

# PROtrough Cable Troughing

The flame-retardant,  
non-cementitious trough



# Innovative and Sustainable Infrastructure Solutions



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### Cubis Systems redefines network access for modern infrastructure.

A sustainable manufacturing leader, we specialise in composite solutions for underground utilities. Our product portfolio includes network access chambers, covers, cable protection systems, and a range of construction accessories.

Importantly, these solutions are modular, scalable, and lightweight. All of which means that they can be built on-site with speed and ease.

With significant – and measurable – benefits across sustainability, safety, and resource-savings, our solutions are designed to tackle your infrastructure challenges head-on.

## Made in Britain

PROtrough's "Made in Britain" logo confirms you're getting a piece of craftsmanship made in one of our five GB or Northern Ireland manufacturing facilities, meaning:

- Reduced transport emissions
- Faster delivery to site
- Support for local jobs and skills
- Lower embodied carbon
- Compliance with UK safety & quality laws

### Sectors we serve



Offering lightweight, fire-retardant cable management that simplifies safety and compliance across rail infrastructure installations.



Eliminating heat distortion issues, allowing multi-service cabling, and giving lightweight, modular installation for complex energy sites.



Providing high-capacity cable protection for substations, with safe, space-efficient installations that require minimal handling



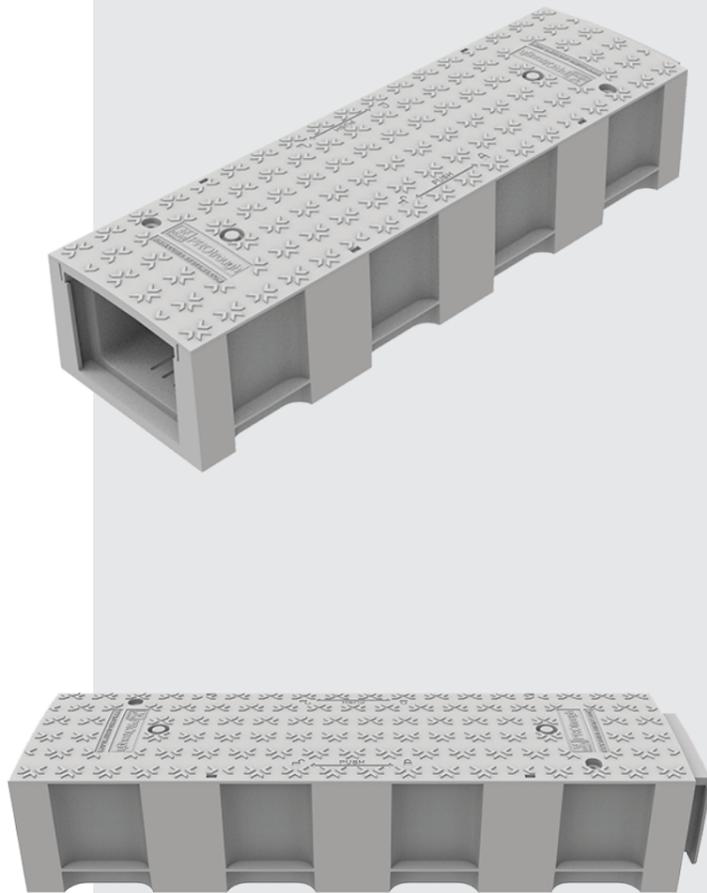
# PROtrough

The industry's go-to flame-retardant, non-cementitious trough.

Our innovative cable trough system offers a modern, sustainable alternative to traditional concrete trough systems.

**Fast fact comparison:**

- Standard trough dimensions suited to most cable runs
- Clip-fit cover with secure, simple placement
- Cable management only



