ensures a snug fit but also acts as a protective 'buffer' between tiles, facilitating removal and reinstallation without compromising structural integrity.



# Step 3

## Adding Dimension using planters and integrated seating.

A terrace can easily be transformed into a garden with layers of interest and a feeling of permanence by adding planters.

# Planterline Straight Planters

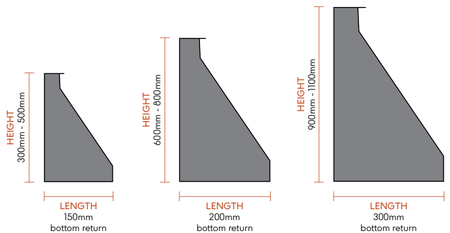
Planterline Planters are premium quality steel planter panels available in straight and curved standard sizes suited to a wide range of designs, available in CorTen, PPC Green Steel, Galvanised T-Wash, Magner and Powder-coated to any RAL colour. The panel systems are pre-formed to straight standard sizes required for your project and are easy to handle and install on site. The panels have a unique folded design that ensures a strong retaining structure, but also keeps weight to a minimum making this an ideal choice for roof terrace applications.

Raaft® Timber Benches can easily be incorporated into Planterline Planter systems which add highly desirable relaxation areas. Can be used on the system, or directly on the roof, to increase soil volume.

## Benefits

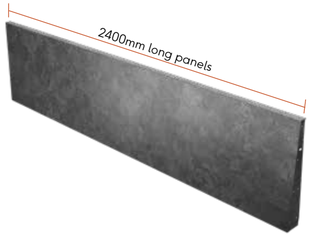
- Strong and robust.
- Folded top-edge.
- Standard design.
- Available in Corten steel, PPC Green Steel, Galvanised T-wash, and Powder-coated.
- Quick lead times.
- Faster install.

## Planterline Straight and Curved height range



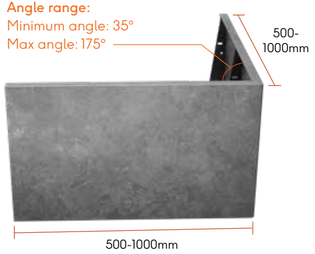

# Planterline Panels

## Straight



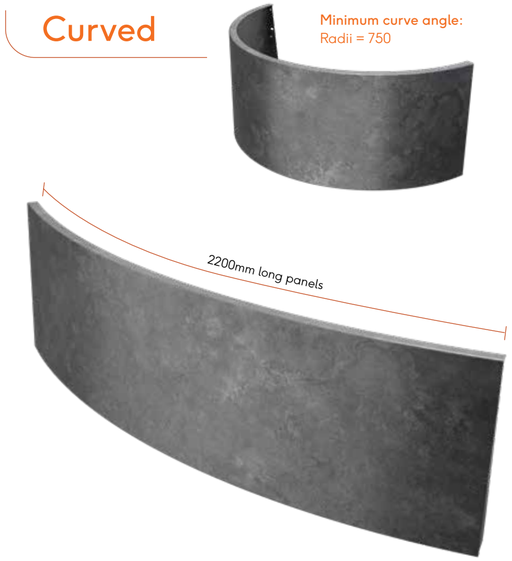

## Corner

Angle range:
Minimum angle: 35°
Max angle: 175°




## Curved

Minimum curve angle:
Radii = 750








# Design - Create - Inspire

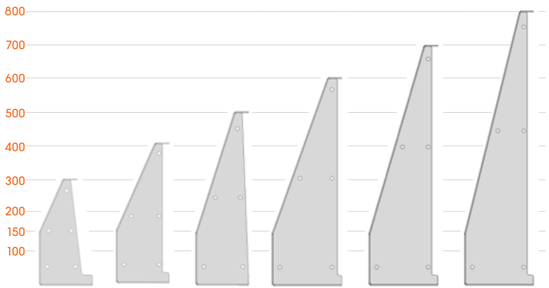
# Planterline Prism Planters

Planterline Prisms are premium quality steel planter panels available in a wide range of designs, available in CorTen, PPC Green Steel, Galvanised T-Wash, and Powder-coated to any RAL colour. The panel systems are pre-formed to standard sizes required for your project and are easy to handle and install on site. The panels have a unique folded design that ensures a strong retaining structure, but also keeps weight to a minimum making this an ideal choice for roof terrace applications.

## Benefits

- Strong and robust.
- Folded top-edge.
- Standard design.
- Available in Corten steel, PPC Green Steel, Galvanised T-wash, and Powder-coated.

## Planterline Prism height range

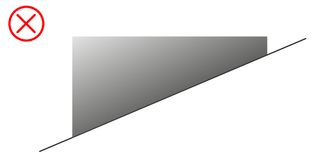



Old Street, London.

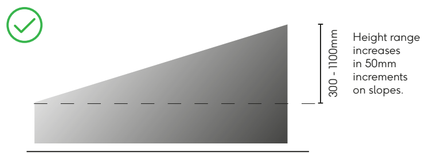
# Planterline on Slopes

There are certain limitations with steel planter panels. Get in touch with our team to find out more.

## Sloped bottom edge

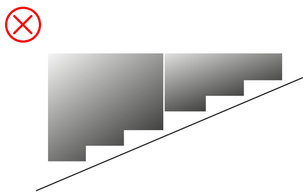


We're unable to do planterline panels with a sloped bottom edge.

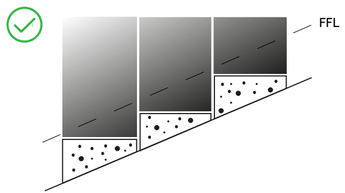



We can create planter panels with a sloped top edge.
The shortest and highest height need to be in increments of 50mm.

## Stepped concrete foundation



We're unable to do planterline panels with stepped bottom edge.




We can create level planters on a slope by stepping the concrete foundation and then changing the height of each planter panel to suit.



