

# DATA CENTRE SOLUTIONS

**Fibergrate**  
Composite Structures



DESIGN • FABRICATION • DELIVERY

BUILDING THE WORLD **TO LAST**<sup>®</sup>



[www.fibergrate.uk](http://www.fibergrate.uk)

## THE DATA CENTRE OF THE FUTURE IS BUILT WITH GRP

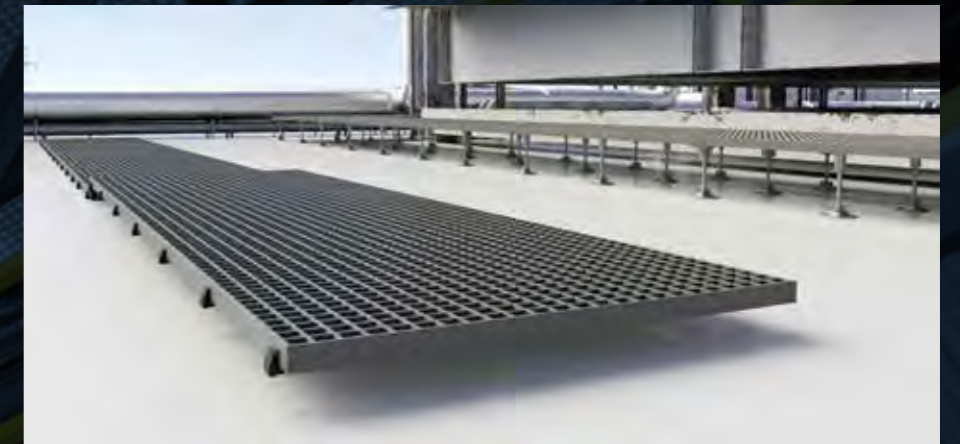
Data Centre construction demands advanced composite materials from Fibergrate Composite Structures, internationally recognised as the original pioneers of Glass Reinforced Plastic (GRP), and one of the industry's leading manufacturers of GRP products & structural engineering services worldwide. From ready-to-ship components to custom fabrication solutions, we guarantee quality materials and expert services at each stage of design, from concept to delivery.

Three ISO 9001:2000 certified manufacturing facilities, centrally located in the United States, Mexico, and the United Kingdom, provide reliable distribution for various data centre projects, modular to hyper-scale, anywhere worldwide.

## CAPABILITIES

- Manufacturing
- Design & Engineering
- Fabrication
- Construction Project Management
- Expert GRP Service
- Delivery