# Key Benefits



**Most flame-retardant non-cementitious trough in the UK.** Tested to meet the highest fire safety standards.



**No distortion or buckling with temperature changes.** Engineered for stability in extreme conditions.



**Heavy-duty range for slow-moving traffic.** Designed for strength in high-impact areas.



**Lightweight, modular, and high-strength.** 5x lighter than concrete, with full structural integrity.



**Greener and easier to get materials to site.** Light, flat-packed, and putting fewer lorries on the road.



**An integrated approach for smoother projects.** Works seamlessly with the Cubis Systems range.



**Delivers safer, faster, and more flexible projects.** Easy manual handling plus quick modular assembly.



**Trusted in projects around the world.** Specified for its field-proven performance and installation advantages.

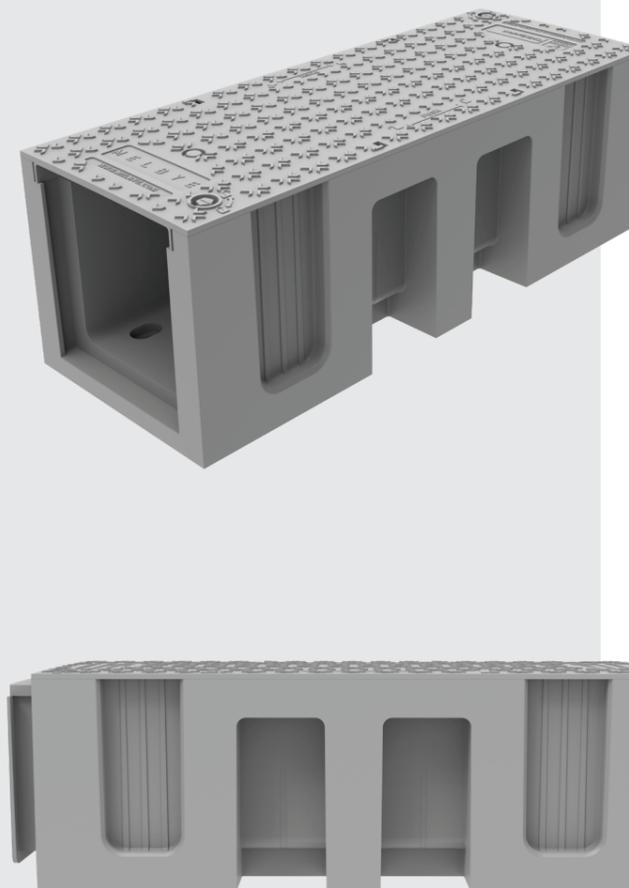
# PROtrough 350

A new iteration offering increased internal capacity for larger projects.

Also features an integrated walkway configuration for dual functionality, plus secure turnkey locking.

**Fast fact comparison:**

- Larger profile for increased cable capacity
- Enhanced locking system for added security and stability
- Flat-sided design allows units to be laid side-by-side, forming an integrated walkway



# How it works

**PROtrough is a highly durable protection system that easily resolves engineering challenges for cable laying.**

## One-click connections

Simple slide and drop male to female connectivity with a unique one-click interlocking cover and sliding mechanism

## Handy grappling points

Multi-point handle grips provide easy grab positions for installers, making manual handling simpler

## Longer installed life

Glass Reinforced Polyester Resin (GRP) outperforms traditional construction methods for chemical resistance during its buried life

## Optional divider panels

Enabling installers to contain multiple services all running alongside one another

## Protected against velocity

Robust linear ballast anchor points ensure your installed units aren't displaced by the velocity of passing trains or vehicles

## Rib design for vertical loading

Designed with optimum sidewall strength performance, meaning minimal flex when back-filled and strength that meets the vertical load class of A15 set by EN124