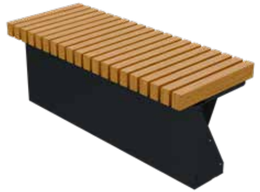




# Ambit integrated seating

Our benches have been created to compliment the Planterline Planter Systems. Designs include Top Mounted and Cantilever versions completed with hardwood of either Iroko or European Oak to achieve a fantastic end result in any environment, requring minimal if no maintenance at all.

Cantilever



Top Mounted

Lift Up Bench

| Wood | Country of Origin | Hard or soft wood | Maintenance | Treatment | Product quality |
|---|---|---|---|---|---|
| **Iroko** | Africa | Tropical hardwood | Relatively maintenance free but will need attention to cracks and splitting | No treatment is advised to reduce maintenance | Premium |
| **European Oak** | France, Germany, Croatia, and many more countries | Hardwood | | | |
| **European Redwood** | France, Germany, Croatia, and many more countries | Softwood | | | |
| **Sapele** | Africa | Hardwood | | | |
| **Bamboo** | Asia, Africa, South America and North Amera | Hardened Grass | | | |

# Accessories

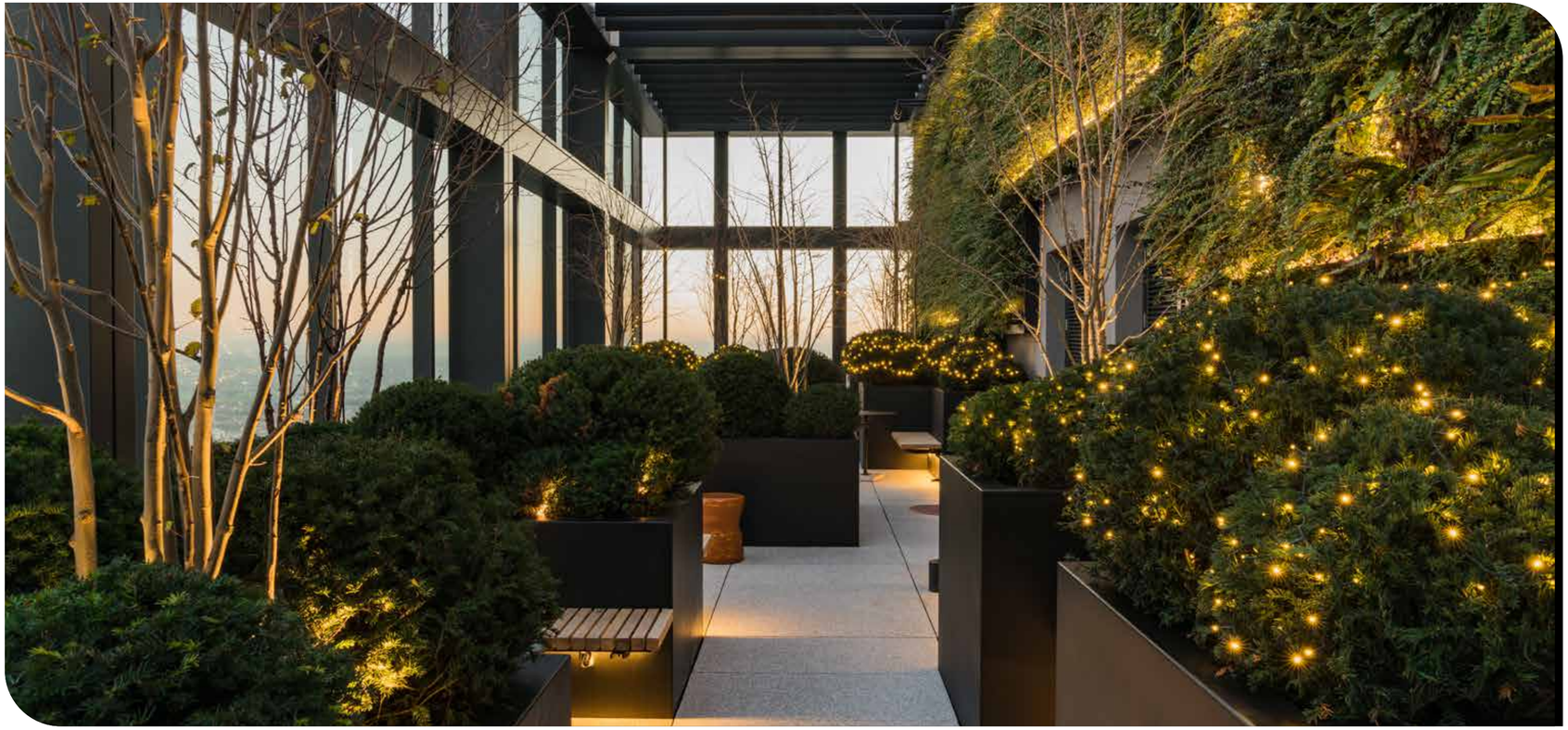
## Enhance your project with our integrated accessories

### Lighting

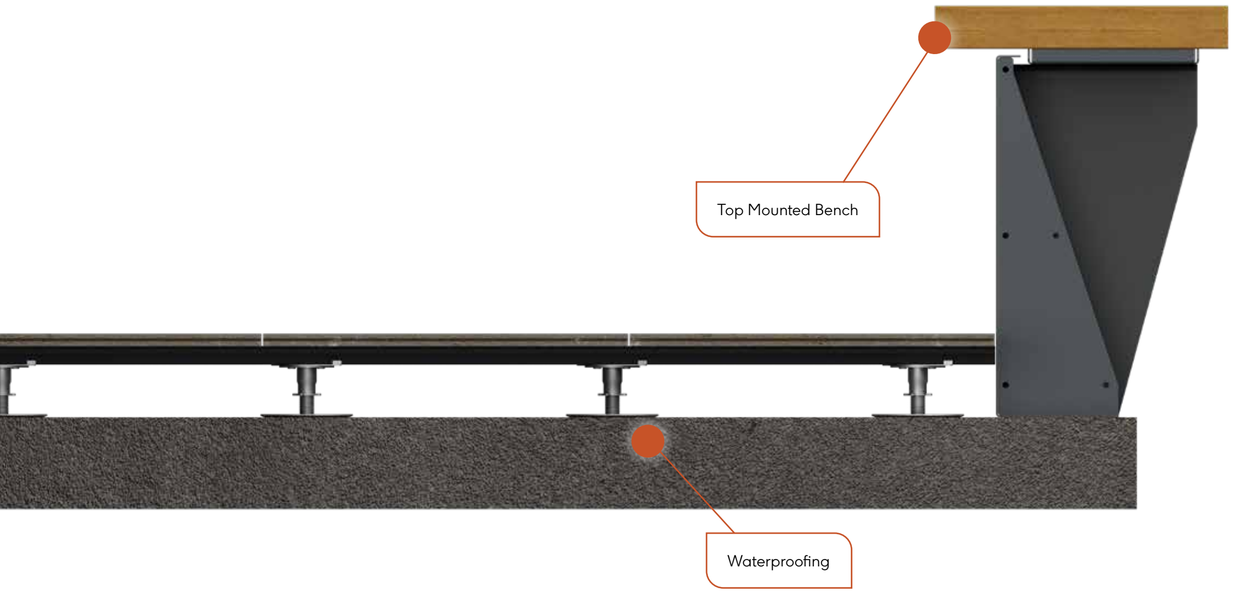
Add lights to your planter for a standout look at night. This not only boosts visibility in the dark but also gives your planter a captivating and unique appearance, making it a striking element in any setting.

### Cabinet door

Integrate a cabinet door into your planter design for easy access to diverse weatherproof storage, including power sockets and lighting boxes. The design opportunities for the cabinet doors are extensive, offering both functionality and aesthetic appeal.



# Benches on Waterproofing

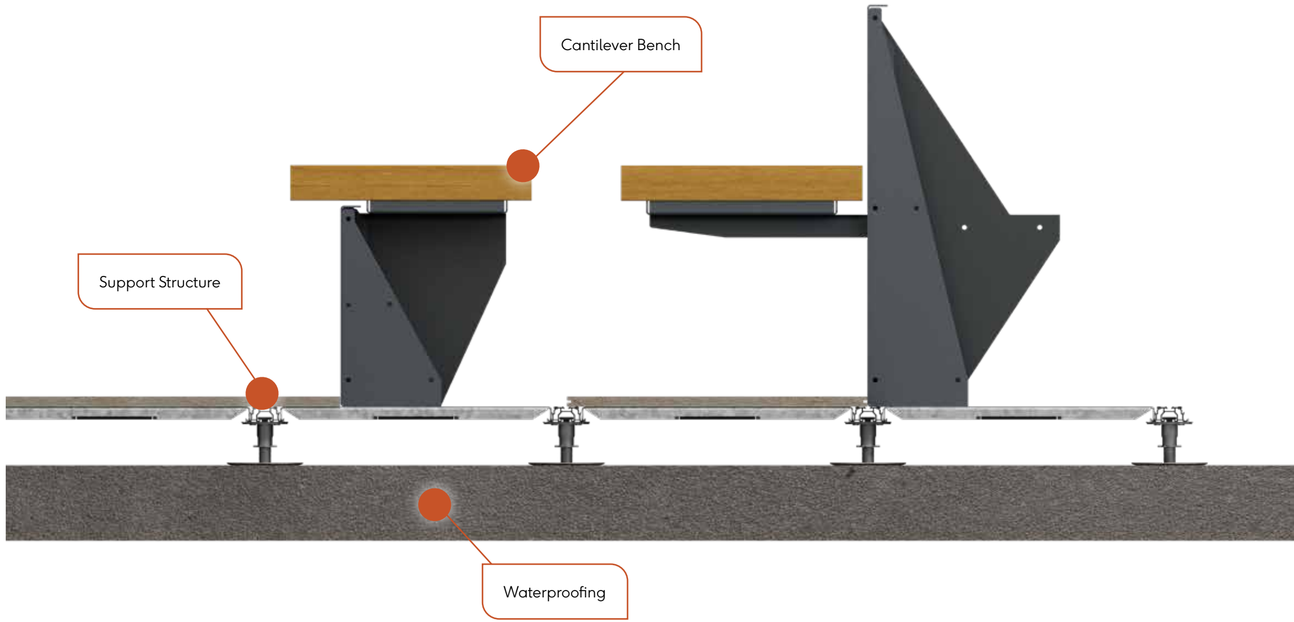









# Benches on Support Structure



# Furniture

## Contemporary furniture ranges provide stylish, yet practical finishing touches

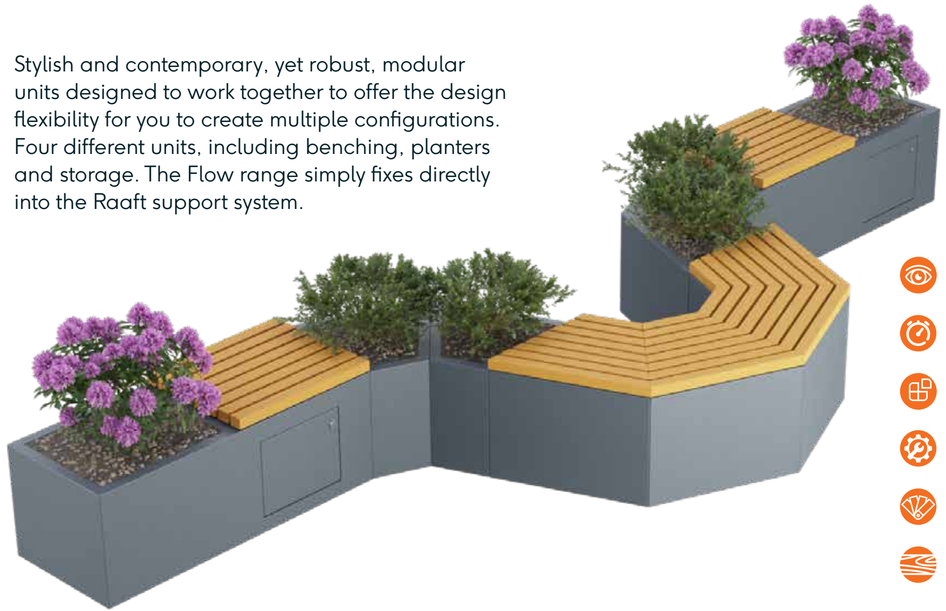
A terrace can easily be transformed into a garden with layers of interest and a feeling of permanence by adding planters.

