

Brymec HDPE Drainage System Technical Specification



System Overview

Brymec's HDPE Drainage system is suitable for use within commercial, industrial, residential and education buildings for the dispersal of wastewater, foul water, rainwater and surface water where the pressure does not exceed 0.5 bar.

HDPE is our most versatile drainage system and offers a strong, durable system which is also lightweight with excellent physical properties. HDPE is highly resistant to impact and temperature, and is capable of exposure to many chemical products found in wastewater.

Connections can be made by two methods depending on the situation. Thermo-fusion connections can be made using either electro-fusion couplers or by butt welding. Both methods of joining the pipes will create a reliable connection that is as strong as the pipe itself.

To enable a safer, easier assembly of pipe sizes 200, 250 and 315mm, Brymec's electro-fusion couplers are equipped with dual-fusion coils. This arrangement means that connections can be made in a completely linear manner, one pipe length at a time.

Technical Information

Brymec HDPE Drainage Pipe Technical Information													
Pipe size (DN/OD)	32	40	50	56	63	75	90	110	125	160	200	250	315
Nominal Wall Thickness (mm)	3.0	3.0	3.0	3.0	3.0	3.0	3.5	4.3	4.9	6.2	7.7	9.6	12.1
Nominal ID (mm)	26	34	44	50	57	69	83	101.4	115.2	147.6	184.6	230.8	290.8
Nominal bore (cm ²)	5.3	9.1	15.2	19.6	25.5	37.4	54.1	80.8	104.2	171.1	267.6	418.4	664.2
Pipe Weight - Kg/m	0.28	0.36	0.45	0.48	0.58	0.70	0.98	1.46	1.88	3.04	4.81	7.19	11.67
Water Volume - L/m	0.53	0.91	1.52	1.96	2.55	3.74	5.41	8.08	10.42	17.11	26.76	41.84	66.42
Max. Operating Pressure	0.5 Bar to BS EN1519-1												
Operating Temperatures	-40°C to 70°C - intermittent peak loads to 95°C												
Thermal Expansion Coefficient	0.2mm (m*K)												
Pipe Material	HDPE (PE80) - Density 954 kg/m ³												
Connection	Plain end tubes for Fusion-weld or Electro-fusion socket welding												
UV Stability	Carbon black ≥2%												
Pipe Reaction To Fire	Class E to BS EN 13501-1												
Pipe Identification Markings	Markings at 1m as required by BS EN 1519:2019 - table 17												
Manufacturing Standard	BS EN 1519:1-2019 Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure												
Application area code	B & BD to BS EN 1519:2019												

Brymec HDPE Drainage Fittings Technical Information	
Body Material	HDPE
Connections	Butt fusion and Electrofusion - Unique Dual Electrofusion couplings 200/250/215mm
Sealing Gaskets (Ring Seal only)	EPDM seals to BS EN 681-2
Manufacturing Standard	BS EN 1519:1-2019 Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure
Fitting Identification Marking	Markings as required by BS EN 1519:2019 - table 18
Pipe Reaction To Fire	Class E to BS EN 13501-1



Applications	Soil & Waste Water	Rain Water Drainage	Industrial Waste Water	Commercial Waste Water
Area B	Soil and waste discharge applications (low and high temperature) inside buildings			
Area BD	Soil and waste discharge applications (low and high temperature) for both inside buildings and buried in the ground within the building structure			
Maximum operating temp.	-40°C to 70°C - intermittent peak loads to 95°C			

Warranty

Brymec HDPE Drainage is covered by a comprehensive 10 year warranty. Please refer to the Brymec terms and conditions for full details.



Installation and Tooling

For manufacturer's warranties to apply, all products must be installed to Brymec's latest installation instructions.

For details of approved electro-fusion welding equipment, please refer to the latest installation instructions for recommended equipment and required equipment settings.

Manufacturer details

Brymec Limited
 Unit C Redlands Centre
 Coulsdon
 CR5 2HT
T: 020 8655 8700
E: enquiries@brymec.com
W: www.brymec.com

Certification



Cert. 288342018



Cert. 459902024



Cert. 1313072



Scan or click to download the Brymec HDPE Technical Manual.

Brymec reserves the right to make changes, without prior notification, to the specification of our HDPE Drainage System in line with our policy of continuous improvement and development.

