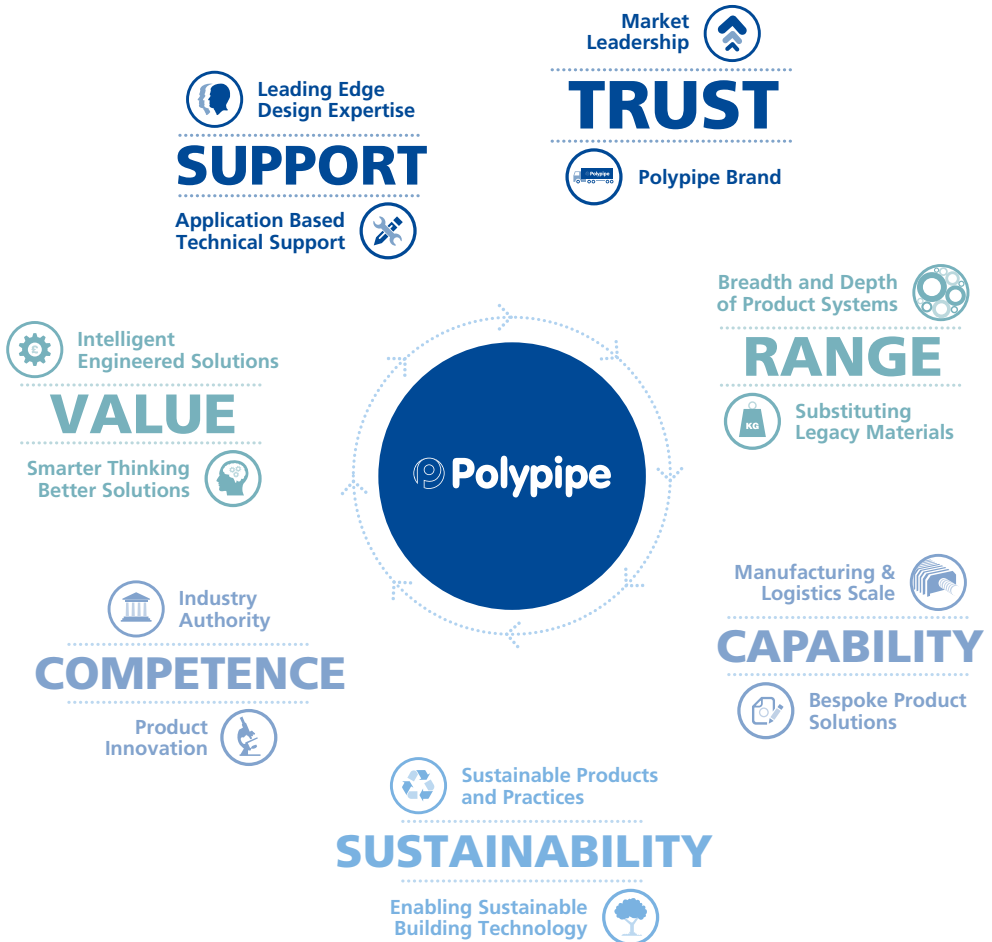


Cold Water Supply Systems

Product Guide 2019

Welcome to Polypipe

At Polypipe, conceiving, designing, manufacturing and delivering the most advanced products and systems isn't merely an occupation. It's a passion. One that's based around a few simple beliefs. Expertise isn't an option. Quality always beats quantity. Products are nothing without service and support. Sustainability isn't just a 'green' word. And working with our customers is much better than simply supplying them.



Every job is covered

Polypipe offers a comprehensive range of below ground drainage products, incorporating all necessary systems for the disposal and redistribution of waste water and rainwater.

For further information on all above ground products, or for technical assistance, call 01709 770000, visit our website www.polypipe.com or contact your local Polypipe Area Manager.

Water Supply

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Introduction



Polypipe manufactures a comprehensive range of polyethylene pipes and fittings for use in potable and non-potable applications.

Polyethylene pipe systems offer many benefits to the water engineer, including

- Lower weight for easier handling and reduced health and safety risks
- Cost savings due to faster installation
- Long lengths for reduced jointing operations
- Greater flexibility, offering superior performance where ground movements occur
- Superior abrasion resistance
- Excellent resistance to corrosion and a wide range of chemicals
- Smooth internal bores for excellent flow rates

APPLICATIONS

Polyethylene pipe systems are widely used for:

- Cold water distribution systems and waste water

They are not suitable for hot water applications, compressed air or chemical waste applications or fuel lines e.g.. Petrol, diesel or gas pipework.

QUALITY ASSURANCE

The company operates a comprehensive quality assurance system to BS EN ISO 9002 applicable to all manufactured products and which has been accepted by the British Standards Institution and has 13 BSI Kitemark Licences. The company is a BSI Registered Firm of Assessed capability for the manufacture of PE pressure pipes to BS EN 12201 and BS 8588.

INSTALLATION

The normal minimum depth of cover for service pipes is 750mm.

In uniform, soft soils free from sharp stones having a compaction fraction of less than 0.3, the pipes can be laid on the trimmed trench bottom and the as-dug soil can be used for side and backfill.

Thorough compaction by hand should be carried out until 250mm depth of cover is placed above the pipe following which machine compaction can be used. If the as-dug material is not suitable, then the trench should be excavated 100mm below the centre of the pipe and imported granular or similar bedding and fill in accordance with IGN 4-08-01 should be used. Polyethylene pipe systems are not suitable for use as an electrical earth

POLYFAST COMPRESSION

An economical compression system for jointing MDPE, LDPE, HDPE, normal gauge and heavy gauge polyethylene, copper, lead, PVCu and galvanised steel.