### Non-Penetrating Rooftop Walkways



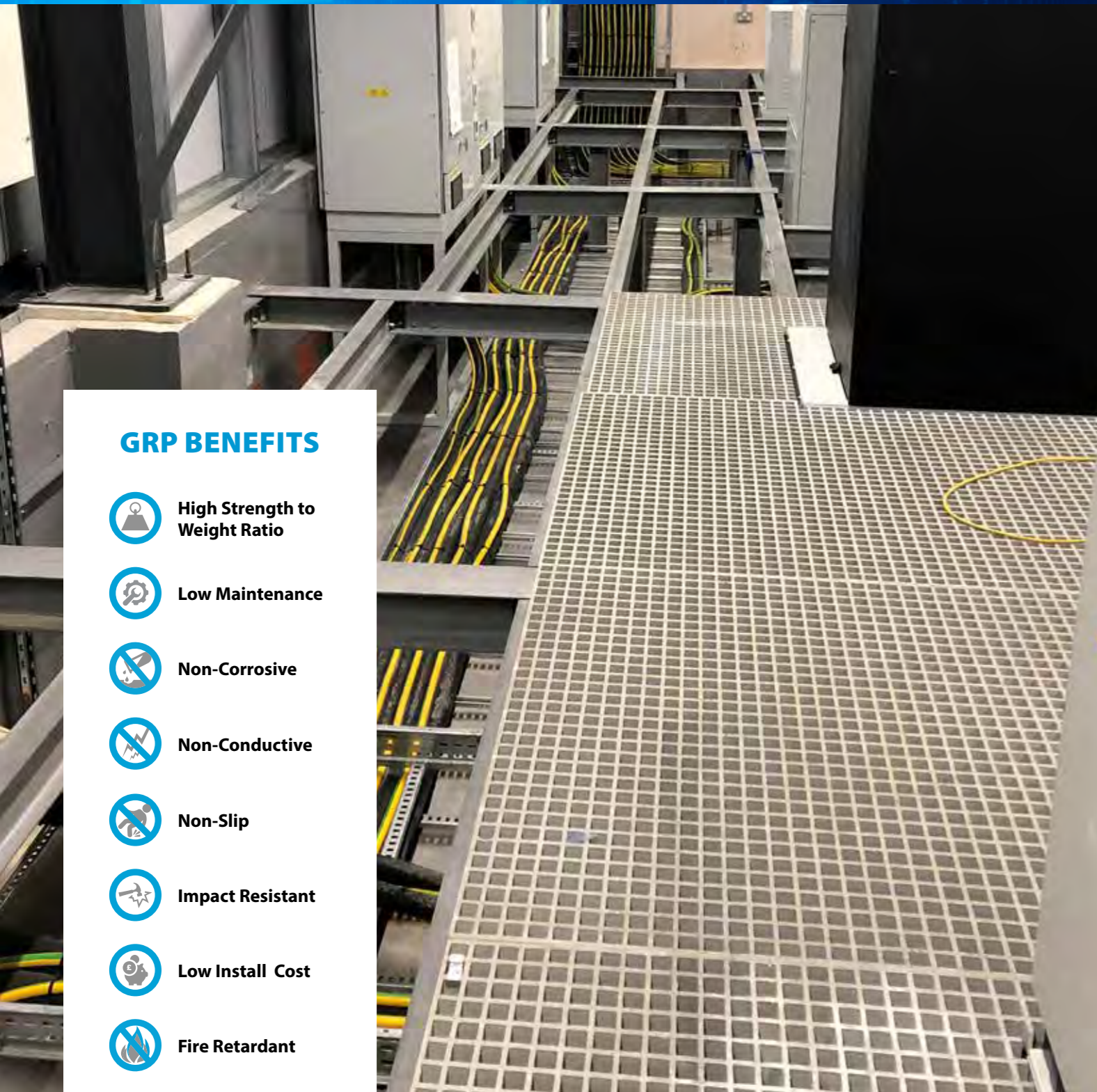
### Non-Conductive Substation Fencing











### Soundscape® Barrier Wall



**EUROPE'S LEADING SUPPLIER**  
GRP Grating, Structures & Anti Slip Products



## GRP BENEFITS

-  High Strength to Weight Ratio
-  Low Maintenance
-  Non-Corrosive
-  Non-Conductive
-  Non-Slip
-  Impact Resistant
-  Low Install Cost
-  Fire Retardant

## DATA CENTRE INFRASTRUCTURE

Custom Solutions	ELECTRICAL/ MECHANICAL YARD	SUBSTATION	SOLAR FIELD	COOLING TOWERS	ROOFTOP
	CABLE MANAGEMENT	FLOORING	STRUCTURAL	EQUIPMENT PROTECTION	AISLE CONTAINMENT

FIBERGRATE APPLICATIONS:

- Access Platforms
- Trench Covers
- Barrier Walls
- Walkways
- Service Riser Flooring
- Decking

## GRP VS. STEEL

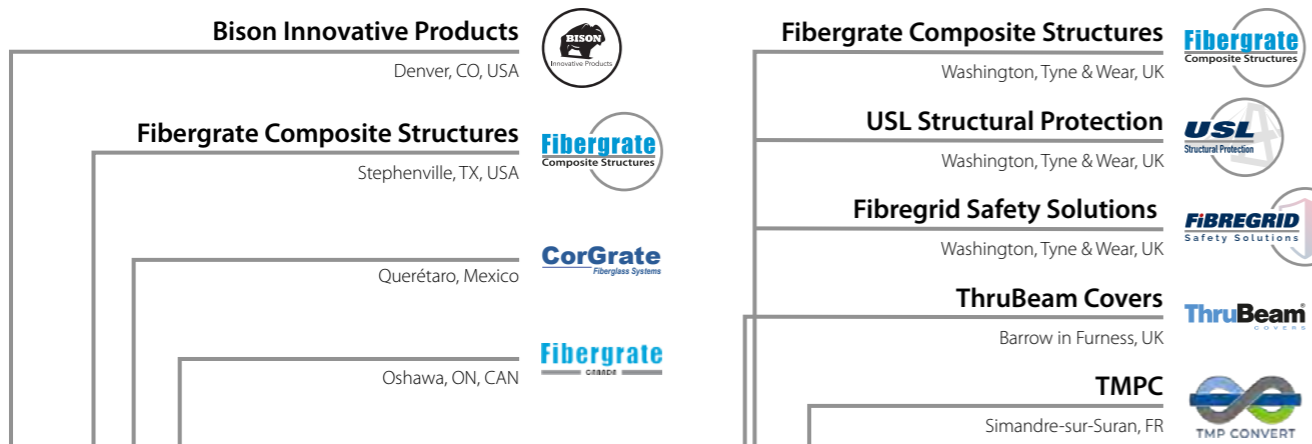
When comparing the price of Fibergrate Glass Reinforced Plastic (GRP) to metallics, consider: **Value = Price / Service Life**

