

# Ridgeline

Flexible stainless steel tubing  
for all plumbing installations





Ridgeline

Ridgeline

# Introducing Ridgeline

Ridgeline™ is a fast, truly versatile and cost-effective system for all water installations.

Built on decades of manufacturing expertise, Ridgeline delivers superior performance that sets new standards in UK plumbing. Our innovative system combines speed, reliability, and sustainability.

Transform your installations with:

- Up to 3x faster installation
- Significantly fewer potential leak points
- Industry-leading sustainability
- Universal compatibility

Choose Ridgeline for quicker installs, fewer potential leak points, and a sustainable future.





28 - WRAS and KIWA Res

# Key Benefits at a Glance

## Faster Installation with Confidence

Install Ridgeline™ up to 3x faster than PEX, with our guaranteed kink-resistant design. The exceptional flexibility allows you to create bends tighter than 90 degrees with minimal effort, ensuring fast, confident installations every time.

## Smart Economics

Ridgeline™ delivers premium performance while reducing total system costs. By eliminating the need for most fittings, dramatically cutting installation time, and removing potential leak points, Ridgeline™ provides exceptional value compared to both PEX and copper systems. Each fitting removed saves not just on material costs, but also on labour time and future maintenance risk.



## **Universal Compatibility**

Ridgeline™ fittings seamlessly integrate with standard EN1254 compression fitting bodies and nuts through our patent-pending RidgeLock™ sealing technology. By simply replacing the traditional olive with our engineered sealing ring, you transform standard compression fittings into superior mechanical connections. This universal compatibility means installers can source fittings through existing merchant supply chains with no need for special parts or tools.

## **Reduce Potential Leak Points from Behind the Wall**

Ridgeline allows for long continuous runs without the need for joints, fittings, or elbows in concealed or hard-to-reach areas. This feature eliminates potential leak points, providing greater reliability and peace of mind during and after installation.



# Key Benefits at a Glance

## **Sustainably Manufactured**

Ridgeline™ sets new environmental standards with a minimum of 80% recycled marine-grade stainless steel. Our commitment to sustainability extends from materials to manufacturing, creating a truly forward-thinking solution.

## **Stainless Steel for Cleaner Water**

Ridgeline™'s stainless steel construction ensures exceptional water quality with water exposure to plastic being eliminated.

## **Low Carbon Footprint**

During the manufacturing process, Ridgeline tubing has significantly lower embodied carbon per metre compared to copper or PEX, reducing the environmental impact of plumbing installations.

## **No Hot Works**

Eliminate fire risks, reduce downtime and simplify compliance.