## Backfill ingress protection

The uniquely designed cover ensures no material ingress when access is required

## Integrated Panduit cable ties

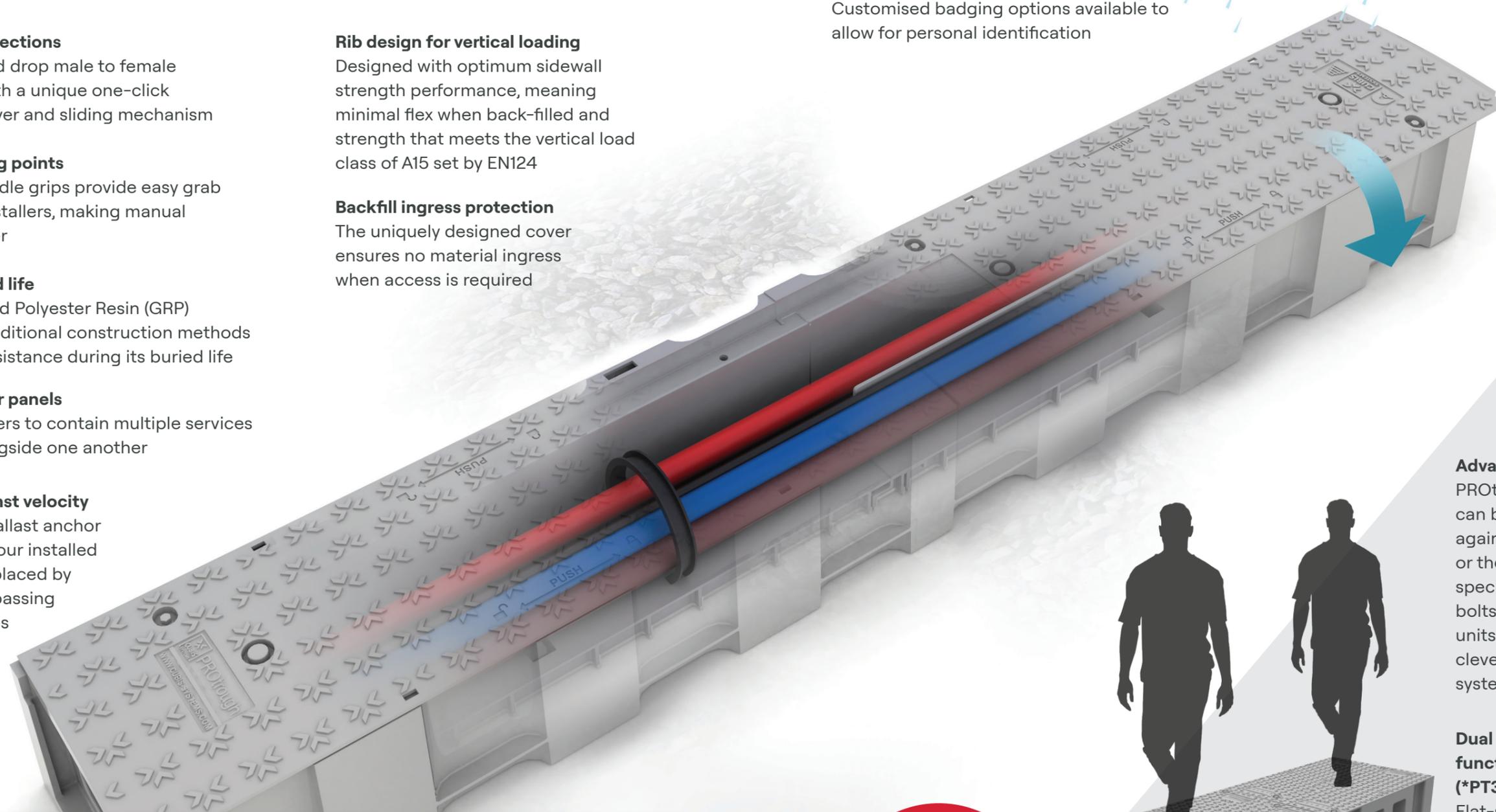
Offering convenient cable management and extra security of cables within units

## Weather-resistance

Our distinctive tread pattern increases water run-off and resists ice build-up, while moulded slots within the base allow for drainage

## Configurable customer branding options

Customised badging options available to allow for personal identification



## Advanced security

PROtrough units can be secured against vandalism or theft with specialist security bolts, while PT350 units come with a clever turnkey lock system

## Dual walkway functionality (\*PT350)

Flat-sided design means multiple units can be placed side by side to create a stable, durable walkway that enhances accessibility and safety

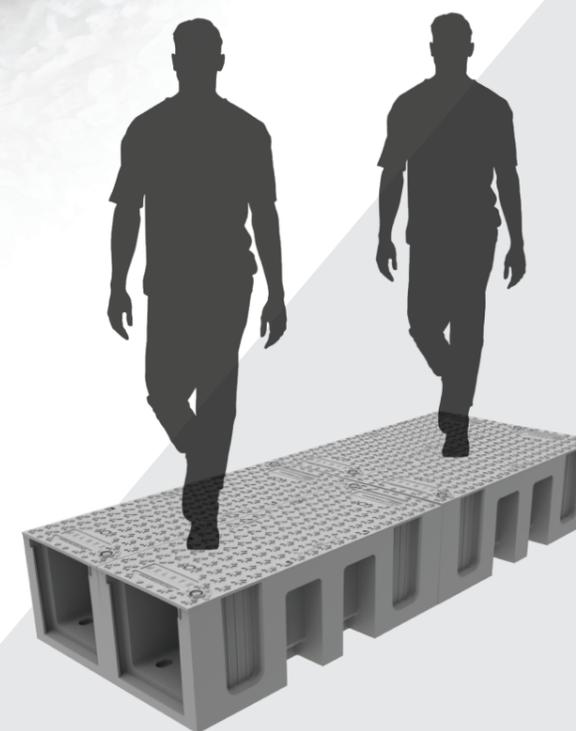
## Smooth Internal Walls

PROtrough's unique smooth internal walls allow for easier cable pulling, improved water drainage, and superior cable protection with no sharp edges.