Cost Factor	Traditional Metallic Materials	The Fibergrate® Advantage
<b>Safety Cost</b>	Slips and falls are the second leading cause of industrial accidents and one of the leading causes of death. £500m per year to work places according to hse.gov.uk*	Fibergrate's slip resistant surface dramatically reduces accidental slips making it the most cost-effective solution for minimising worker accidents and lost workdays.
<b>Initial Installation Cost</b>	Up front, metallic components appear to be the most economical, based on material cost alone. However, metallic materials require heavy lifting equipment, added labour for cutting, welding, painting and grating must be "edge-banded".	Although initial material investment may appear higher, don't be fooled! GRP products require no heavy lifting equipment, minimal labour, are easily fabricated with hand tools, do not need painting, and grating requires no edge-banding.
<b>Maintenance &amp; Replacement Cost</b>	In highly corrosive installations, metallic products often require intensive maintenance and can deteriorate in a few years or less, requiring numerous replacements within the facility life.	Fibergrate GRP products will last much longer and require little maintenance. Fibergrate systems pay for themselves after one maintenance cycle. Many Fibergrate installations have been in service for 20+ years.

\*www.hse.gov.uk/slips/costs.htm

# GLOBAL EXPERT GRP SERVICES

We are here to help our customers Build the World to Last.



## OVER 50 YEARS OF BUILDING SAFE AND INNOVATIVE ENVIRONMENTS FOR PEOPLE TO WORK, LIVE, AND PLAY.

In 1966, William C. Coonrod invented fibreglass moulded grating in his Dallas, Texas, garage. That first panel was the beginning of Fibergrate. We are now an international company with a presence in 11 countries, and our customers have installed Fibergrate products on projects in more than 40 countries on 7 continents.

Even after 50 years of growth, we still have the heart of that small company William started.

We are constantly looking for ways to further enhance the products and services we provide. We still believe our clients are our partners, and we believe in the power of local presence and support. We will be with our customers on every project, side-by-side, even joining them on the job site to ensure their success.



**Daniel Lindsay**  
General Manager Europe

*Fibergrate Composite Structures is revolutionising data centres with Glass Reinforced Plastic (GRP), a material that offers unmatched performance, safety, and sustainability. Lightweight, exceptionally strong, non-conductive, and corrosion-resistant, GRP delivers superior durability and reliability for mission-critical environments. We provide a complete end-to-end GRP solution, partnering with clients to shape the foundations of the data-driven world.*

SALES

ENGINEERING

PRODUCT MANAGEMENT



**Chris Davies**  
Sales Manager



**Maciej Zembowicz**  
European Sales Manager



**Bill Budgell**  
VP Global Product & Corporate Development



**Grant Hann**  
Product Manager



**Jacqueline Jaime**  
Product Marketing Specialist

**99** YEARS OF COMBINED SERVICE AS A EUROPEAN TEAM

[www.fibergrate.co.uk](http://www.fibergrate.co.uk) @ [uk.sales@fibergrate.com](mailto:uk.sales@fibergrate.com) +44 (0) 191 416 1530




# PROJECT SPOTLIGHT

## Access Solutions for Technology Centre Renovation

 **Technology Centre,  
Knutsford, Cheshire, UK**

 **Group Metropolitan**

-  **Applications**
- Access Step Overs
  - Stair Solutions
  - Rubber Pads
  - Service Riser Gratings

### **The Challenge**

The Technology Centre, an aging building undergoing significant renovation, presented unique challenges for the project team. A large amount of equipment was being installed on the roof, including extensive cable trays for current and future use. These installations created numerous obstacles in a confined area, making it difficult for workers to access equipment safely and efficiently. A solution was needed to provide safe navigation over and around these obstructions, without compromising the integrity of the roof.

**“We offered our installation guidance to ensure all items were installed correctly with the addition of rubber pads to ensure the loads were spread and the roof membrane was not pierced. Service riser gratings were also installed to ensure safe man access to the equipment within the riser cupboard, all the while working in an area containing numerous fibreoptic cables, without any errors on our part.”**

Mark Tyerman  
Territory Sales Manager - North West & Central



### **Our Approach**

Fibergrate was engaged to provide a robust and safe solution to address these challenges. Given the complexity of the site, which was evolving throughout the renovation process, several site surveys were conducted to assess the changing conditions and obstacles. Our focus was on delivering a tailored solution that maximized safety and usability within the tight space constraints.

