Polypipe Ltd
t/a Polypipe Building Products
Broomhouse Lane
Edlington
Doncaster DN12 1ES

Tel: 01709 770000
e-mail: bp.enquiries@polypipe.com
website: www.polypipe.com

Agrément Certificate
18/5514
Product Sheet 1 Issue 3

POLYPIPE WASTE SYSTEMS

POLYPIPE PUSH-FIT PIPES AND FITTINGS

This Agrément Certificate Product Sheet(1) relates to Polypipe Push-Fit Pipes and Fittings, ranging from 34 to 54 mm in diameter, for use in above ground drainage systems, for the collection and disposal of sewage in domestic buildings.

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

System 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 system described herein. This system has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Third issue: 11 September 2024
Originally certificated on 20 March 2018

Hardy Giesler
Chief Executive Officer

This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.

The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).

Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

The Certificate should be read in full as it may be misleading to read clauses in isolation.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

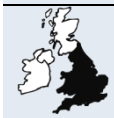
British Board of Agrément
1st Floor, Building 3, Hatters Lane
Croxley Park, Watford
Herts WD18 8YG
tel: 01923 665300
clientservices@bbacerts.co.uk
ww.bbacerts.co.uk

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 Push-Fit 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:	**H1**	**Foul water drainage**
Comment:		The system can contribute to satisfying this Requirement. See sections 1 and 9 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**7(2)**	**Materials and workmanship**
Comment:		The use of the system 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 system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**9**	**Building standards - construction**
Standard:	2.2	Separation
Comment:		The use of the system is restricted by this Standard, with reference to clause 2.2.6(1). See section 2 of this Certificate.
Standard:	2.6	Spread to neighbouring buildings
Comment:		The use of the system is restricted by this Standard, with reference to clause 2.6.5(1). See section 2 of this Certificate.
Standard:	3.7(b)(c)	Wastewater drainage
Comment:		The system can contribute to satisfying this Standard, with reference to clause 3.7.1(1). See section 1 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The system 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 - conversion**
Comment:		Comments in relation to the system 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 system is acceptable. See sections 8 and 9 of this Certificate.

Regulation:	**23(2)**	**Fitness of materials and workmanship**
Comment:		The use of the system is restricted by this Regulation. See section 2 of this Certificate.
Regulation:	**79**	**Drainage systems**
Comment:		The system can contribute to satisfying this Regulation. See sections 1 and 9 of this Certificate.
Regulation:	**80**	**Sanitary pipework**
Comment:		The system can contribute to satisfying this Regulation. See section 9 of this Certificate.

Additional Information

NHBC Standards 2024

In the opinion of the BBA, Polypipe Push-Fit 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 Push-Fit Pipes and Fittings to be satisfactory for use as described in this Certificate. The system has been assessed for use in above ground drainage systems, for the collection and disposal sewage in domestic buildings.

ASSESSMENT

System description and intended use

The Certificate holder provided the following description for the system under assessment. Polypipe Push-Fit Pipes and Fittings consist of a range, as listed in Table 1, of push-fit polypropylene (PP):

- three layer plain-ended pipes — extruded with inner and outer layers made of virgin PP, and a middle core layer made of recycled PP
- solid wall fittings with integral elastomeric ring seal sockets or spigot-ended — injection moulded fittings including bends, branches, adaptors, connectors, junctions, couplings and plugs. The fittings comply with requirements of BS EN 1451-1 : 2017, where appropriate. Each fitting is supplied with seals (where required), assembled ready for use.

The pipes and fittings are available in white, grey, brown and black colours with the exception of PS50 and PS60 pipes, which are only available in white.

Sealing of the joints requires rubber sealing rings supplied by the Certificate holder. The seals are manufactured from EPDM to BS EN 681-1 : 1996, Type WC.

Ancillary Items

The Certificate holder recommends fixings and brackets for securing pipes for use with the system, but these materials have not been assessed by the BBA and are outside the scope of this Certificate.

