

## Qual-PB barrier pipe

### 1) Product Description

Qual-PB pipe is a 5-layer barrier (EVOH) pipe manufactured from polybutylene. Polybutylene is a high molecular weight polymer, manufactured by polymerizing butane-1 and is primarily used in hot water piping application's worldwide. Qual-PB pipe has many advantages over metal and other plastic piping systems; corrosion, scale and electrolysis resistance; freezing tolerance, high temperature pressure carrying capabilities and ease of installation due to its flexibility. Polybutylene pipe thermally expands and allowances of 1% in length need to be taken into consideration when pipe is installed at 20C for use up to 82C during an installations. Qual-PB barrier pipe is WRAS approved, BS 7291 Class S approved and guaranteed for 50 years.

### 2) Product Photographs – 15mm BS 7291 approved grey and white Qual-PB



### 3) Qual-PB barrier pipe - applications and service conditions

Qual-PB barrier pipe is certified and manufactured to the Class S service requirements of BS7291, the approved service conditions and applications of which are as follows:

BS 7291-1:2010

BRITISH STANDARD

Table 1 Class "S" service conditions

Application	Nominal system flow temperature $T_f$ °C	Maximum system service temperature $T_s$ °C	System malfunction temperature $T_m$ °C	System maximum working pressure <sup>A)</sup> bar <sup>B)</sup>
Indirect cold water systems	20	20	—	3½
Direct mains-fed cold water systems	20	20	—	12½
Subsurface heating systems	60	83	100	3½
Vented hot water supply systems	65	83	100	3½
Unvented hot water supply systems including instantaneous heaters and/or incorporating storage	65	95	100	6
Vented central heating systems and indirect hot water primary circuits	82	95	100	3½
Sealed central heating systems and indirect hot water primary circuits	82	105	114	3

Continuously operated re-circulating systems are excluded from these applications

<sup>A)</sup> Where a nominal working pressure does not comprise an integer value, the mantissa is expressed in a fractional format. This is done to reduce the possibility of misinterpretation or obscurity that could cause a system to be subjected to an excessive pressure (see also 8.4).

<sup>B)</sup> 1 bar = 10<sup>5</sup> N/m<sup>2</sup> = 10<sup>5</sup> Pa.

### 4) Qual-PB guarantee certificate

Qual-PB barrier pipe (white and grey) is guaranteed for a period of:

**50 years**

Provided Qual-PB installation guidelines are adhered to, the pipe is guaranteed against any manufacturing defects for a period of 50 years.

For and Behalf of Pipelife Ireland Ltd

**Paul Warren**  
**Technical and Quality Control Dept.**  
**20/03/17**