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Agrément Certificate
00/3699
Product Sheet 1 Issue 3

POLYPIPE PLUMBING SYSTEMS

POLYPIPE STANDARD AND BARRIER PIPES AND FITTINGS

This Agrément Certificate Product Sheet(1) relates to Polypipe Standard and Barrier Pipes and Fittings, for use within buildings for the conveyance of cold and heated water for use in domestic hot and cold water distribution and heating installations.

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review

KEY FACTORS ASSESSED

Section 1. Mechanical resistance and stability
Section 2. Safety in case of fire
Section 3. Hygiene, health and the environment
Section 4. Safety and accessibility in use
Section 5. Protection against noise
Section 6. Energy economy and heat retention
Section 7. Sustainable use of natural resources
Section 8. Durability

The BBA has awarded this Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Third issue: 5 April 2024

Hardy Giesler
Chief Executive Officer

Originally certified on 20 March 2000

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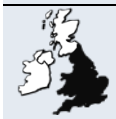
SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that Polypipe Standard and Barrier Pipes and Fittings, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	**G1(1)(2)**	**Cold water supply**
Comment:		The products can contribute to satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**G3(1)(2)**	**Hot water supply and systems**
Comment:		The products can contribute to satisfying this Requirement. See section 3 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The products are acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**7(2)**	**Materials and workmanship**
Comment:		The use of the products is restricted by this Regulation. See section 2 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)(2)**	**Fitness and durability of materials and workmanship**
Comment:		The products are acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**9**	**Building standards – construction**
Standard:	2.2	Separation
Comment:		The use of the products may be restricted by this Standard, with reference to clause 2.2.6(1). See section 2 of this Certificate.
Standard:	2.6	Combustibility
Comment:		The use of the products is restricted by this Standard, with reference to clause 2.6.5(1). See section 2 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The products can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6 and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.
Regulation:	**12**	**Building standards – conversions**
Comment:		Comments in relation to the products under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1(1) and Schedule 6(1).

(1) Technical Handbook (Domestic).

The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	**23(1)(a)(i)**	**Fitness of materials and workmanship**
Comment:	**(iii)(b)(i)**	The products are acceptable. See sections 8 and 9 of this Certificate.

Regulation:	**23(2)**	**Fitness of materials and workmanship**
Comment:		The use of the products is restricted by this Regulation. See section 2 of this Certificate.
Regulation:	**86(2)**	**Sanitary appliances**
Comment:		The products can contribute to satisfying this Regulation. See section 3 of this Certificate.

Additional Information

NHBC Standards 2024

In the opinion of the BBA, Polypipe Standard and Barrier Pipes and Fittings, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapter 8.1 *Internal Services*.

Fulfilment of Requirements

The BBA has judged Polypipe Standard and Barrier Pipes and Fittings to be satisfactory for use as described in this Certificate. The products have been assessed for use within buildings for the conveyance of cold and heated water for use in domestic hot and cold water distribution and heating installations.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the products under assessment. Polypipe Standard and Barrier Pipes and Fittings, in accordance with BS 7291-1 : 2010 and BS 7291-2 : 2010, consist of polybutylene (PB) pipes and fittings, as detailed in Tables 1 and 2 of this Certificate, and have the following characteristics:

- Polypipe Standard Pipe — grey in colour with black markings. For use in hot and cold water services
- Polypipe Barrier pipes — made of five layers: an inner and outer layer of PB and a central oxygen diffusion barrier of ethylene vinyl alcohol (EVOH) copolymer bounded on either side by an adhesive layer; grey or white in colour with red markings; used with all types of fittings
- Fittings as detailed in Table 2, and characteristics as follow:
  - push-fit:
    - PolyPlumb fittings — (grey or white) with In-Cert(1) feature in the socket and nut with incorporated bottom washer
    - PolyFit fittings — (white) with reduced end diameter on the cap nuts, used with stiffeners
    - PolyMax fittings — (white) with smooth external finish, used with stiffeners
  - press-fit (compression):
    - PolySure fittings — (white) in size 10, 15, 22 and 28 mm; with sleeve fitted with two seals, used with inbuilt stiffeners