#### **1. Tailored Access Solutions:**

Utilizing our range of Access Step Overs and Stair Solutions, we designed and installed custom structures that allow seamless navigation over the obstacles. These solutions ensured safety and maintained operational efficiency, even in restricted spaces.

#### **2. Protecting the Roof Structure:**

To prevent damage to the roof membrane and distribute weight evenly, we incorporated rubber pads as part of the installation. This approach ensured the longevity of the roof structure while maintaining safety standards.

#### **3. Ensuring Safe Equipment Access:**

We installed service riser gratings to facilitate safe access to the equipment housed within the riser cupboards. These areas contained critical fiber-optic cables, and any mishandling or errors during installation could have resulted in significant disruptions to the network.

#### **4. Seamless Installation Guidance:**





Fibergrate's experienced team handled the entire installation process to ensure every component was installed accurately and efficiently, without compromising the safety of the workers or the integrity of the structure.



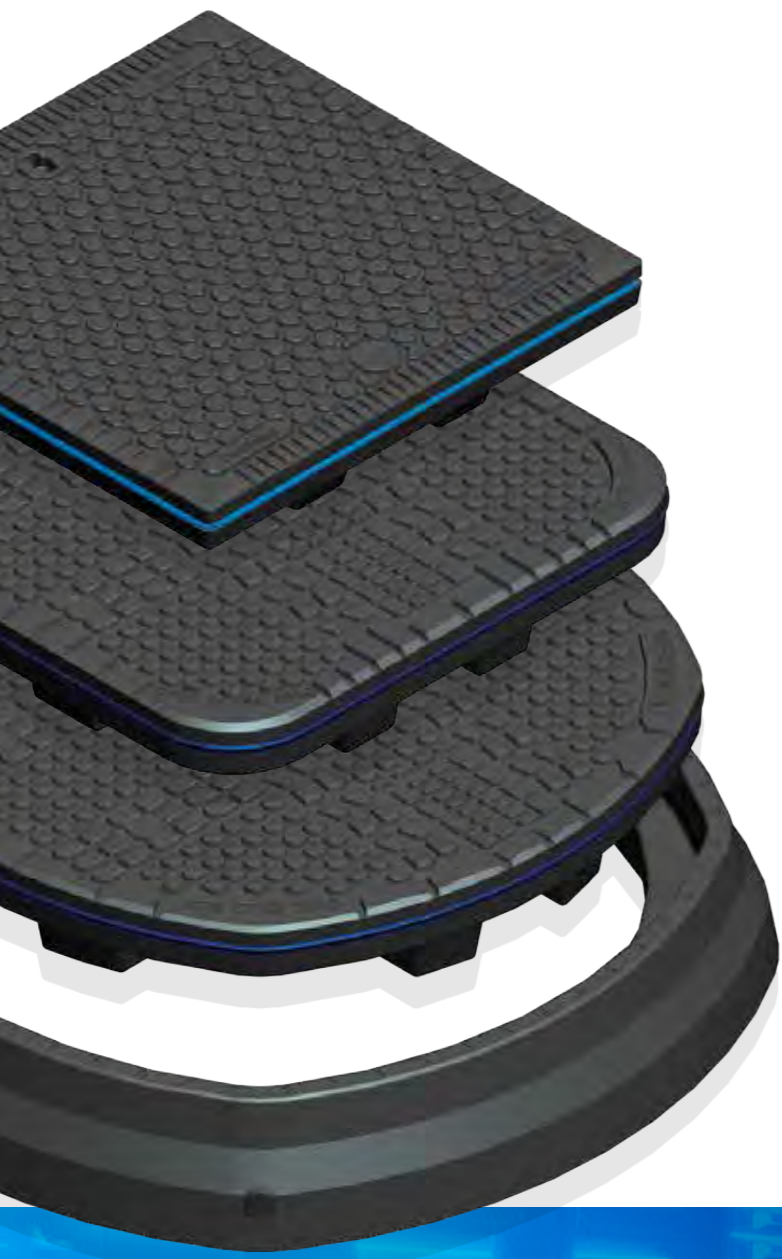
### **The Outcome**

Fibergrate successfully delivered a comprehensive solution that overcame the unique challenges of this project.