## Fire Retardant

PROtrough is a GRP cable management trough that has been designed to comply with all European fire retardant specifications, including those for tunnels and stations.

Contact us for technical project support, BIM library and design guidance, and installation info.



# Accessories

The PROtrough cable protection system's flexible accessory range makes it easy to navigate tight turns, changes in elevation, and site obstacles. So, you can ensure a faster, safer installation and a seamless fit for even the most complex routes.

## 200m Adaptors

Unique adaptor system enabling male to male or female to female connection, with the added flexibility to easily install unit sections in the opposite direction.

Available for: PROtrough

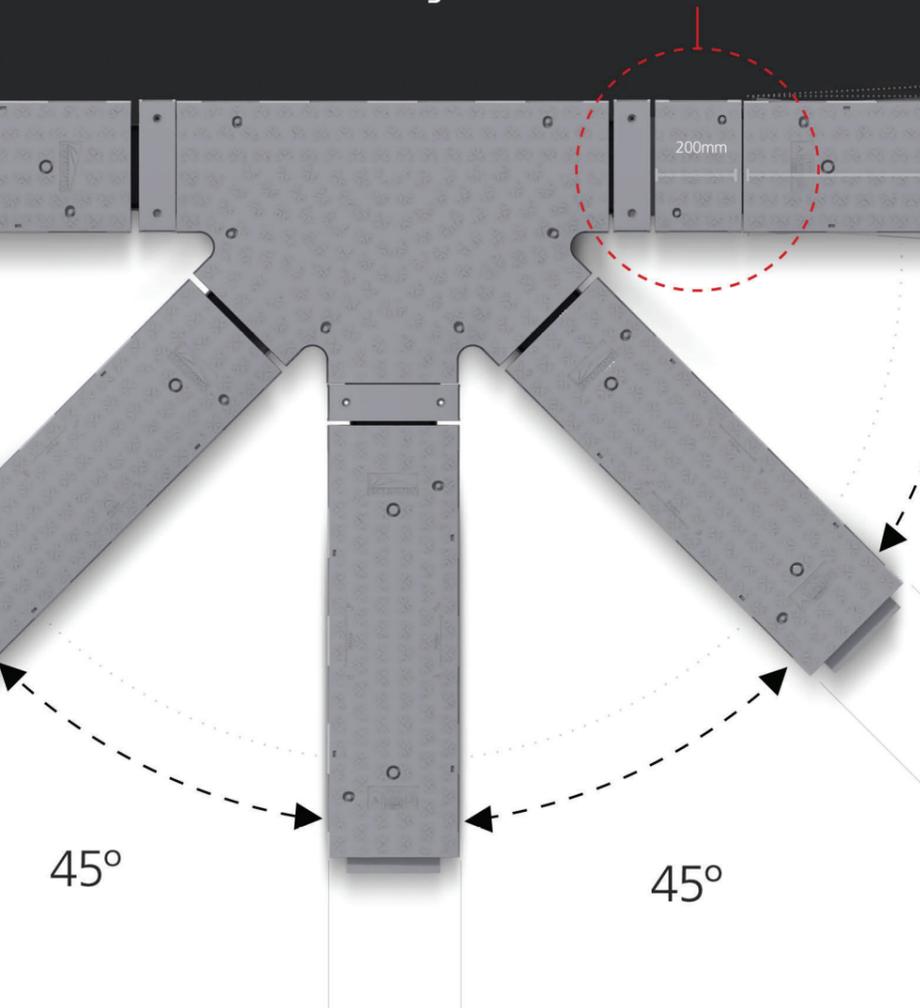
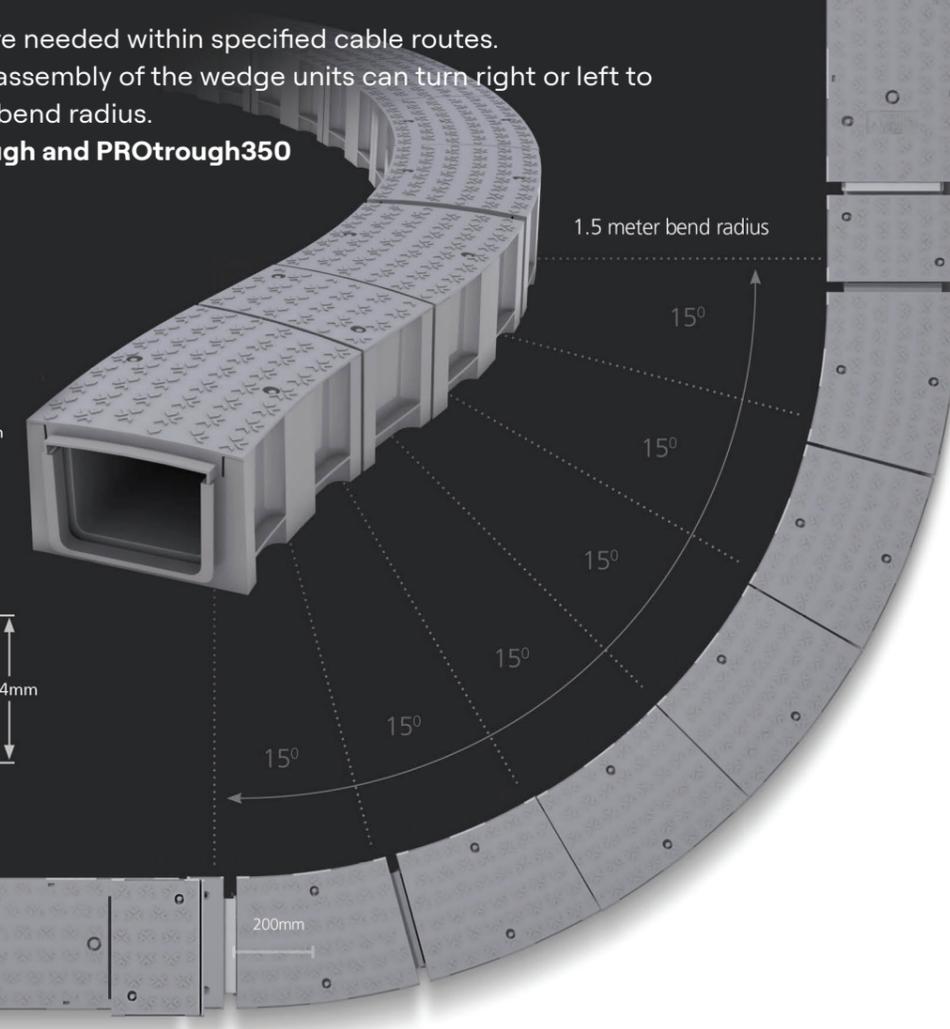
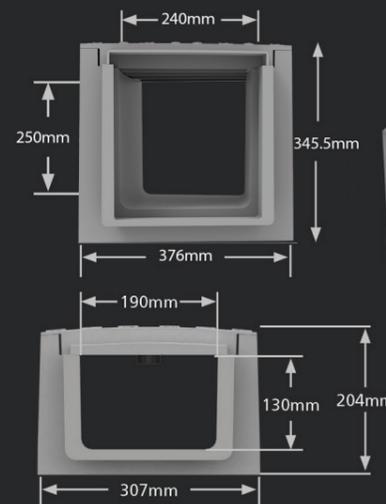


**3 degrees of flexibility**  
The PROtrough range consists of connectable meter-long units that allow for 3° rotation in the unit – following natural track curvatures.

## Wedges

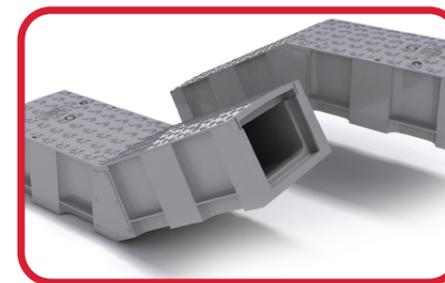
Assists in any curvature needed within specified cable routes. The unique one-click assembly of the wedge units can turn right or left to accommodate a 1.5m bend radius.