(1) In-Cert is a registered trademark

Table 1 Pipe wall thickness

Nominal pipe diameter (mm)	Minimum wall thickness (mm)	
	Polypipe Standard Pipe	Polypipe Barrier Pipe
10	1.5	1.5
12	1.5	1.5(1)
15	1.7	1.7
18	1.8	2.0(1)
20	1.9	2.0
22	2.0	2.0
28	2.6	2.6

(1) Used only in Polypipe Under Floor Heating Systems as detailed in Product Sheet 3 of this Certificate.

The codes of the certified products follow a pattern, as examples below:

- Polypipe Standard Pipes — eg PB5010, where PB stands for Polypipe, 50 for length and 10 for the diameter
- Polypipe Barrier Pipes eg:
  - PB322B, where PB stands for grey, 3 for length, 22 for diameter and B for Barrier
  - FIT5010B, where FIT stands for white, 50 for length, 10 for diameter and B for Barrier
- Fittings — eg PB110EW, where PB stands for PolyPlumb with In-Cert feature (FIT for PolyFit, MAX for PolyMax), 1 for fitting type (here for elbow; see Table 2) and 10 for diameter. EW (for In-Cert feature, only with PB fittings) stands for white
- PolySure fittings — eg SUR210, where SUR stands for PolySure, 2 for fitting type (here for equal tee; see Table 3) and 10 for diameter
- Stiffener INCERT10 – for In-Cert stiffeners and 10 for diameter.

Table 2 PolyPlumb, PolyFit and PolyMax fittings type code

Fitting	Code	Fitting	Code	Fitting	Code
Straight Coupler	0	Double Check Valves	37	Pipe Clip Spacer	24
Reducing Coupler	58	Straight Service Valve	65	EPDM 'O' Rings	90
Elbow	1	Bent Service Valve	66, 79	Spacer Washer	91
Spigot Elbow	10	Stopcock	26	Grab Rings	92
Equal Tee	2	Flexible Hose Connectors	57, 68, 71, 75, 80, 83	CP Brass Service Valves with Tap Connector	86
End Reduced Tee	14	Flexible PolyFit Connector	81, 82	Manifold (2210 socket 2 port)	28
Branch Reduced Tee	11	Flexible Hose Connector - Compression	96, 97, 98	Manifold (2210 socket blank 2 port)	29
Branch Reduced Spigot Tee	12	Adaptor Coupler (Imperial Irish pipe)	0xxx	Manifold (2210 2215 socket blank 3, 4 port)	76
Branch One End Reduced Tee	15	Radiator Connector Bend	39	Manifold (2210 socket 4 port)	48
Two Ends Reduced Tee	16	Brass Manifold	47	Manifold (2210 2215 socket 2, 3, 4 port)	73
Spigot Reducer	8	Brass Valved Manifold	52	Manifold (2210 socket blank 4 port)	49
Socket Reducer	18	Female Brass BSP Adaptor	43		
Tank Connector	38	Male Brass BSP Adaptor	44	Bulldog Clip	21
Straight Tap Connector	7	Female BSP Brass Elbows	30	Nail In Clip	22
Hand Tighten Tap Connector	27	Female BSP Brass Tees	29	Snap-fit Clip	23
Bent Tap Connector	17	UFH Manifold Connection	12715	EuroCone adaptor	UFH18EC
Wallplate Elbow	13	Bend Formers	63	Socket x Spigot Ball Valve	40
Wallplate Plastic Elbow	53	Spigot Draincock	36	Flexible Hose Connectors c.w. Service Valve	84, 87, 88, 89
Wallplate Tee	51	Conduit Terminal Box and wall plate elbow	CTWP, 45	MDPE Polyfast Adaptors(1)	42
Spigot Blank End	9	Gate Valves	31	Fibre Washers	93
Socket Blank End	19	Radiator/ Lockshield Valves	32	Spares Components Pack	95
Demountable Socket Black End	69	Thermostatic Radiator Valves	33	In-Cert stiffener	INCERT
Shut Off Valve	59	Metal pipe stiffener	64xxM	Appliance Valve	61
Plastic pipe stiffener	64	Ball valves	67	CP Brass Service Valves	85

