P&HDLTPL6 FEBRUARY 2017

EFFECTIVE: 6th FEBRUARY 2017

# **Polypipe Underfloor Heating**



Trade Price List 2017





# Underfloor Heating Trade Price List 2017

Welcome to the new Polypipe Underfloor Heating Trade Price List. This handy pocket guide combines all of our related products into one single catalogue of product and price information.

Alongside all of our best known product ranges, you will also find several exciting new additions, continuing our reputation for product innovation and great value. Together they make Polypipe the most comprehensive range of plumbing and heating systems available from a single UK manufacturer.

#### Be sure to check out these great new products:

Page 26 Steel Manifolds Optional secure fixed bracket Page 36 Smart + Controls

Control your heating when you're not at home

For the latest product and support information, literature downloads, product selectors and news, visit us online at **www.polypipeufh.com** 

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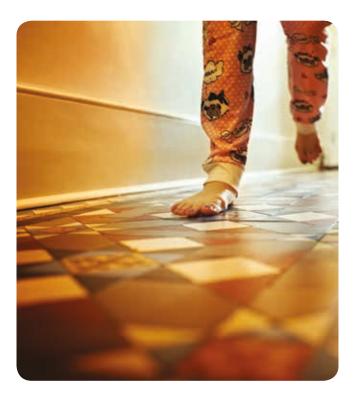
You can find out more about Polypipe Underfloor Heating Systems at www.polypipeufh.com

# Underfloor Heating Systems

**Polypipe** manufactures the most comprehensive range of underfloor heating systems available for the UK market.

Our range combines versions of traditional underfloor systems and a number of innovative product solutions, designed to extend the suitability of underfloor heating to almost any installation scenario, from whole house to single room projects and for new build and renovations.

For more information, consult our Installation Guide or use the online product selectors at **www.polypipeufh.com** 



#### Polypipe Ultra Flexible Underfloor Heating Pipe (For Underfloor Heating Use Only) - EN15876

Underfloor Heating Pipe Polybutylene	Pack Qty.	Code No.	Price Each £
12mm x 25m Coil UFH Pipe	1	UFH2512B	28.11
12mm x 50m Coil UFH Pipe	1	UFH5012B	56.21
12mm x 80m Coil UFH Pipe	1	UFH8012B	89.93
15mm x 50m Coil UFH Pipe	1	UFH5015B	59.19
15mm x 80m Coil UFH Pipe	1	UFH8015B	94.70
15mm x 100m Coil UFH Pipe	1	UFH10015B	118.38
15mm x 120m Coil UFH Pipe	1	UFH12015B	142.06
15mm x 150m Coil UFH Pipe	1	UFH15015B	177.58
15mm x 500m Coil UFH Pipe	1	UFH50015B	591.91
18mm x 120m Coil UFH Pipe	1	UFH12018B	169.94
18mm x 200m Coil UFH Pipe	1	UFH20018B	283.24
18mm x 300m Coil UFH Pipe	1	UFH30018B	424.86



Pipe Decoiler	Pack Qty.	Code No.	Price Each £	
Adjustable pipe decoiler for pipes coils up to 500m	1	UFHDECOIL	248.17	X

#### **Conduit Pipe**

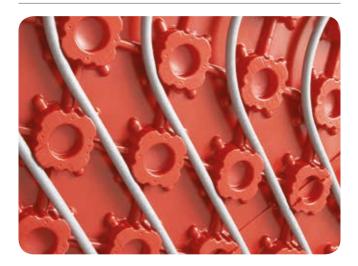
Conduit Polypropylene Pipe Coil	Pack Qty.	Code No.	Price Each £	
15mm x 25 metre (Black)	1	UFHCP1525	19.95	

#### Polypipe MCP Underfloor Heating Pipe (For Underfloor Heating Use Only)

#### - EN21003 Class S

Metal Composite Pipe	Pack Qty.	Code No.	Price Each £
16mm x 80m Coil MCP UFH Pipe	1	MCP8016B	114.59
16mm x 100m Coil MCP UFH Pipe	1	MCP10016B	143.23
16mm x 120m Coil MCP UFH Pipe	1	MCP12016B	171.87
16mm x 150m Coil MCP UFH Pipe	1	MCP15016B	214.84

# Solid Floor Systems



# **Underfloor heating** for solid screeded floors

# **Red Floor Panel System**

For optimum performance, Polypipe has the perfect solution for installing underfloor heating into solid or screeded floors. Utilising our unique lightweight plastic floor panels, which are quick and easy to cut to size, it is possible to fit Polypipe Underfloor Heating into any shaped room. The lightweight plastic floor panels also nest for easy storage and carrying.

#### **Clip Rail and Staple Systems**

We also provide a range of rail and staple systems that fit directly onto the insulation, offering a more traditional alternative to installing underfloor heating in solid or screeded floors.

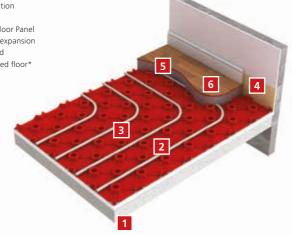
#### **Optimum performance system**

# 🔗 Panel System

Floor Panel Allow for overlap and waste when ordering	Pack Qty.	Code No.	Price Each £	
1.2m x 1m	1	PB08576	7.77	
Standard UFCH Pipe Clip	Pack Qty.	Code No.	Price Each £	
Standard UFCH Pipe Clip	250	PB02911	0.08	
Edge Expansion	Pack Qty.	Code No.	Price Each £	
25m Coil	1	PB05855	23.79	
Long Radius Bend Former	Pack Qty.	Code No.	Price Each £	6
For use as pipe guide at bottom of manifold - accepts 15mm conduit pipe	1	PB6325	11.94	(
Plastic Pipe Stiffeners	Pack Qty.	Code No.	Price Each £	
15mm UFH pipe stiffener	30	UFHPS15	0.25	-

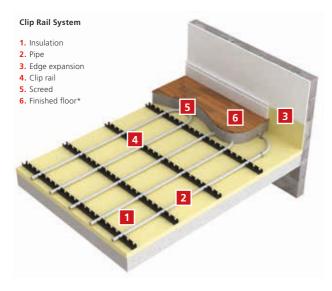
#### Panel System

- 1. Insulation
- 2. Pipe
- 3. Red Floor Panel
- 4. Edge expansion
- 5. Screed
- 6. Finished floor\*



## **Clip Rail System**

Clip Rails 200mm pipe centres (15mm pipe) & 200mm & 300mm pipe centres (18mm pipe). Use approx 1m/m <sup>2</sup> floor area and secure with standard Pipe Clip P802911.	Pack Qty.	Code No.	Price Each £	11
15-18mm pipe 16 x 1m pack (16m)	16	PB08515	2.46	10
Standard UFCH Pipe Clip	Pack Qty.	Code No.	Price Each £	<b>~</b>
Standard UFCH Pipe Clip	250	PB02911	0.08	<b>`</b>
Edge Expansion	Pack Qty.	Code No.	Price Each £	-
25m Coil	1	PB05855	23.79	
Long Radius Bend Former	Pack Qty.	Code No.	Price Each £	-
For use as pipe guide at bottom of manifold - accepts 15mm conduit pipe	1	PB6325	11.94	(
Plastic Pipe Stiffeners	Pack Qty.	Code No.	Price Each £	
15mm UFH pipe stiffener	30	UFHPS15	0.25	



