

Brymec

Soil and Waste Systems

Introducing the Brymec Soil and Waste Range

Brymer

Soil and waste pipes and fittings for sanitary pipework systems are manufactured from different plastics materials including PVCu, and polypropylene. All pipes are manufactured using a continuous extrusion process and fittings are produced by high-pressure injection moulding.

The Brymec soil and waste range offers solutions for the disposal and redistribution of waste and rainwater.

Brymec systems are available with solvent weld, push fit and compression joints.



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Features and Benefits

Lightweight and easy to install

The Brymec soil and waste system is robust, lightweight and easy to handle. Designed to provide the installer with hassle-free installation, the system components can be transported and handled easily.

Manufactured to the highest quality standards

Our soil and waste system has been carefully designed and selected to meet the highest quality standards. Products undergo stringent testing in compliance with our ISO 9001:2015 quality management system.

Brymec soil and waste systems are manufactured to the following standards:

- BS 3943:1988 Specification for waste traps
- BS 4514:1983 Specification for un-plasticised PVC soil and ventilating pipes, fittings and accessories
- BS EN 1329:1 Specification for un-plasticised PVC soil and waste pipes, fittings and accessories
- BS 5627 Specification for pan connectors
- EN12380 Specification for Air Admittance Valves (AAV's)

Wide range of applications for use. These include:

- Above ground soil drainage
- Sanitary waste drainage
- Soil stack and system ventilation
- Gravity condensate drainage
- Traps, adaptors and accessories

Brymec warranty

We offer a 10-year warranty across our soil and waste range.





Resistance to chemicals

The Brymec soil and waste system is rot and vermin proof, and resistant to most commonly occurring household chemicals. The system will not be affected by domestic effluents.



Highly resistant to impact

The Brymec soil and waste system has high durability and resistance to impact once installed. It is also robust during installation, handling and transportation.

Ring Seal Soil and Vent

Plain End Pipe		Double Socket Elbows	
STOCK NO	SIZE	STOCK NO	
35100	4" / 110mm x 3m	35108	2
		35109	4
Single Socket Pipe		Adjustable Elbows	
STOCK NO	SIZE		
35099	4" / 110mm x 3m	STOCK NO	
Couplers		35111 35112 Single Branches	
STOCK NO	SIZE		
35101	Ring Seal to Solvent		
35102	Double Socket	STOCK NO	
		35113	
Single Socket Elbows		35114	
		35139	
STOCK NO	SIZE	35115	
35105	4" / 110mm x 92.5°		
35106*	4" / 110mm x 112.5°		
35107	4" / 110mm x 135°		

S



STOCK NO	SIZE
35108	4" / 110mm x 92.5°
35109	4" / 110mm x 135°



STOCK NO	SIZE
35111	4" / 110mm x 0-45° Single Socket
35112	4"/110mm x 0-90° Double Socket



STOCK NO	SIZE
35113	92.5° 2 Boss (2″) Double Socket
35114	92.5° 2 Boss (2″) Triple Socket
35139	92.5° (No Boss) Triple Socket
35115	135° (No Boss) Double Socket

* For full warranty details or more information please call customer service on 0333 000 55 55 or email sales@brymec.com

4" / 110mm x 135° Solvent

35110

Ring Seal Soil and Vent

Double Branch



Access Elbow

 STOCK NO
 SIZE

 35116
 4"/1

4" / 110mm x 92.5°

Corner Double Branch



STOCK NO SIZE

35117*

4" / 110mm

Boss Pipes



STOCK NO	SIZE
35118*	4" / 110mm 3 Boss 63mm
35119	4" / 110mm Short 3 Boss 63mm Solvent

SIZE

Access Pipe

STOCK NO



35128 4" / 110mm

STOCK NO	SIZE
35129	4" / 110mm x 92.5°
Access Branch	
STOCK NO	SIZE
35130	92.5° 2 Boss (2″) Triple Socket

Ring Seal Soil and Vent

Access Caps



STOCK NO	SIZE
35132	Spigot
35133*	Solvent Socket

Socket Plug

STOCK NO	SIZE	
35134	4" / 110mm	

Strap Boss

STOCK NO

35120

	0
SIZE	
4" / 63mm	

35103 For Pipe - Ring seal grey 35104 For Socket - Ring seal grey Manifold

SIZE



Reducers

Pipe Clips

STOCK NO

STOCK NO	SIZE	
35135	4" to 2" waste	
35136	4" to 68mm rainwater	

Weathering Tile Slate





Air Admittance Valve



STOCK NO SIZE 35208 4" / 110mm

Rubber Waste Adaptors		te Adaptors	
	STOCK NO	SIZE	REF
	35214*	4" to 1 1/2"or 1 1/4"	DC2BL-OS
	35215*	4" to 2"	DC3BL-OS

Solvent Weld Soil and Vent

Plain En	d Pipe			
STOCK	٥N	SIZE		
35148		4" / 1	10mm x 3	m
Single S	ocket Elbow	5		
STOCK NO	SIZE		RINGSE ADAPT	
35152	4" / 110mm x 90°	5	Type 1	
35153*	4" / 110mm x 112	2.5°	N/A	
35154	4" /110mm x 135)	Type 1	
Single B	ranches			
STOCK NO	SIZE			RINGSEAL ADAPTOR**
35159	92.5° 2 Boss (2") [Double	Socket	Туре 1
35160	92.5° 2 Boss (2") T	riple S	ocket	Туре 1
35182*	92.5° 4 Boss (50mm) Triple Socket. Requires 35170 boss adaptor		Туре 2	
35161	135° (No Boss) Tri	ple So	cket	Туре 1
Coupler				
STOCK			DINCS	

STOCK
NOSIZERINGSEAL
ADAPTOR**351504" Double SocketType 1

Double Socket Elbows



STOCK NO	SIZE	RINGSEAL ADAPTOR**
35155	4" / 110mm x 92.5°	Туре 1
35156*	4" / 110mm x 112.5°	Туре 2
35157	4" / 110mm x 135°	Туре 1

Double Branch



STOCK NO	SIZE	RINGSEAL ADAPTOR**
35163	92.5° 2 Boss (2″) Triple Socket	Туре 1

Corner Double Branch



STOCK NO	SIZE	RINGSEAL ADAPTOR**
35165*	92.5° 2 Boss (50mm) Four Socket. Requires 35170 boss adaptor.	Туре 2

3 Way Boss Pipe



STOCK NO	SIZE	RINGSEAL ADAPTOR**
35168	4" / 110mm Short 3 Boss 2"	N/A

** Ring seal adaptors can be selected and fitted on site to most solvent fittings to create a ring seal joint as a removeable or expansion connection.

Solvent Weld Soil and Vent

Single Boss Pipes



Access Cap

STOCK NO	SIZE	RINGSEAL ADAPTOR**
35183*	Double Socket 1 1/4" Boss	Туре 2
35184*	Double Socket 1 1/2" Boss	Туре 2
35169*	Double Socket 50mm Boss. Requires 35170 boss adaptor.	Type 2

Short Access	Pipe
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Access Pipe with Boss



STOCK NO	SIZE	RINGSEAL ADAPTOR**
35176	4" / 110mm	Туре 1

STOCK	10	SIZE		
35180		Solver	nt Spigol	
Access I	Elbow			
STOCK NO	SIZE		RINGS ADAP	EAL TOR**
35177	4" / 110mm x 9	2.5°	Type 1	
Access I	Branch			
STOCK NO	SIZE			RINGSEAL ADAPTOR**
35178*	92.5° 2 Boss (2")	Triple S	Socket	Туре 1
Solvent Seal Ad	To Ring aptor			\bigcirc

STOCK NO	SIZE	RINGSEAL ADAPTOR**
35174*	4 Boss (50mm) Double Socket. Requires 35170 boss adaptor.	Туре 2

Solvent To F Seal Adapto	-	\bigcirc
STOCK NO	SIZE	REF
35185	4" / 110mm	Туре 1
35186*	4" / 110mm	Type 2

Access Saddle





	STOCK NO	SIZE
35131* 4" / 110mm	35131*	4" / 110mm

STOCK NO	SIZE
35205	4" / 110mm

** Ring seal adaptors can be selected and fitted on site to most solvent fittings to create a ring seal joint as a removeable or expansion connection.

Soil and Vent Accessories

Strap Boss		Vent Cowl		
STOCK NO	SIZE	STOCK NO	SIZE	
35121	4" / 110mm to 2"	35203	4" / 110m	າມ
Solvent Weld Boss Adaptors		Rubber Boss	Adaptors	
STOCK NO	SIZE	STOCK NO	SIZE	
35125*	63mm to 1 1/4"	35122	63mm to	1 1/4"
35126*	63mm to 1 1/2"	35123	63mm to	1 1/2"
35127*	63mm to 2"	35124	63mm to	2"
35432	2" x 1 1/4"			
35433	2" x 1 1/2"	Rubber Line	Rubber Lined Pipe Clips	
35170	50mm to 2"			
Pipe Clips		STOCK NO	SIZE	PACK QTY
		04099	32 - 37mm (1 1/4")	25
		04100	40 - 45mm (1 1/2")	25
STOCK NO	SIZE	04113	50 - 56mm (2")	50
35098	For Pipe - Solvent Grey	04108	108 - 116mm (4")	5
35104*	For Socket			
Vent Terminal		Solvent Cem - large pot fo		Brymec) PVC CEMENT Warden State Come Brymeccom
STOCK NO	SIZE	STOCK NO	SIZE	REF
35204	4" / 110mm	35211	1000ml c/w brush	SC1000

Pan Connectors

Straight Pan Connector



90° Pan Connector With 32mm Boss



STOCK NO	SIZE	STOCK NO	SIZE
0975	4" / 110mm	30982*	4" / 110mm
4° Pan Connector		90° Swan Neck Pan Connector	
ΤΟϹΚ ΝΟ	SIZE	STOCK NO	SIZE
0976*	4" / 110mm	30986	4" / 110mm
0° Extended an Connector STOCK NO	SIZE	Flexible Pan Con	SIZE
978	4" / 110mm	30880*	90° Flexible
		30980	Straight flexible
ffset Pan Connecto	OF SIZE	Pan Connector Extension Piece	
0981	4" / 110mm		CIZE
)981	4" / 110mm	STOCK NO 30985	SIZE 4" / 110mm

Solvent Weld Waste

3m Pipe				
SIZE	PACK QTY		STOCK NO	1
		GREY	WHITE	BLACK
32mm	10	35400	19375	19395
40mm	10	35401	19415	192901
50mm	10	35402	19990	-
Couplers				
SIZE	PACK QTY	STOCK NO		
JILL	TACK QTT	GREY	WHITE	BLACK
32mm	10	35403	19376	19396
40mm	10	35404	19416	192902
50mm	10	35405	19991	-
92.5° Swept Bends				
SIZE	ΡΑϹΚ QTY		STOCK NO	
		GREY	WHITE	BLACK
32mm	10	35408	19377	19397
40mm	10	35409	19417	192903
50mm	10	35410	19992	-
	10		10002	

STOCK NO SIZE PACK QTY GREY WHITE BLACK 35411 193772 193972 10 32mm 40mm 10 35412 194171 192911 50mm 10 35413 199922 92.5° M x F Elbows **STOCK NO** PACK QTY SIZE WHITE **BLACK** GREY 10 35417 193771 193971 32mm 40mm 10 35418 194172 192910 50mm 10 35419 199921 45° Elbows **STOCK NO** PACK QTY SIZE GREY WHITE **BLACK** 35414 19378 19398 32mm 10 10 35415 19418 192904 40mm 50mm 10 35416 19993 _

Solvent Weld Waste

90° Knuckle Elbows

92.5° Swept Tees				
SIZE	PACK QTY		STOCK NO	
5122		GREY	WHITE	BLACK
32mm	10	35423	19379	19399
40mm	10	35424	19419	192905
50mm	10	35425	19994	-
Reducers			0	
SIZE PACK QTY -		STOCK NO		
0.22		GREY	WHITE	BLACK
32 - 22mm	10	-	19371	19391
40 - 22mm	10	-	35611	-
40 - 32mm	10	35431	19424	192908
50 - 32mm	10	35432	19998	-

SIZE

32mm

40mm

50mm

45° M x F Elbows

Solvent Weld Waste

PACK QTY

10

10

10



GREY

35420*

35421*

35422*

STOCK NO

WHITE

193781*

194181*

199931*



BLACK

193981*

192912*

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Re



15

Solvent Weld Waste

Rodding Eyes				
SIZE	PACK QTY		STOCK NO	
JILL		GREY	WHITE	BLACK
32mm	10	35444	19381	19401
40mm	10	35445	19420	192906
50mm	10	35446	19995	-
Pipe Clips				
SIZE	PACK QTY		STOCK NO	
JILL	TACK QTT	GREY	WHITE	BLACK
32mm	10	35406	19382	19402
40mm	10	35407	19421	192907
50mm	10	35450	19996	-
Strap Boss				
SIZE PACK QTY			STOCK NO	
SIZE		GREY	WHITE	BLACK
4" / 110mm to 2" Outlet	10	35121	19380	19400

Solvent Weld Waste - Grey

4 Way Cross Tees



Tank Connectors	
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STOCK NO	SIZE	PACK QTY
35426*	40mm	10
35427*	50mm	10

STOCK NO	SIZE	ΡΑϹΚ QTY
35442*	32mm	10
35443*	40mm	10

Socket Plugs



Expansion Couplers



STOCK NO	SIZE	PACK QTY
35447*	32mm	10
35448*	40mm	10
35449*	50mm	10

STOCK NO	SIZE	PACK QTY
35434*	32mm	10
35435*	40mm	10
35436*	50mm	10

Male Iron Adaptors



45°	Junctions	



STOCK NO	SIZE	PACK QTY
35439*	32mm	10
35440*	40mm	10
35441*	50mm	10

Female Iron Adaptors



STOCK NO	SIZE	PACK QTY
35428	32mm	10
35429	40mm	10
35430	50mm	10

STOCK NO	SIZE	ΡΑϹΚ QTY
35437*	32mm	10
35438*	40mm	10

Solvent Weld Waste - White

Male Iron Adaptor



STOCK NO	SIZE
19374*	1 1/4"



EXO Valve

Flexible Connectors

STOCK NO	SIZE
19403*	1 1/4" x 18"
19404*	1 1/2" x 18"

Air Admittance Valves



STOCK NO	SIZE	REF
35454*	40mm	PV540W
35455*	50mm	PV550W

ΕΧΟ	Bosses



STOCK NO	SIZE	DOWNPIPE SIZE	HOLESAW SIZE
21601	32mm	110mm	38mm
21602	40mm	110mm	44mm

STOCK NO	SIZE	
19294*	32mm	
Waterless Self S Traps	Seal	
STOCK NO	SIZE	
19384*	32mm Waterless Trap	
19422*	40mm Waterless Trap	
19405*	32mm Compression Adaptor	
19423*	40mm Compression Adaptor	

92.5° Transition Elbow



STOCK NO	SIZE
35319*	1 1/4" Solvent x 32mm Euro Push-Fit

Solvent Weld Waste Accessories

Silicone Lubricant Grease

SIZE

100g

STOCK NO

35788*



REF

SG100

		PIPE CLEANER
STOCK NO	SIZE	REF
19413	250ml	CF250

5		
Solvent Cem	ent	
STOCK NO	SIZE	REF
19410	125ml c/w brush	SC125
19411	250ml c/w brush	SC250
35211	1000ml c/w brush	SC1000
125ml & 250ml	cuitable for cizes up t	o 50mm

125ml & 250ml - suitable for sizes up to 50mm. Larger sizes use 1000ml.

19413	250ml	CF250	
Rubber Drai			

Pipe Adaptors

Cleaning Fluid



STOCK NO	SIZE	COLOUR
19406	1" - 3/4"	Green
19407	1 1/4" - 3/4"	Blue
19408	1 1/2" - 3/4"	Black

Aerosol Lubricant



STOCK NO	SIZE	REF
19412*	300ml	SG300

Compression Waste

Couplers



90° M x F Elbows

45° M x F Elbows



STOCK NO	SIZE
35300	32mm
35301	40mm
35320*	50mm

SIZE

32mm

40mm

50mm

STOCK NO	SIZE
35308*	32mm
35309*	40mm

90° Knuckle Elbows



STOCK NO	SIZE
35310*	32mm
35311*	40mm

90° Adaptor Elbows



45° Elbows

STOCK NO

35304

35305

35321*



STOCK NO	SIZE
35318*	1 1/4" Compression x 32mm Euro Push-Fit

STOCK NO	SIZE
35306	32mm
35307	40mm
35322*	50mm

Male	Adapters	



STOCK NO	SIZE
19423*	32mm x 1 1/4" BSP
19423*	40mm x 1 1/2" BSP

Compression Waste

SIZE

32mm

40mm

50mm

Equal Tees

STOCK NO

35312

35313

35325*



Flexible Connectors

Pipe Clips

STOCK NO	SIZE
19403*	32mm x 18"
19404*	40mm x 18"

Reducer



STOCK NO	SIZE
35314	40 - 32mm

STOCK NO	SIZE	
19382	32mm	
19421	40mm	
19996	50mm	

Compression To Solvent Adaptors



STOCK NO	SIZE
35315*	32mm
35316*	40mm

Waste Traps

Bottle Traps



 STOCK NO
 SIZE

 35500
 1 1/4" / 32mm

 35501
 1 1/2" / 40mm

P Traps



STOCK NO	SIZE
35504	1 1/4" / 32mm
35505	1 1/2" / 40mm

Anti - Syphon Bottle Traps



Telescopic P Traps



STOCK NO	SIZE
35530	1 1/4" / 32mm
35531	1 1/2" / 40mm
35532*	1 1/4" Telescopic

Telescopic Chrome Plated Bottle Traps



STOCK NO	SIZE
35502*	1 1/4" / 32mm
35503*	1 1/2" / 40mm

Low Level Bath Trap



STOCK NO	SIZE	REF
35513*	1 1/2" / 40mm	WT67

STOCK NO	SIZE
35506*	1 1/4" / 32mm
35507*	1 1/2" / 40mm
35533*	1 1/4" anti-syphon
35534*	1 1/2" anti-syphon