(1) To connect pipe to BS 7291-2 : 2010 with pipe to BS EN 12201-2 : 2011.

Table 3 PolySure fittings type code

Fitting	Code	Fitting	Code	Fitting	Code
Straight Coupler	0	Branch and End Reduced Tee	15	PolySure x Compression Adaptor	55
90° Elbow	1	Socket x Socket Reducer	58	Female BSP Adaptor	44
Equal Tee	2	Straight Tap Connector	7	O Rings	90
Reduced Branch Tee	11	Bend Tap Connector	17	Press Sleeve and Washer	95
End Reduced Tee	14	Male BSP Adaptor	43	Socket x Pressfit Spigot Adaptor	56

Pipe stiffeners must be inserted in each plastic pipe end before jointing the pipe with push-fit fittings. They are manufactured from polysulphone or stainless steel to BS EN 10088-2 : 2014, grade 1.4404, and are available for each pipe size.

Stiffeners are not required if using PolySure fittings (press-fit), which incorporate a sleeve fitted with two ethylene propylene diene monomer (EPDM) rubber seals.

For securing pipe runs, there are two types of pipe clips used:

- screw-fix clip — snap-fit for 10, 15, 22 and 28 mm diameter pipes and bull dog for 15, 22 and 28 mm diameter pipes
- nail-in clip — for 10, 15, 22 and 28 mm diameter pipes
- as well as staples — for 12, 18 and 20 mm diameter pipes.

A cold-forming bend fixture in engineering plastic is available for 15 and 22 mm diameter pipes. The fixtures are used to ensure that sharp bends remain smoothly curved.

The products are intended for use in:

- hot and cold water (including potable water) services and heating installations in new and existing domestic buildings
- applications and service conditions defined as Class S in BS 7291-1 : 2010.

Definitions for products and applications inspected

The following term has been defined for the purpose of this Certificate as:

- oxygen barrier pipes — pipes incorporating a polymeric barrier layer to prevent or greatly diminish the diffusion of oxygen into or through the pipe wall where the design stress requirements are entirely met by base polymer.

Product assessment – key factors

The products were assessed for the following key factors, and the outcome of the assessments is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

1 Mechanical resistance and stability

Data were assessed for the following characteristics.

1.1 Mechanical properties

1.1.1 Results of pressure resistance tests are given in Table 4.

Table 4 Characteristics for mechanical properties

Product assessed	Assessment method	Requirement	Result
Pipes and assembled pipes and fittings	Short-term hydrostatic pressure resistance at 20 and 95°C to BS 7291-2 : 2010	No bursting or leakage	Pass
Assembled pipes and fittings	Resistance to cyclic pressure shock to BS 7291-1 : 2001, Appendix D	No leakage	Pass
Pipes	Elongation at break to BS 2782-3 : Method 320A : 1976	≥ 125%	Pass

1.1.2 On the basis of data assessed, the products are deemed to be appropriately robust to withstand operating pressure and temperature conditions.

1.2 Performance of joints

1.2.1 Results of tightness of joints and dimensions tests are given in Table 5.

Table 5 Characteristics for performance of joints

Product assessed	Assessment method	Requirement	Result
Pipes, fittings	Dimensions	Compliant with BS 7291-2 : 2001, Clause 5	Pass
Assembled pipes and fittings	Pull-out resistance of assembled joints to BS 7291-2 : 2010, Appendix C	Socket of the fitting retains the pipe under applied force	Pass

1.2.2 On the basis of data assessed, the products are deemed fit for purpose for ability to hold fluid inside and outside the system.