## **Staple System**

UFCH Staple System	Pack Qty.	Code No.	Price Each £	2
UFCH Staple Clip (40mm)	300	PB02940	0.11	11.
UFCH Staple Clip (60mm)	300	PB02930	0.11	
UFCH Staple Gun	1	PB02931	203.93	2

Edge Expansion		Code No.	Price Each £	
25m Coil	1	PB05855	23.79	

Long Radius Bend Former	Pack Qty.	Code No.	Price Each £	1
For use as pipe guide at bottom of manifold - accepts 15mm conduit pipe	1	PB6325	11.94	

Plastic Pipe Stiffeners	Pack Qty.	Code No.	Price Each £	
15mm UFH pipe stiffener	30	UFHPS15	0.25	



# Floating Floor Systems



# Underfloor heating for floating floors

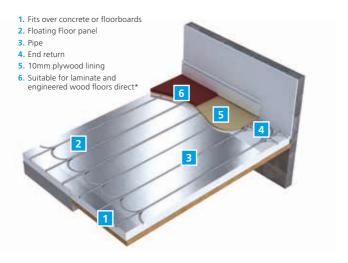
**The Polypipe Floating Floor System** features high density polystyrene floor panels that enhance insulation, as well as providing the base for the heating pipes.

The system is designed for use with "dry build" floors laid directly over solid or timber sub bases in both new build and existing properties.

Floating Floor Systems are compatible with our 15mm pipe systems.

#### **Floating Floor System**

Floor Panel Coverage approx. 9.6m <sup>2</sup> per 10 pack	Pack Qty.	Code No.	Price Each £	
1200mm (L) x 800mm (W) x 50mm (D)	10	PB08050	33.37	
Connection/Return panel	10	PB08060	8.77	
Self Adhesive Aluminium Tape	Pack Qty.	Code No.	Price Each £	電
Aluminium Tape	Qty.	No.	Each £	



# Suspended Floor Systems



# Underfloor heating for suspended floors

**For suspended timber and composite joists**, typically found in new build and renovation projects - Polypipe offers a range of unique pre-insulated and pre-configured systems, as well as more traditional suspended floor underfloor heating options. Giving you a solution for every type of suspended floor installation.

#### **Double Heat Spreader Plates (DHSP)**

Offering a simple installation system for traditional joists and spacings, Double Heat Spreader Plates can also be used in 'sprung' flooring systems such as sports halls.

This system uses aluminium Double Heat Spreader Plates to transmit the heat evenly across the finished floor surface.

#### **Optimum performance system**

## ✓ Fit From Above with Overlay™ Lite 15 - Suspended floor application

For enhanced performance, especially over larger floor areas, use with our new Overlay<sup>™</sup> Lite 15 panels for an integrated insulated solution.

#### Fit From Below (FFB) Double Heat Spreader Plate

Suitable for use with traditional or composite joists, this system offers the ability to fit from below, even if the floor above has already been installed.

Perfect for cellars or where upper floor coverings are already in place.

# **OMOD** Modular Heating Panels

For the ultimate quick and easy installation solution, use our pre-configured, insulated panels that include all the system components already integrated. The panels are supplied in sized panels which are simply fitted and connected together on site.

#### All systems

For use with our 15mm pipe systems. All suspended floor systems are fitted within the joists so do not add any build height to the floor.

#### **Double Heat Spreader Plate**

Double Heat Spreader Plate Pipe grooves at 125mm each side of centre line	Pack Qty.	Code No.	Price Each £	
For 15mm Pipe, 450mm x 1m span double indent	5	PB209	9.74	
Double Heat Spreader Plate				
<ol> <li>Ceiling</li> <li>Supporting joists</li> </ol>				
3. Insulation				
4. Double Heat Spreader Plate				
5. Pipe		-		
6. Timber or chipboard floor deck*		5	6	
	4	×		
2				
1	6	9		

# FFB Double Heat Spreader Plate

FFB Double Heat Spreader Plate	Pack Qty.	Code No.	Price Each £	
For 15mm Pipe, 310mm x 1n span double indent	<sup>n</sup> 5	PB206	13.60	
Fit From Below (FFB) Double Heat Spreader Plate				
<ol> <li>Supporting joists</li> <li>Insulation</li> <li>FFB Double Heat Spreader Plate</li> <li>Pipe</li> <li>Timber or chipboard floor deck*</li> </ol>	ate		5 4	

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\*See technical guide for floor coverings.

# **⊘** Overlay™ Lite 15

Overlay™ Lite 15 Floor Panel	Pack	Code	Price
	Qty.	No.	Each £
1200mm (L) x 800mm (W) x 22mm (D) Coverage approx. 9.6m <sup>2</sup> per 10 pack	10	PB08030	27.82
Plastic Pipe Stiffeners	Pack	Code	Price
	Qty.	No.	Each £
15mm UFH pipe stiffener	30	UFHPS15	0.25

#### Fit From Above With Overlay™ Lite 15

1. Ceiling 2. Supporting joists 3. Overlay<sup>TM</sup> Lite 15 4. Pipe 5. Timber or chipboard floor deck\* 5 1 1 1 2

## MHP (Modular Heating Panel)

MHP (Modular Heating Panel)	Pack Qty.	Code No.	Price Each £
330mm x 1.3m	5	MHP33013	18.82
380mm x 1.3m	5	MHP38013	18.82
330mm x 2.0m	5	MHP33020	25.10
380mm x 2.0m	5	MHP38020	25.10
490mm x 1.3m	5	MHP49013	25.10
490mm x 2.0m	5	MHP49020	33.46

#### MHP (Modular Heating Panel)



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# Existing Floors & Low Profile Systems



# Underfloor heating that goes over the floor

For existing solid or timber deck floors - Polypipe's unique Overlay<sup>™</sup> underfloor heating range of low profile systems are installed over the existing floor. This makes them ideal for renovation and new build, whole house and single room projects.

Optimum performance system

# **⊘** Overlay™

Overlay<sup>™</sup> accommodates all types of project and floor coverings, and the only choice is that of which panel will be most appropriate for the installation. Both Overlay<sup>™</sup> and Overlay<sup>™</sup> Lite can be used for the majority of projects, however the choice of Overlay<sup>™</sup> is determined by floor covering selection. Overlay<sup>™</sup> and Overlay<sup>™</sup> Lite can be used as appropriate in the same project.

The more structural nature of Overlay<sup>™</sup>, however, makes it ideal for direct tiling or application of floor finishes which need to be fixed or screwed to the panel.

# **⊘** Overlay™ Lite

Overlay<sup>™</sup> Lite is the ideal solution for laminate and engineered wood floors, which should be laid directly over the system.

Overlay<sup>™</sup> Lite products are easy to install making it ideal for larger floor areas.

# 🧭 Overlay™ Lite 15

Slightly deeper profile, which can be used on top of a supporting floor or as a low profile alternative to floating floor. The system delivers the same responsive heat but is configured to be more suitable for larger, "whole house" projects. Choose **Overlay™** original floor panels for use with heavier floor coverings such as tiles and ceramics.

# Overlay™

Overlay™ Floor Panel	Pack Qty.	Code No.	Price Each £	
800mm (L) x 600mm (W) x 18mm (D) Coverage approx. 14·4m <sup>2</sup> per 30 pack	30	PB08571	13.96	
800mm (L) x 600mm (W) x 18mm (D) Coverage approx. 4.8m <sup>2</sup> per 10 pack	10	PB08570	14.66	
1200mm (L) x 600mm (W) x 18mm (D) Manifold Routing Board	1	UFHOVMFP	75.00	
End Returns (Overlay™ & Overlay™ Lite)	Pack Qty.	Code No.	Price Each £	
End Returns	10	PB08573	2.16	
Polyurethane Expanding Foam Glue	Pack Qty.	Code No.	Price Each £	2
Polyurethane Expanding Foam Glue Polyurethane Expanding Foam Glue (Overlay™)			Price Each £ 13.03	
Foam Glue Polyurethane Expanding	Qty.	No.	Each £	
Foam Glue Polyurethane Expanding Foam Glue (Overlay™) Adaptor Set	Qty. 1 Pack	No. PB776 Code	Each £ 13.03 Price	<u> </u>
Foam Glue Polyurethane Expanding Foam Glue (Overlay™) Adaptor Set (Overlay™ & Overlay™ Lite) 15mm x 12mm including	Qty. 1 Pack Qty.	No. PB776 Code No.	Each £ 13.03 Price Each £	
Foam Glue Polyurethane Expanding Foam Glue (Overlay™) Adaptor Set (Overlay™ & Overlay™ Lite) 15mm x 12mm including Pipe Stiffeners	Qty. 1 Pack Qty. 2 Pack	No. PB776 Code No. PB181512 Code	Each £ 13.03 Price Each £ 3.14 Price	

- 1. Fits over concrete or floorboards
- 800mm x 600mm x 18mm OverlayTM panel
- 3. 12mm polybutylene barrier pipe
- 4. End return
- Suitable for tiles and hard wood floors\*

Choose **Overlay™ Lite** floor panels for use with lighter floor coverings such as carpet and laminates.

# **⊘** Overlay™ Lite

Overlay™ Lite Floor Panel	Pack Qty.	Code No.	Price Each £	
1245mm (L) x 600mm (W) x 18mm (D) Coverage approx. 7.5m <sup>2</sup> per 10 pack	10	PB08010	21.53	
1245mm (L) x 600mm (W) x 18mm (D) Coverage approx. 15m <sup>2</sup> per 20 pack	20	PB08020	19.54	
Self Adhesive Aluminium Tape	Pack Qty.	Code No.	Price Each £	
48mm wide x 46 metres long	1	UFHALTP	10.00	
End Returns (Overlay™ & Overlay™ Lite)	Pack Qty.	Code No.	Price Each £	
End Returns	10	PB08573	2.16	In A second data
Adaptor Set (Overlay™ & Overlay™ Lite)	Pack Qty.	Code No.	Price Each £	-
15mm x 12mm including Pipe Stiffeners	2	PB181512	3.14	
Nail-In-Clip - Polypropylene	Pack	Code	Price	0

Nail-In-Clip - Polypropylene	Qty.	No.	Each £	C
12mm	30	UFHNAILCLIP	0.10	

- 1. Fits over concrete or floorboards
- Overlay<sup>™</sup> Lite panel
- 3. Pipe
- 4. End return
- 5. 10mm plywood lining (optional)
- Suitable for laminate and engineered wood floors\*

Choose **Overlay™ Lite 15** floor panels, with 15mm pipe, for larger floor areas.

# **⊘** Overlay™ Lite 15

Overlay™ Lite 15 Floor Panel	Pack Qty.	Code No.	Price Each £
1200mm (L) x 800mm (W) x 22mm (D) Coverage approx. 9.6m <sup>2</sup> per 10 pack	10	PB08030	27.82
Connection/Return panel	10	PB08040	7.30

Self Adhesive	Pack	Code	Price
Aluminium Tape	Qty.	No.	Each £
48mm wide x 46 metres long	1	UFHALTP	10.00

Plastic Pipe Stiffeners		Code No.	Price Each £
15mm UFH pipe stiffener	30	UFHPS15	0.25



- Overlay<sup>™</sup> Lite 15 panel
- 3. Pipe
- 4. End return
- 5. 10mm plywood lining
- Suitable for laminate and engineered wood floors\*

# Underfloor Heating Room Kits

The simplest way to enjoy affordable luxury heating in your bathroom, kitchen, bedrooms or living spaces.

#### Live in the comfort of your own home

# Polypipe Underfloor Heating

www.polypipeufh.com 23



# **Polypipe** offers a broad range of manifold and water temperature controls for both traditional and underfloor heating applications, now including the new Stainless Steel Manifold with Secure Fix Bracket.

Manifolds are used in all underfloor heating systems above 30m<sup>2</sup>, irrespective of floor type. Manifolds are supplied complete and fixed with a wall mounting bracket. The manifold comes complete with a drain and air vent assembly, which can be positioned on either end of the manifold, and isolation valves are supplied separately for the supply end of the manifold.

We offer a range of 15mm push-fit manifolds for use with 12mm and 15mm pipe systems and compression manifolds for use with our 16mm and 18mm pipe systems.

Each Polypipe manifold includes a flow meter on each flow port to provide a visual indicator of the flow through rate of each circuit.

Polypipe also offers a range of water temperature control units. These are used to reduce the water temperature for underfloor heating systems, when connected to the same boiler used for radiators or stored hot water, which operate at higher temperatures than underfloor systems.

#### Stainless Steel Underfloor Heating Manifolds and Ancillaries



15mm Stainless Steel Manifold Push-fit For use with 15mm and 12mm Overlay™ Systems	Pack Qty.	Code No.	Price Each £
2 Port - Push-fit Manifold	1	PB12752	130.00
3 Port - Push-fit Manifold	1	PB12753	156.50
4 Port - Push-fit Manifold	1	PB12754	192.60
5 Port - Push-fit Manifold	1	PB12755	207.05
6 Port - Push-fit Manifold	1	PB12756	246.78
7 Port - Push-fit Manifold	1	PB12757	270.85
8 Port - Push-fit Manifold	1	PB12758	300.94
9 Port - Push-fit Manifold	1	PB12759	327.42
10 Port - Push-fit Manifold	1	PB12760	355.12
11 Port - Push-fit Manifold	1	PB12761	385.21
12 Port - Push-fit Manifold	1	PB12762	415.31

Stainless Steel	Pack	Code	Price
Isolation Valves	Qty.	No.	Each £
1 inch - Isolation Valves - use to connect manifolds to both UFCH Control Pack & Modulating Pump Unit (Pair)	1	PB12764	31.27 per pair

Stainless Steel		Code	Price
Isolation Valves		No.	Each £
1 inch - Isolation Valves - use to connect UFCH Control Pack to system pipework	1	PB12765	31.27 per pair

Secure Fix Bracket Assembly with Isolation Valves (optional)	Pack Qty.	Code No.	Price Each £
Including 4 Ball Valves	1	PB12763	135.95