Available for: PROtrough and PROtrough350



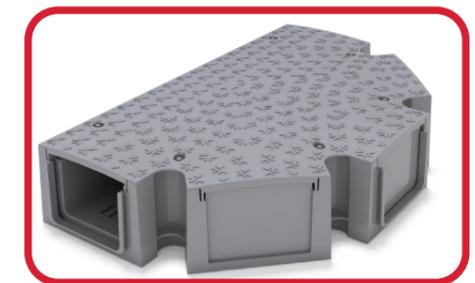
**Elevated troughing system**  
Ideally used for sloped and uneven ground embankments. Unique steel tray design with additional handrail options available.

Available on request



**30° Elevation Connection System**  
Designed to deal with abrupt changes in elevation. (Such as on-site obstacles, embankment installs, and surface-level connections to elevated troughing.)

Available for: PROtrough



**5 Way Junction Box**  
A first within the troughing market. Our unique junction box brings flexibility and adjustability, allowing a 5-way inlet and outlet to cable routes to suit customer needs.

Available for: PROtrough

# PROtrough by numbers

## PROtrough and PROtrough 350

|                 | PROtrough | PROtrough 350 |
|-----------------|-----------|---------------|
| Internal Width  | 190mm     | 240mm         |
| External Length | 1036mm    | 1053mm        |
| External Width  | 376mm     | 376mm         |
| Weight          | 17.7kg    | 23.35kg       |
| External Depth  | 204mm     | 345.5mm       |
| Internal Depth  | 130mm     | 250mm         |

## PROtrough Vs Concrete Trough

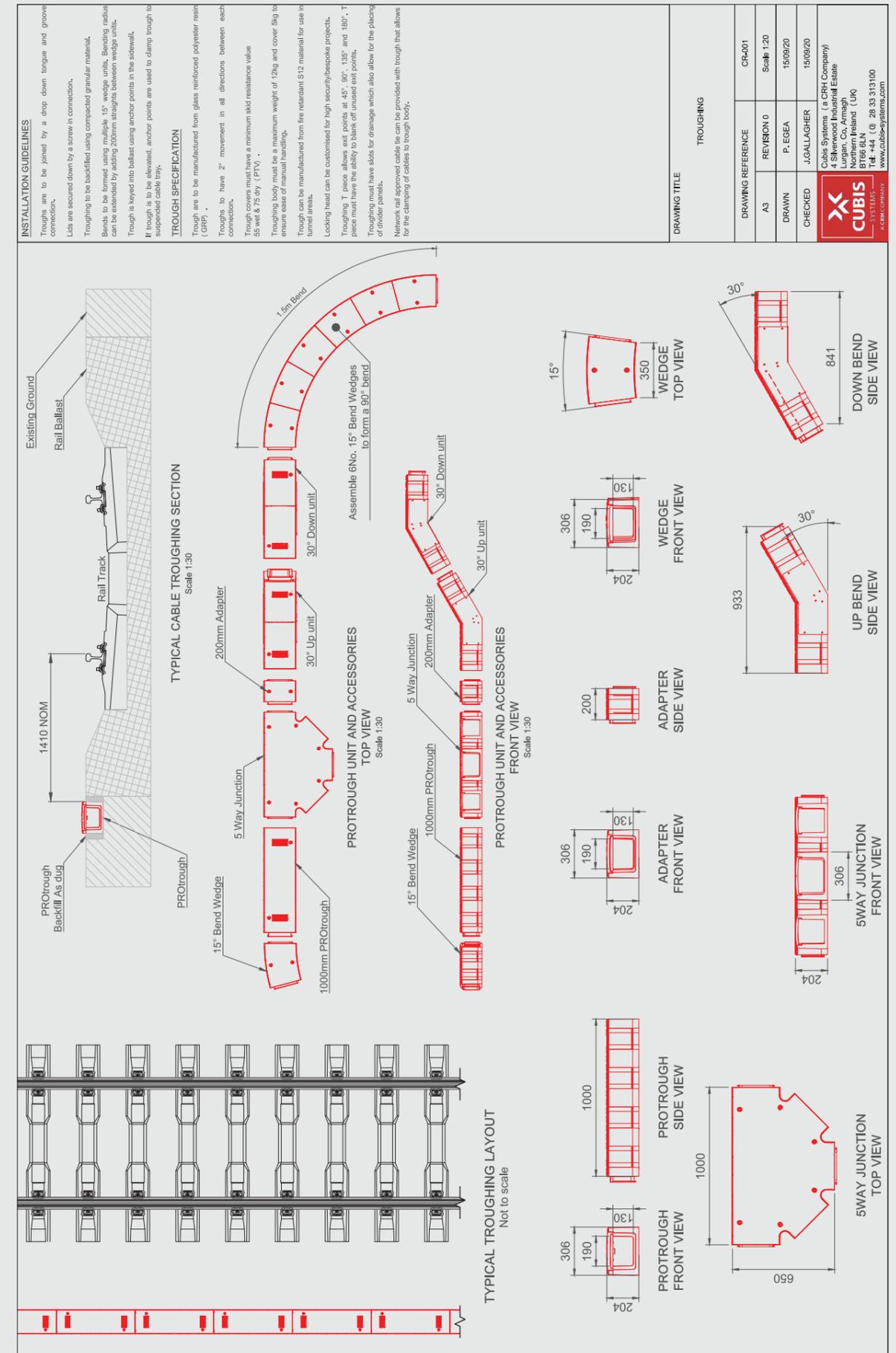
|          | PROtrough | Concrete Trough |
|----------|-----------|-----------------|
| Body     | 13kg      | 54kg            |
| Cover    | 5kg       | 34kg            |
| Combined | 18kg      | 88kg            |