Table 1 Pipes and Fittings

Product type	Product code		
	Nominal size DN/OD (Reference size) (mm)		
	34 (32)	41 (40)	54 (50)
Pipes (3 m length)	WP11	WP12	WP51
Pipes (2 m length)	PS50	PS60	—
Swept Bend - 91.25°	WP13	WP14	WP52
Knuckle Bend - 90°	WP15	WP16	WP64
Obtuse Bend - 45°	WP17	WP18	WP54
Soil Boss Bend - 157.5°	WP19	WP20	—
Swept Tee - 91.25°	WP21	WP22	WP56
Swivel Bend - 91.25°	WP23	WP24	MAN8
Straight Coupler	WP25	WP26	WP58
Reducer	—	41 x 34 – WP27	54 x 34 – WP70 54 x 41 – WP59
Socket Plug	WP29	WP30	WP72
Threaded Coupling	WP31	WP32	—
Tank Connector	WP35	WP36	—
Screwed Access Plug	WP43	WP44	—
Wastepipe Shroud	WP47	WP48	—
Universal Waste Coupler	UWC32	UWC40	UWC50
Vent Terminal	—	—	WP66

Applications

The system is intended for use in:

- above ground drainage, inside and outside (fixed onto the wall) buildings, as defined by application area code ''B'' in BS EN 1451-1 : 2017
- domestic buildings and installations designed in accordance with BS EN 12056-1 : 2000 and BS EN 12056-2 : 2000 for the conveyance of domestic sewage as is permitted to be discharged into public sewers by the Water Industry Act 1991 (England and Wales), and sewage as is permitted and defined by the Sewerage (Scotland) Act 1968 and the Water and Sewerage Services (Northern Ireland) Order 2006.

System assessment – key factors

The system was 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 impact resistance test are given in Table 2.

Table 2 Characteristics for mechanical properties

System assessed	Assessment method	Requirement	Outcome
Pipes	Impact resistance to BS EN ISO 3127 : 1994	TIR ≤ 10 %	Pass

1.1.2 On the basis of data assessed, the system is deemed to be sufficiently robust to withstand handling, transport, storage and installation.

1.2 Performance of joints

1.2.1 Results of tightness of joints and dimensions tests are given in Table 3.

Table 3 Characteristics for performance of joints

System assessed	Assessment method	Requirement	Result
Pipes, fittings and seals (system)	Watertightness to BS EN ISO 13254 : 2010	No leakage	Pass
	Airtightness to BS EN ISO 13255 : 2010	No leakage	Pass
Pipes, fittings and seals	Dimensions to BS EN 1451 : 2017	As per drawings	Pass

1.2.2 On the basis of data assessed, the system is 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

On the basis of data assessed, the system is deemed to have satisfactory flow characteristics.

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 system to BS EN 13501-1 : 2018.

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

2.1.3 In England, Wales and Northern Ireland, the system must not be used in external walls of buildings that have a storey at least 18 m above ground level and 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 system 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 system is 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 system passes through a fire rated wall or floor.

3 Hygiene, health and the environment

Not applicable.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Not applicable.

7 Sustainable use of natural resources

The system is manufactured from polypropylene, which can be recycled.

8 Durability

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

8.2 Specific test data were assessed as given in Table 4.

Table 4 Characteristics for durability

System assessed	Assessment method	Requirement	Result
Pipes	Longitudinal reversion to BS EN ISO 2505 : 2005	≤ 2.0 % No bubbles or cracks	Pass
Fittings	Effects of heating to BS EN ISO 580 : 2005	Depth of cracks, delamination or blisters is less than 20 % of the wall thickness	Pass
Pipes, couplers and seals (system)	Elevated temperature cycling to BS EN ISO 13257 : 2010	No leakage before and after the test	Pass
Pipes and fittings material	Resistance to chemicals For guidance: PD ISO/TR 10358 : 2021	Products conforming to BS EN 1451-1 : 2017	Pass
Seals material	Resistance to chemicals For guidance: PD ISO/TR 7620 : 2005		Pass

8.2.1 On the basis of data assessed, the system is deemed to be suitably resistant to high temperatures and corrosion by water with a wide range of pH-values with which it is likely to come into contact in service, excluding chemically contaminated wastewaters, such as industrial discharges. In addition, the manufacturing process does not affect performance of the system.

8.3 Cleaning and maintenance

8.3.1 The system must be designed so that access for cleaning and maintenance is provided. Sections of the system can be removed and replaced.

8.3.2 On the basis of data assessed, the system is suitably designed and resistant to cleaning and maintenance activities.

8.4 Service life

Under normal service conditions, the system will have a life of at least 50 years, provided it is 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

Installations containing the system must be designed in accordance with BS EN 12056-1 : 2000 and 12056 -2 : 2000.

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. A summary of instructions and guidance are provided in Annex A of this Certificate.

9.2.3 To achieve the performance described in this Certificate, the system must be installed and tested in accordance with BS EN 12056-5 : 2000 and PD CEN/TR 13801 : 2014.

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 system must be carried out by a competent general builder, or a contractor, experienced with this type of system.

