

## MANUFACTURER'S DECLARATION Maximum Allowable Working Pressure (MAWP) & Operating Conditions

### 1. Manufacturer

- Company name: Ridgeline Tubes Ltd
- Registered address: Sunnybank, Giantswood Lane, Somerford Booths, CW12 2JR
- Country: United Kingdom

### 2. Product Identification

- Product range: Ridgeline Flexis™ Corrugated Stainless Steel Flexible Connectors
- Product type: Corrugated stainless steel flexible assemblies, designed for medium and regular movement applications / final connections between equipment and fixed plumbing installations.
- Nominal sizes: ½" to ¾"
- Construction: Corrugated stainless steel tube with 2x end fittings and sealing elements

### 3. Declaration of Maximum Allowable Working Pressure (MAWP)

Ridgeline Tubes Ltd hereby declares the following Maximum Allowable Working Pressures (MAWP) for the Ridgeline Flexis™ range:

- ½" (DN15): 16 bar
- ¾" (DN20): 14 bar

These values apply:

- At a reference temperature of 20°C
- Under conditions where the product may be subject to regular bending, flexing, and/or component changes throughout its service lifetime

### 4. Temperature Derating

In accordance with the principles of EN 10380, allowable working pressure reduces with increasing temperature.

- At elevated temperatures of up to 90°C, the maximum working pressure is typically reduced to approximately:
  - 10–11 bar (depending on size and configuration)

### 5. Burst Pressure

The Ridgeline Flexis™ range exhibits burst pressures significantly in excess of the declared MAWP.

- Typical burst pressure: 70 bar or greater, depending on tube size, length and configuration
- This provides a substantial safety margin, with meaningful risk of rupture occurring only at pressures well above normal operating conditions

## 6. Static vs Dynamic Applications

The above MAWP values are conservative and reflect dynamic service conditions, including regular flexing and handling.

For static or quasi-static installations (e.g. fixed pipework with minimal movement), particularly in non-drinking water applications:

- The system is capable of operating at higher pressures

For such applications, users are advised to contact Ridgeline Tubes Ltd for specific guidance and ratings.

## 7. Sealing Materials and Temperature Capability

- The Ridgeline Flexis™ range is supplied as standard with EPDM sealing elements
- These are suitable for potable water applications and are WRAS approved

For applications involving:

- Pressures above 10 bar, and/or
- Temperatures above 100°C

It is recommended that:

- EPDM seals are replaced with high-temperature gasket materials

Such configurations enable operation at higher pressures and temperatures, subject to application-specific validation.

## 8. UK Water Supply Context

Typical UK mains water pressures:

- Rarely exceed 6 bar under normal operating conditions

Pressures above this level:

- May cause damage to domestic appliances such as washing machines and dishwashers
- Should be controlled using appropriate measures (e.g. pressure reducing valves) at the property boundary

## 9. Certification Scope (WRAS / KIWA Regulation 4)

Certifications such as:

- WRAS Approval
- KIWA Regulation 4

Are intended to:

- Confirm a product's suitability for use with drinking water

They are not intended to:

- Define or limit the product's maximum pressure or temperature capability
- Serve as a declaration of performance for non-potable or higher duty applications

The original certification of the Ridgeline Flexis™ range to 6 bar reflects:

- Typical UK potable water system conditions
- The scope and intent of these certification schemes

## 10. Ongoing Certification Updates

It is recognised that the above has led to some confusion within the market.

Accordingly, Ridgeline Tubes Ltd confirms that:

- Over the next 6 months, WRAS and KIWA Regulation 4 certifications will be updated to 10 bar across all product codes, to better reflect real-world system conditions while remaining within potable water certification scope.

## 11. General Conditions

- All installations must comply with relevant national regulations and good engineering practice
- Final suitability remains the responsibility of the system designer and installer

## 12. Authorised Signatory

Signed for and on behalf of Ridgeline Tubes Ltd



Name: Jonathon Ivett

Position: Director

Date: 24/4/2026

**END OF DECLARATION**