#### **Key Outcomes Included:**

-  **Safe & efficient navigation over roof obstacles.**
-  **Full protection of the roof membrane, preventing any puncture-related damages.**
-  **Uninterrupted access to crucial riser equipment, safeguarding the functionality of the fiberoptic cables powering operations.**
-  **On-time & precise installation, minimizing disruption to the ongoing renovation process.**

Our expertise allowed us to adapt to the evolving site conditions, ensuring that safety and operational standards were upheld at every stage.



### Company Background

ThruBeam is a UK-based company specializing in composite manhole and trench covers with over 20 years of experience.

### Product Innovation

Focus on replacing heavy steel and concrete covers with lightweight, durable, and eco-friendly composite alternatives.

- All products are manufactured and designed in the UK
- Wide range of sizes available to suit a wide range of user requirements
- Easy installation process
- Configurable options available
- Exceeds 0.6 coefficient of friction even when wet
- Load Ratings from B125 TO D400

**If you'd like to learn more about our manhole and trench cover offerings, please reach out to a member of our team—we'd be happy to help.**



**Extended Working Life**



**Permanent Anti-Slip Surface**



**Reduced Maintenance**



**No Residual Value**



**Non-Corrosive & Chemically Resistant**



**Injury Free Removal**



**Secure & Lockable**



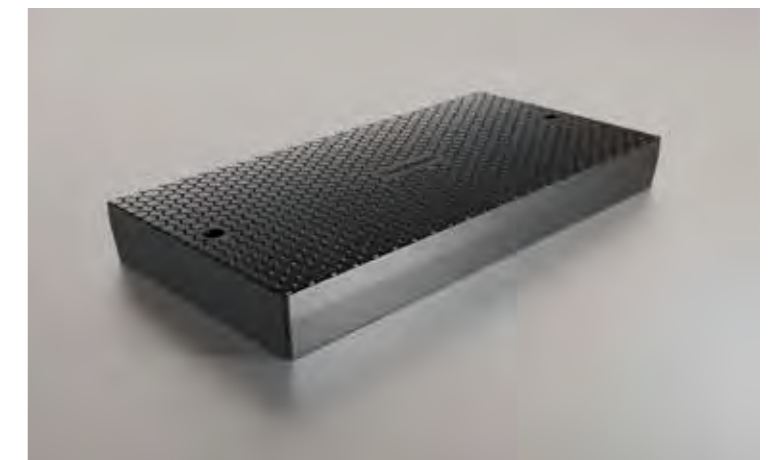
**Ventable Design**



**Custom Colours & Design**



**Electrically Safe**





# PROJECT SPOTLIGHT

## DYNADECK®

### Interlocking Flooring

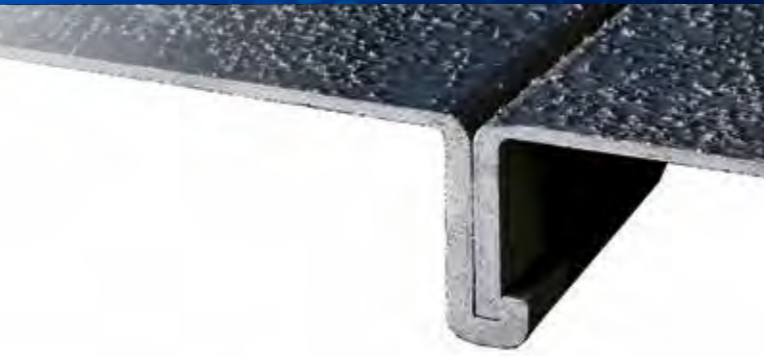


#### Confidential Client Installation

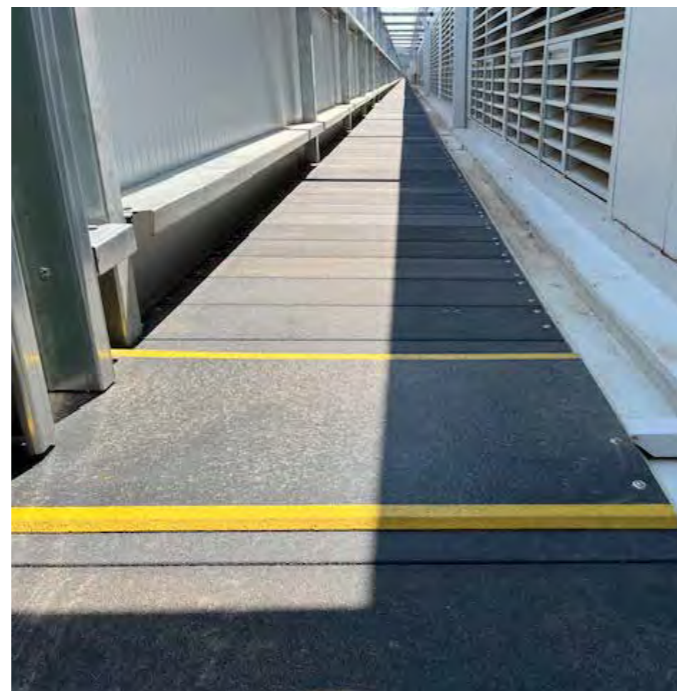
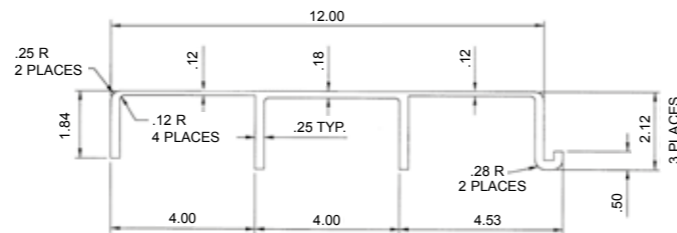
1,200 ft Dynadeck® installed for rooftop access walkway including yellowing nosing expansion joints.



Fibergrate's Dynadeck interlocking flooring provides a unique combination of easy transportation, installation, durability and long, low maintenance life for data center construction. Designed to be installed over three times faster than conventional flooring, with sections easily snapping together, Dynadeck efficiently speeds up your project timeline. Optional, silica sand grit surface for increased slip resistance and ADA vented surface are also available.



### Standard Smooth Solid Details



# PRODUCT SPOTLIGHT

## SOUNDSCAPE®

### Asset Concealment & Noise Reduction



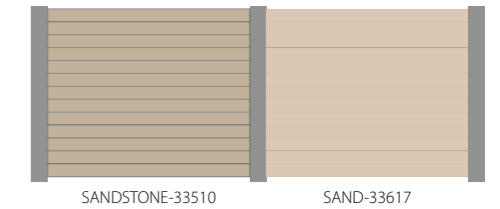
Soundscape is a high-performance solution for both **asset concealment** and **noise reduction**. Engineered with a modern, shiplap-inspired design, it seamlessly integrates into contemporary and industrial settings. This barrier wall system features interlocking planks available in both **reflective and absorptive** options to meet specific acoustic requirements. Multiple standard color options are available, allowing for patterns that can match or complement different environments.

#### Interlockable Plank Design

- Tongue and groove planks connect to concrete, steel, wood or FRP
- Reflective Plank STC 31
- Absorptive Plank NRC 1.0

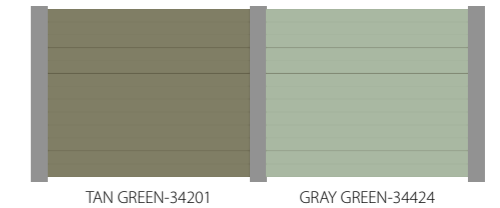
Designed for maximum versatility, the planks can span up to 14 feet between supports for typical applications providing architects and contractors with an aesthetically pleasing solution for concealing critical assets while mitigating noise.

### Stackable Colors LIMITLESS PATTERNS



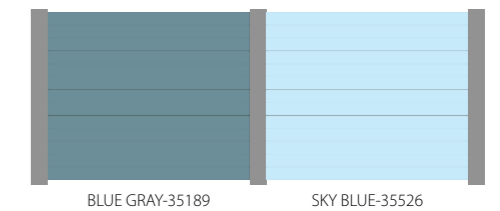
SANDSTONE-33510

SAND-33617



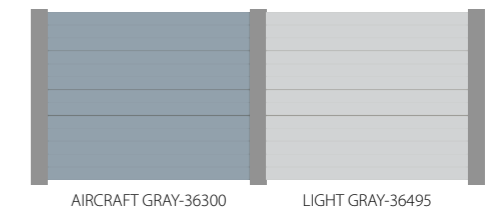
TAN GREEN-34201

GRAY GREEN-34424



BLUE GRAY-35189

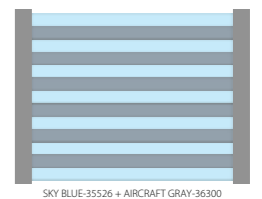
SKY BLUE-35526



AIRCRAFT GRAY-36300

LIGHT GRAY-36495

Mix complementary colors to create bespoke patterns or request custom colors for unique project requirements.