9.4 Maintenance and repair

9.4.1 Ongoing satisfactory performance of the system in use requires that it is suitably maintained. The guidance provided by the Certificate holder was assessed by the BBA and found to be appropriate and adequate. The following requirements apply in order to satisfy the performance assessed in this Certificate:

9.4.1.1 Access to the system for cleaning must be provided by conventional means.

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 system is delivered to site as follows:

- pipes are marked with the brand, product code, production date, nominal diameter, wall thickness, length, material, series, area code and the BBA logo incorporating this Certificate number. Fittings are marked with the brand, nominal diameter, product code, material and the Kitemark logo
- labels indicating system name, code and size, production date and number of units are affixed to the ends of completed bulk stillages, extrusion packs, or bulk bags. The BBA logo is included on labels for fittings
- pipes, in different quantities and depending on size, are sleeved in polythene sleeving
- fittings are packed in polythene bags, all containing the same type of system.

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

11.2.1 Requirements for transportation on site, storage, and lifting of components must be in accordance with PD CEN/TR 13801 : 2014.

11.2.2 The products must be transported in their original packaging if possible. During unloading they must be handled with care. Pipes must not be dragged across the floor or pulled over edges.

11.2.3 Care must be taken to not to drop products on their ends, particularly during cold weather conditions. Pipes must be stored on a flat surface.

11.2.4 The products must be protected from direct sunlight if long-term storage is envisaged.

ANNEX A – SUPPLEMENTARY INFORMATION †

Supporting information in this Annex is relevant to the system 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.

CE marking

The Certificate holder has taken the responsibility of CE marking the system, in accordance with EN 681-1 : 1996.

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of ISO 9001 : 2015 and ISO 14001 : 2015 by BSI (Certificates FM 00318 and EMS 732427 respectively).

Additional Certification

BSI Kitemark licence No KM 56630 has been issued to Polypipe Building Products, Broomhouse Lane, Edlington, Doncaster DN12 1ES, for the manufacture of pipes and fittings certified to BS EN 1451-1 : 2017.

Additional information on installation

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

A.1 Special attention should be paid to appropriate:

- selection of pipe welding and working tools
- selection of connection depending on technology type and pipe dimensions
- pipe fastening, considering thermal expansion, sliding and rigid installation
- installation in concrete
- adaptor for proprietary and third party materials.

Bibliography

BS EN 681-1 : 1996 *Elastomeric seals — Material requirements for pipe joint seals used in water and drainage applications — Vulcanized rubber*

BS EN 1451-1 : 2017 *Plastic piping systems for soil and waste discharge (low and high temperature) within the building structure — Polypropylene (PP) — Specifications for pipes, fittings, and the system*

BS EN 12056-1 : 2000 *Gravity drainage systems inside buildings — General and performance requirements*
BS EN 12056-2 : 2000 *Gravity drainage systems inside buildings — Sanitary pipework, layout and calculation*
BS EN 12056-5 : 2000 *Gravity drainage systems inside buildings — Installation and testing, instructions for operation, maintenance and use*

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

BS EN ISO 580 : 2005 *Plastics piping and ducting systems — Injection-moulded thermoplastics fittings — Methods for visually assessing the effects of heating*

BS EN ISO 2505 : 2005 *Thermoplastics pipes — Longitudinal reversion — Test methods and parameters*

BS EN ISO 3127 : 1994 *Thermoplastics pipes — Determination of resistance to external blows — Round-the-clock method*

BS EN ISO 13254 : 2010 *Thermoplastics piping systems for non-pressure applications — Test method for watertightness*

BS EN ISO 13255 : 2010 *Thermoplastics piping systems for soil and waste discharge inside buildings — Test method for airtightness of joints*

BS EN ISO 13257 : 2010 *Thermoplastics piping systems for non-pressure applications — Test method for resistance to elevated temperature cycling*

EN 681-1 : 1996 *Elastomeric seals — Material requirements for pipe joint seals used in water and drainage applications — Vulcanized rubber*

ISO 9001 : 2015 *Quality management systems — Requirements*

ISO 14001 : 2015 *Environmental management system — Requirements*

PD CEN/TR 13801 : 2014 *Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure — Thermoplastics — Recommended practice for installation*

PD ISO/TR 7620 *Rubber materials — Chemical resistance*

PD ISO/TR 10358 : 2021 *Plastics pipes and fittings for industrial applications — Collection of data on combined chemical-resistance*

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 system 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 system or any other system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the system
- actual installations of the system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the system, 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 system which is contained or referred to in this Certificate is the minimum required to be met when the system 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.

British Board of Agrément
1st Floor, Building 3, Hatters Lane
Croxley Park, Watford
Herts WD18 8YG
tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk