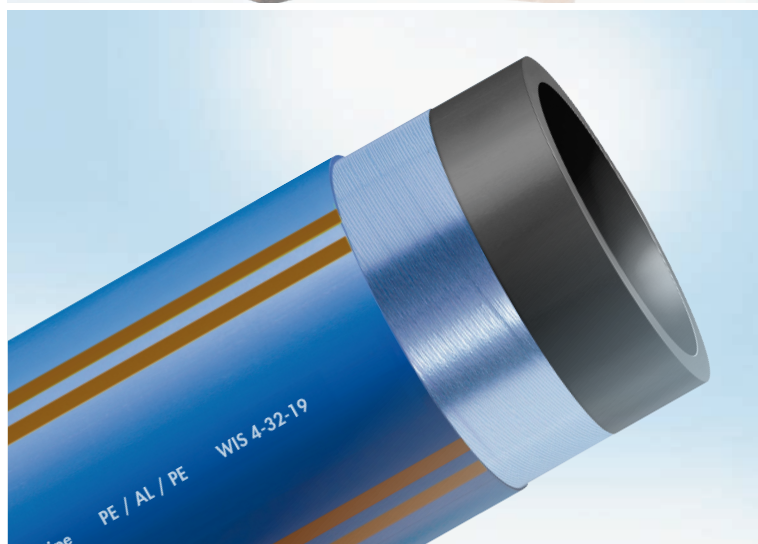




## Contaminated Ground Products







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Contaminated Ground

About Westwood Pipelines Ltd.

Since its formation, Westwood Pipelines Ltd has become a leading supplier and manufacturer of polyethylene pipes and fittings, gaining a reputation for providing a fast, reliable and competitive service to the Civil, Construction and Utility sectors. Our product range is supplied and produced to the highest standards of specification and approvals. The range includes PE100 Pipes up to 1200mm, EF fittings up to 1000mm, Egeplast SLA Barrier Pipe System up to 630mm and our standard and bespoke Fabrications up to 1600mm, consisting of Mitred Bends, Tees, Elbows, Bends and Stub Flanges.

About TALIS UK

Consisting of well known brands, such as ATPLAS and ERHARD TALIS UK has a rich history of servicing the water industry both in the UK and around the world and is a recognised and reliable supplier of connection systems for all water-related areas. With an extensive range of water fittings and valves for a variety of mains and service pipes, the company’s products stand for certified quality and many years of know-how.

Westwood pipelines and TALIS have come together to give you a full range of products that are suitable for contaminated ground. From house fittings to SLA barrier pipe you will find all the products you need for contaminated ground in this brochure.

Our Primary Nutrient

When drinking water pipelines are laid in contaminated ground, there is a risk of contamination through pollutants finding their way into the drinking water. In particular, hydrocarbons that are chemically related to polyethylene exhibit high rates of permeation through polyethylene. Permeation refers here to the penetration of undesirable substances through the pipe wall into the drinking water.

A risk of contamination to drinking water exists primarily in regions near industrial zones, agricultural areas, cemeteries, landfill sites, petrol stations, former military land, near damaged sewer pipes or at crossings under rivers. There is also an increased risk of contamination in flood plains and in areas prone to inundation (waterlogged areas).

The egeplast SLA® Barrier Pipe

Developed by egeplast, the egeplast SLA® Barrier Pipe reliably eliminates the migration of pollutants into the drinking water. Through the use of a clever combination of the thermoplastic material properties of polyethylene, paired with the proof against diffusion of metallic materials, a pipe has been created which has made accessible a totally new area of application compared to conventional polyethylene pipes.





egeplast SLA Barrier Pipe

egeplast SLA® BARRIER PIPE SDR11		
SDR11	Code	List Price per Metre
50m Coils		
25mm	150215005	£7.92
32mm	150315005	£10.23
63mm	150615005	£27.97
90mm	150915005	£34.05
110mm	151115005	£41.85
125mm	151215005	£46.95
160mm	151615005	£73.75
180mm	151815005	£85.00
6m & 12m Lengths		
63mm	150610605	£27.97
90mm	150910605	£34.05
110mm	151110605	£41.85
125mm	151210605	£46.95
160mm	151610605	£73.75
180mm	151810605	£85.00
225mm	152210605	£141.12
250mm	152510605	£171.21
315mm	153110605	£262.23
355mm	153510605	P.O.A
400mm	154010605	P.O.A
450mm	154510605	P.O.A
500mm	155010605	P.O.A
630mm	156310605	P.O.A

Code shown dictates 6m lengths prefix 06 with 12 for 12m lengths

egeplast SLA® BARRIER PIPE SDR17		
SDR17	Code	List Price per Metre
50m Coils		
90mm	150975005	£27.79
110mm	151175005	£35.12
125mm	151275005	£44.89
160mm	151675005	P.O.A
180mm	151875005	P.O.A
6m & 12m Lengths		
63mm	N/A	N/A
90mm	150970605	£27.79
110mm	151170605	£35.12
125mm	151270605	£44.89
160mm	151670605	£54.99
180mm	151870605	£60.42
225mm	152270605	£89.52
250mm	152570605	£125.21
315mm	153170605	£187.91
355mm	153570605	P.O.A
400mm	154070605	P.O.A
450mm	154570605	P.O.A
500mm	155070605	P.O.A
630mm	156370605	P.O.A

Code shown dictates 6m lengths prefix 06 with 12 for 12m lengths

The egeplast SLA® Barrier Pipe consists of a core pipe in accordance with BSEN 12201, upon which a protective coating is additionally extruded in order to increase its scratch and abrasion resistance. A multiple layer aluminium foil is applied as a barrier layer between the core pipe and the coating layer. The four brown double stripes serve to identify it as a multiple layer pipe.



Pushfit\* & STFS's for Contaminated Ground

BPA - Barrier Pipe Type A

Connectors BPA x BPA				
	Code	Size	Unit Price	Bag Qty
	75020105P	25mm	£9.08	5
	75030105P	32mm	£10.92	5

Adaptor BPA x Male Threaded				
	Code	Size	Unit Price	Bag Qty
	72023105P	25mm x 3/4"	£5.10	5
	72031105P	32mm x 1"	£7.40	5
	72033105P	32mm x 3/4"	£7.27	5

Connectors BPA x Female Threaded				
	Code	Size	Unit Price	Bag Qty
	73023105P	25mm x 3/4"	£5.83	5
	73031105P	32mm x 1"	£7.03	5

Reducing Connectors BPA x BPA				
	Code	Size	Unit Price	Bag Qty
	78322505P	32mm x 25mm	£13.98	5

Elbows (90°) BPA x BPA				
	Code	Size	Unit Price	Bag Qty
	77029105P	25mm	£8.73	5
	77039105P	32mm	£12.48	5