## PROtrough350 Vs Concrete Trough

|          | PROtrough 350 | Concrete Trough |
|----------|---------------|-----------------|
| Body     | 18.17kg       | 72kg            |
| Cover    | 5.18kg        | 70kg            |
| Combined | 23.35kg       | 142kg           |

Our integrated systems approach means Cubis products are interoperable. For example, PROtrough enhances the access and cable management aspects of your project through seamless integration with:

| STAKKAbOX™ access chamber products | Cable protection products |
|------------------------------------|---------------------------|
| ULTIMA                             | MULTIduct™                |
| ULTIMA Connect                     |                           |
| MODULA                             |                           |



# Seamless specification

We're proud to be the only manufacturer in our space offering a free BIM tool. Using the BIM configurator doesn't just help you design smarter with our 3D models. It can also deliver you significant, and fully measurable, savings.

## Features & Benefits:

-  Easily drop our 3D product models into your designs
-  Identify and resolve design conflicts early-on, saving time and resources
-  Access precise data for better budget planning and analysis
-  Download our CAD files in any number of formats
-  Customise your project specs for fast calculations and data validations
-  Work with our experts for custom sizes, quotes, and bespoke support
-  Deliver projects that are smarter, safer, and more sustainable
-  Ensure material optimisation and faster installation

One Cubis rail customer was able to achieve a **75% reduction in CO2 emissions** (282 tonnes) and use 30% fewer chambers using our **BIM-powered redesign**. In the process, they also saved **£235,000**.



## Project spotlight



**Location:** Sweden

**Solution:** PROtrough

**Highlight:** Specified to protect bridge cables – with lightweight, flame-retardant design enabling safe installation across the structure.



**Location:** UK

**Solution:** PROtrough

**Highlight:** Used along a rail lineside project to provide secure cable protection – all while enabling minimal disruption to live operations.