S Traps



STOCK NO	SIZE
35508	1 1/4" / 32mm
35509	1 1/2" / 40mm

Waste Traps

Bath Traps



Washing Machine Trap Adaptor



STOCK NO	SIZE
35510 (Without cleaning eye)	1 1/4" / 32mm
35511 (With cleaning eye)	1 1/2" / 40mm

STOCK NO	SIZE	REF
35521*	1 1/2" / 40mm	WT61

Blanking Caps



Washing Machine Trap	
	0

STOCK NO	SIZE
35519	1 1/2" / 40mm with Upstand

Washing Machine Traps With Adaptor



STOCK NO	SIZE
35520	1 1/2" / 40mm Single spigot
35524	1 1/2" / 40mm Twin spigot

STOCK NO	SIZE	
35330*	1 1/4"	
35331	1 1/2"	
35332*	2"	





STOCK NO	SIZE
35541*	1 1/4" / 32mm

Fire Stop Products

Manufactured from a high performance material bonded to the inside of a steel sleeve. Suitable for when plastic soil and waste pipes pass through fire compartment walls and floors. On exposure to heat from a fire they rapidly expand inwards to squeeze the collapsing plastic pipe until the aperture is completely sealed. Tested in accordance with the performance requirements of EN1366-3: 2009.

Intumescent Pipe Collars

- Tested to and EN1366-3: 2009
- For use on UPVC, ABS, MDPE, HDPE and PP pipes
- Up to 4 hours fire resistance
- Surface mounted, cast or semi-cast applications



STOCK NO	SIZE	MAX RATING	STOCK NO	SIZE	MAX RATING
040526	55mm	1 Hour	040541	75mm	4 Hour
040531	110mm	1 Hour	040544	110mm	4 Hour
040538	32mm	4 Hour	040547	160mm	4 Hour
040582	40mm	4 Hour	040535	200mm	4 Hour
040539	50mm	4 Hour	040537	250mm	4 Hour
040540	56mm	4 Hour			

Fire Stop Intumescent Pipe Wraps

Designed to provide high volume expansion and pressure sealing using an intumescent composition based on elastomeric thermoplastic polymers and binders. On exposure to fire the pipe wrap expands rapidly inwards to squeeze the collapsing plastic pipe until the aperture is completely sealed.

Intumescent Pipe Wraps

- Tested to EN1366-3: 2009
- Upto 4 hour rated
- Easy to fit
- Unaffected by moisture, humidity or frost
- Care should be taken so as to avoid damaging the outer polythene sleeve



STOCK NO	SIZE	MAX RATING	STOCK NO	SIZE	MAX RATING
040511	32mm	4 Hour	040517	110mm	4 Hour
040530	40mm	4 Hour	040519	125mm	4 Ноиг
040512	55mm	4 Hour	040520	160mm	4 Hour
040514	63/75/82mm	4 Hour			

Fire Stop Accessories

Fire Rated Acoustic Foam - B1 Rating

- Fire retardant up to 6 hours
- Excellent adhesion on most substrates
- Very good filling characteristics
- Tested to EN1366-4 and BS476-20

STOCK NO SIZE 08063 750 ml

Fire Rated Silicone

A neutral cure elastic silicone sealant which conforms to BS476-20 / EN1366-4:2006 for fire retardancy and has a fire rating of up to 4 hours in certain joint configurations. Acoustic rated to BS EN ISO 140/3. Tested for air permeability to EN13141-1 ventilation for buildings. Performance testing for components / products for residential ventilation.

STOCK NO	SIZE
08174	310 ml

Intumescent Putty

• An easy to use, non setting intumescent compound, which is ideal for sealing around pipes and cables in walls and floors



STOCK NO	SIZE
40573	1kg

Fire Batt - 4 Hour Fire Rating

- Tested to EN1366-3:2009
- Up to 4 hours fire resistance
- Economical, easy to fit
- Halogen free

STOCK NO

- Accoustic tested to EN ISO 10140-2:2010
- Suitable for large apertures and to accomodate multple penetrations

040591

1200 x 600 x 60mm

SIZE

Intumescent Acoustic Sealant

- The Intumescent Acoustic Sealant is a one part acrylic emulsion sealant giving good fire resistance to EN1366-3 and EN1366-4
- Water based acrylic
- It can be overpainted and accept movement accommodation ≤7.5%
- Up to 4 hours fire resistance

STOCK NO	SIZE
08231	310 ml

Technical Data and Uses

Materials

- Poly Vinyl Chloride un-plasticised: PVCu (Solvent and Ring Seal pipe and fittings)
- Polypropylene: PP (Traps, Compression waste & Pan Connectors; note, do not solvent weld)

Pipe sizing

- Soil: 110mm OD x 3.2mm wall
- Waste: 36.3mm x 1.8mm wall
- 43.0mm x 1.9mm wall
- 55.9mm x 3.2mm wall

UV light resistance

PVCu can be formulated to give excellent resistance to UV light, and is suitable for exterior uses. Available from Brymec in either 4" solvent weld, ring-seal and waste systems.

Polypropylene and ABS fittings used in traps and condensate drainage have good chemical resistance, but if used externally these will need to be protected using suitable paint or enclosures.

Thermal movement

The coefficient of linear expansion for PVCu is 0.06mm/m/°C. As a result, a 3m length of pipe will increase in length by approximately 3.6mm when subjected to a 20°C temperature variation. Therefore, it is important to ensure that any movement is controlled, and push-fit joints are installed to accommodate any expansion that may occur due to increases in ambient temperature or hot water discharges.

Service temperature

Generally, the maximum working temperature of Brymec PVCu, soil and waste systems when subjected to continuous flow is 70°C. Higher intermittent discharges of up to 90°C may be accommodated by PVCu, provided the period of discharge does not exceed one-minute duration. Polypropylene has a higher softening point of 140°C, meaning it can cope with higher discharges such as boiling water - making it ideal for the manufacture of traps.

Technical Data and Uses

Biological and chemical resistance

Polluted industrial atmospheres will not affect Brymec soil and waste systems. PVC and polypropylene are rot and vermin proof and resistant to most commonly occurring chemicals, so it will not be affected by domestic effluents. Notable exceptions however are solvents, including those incorporated in most timber preservatives. Before any component is fixed to a timber surface treated with wood preservative, the preservative must be dried thoroughly. The solvent content of wet preservatives / paints can attack and embrittle plastic materials.

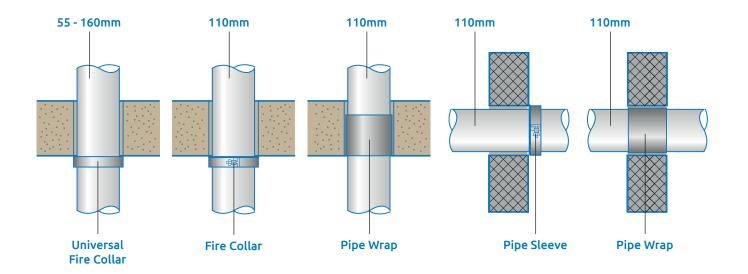
The system should not be used for the disposal of industrial chemical wastes.

Reference can be made for your specific application to ISO publications TR10358 and TR7620 which provide comprehensive information on chemical and temperature resistance of plastics and rubber materials.

Fire protection

Fire protection products provide up to 4 hours resistance. Suitable for use with all Brymec plastic drainage systems. The Building Regulations 1991 (as amended) require that a building shall be sub-divided into compartments where necessary to inhibit the spread of fire. Plastics pipework is permitted to penetrate separating walls, compartment walls and floors provided the appropriate measures are taken to prevent the spread of fire in accordance with Part B of the Approved Document (2010). To comply with this, pipes must be enclosed within a fire-resistant enclosure which extends from floor to ceiling within each storey. The enclosure must have a class 'O' internal surface and have each side formed by a separating wall, external wall or by casing. Any casing must have a minimum 30 minutes fire resistance and penetrations of the duct must be limited to 160mm vertical and 110mm horizontal. Where longer periods of fire resistance are required, fire collars or pipe wraps can be fitted to provide a fire rating of up to 4 hours depending on the actual construction detail.

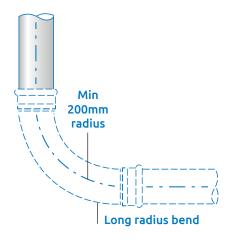
Please consult installation instructions for your fire protection product to ensure pipework compatibility, fixing and installation are appropriate for your system design and the construction specification.



Design Considerations

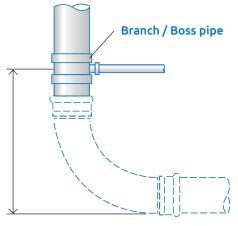
Bends at the base of stacks

Bends at the base of vertical stacks should be of long radius and have a minimum centre line radius of 200mm on a 110mm nominal size stack. Two 45° radius bends may also be used as an alternative to provide the change of direction and connection to the building drain. The same design principle should also be adopted where off sets occur in stacks of one or more storey height. Where pipework is suspended in a ceiling void or car park, it is recommended that two 45° solvent weld bends are used with a short piece of pipe between to ensure the radius exceeds that required.



Branches at the base of stacks

For single dwellings up to three storeys high, the distance between the centre line of the lowest branch connection and the invert of the drain should be at least 450mm. For multistorey systems up to five storeys high, the minimum distance should be 740mm and for systems higher than five floors no connections are permissible at ground floor level. Where this occurs a separate stub stack should be provided to serve the ground floor or individual appliances should have their own separate connection to the building drain.



= 450mm up to three storeys high = 740mm up to five storeys high

= One storey height, over five storeys

Offsets in stacks

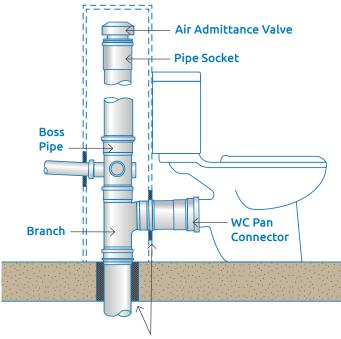
Offsets in the wet portion of a discharge stack should be avoided wherever possible but where they have to be fitted a large radius or two 45° bends should be used to create each change of direction. Offsets in lightly loaded stacks up to three storeys high do not require off set venting but on multi-storey buildings this may be necessary depending on the loading of the stack and the numbers of floors above the offset. The principles previously described for bends and branches at the base of a stack should also be applied.

Design Considerations

Stub stacks

An unventilated stub stack terminated with an access fitting may be used to connect a group of ground floor appliances to the building drain provided the vertical drop to the invert level of the drain does not exceed 1.5m from a WC and 2.5m from a waste appliance.

Where one or more stub stacks are connected to the same drain, the head of the run should be externally ventilated to atmosphere or air admittance valves fitted to each stub stack arrangement. Refer to building regulations to ensure maximum distance between WC and ventilation stack is met.



Floor and enclosure fire stopped at all openings using materials meeting building regulation requirements

Combined branch waste

A combined branch waste is often used to connect a bath and/or shower and basin to the discharge stack as this allows waste pipework to be neatly concealed in a low-level duct. Where this technique is adopted a 45° entry tee must be used to ensure the basin discharge is swept in the direction of flow towards the stack. The minimum distance between the bath or shower and basin connection should not be less than 500mm and it is recommended that an anti-syphon bottle trap is fitted to the basin or a vent provided to protect the appliance from self-syphonage. It is recommended that the distance of the combined waste does not exceed 3m, however, experience has shown that longer runs using 40 or 50mm pipework has proved successful provided adequate fall can be obtained to ensure self-cleansing velocity is maintained.

