Ridgeline

TECHNICAL RESOURCE

316L STAINLESS STEEL PLUMBING

Ridgeline Specification Pack.

A guide to specifying corrugated 316L stainless steel plumbing on UK projects — whole-home water, heat-pump flow and return, and underfloor heating.

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THE BRIEF

Specify plumbing by installed lifecycle risk, not pipe price.

A plumbing system is not a length of pipe. It is the water-contact surface, the number of fittings, the connection method, the labour to route it, the joints hidden behind finished surfaces, and the cost of access if any of those joints later fails.

Ridgeline is corrugated 316L stainless steel tube designed for whole-home water distribution. The tube bends in long continuous runs, reducing the number of fittings that need to be installed behind walls, under floors and through service voids. The specification should be written to match that capability — fewer hidden joints, an all-metal tube water path, and a clear evidence pack from approval to installation.

316L stainless water-contact tube	**Fewer hidden fittings**	**WRAS approved**	**Kiwa Reg 4 certified**	**UK designed**

Corrugated 316L stainless steel — the tube specifiers are designing around.

HOW TO SPECIFY

The five-step specification process.

A good Ridgeline specification defines the application, the tube, the connection system, the route logic for concealed pipework, and the proof documents required for the project pack.

01 Define the application

Identify the role of each run — hot water, cold water, central heating flow and return, ASHP flow and return, plant-room connections, underfloor circuits, or final flexible connections. Specify by application and system role, not by material alone.

02 Select the tube and size

Use Ridgeline data sheets and technical support to size for flow requirement, pressure drop, route length and temperature. For heat-pump applications, check sizing against the heat-pump design — flow rate and pressure drop are tightly controlled.

03 Define the connection system

State the Ridgeline-approved fitting system explicitly — P1 mechanical, RidgeLock sealing ring, or Flexis final connector — and any compatibility requirements. Avoid "connect to suit": it invites substitution and confusion on site.

04 Control hidden fittings

For concealed pipework, specify continuous Ridgeline runs where practical, with fittings located in accessible zones unless manufacturer instructions and project design permit otherwise. Reducing concealed joints reduces hidden-joint risk.

05 Include proof documents

Link to product data sheets, installation instructions, approval certificates, pressure and temperature data, fitting compatibility guidance and warranty information. A clear proof pack helps contractors price accurately and avoids substitution by assumption.

Steps 01–02 sit with the designer. Steps 03–04 sit with the project specifier. Step 05 sits with both.

DROP-IN WORDING

Suggested specification line.

Use this as the generic Ridgeline wording on schedules and specifications. Edit project-specific tube size, fitting system and application references before issuing for construction.

GENERIC RIDGELINE WORDING

Ridgeline corrugated 316L stainless steel plumbing tube, UK-designed, for hot water, cold water, heating and heat-pump flow and return applications, installed with Ridgeline-approved fittings in accordance with manufacturer data sheets, installation instructions, approval documents and project design requirements.

Edit project-specific tube size, fitting system and application references into this wording before issuing for construction.

BY APPLICATION

Spec wording by application.

Three drop-in specification wordings, taken verbatim from the live Ridgeline application pages. Each is brand-approved and ready to paste into a project schedule.

AIR SOURCE HEAT PUMP FLOW AND RETURN

Ridgeline corrugated 316L stainless steel plumbing tube for air source heat pump flow and return applications, installed with Ridgeline-approved fittings in accordance with manufacturer data sheets, installation instructions, approval documents and project design requirements.

WHOLE-HOME HOT AND COLD WATER DISTRIBUTION

Whole-home hot and cold water distribution to use Ridgeline corrugated 316L stainless steel plumbing tube, UK-designed, with Ridgeline-approved fittings — P1 mechanical fittings or RidgeLock sealing-ring fittings as appropriate — in accordance with manufacturer data sheets, installation instructions, approval documents and project design requirements.

Final flexible connections to taps, appliances, water heaters and cisterns to use Ridgeline Flexis 316L stainless steel flexible connectors. All visible water-contact surfaces to be 316L stainless steel.

UNDERFLOOR HEATING CIRCUITS

Underfloor heating circuits to use Ridgeline Underfloor corrugated 316L stainless steel tube — Pro-FAST 15, Pro-FAST 17 or Eco-MAX as appropriate for the heat-loss design and circuit length — on a Ridgeline-compatible manifold or via the Pro-FAST adapter on a standard PEX manifold.

Edit project-specific tube size, fitting system and application references into this wording before issuing for construction.

CONNECTION SYSTEMS

Three ways to connect Ridgeline tube.

Ridgeline tube is closed-system. Specify the fitting family by name so substitution cannot enter the project on the connection side.

Ridgeline R-22 corrugated 316L tube with P1 mechanical brass fitting. WRAS and Kiwa marks visible on the printed tube.

MECHANICAL

P1 Fittings

Brass mechanical fittings for primary Ridgeline tube connections. Use across hot, cold, heating and heat-pump flow and return where a robust mechanical connection is required.

SEALING RING

RidgeLock

Sealing-ring fittings for Ridgeline tube where a slim sealed connection is preferred. Specify by name; do not allow mixed-brand sealing rings.