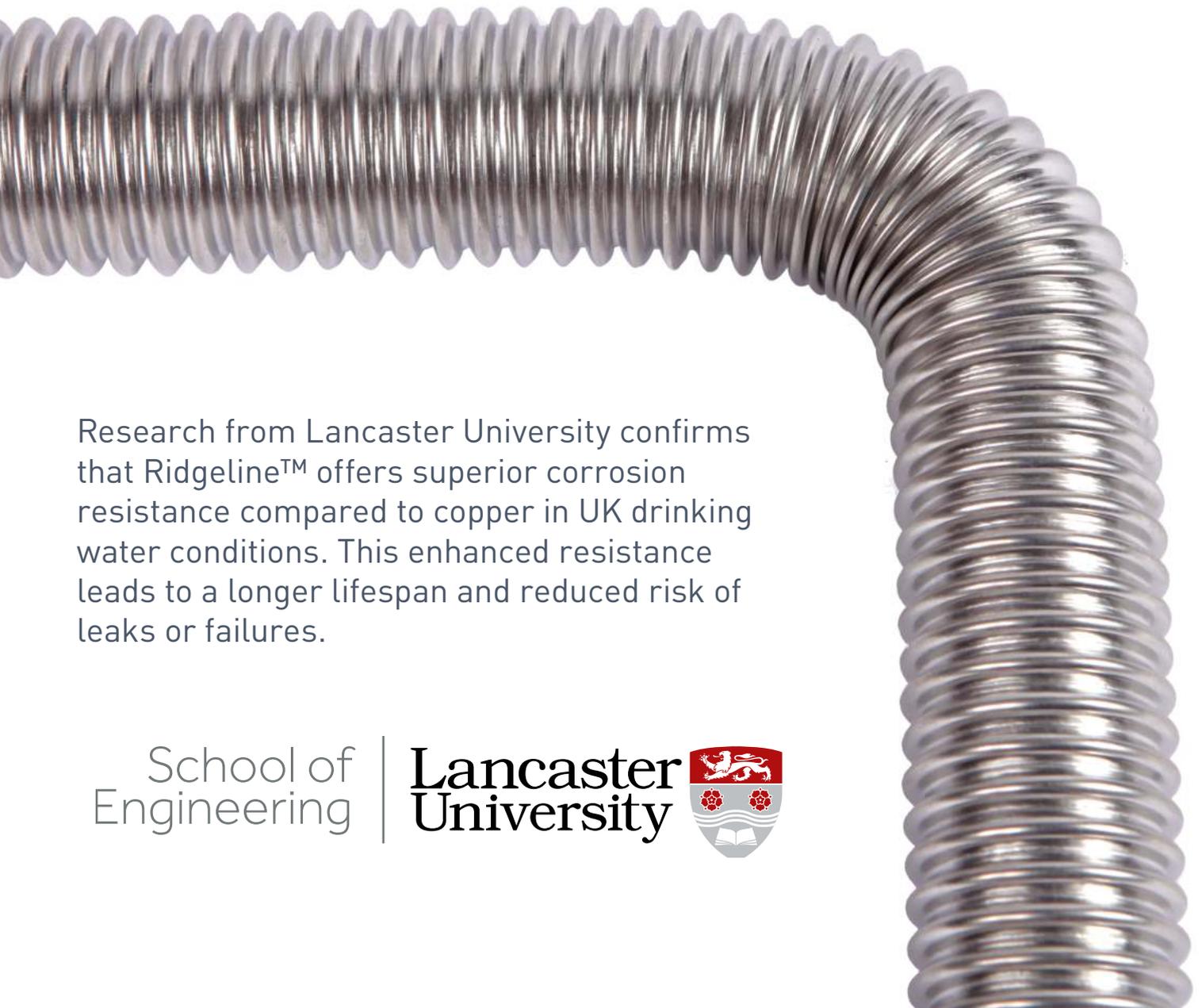




The corrugations allow for flexibility without sacrificing on strength, compressing together on the inside edge and slightly expanding on the outside edge to easily create any angle required.

# What is Flexible Steel Piping?

Ridgeline™ is made from stainless steel sheet, shaped into corrugations that bends effortlessly by hand while retaining the strength and durability of rigid steel or copper. This design provides the strength of rigid copper with significantly less material per metre, making it efficient and practical.



Research from Lancaster University confirms that Ridgeline™ offers superior corrosion resistance compared to copper in UK drinking water conditions. This enhanced resistance leads to a longer lifespan and reduced risk of leaks or failures.

School of  
Engineering

**Lancaster  
University**



# Point-to-Point Plumbing Perfected

## Speed Through Complexity

Route Ridgeline™ through the most challenging spaces with ease. Even our largest diameter tubes thread through tight spaces as effortlessly as electrical cable, transforming complex installations into simple point-to-point runs.

## Time-Saving Technology

Eliminate time-consuming workarounds and complex fitting arrangements. Ridgeline™'s exceptional flexibility means you can create direct routes from source to outlet, significantly reducing installation time and complexity.

## See It In Action

Scan the QR code to watch our installation race videos and discover just how fast Ridgeline™ can be installed compared to traditional systems.