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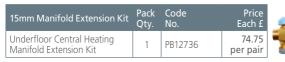
15mm Stainless Steel Manifold Extension Kit	Pack Qty.	Code No.	Price Each £	and an a street
Underfloor Central Heating Manifold Extension Kit	1	PB12769	74.77 per pair	1 1
UFCH Manifold Bends (90°)	Pack Qty.	Code No.	Price Each £	

## Stainless Steel Manifold Spares and Accessories

Manifold Flow Meter	Pack Qty.	Code No.	Price Each £	1
Manifold Flow Meter	1	PB128FM	13.60	Ŧ
Manifold Balancing Valve	Pack Qty.	Code No.	Price Each £	A
Manifold Balancing Valve	1	PB128BV	10.20	T
Manifold Blue Cap	Pack Qty.	Code No.	Price Each £	
Manifold Blue Cap	1	PB128BC	1.36	
Manifold End Set	Pack Qty.	Code No.	Price Each £	<b>a</b> l <b>a</b> l
Manifold End Set (Pair)	1	PB128ES	33.99 per pair	75
Comissioning Hose	Pack Qty.	Code No.	Price Each £	$\bigcirc$
For filling and draining	1	PB12766	16.99	

# Brass Underfloor Heating Manifolds and Ancillaries

15mm Manifold Push-fit For use with 15mm and 12mm Overlay™ Systems	Pack Qty.	Code No.	Price Each £
2 Port - Push-fit Manifold	1	PB12737	130.00
3 Port - Push-fit Manifold	1	PB12738	156.50
4 Port - Push-fit Manifold	1	PB12739	192.60
5 Port - Push-fit Manifold	1	PB12740	207.05
6 Port - Push-fit Manifold	1	PB12741	246.78
7 Port - Push-fit Manifold	1	PB12742	270.85
8 Port - Push-fit Manifold	1	PB12743	300.94
9 Port - Push-fit Manifold	1	PB12744	327.42
10 Port - Push-fit Manifold	1	PB12745	355.12
11 Port - Push-fit Manifold	1	PB12746	385.21
12 Port - Push-fit Manifold	1	PB12747	415.31



16mm and 18mm Compression Manifold For use with 16mm MCP and 18mm systems Use with Manifold Unions	Pack Qty.	Code No.	Price Each £
2 Port - Compression Manifold	1	PB08351	130.00
3 Port - Compression Manifold	1	PB08392	156.50
4 Port - Compression Manifold	1	PB08459	192.60
5 Port - Compression Manifold	1	PB08462	191.89
6 Port - Compression Manifold	1	PB08479	246.78
7 Port - Compression Manifold	1	PB08558	270.85
8 Port - Compression Manifold	1	PB08563	300.94
9 Port - Compression Manifold	1	PB08564	327.42
10 Port - Compression Manifold	1	PB08572	355.12
11 Port - Compression Manifold	1	PB08588	385.21
12 Port - Compression Manifold	1	PB08589	415.31

16mm and 18mm Manifold Unions To be used on each Manifold Port	Pack Qty.	Code No.	Price Each £
16mm	1	PB07729	3.29
18mm	1	PB07730	3.29





UFCH Manifold Bends (90°)	Pack Qty.	Code No.	Price Each £	
Allows pump unit and manifold to be corner mounted, can be used with UFCH Control Pack or Modulating Pump Unit (Pair)	1	PB12735	33.35 per pair	
Isolation Valves	Pack	Code	Price Fach f	

	Qty.	No.	Each £	
1 inch - Isolation Valves - use to connect manifolds to both UFCH Control Pack & Modulating Pump Unit (Pair)	1	PB01732	29.46 per pair	

## **Brass Manifold Spares and Accessories**

Manifold Flow Meter	Pack Qty.	Code No.	Price Each £	ŵ
Manifold Flow Meter	1	PB127FM	12.43	-
Manifold Balancing Valve	Pack Qty.	Code No.	Price Each £	4
Manifold Balancing Valve	1	PB127BV	9.48	Ŧ
Manifold Blue Cap	Pack Qty.	Code No.	Price Each £	
Manifold Blue Cap	1	PB127BC	1.36	
Manifold End Set	Pack Qty.	Code No.	Price Each £	0 🙀
Manifold End Set (Pair)	1	PB127ES	31.64 per pair	0 🐙 🔍
Temperature Gauge	Pack Qty.	Code No.	Price Each £	40
Temperature Gauge	1	PB127TG	11.98	20 60



## **Multiple Room Systems**

Stainless Steel Manifold Control Pack	Pack Qty.	Code No.	Price Each £	
UFCH Control Pack - Includes EUP Pump, UFCH Mixer Valve, bend and adaptors. For use with Stainless Steel Manifold only (see page 26-27).	1	PB970055	328.84	
High Limit Thermostat	Pack Qty.	Code No.	Price Each £	
Provides additional protection from high temperature water. For use with PB970055 only.	1	PB12767	47.58	SO
Brass Pre-Assembled Manifold Control Pack	Pack Qty.	Code No.	Price Each £	7
Factory assembled UFCH Control Pack - Includes EUP Pump, UFCH Mixer Valve, bend and adaptors. For use with Brass Manifold only (see page 28-29).	1	PB970035	328.84	Ó
High Limit Thermostat	Pack Qty.	Code No.	Price Each £	
Provides additional protection from high temperature water. For use with PB970035.	1	PB970036	20.39	
2 Port Zone Valve	Pack Qty.	Code No.	Price Each £	
2 Port Spring Return Zone Valve	1	PB9700ZV	54.81	



UFCH Mixing Valve	Pack Qty.	Code No.	Price Each £	
22mm	1	PB219058	105.72	
28mm	1	PB219059	118.01	10

#### **Single Room Systems**

Single Room Control Units Zonal Regulation Units (ZRU)	Pack Qty.	Code No.	Price Each £	
ZRU Single circuit	1	PB970018	372.54	
Single Room Control Units Zonal Regulation Units (ZRU)	Pack Qty.	Code No.	Price Each £	
ZRU 2/3 circuit	1	PB970028	387.16	<b>.</b>
Temperature Limiting Valve	Pack Qty.	Code No.	Price Each £	
Temperature Limiting Valve 5m² Overlay™ only	1	PB970010	60.34	C C











**Polypipe** supplies a comprehensive range of room temperature control products for use on both Polypipe Underfloor Heating Systems and for general use to control heating temperatures in different rooms or control zones. Now with internet control options.

The range is designed to enable users to configure their heating system to create their preferred balance of comfort and efficiency. Unique programming functions also provide the perfect control solution for Polypipe Underfloor Heating Systems.

Polypipe Room Temperature Controls are available in a wide range of options, including dial, digital, programmable and internet room thermostats, in both wired and RF version, time clocks and master and slave systems.