FINAL CONNECTION

Flexis

316L stainless steel flexible connectors for final connections to taps, appliances, water heaters and cisterns — keeping the visible water-contact surface stainless steel.

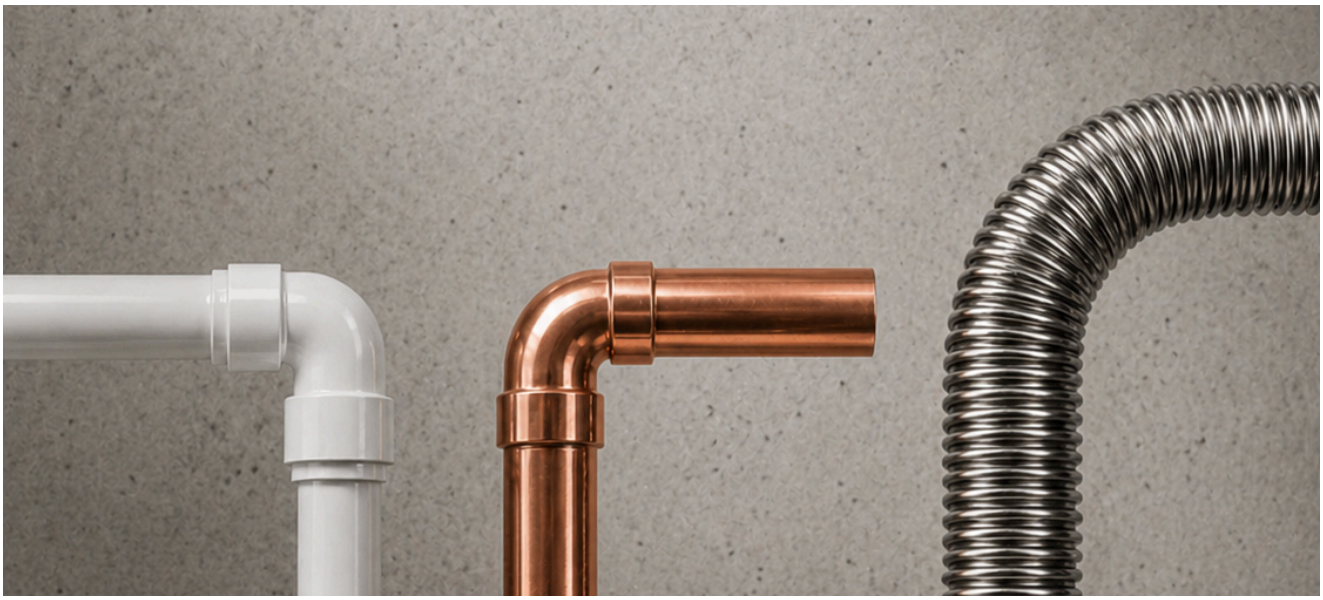
All three connection families are covered by their own Ridgeline data sheets — see page 8 for direct links.

DESIGN PRINCIPLE

Hidden fittings are the weak point to design out.

Straight pipe rarely fails. The risk concentrates at joints — elbows, tees, transitions and seals. In copper, every direction change can become a fitting. In plastic and MLCP systems, fittings, manifolds and branches still define the installed risk. Where pipework is concealed, those fittings become difficult and expensive to access if anything later goes wrong.

> **"The fitting you do not install behind the wall is the fitting that can never leak behind the wall."**



Plastic and copper rely on elbow joints at every direction change. Ridgeline bends in one continuous run.

Route, don't joint

Specify continuous Ridgeline runs through joists, voids and risers where practical, so direction changes are formed in the tube rather than at fittings.

Keep joints accessible

Where fittings are required, locate them in accessible zones — plant rooms, cupboards, service hatches — so they can be inspected and serviced.

Fewer leak points

Fewer fittings means fewer potential leak points. The reduction in hidden-joint risk is the core specification benefit.

PROOF PACK

Documents, approvals and useful links.

Ridgeline corrugated 316L stainless steel tube with brass mechanical fitting.

Specifier downloads.

→ **P1 Fittings — data sheet**	ridgelinetubes.com/…/Ridgeline-Plumbing-P1-Data-Sheet.pdf
→ **RidgeLock — data sheet**	ridgelinetubes.com/…/Ridgeline-Plumbing-Ridgelock-Data-Sheet.pdf
→ **Underfloor — data sheet**	ridgelinetubes.com/…/Ridgeline-Underfloor-Data-Sheet.pdf
→ **Flexis — data sheet**	ridgelinetubes.com/…/Ridgeline-Flexis-Data-Sheet.pdf
→ **WRAS Product Approval Certificate**	ridgelinetubes.com/…/WRAS-PRODUCT-APPROVAL-CERTIFICATE.pdf
→ **Kiwa UK Regulation 4**	ridgelinetubes.com/…/Kiwa-Regulation-4.pdf
→ **Heat Pump Pipework Specifier Guide**	ridgelinetubes.com/…/Ridgeline-Heat-Pump-Pipework-Specifier-Guide.pdf
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For current product data, approvals and installation guidance, use ridgelinetubes.com/technical-downloads/ and speak to the Ridgeline technical team before final specification.