Ridgeline



# Impossible to Kink

## Engineered for Confidence

### **Unmatched Flexibility**

Ridgeline™'s corrugated design delivers exceptional flexibility while being completely kink-proof. This unique combination lets installers work faster and with total confidence, even in the most challenging spaces.

### **Maximum Efficiency**

Available in lengths up to 500m, Ridgeline™'s lightweight yet robust construction revolutionises on-site handling. Cut exact lengths from the spool, eliminate wastage, and create long, continuous runs without joints.

### **Superior By Design**

While traditional systems risk kinking under pressure, Ridgeline™'s engineered corrugations ensure consistent performance in every installation. No kinks means no delays, no waste, and no callbacks.

### **Lightweight & Metre-Marked for Efficiency**

Ridgeline™ is ultra-lightweight, making it easy to handle and move around site. With precise metre markings along its length, measuring and cutting is faster and more accurate—saving time and reducing waste.

# **Eliminate fittings from behind the wall**

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**Which would you rather  
drink from every day?**



Stainless steel is the go-to option when hygienic, clean water is needed most.

No leaching of chemicals or VOC's. No shedding of micro and nano plastics.

**Just clean water.**

**Ridgeline**

100% 316L stainless steel



# Ridgeline

Fewer Fittings - Faster Installs

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## **2 unique connection methods**

1. RidgeLock™
2. RidgeLock™ P1



11-840

wFlex®

# **RidgeLock™: Patent-pending compatibility with any EN 1254 compression fitting**

Ridgeline is designed to work seamlessly with standard EN 1254 fittings, maximising compatibility and simplifying the supply chain for both installers and merchants. By utilising standard EN 1254 fitting bodies and nuts, Ridgeline maintains full compatibility with widely available copper compression fittings, ensuring that no specialised parts are required.



Ridgeline





## **The Key Innovation: RidgeLock™ Sealing Ring**

Traditional olives rely on compression alone and can fail under pipe movement. The RidgeLock™ sealing ring takes a fundamentally different approach, using engineered teeth that mechanically interlock with Ridgeline™'s corrugations.

This positive mechanical connection maintains its integrity even under bending forces, creating a robust, reliable seal that's ideal for concealed installations where long-term reliability is essential.



Ridgeline

# RidgeLock™ - Key Benefits

## **For Installers:**

Ridgeline fittings are engineered for simplicity and reliability. With RidgeLock™, simply replace the traditional olive in an EN1254 copper compression fitting with our sealing ring to convert it into a RidgeLock fitting. This straightforward adaptation allows you to work with components readily available on-site, reducing the time spent sourcing specific parts. The RidgeLock's positive mechanical lock ensures a secure, leak-free connection, providing confidence even in concealed installations.

## **For Merchants:**

Ridgeline fittings offer a practical way to enhance your existing inventory without over-complicating stock management. By adding RidgeLock™ sealing rings to your EN1254 fittings, you can provide a premium, upgraded fitting solution without the need to introduce a new product line. RidgeLock's compatibility with EN1254 fitting bodies means that merchants can easily provide a superior solution to installers, ensuring consistent availability and supporting a simplified supply chain.





**Riddell**

# RidgeLock™ FAQ

## **How do RidgeLock™ fittings work?**

RidgeLock™ creates a positive mechanical lock by combining standard EN1254 fitting components with our engineered sealing ring. The sealing ring's teeth mechanically interlock with the tube's corrugations, creating a robust, reliable seal that maintains its integrity even when subjected to bending forces.

## **Is a RidgeLock™ fitting a copper compression fitting?**

No. While RidgeLock™ fittings utilise the nut and body from EN1254 fittings, the similarity ends there. Once the copper olive is replaced with our RidgeLock™ sealing ring, it becomes a fundamentally different connection system utilising a mechanical interlock rather than compression.

## **Can I purchase complete RidgeLock™ fittings?**

Yes! Complete fittings are available in sealed bags containing the EN1254 fitting body, hex nut, and pre-installed RidgeLock™ sealing ring through standard merchant supply chains.

Alternatively, you can convert any EN1254 fitting by removing the copper olive and replacing it with our RidgeLock™ sealing ring.

## **Can RidgeLock™ fittings be placed in concealed spaces?**

Like all plumbing fittings, installation should follow Water Regulations guidance regarding concealed locations. While RidgeLock's™ positive mechanical lock provides additional security, best practice remains to minimize concealed fittings where possible through good system design. Ridgeline's flexibility often helps eliminate the need for concealed fittings entirely.

## **Why use a system compatible with EN1254 fittings?**

- Access to the vast range of fittings already stocked by merchants
- Universal compatibility with valves, handles and other common components
- Simplified stock-holding for merchants
- Easy integration with existing installations
- Perfect for emergency repairs and replacements



22 mm

FN1054-2

FLOWTECH UK

Rico

# RidgeLock P1™ Fittings

RidgeLock™ P1 employs the same core sealing technology as standard RidgeLock™ fittings, using our engineered sealing ring to create a positive mechanical lock with the tube's corrugations. The key difference is the permanent connection method - instead of a mechanical nut, P1 uses a sliding sleeve system that, once installed, creates a permanent, tamper-proof connection.







# RidgeLock P1™ Fittings FAQ

## **What's the difference between RidgeLock™ and RidgeLock™ P1?**

Both use identical sealing technology but differ in their connection method:

- Standard RidgeLock™: Mechanical nut can be disassembled if needed
- RidgeLock™ P1: Sliding sleeve creates permanent, non-removable connection

## **When should I specify RidgeLock™ P1?**

Choose P1 when:

- Installation requires permanent connections
- System specifications call for non-removable fittings
- Additional tamper-proofing is desired

## **What tools are required for P1 installation?**

Installation requires the dedicated RidgeLock™ P1 sliding tool. No other specialist tools needed.

## **Can RidgeLock™ P1 fittings be disassembled after installation?**

No. Once the sleeve is properly positioned and locked, the connection is permanent and cannot be undone.

## **Can RidgeLock™ fittings be placed in concealed spaces?**

All fitting types can be placed in concealed spaces, however many installers prefer using fittings that have a permanent connection when being placed in a concealed area or “behind a wall”.

**1/6 carbon footprint of copper**

**1/2 carbon footprint of PEX**

**Made from 80%+ recycled 316L**

Ridgeline™ tube is manufactured using a minimum of 80% recycled marine-grade 316L stainless steel. We are actively working to increase our recycled content above 90% as part of our commitment to sustainability. This process is being independently verified through the UL 2809 recycled content validation scheme.



**stainless steel**



# A focus on sustainability:

## The Ridgeline carbon story:



Ridgeline™ is made from >80% recycled stainless steel.

The recycled material is formed into new stainless steel strip using a state of the art arcing furnace which is a low carbon method of manufacturing stainless steel.



The stainless steel strip is then manufactured into our Ridgeline™ tube at our facility which relies heavily on solar power.

Shipping is generally a low carbon activity however, as Ridgeline™ is so lightweight, over 70,000m can be loaded in just one container making it even more efficient.



Ridgeline™ is cut and packaged in the UK using renewable materials like wooden spools and cardboard boxes. We attempt to reduce plastic usage to an absolute minimum.



Ridgeline™ uses significantly less material per m vs. copper or PEX. This contributes significantly to reducing our carbon footprint per metre.

At the end of life stage, Ridgeline™ is 100% fully recyclable, which is not possible with PEX tubing.



Ridgeline™ greenhouse gas emissions (GHG) are currently being audited and certified by Ernst and Young.

Ridgeline™ supply chain is currently being audited by Underwriters Laboratories to verify percentage recycled content



# Less material per metre of tube

=

# Less greenhouse gas emissions

It's a simple formula!

The manufacture of Ridgeline yields less emissions of CO<sub>2</sub>e compared to PEX and Copper (per tonne of manufactured goods), however due to the reduced amount of material needed per metre, the CO<sub>2</sub> savings are significantly multiplied.