SKY BLUE-35526 + AIRCRAFT GRAY-36300

# SAFE - T- SPAN PEDESTRIAN GRATING

Pultruded Grating for Trenching, Walkways and Access Platforms

## SAFE-T-SPAN Pedestrian Grating

- Trenching
- Walkways
- Access Platforms

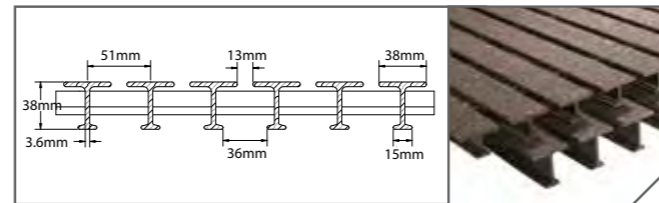
Tailored for the rigid demands of data centre flooring, Fibergrate's Safe-T-Span pultruded grating provides an optimal solution where a blend of flexibility, resiliency, scalability, and lightweight construction is imperative. Available in various depths, configurations and panel sizes, Safe-T-Span grating can be pieced together to provide diverse data centre layouts.

The 1-1/2" deep T2515 variant is engineered for high-traffic pedestrian areas, offering robust support under heavy footfall; the grating boasts very high strength and stiffness, making it suitable for the typical trench widths within data centre environments.



### 38mm Deep T2515 (ADA Compliant)

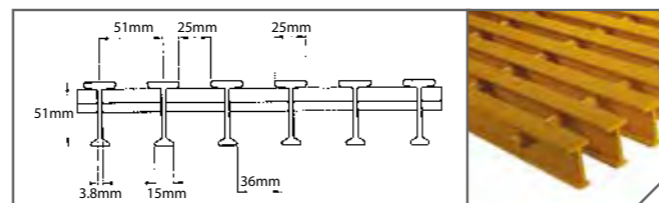
# of Bars/ m of Width	Load Bar Depth	Open Area	Load Bar Centres	Approximate Weight
20	38mm	25%	51mm	14 kg/m <sup>2</sup>



Section Properties per m of Width: A=5.78x10<sup>3</sup> mm<sup>2</sup> I=1.09x10<sup>6</sup> mm<sup>4</sup> St=7.90x10<sup>4</sup> mm<sup>3</sup> Sb=4.46x10<sup>4</sup> IN<sup>3</sup>  
Average E = 35.59 GPa (SPAN ≥ 600mm)

### 51mm Deep T5020

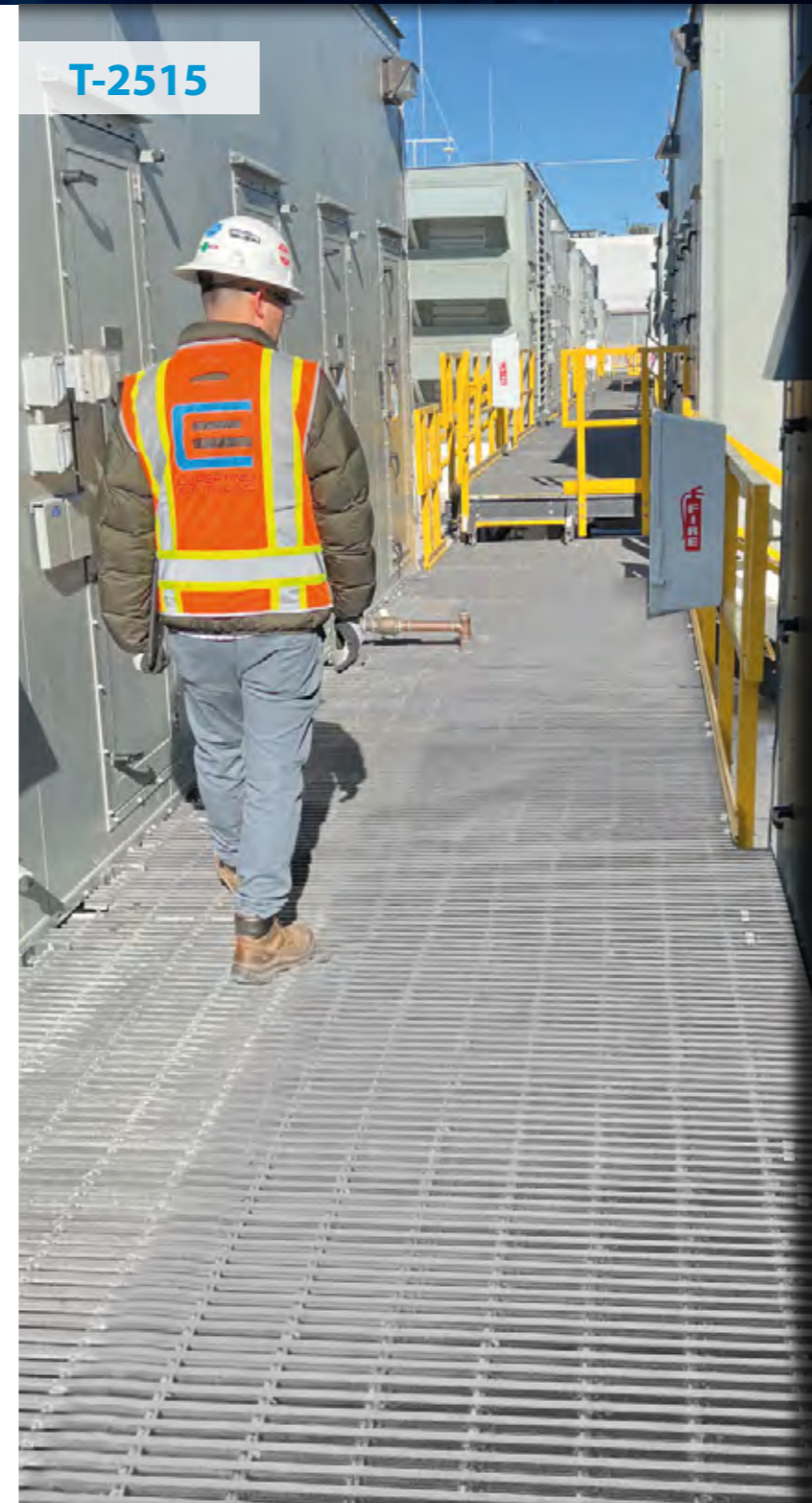
# of Bars/ m of Width	Load Bar Depth	Open Area	Load Bar Centres	Approximate Weight
20	51 mm	50%	51 mm	10.3 kg/m <sup>2</sup>