Tees, Equal BPA x BPA x BPA				
	Code	Size	Unit Price	Bag Qty
	76029105P	25mm	£12.48	5
	76039105P	32mm	£14.72	5

Compression fitting Self Tapping Ferrule straps				
	Code	Size	Unit Price	Bag Qty
	91062505	63mm BPA x 25mm	£90.83	1
	91092505	90mm BPA x 25mm	£90.93	1
	91112505	110mm BPA x 25mm	£92.42	1
	91122505	125mm BPA x 25mm	£94.59	1
	91162505	160mm BPA x 25mm	£109.29	1
	91182505	180mm BPA x 25mm	£117.97	1
	91063205	63mm BPA x 32mm	£100.93	1
	91093205	90mm BPA x 32mm	£106.57	1
	91113205	110mm BPA x 32mm	£107.05	1
	91123205	125mm BPA x 32mm	£107.05	1
	91163205	160mm BPA x 32mm	£117.25	1
	91183205	180mm BPA x 32mm	£117.25	1

Female Threaded fitting Self Tapping Ferrule straps				
	Code	Size	Unit Price	Bag Qty
	90063105	63mm BPA x 3/4"	£68.03	1
	90093105	90mm BPA x 3/4"	£72.07	1
	90113105	110mm BPA x 3/4"	£73.69	1
	90123105	125mm BPA x 3/4"	£73.69	1
	90163105	160mm BPA x 3/4"	£83.62	1
	90183105	180mm BPA x 3/4"	£83.62	1
	90061105	63mm BPA x 1"	£92.87	1
	90091105	90mm BPA x 1"	£97.85	1
	90111105	110mm BPA x 1"	£99.80	1
	90121105	125mm BPA x 1"	£99.80	1
	90161105	160mm BPA x 1"	£111.15	1
	90181105	180mm BPA x 1"	£111.15	1


Please note: Pushfit Fittings have WRAS approval




Self Tapping Ferrule straps Accessories			
Code	Description	Unit Price	Bag Qty
90030005	25mm / 3/4" Cutting Key	£26.16	1
90010005	32mm / 1" Cutting Key	£52.28	1

# Gunmetal Compression Fittings, Manifolds & Contaminated Ground Meterbox


Coupler BPA x BPA				
	Code	Size	Unit Price	Bag Qty
	75020105	25mm	£24.24	5
	75030105	32mm	£39.92	5
	75060105	63mm	£90.44	1


Adaptor BPA x Female Threaded				
	Code	Size	Unit Price	Bag Qty
	73023105	25mm x 3/4"	£12.76	5
	73031105	32mm x 1"	£27.64	5
	73062105	63mm x 2"	£68.82	1


Adaptor BPA x Male Threaded				
	Code	Size	Unit Price	Bag Qty
	72023105	25mm x 3/4"	£11.39	5
	72033105	32mm x 3/4"	£27.64	5
	72031105	32mm x 1"	£23.74	1
	72062105	63mm x 2"	£66.49	1

Reducing Coupler BPA x BPA				
	Code	Size	Unit Price	Bag Qty
	78322505	32mm x 25mm	£39.07	5
	78633205	63mm x 32mm	£131.72	1

Elbows (90°) BPA x BPA				
	Code	Size	Unit Price	Bag Qty
	77029105	25mm	£27.11	5
	77039105	32mm	£51.15	5
	77069105	63mm	£163.33	1

Tees, Equal BPA x BPA x BPA				
	Code	Size	Unit Price	Bag Qty
	76029105	25mm	£30.55	5
	76039105	32mm	£78.77	5
	76069105	63mm	£210.98	1

Gunmetal Manifolds				
	Code	Size	Unit Price	Bag Qty
	MANI451	4 x 3/4" female outlets	£509.06	1
	MANI651	6 x 3/4" female outlets	£750.97	1

Boundary Boxes - Contaminated Land Box (Below Ground Installation)				
	Code	Description	Unit Price (£)	Bag qty.
	Telescopic, Contaminated Land, Sealed Meter Box			
	MBB2010 MBB2010BPA	3/4" female threaded 1/4 turn gunmetal manifold, Telescopic (520mm to 800mm), including surface box	£120.38	1
		25mm BPA 1/4 turn gunmetal manifold, Telescopic (520mm to 800mm), including surface box	£169.82	1
	Telescopic, Contaminated Land, Unsealed Meter Box			
	MBB0910C MBB0920C	2 x 1" male inlet 1/4 turn gunmetal manifold double outlet 2 x 3/4" female 1 x 1" female inlet 1/4 turn gunmetal manifold double outlet 2 x 3/4" female	£232.04 £300.14	1 1

# SLA Fluid Hydraulic Compression Fittings

SLA® Fluid Hydraulic Compression Fittings SDR11		
Description	Code	List Price per Unit
Duckfoot Bend Kit		
63mm x 80mm NP16	80068105	£444.13
90mm x 80mm NP16	80098105	£456.24
110mm x 80mm NP16	80118105	£512.37
Couplers		
63mm coupler	81060105	£113.92
90mm coupler	81090105	£163.38
110mm coupler	81110105	£240.42
Stub Flange		
63mm x 50mm NP16	87060105	£175.05
63mm x 80mm NP16	87068105	£209.31
90mm x 80mm NP16	87090105	£207.42
110mm x 100mm NP16	87110105	£263.88
90 Deg Elbows		
63mm x 90 deg	83069105	£241.58
90mm x 90 deg	83099105	£328.16
110mm x 90 deg	83119105	£421.55
45 Deg Elbows		
63mm x 45 deg	84064105	£231.42
90mm x 45 deg	84094105	£302.27
110mm x 45 deg	84114105	£419.80
Equal Tees		
63mm	85069105	£374.77
90mm	85099105	£499.78
110mm	85119105	£655.12
Flange Branch Tee		
63mm x 80mm NP16	860608105	£408.90
90mm x 80mm NP16	860908105	£496.48
110mm x 80mm NP16	861108105	£637.99
Repair Couplers		
63mm	82060105	£185.86
90mm	82090105	£286.79
110mm	82110105	£362.94
Reducers		
90mm x 63mm	880906105	£303.14
110mm x 90mm	881109105	£403.18
Fluid Oil (5 litres)	89100005	£81.31
SLA Pump	89200005	£1,090.00

SLA® Accessories		
Description	Code	List Price each
SLA External Tape (12.5m Roll)	070SLATAPE10	£25.43
Aluminium Tape (50m Roll)	070ALUMR	£20.00
M10 Peeling Tool	070CTOOL	£218.55
SLA Router (110v)	070ROUTER	£450.00