Use our online controls selector tool for help with selecting the right controls system at **www.polypipeufh.com** 

#### **Room Temperature Controls**

UFCH Valve Actuators	Pack Qty.	Code No.	Price Each £	
2 Wire	1	PB00401	21.64	
4 Wire	1	PB00402	36.04	10
Smart Internet Controls	Pack Qty.	Code No.	Price Each £	
Wired Room Thermostat compatible with Wiring Centres PB1ZM, PB4ZS & PB6ZS only	1	PBINTRS	135.95	Same II
Wired Wet Room Thermostat compatible with Wiring Centres PB1ZM, PB4ZS & PB6ZS only	1	PBINTWRS	156.35	
Heating Hub Unit (supplied with ethernet cable for connection to broadband router)	1	PBINTNG	101.97	

Room Thermostats	Pack Qty.	Code No.	Price Each £
Dial Room Thermostat	1	UFHDIALB	32.89
Dial Room Thermostat RF	1	UFHDIALRFB	47.51
Programmable Room Thermostat	1	UFHPROGB	61.25
Programmable Room Thermostat RF	1	UFHPROGRFB	84.04

Time Clocks	NEW	Pack Qty.	Code No.	Price Each £	Ker mit
2 Channel		1	UFHTIME2B	47.58	
4 Channel RF		1	UFHTIME4RFB	73.08	

#### **Room Temperature Controls**

Wiring Centres For wired room thermostats and clocks	Pack Qty.	Code No.	Price Each £	
Single Zone Master Control Unit - Provides wiring connections for Boiler, Zone Valve, UFH Pump and Power Supply and Single Room Thermostat	1	PB1ZM	67.08	
4 Zone Slave Unit - Plug-in connection to Master Unit to provide 4 Control Zones	1	PB4ZS	58.47	
6 Zone Slave Unit - Plug-in connection to Master Unit to provide 6 Control Zones	1	PB6ZS	71.02	and the second

Wiring Centres For RF Room Thermostats and Clocks	Pack Qty.	Code No.	Price Each £	
2 Zone Master Unit - Provides hard wired connections for Boiler, Zone Valve, UFH pump, power supply and Actuators (2 zone). Provides RF Connectivity for RF Clock and up to 2 RF Thermostats.	1	PB2ZM RF	146.15	line 1
4 Zone Slave Unit RF - Plug in connection to PB2ZM RF and provides RF connectivity for up to 4 Zones	1	PB4ZS RF	73.08	
RF Receiver - Remote RF receiver providing connectivity to any RF Thermostat or time clock (switches 230V)	1	PB REC RF	32.89	

Wet Room Sensor	Pack Qty.	Code No.	Price Each £	
Includes 3m Sensor Cable - Connects to all wired and RF Room Thermostats for remote sensing in wet rooms	1	PB23020	8.85	CG

#### **Room Temperature Controls**

Smart + Controls Wiring Centre	Pack Qty.	Code No.	Price Each £	
8 Zone Master Unit for RF Pairing.	1	UFH8ZMP	301.04	<b>•••</b>
Smart + Controls Thermostats	Pack Qty.	Code No.	Price Each £	
8 Zone Master TFT Thermostatic Control Unit	1	UFHTFTMBP (Black)	301.04	
8 Zone Master TFT Thermostatic Control Unit	1	UFHTFTMWP (White)	301.04	(Baaa)
Single Zone TFT Thermostatic Control Unit	1	UFHTFTBP (Black)	301.04	
Single Zone TFT Thermostatic Control Unit	1	UFHTFTWP (White)	301.04	
Single Zone Temperature Sensor with Boost Function	1	UFHBOOSTWP	60.42	250
Single Zone Temperature Sensor	1	UFHSENSEWP	32.37	_

Smart + Internet Connectivity Modules	Pack Qty.	Code No.	Price Each £	
Wifi Connectivity Internet Module	1	UFHINTWIFIP	242.78	-
Hard Wired Internet Module	1	UFHINTMODP	211.48	7.664 

Accessories	Pack Qty.	Code No.	Price Each £
Additional Power Connection Unit	1	UFHPOWERP	30.21
Replacement Coloured Frame*	1	UFHFRAME <b>WP</b>	7.55



\* Other colours are available by replacing the colour code ie WP for white. BLP: Blue, BP: Black, CP: Chrome, PP: Purple.

Other colours are available upon request.

www.polypipeufh.com 37

This range of underfloor heating packs contains all the flooring and control equipment required for a single room project.

# 1. Select the floor type applicable for the room from the following options:

Solid Floor – Red Floor Panel (Code **SO**) Overlay<sup>™</sup> (Code **O**) Solid Floor - Staple (Code **SS**) Overlay™ Lite (Code **OL**)

2. Select the total heated floor area for the room and round up to the following options:

\*5m<sup>2</sup> (Code 5) 12m<sup>2</sup> (Code 12) 20m<sup>2</sup> (Code 20) 30m<sup>2</sup> (Code 30)

## 3. Add the control unit:

ZRU – For connection to existing heating system (Code Z) \*Temperature Limiting Valve – For connection to existing heating systems in rooms up to  $5m^2$  (Code B)

## 4. Optional Room Thermostatic control:

ZRU only (No additional code) Wired Digital Thermostat (Code **C**) RF Digital Thermostat (Code **RF**)

## EXAMPLE:

The order code for a 12m<sup>2</sup> solid floor with a ZRU would be:

SS	20	Ζ	RF	SS20ZRF
Solid Floor Staple	<b>20m</b> <sup>2</sup>	ZRU	RF Thermostat	Order Code

Pack number	Floor Type	Area				
			None	Wired (C)	RF (RF)	
O5B	Overlay™	5m²	£354.59	-	-	
O12Z	Overlay™	12m <sup>2</sup>	£990.95	£1,041.94	£1,087.25	
O20Z	Overlay™	20m²	£1,320.13	£1,371.12	£1,416.44	
O30Z	Overlay™	30m²	£1,730.67	£1,781.66	£1,826.97	
OL12Z	Overlay™ Lite	12m²	£965.29	£1,016.28	£1,061.60	
OL20Z	Overlay™ Lite	20m²	£1,339.72	£1,390.70	£1,436.02	
OL30Z	Overlay™ Lite	30m²	£1,716.35	£1,767.34	£1,812.66	
SO12Z	Red Floor Panel	12m <sup>2</sup>	£660.04	£711.02	£756.34	
SO20Z	Red Floor Panel	20m²	£865.01	£916.00	£961.31	
SO30Z	Red Floor Panel	30m²	£1,111.28	£1,162.27	£1,207.58	
SS12Z	Staple System	12m <sup>2</sup>	£595.37	£646.35	£691.67	
SS20Z	Staple System	20m²	£768.32	£819.31	£864.62	
SS30Z	Staple System	30m²	£932.95	£983.93	£1,029.25	

\*Overlay™ only

## **Room Packs**

Room Packs	Pack Code	Pack Code	Pack Code	Pack Code
Overlay™ Single Room Packs	O5B	O12Z	O20Z	O30Z
Product	Qty	Qty	Qty	Qty
Overlay™ Temperature Limiting Valve	1			
Overlay™ Panel (in Packs of 10)	10		10	
Overlay™ Panel (in Packs of 30)		30	30	60
Overlay™ End Returns (in Packs of 10)	10	20	40	60
Overlay™ Pipe (12mm x 80m)	1	1	2	3
Overlay™ Glue	1	1	2	2
12 x 15mm Adaptors (in Packs of 2)	2	2	4	6
15mm PolyPlumb Tees			2	4
15mm PolyPlumb Spigot Elbows			2	4
ZRU (Zonal Regulation Unit)		1	1	1

Overlay™ Lite Single Room Packs	OL12Z	OL20Z	OL30Z
Product	Qty	Qty	Qty
Overlay™ Lite Panel (in Packs of 10)		10	
Overlay™ Lite Panel (in Packs of 20)	20	20	40
Overlay™ End Returns (in Packs of 10)	20	40	60
Overlay™ Pipe (12mm x 80m)	1	2	3
Self Adhesive Aluminium Tape	1	2	2
12 x 15mm Adaptors (in Packs of 2)	2	4	6
15mm PolyPlumb Tees		2	4
15mm PolyPlumb Spigot Elbows		2	4
ZRU (Zonal Regulation Unit)	1	1	1

Solid Floor	12	m²	20		30	m²
Product	So	SS	So	SS	So	SS
Screeded Solid Floor Panels	12		20		30	
60mm Staple Clips (in Packs of 300)		300		600		600
15mm x 100mm Pipe Coil	1	1	2	2	3	3
Edge Expansion	1	1	1	1	2	2
Pipe Stiffeners (in Packs of 30)	30	30	30	30	30	30
15mm PolyPlumb Tees			2	2	4	4
15mm PolyPlumb Spigot Elbows			2	2	4	4
ZRU (Zonal Regulation Unit)	1	1	1	1	1	1

Please Note: Wired control option adds 1 x UFHDIALB RF Control option adds 1 x UFHDIALRFB and 1 x PBRECRF Receiver.



# **Polypipe** offers a range of pre-insulated pipe systems, which provide flexibility, durability and availability when required.

These systems meet the growing demand for products that are suitable for renewable heat sources such as remote boilers and heat pumps. Installation is fast and easy, requiring just a single lay of the flow and return pipes, which are both contained in a single casing. The inner water bearing pipes are PEX barrier pipes, which are contained in a corrugated HDPE outer casing.

Polypipe pre-insulated pipes are fastened using brass mechanical clamp fittings, which require no special tools or equipment.

## **Pre-Insulated Pipes**

Pipes (Twin Pipe Coil) Outside casing 160mm (OD) Bend radius 0.5m	Pack Qty.	Code No.	Price Each £
25mm x 10m, PE-Xa 2mm x 25mm (OD) 20 DN (ID)	1	INS1025-2-HTG	497.93
25mm x 15m, PE-Xa 2mm x 25mm (OD) 20 DN (ID)	1	INS1525-2-HTG	746.91
25mm x 20m, PE-Xa 2mm x 25mm (OD) 20 DN (ID)	1	INS2025-2-HTG	995.85
32mm x 10m, PE-Xa 2mm x 32mm (OD) 25 DN (ID)	1	INS1032-2-HTG	586.61
32mm x 15m, PE-Xa 2mm x 32mm (OD) 25 DN (ID)	1	INS1532-2-HTG	879.94
32mm x 20m, PE-Xa 2mm x 32mm (OD) 25 DN (ID)	1	INS2032-2-HTG	1,173.25

Max operating pressure: 6 bar. Max fluid temperature: +95°C. PE-Xa pipes: SDR 11. Carrier pipes are individually identified as flow and return.

Dust Cap	Pack Qty.	Code No.	Price Each £
160mm x 25mm Dust Cap	1	INS160-25-2DC	12.75
160mm x 32mm Dust Cap	1	INS160-32-2DC	12.75

Heat Shrink Cap	Pack	Code	Price
	Qty.	No.	Each £
160mm Heat Shrink Cap	1	INS160-3225-2HSC	128.17

Insulation Kit	Pack	Code	Price
For Coupler	Qty.	No.	Each £
160mm (OD) to fit outside casing, 1000mm (L) 180mm (OD)	1	INS160IKC	103.83

Kit comprises a smooth black HDPE pipe, rock wool insulation, 2 shrink sleeves, adhesive tape and assembly instructions. Heat shrinkable cap to be ordered separately.

Male Couplings For PEX pipe	Pack Qty.	Code No.	Price Each £
25mm (OD)/2.3 (w/t) thread 3/4"	1	INS25MC-HTG	30.34
32mm (OD)/2.9 (w/t) thread 1"	1	INS32MC-HTG	39.78

Max operating pressure: 10 bar. Max fluid temperature: +95°C. PE-Xa pipes: SDR 11.

Female Couplings	Pack Qty.	Code No.	Price Each £
25mm, thread ¾"	1	INS25FC-HTG	5.91
32mm, thread 1"	1	INS32FC-HTG	8.69

Fix Points	Pack Qty.	Code No.	Price Each £
25mm, thread ¾" FF	1	INS25FP-HTG	10.69
32mm, thread 1" FF	1	INS32FP-HTG	24.29

Fix points must be installed to absorb the possible effects of thermal expansion/shrinkage of the PE-Xa transport pipe. The non application of fixed points may result in serious damage to pipes, joints and buildings.













## **Standards & Polypipe Guarantee Information**

Polypipe meets, and constantly strives to exceed, the changing laws and regulations governing our operations and products. We have invested in extensive testing and development facilities to ensure the products we supply are of the highest quality. Our plumbing systems conform to a number of third party accredited standards which are listed below.

PolyPlumb polybutylene barrier pipe, fittings and



British Standard Class S rated to BS7291 Part 1 and Kitemark Licence Number 38148 to BS7291 Part 1 & 2.

WRAS 🚙



accessories are covered by BBA Certificate No 00/3699. Listed in the WRAS Water Fittings and Materials Directory.

Standards Manufacturing Quality Assurance in accordance with BS EN ISO 9001 (BSI registered firm Certificate FM00318).

British Gas has accepted the Polypipe 'PolyPlumb' & 'PolyFit' Class S polybutylene pipe systems as being acceptable for open vented and sealed central heating systems and are eligible for acceptance onto Home Care Central Heating System Cover.

At Polypipe we pride ourselves on offering the highest guality products, and wherever possible our products and processes are covered by independent third-party accreditation, so you can rest easy knowing that you are buying from the UK's market leading manufacturer. We have invested significantly in our quality control procedures, have our own fully-equipped modern laboratory for development and analysis, and also have our own tooling and extrusion processes.

## **Installation Standard**

Installation must follow the requirements of BS5955 - PART 8 2001 Plastic Pipework (Thermoplastic Materials).

## Guarantee

Polypipe guarantees for 25 years against defects in materials or manufacture of the PolvPlumb, PolvMax and PolvFit hot and cold water supply and heating systems from date purchased. Underfloor heating pipe for 50 years and all other UFH component parts (including Manifolds, controls and accessories) for 1 year.

This guarantee only applies if the products are installed in accordance with the manufacturer's recommendations and are used in a normal domestic operation.

A normal domestic operation is defined as a residential property and excludes commercially run residential properties e.g. care homes and is also defined as being part of an open vented or sealed central heating system, direct or indirect single pipe hot water supply or mains or tank fed cold water supply system.

The system must be designed, installed and operated within the temperature and pressure ratings as defined in BS 7291 Class S which are also published in the manufacturer's literature and must also take account of all the other exclusions and limitations as defined in the design, application and installation guidance provided by the manufacturer.

Exclusions apply, please contact the manufacturer for further details.

For Polypipe's Contract of Sale, please refer to www.polypipe.com

## **Underfloor Heating Pipe (UFH) and MCP Underfloor Heating Pipe (MCP)** - Application Classes

The Polypipe UFH and MCP Underfloor Heating Pipes have been tested in accordance with BS EN ISO 15876-1:2003 and BS EN ISO 21003-1:2008 respectively at a maximum design pressure of 10 bar for application class 4 - Underfloor heating and low-temperature radiators only. The maximum operating temperature of these pipes is 60°C.

## These pipes are NOT suitable for potable cold water or domestic hot water services.

The following information is designed to provide basic guidance for installers and specifiers when selecting Polypipe products. The information is not exhaustive and guidance may change dependent on site conditions and applications. This document should be read in conjunction with the Polypipe Plumbing & Heating Product Guide. If in doubt please contact our Technical Services Department on +44 (0) 1709 770000.

## Service Conditions

Grey and White Plumbing and Heating Pipe, PolyPlumb, PolyMax, PolyFit and PolySure fittings are suitable for the following Class S service conditions in a normal domestic operation (subject to the exceptions referred to in note 2):

(Continuously operated ring main installations are excluded from these applications.)	Moning Succession	Maxim Construction of the second seco	System Marken Stem Service	Secolar Unicities	nng pressure bar
Indirect cold water systems	20	20	-	31⁄2	[
Direct mains-fed cold water systems	20	20	-	12½	
Subsurface heating systems (including underfloor)	60	83	100	31/2	
Vented hot water supply systems	65	83	100	31/2	
Unvented hot water supply systems including instantaneous heaters and/or incorporating storage	65	95	100	6	
Vented central heating systems	82	95	100	31⁄2	
Sealed central heating systems	82	105	114	3	

Note 1:

- nominal system flow temperature Tf is the intended maximum flow temperature of a system for a particular application as recommended in codes of practice and other guidance documents
- maximum system service temperature Ts is the maximum service temperature that can occur intermittently during normal operation
- system malfunction temperature Tm is the maximum temperature likely to be applied to pipes and fittings in the event of control thermostat failure or malfunction

Note 2:

 certain fittings in the PolyPlumb, PolyMax and PolyFit ranges are not suitable for all the Class S service conditions. The limitations are indicated against every applicable fitting in the Trade Price List e.g. "Cold Water Only".

## **Connections to other materials**

#### **Connection to Imperial Copper using PolyPlumb**

Imperial ¾" copper pipe is of significantly different size to its metric 22mm counterpart and therefore requires a different 'O' ring to that supplied in the 22mm fitting. The 22mm 'O' ring should be replaced with a ¾" 'O' ring (PB9034). Standard 15mm fittings can be connected to Imperial ½" copper pipe, and 28mm fittings can be connected to 1" copper pipe.

#### Connection to Irish copper pipe

Irish copper pipe to IS238:1980 can be connected to PolyPlumb fittings which incorporate the  $\frac{3}{4}$ " or 1" adaptor set. Using a standard 22mm or 28mm PolyPlumb fitting, remove the nut and socket components and discard. Replace these parts with the relevant adaptor set,  $\frac{3}{4}$ " - PB7034 or 1" - PB701. The adaptor sets are distinguishable by the black cap nut.

#### Connections to chrome plated and stainless steel pipework

PolyPlumb, PolyFit and PolyMax fittings should not be connected directly to chrome plated copper pipes or stainless steel pipes. To connect to these pipes we recommend the use of a compression coupler. A pipe stiffener should be used when connecting Polypipe Grey and Polypipe White pipe to a compression fitting.

#### **Connecting PolySure press-fit fittings to copper**

PolySure press-fit fittings have been designed specifically to fit to Polypipe grey and Polypipe white polybutylene pipes. To connect to copper pipes we advise the use of a PolySure press-fit x BSP male or female adaptor, with the corresponding adaptor being used on the copper side from the PolyPlumb or PolyFit range. PTFE tape should be used to seal the mating brass components.

## **Connections close to capillary fittings**

Capillary fittings should preferably be completed prior to the use of Polypipe fittings. Where this is not possible, care should be taken to ensure that flux or solder does not come into contact with plastic pipes or fittings. A damp cloth should be wrapped around the copper pipe close to the nearest plastic pipe or fitting to ensure against damage by conductive heat. Pipework should be flushed to clear flux before active use.

#### Connections to incoming cold water supply

There are two options for connecting incoming MDPE mains water service pipe to Polypipe Plumbing and Heating Systems. Firstly the push-fit x compression adaptors provide a one piece transition fitting covering connections from 20mm, 25mm and 32mm MDPE service pipes to 15mm, 22mm and 28mm polybutylene pipes and most sizes are available in both Polypipe Grey and White versions. Secondly, as there is a requirement for a stopcock on the incoming main there is also a combined stopcock and adaptor which reduces the number of fittings required in a position where there is often limited space e.g. under a kitchen sink. These products allow connections from 20mm or 25mm MDPE pipe via a compression end to 15mm or 22mm polybutylene using a push-fit connection.

## Gas, oil, and compressed air

Polypipe systems are suitable for domestic plumbing and heating systems. Pipes and fittings must not be used for gas and oil supply pipework or compressed air pipework. In all the above instances metal pipework should be installed.

## Continuously operated re-circulating systems (Secondary Hot Water Circulation/Ring main installations)

A continuously operated re-circulating system is a water-replenished circulating system which is maintained at a constant high temperature to provide a constant source of hot water. Continuously operated re-circulating systems are used to distribute constant hot water to wards or rooms that may be distant from the heat source or hot water storage vessel. Locations where continuously operated re-circulating systems are used include, but are not limited to, residential care homes, hospitals and hotels. Continuously operated re-circulating systems are very different from conventional hot water supply and central heating systems found in domestic properties, for which our products have been tested to, under either BS 7291 Class S or WRAS approval standards, and for this reason PolyPlumb, PolyMax, PolyFit or PolySure must not be used on any continuously operated re-circulating systems. Some secondary hot water circulation systems are used intermittently, controlled by time and/or temperature thermostats. This application is also unsuitable for products manufactured to BS 7291.

#### **Re-cycled rainwater systems**

Polypipe products can be used in systems conveying re-cycled or harvested rainwater within domestic properties. All pipework used in this type of system should be clearly identifiable and this should be carried out in accordance with WRAS Information and Guidance Note No 9-02-05; Marking and Identification of Pipework for Reclaimed (Greywater) Systems. If self adhesive labels are to be used, these should not be applied directly to the pipe.

## Chlorine and other additives

The polybutylene material used in Polypipe Plumbing and Heating Systems is WRAS approved. It is resistant to the buildup of scale. Normal levels of chlorine in UK domestic water supplies will not have an adverse effect on Polypipe Plumbing and Heating Systems.

However, Polypipe Plumbing and Heating Systems are not suitable for systems in which any further additives are ever added, periodically added, or regularly dosed into or additional to the normal UK mains water supply, for example chlorine for swimming pools or those used for bacteria control or Legionella prevention. Systems must not be flushed through with anything other than water from the normal UK mains water supply or a cleaning product at the correct concentration that is specifically recommended for plastic piping systems.

The use of corrosion inhibitor in central heating systems is acceptable provided that the inhibitor is specifically designed for plastic piping systems and guidance on their suitability should be sought from the inhibitor manufacturer prior to adding to the system.

## **Electrical Safety / Equipotential Bonding**

Where Polypipe pipes break the continuity of existing metal pipe, which may be used for earthing or bonding, this continuity must be re-instated by affixing permanent earth clips and a section of earth cable between the copper ends on either side of the plastic sections. Both the IEE and the Chartered Institute of Plumbing and Heating Engineers now give guidance on the Earth Bonding requirements of Plastic Pipe systems. As plastic pipes do not conduct electricity, installations generally require less equipotential bonding than metal systems although if in doubt exact guidance should be sought.

## Light

Polypipe Plumbing and Heating Systems should be protected from UV light. Standard decorating paints form adequate protection. Pipe insulation forms adequate protection for external use. Polypipe products are delivered in light protective packaging.

## Compatibility with other substances

For details of compatibility with building and cleaning substances, and treatments (e.g. filler foam and wood worm treatments) please consult the relevant manufacturers to confirm suitability with polybutylene. Polypipe Plumbing and Heating Systems pipes and fittings can be painted using emulsion or undercoat and gloss. Cellulose based paints, strippers or thinners must not be used.

#### Vermin

There is no evidence to suggest that Polypipe Plumbing and Heating Systems attract vermin. Where vermin are present they can cause damage to other services, building fabric and pipes and fittings, and therefore a qualified pest controller should be employed to remove vermin from the affected area.

## **Connections to other equipment**

## **Boilers and appliances:**

All boilers and appliances must have safety devices such as thermostatic controls, cut-outs and pump over-run protection to make sure that they cannot operate above the Class S working temperature and pressure limits set out in the table of Class S service conditions above. Exposure to conditions in excess of those specified could result in failure of the pipes or fittings with the potential for serious injury.

#### **Gas Boilers:**

Pipe should only be connected to gas boilers where the pipe connection is outside the boiler casing and where the boiler incorporates a high limit thermostat and pump over-run facility. The pipe connections should be 350mm from the heat source. In all other situations, a section of metal pipe should be at least 1m in length. In addition for back boilers metal pipework should be used within the fire opening extending out of the chimney brickwork.

## **Combination Boilers:**

Where system connections are made to an incoming water supply pipe from a water meter, or any other device which contains a check valve, a suitable expansion vessel must be fitted to prevent the expansion of heated water back down the supply pipe. This is especially important where a water meter is fitted retrospectively.

#### Solid Fuel Boilers & Cooking Ranges

Pipes and fittings must not be used for primary or gravity circuits from solid fuel boilers, cooking ranges or other uncontrolled heat sources.

#### Solar Panels / Systems

Pipes and fittings must not be used for connection of solar panels or any part of solar distribution that operates above the Class S working temperature and pressure limits set out in the table of Class S service conditions above.

## **Oil Fired Boilers**

## **Open Vented Central Heating Systems:**

The use of plastic pipe and fittings is acceptable when used in oil fired installations where the boiler is connected to an open vented system, however the first metre of primary pipework from the boiler connections must be installed using metal pipe. The boiler must be suitable for this type of application and all relevant safety features as supplied and fitted to the boiler must be checked for correct operation. The system must also be commissioned in accordance with the boiler manufacturers instructions.

Plastic pipe and fittings can also be used in the hot and cold water and underfloor central heating systems with the exception of continuously operated re-circulating systems (see page 50) where plastic pipe and fittings should not be used.

For further information regarding the suitable applications for our plastic pipe and fittings please refer to the Class S Service Conditions table as shown on page 48 of this publication.

#### **Sealed Central Heating Systems:**

Where a sealed system oil fired boiler is to be used, all primary boiler pipework to and from the hot water cylinder (if fitted) and any radiator or towel rail circuits must be installed using metal pipe and fittings.

Plastic pipes can be used on underfloor central heating systems where the plastic pipes are fitted after the UFCH control unit and manifold arrangement which must contain a correctly operating thermostatic mixing valve.

Plastic pipe and fittings can also be used in the hot and cold water system with the exception of continuously operated re-circulating systems (see page 50), where plastic pipe and fittings should not be used.

All relevant safety features as supplied and fitted to the boiler, such as the boiler temperature control thermostat, high limit thermostat, pump overrun facility and the pressure and temperature relief valve, must be checked for correct operation at both installation stage and at any subsequent boiler service intervals. The system must also be commissioned in accordance with the boiler manufacturers instructions.

For further information regarding the suitable applications for our plastic pipe and fittings please refer to the Class S Service Conditions table as shown on page 48 of this publication.

## Use of aluminium tape

To comply with the NHBC guidelines regarding detection of pipes in wall cavities Polypipe recommends the use of aluminium tape. This tape should be applied directly to the wall sub-structure and pipes should be clipped on top of the tape. The tape must not be applied directly to the pipes.

## "Dot and dab" walling

Dry lined or "dot and dab" walls are commonly used to speed up the build process and Polypipe systems are compatible with these types of constructions. Board adhesive or plaster should not be applied to Polypipe pipe and fittings, especially around the area where the pipes pass through the wall to feed radiators and appliances. Pipes and fittings must remain accessible should future maintenance be required.

## Handling and storage of products

The packaging of both pipes and fittings is designed to protect from ultraviolet light and environmental contamination. Pipes and fittings should therefore be retained in their packaging as long as possible, and should be stored in a cool dry area.

When on site, fittings should be stored to prevent dust and debris from entering the fitting and sticking to the pre-lubricated 'O' ring. Care should be taken to avoid scratching the pipe surface during the handling, storage and installation processes.

## **Insulation of pipework**

If pipe and fittings are installed in an environment that is not heated or alternatively outside, they should be protected from potential frost damage in accordance with BS6700 and BS5422.

## System testing

Pressure testing of the pipe system is essential however a successful pressure test using the following steps is not a guarantee of complete and correct installation and only ensures that pipes have been inserted into fittings passed both the 'O' ring and the grab ring. If pipes have been scored or scratched during the installation process a high pressure test as below may not highlight these issues.

## **1st fix Installations**

## Step 1:

Pipe and fittings only should be tested. The system should be filled completely using water not more than 20°C at a test pressure of 18 bar which should be applied for not less than 15 minutes and no longer than 1 hour. Joint security can be checked visually and by tugging at joints.

## 2nd fix Installations

## Step 2:

Complete installations including appliances should be tested with water to the maximum pressure allowed by the manufacturers of the appliances and fittings. Please note, due to Health and Safety reasons pipework installations must not be air tested.

#### Pressure testing in sub zero temperatures

## Special precautions are necessary if the pressure testing is to take place in sub-zero temperatures.

This applies particularly in underfloor central heating systems using the screeded floor system where most of the pipe is encased in concrete. Due to the contact between pipe and floor panel on screeded installations, where the screed does not completely surround the pipe, there may be points where strain is created on the pipe in freezing conditions which is not normally present.

Therefore it is advisable to drain the underfloor central heating system once testing and screeding has been completed.

Precautions should also be taken where installations contain large quantities of fittings which due to the rigidity of their construction may put undue pressure on the pipe.

## Polypipe Underfloor Heating Trade Price List 2017



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