HANDLING AND STORAGE

Do not use metallic slings as these can cause cuts and gouges.

Ensure that pipes and fittings do not come into contact with oils/solvents or heat sources (polyethylene is flammable). Avoid contact with sharp objects and do not drag pipes across the ground. For storage periods outdoors longer than 12 months blue products should be stored under cover. Particular care should be exercised when handling pipes/fittings in wet or frosty conditions as the pipes/fittings will be slippery and difficult to handle.

TESTING

Pressure test to 1.5 times the actual working pressure for 1 hour maximum before connecting the installation to the mains supply. Any permissible fall off in pressure after isolating from the pressure source will be determined by the Site Engineer in accordance with the IGN 4-08-03. Sanitisation of the pipework prior to connection to carry Potable Water should be in accordance with the recommended procedure of the responsible Water Undertaker.

Service Pipes & Fittings

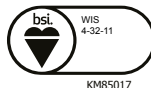


FEATURES

- **Sound and integrity** gives reliable trouble free service.
- **Simple and quick** to use for speedy installation.
- **PN12.5 Pressure Rating** gives increased safety factor.
- **Pipe and fittings** from one British Manufacturer.
- **End load resistant** - pull out is prevented by grab ring/ pipe stiffener/insert.
- **Robust** high impact resistance.
- **Tough** to withstand damage even at low temperatures.
- **Seals** are pre-lubricated.

MATERIALS

Polyfast compression fittings are manufactured with engineering plastic bodies and grab rings with EPDM Rubber seals kitemarked to BS EN681-1 and engineering plastic stiffeners and retaining nuts.



Service Pipes & Fittings

SERVICE PIPES

Blue MDPE pipes in diameters from 20 to 63mm are designed for underground potable water services for the connection of individual properties to distribution mains and are kitemarked to BS EN 12201.

Black MDPE pipes in diameters from 20 to 63mm are used for potable water above ground and are also kitemarked to BS EN 12201.

Black MDPE pipe can also be used for non potable water applications.

All service pipes are available in coil sizes of 25, 50, 100 and 150 metres.

FITTINGS

MDPE Service pipes may be jointed using Polyfast or electrofusion fittings.

Black LDPE pipes are jointed using Polyfast compression fittings using the BS 1972 adaptors.

POLYFAST FITTINGS

Polyfast fittings are economical compression fittings for jointing pipes kitemarked to BS EN 12201.

Polyfast fittings are manufactured in diameters from 20 to 63mm to the requirements of WIS 4.32.11 and hold WRAS Certificate No. 9503041.

Polyfast features include

- Sound joint integrity gives reliable trouble free service
- Simple and quick to use for rapid installation
- Manufacture with engineering plastic bodies and grab rings with EPDM rubber seals to BS EN 681-1 and engineering plastic stiffeners and retaining nuts.
- 12.5 bar pressure rating offers a high safety factor
- End load resistant design, with pull out prevented by the grab ring, pipe stiffener and insert
- Robust construction with high impact resistance
- Tough, even at low temperatures
- Pre-lubricated seals

Compression Fittings in sizes 20mm to 63mm OD, to the requirements of WRC WIS 4.32.11 are Adaptable for Polyethylene, Lead, Copper and Galvanised Iron

I 20mm to 63mm I MDPE to BS6572 and BS6730 I 3/8 inch to 2 inch LDPE to BS1972:1967 Class C and D I HDPE to BS3284:1967 Class C and D I LDPE to BS1972:1961 Normal and Heavy Gauge (IS134-1977) I Copper to BS2871 Table X and Y BS659, BS1386 I Lead to BS602/1085:1970 I PVC to BS3505:1986 I Galvanised Steel to BS1387:1985.



Water Supply

Water Service Pipe MDPE



Polypipe

MDPE PE80 12 Bar Pressure Pipe	Code	Colour	Approx kg/m	Min Wall Thickness	
20mm x 25m Coil. 0.13kg/m, 2.3mm.	2025		0.13	2.3mm	
20mm x 50m Coil. 0.13kg/m, 2.3mm.	2050		0.13	2.3mm	
20mm x 100m Coil. 0.13kg/m, 2.3mm.	20100		0.13	2.3mm	
20mm x 150m Coil. 0.13kg/m, 2.3mm.	20150		0.13	2.3mm	
25mm x 25m Coil. 0.17kg/m, 2.3mm.	2525		0.17	2.3mm	
25mm x 50m Coil. 0.17kg/m, 2.3mm.	2550		0.17	2.3mm	
25mm x 100m Coil. 0.17kg/m, 2.3mm.	25100		0.17	2.3mm	
25mm x 150m Coil. 0.17kg/m, 2.3mm.	25150		0.17	2.3mm	
32mm x 25m Coil. 0.28kg/m, 3.0mm.	3225		0.28	3.0mm	
32mm x 50m Coil. 0.28kg/m, 3.0mm.	3250		0.28	3.0mm	
32mm x 100m Coil. 0.28kg/m, 3.0mm.	32100		0.28	3.0mm	
32mm x 150m Coil. 0.28kg/m, 3.0mm.	32150		0.28	3.0mm	
40mm x 50m Coil. 0.43kg/m, 3.0mm.	4050		0.50	3.7mm	
40mm x 100m Coil. 0.43kg/m, 3.0mm.	40100		0.50	3.7mm	
50mm x 6m Length. 0.67kg/m, 4.6mm.	5006		0.67	4.6mm	
50mm x 25m Coil. 0.67kg/m, 4.6mm.	5025		0.67	4.6mm	
50mm x 50m Coil. 0.67kg/m, 4.6mm.	5050		0.67	4.6mm	
50mm x 100m Coil. 0.67kg/m, 4.6mm.	50100		0.67	4.6mm	
50mm x 150m Coil. 0.67kg/m, 4.6mm.	50150		0.67	4.6mm	
63mm x 6m Length. 1.05kg/m, 5.8mm.	6306		1.05	5.8mm	
63mm x 25m Coil. 1.05kg/m, 5.8mm.	6325		1.05	5.8mm	
63mm x 50m Coil. 1.05kg/m, 5.8mm.	6350		1.05	5.8mm	
63mm x 100m Coil. 1.05kg/m, 5.8mm.	63100		1.05	5.8mm	
63mm x 150m Coil. 1.05kg/m, 5.8mm.	63150		1.05	5.8mm	