1.2.3 The joints, when correctly made, will not be adversely affected by thermal movement and remain tight under conditions of pipeline movement in excess of those expected to occur in normal good drainage practice.

1.3 Flow characteristics

1.3.1 On the basis of data assessed, the products are deemed to have satisfactory flow characteristics.

1.3.2 The bore of the pipes is less than the bore of copper or stainless steel pipes of an equivalent outside diameter. The consequent reduction in flow rate for a given pressure head should be considered when designing a system containing the products.

1.3.3 The insertion of pipe stiffeners into the pipe does not significantly affect the flow characteristics of the system.

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

2.1.1 The Certificate holder has not declared a reaction to fire classification for the products to BS EN 13501-1 : 2018.

2.1.2 On the basis of the data assessed, use of the products is restricted in some cases.

2.1.3 In England, Wales and Northern Ireland, the products must not be used in external walls of buildings that have a storey at least 18 m above ground level and which contain one or more dwellings, an institution, a room for residential purposes (excluding, in Wales and Northern Ireland only, any room in a hostel, hotel or boarding house), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools and, additionally in Northern Ireland, nursing homes and places of lawful detention.

2.1.4 In Scotland, the products must not be used 1 m or less from a relevant boundary, or in external walls of domestic high rise buildings or in separating walls and, in some cases, separating floors.

2.1.5 In common with other plastic materials, the products are combustible and, in a fire, may ignite and burn. Consideration must be given to the need for protective, fire-resistant ducting when assessing the fire risk in a building, particularly where large quantities of piping may otherwise be exposed.

2.2 Resistance to fire

The national Building Regulations concerning the prevention of fire spread by fire-stopping must be taken into account at the design stage, if the products pass through a fire-rated wall or floor.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Hygiene and health

3.1.1 The result of the effect of materials on the quality of drinking water test, is given in Table 6.

Table 6 Characteristics for effects of materials

Product assessed	Assessment method	Requirement	Result
Material of pipes and fittings	Effect of materials on the quality of drinking water to BS 6920-1 : 1988	No odour, flavour, colour, turbidity, change in appearance in water	Pass

3.1.2 On the basis of data assessed, the products are deemed fit for the purpose of supplying drinking water, as the material from which they are made is considered free from adverse health effects on humans.

3.1.3 The polybutylene material is listed in the UK Water Regulations Advisory Scheme.

4 Safety and accessibility in use

Data were assessed for the following characteristics.

4.1 Safety in use

4.1.1 The products comply with the Class S service conditions in domestic hot water services as given in BS 7291-1 : 2010, Table 1, with limitations as indicated against the relevant fittings in the Certificate holder's literature.

4.1.2 On the basis of data assessed, the products are deemed to be appropriately robust to withstand operating pressure and temperature conditions.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Not applicable.

7 Sustainable use of natural resources

The products (fittings only) are manufactured from polybutylene, which can be recycled.

8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in the products were assessed.

Specific test data were assessed for the following.

8.2 Durability

8.2.1 The products were tested for the characteristics as given in Table 7.

Table 7 Characteristics for durability

Product assessed	Assessment method	Requirement	Result
Barrier pipes and fittings	Oxygen permeability to DIN 4726 : 1993 and DIN 4727 : 1988	<0.32 $mg \cdot (m^2 \cdot day)^{-1}$ Equivalent to 0.1 $g \cdot (m^3 \cdot day)^{-1}$	Pass
Pipes	Long-term hydrostatic strength to BS 7291-1 : 2001, Appendix A	Extrapolated failure time >438 000 h (50 years); 97.5% lower confidence limits of failure time >100 000 h	Pass
Pipes and fittings (system)	Resistance to thermal cycling to BS 7291-1 : 2001, Appendix C	No leakage	Pass
Material	Resistance to chemicals For guidance: PD ISO/TR 10358 : 2021	Product conforming to BS 7291-1 : 2010	Pass

8.2.2 On the basis of data assessed, the products are deemed to be suitably resistant to the pressure and temperature conditions under which they operate.