Section Properties per m of Width: A=6.8x10<sup>3</sup> mm<sup>2</sup> I=2.3x10<sup>6</sup> mm<sup>4</sup> St=1.1x10<sup>5</sup> mm<sup>3</sup> Sb=7.9x10<sup>4</sup> mm<sup>3</sup>  
Average E = 31.19 GPa (SPAN ≥ 600mm)

- High Strength Grating With Unmatched Corrosion Resistance
- Anti-Slip Surface For Increased Grip In High Traffic Areas
- Light Weight & Decreased Labour For Installation Or Future Access
- Multiple Levels & Coatings To Meet Any Facility Needs

### T-2515



### T-2515



### T-5020





## Fibergrate® Moulded Grating

Fibergrate® moulded gratings are designed to provide the ultimate in reliable performance, even in the most demanding conditions. Fibergrate offers the widest selection in the market with multiple resins and more than twenty grating configurations available in many panel sizes and surfaces.



## Safe-T-Span® Pultruded Industrial & Pedestrian Gratings

Combining corrosion resistance, long-life and low maintenance, Safe-T-Span® provides unidirectional strength for industrial and pedestrian pultruded grating applications.



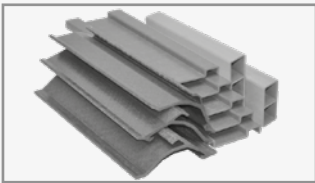
## Dynaform® Structural Shapes

Fibergrate offers a wide range of standard Dynaform® pultruded structural profiles for industrial and commercial use, including I-beams, wide flange beams, round and square tubes, bars, rods, channels, leg angles and plate.



## Dynarail® & DynaRound® Guardrail, Handrail & Ladder

Easily assembled from durable components or engineered and prefabricated to your specifications, Dynarail square tube and DynaRound round tube railing systems and Dynarail safety ladder systems meet or exceed OSHA and strict building code requirements for safety and design.



## Custom Composite Solutions

Combining Fibergrate's design, manufacturing and fabrication services allows Fibergrate to offer custom composite solutions to meet our client's specific requirements. Either through unique pultruded profiles or custom open moulding, Fibergrate can help bring your vision to reality.



## Design & Fabrication Services

Combining engineering expertise with an understanding of fibreglass applications, Fibergrate provides turnkey design and fabrication of fibreglass structures, including platforms, catwalks, stairways, railings and equipment support structures.



## Worldwide Sales & Distribution Network

Whether a customer requires a platform in a mine in South Africa to grating on an oil rig in the North Sea, or walkways in a Wisconsin cheese plant to railings at a water treatment facility in Brazil; Fibergrate has sales and service locations throughout the world to meet the needs and exceed the expectations of any customer.