MDPE PE80 8 Bar Pressure Pipe	Code	Colour	Approx kg/m	Min Wall Thickness	
50mm x 50m Coil. 0.40kg/m, 2.9mm.	500850B		0.40	2.9mm	
50mm x 100m Coil. 0.40kg/m, 2.9mm.	5008100B		0.40	2.9mm	
63mm x 50m Coil. 0.64kg/m, 3.6mm.	630850B		0.64	3.6mm	
63mm x 100m Coil. 0.64kg/m, 3.6mm.	6308100B		0.64	3.6mm	



Water Supply



Polyfast Polyethylene Compression Fittings




Straight Coupler		Code	
20mm.		40020	
25mm.		40025	
32mm.		40032	
40mm.		40040	
50mm.		40050	
63mm.		40063	
Slip/Repair Coupler		Code	
20mm.		40020S	
25mm.		40025S	
32mm.		40032S	
40mm.		40040S	
50mm.		40050S	
63mm.		40063S	
Polylink Straight Universal Transition Coupler		Code	
25mm x 15/22mm.		4841522	
25mm x 21/27mm.		4842127	
25mm x 27/35mm.		4842735	
32mm x 27/35mm.		4882735	
Polylink 90° Bent Universal Transition Coupler		Code	
25mm x 15/22mm.		4851522	
25mm x 21/27mm.		4852127	
25mm x 27/35mm.		4852735	
Reducing Coupler		Code	
25mm x 20mm		40625	
32mm x 20mm		4063220	
32mm x 25mm		40632	
40mm x 32mm		40640	
50mm x 32mm		4065032	
50mm x 40mm		40650	

Water Supply




Polyfast Polyethylene Compression Fittings



Metric to Imperial Coupler	Code	
20mm x 1/2".	48120	
25mm x 1/2".	4812512	
25mm x 3/4".	48125	


Imperial Male Iron x PE Coupler	Code	
1/2" BSP x 20mm	49012	
3/4" BSP x 25mm	49034	
1" BSP x 32mm	4901	

Taper BSP thread to BS21 - Use PTFE tape to seal thread

Copper/ Polybutylene Adaptor	Code	
20mm x 15mm (1/2").	47820	
25mm x 15mm (1/2").	4782515	
25mm x 22mm (3/4").	47825	
32mm x 22mm (3/4").	4783222	
32mm x 28mm (1").	47832	

Female Adaptor	Code	
20mm x 1/2" BSP.	40320	
25mm x 1/2" BSP.	4032512	
25mm x 3/4" BSP.	40325	
32mm x 1" BSP.	40332	
40mm x 1 1/4" BSP.	40340	
50mm x 1 1/2" BSP.	40350	
63mm x 2" BSP.	40363	

Complete with stainless steel reinforcing shroud


Male Adaptor	Code	
20mm x 1/2" BSP.	40420	
25mm x 1/2" BSP.	4042512	
25mm x 3/4" BSP.	40425	
32mm x 1" BSP.	40432	
40mm x 1 1/4" BSP.	40440	
50mm x 1 1/2" BSP.	40450	
63mm x 2" BSP.	40463	


Water Supply



Polyfast Polyethylene Compression Fittings




Elbow	Code	
20mm.	40120	
25mm.	40125	
32mm.	40132	
40mm.	40140	
50mm.	40150	
63mm.	40163	

Reducing Elbow	Code	
25mm. 25mm x 20mm 90° Reducing.	4012520	


Reducing Female Elbow	Code	
20mm x ½" BSP Female.	42120	
25mm x ¾" BSP Female.	42125	
32mm x 1" BSP Female.	42132	
40mm x 1¼" BSP Female.	42140	
50mm x 1½" BSP Female.	42150	
63mm x 2" BSP Female.	42163	

Complete with stainless steel reinforcing shroud

Tank Connector	Code	
25mm x ¾" BSP.	42525	

Reducing Male Elbow	Code	
20mm x ½" BSP Male.	42320	
25mm x ¾" BSP Male.	42325	
32mm x 1" BSP Male.	42332	

Complete with stainless steel reinforcing shroud


Equal Tee	Code	
20mm.	40220	
25mm.	40225	
32mm.	40232	
40mm.	40240	
50mm.	40250	
63mm.	40263	


Water Supply





Polyfast Polyethylene Compression Fittings



Branch Reducing Tee	Code	
25mm x 20mm.	41125	
32mm x 20mm.	4113220	
32mm x 25mm.	41132	