Design Considerations

Branch pipe gradients

The gradient of a branch pipe should be uniform and adequate to drain the pipe and appliance efficiently. A minimum gradient of 18mm/ metre should be adopted for 32, 40 and 50mm nominal size pipes but larger diameter 110 and 160mm branch runs may be laid flatter at 9mm/m fall where the discharge flow rate exceeds 2.5litres/second. Table 8 of BS EN 12056: 2: 2000 provides general guidance on the recommended lengths of unventilated branch pipes for a variety of sanitary appliances.

Air admittance valve certification and installation

Product is in accordance with BS EN 12380 - it can be installed below the flood level of connected appliances. It is tested and approved for use in installations varying between -20°C and +60°C (no insulation required)

The valve is designed to reduce the number of roof penetrations. Suitable for use in sanitary pipework systems up to ten storeys high, the valve must be fitted in a vertical upright position above the flood level of the highest appliance connecting to the stack.

Brymec Air Admittance Valves (AAVs) are designed to allow the free entry of air into the sanitary pipework system without the escape of foul gases into the building. When installed into sanitary pipework systems conforming to BS EN 12056:2000, the Brymec AAVs not only prevents the loss of water from trap seals due to induced siphonage but also has the added advantage of providing an early warning indicator to a potential drainage blockage. The push-fit AAVs may also be used as a secondary rodding point to remove such blockages. Approved Document H of the Building Regulations only permits AAVs that conform to BS EN 12380.

It is recommended that AAVs are not used externally, as environmental debris will affect the air tightness performance of the valve.

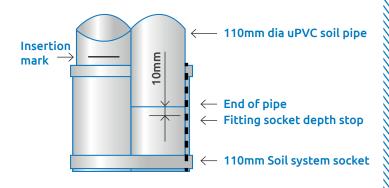
Installation Instructions

Solvent weld jointing

- Step 1. Cut pipe square and chamfer to remove burrs.
- **Step 2.** Ensure the surface you wish to join are dry and free of dust / debris.
- **Step 3.** To remove any surface grease from the spigot and socket to be jointed, use Brymec cleaning fluid.
- **Step 4.** Apply Brymec solvent cement (see page 19) to **both surfaces** that are to be jointed using a brush applicator. Apply the cement along the length of the spigot.
- **Step 5.** Following application of the solvent cement, the spigot should be applied immediately into the socket with a small twist action.
- **Step 6.** Any excess cement should be removed using a clean cloth.
- **Step 7.** The joint will be strong enough to handle after 5 minutes. You can test 12 hours after jointing.

Push-Fit (ring seal) jointing

- **Step 1.** When using plain end pipe, ensure you cut square and chamfer to remove burrs.
- **Step 2.** To prevent damage to the ring seal when inserted into the socket, chamfer the end of the pipe. Fittings with spigot ends won't need the edges chamfered as it is moulded in during the manufacturing process.
- **Step 3.** Once the pipe or fitting has been fully inserted into the socket it should be marked along the joint edge.
- **Step 4.** Withdraw the pipe or fitting from the socket 10-12mm to allow for pipework expansion using the insertion mark as a reference. (see image of finished joint)



The table below shows the number of joints (approx.) that can be made for each pipe diameter with solvent cement.

	3/4" / 21.5mm	1 1/4 " / 36.3mm	1 1/2" / 43mm	2" / 55.9mm	4" / 110mm
Solvent Cement 125 ml	85	45	35	20	5
Solvent Cement 250 ml	175	90	70	40	10
Solvent Cement 500 ml	350	180	140	80	20

Pipe Support

The table below shows recommended maximum pipe support centres for horizontal and vertical pipework.

	PIPE DIAMETERS				
	3/4" / 21.5mm	1 1/4 " / 36.3mm	1 1/2" / 43mm	2" / 55.9mm	4" / 110mm
Horizontal	0.5m	0.5m	0.5m	0.6m	1.0m
Vertical	0.6m	1.2m	1.2m	1.2m	2.0m

For vertical pipework it is best practice to fix clamps at the socket as there is increased grip and support for the joint, and intermediate clips to pipe.

Testing Procedure

This page provides information on testing methods for above ground sanitary pipework and fittings. Ensuring the pipework is properly secured is extremely important, and inspections and tests should be made during the installation of the discharge system as the work progresses. All work should be tested and free from defects before it is finally enclosed. A wide range of drain testing items are available from Brymec, please refer to our main catalogue or Brymec.com.

Testing with air

An air test is normally carried out to confirm that all pipes and fittings are airtight. This should normally be completed in one operation, but for larger systems it is recommended to ensure access points are installed in appropriate positions so testing in sections can also be completed. Seal all open vents and connection to sewer with suitable test bungs, then use hand pump and manometer to pressurise and test. Ensure all bungs are removed before system operation.

Testing with smoke

It is not recommended to carry out a smoke test on plastic pipework systems due to detrimental effect or embrittlement on plastics and rubber gaskets.

Leak detection

A soapy water solution test can be applied to the pipes and joints. Leaks can then be detected by the formation of bubbles.

Testing with water

A water system is not necessary to be applied to the whole of the plumbing system. The part of the system at risk is that below the lowest sanitary appliance and this can be tested using a test plug in the lower end of the pipe and filling the pipe with water up to the flood level of the lowest sanitary appliance.

Frequently Asked Questions

Q. What are the working temperatures for your PVC drainage systems?

The maximum temperature in continuous flow is 70°C. An intermittent spike of duration <1minute is possible up to 90°C. PP Traps are designed to withstand boiling water discharges.

Q. What materials are used in the manufacturer of your drainage product?

PVCu pipe and fittings (Poly vinyl chloride un-plasticised). PP Traps and Pan Connectors (PP). (Do not solvent weld PP).

Q. What is the chemical resistance of your piping system?

Brymec Soil and Waste Systems are designed to be resistant to most commonly occurring domestic chemicals and effluents. Acids, solvents or industrial chemicals cannot be transported by or come in contact with the system.

Q. How do I adapt to other materials within a drainage system?

Compression fittings, ring seal connectors and threaded adaptors would be recommended. If connecting different systems, care must be taken to ensure acceptable compatibility.

Q. What standards and certifications do your drainage systems adhere to?

BS 3943:1988 Specification for waste traps, BS 4514:1983 Specification for un-plasticised PVC soil and ventilating pipes, fittings and accessories, BS EN 1329:1 Specification for un-plasticised PVC soil and waste pipes, fittings and accessories, BS 5627 Specification for Pan Connectors, EN12380 Specification for Air Admittance Valves.

Q. How often do I need to use an expansion coupling with a PVC drainage system?

Provision for expansion must be provided for all pipe runs in excess of 3m for 32/40/50mm pipe, and 4m for 110mm pipe, or between any two fixed points 1m or more apart.

(Fixed point being at change of direction or branch connection, and socket clamps.)

Terms of Business

1. BACKGROUND

- 1.1 These Terms apply to the Contract between Brymec and the Customer for the sale of Brymec Products. Any other terms, whether implied by custom or practice, or which the Customer may seek to include, are specifically excluded.
- 1.2 Capitalised words (such as 'Contract'), have a specific meaning which is set out in 10 below.

2. CONTRACT TO BUY PRODUCTS

- 2.1 The Products are described on Brymec's website and in its catalogue. Specifications for Products are subject to change, in which case, Brymec will endeavour to supply an equivalent or suitable alternative.
- 2.2 When the Customer wishes to place an order for Products, it will provide a purchase order to Brymec. If Brymec accepts such order, it will issue an Order Acceptance to the Customer, at which point the Contract shall come into existence.
- 2.3 The Customer is responsible for ensuring that the details in the Order Acceptance are complete and accurate.

3. DELIVERY

- 3.1 Each delivery of the Products will be accompanied by a delivery note that shows the date of the Order Acceptance, the relevant Brymec reference number, and the type and quantity of the Products.
- 3.2 Brymec shall deliver the Products to the Delivery Location at any time after Brymec notifies the Customer that the Products are ready.
- 3.3 Delivery is completed on the completion of unloading of the Products at the Delivery Location (and, if applicable, Signed For.)
- 3.4 Customer must notify any issues of non-delivery, discrepancy or damage to Brymec within 2 business days of Delivery (see further 4.2 below).
- 3.5 Any dates quoted for delivery are approximate only, and the time of delivery is not of the essence. Brymec shall use all reasonable commercial efforts to meet any specific delivery dates. However, Brymec will not be liable for any delay in delivery of the Products.
- 3.6 If Brymec fails or is unable to deliver the Products for any reason (except for an Unforeseen Event), its liability shall be limited to the costs and expenses incurred by the Customer in obtaining replacement Products of similar description and quality in the cheapest market available, less the price of the Products. Brymec shall have no liability for any failure to deliver the Products to the extent that such failure is caused by an Unforeseen Event, or the Customer's failure to provide Brymec with adequate delivery instructions or any other instructions that are relevant to the supply of the Products.
- 3.7 Brymec may deliver the Products by instalments, which shall be invoiced and paid for separately. Any delay in delivery or defect in an instalment shall not entitle the Customer to cancel any other instalment.

4. QUALITY

- 4.1 Brymec warrants that, on delivery, the Products shall conform in all material respects with their description and any applicable Specification. For products sold by weight, or in the manufacturer's packaging, Brymec may supply quantities of up to 5% more or less than the amount ordered.
- 4.2 Subject to 4.3 and 4.4 below, if i) the Customer gives notice in writing to Brymec within 2 business days of delivery that the Products do not

comply with the Specification, and ii) Brymec is given a reasonable opportunity to examine such Products, and iii) the Customer returns such Products to Brymec's place of business at the Customer's cost, Brymec shall, at its option, replace the defective Products or refund the price of the defective Products in full.

- 4.3 Brymec shall not be liable for the Products' failure to comply with the warranty set out in clause 4.1 if: i) the Customer makes any further use of such Products after giving notice under 4.2 above; ii) the defect arises because the Customer failed to follow good trade practice or instructions as to the storage, commissioning, installation or use of the Products; or iii) the Customer alters or attempts to repair such Products.
- 4.4 Brymec may accept Product returned to it no later than 10 business days after the date of Delivery for credit or exchange, provided that the correct delivery details are provided. In this case, Brymec may make a charge for handling and restocking equal to 25% of the price of the returned Products.
- 4.5 Non-stock Products purchased by Brymec at the Customer's request are non-returnable and non-refundable.
- 4.6 Other than as set out above, Brymec shall have no liability to the Customer in respect of the Products' failure to comply with the warranty set out in clause 4.1.

5. TITLE AND RISK

- 5.1 The risk in the Products shall pass to the Customer on completion of delivery.
- 5.2 Title to the Products shall not pass to the Customer until the earlier of: i) Brymec receives payment in full for the Products; and ii) the Customer resells the Products, in which case title to the Products shall pass to the Customer at the time specified in 5.4 below.
- 5.3 Until title to the Products has passed to the Customer, the Customer shall store the Products separately from all other products held by the Customer so that they remain readily identifiable as Brymec's property, maintain the Products in satisfactory condition, and keep them insured against all risks for their full price from the date of delivery.
- 5.4 The Customer may use or resell the Products before Brymec receives payment for the Products, in which case it does so as principal and not as Brymec's agent, and title to the Products shall pass from Brymec to the Customer immediately before the time at which such reuse or resale by the Customer occurs.