SLA® Fluid Hydraulic Compression Fittings (SDR17)		
Description	Part No.	List Price per Unit
Couplers		
125mm coupler	81120705	£308.28
160mm coupler	81160705	£490.57
180mm coupler	81180705	£512.74
Stub Flange		
125mm x 100mm NP16	87120705	£313.17
160mm x 150mm NP16	87160705	£462.23
180mm x 150mm NP16	87180705	£561.35
90 Deg Elbows		
125mm x 90 deg	83129705	£572.59
160mm x 90 deg	83169705	£843.07
180mm x 90 deg	83189705	£1,040.83
45 Deg Elbows		
125mm x 45 deg	84124705	£557.46
160mm x 45 deg	84164705	£891.09
180mm x 45 deg	84184705	£1,014.07
Equal Tees		
125mm	85129705	£894.92
160mm	85169705	£1,373.93
180mm	85189705	£1,564.52
Flange Branch Tee		
125mm x 80mm NP16	861208705	£1,010.75
180mm x 80mm NP16	861808705	£1,374.71
180mm x 100mm NP16	861810705	£1,395.05
180mm x 150mm NP16	861815705	£1,416.81
Repair Couplers		
125mm	82120705	£466.71
160mm	82160705	£642.63
180mm	82180705	£916.00
Reducers		
125mm x 110mm	881211705	£490.60
160mm x 125mm	881612705	£710.93
180mm x 125mm	881812705	£923.95





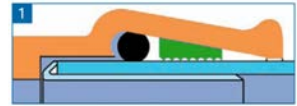
# Pushfit for Contaminated Ground

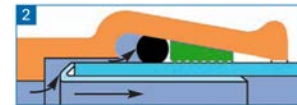
Pushfit fittings are quick and easy to use, with no nuts to lose or leave undone. The connections grip and seal on the pipe increases with water pressure and tensile load so that the pipe will burst or neck before the connection will fail.

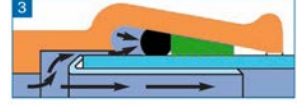
Pushfit fittings are manufactured from high performance materials for resistance to distortion and corrosion and for strong threaded connections.

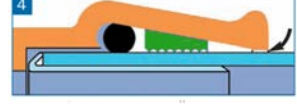
### Technical data

Pressures: Working: 16 bar Test: 24 bar  
The pressures stated above apply with water temperatures up to 20°C

- 

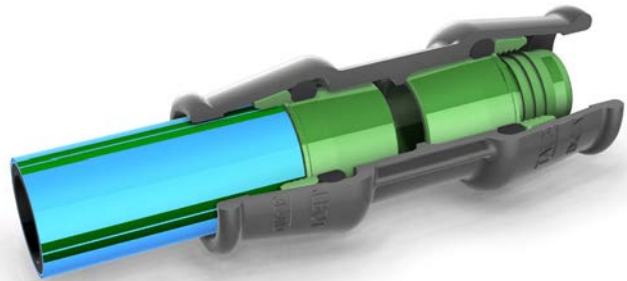
1. After insertion of the pipe, with the components at rest, the 'O' ring provides the water seal and the grip ring is ready to resist any pull out.
- 

2. Water pressure forces the 'O' ring against the grip ring, pushing both components down the taper of the fitting creating an excellent pressure seal on the pipe.
- 

3. As the water pressure rises the 'O' ring is forced further down the tapered body towards the grip ring, increasing the sealing pressure against the pipe and body.
- 

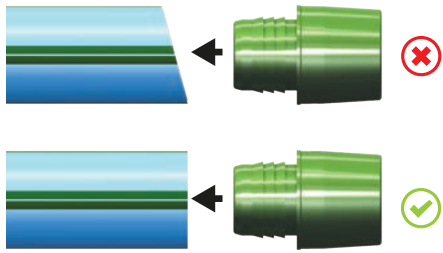
4. In negative pressure conditions the 'O' ring remains in its original seating position and provides an effective vacuum seal.

For illustration purpose only



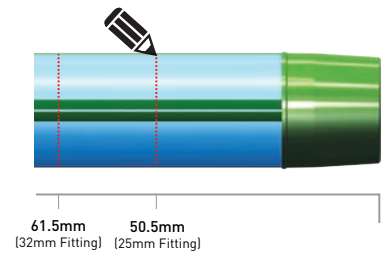
## Fitting Instructions for Contaminated Ground Pushfit Fittings

### 1. Fitting the Insert



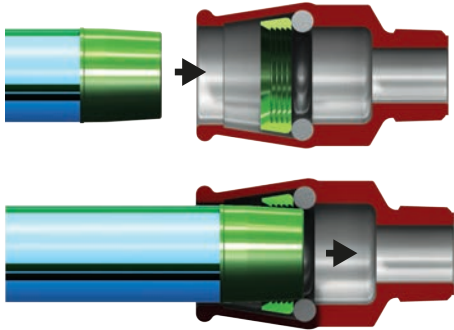
Ensure pipe is cut 90° before fitting the insert

### 2. Marking the pipe



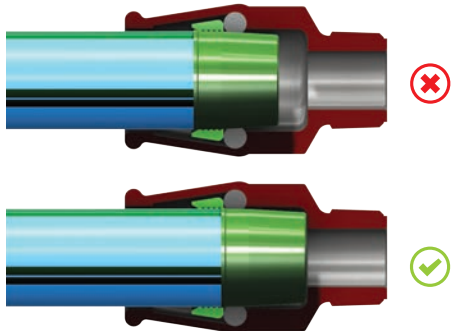
Mark the pipe from the end of the insert  
50.5mm for the 25mm fitting or  
61.5mm for the 32mm fitting

### 3. Inserting Pipe to Fitting



Push pipe fully into fitting using a soft hammer ensuring marking is inline with the end of fitting

### 4. Complete Fitting



To ensure fitting is completely inserted tap with soft hammer.

# Self Tapping Saddles, Ferrules & Manifolds

The EBCO range of Self Tapping Ferrule Straps, Swivel Ferrules and can be used to connect PE, copper and threaded pipes to almost any type and size of mains pipe material from 32mm in diameter. Straps are available up to 315mm in diameter as standard with larger sizes available on request. Ferrules can be inserted directly into suitable mains pipe of any size as long as both wall section and wall strength allow.



### General application

EBCO straps are simply clamped onto the pipe needing no specialised equipment to fit so can be installed easily in wet and congested trench conditions, offering many benefits over welded systems.

### Range

- Gunmetal Self Tapping Ferrule Straps
- Bronze Self Tapping Ferrule Straps
- Swivel Ferrules
- Flat Boss Straps

### Safety

As with all industrial products it is important to take adequate safety precautions such as the use of adequate protective clothing like gloves, overalls, eye protection and safety footwear during installation, use and maintenance of these products.

### Installation

- Step 1**  
Firstly make sure that the area to be tapped into is clean.
- Step 2**  
Place the top of the Ferrule Strap on to the egeplast SLA® Barrier Pipe making sure the O-ring is seated in place and press the top section down firmly.
- Step 3**  
Attach the lower steel strap by placing the strap under the pipe and bolt the top section and lower section together using the bolts provided. Tighten the bolt assembly equally and keep tightening until you can no longer see the O-ring.
- Step 4**  
Use an egeplast SLA® Barrier Pipe adaptor either 25mm x 3/4" or 32mm x 1" to connect your service pipe onto the ferrule and you can do this by applying PTFE tape to the thread of the adaptor before screwing into position. (Unless using a Tapping saddle banjo that is complete with a BPA socket).
- Step 5**  
Remove the blue or red top cap to expose the top of the cutter (not the full gunmetal cap) and use the T key to turn the cutter until you can no longer turn the valve, then turn the cutter in the opposite direction to withdraw the cutter thus allowing water to escape through the valve into your already connected service pipe.
- Step 6**  
Keep turning the cutter until you are back to where you started. Replace the blue or red cap and your connection is now complete.

### Technical data

Pressures: Working: 16 bar Test: 24 bar  
The pressures stated above apply with water temperatures up to 20°C

The EBCO Stopvalve Manifold System is used to divide a water service pipe into either 6 or 4 outlets, each outlet having its own shut-off device in either screwdown or 1/4 turn operation and the option for individual metering facilities. The system can be used in crowded areas for multi-dwelling developments and it can be used confidently in areas of contaminated land. The EBCO Stopvalve Manifold System is a simple and robust unit and both its 4 and 6 port configurations are compact enough to be installed in a standard 24" x 18" chamber.

### Benefits

Staggered meter mounts on the 6 port unit means that the unit is compact enough to fit an 18" x 24" meter chamber.  
1 1/2" female inlet and 3/4" male, female or 25mm PE outlets allow most types of pipe material to be connected.  
When supplied with stopvalves each outlet has its own shut-off device which is available with either Screw down or 1/4 turn valve operation.



# Gunmetal Compression Fittings

## Gunmetal Fittings for SLA® Barrier Pipe

The EBCO-B connector is designed for use with PE pipes. The fitting is made from corrosion immune gunmetal so will give many years of trouble free service in even the most aggressive of ground conditions and the seal created is secure, providing a leak free connection.

This security combined with the products robust gunmetal construction offers customers the knowledge that any connections made using the EBCO-B are secure, robust and reliable.

The EBCO-B connection is available in sizes from 20mm to 63mm in diameter. The fitting will also suit the imperial equivalents to these metric pipes using simply inter-changed internal components.

## Gunmetal Fittings for SLA® Barrier Pipe Assembly Instructions

### Step 1

Ensure the pipe is cut square then disassemble the end of the fitting to be connected.

### Step 2

Slide the thrust nut (1) then the friction washer (2), then the Viton compression gland (3) over the end of the pipe to be connected.

### Step 3

Insert the serrated insert (4) into the pipe and securely hammer it fully home with a soft faced mallet.

### Step 4

Place the end of the pipe into the fitting's body (5) and screw the thrust nut fully into the body, securely locating the friction washer and sealing rubber inside the body of the fitting.

### Step 5

Once the thrust nut has been hand tightened use a spanner and tighten a further 1½ to 2 turns to form a fully sealed connection. The connection is now made.

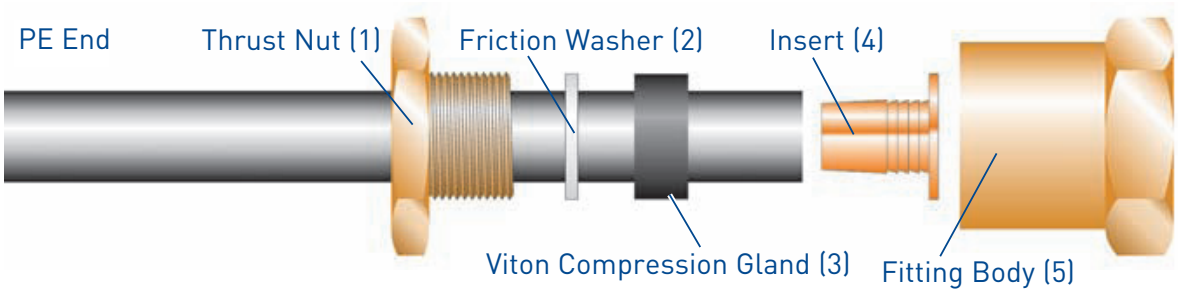
## Benefits

- The EBCO-B compression fitting can be used on either metric or Imperial PE pipes from 20mm to 63mm in diameter. (Please specify pipe type and class when ordering to enable the correct product to be supplied)
- Made from corrosion immune gunmetal, EBCO-B compression fittings will provide years of trouble free service in even the most arduous of ground conditions
- The extensive range of EBCO-B compression fittings covers the majority of operational requirements with stopcocks and ferrules also being available with the EBCO compression outlet

## Range

- Equal Connectors
- Reducing Connectors
- Male Threaded Adaptors
- Female Threaded Adaptors
- Equal Tees
- Un-equal Tees
- 90° Elbows
- Reducing Bushes
- Stopcocks
- Ferrules

For full details concerning product size and configuration please contact the Customer Service Team at the number shown on the back of this brochure.



# Contaminated Ground Boundary Boxes

## General application

EBCO Below Ground Boundary Boxes provide an easy to install, operate and maintain connection point between the mains water supply and the consumer property. This point may be used for associated functions other than meter mounting such as filtration, pressure regulation or leak detection.

Amongst the range of EBCO Boundary Boxes is a range of products to suit QN 3.5 meters. Each of these units is supplied with a 240mm diameter x 600mm high PVC guard tube that can be cut to the exact desired length by the installer on site. Units are unsealed and are supplied with gunmetal manifold units with gunmetal full flow caps making them ideal for use in areas of contaminated land. These units are available in a variety of formats.

Complies with WIS 4-32-19

A boundary box provides the connection point between the mains water supply and the consumer property. This point may be used for several associated functions such as metering, filtration, sampling, pressure regulation, leak detection etc.

TALIS UK manufacture and market a wide range of boundary box designs and associated valve equipment, conforming to all relevant water industry standards.

Each box assembly is tested in excess of the applicable industry or customer specification and is backed by full after sales support.

The contaminated ground boxes are fitted with a gunmetal valve manifold with proven immunity to corrosive and contaminated soil conditions. Its robust flat base is designed to sustain heavy surface loads and has a clearly marked inlet / outlet.

For full details of all accessories, please contact the Customer Service Team at the number shown on the back of this brochure.

## Features:

- Integral compression joints with meter manifold minimise potential leak paths associated with fitting male adaptors into female connections. PE-AL-PE Type A barrier pipe fits directly into the manifold without need for adaptors.
- Sealing is provided by inert, water quality approved fluoroelastomer, ensuring leak-tightness and prevention of contaminant ingress into the drinking water supply.
- Corrosion and contaminant resistant gunmetal manifold and connections provide ultimate protection against permeation of chemicals into the drinking water.



Gunmetal Compression fitting suitable for direct connection to Barrier pipe.



egeplast SLA Barrier Pipe

The egeplast SLA® Barrier Pipe

Developed by egeplast, the egeplast SLA® Barrier Pipe reliably eliminates the migration of pollutants into the drinking water. Through the use of a clever combination of the thermoplastic material properties of polyethylene, paired with the proof against diffusion of metallic materials, a pipe has been created which has made accessible a totally new area of application compared to conventional polyethylene pipes.

Material Requirements for Reinstating Protective Layer Over Electrofusion Couplers with Aluminium Foil & Denso E10 Tape

OD (mm)	Metres / Weld Seam Aluminium Foil	Metres / Weld Seam Denso E10 Tape
25	3.0	1.0
32	3.0	1.0
40	4.5	1.5
50	4.5	1.5
63	6.0	2.0
75	6.0	2.0
90	8.5	2.5
110	9.0	3.0
125	12.0	4.0
140	12.0	4.0
160	13.5	4.5
180	15.0	5.0
200	18.0	6.0
225	18.0	6.0
250	22.5	7.5
280	22.5	7.5
315	30.0	10.0
355	30.0	10.0
400	45.0	15.0
450	45.0	15.0
500	45.0	15.0
560	45.0	15.0
630	90.0	30.0

Actual Outside Dimensions of the egeplast SLA® Barrier Pipe

Pipe Reference Size (mm)	Actual Outside Diameter (mm)
25	26.2 - 27.4
32	33.3 - 34.5
40	41.3 - 42.5
50	51.3 - 52.6
63	65.6 - 65.9
75	78.8 - 79.0
90	93.8 - 94.1
110	113.7 - 114.0
125	129.6 - 129.9
140	145.4 - 145.7
160	165.7 - 166.1
180	186.6 - 187.3

Sizes, Pressures & Lengths Available:

- 25 & 32mm\*\* - SDR11 - 50m Coils
- 63mm\*\* - SDR11 - 50m Coils, 6m Lengths
- 90 to 160mm\*/\*\* - SDR11 - 50m Coils, 6m & 12m Lengths
- 90 to 180mm\*/\*\* - SDR11 - 50m Coils, 6m & 12m Lengths
- 180 to 630mm\* - SDR11 & 17 - 6m & 12m Lengths

(\*14m Lengths Subject to Quantity)  
(\*\*100m Coils Available Subject to Quantity)

System Approvals:

- WIS 4-32-19 - Polyethylene Pressure Pipe Systems with an Aluminium Barrier Layer for potable water supply.
- WRAS - Water Regulations Advisory Scheme
- BSEN12201 - Inner Core Pipe constructed in accordance with this standard.
- Regulation 31 - Materials in contact with potable water.
- KIWA - Chemical and mechanical testing.

Pipe Construction:

- Inner Core Pipe - Black PE100 to BSEN12201
- Metal Layer - Double Bonded Aluminium
- External Layer - Blue PE100 c/w Brown Stripes

Joining Systems:

- 25, 32 & 63mm - E/F Fittings (GF) and Metal Compression Fittings
- 63mm to 180mm - Fluid Hydraulic Compression Fittings
- 63mm to 180mm - Self Tapping Ferrule Straps
- 90mm to 630mm - E/F Fittings (GF), Butt Fusion Welding

\* All E/F Fittings and Butt Fusion Joints must be externally protected from ground contamination to ensure the integrity of the complete system. Use of Aluminium tape and Denso E10 is required and can be supplied by Westwood Pipelines Ltd.  
\*\* (GF) – Georg Fischer - ELGEF+ Electrofusion range



Butt Fusion Welding

Step 1



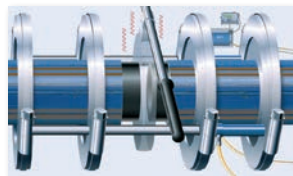
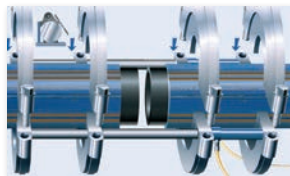
Prepare your pipe ends for Butt Fusion Welding by removing the outside PE skin and aluminium foil utilising the M10 Peeling Tool.

Step 2

Once the outside PE skin and aluminium is removed over a length of 30mm from the pipe end you must scrape the internal pipe, removing any adhesive residue and leaving you a clean swarf free surface for welding.



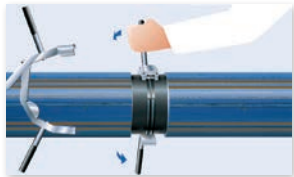
Step 3



After the above pre welding preparation has taken place you can now Butt Weld. Welding should be carried out in compliance with WIS 4-32-16. Standard welding machines will need to use adapted inserts adjusted to the specific external diameter. (Please check compatibility of inserts and if in doubt seek advice.)

Step 4

For the installation of the egeplast SLA® Barrier Pipe, it is mandatory to provide separate protection for both the area of the weld and the aluminium layer. The weld bead is to be removed with an external bead remover, and the aluminium layer must be restored so that it is continuous again.



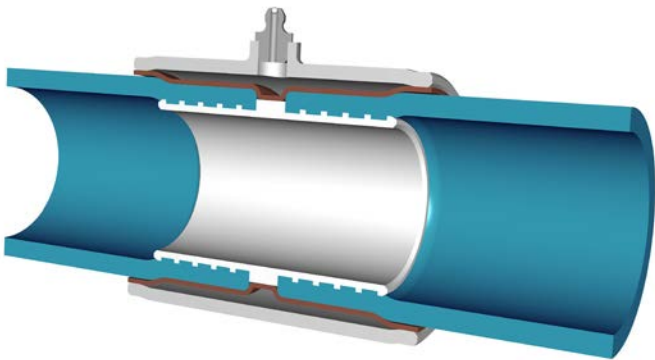
To do this, aluminium foil from Westwood Pipelines Ltd, is to be applied in three layers in a left to right motion starting up to 100mm away from the weld, making sure that you cover the weld with a 50% overlap.

Step 5

It is mandatory to provide separate protection to the area by applying 25% overlap of Denso E10 Tape over your already applied aluminium foil, (Denso E10 Tape available from Westwood Pipelines Ltd).



SLA® Barrier Pipe Fluid Hydraulic Compression Fitting Installation Instructions



\*For illustration purposes only

Step 1

Firstly mark on the outside of the egeplast SLA® Barrier Pipe the insertion depth of the insert / outer shell.

Step 2

Place inside the pipe the serrated insert, then slide the outer shell over the pipe.

Step 3

Bring together the two pipes and slide into place the outer shell so that it meets your two marks.

Step 4

Attach the pump onto the valve nipple on the shell and start to inject the compression fluid and pressurise up to 260 bar. Please make sure that your pipe is adequately restrained so as to avoid misalignment. Once you have pressurised the fitting up to 260 bar check the pressure gauge to make sure the pressure is holding at 260 bar then with one more pump of the handle the breaker relief valve will kick in.

Step 5

Use the manual air release valve to depressurise the system then remove the nozzle from the fitting. Your joint is now complete.

The same process applies when connecting a Fluid Compression Stub Flange, Repair Shell, Tee or Elbow.

*\*To comply with WIS 4-32-19 only fittings supplied by Westwood Pipelines Ltd can be installed with the egeplast SLA® Barrier Pipe. The WIS 4-32-19 approval will become invalid if any other manufacturer fittings are used.*

# Jointing Techniques Open Trench Installation of egeplast SLA® Barrier Pipe using Electrofusion Fittings

## Steps 1 & 2



Prepare your pipe ends ready for electrofusion by measuring the insertion depth for your fitting and then allowing an additional 30mm. Using this measurement from the pipe end and mark the pipe. Using the M10 Peeling Tool remove both the outside PE skin and aluminium layer to your mark as required.



## Steps 3 & 4

Once the outside skin and aluminium is removed you must scrape the internal pipe removing any adhesive residue giving you a clean swarf free surface.

## Step 5



Once you have prepared both pipes you can now introduce your electrofusion fitting. You must clamp your fitting in place using restraining clamps then set your electrofusion box to the correct setting and then commence welding.

## Step 6



Once the electrofusion fitting has successfully welded and cooled down it is mandatory that you reintroduce the egeplast SLA® Barrier Pipe aluminium foil and apply three layers in a left to right motion starting up to 100mm away from the fitting, making sure that you cover the fitting with a 50% overlap.

## Step 7



It is mandatory to provide separate protection to the area by applying 25% overlap of Denso E10 Tape over your already applied aluminium foil, (Denso E10 Tape available from Westwood Pipelines Ltd).

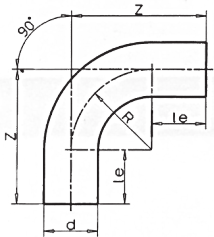
## System Techniques

Westwood Pipelines Ltd egeplast SLA® Barrier Pipes can be integrated into the pipeline network with all the moulded fittings and joining elements normally used in the trade. The manufacturers' instructions should be followed in doing so.

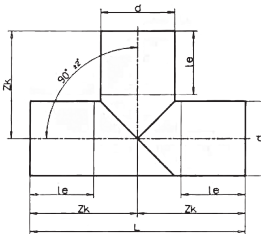
As part of Westwood Pipelines Ltd's product offering, both standard moulded and fabricated PE fittings can be supplied factory wrapped with the required aluminium layers and E10 Denso tape, leaving only the areas of connection needing post welding wrapping. Reducing significantly the time of overall installation.

A selection of available moulded fittings is shown for illustration below:

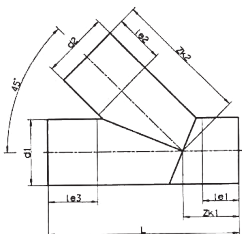
### Seamlessly drawn Elbow made of PE100 Constructed according to requirements



### Equal Tee made of PE100 Constructed according to requirements



### Branches made of PE100 Constructed according to requirements



\* All fittings listed in our standard price list are available factory wrapped. Price on application.

## Terms & Conditions

### 1. Interpretation

1.1 In these Conditions:  
"Business Day" means any day other than a Saturday or Sunday or a bank or public holiday;  
"Client" means the person to whom the Supplier has agreed to sell the Goods in accordance with these Conditions;  
"Conditions" means the standard terms and conditions of sale set out in this document and (unless the context otherwise requires) includes any special terms and conditions agreed in Writing between the Client and the Supplier;  
"Contract" means the contract for the purchase and sale of the Goods;  
"Force Majeure" means, in relation to either party, any circumstances beyond the reasonable control of that party (including, without limitation, any strike, lock-out or other industrial action);  
"Goods" means the goods referred to in the Sales Order;  
"Location" means the address to which the Goods are to be delivered to by the Supplier as notified by the Client to the Supplier in Writing;  
"Normal Business means the hours of 9.00 a.m. to 5.00 p.m. (inclusive) Hours" on any Business Day;  
"Price" means the price of the Goods set out in the invoice;  
"Supplier" means Westwood Pipelines Limited;  
"in Writing" includes facsimile transmission and comparable means of communication.  
1.2 Any reference in these Conditions to any provision of a statute shall be construed as a reference to that provision as amended, reenacted or extended at the relevant time.  
1.3 The headings in these Conditions are for convenience only and shall not affect their interpretation.

### 2. Basis of Sale and Supply

2.1 The Supplier shall sell the Goods to the Client who shall purchase the Goods subject to these Conditions which shall govern the Contract to the exclusion of any other terms and conditions.  
2.2 No variation to these Conditions shall be binding unless agreed in Writing by the authorised representatives of the Supplier.  
2.3 The Supplier's employees or agents are not authorised to make any representations concerning the Goods unless confirmed by the Supplier in Writing. In entering into the Contract, the Client acknowledges that it is not relying on any representations which have not been so confirmed.  
2.4 The Supplier may correct any typographical or other errors or omissions in any brochure, promotional literature, quotation or other document issued by the Supplier relating to the Goods without any liability to the Client.

### 3 Orders

3.1 The quantity, quality and description of and any specification for the Goods shall be those set out in the Specification Sheet and the Client shall be responsible to the Supplier for ensuring their accuracy and for giving the Supplier any necessary information relating to the Goods within a sufficient time to enable the Supplier to perform the Contract in accordance with its terms.  
3.2 The Supplier reserves the right to make any changes in the specification of the Goods which are required to conform with any applicable statutory or EU requirements or, where the Goods are to be supplied to the Supplier's specification, which do not materially affect their quality or performance.  
3.3 If the Goods are to be manufactured or any process is to be applied to the Goods by the Supplier in accordance with a specification submitted by the Client, the Client shall indemnify the Supplier against all loss, damages, costs and expenses awarded against or incurred by the Supplier in connection with or paid or agreed to be paid by the Supplier in settlement of any claim for infringement of any patent, copyright, design, trade mark or other industrial or intellectual property rights of any other person which results from the Supplier's use of the Client's specification.  
3.4 No order for Goods which has been accepted by the Supplier may be cancelled by the Client except with the agreement in Writing of the Supplier and on terms that the Client shall indemnify the Supplier in full against all loss (including but not limited to loss of profit), costs (including but not limited to the cost of all labour and materials used), damages, charges and expenses incurred by the Supplier as a result of cancellation.

### 4 Delivery and Installation

4.1 The Goods shall be delivered to the Client at the Location on the date or within the period stated in the Sales Order during Normal Business Hours.  
4.2 Any dates quoted for delivery of the Goods are approximate only and the Supplier shall not be liable for any delay in delivery of the Goods however caused. Time for delivery shall not be of the essence of the Contract unless previously agreed by the Supplier in Writing. The Goods may be delivered by the Supplier in advance of the quoted date upon giving reasonable notice to the Client.  
4.3 Where the Goods are to be delivered in instalments, each delivery shall constitute a separate contract and failure by the Supplier to deliver any one or more of the instalments in accordance with these Conditions or any claim by the Client in respect of any one or more instalments shall not entitle the Client to treat the Contract as a whole as repudiated.  
4.4 The Client is responsible for off-loading the Goods at the Location unless otherwise agreed by the Supplier in Writing.  
4.5 The Supplier is required to check that the correct quantity of Goods have been delivered. Signature by the Client of the carrier's despatch note shall be deemed conclusive evidence that the correct quantity of Goods have been delivered unless the Client informs the Supplier otherwise within three days from the date of delivery.  
4.6 The Supplier will only consider requests for documentary proof of delivery if such a request is made within 90 days of the date of the Supplier's invoice.

### 5 Price and Charges

5.1 The Price shall be deemed to include the Supplier's costs for delivery of the Goods at the Location unless otherwise stated. The Price excludes any cost of unloading the Goods at the Location unless otherwise agreed by the Supplier in Writing.  
5.2 The Supplier reserves the right, by giving notice to the Client at any time before delivery, to increase the Price to reflect any increase in the cost to the Supplier which is due to any factor beyond the control of the Supplier (such as, without limitation, any foreign exchange fluctuation, currency regulation, alteration of duties, significant increase in the costs of labour, materials or other costs of manufacture), any change in delivery dates, quantities or specifications for the Goods which may be requested by the Client, or any delay caused by any instructions of the Client or failure of the Client to give the Supplier adequate information or instructions.  
5.3 The Price is exclusive of any applicable value added tax, which the Client shall be additionally liable to pay to the Supplier.

### 6 Terms of Payment

6.1 The Supplier shall be entitled to invoice the Client for the Price on or at any time after delivery (or tendered delivery if the Client wrongfully fails to take delivery of the Goods).  
6.2 The Client shall pay the Price without any set-off or other deduction within 30 days of the date of the Supplier's invoice. Time of payment shall be of the essence of the Contract. Receipts for payment shall only be issued upon request.  
6.3 If the Client fails to make any payment on the due date then, without prejudice to any other right or remedy available to the Supplier, the Supplier shall be entitled to:  
6.3.1 cancel the Contract or suspend any further deliveries to the Client;  
6.3.2 appropriate any payment made by the Client to such of the Goods (or the goods supplied under any other contract between the Client and the Supplier) as the Supplier may think fit (notwithstanding any purported appropriation by the Client); and  
6.3.3 charge the Client interest (both before and after any judgement) on the amount unpaid on a daily basis, at the rate of 3 per cent per annum above HSBC Bank plc base rate from time to time, until payment in full is made. The Supplier reserves the right to claim interest under the Late Payment of Commercial Debts (Interest) Act 1998.  
6.4 All costs, charges and expenses (including but not limited to debt collection and legal costs) incurred by the Supplier in recovering any debt due by the Client shall be paid by the Client on a full indemnity basis.

### 7 Risk and Property

7.1 Risk of damage to or loss of the Goods shall pass to the Client upon delivery at the Location in accordance with the Contract (or, if the Client wrongfully fails to take delivery of the Goods, when the Supplier tenders delivery).  
7.2 Notwithstanding delivery and the passing of risk in the Goods or any other provision of these Conditions, the property in the Goods shall not pass until the Supplier has received cash or cleared funds in payment in full of the price of:  
7.2.1 the Goods; and  
7.2.2 all other Goods agreed to be sold by the Supplier to the Client for which payment is then due.  
7.3 Until such time as the property in the Goods passes to the Client, the Client shall:  
7.3.1 hold the Goods as the Supplier's fiduciary agent and bailee;  
7.3.2 keep the Goods separate from those of the Client and third parties; and  
7.3.3 keep the Goods properly stored, protected and insured and identified as the Supplier's property.  
7.4 Until such time as the property in the Goods passes to the Client, the Client shall be entitled to resell or use the Goods in the ordinary course of its business solely on the following conditions: that it shall account to the Supplier for the proceeds of sale or otherwise of the Goods, whether tangible or intangible, including insurance proceeds; and  
7.4.1 that it shall keep all such proceeds separate from any monies or property of the Client and third parties and, in the case of tangible proceeds, properly stored, protected and insured.  
7.5 Until such time as the property in the Goods passes to the Client (and provided the goods are still in existence and have not been resold), the Supplier shall be entitled at any time to require the Client to deliver up the Goods to the Supplier and, if the Client fails to do so forthwith, to enter upon any premises of the Client or any third party where the Goods are stored and repossess the Goods.  
7.6 The Client shall not be entitled to pledge or in any way charge by way of security for any indebtedness any of the Goods which remain the property of the Supplier, but if the Client does so all monies owing by the Client to the Supplier shall (without prejudice to any other right or remedy of the Supplier) forthwith become due and payable.

### 8 Client's Obligations

8.1 The Client shall:  
8.1.1 at all times keep the Goods in the environmental conditions recommended by the manufacturer of the Goods;  
8.1.2 not move the Goods from the Location without obtaining the prior written consent of the Supplier;  
8.2 The Client shall take all such steps as may be necessary to ensure the safety of any of the Supplier's representatives who visit any premises of the Client.

### 9 Warranties and Liability

9.1 Whereby the Supplier is merely a reseller of the Goods, the Supplier does not give any warranty guarantee or other term as to the quality, fitness for purpose or otherwise of the Goods, but shall, where possible, assign the Client the benefit of any warranty guarantee or indemnity given by the manufacturer to the Supplier.  
9.2 Subject as expressly provided in these Conditions, and except where the Goods are sold to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977), all warranties, conditions or other terms implied by statute or common law are excluded to the fullest extent permitted by law.  
9.3 Any claim by the Client which is based on any defect in the quality or condition of the Goods or their failure to correspond with specification shall or (whether or not delivery is refused by the Client) be notified to the Supplier in Writing within three days from the date of delivery or (where the defect or failure was not apparent on reasonable inspection) within a reasonable time after discovery of the defect or failure. If delivery is not refused, and the Client does not notify the Supplier accordingly, the Client shall not be entitled to reject the Goods and the Supplier shall have no liability for such defect or failure, and the Client shall be bound to pay the Price as if the Goods had been delivered in accordance with the Contract.  
9.4 Where any valid claim in respect of any of the Goods which is based on any defect in the quality or condition of the Goods or their failure to meet specification is notified to the Supplier in accordance with these Conditions, the Supplier shall be entitled to replace the Goods (or the part in question) free of charge or, at the Supplier's sole discretion, refund to the Client the Price (or a proportionate part of the Price), but the Supplier shall have no further liability to the Client.  
9.5 Except in respect of death or personal injury caused by the Supplier's negligence, the Supplier shall not be liable to the Client by reason of any representation (unless fraudulent), or any implied warranty, condition or other term, or any duty at common law, or under the express terms of the Contract, for any indirect, special or consequential loss or damage (whether for loss of profit or otherwise), costs, expenses or other claims for compensation whatsoever (whether caused by the negligence of the Supplier, its employees or agents or otherwise) which arise out of or in connection with the supply of the Goods and the entire liability of the Supplier under or in connection with the Contract shall not exceed the Price (as the case may be) except as expressly provided in these Conditions.  
9.6 The Supplier shall not be liable to the Client or be deemed to be in breach of the Contract by reason of any delay in performing, or any failure to perform, any of the Supplier's obligations in relation to the Goods, if the delay or failure is due to an event of Force Majeure.