8.2.3 The EVOH oxygen diffusion barrier in the barrier pipes virtually eliminates the diffusion of oxygen into the heating system. Provided the products are installed correctly, the requirement for the addition of a corrosion inhibitor will be the same as that for a traditional installation with metal pipes and fittings.

8.2.4 The material from which the products are made could be adversely affected by contact with some types of soldering flux and associated sealing compounds (which are not used with the products) and, therefore, such materials must be avoided.

8.2.5 The terminal fittings, eg thermostatic radiator valves, are produced from materials known to be durable in plumbing applications. They may require replacement within the life of the system.

8.3 Repair

A system comprising the products must be designed so that access to undertake repair activities when damage occurs, is provided. Sections of the system can be removed and replaced.

8.4 Service life

Under normal service conditions, the products will have a life equivalent to conventional installations with metal pipework, provided they are designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 Water supply installations must be designed as detailed in BS EN 806-1 : 2000, BS EN 806-2 : 2005 and BS 8558 : 2015.

9.1.2 The pipes passing through areas not contributing to space heating and the system in general must be insulated. Although the pipes have good resistance to freezing, they must be provided with thermal insulation for frost protection. Insulation for such pipes and the system may be provided by following the guidance given in BS 5422 : 2023 for environmental insulation thickness.

9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions.

9.2.3 To achieve the performance described in this Certificate, the products must be installed and tested in accordance with BS EN 806-4 : 2010 and BS 8558 : 2015.

9.3 Workmanship

Practicability of installation was assessed by the BBA, on the basis of the Certificate holder's information. To achieve the performance described in this Certificate, installation of the products must be carried out by a competent general builder, or a contractor, experienced with these types of products.

9.4 Maintenance and repair

9.4.1 As the products are installed in floors and walls and have suitable durability, maintenance is not required unless they are damaged.

9.4.2 In the event of a leak in the pipe, eg due to local damage, repairs can be made using a replacement section of pipe in conjunction with appropriate fittings. It should be noted that the stainless steel grab rings are single use only and whenever a joint is dismantled, the grab ring should be cut off and a new one fitted as per the Certificate holder's Installation Guide, ensuring the new grab ring is correctly seated in the base of the socket before jointing.

9.4.3 The installation in which the products are installed must undergo inspection and routine maintenance at least once a year, as detailed in BS 8558 : 2015.

10 Manufacture

10.1 The production processes for the products have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

† 10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

11 Delivery and site handling

11.1 The Certificate holder stated that the products are delivered to site as follows:

- pipes are marked with the brand, British Standard number and Class they comply with, size, application, batch number, production time and date, BBA Certificate number and other approvals. Barrier pipes are marked in red and including the legend BARRIER. Standard ones are marked in black
- pipes are supplied in straight lengths of 3 or 6 m and in coils in lengths from 6 to 500 m
- straight lengths are packed in sealed polyethylene sleeves, and coils in sealed polyethylene bags. The colour coding of the packaging identifies the product:
  - PolyPlumb Standard Pipe in beige
  - PolyPlumb Barrier Pipe in yellow
  - PolyFit Barrier Pipe in blue
- the fittings and pipe stiffeners are supplied in polyethylene bags labelled with nominal size, code number and product standard (where applicable).

11.2 Delivery and site handing must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 The pipes should be transported on a flat-bed vehicle. Straight pipes should be loaded to avoid overhang or crushing.

11.2.2 Once unwrapped, pipes should be stored indoors or in a shaded area to prevent ultraviolet degradation. To prevent distortion, pipes should be stored in racks which support their whole length.