BSP Branch Tee	Code	
20mm x 1/2" BSP Female.	42220	
25mm x 3/4" BSP Female.	42225	
32mm x 1" BSP Female.	42232	
40mm x 1 1/4" BSP Female.	42240	
50mm x 1 1/2" BSP Female.	42250	
63mm x 2" BSP Female.	42263	
20mm x 1/2" BSP Male.	42420	
25mm x 3/4" BSP Male.	42425	

End Plug	Code	
20mm.	40920	
25mm.	40925	
32mm.	40932	
40mm.	40940	
50mm.	40950	
63mm.	40963	

Stop End	Code	
20mm.	30920	
25mm.	30925	
32mm.	30932	
40mm.	30940	
50mm.	30950	
63mm.	30963	


Fits Polyfast sockets. Pipe stiffeners should be used



Water Supply





Polyfast Polyethylene Compression Fittings



Plastic Pipe Stiffener 12 Bar Plastic Pipe Stiffener	Code	
20mm.	46420	
25mm.	46425	
32mm.	46432	
40mm.	46440	
50mm.	46450	
63mm.	46463	
50mm. 8 Bar Stiffener.	47450	
63mm. 8 Bar Stiffener.	47463	

MDPE High Flow Reducing Set	Code	
25mm x 20mm.	4802520	
32mm x 20mm.	4803220	
32mm x 25mm.	4803225	
50mm x 20mm.	4805020	
50mm x 25mm.	4805025	
50mm x 32mm.	4805032	
63mm x 20mm.	4806320	
63mm x 25mm.	4806325	
63mm x 32mm.	4806332	
63mm x 50mm.	4806350	

MDPE Reducing Set	Code	
25mm x 20mm.	4712520	
32mm x 20mm.	4713220	
32mm x 25mm.	4713225	
50mm x 20mm.	4715020	
50mm x 25mm.	4715025	
50mm x 32mm.	4715032	
63mm x 20mm.	4716320	
63mm x 25mm.	4716325	
63mm x 32mm.	4716332	
63mm x 50mm.	4716350	


For MDPE BS6572 and BS6730


Water Supply




Polyfast Polyethylene Compression Fittings




Copper Adaptor Set	Code	
20mm x 15mm Cu.	46820	
25mm x 15mm Cu.	4682515	
25mm x 22mm Cu.	46825	
32mm x 28mm Cu.	46832	


Lead Adaptor Set	Code	
20mm x 3/8" 5lb.	46920	
25mm x 1/2" 7lb.	46925	
25mm x 3/4" 9lb.	46932	
32mm x 3/4" 11lb.	469329	
40mm x 1" 16lb.	46940	

Light Grey
BS602, 1085)

Wider Tolerance Lead Coupler	Code	
25mm x 3/8" 5lb.	479385	
25mm x 1/2" 7lb.	479127	
25mm x 1/2" 9lb.	479129	
25mm x 3/4" 9lb.	479349	
32mm x 3/4" 11lb.	4793411	
32mm x 1" 16lb.	479116	

Mid Blue Polyethylene Adaptor Set	Code	
20mm x 1/2".	465C12	
25mm x 3/4".	465C34	
32mm x 1".	465C1	
50mm. 50mm x 1 1/4".	465C114	
50mm. 50mm x 1 1/2".	465C112	
63mm. 63mm x 2".	465C2	

Low Density BS1972:1967
Class C. To connect 3/8"
use 1/2" 467NG12
with 20mm Nut and Body

Light Green Polyethylene Adaptor Set	Code	
25mm x 1/2".	465D12	
25mm x 3/4".	465D34	
32mm x 1".	465D1	
50mm x 1 1/4".	465D114	
50mm x 1 1/2".	465D112	


Low Density BS1972:1967
Class D


Water Supply





Polyfast Polyethylene Compression Fittings



Dark Blue Polyethylene Adaptor Set		Code	
20mm x 1/2".	High Density BS3284:1967 Class C	466C12	
25mm x 3/4".		466C34	
32mm x 1".		466C1	
50mm x 1 1/4".		466C114	
50mm x 1 1/2".		466C112	
63mm x 2".		466C2	

Dark Green Polyethylene Adaptor Set		Code	
20mm x 3/8".	High Density BS3284:1967 Class D	466D38	
20mm x 1/2".		466D12	
25mm x 3/4".		466D34	
32mm x 1".		466D1	
50mm x 1 1/4".		466D114	
50mm x 1 1/2".		466D112	
63mm x 2".		466D2	

Red Polyethylene Adaptor Set		Code	
20mm x 1/2".	Low Density BS1972:1961 Normal Gauge IS134:1977	467NG12	
25mm x 3/4".		467NG34	
32mm x 1".		467NG1	
50mm x 1 1/4".		467NG114	
50mm x 1 1/2".		467NG112	
63mm x 2".		467NG2	

Light Blue Polyethylene Adaptor Set		Code	
20mm x 1/2".	Low Density BS1972:1961 Heavy Gauge IS134:1977	467HG12	
25mm x 3/4".		467HG34	
32mm x 1".		467HG1	
50mm x 1 1/4".		467HG114	
50mm x 1 1/2".		467HG112	








PVC/Galvanised Iron Adaptor		Code	
20mm x 3/8".	Not end load bearing. Must be anchored or clamped to prevent pull-out PVC BS 3505/6 Galv. Steel BS1387	4722038	
25mm x 1/2".		4722512	
32mm x 3/4".		4723234	
40mm x 1".		47240	

Water Supply



Polyfast Polyethylene Compression Fittings




Bibtap Wall Flange (DZR Brass)		Code	
20mm x 1/2" BSP.		41320	
25mm x 1/2" BSP.		41325	
25mm x 3/4" BSP.		4132534	
Bibtap Wall Flange (Plastic)		Code	
20mm x 1/2" BSP.		48320	
25mm x 1/2" BSP.		4832512	
25mm x 3/4" BSP.		48325	
Gunmetal Stop Cock - Polyfast Ends		Code	
20mm.		41020	
25mm.		41025	
32mm.		41032	
Gunmetal Stop Cock - Female Iron		Code	
1 1/2" F.I. - Requires Adaptors		31050	
2" F.I. - Requires Adaptors		31063	
Engineering Plastic Stop Cock (complete with excess torque override feature)		Code	
20mm.		42620	
25mm.		42625	
32mm.		42632	
Square Drive Stop Cock (Engineering Plastic)		Code	
20mm.		49120	
25mm.		49125	
Stop Cock		Code	
20mm x 15mm (1/2") Copper.		47720	
25mm x 15mm (1/2") Copper.		4772515	
25mm x 22mm (3/4") Copper.		47725	

Water Supply



Polyfast Polyethylene Compression Fittings



Single Union Ball Valve	Code	
½" F.I.	47312	
¾" F.I.	47334	
1" F.I.	4731	

Threaded Reducing Bush	Code	
¾" x ½" BSP.	4703412	
1" x ½" BSP.	470112	
1" x ¾" BSP.	470134	
1¼" x 1" BSP.	4701141	
1½" x ½" BSP.	47011212	
1½" x ¾" BSP.	47011234	
1½" x 1" BSP.	4701121	
1½" x 1¼" BSP.	470112114	
2" x ½" BSP.	470212	
2" x ¾" BSP.	470234	
2" x 1" BSP.	47021	
2" x 1½" BSP.	4702112	
3" x 2" BSP.	47032	
4" x 3" BSP.	47043	

Gunmetal Stop Cock - Female Iron	Code	
1½" F.I. - Requires Adaptors	31050	
2" F.I. - Requires Adaptors	31063	

POLYETHYLENE PIPE JOINTING INSTRUCTIONS

Note: Always check that the factory applied silicone lubricant grease is present on the rubber seal.

There are 5 vital stages to successfully join Polyfast compression fittings to blue (BS6572) and black (BS6730) MDPE pipe.

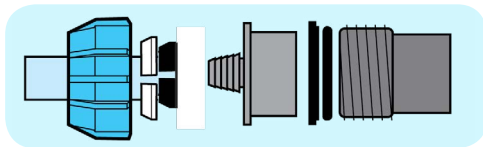
1. Always use one of the approved pipe cutters (Code 781 or 778).
A slight rotation of the pipe when cutting will help make the operation easier. **Never use a hacksaw.** Cut pipe end square and remove any burrs or sharp edges.
2. Insert pipe stiffener in pipe up to the stop.
3. Loosen nut on the Polyfast fittings.
4. Insert clean pipe to full socket depth and hand tighten the Polyfast nut to secure. Use a strap wrench (code: 780) to tighten the nut 1/8 of a turn. **Do not over tighten.**



Jointing Instructions

MDPE Reducing Set

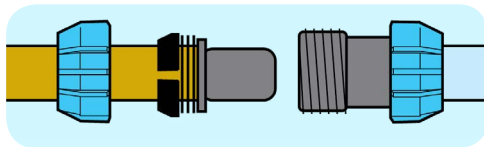
1. Remove the nut from the fitting and place over pipe end.
2. Discard black/grey metric grab ring.
3. Place nut reducer and new black grab ring over pipe end (thickest section towards fitting body). Ensure the grab ring is positioned at the end of the pipe.
4. Insert barbed end of adaptor into pipe and tap in with wooden mallet up to flange.
5. Push black grab ring up to flange, if necessary.
6. Push spigot end of adaptor into body of fitting to full socket depth. Engage nut onto fitting.
7. **Hand tighten plus 1/8 turn using strap wrench.**



Copper

BS2871 Table X & Y (EN1057)

1. Remove nut from fitting and place over pipe end.
2. Place black/grey metric ring over pipe (thickest section towards fitting body)
3. Place over pipe stainless steel washer, stainless steel grab ring (taper towards pipe end) and then other stainless steel washer maximum of 15mm from end.
4. Push rubber bush, flange first onto pipe, maintaining close contact with other components up to stop of rubber bush.
5. Push spigot end of adaptor into body of fitting to full socket depth. Engage nut onto fitting.
6. **Hand tighten plus 1/8 turn using strap wrench.**

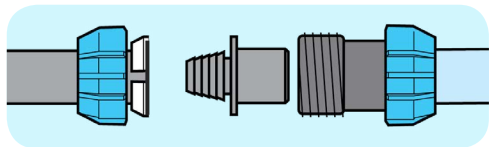


LDPE and HDPE Black

BS1972: 1967 C&D BS3284 C&D

BS1972: 1961 (IS134 NG & HG)

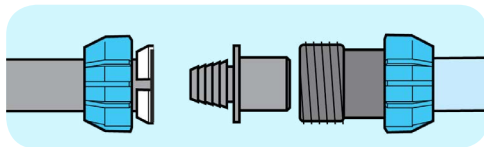
1. Remove nut from fitting and place over end of pipe.
2. Discard of black/grey metric grab ring.
3. Place white imperial grab ring over the pipe (thickest section towards fitting body). Ensure the grab ring is positioned at the end of the pipe.
4. Insert barbed end of adaptor into pipe and tap in with wooden mallet up to flange.
5. Push spigot end of adaptor into body of fitting to full socket depth. Engage nut onto fitting.
6. **Hand tighten plus 1/8 turn using strap wrench.**



LEAD

BS602, 1085/1970 NB Use 3/8" in 20mm body, 1/2" in 25mm body, 3/4" in 32mm body, 1" in 40mm body.

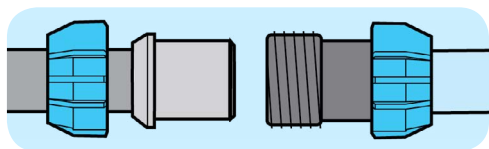
1. Remove nut from fitting and place over pipe end.
2. Discard black/grey metric grab ring.
3. Place white grab ring over pipe (thickest section towards fitting body). Ensure the grab ring is positioned at the end of the pipe.
4. Insert barbed end of adaptor into pipe and tap in with wooden mallet up to flange.
5. Push white grab ring up to flange, if necessary.
6. Push spigot end of adaptor into body of fitting to full socket depth. Engage nut onto fitting.
7. **Hand tighten plus 1/8 turn using strap wrench.**



Joining Instructions

PVCu BS3505/6 1968 and Glavanised Steel BS1387

1. Remove the nut from the fitting and place over pipe end.
2. Discard black/grey metric grab ring.
3. Push rubber bush onto end of pipe.
4. Push spigot end of adaptor into body of fitting to full socket depth. Engage nut onto fitting.
5. **Hand tighten plus 1/8 turn using strap wrench.**



Imperial Adaptor Couplers for LDPE/HDPDE Pipes

BS1972: 1967 C&D BS3284 C&D

1. Note that the imperial end of the fitting has a black nut. Cut the pipe end square with the axis and file a chamfer onto the pipe end.
2. Insert the pipe end through the black nut, grab ring and the rubber seal to full socket depth.
3. **Hand tighten plus 1/8 turn using strap wrench.**

Wide Tolerance Adaptor Couplers for Lead Pipes

BS602, 1085: 1970

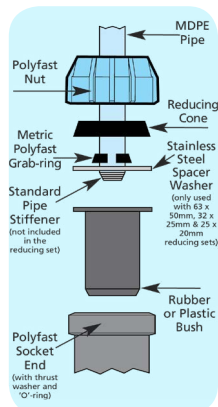
1. Check condition of pipe surface and cut back pip square to remove any surface grooves or damage using pipe cutters or saw, deburr and chamfer end of pipe to facilitate assembly.
2. Remove the nut from the fitting and replace the nut over the pipe end.
3. Mark the socket depth on the pipe and push the grab-ring up to the mark (thickest section toward fitting body).
4. Push the seal onto the pipe and up to the grab-ring (tapered face towards fitting).
5. Position the lead pipe, seal and grab-ring into the fitting body. Engage the thread.
6. **Hand tighten plus 1/8 turn using strap wrench.**

High Flow Reducing Set For MDPE Pipes

Plastic reducing bushes: 63 x 20mm (Code: 4806320) 63 x 25mm (Code: 4806325) 63mm x 32mm (Code: 4806332) 50 x 20mm (Code: 4805020) 50 x 25mm (Code: 4805025) 32 x 20mm (Code: 4803220)

1. Cut pipe square and fit standard Polyfast pipe stiffener.
2. Select the appropriate reducing set for the size of polyfast fitting and the smaller pipe to be fitted (eg. 63mm x 20mm reducing set, Code: 4806320).

3. Remove the nut from the Polyfast fitting and discard the standard metric grab-ring. Ensure that the seal and thrust washer remain in position in the socket.
4. Push the plastic reducing bush into the socket of the polyfast socket until the end of the bush is flush with the end of the socket.
5. Place the smaller grab-ring onto the reducing bush (thicker end in contact with the bush) and the reducing cone over the grab-ring and re-fit the Polyfast nut onto the end of the body.



6. Push the pipe through the nut into the socket of the reducing bush to contact the register at the bottom of the socket.
7. **Hand tighten plus 1/8 turn using strap wrench.**

High Flow Reducing Set For MDPE Pipes

Rubber bushes 63 x 50mm (Code: 4806350) 32 x 25mm (Code: 4803225) 25mm x 20mm (Code: 4802520)

1. Cut pipe square and fit standard Polyfast pipe stiffener.
2. Select the appropriate reducing set for the size of polyfast fitting and the smaller pipe to be fitted (eg. 63mm x 20mm reducing set, Code: 4806320).
3. Remove the nut from the Polyfast fitting and discard the standard metric grab-ring. Ensure that the seal and thrust washer remain in the position in the socket and check that the factory applied silicone lubricant grease is present on the rubber seal.
4. Place the nut on the pipe end followed by the reducing cone, grab-ring (thickest section towards the pipe end) and stainless steel support washer.
5. Fit the rubber bush over the pipe end and push the stainless steel washer/grab-ring and reducing cone back down the pipe until the pipe is fully inserted into the rubber bush with a stainless steel spacer washer and grab-ring in contact with the flanged end of the rubber bush.
6. Push the plain spigot of the rubber reducing bush into the socket of the fitting through the thrust washer and 'O'-ring and engage the nut onto the threads on the body of the fitting.
7. **Hand tighten plus 1/8 turn using strap wrench.**

Joining Instructions

High Flow Reducing Set For MDPE Pipes

Rubber bushes 63 x 50mm (Code: 4806350) 32 x 25mm (Code: 4803225) 25mm x 20mm (Code: 4802520)

1. Cut pipe square and fit standard Polyfast pipe stiffener.
2. Select the appropriate reducing set for the size of polyfast fitting and the smaller pipe to be fitted (eg. 63mm x 20mm reducing set, Code: 4806320).
3. Remove the nut from the Polyfast fitting and discard the standard metric grab-ring. Ensure that the seal and thrust washer remain in the position in the socket and check that the factory applied silicone lubricant grease is present on the rubber seal.
4. Place the nut on the pipe end followed by the reducing cone, grab-ring (thickest section towards the pipe end) and stainless steel support washer.
5. Fit the rubber bush over the pipe end and push the stainless steel washer/grab-ring and reducing cone back down the pipe until the pipe is fully inserted into the rubber bush with a stainless steel spacer washer and grab-ring in contact with the flanged end of the rubber bush.
6. Push the plain spigot of the rubber reducing bush into the socket of the fitting through the thrust washer and 'O'-ring and engage the nut onto the threads on the body of the fitting.
7. **Hand tighten plus 1/8 turn using strap wrench.**

Copper/Polybutylene Sockets

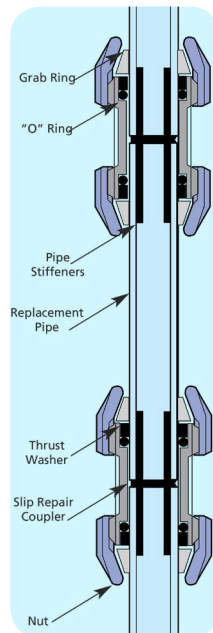
Polyfast MDPE x Copper/polybutylene adaptors (Code: 478) and Push-fit MDPE x Copper/polybutylene adaptors (Code: 378)

Please refer to the joining and dismantling instruction section of the Polyplumb Hot and Cold Water Plumbing and Heating Guide earlier in this manual (pages 8, 9 and 10).

Slip Repair Couplers

To replace damaged pipe on straight runs

1. Cut out the damaged pipe for a distance of at least the length of 2 slip couplers. Cut a replacement length of pipe, and de-burr/chamfer pipe ends.
2. Fit pipe stiffeners to pipe ends and mark half the length of the slip couplers from each pipe end with a felt-tipped pen. Remove nuts and grab rings from the 2 slip couplers and place first one nut and one grab ring on the existing pipe ends with the tapers as shown.
3. Check that the 'O'-ring seals are lubricated and slide one slip coupler onto each pipe end, holding the thrust washer and 'O'-ring in place until the couplers are fully onto the pipe ends.
4. Place the second nut and grab-ring of each slip coupler onto the replacement length of pipe as shown, insert the replacement length of pipe in between the 2 existing pipe ends.
5. Slide the 2 slip couplers onto the replacement pipe so that they are half on the existing pipe and half on the replacement pipe using the previously marked lines for guidance. If necessary, ensure that the seals and thrust washers are pushed back into position in each socket.
6. Slide the grab-rings back to contact the end of each socket. (It may be necessary to insert the end of a screwdriver or a piece of wood in the grab-ring slot to open the grab-ring out slightly to enable it to be moved backwards).
7. **Screw the nut onto each socket end. Hand tighten plus 1/8 turn using strap wrench.**



Water Supply

Polyguard Barrier Pipe & Fittings



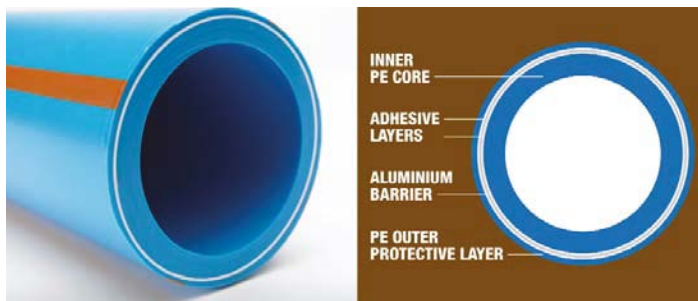
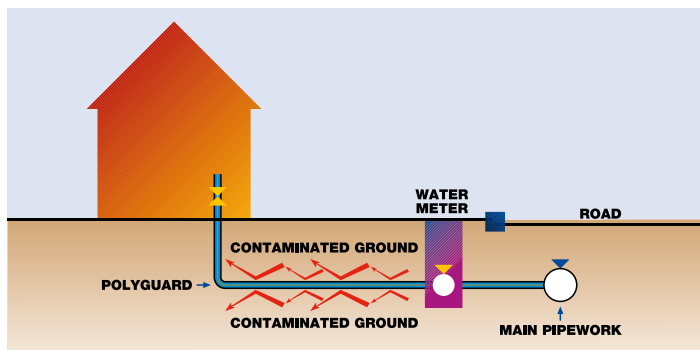
Polyguard has been designed to ensure the safe delivery of drinking water through redeveloped sites that may have been contaminated by previous industrial use. As its name suggests, Polyguard guard's essential drinking water against a wide range of potential contaminants, including organic, inorganic, corrosive and toxic elements.

The Polyguard system offers a comprehensive range of both pipe and brass-ware fittings providing a complete potable water supply solution.

Polyguard pipe is constructed from 2 layers of Polypipes proven flexible polyethylene adhered to a layer of aluminium, providing an impermeable barrier to the ingress of contaminants. The inner layer of polyethylene carries the water and the outer layer provides protection for the aluminium layer from damage. Brown stripes on the outer layer ensure installed pipework is easily identified.

The Polyguard range is completed by an extensive selection of specialist fittings, each incorporating a special insert designed to ensure a perfect seal. Tees, elbows, and both standard and transition couplings are available for use with each of the three Polyguard pipe sizes: 25, 32 and 63mm.

25 & 32mm pipe is available in 50m coils whilst 63mm is available in 25m, 50m coils & 6m straight lengths.





Water Supply

Polyguard Barrier Pipe & Fittings



- Conforms with Type A: WIS 4-32-19: Polyethylene pressure pipe systems with an aluminium barrier layer for potable water supply in contaminated land
- Complies with BS6920 Water Quality Testing
- Approved under regulation 31 of the Water Supply (Water Quality) Regulations 2000
- "Approved for use in public water supplies"
- WIS approval for plastic fittings for Polyguard Barrier Pipe providing manufacturer's instructions are followed upon installation.
- Kitemarked to BS 8588: KM692343



Polyguard Barrier Pipe	Code	
25mm. Polyguard pipe x 50m coil.	PGP2550	
32mm. Polyguard pipe x 50m coil.	PGP3250	
63mm. Polyguard pipe x 6m length.	PGP636	
63mm. Polyguard pipe x 25m coil.	PGP6325	
63mm. Polyguard pipe x 50m coil.	PGP6350	

Polyguard Plastic Fittings	Code	
25mm. 25mm Coupler.	PGF40025	
32mm. 32mm Coupler.	PGF40032	
32mm. 32 x 25mm Reducer.	PGF40632	
25mm. 25mm x 3/4" Male Adaptor.	PGF40425	
32mm. 32mm x 1" Male Adaptor.	PGF40432	
25mm. 25mm x 3/4" Female Adaptor.	PGF40325	
25mm. 32mm x 1" Female Adaptor.	PGF40332	
25mm. 25mm Elbow.	PGF40125	
32mm. 32mm Elbow.	PGF40132	
25mm. 25mm Tee.	PGF40225	
32mm. 32mm Tee.	PGF40232	
25mm. 25mm x 15mm Transition Coupler.	PGF4782515	
25mm. 25mm x 22mm Transition Coupler.	PGF47825	
32mm. 32mm x 28mm Transition Coupler.	PGF47832	
25mm. 25mm Polyguard x 25mm MDPE Transition Coupler.	PGF402525	
32mm. 32mm Polyguard x 32mm MDPE Transition Coupler.	PGF403232	
25mm. 25mm Stopcock.	PGF41025	
32mm. 32mm Stopcock.	PGF41032	
25mm. 25mm Endcap.	PGF40925	
32mm. 32mm Endcap.	PGF40932	

Water Supply

Polyguard Barrier Pipe & Fittings



Polyguard DZR Gunmetal Fittings	Code	
25mm. Polyguard straight coupling.	PGF25SC	 PGF32SC
32mm. Polyguard straight coupling.	PGF32SC	
63mm. Polyguard straight coupling.	PGF63SC	
25mm. Polyguard x 3/4" MBSP coupling.	PGF25MTC	
32mm. Polyguard x 1" MBSP coupling.	PGF32MTC	
63mm. Polyguard x 2" MBSP coupling.	PGF63MTC	
25mm. Polyguard x 3/4" FBSP coupling.	PGF25FTC	
32mm. Polyguard x 1" FBSP coupling.	PGF32FTC	
63mm. Polyguard x 2" FBSP coupling.	PGF63FTC	
25mm. Polyguard 90° elbow.	PGF2590E	
32mm. Polyguard 90° elbow.	PGF3290E	 PGF3290E
63mm. Polyguard 90° elbow.	PGF6390E	
25mm. Polyguard equal tee.	PGF25T	
32mm. Polyguard equal tee.	PGF32T	
63mm. Polyguard equal tee.	PGF63T	
25mm x 15mm. Polyguard to copper transition coupling.	PGF2515TC	
25mm x 22mm. Polyguard to copper transition coupling.	PGF2522TC	
25mm x 25mm. Polyguard to PE transition coupling.	PGF2525TC	
32mm x 32mm. Polyguard to PE transition coupling.	PGF3232TC	
63mm x 63mm. Polyguard to PE transition coupling.	PGF6363TC	

Water Supply

HPPE | PE100 | HDPE Range



Polypipe

HPPE PE100 HDPE Range	Code	Colour	Approx kg/m	Pressure Rating	
90mm x 6m	HP0901606		2.04	16	
90mm x 6m	HP0901006		1.40	10	
90mm x 50m CL	HP0901050		1.40	10	
90mm x 100m CL	HP09010100		1.40	10	
90mm x 50m CL	HP0901650		2.04	16	
110mm x 6m	HP1101006		2.08	10	
110mm x 50m CL	HP1101050		2.08	10	
125mm x 6m	HP1251606		3.94	16	
125mm x 6m	HP1251006		2.65	10	
160mm x 6m	HP160100		4.35	10	
180mm x 6m	HP1801006		5.51	10	

HPPE PE100 HDPE Range	Code	Colour	Approx kg/m	Pressure Rating	
90mm x 6m	HP0901006		1.40	10	
90mm x 50m CL	HP0901050		1.40	10	
90mm x 100m CL	HP09010100		1.40	10	
110mm x 6m	HP1101006		2.08	10	
110mm x 50m CL	HP1101050		2.08	10	
125mm x 6m	HP1251006		2.65	10	
160mm x 6m	HP1601006		4.35	10	
180mm x 6m	HP1801006		5.51	10	

Cold Water Supply Systems

Product Guide 2019

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