Size	Product	mt CO <sub>2</sub> e per tonne manufactured	Weight per metre of tube
15mm	Ridgeline™	1.92 mt CO <sub>2</sub> e	75 g
	PEX	3.50 mt CO <sub>2</sub> e	90 g
	Copper Tube	3.37 mt CO <sub>2</sub> e	266 g
22mm	Ridgeline™	1.92 mt CO <sub>2</sub> e	140 g
	PEX	3.50 mt CO <sub>2</sub> e	160 g
	Copper Tube	3.37 mt CO <sub>2</sub> e	505 g
28mm	Ridgeline™	1.92 mt CO <sub>2</sub> e	190 g
	PEX	3.50 mt CO <sub>2</sub> e	260 g
	Copper Tube	3.37 mt CO <sub>2</sub> e	900 g

\*CO<sub>2</sub> per kg of copper is sourced from published data from the Copper Development Association (copper.org). Weights are estimates, and will vary by manufacturer.

\*CO<sub>2</sub> per kg of PEX is an estimate sourced from averages across a number of EPD's (Environmental Product Declaration) of PEX manufacturers. Numbers will vary by manufacturer. Weights are also estimates, and will vary by manufacturer.





# System Cost Analysis

Whilst Ridgeline's premium materials command a higher per-metre, that's not the full story:

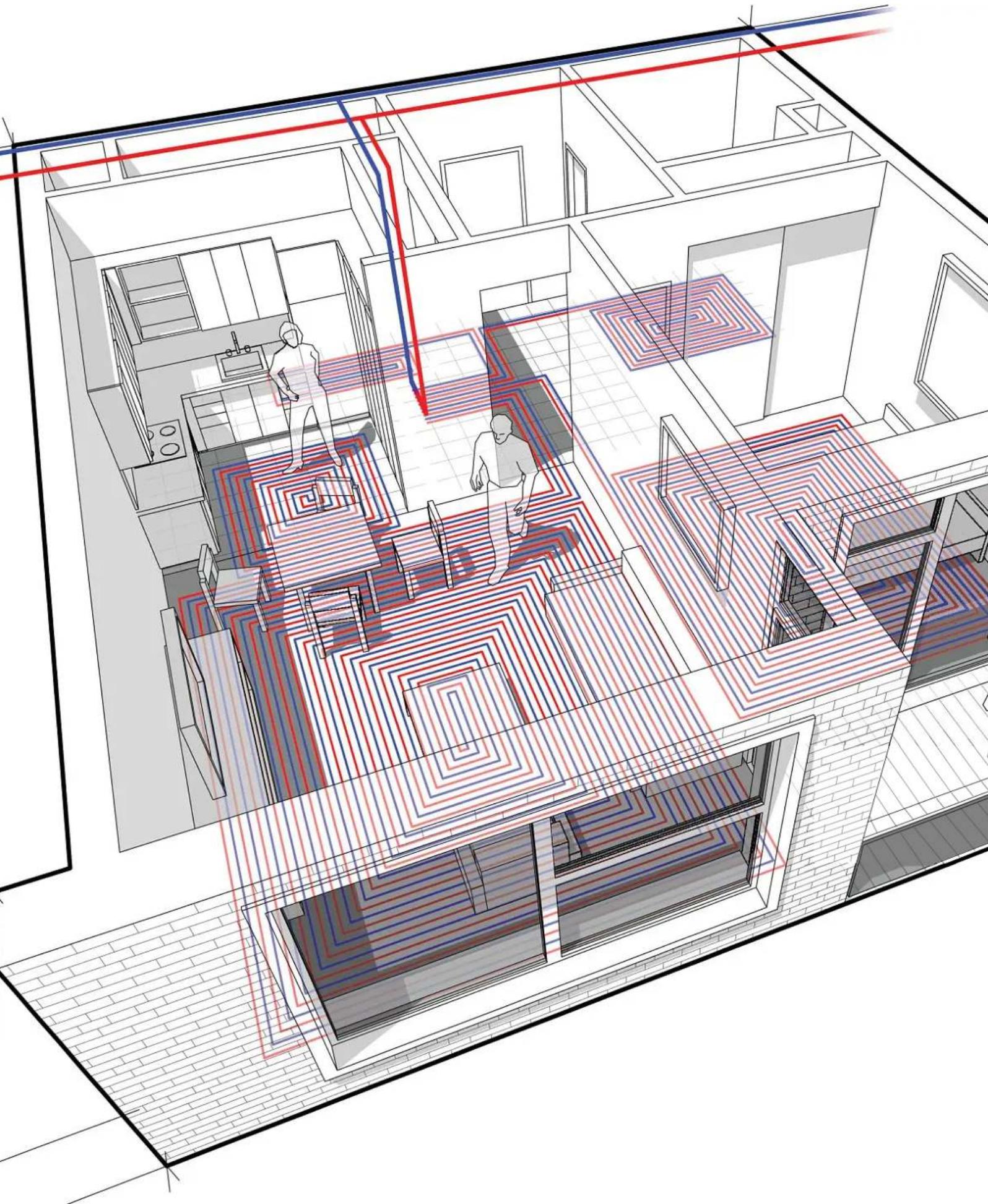
Each fitting adds to your installation:

- Material cost
- Labour time to install
- 2x potential leak points (if an elbow)
- Future maintenance risk

Ridgeline's flexibility eliminates fittings:

- Long continuous runs
- No elbows needed
- Faster installation time
- Fewer potential leak points

We have tools and worksheets available to help calculate the true installation costs for your project.



# **We are here to help:**

We are committed to supporting you every step of the way, from initial design to installation. Whether you need expert guidance or want to take control yourself, we've got you covered.

## **Design services**

Send us your drawings for a complete plumbing system design including:

- Flow rate calculations
- Pressure loss analysis
- Optimal pipe sizing
- Detailed bill of materials

## **Software and Training**

Access our design software and receive training to:

- Design efficient point-to-point systems
- Calculate pressure losses
- Plan manifold installations
- Optimise system layout

## **Site visits**

Arrange a site visit from one of our experienced representatives to ensure everything goes smoothly on-site. We're here to help you get the best results.



# How to assemble and install RidgeLock™ fittings

RidgeLock™ fittings can be purchased as complete sets, which will include a fitting body (for example, a Union, Tee, Reducer, etc), a RidgeLock™ sealing ring and a hex nut. If you have all these components, go to step 4.

Complete RidgeLock™ fittings can also be made up from using components from any EN1254-2 compression fitting for copper tube (widely available in the UK). If this is the case, go to step 1.

## Do you already have a complete RidgeLock fitting?

**YES** Go to Step 4

**NO** Go to Step 1

## Step 1 Choose

Buy ANY EN1254-2 compression fitting from your local merchant. Compression fittings for copper tube are widely available in the UK, and Ridgeline tube is compatible with all compression fittings by replacing the olive with a RidgeLock™ sealing ring.



## Step 2 Take out

Open up the fitting and take out the copper olive. Recycle it (or keep for use with copper tube).



## Step 3 Replace

Replace the copper compression olive with a RidgeLock™ sealing ring. You now have a complete RidgeLock™ fitting.

Remember: this fitting now has a positive interlocking seal, and is far superior to a standard copper compression olive.



If you have a complete RidgeLock™ fitting start here, if not return to Step 1

## Step 4 Cut

Cut the Ridgeline tubing with a metal wheel pipe cutter.



## Step 5 Remove

With a utility knife, safely remove the outer protective cover so that the last 6-7 corrugations are exposed.

## Step 6 Slide

Slide the nut onto the tubing.

## Step 7 Assemble

Assemble the RidgeLock™ sealing ring over the end of the tube, such that the metal teeth abut, but does not cover the end of the plastic cover, and such that the rubber tongue extends into the 3rd corrugation valley, and leave 3 corrugation peaks in front of the adapter, and to be inserted into the

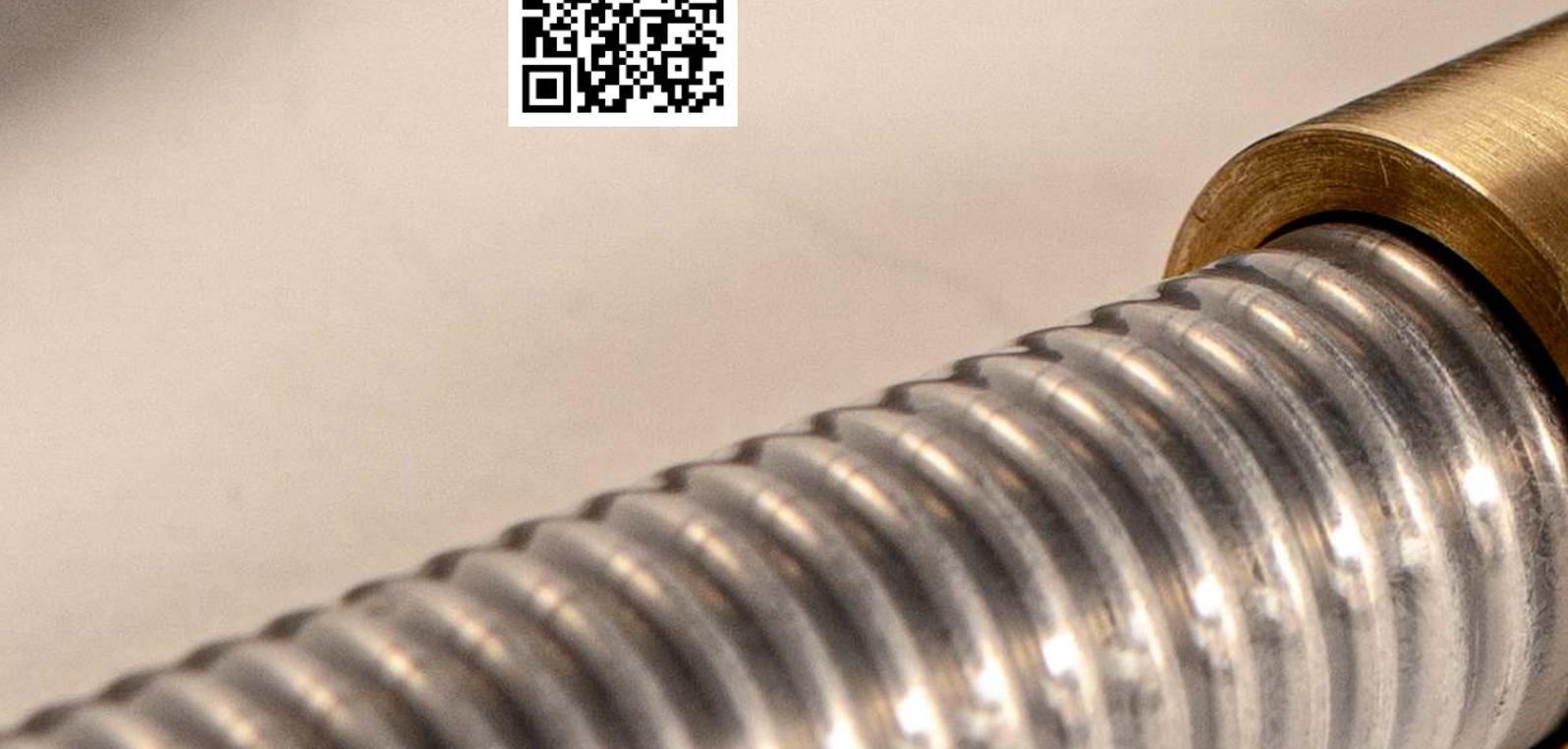
## Step 8 Tighten

Tighten the nut onto the fitting body. Only a few half turns of the nut are required to obtain a seal.



# How to assemble Ridgelo<sup>TM</sup> P1 fittings

Scan the QR code for P1<sup>TM</sup> installation steps.





# Ridgeline™ Products

## Ridgeline™ Tube

Description	Code
15mm -25m (box)	R-15-25
15mm - 50m (box)	R-15-50
15mm - 75m (box)	R-15-75
15mm - 100m (box)	R-15-100
15mm - 500m (spool)	R-15-500
22mm -25m (box)	R-22-25
22mm - 50m (box)	R-22-50
22mm - 75m (box)	R-22-75
22mm - 100m (box)	R-22-100
22mm - 250m (spool)	R-22-250
28mm -25m (box)	R-28-25
28mm - 50m (box)	R-28-50
28mm - 75m (spool)	R-28-75
28mm - 100m (spool)	R-28-100
28mm - 250m (spool)	R-28-250
35mm -25m (box)	R-35-25
35mm - 50m (spool)	R-35-50
35mm - 75m (spool)	R-35-75
35mm - 100m (spool)	R-35-100
35mm - 250m (spool)	R-35-250
42mm -25m (box)	R-42-25
42mm - 50m (spool)	R-42-50
42mm - 75m (spool)	R-42-75
42mm - 100m (spool)	R-42-100
54mm -25m (box)	R-54-25
54mm - 50m (spool)	R-54-50
54mm - 75m (spool)	R-54-75
54mm - 100m (spool)	R-54-100

## RidgeLock™ Sealing Rings

Description	Code
10 x 15mm Adapters (bag)	O-15-10
10 x 22mm Adapters (bag)	O-22-10
10 x 28mm Adapters (bag)	O-28-10
10 x 35mm Adapters (bag)	O-35-10
10 x 42mm Adapters (bag)	O-42-10
10 x 54mm Adapters (bag)	O-54-10
100 x 15mm Adapters (bag)	O-15-100
100 x 22mm Adapters (bag)	O-22-100
100 x 28mm Adapters (bag)	O-28-100
100 x 35mm Adapters (bag)	O-35-100
100 x 42mm Adapters (bag)	O-42-100
100 x 54mm Adapters (bag)	O-54-100

## Finished RidgeLock™ Fittings

Many 100's of RidgeLock™ fitting combinations are available in individual sealed bags. For a full list of all RidgeLock™ fittings please follow the QR code:



Remember: RidgeLock™ fittings can also be made up on site or in merchant by combining Ridgelock™ sealing rings with ANY standard EN 1254-2 compression fitting for copper tube.

## On-site spool roller for 500m coils

Ridgeline is available in spools on up to 500m in length. This can effectively eliminate tube wastage on site, resulting in additional financial and environmental savings. We offer a unique spooling system, which can be set up on site. Lengths can be cut off as needed. Code: SPL-01



## P1™ Fittings

Description	Code
P1 15mm Tee	P1-TT-15
P1 22mm Tee	P1-TT-22
P1 28mm Tee	P1-TT-28
P1 35mm Tee	P1-TT-35
P1 15mm Union	P1-SU-15
P1 22mm Union	P1-SU-22
P1 28mm Union	P1-SU-28
P1 35mm Union	P1-SU-35
P1 22mm to 15mm Reducer	P1-SR-2215
P1 28mm to 22mm Reducer	P1-SR-2822
P1 35mm to 28mm Reducer	P1-SR-3528
P1 15mm Male	P1-SM-15
P1 22mm Male	P1-SM-22
P1 28mm Male	P1-SM-28
P1 35mm Male	P1-SM-35

## Accesories

Description	Code
Tube Cutter (15-28mm)	TC-01
Tube Cutter (35-42mm)	TC-02
Hand Crank Tool for P1 Fittings	P1-HT

# Ridgeline

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