The Raaft Terrace System is Tested to Broof(t4)

# Flow

## Four components. Unlimited possibilities.

Stylish and contemporary, yet robust, modular units designed to work together to offer the design flexibility for you to create multiple configurations. Four different units, including benching, planters and storage. The Flow range simply fixes directly into the Raaft support system.

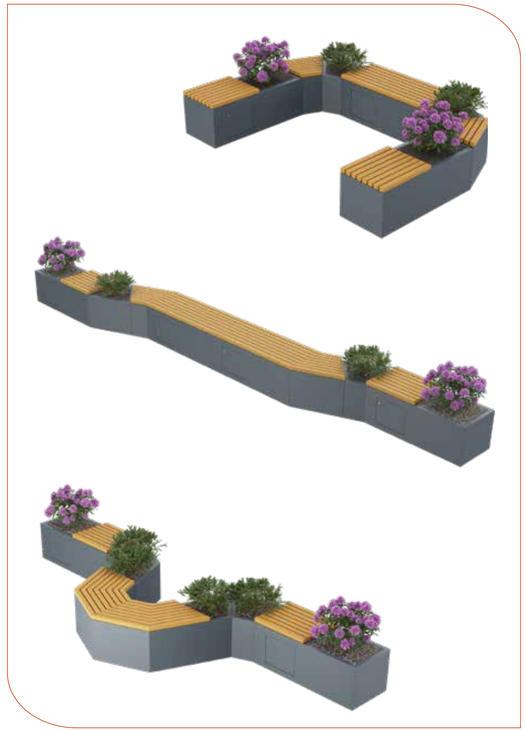


- Smart contemporary design
- Easy and quick to install
- Modular units – multiple designs
- Fixes into Raaft terrace system
- Corten steel and powder coated finishes available
- FSC certified timber









The modularity and the simplicity of fixing of the Flow range offers the designer many variations on roof terrace lay-outs and configurations. Some typical options are shown on these pages. We can offer design advice and guidance on best practice at any stage in your project.





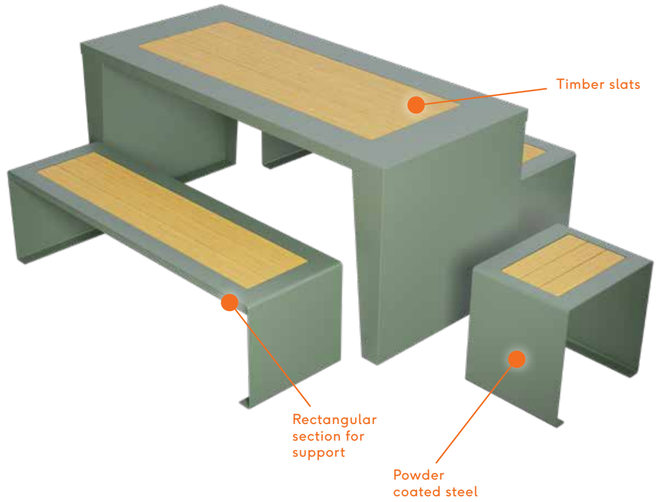


# Merlino collection

## Style meets simplicity.

An innovative collection of steel benches, stools and tables, featuring recessed timber boards.

Merlino provides an elegant timber look and feel to a sturdy steel framework.



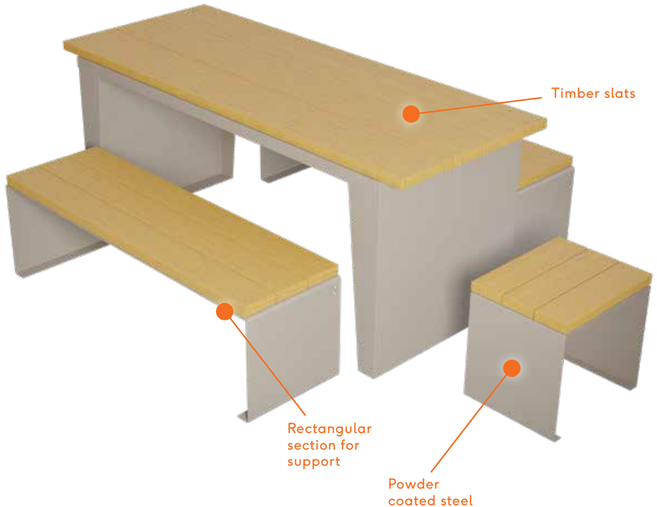

- Smart contemporary design
- FSC accredited timber
- Powder coated finishes available
- Fixes into Raaft® terrace system

# Estro collection

## Nature meets durability.

An inspirational suite of steel benches, stools and tables, featuring timber-slatted surfaces.

Estro offers a natural and hard-wearing look.




- Smart contemporary design
- FSC accredited timber
- Fixes into Raaft® terrace system



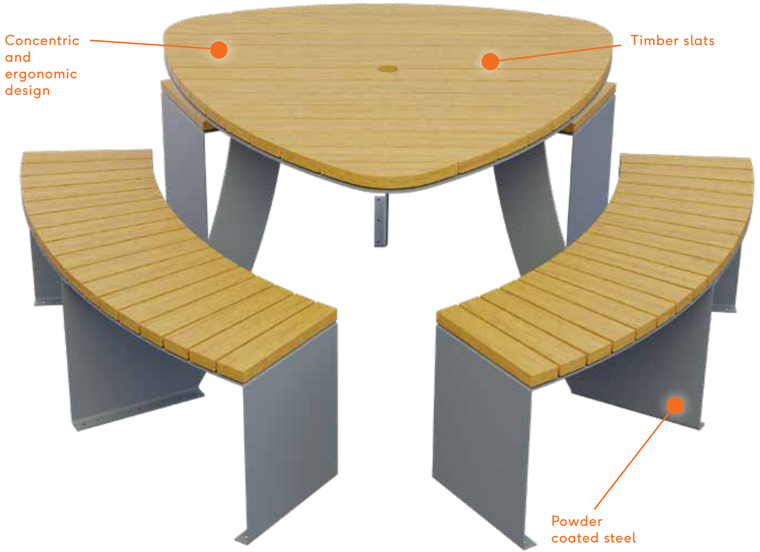




# Alfresco

## Beauty meets viability.

A unique curvilinear seating unit, featuring contoured timber-slatted surfaces. Alfresco offers beautiful and ergonomic comfort.



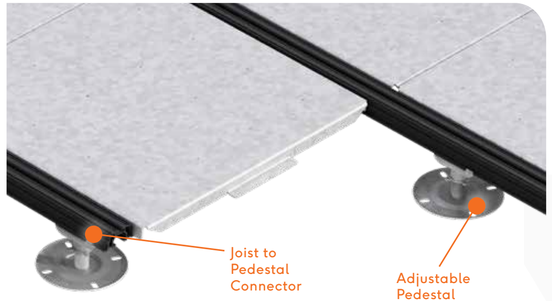

- Smart contemporary design
- FSC accredited timber
- Fixes into Raaft® terrace system
- Seats six people

Westminster Firestation, London.

# Technical data



# Preventa® Aluminium Joists




Rigid aluminium extruded joist rails for use as a support structure system to decking and paving. Raaft® joists are designed to be used on roof terraces, balconies and other external podium construction areas.

**30mm** height joist

## PRODUCT INFORMATION

| DIMENSIONS | | | MAX SPAN * | WEIGHT/ LENGTH | MAX CANTILEVER | MAX LOADING ** | MATERIAL | FINISH | SKU |
|---|---|---|---|---|---|---|---|---|---|
| H | W | L | | | | | | | |
| 30mm | 60mm | 2.4m | 500mm | 3.87kg | 100mm | 250kg | 6063 T6 aluminium | Mill | 301015 |

* Between supports, see overleaf
** Point load based on Finite Element Analysis (FEA) with a x 1.5 factor of safety



## 30 JOIST WEIGHT LOADINGS

| JOIST HEIGHT | CENTRES | JOIST LOAD (kN) | SAFE WORKING LOAD (kN) |
|---|---|---|---|
| 30 mm | 400 | 2.812 | 2 |
| | 600 | 1.054 | 0.8 |
| | 900 | 0.624 | 0.4 |

## MAXIMUM UNSUPPORTED SPANS


## CUTTING AND PPE

Raaft® aluminium joists can be simply cut on site using an angle grinder or chop saw with the appropriate disc or blade. We recommend that PPE (Personal Protective Equipment) is used when cutting and installing joists:

a) cut-resistant safety boots/shoes with toe protection
b) protective eyewear
c) strong gloves to protect the hands.
d) if using loud cutting equipment then ear plugs or defenders should be worn.

## FIRE RESISTANCE

Joists are manufactured from extruded aluminium alloy 6063A T6 which is a non-combustible material deemed to be Class A in accordance with the European Commission decision of 4 October 1996 (Document: 96/603/EC). Approved Document B (Building Regulations relating to Fire Safety) states under Regulation 7(2) that the requirements on external walls and roof tops of buildings does not include seals, gaskets and fixings.

# Atria® 20mm Porcelain Tiles


## SLIP RESISTANCE

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|---|---|---|---|
| Dynamic Slider | BCRA | Test Method Available | > 0.4 |
| Static Slider | ASTM C1028 | Test Method Available | |
| Inclined Platform | DIN 51130 | Test Method Available | R11 |
| Pendulum Test Value (PTV) - Dry Surface | BS EN 14231 | 36+ | 72 |
| Pendulum Test Value (PTV) - Wet Surface | BS EN 14231 | 36+ | 65 |

## REGULARITY CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | | ATRIA® VALUES |
|---|---|---|---|---|
| Length and Width | ISO 10545-2 | ± 0.6 % | ± 2 mm | ≥ 3400 N |
| Thickness | ISO 10545-2 | ± 5.0 % | ± 0.5 mm | ≥ 2720 N |
| Squareness | ISO 10545-2 | ± 0.5 % | ± 2 mm | ≤ 1.8 mm |
| Straightness of sides | ISO 10545-2 | ± 0.5 % | ± 1.5 mm | ≤ 13 mm |
| Surface Flatness | ISO 10545-2 | ± 0.5 % | ± 2 mm | ≤ 7.0 % |



## THERMAL AND HYGROMETRIC CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|---|---|---|---|
| Coefficient of Linear Thermal Expansion | ISO 10545-8 | Test Method Available | < 7 x 10-6 °C-1 |
| Thermal Shock Resistance | ISO 10545-9 | Test Method Available | Guaranteed |
| Frost Resistance | ISO 10545-12 | Required | In Accordance |

## SURFACE CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|---|---|---|---|
| Resistance to Deep Abrasion | ISO 10545-6 | ≤ 175 mm3 | ≤ 155 mm3 |