**Location:** Northern Ireland

**Solution:** PROtrough

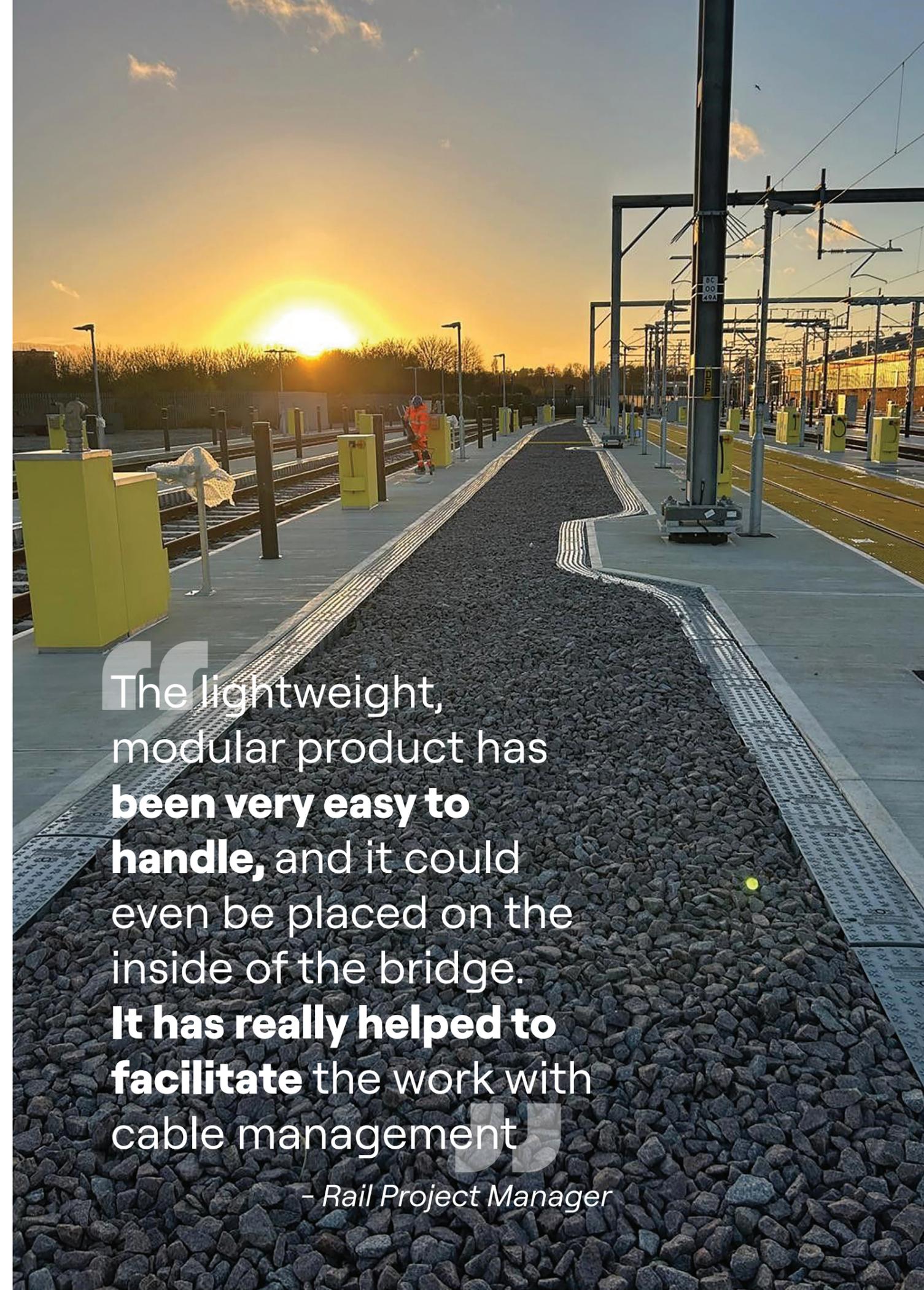
**Highlight:** Underpinned an 840m infrastructure upgrade, providing critical cabling with lasting protection against environmental and mechanical stresses.



**Location:** Luxembourg

**Solution:** PROtrough 350

**Highlight:** Provided high-capacity but sustainable cable management – helping the client achieve their decarbonisation agenda.



The lightweight, modular product has **been very easy to handle**, and it could even be placed on the inside of the bridge. **It has really helped to facilitate** the work with cable management

– Rail Project Manager



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## Driven by *Innovation*

Cubis is Europe's leading manufacturer of network access chamber and ducting systems, used in the construction of infrastructure networks for rail, telecoms, water, construction and power markets.

Cubis has developed an innovative approach in an old-fashioned industry. This has been achieved by developing quality products which replace traditional construction materials, like bricks and concrete, with lightweight plastics incorporating intelligent design features. These can then be installed faster and ultimately save our customers both time and money.

Cubis manufactures preformed network access chamber systems STAKKAbOX™, AX-S™ access covers, MULTIduct™ multiple duct system and RAILduct™ cable trough at its manufacturing sites throughout the UK and Ireland these products are exported to more than 25 countries throughout the World.

At Cubis we pride ourselves on delivering technical customer support, new innovation, product quality and the highest levels of customer satisfaction.