11.2.3 Care must be taken during installation to ensure that damage to the products does not occur.

ANNEX A – SUPPLEMENTARY INFORMATION †

Supporting information in this Annex is relevant to the products but has not formed part of the material assessed for the Certificate.

Construction (Design and Management) Regulations 2015
Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of ISO/IEC 9001 : 2015 and ISO/IEC 14001 : 2015 by BSI (Certificates FM00318 and EMS 732427 respectively).

Kitemark licence

BSI Kitemark licence No. KM 38148 has been issued to Polypipe Building Products, Neale Road, Off Wheatley Hall Road, Doncaster DN2 4PG, for the manufacture of thermoplastic PolyPlumb, PolyFit, PolyMax and PolySure products for hot and cold water for domestic purposes and heating installations in buildings certified to BS 7291-1 : 2010 and BS 7291-2 : 2010.

Bibliography

BS 2782-3 : Methods 320A to 320F : 1976 *Methods of testing plastics — Mechanical properties — Tensile strength, elongation and elastic modulus*

BS 5422 : 2023 *Thermal insulating materials for pipes, tanks, vessels, ductwork and equipment operating within the temperature range -40°C to +700°C — Method for specifying*

BS 6920-1 : 1988, *Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water — Part 1: Specification (incorporating corrigendum No. 1)*

BS 7291-1 : 2001 *Thermoplastics pipe and fitting systems for hot and cold water for domestic purposes and heating installations in buildings — General requirements*
BS 7291-2 : 2001 *Thermoplastics pipe and fitting systems for hot and cold water for domestic purposes and heating installations in buildings — Specification for polybutylene (PB) pipe and associated fittings*
BS 7291-1 : 2010 + A1 : 2023 *Thermoplastics pipe and fitting systems for hot and cold water for domestic purposes and heating installations in buildings — General requirements*
BS 7291-2 : 2010 + A1 : 2023 *Thermoplastics pipe and fitting systems for hot and cold water for domestic purposes and heating installations in buildings — Specification for polybutylene (PB) pipe and associated fittings*

BS 8558 : 2015 *Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages — Complementary guidance to BS EN 806*

BS EN 806-1 : 2000 *Specification for installations inside buildings conveying water for human consumption — Part 1: General*
BS EN 806-2 : 2005 *Specification for installations inside buildings conveying water for human consumption — Part 2: Design*
BS EN 806-4 : 2010 *Specifications for installations inside buildings conveying water for human consumption — Part 4: Installation*

BS EN 1264-2 : 2008 + A1 :2012 *Water based surface embedded heating and cooling systems — Floor heating — Prove methods for the determination of the thermal output using calculation and test methods*
BS EN 1264-3 : 2021 *Water based surface embedded heating and cooling systems — Dimensioning*

BS EN 10088-2 : 2014 Stainless steels — *Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*

BS EN 12201-2 : 2011 + A1 : 2013 *Plastics piping systems for water supply, and for drainage and sewerage under pressure — Polyethylene (PE). Pipes*

BS EN 13501-1 : 2018 *Fire classification of construction products and building elements — Classification using data from reaction to fire tests*

CIBSE Guide A : 2015 (updated 2021) *Environmental design*

DIN 4726 : 1993 *Warm water surface heating systems and radiator connecting systems — Plastics piping systems and multilayer piping systems*

DIN 4727 : 1988 *Pipelines of polybuten for using in warm water floor heating systems; special requirements and testing*

ISO/IEC 9001 : 2015 *Quality management systems — Requirements*

ISO/IEC 14001 : 2015 *Environmental management systems — Requirements*

PD ISO/TR 10358 : 2021 *Plastics pipes and fittings for industrial applications*

Conditions of Certificate

Conditions

1 This Certificate:

- relates only to the product that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product
- actual installations of the product, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to UKCA marking and CE marking.

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.

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