## CHEMICAL CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|---|---|---|---|
| Chemical Resistance | ISO 10545-13 | Test Method Available | Guaranteed |
| Stain Resistance | ISO 10545-14 | Test Method Available | Guaranteed |

## STRUCTURAL CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | ATRIA® VALUES |
|---|---|---|---|
| Water Absorption | ISO 10545-3 | ± 0.5 % | ± 0.1 % |
| | ASTM C373 | | In Accordance |
| Breaking Strength | ISO 10545-4 | ≥ 1300 N | ≥ 10.000 N |
| Modulus of Rupture | ISO 10545-4 | ≥ 35 mm² | ≥ 45 N/mm² |
| Breaking Load Class | EN 1339 | ± 0.5 % | U 11 |
| | | | T 11 |

# Atria® 20mm Porcelain Tiles

## WORKING SIZE AND WEIGHT

| TILE SIZE | ACTUAL RECTIFIED SIZE | M²/TILE | KG/TILE |
|---|---|---|---|
| 300 x 1200 | 297 x 1195 | 0.3600 | =16.88 |
| 600 x 600 | 596 x 596 | 0.3600 | =16.88 |
| 600 x 1200 | 596 x 1195 | 0.7200 | =33.77 |

## HOW RAAFT® OVERCOME WIND UPLIFT WITH ATRIA® PORCELAIN TILES

To overcome wind uplift challenges on roof terraces, Raaft® has developed Atria® + wind uplift resistance tiles. Products that claim to be resistant to wind uplift must meet BS EN 1991-1-4: 2005 + + A1:2010 Eurocode 1 regulations, so we put our tiles and clips to the test. Following the principles of BS 14437:2004, the tests were conducted by independent testers BRE Group on both types of clip, fixing 600 x 600 mm, 20 mm thick Atria® + Porcelain Tiles, with two clips per tile attaching them to the Raaft® Aluminium Joists. Tests were also carried out on the Pedestal Joist Connectors.

Testing applied an uplift pressure of 4536N/m2 and as the products were tested to destruction, no partial safety factors were used.
The results were as follows:

- Using stainless steel clips, the characteristic wind uplift resistance per clip was 738.1N
- Using nylon clips, the characteristic wind uplift resistance per clip was 51.6N
- By also fixing the tile with Formoa 017FE hybrid polymer adhesive the indicative wind uplift resistance per clip was 2943N
- The pedestal joist connector returned a wind uplift resistance of 71.0N

The clip and groove wind uplift resistance system is also featured on our Terrafina Composite Wood-polymer Decking and Farrino® Porcelain Decking.
To view the full BRE Report, please visit www.raaft.co/storage/uploads/documents/wind-uplift-test-bre-report_kwbgo.pdf



## PACKAGING AND WEIGHTS

| SIZE | THICKNESS | BOX SPECIFICATIONS | | | PALLET SPECIFICATIONS | | |
|---|---|---|---|---|---|---|---|
| | | PIECES/BOX | SQM/BOX | KG/BOX | BOX/PALLET | SQM/PALLET | KG/PALLET |
| 300 x 1200 | 20 mm | 2 | 0.720 | 26.38 | 36 | 16.88 | 1519.56 |
| 600 x 600 | 20 mm | 2 | 0.563 | 50.65 | 30 | 45.36 | 5673.02 |
| 600 x 1200 | 20 mm | 1 | 0.540 | 33.77 | 15 | 28.80 | 1013.04 |

## STORAGE & HANDLING

The product is securely packed into cardboard boxes to ensure no movement of the product in transit. Depending on the size/weight of the consignment this may be palletised.
Whilst there are no specific weight restrictions on what is or is not safe to lift in manual handling, an assessment of the health and safety risks should be undertaken and measures taken to reduce the risk of injury so far as reasonably practicable.

The following guidelines may be useful:

a) Each person should be fully trained in manual handling techniques.
b) The use of handling aids such as a trolley, folk-lift, pallet truck or conveyor should be used if moving large volumes of cartons.
c) Break up large consignments into more manageable loads.
d) Ensure that the product is stored at a reasonable height, so avoiding the lifting of cartons from floor level or above shoulder height.
e) Reduce carrying distances of cartons.

# Farrino®
# Porcelain Decking


## SLIP RESISTANCE

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | FARRINO® VALUES |
|---|---|---|---|
| Dynamic Slider | BCRA | Test Method Available | > 0.4 |
| Static Slider | ASTM C1028 | Test Method Available | |
| Inclined Platform | DIN 51130 | Test Method Available | R11 |
| Pendulum Test Value (PTV) - Dry Surface | BS EN 14231 | 36+ | 72 |
| Pendulum Test Value (PTV) - Wet Surface | BS EN 14231 | 36+ | 65 |

## REGULARITY CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | | FARRINO® VALUES |
|---|---|---|---|---|
| Length and Width | ISO 10545-2 | ± 0.6 % | ± 2 mm | ≥ 3400 N |
| Thickness | ISO 10545-2 | ± 5.0 % | ± 0.5 mm | ≥ 2720 N |
| Squareness | ISO 10545-2 | ± 0.5 % | ± 2 mm | ≤ 1.8 mm |
| Straightness of sides | ISO 10545-2 | ± 0.5 % | ± 1.5 mm | ≤ 13 mm |
| Surface Flatness | ISO 10545-2 | ± 0.5 % | ± 2 mm | ≤ 7.0 % |



## THERMAL AND HYGROMETRIC CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | FARRINO® VALUES |
|---|---|---|---|
| Coefficient of Linear Thermal Expansion | ISO 10545-8 | Test Method Available | < 7 x 10-6 °C-1 |
| Thermal Shock Resistance | ISO 10545-9 | Test Method Available | Guaranteed |
| Frost Resistance | ISO 10545-12 | Required | In Accordance |

## SURFACE CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | FARRINO® VALUES |
|---|---|---|---|
| Resistance to Deep Abrasion | ISO 10545-6 | ≤ 175 mm3 | ≤ 155 mm3 |

## CHEMICAL CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | FARRINO® VALUES |
|---|---|---|---|
| Chemical Resistance | ISO 10545-13 | Test Method Available | Guaranteed |
| Stain Resistance | ISO 10545-14 | Test Method Available | Guaranteed |

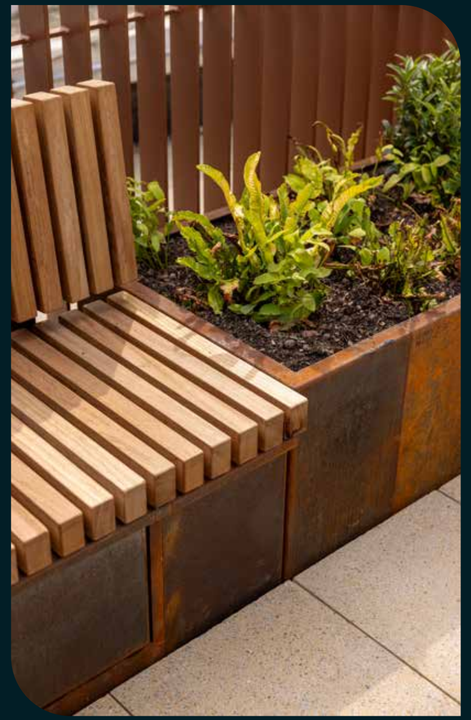
## STRUCTURAL CHARACTERISTICS

| TECHNICAL FEATURES | SPECIFICATION | VALUES REQUIRED | FARRINO® VALUES |
|---|---|---|---|
| Water Absorption | ISO 10545-3 | ± 0.5 % | ± 0.1 % |
| | ASTM C373 | | In Accordance |
| Breaking Strength | ISO 10545-4 | ≥ 1300 N | ≥ 10.000 N |
| Modulus of Rupture | ISO 10545-4 | ≥ 35 mm² | ≥ 45 N/mm² |
| Breaking Load Class | EN 1339 | ± 0.5 % | U 11 |
| | | | T 11 |

# Inspiration

See how our terrace systems enhance outdoor spaces.





# The Hub, Victoria

Located just a two-minute walk from London Victoria Station, HUB Victoria is a 107,000 sq. ft. self-contained, mixed-use residential, office and retail development of three distinct buildings, to be completed in 2023.

Planters and benches in the atrium, on ground-floor access ramps and on roof terraces will create green spaces that provide areas for relaxation and encourage biodiversity and wildlife corridors in the city.

It was decided that the planters should be constructed out of Corten weathering steel from Raaft®'s Planterline range to reference design accents in the main structure. The benches were constructed in complementary natural wood.

**Location**

123-151, Victoria, London, SW1W 9SH

**Architect**

Morrow + Lorraine

**Main Contractor**

McLaren Construction Group

**Landscape Architect**

BBUK Studio

**Product Installer**

Rochford Construction Ltd

# Tailors Corner

The greatest challenge we faced on this project was the extremely short time frame, as all heavy lifting to the roof area had to be completed before a crane was removed from the site.

The client also originally specified powder-coated planters then changed to Corten finish. Our operations team proved their agility by ensuring all components were manufactured and shipped to site on schedule.

**Location**
Leeds, LS1 4JF

**Client**
Boultbee Brooks Real Estate

**Architect**
GPAD London

**Landscape Architect**
John Davies Landscape Architecture

**Main Contractor**
Simpson (York) Ltd

**Product Installer**
Palmer Landscapes

# New Street Square

New Street Square is a vibrant area comprised of four office buildings and retail amenities surrounding a contemporary public square in the heart of the Fleet Street Quarter.

Occupying an entire building and spanning six storeys, Myo New Street Square offers 45,000 square feet of flexible workspace in a flagship City of London location. A large roof terrace also offers views of St. Paul's and across the City.

A Raaft extruded aluminium support structure was used to create a lightweight but stable base for the terrace. This spreads the weight of the flooring and planters across the roof and lifts it above any raised features of the original construction. Raaft access hatches were integrated within the structure to enable access to the drainage outlets and davits, and floor structure panels were used to provide additional support and drainage for the planters.

**Location**

New Street Square, London EC4A 3BF

**Architect**

DeMetzForbesKnight (dMFK)

**Main Contractor**

Collins Construction

**Landscape Architect**

Spacehub

**Product Installer**

Oasis Plants

# Nine Elms Park

Designed to deliver zero-$CO_2$ operation and features extensive interior and exterior planting to create a relaxing working environment that is close to nature.

Osmo Battersea offers 166,000 sq. ft. of contemporary, flexible office space between Vauxhall and Battersea Power Station in the heart of the new Nine Elms Linear Park. It has been designed to deliver zero-$CO_2$ operation and features extensive interior and exterior planting to create a relaxing working environment that is close to nature.

The design incorporated a terrace that features steel planters fitted with integral benches and lighting to create pleasant alternative work zones and durable porcelain surfaces for non-slip, low-maintenance, yet stylish external walking areas.

**Location**

Osmo House, Nine Elms Park, 53 Nine Elms Lane, Vauxhall, London, SW8 5BB

**Main Contractor**

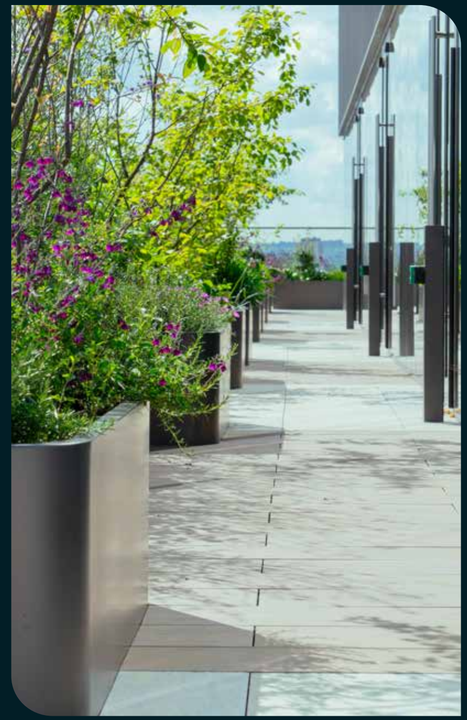
McLaren Construction

**Architect**

Camlins

**Product Installer**

Frosts Landscapes



# Drapers Yard, Leeds

The Drapers Yard redevelopment project involved converting a vacant building in Leeds's historic industrial quarter into a medical facility, creating a 100-bed clinic, pharmacy and almost 300 highly-skilled scientific and healthcare jobs in the city.

The dramatic transformation of the building included a new façade, a rooftop terrace amenity space, a green sedum roof and new landscaping and planting on Marshall Street and Sweet Street.

**Location**

Drapers Yard, Leeds, LS11 9DL

**Landscape Architect**

Oobe Landscape Architects

**Main Contractor**

Overbury plc

**Product Installer**

Palmer Landscapes Ltd

# Westminster Fire Station

Westminster Fire Station, designed in the Free English Baroque style, was built in 1906 on the same site as an earlier station. Granted Grade II listed status in 1987, the station remained operational until 2014 when it fell victim to fire station cuts across the capital.

Four years later, plans were drawn up to convert the iconic building into a ground-floor restaurant and 6 luxury apartments above, with a single-storey basement excavated underneath the entire site. A new, secondary building on the site would contain a further 11 apartments.

An inner courtyard was to be landscaped with natural stone paving to complement the tones of the original brickwork and sculpted CorTen steel planters to soften the harsh geometry of the building. Timber benches were to be integrated into the planters and surround a raised pool and fountain walled by matching CorTen steel, to provide areas for relaxation and socialising.

**Location**

Old Westminster Fire Station,
4 Greycoat Place, London SW1P 1SB

**Architect**

Openstudio Architects

**Landscape Architect**

James Lee Design

**Main Contractor 1**

Knight Build

**Main Contractor 2**

Paragon

**Product Installer**

Greenside Landscapes

# CPDs and Design Consultations

We prioritize your professional development, valuing it as much as the successful specification and installation of our products. Our engaging presentations, lasting approximately 45 minutes with an additional 15 minutes for questions, can be hosted either at your work location through a lunch and learn or virtually via Microsoft Teams.

In addition to our commitment to your professional growth, we recognize the value of roof terraces in urban developments. Our presentations delve into the common challenges faced in roof terraces and offer practical solutions to overcome them.

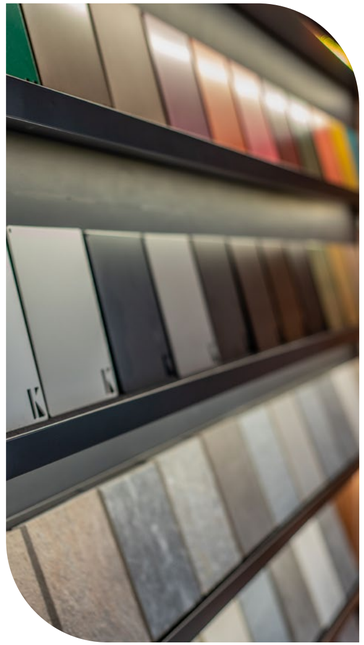
We take pride in presenting a diverse array of seminars, each contributing to your Continuing Professional Development (CPD). Upon completion, participants receive certificates, each carrying one CPD point, conveniently dispatched via email to the provided participant list. Our seminars cover a wide spectrum of essential topics, encompassing:

- Recent Fire Safety Regulations Post-Grenfell: Scrutinizing changes outlined in the Hackitt report and Building Control Document B, particularly relevant in the aftermath of the Grenfell tragedy.
- Fire Safety Classifications of Materials: Empowering your team to confidently specify materials in accordance with current legislation.
- Product Knowledge: Raaft's Class A Fire-Rated Modular Terrace System: A detailed exploration of our innovative terrace system, enhancing your understanding and application.
- Applying Fire Regulations to Your Projects: A comprehensive guide on seamlessly integrating fire regulations into your projects.
- Inspiration for Your Next Project: Exploring noteworthy case studies to inspire and guide your upcoming endeavors.
- The Value of a Roof Terrace in Urban Developments: Understanding the significance of roof terraces in the context of urban development.
- Common Challenges of Roof Terraces and Solutions: Identifying challenges and providing practical solutions to overcome them.
- Gain Product Knowledge: Raaft Terrace System: An intuitive modular terrace system that can be easily constructed in a simple three-step process.
- Revolutionary Terrace System: A singular solution to build your entire terrace effortlessly.
- Inspiration for Your Next Project: Learning how to use different surfaces within the Terrace System to enhance your project aesthetics.

Embark on this educational journey with us to elevate your professional expertise and contribute to the creation of extraordinary outdoor spaces.

Contact us today to book a CPD

t. +44 20 3146 78791 - e. CPD@raaft.co - or visit raaft.co/book-cpd



# London Design Studio

Located in Clerkenwell, London, you can meet with colleagues and clients, and discuss your challenges with our technical experts. See, touch and feel the Raaft range, understand how to specify and install our products, and explore the Raaft Terrace System - pedestals, joists and the various range of finishes.

A diverse range and our experienced technical team on hand at our London design studio.

Open Monday to Friday 8am - 5pm with evening appointments available upon request.

RAAFT®

sales@raaft.co

raaft.co

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Respect the environment, please recycle.