### 10 Insolvency of Client

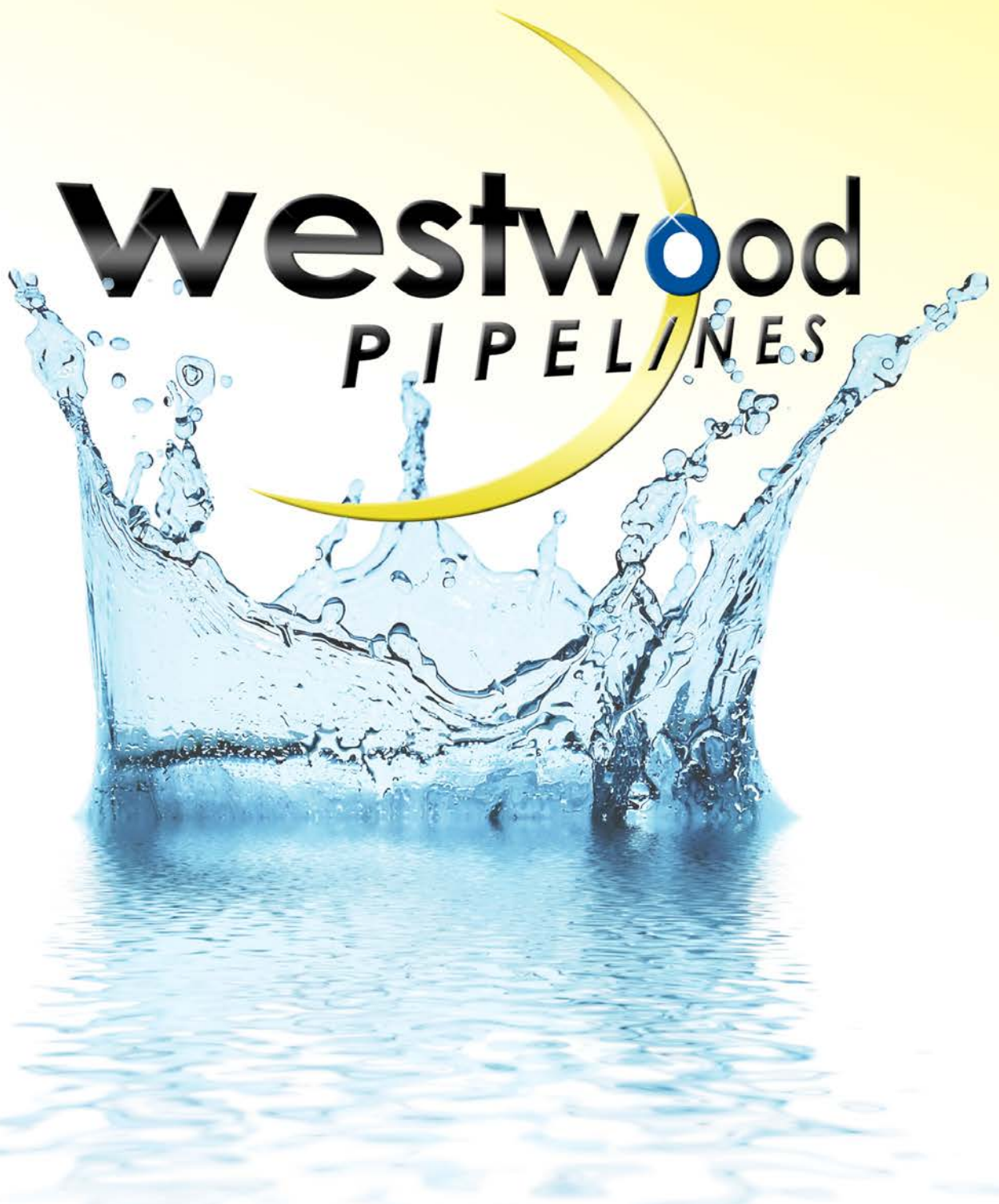
10.1 This clause applies if:  
10.1.1 the Client makes any voluntary arrangement with its creditors or becomes subject to an administration order or (being an individual or firm) becomes bankrupt or (being a company) goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction); or  
10.1.2 an encumbrance takes possession, or a receiver is appointed, of any of the property or assets of the Client; or  
10.1.3 the Client ceases, or threatens to cease, to carry on business; or  
10.1.4 the Supplier reasonably apprehends that any of the events mentioned above is about to occur in relation to the Client and notifies the Client accordingly.  
10.2 If this clause applies, then, without prejudice to any other right or remedy available to the Supplier, the Supplier shall be entitled to cancel the Contract or suspend any further deliveries under the Contract without any liability to the Client and, if the Goods have been delivered but not paid for, the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

### 11 General

11.1 The Supplier shall be entitled to carry out its obligations under this Agreement through any agents or sub-contractors appointed by it in its absolute discretion for that purpose.  
11.2 Any notice required or permitted to be given by either party to the other under these Conditions shall be in Writing addressed to that other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party giving the notice.  
11.3 No waiver by the Supplier of any breach of the Contract by the Client shall be considered a waiver of any subsequent breach of the same or any other provision.  
11.4 If any provision of these Conditions is held by any competent authority to be invalid or unenforceable in whole or in part the validity of the other provisions of these Conditions and the remainder of the provision in question shall not be affected.  
11.5 A person who is not a party to the Contract shall have no right to enforce any term of the Contract by virtue of the Contract (Rights of Third Parties) Act 1999.  
11.6 The Contract shall be governed by the laws of England, and the Client agrees to submit to the nonexclusive jurisdiction of the English courts.

\* Also note Electrofusion Tapping Saddles can be applied by following the previous steps.





To comply with the WIS 4-32-19 and WRAS regulations, only fittings supplied by Westwood Pipelines Ltd can be used with the egeplast SLA Barrier Pipe and all warranties will become invalid if any other manufacturers fittings are used.



[www.talis-uk.com](http://www.talis-uk.com)

[www.westpipes.com](http://www.westpipes.com)

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