6. PRICE AND PAYMENT

- 6.1 The price of the Products shall be the price set out in the Order Acceptance issued by Brymec. Brymec may, by giving notice to the Customer at any time up to delivery, increase the price of the Products to reflect any increase in the cost of the Products that is due to i) any factor beyond Brymec's control (including foreign exchange fluctuations, increases in taxes and duties, and increases in labour, materials and other manufacturing costs), or ii) any request by the Customer to change the delivery date(s), quantities or types of Products ordered, or the Specification.
- 6.2 The price of the Products excludes amounts in respect of value added tax (VAT), which the Customer shall additionally be liable to pay.
- 6.3 Unless otherwise stated on the Order Acceptance, Brymec shall be responsible for the cost of insurance and transport of the Products to the Delivery Location.

- 6.4 Brymec may invoice the Customer for the Products on or at any time after the Products have been despatched.
- 6.5 Unless otherwise stated in the Order Acceptance, the Customer shall pay the invoice in full and in cleared funds by the end of the month following the month the invoice was dated to the bank account nominated by Brymec. Time for payment is of the essence.
- 6.6 The Customer must raise any invoice queries with Brymec by email to creditcontrol@brymec.com within 28 days of the invoice date. Brymec will endeavour to respond within 2 business days and to propose a resolution to the Customer within 3 working days. The Customer must communicate any non-acceptance of such resolution to Brymec within 3 business days, failing which the relevant invoice remains payable according to these Terms.
- 6.7 If the Customer fails to make any payment due to Brymec under the Contract by the due date for payment, then Brymec shall be entitled to charge interest on the overdue amount at the rate of 4.0% per annum above the base rate from time to time of the Bank of England. Such interest shall accrue on a daily basis from the due date until actual payment of the overdue amount, whether before or after judgment. The Customer shall pay the interest together with the overdue amount.
- 6.8 The Customer shall pay all amounts due under the Contract in full without any set-off, counterclaim or deduction. Brymec may set off any amount owing to it by the Customer against any amount payable by Brymec to the Customer.

7. LIMITATION OF LIABILITY AND INSURANCE

- 7.1 Nothing in these Terms shall limit or exclude Brymec's liability for: (i) death or personal injury caused by its negligence; ii) fraud or fraudulent misrepresentation; iii) breach of the terms implied by section 12 of the Sale of Products Act 1979; or defective products under the Consumer Protection Act 1987.
- 7.2 Subject to 7.1 above, Brymec shall under no circumstances whatsoever be liable to the Customer, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, for any loss of profit, or any indirect or consequential loss arising under or in connection with the Contract; and
- 7.3 Brymec has obtained insurance cover in respect of its own legal liability for individual claims not exceeding £1,000,000 per claim. Therefore Brymec's total liability to the Customer in respect of all other losses arising under or in connection with the Contract, whether in contract, tort (including negligence), breach of statutory duty, or otherwise, shall in no circumstances exceed £1,000,000, and the Customer is responsible for making its own arrangements for the insurance of any excess loss.

8. UNFORESEEN EVENTS

8.1 Neither party shall be in breach of this Contract nor liable for delay in performing, or failure to perform, any of its obligations under this Contract if such delay or failure results from an Unforeseen Event. If the period of delay or non-performance continues for three months, the party not affected may terminate this Contract by giving one month's written notice to the affected party.

9. GENERAL

9.1 Assignment. The Customer may not assign, transfer, mortgage, charge, subcontract or deal in any other manner with any or all of its rights or obligations under the Contract without Brymec's prior written consent.

- 9.2 Confidentiality. Each party undertakes that it shall not at any time during this agreement, and for a period of 5 years after termination of this agreement, disclose to any person any confidential information concerning the business, affairs, customers, clients or suppliers of the other party, except as permitted by this paragraph. Each party may disclose the other party's confidential information: (i) to its employees, officers, representatives or advisers who need to know such information for the purposes of carrying out its obligations under or in connection with the Contract; and (ii) as may be required by law. No party shall use any other party's confidential information for any purpose other than to exercise its rights and perform its obligations under or in connection with this agreement.
- 9.3 Entire agreement. This Contract constitutes the entire agreement between the parties and supersedes and extinguishes all previous agreements and understandings between them, whether written or oral, relating to its subject matter. Each party agrees that it shall have no remedies in respect of any statement, representation, assurance or warranty (whether made innocently or negligently) that is not set out in this agreement.
- 9.4 Variation. No variation of this Contract shall be effective unless it is in writing and signed by the parties (or their authorised representatives).
- 9.5 Third party rights. No one other than a party to this Contract shall have any right to enforce any of its terms.
- 9.6 Law and jurisdiction. The Contract, and any dispute or claim arising out of or in connection with it shall be governed by and construed in accordance with the law of England and Wales. Each party agrees that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this Contract.

10. DEFINITIONS:

- 10.1 **Brymec:** Brymec Limited, whose registered office is at Unit C, Redlands, Coulsdon, Surrey, CR5 2HT.
- 10.2 **Terms:** the terms set out in this document.
- 10.3 **Contract:** the contract between Brymec and the Customer for the sale and purchase of the Products in accordance with these Terms.
- 10.4 **Customer:** the business or person who purchases the Products from Brymec.
- 10.5 **Delivery Location:** the location for delivery of the Products set out in the Order Acceptance, or such other location as the parties may agree.
- 10.6 **Order Acceptance:** a form issued by Brymec in response to a Customer's order for Products, specifying Product details, quantities, prices and costs of transportation.
- 10.7 **Products:** the products (or any part of them) set out in the Order Acceptance.
- 10.8 **Signed For:** a Customer requirement stated in the Order Acceptance that a delivery of Product must be signed for at the Delivery Location.
- 10.9 **Specification:** any specification for the Products set out on Brymec's website or in its catalogue.
- 10.10 **Unforeseen Event:** an event or circumstance beyond a party's reasonable control.

Quality Policy

Brymec Ltd (the 'Organisation') aims to provide defect free products and services to its customer on time and within budget.

The Organisation operates a Quality Management System that has gained BS EN ISO 9001 : 2015 certification, including aspects specific to the stockholding and supply of mechanical, plumbing and air conditioning products and services.

This gives us a platform to guarantee a structured approach to our continuous improvement cycle, and ensure we continue to meet and exceed the following key goals:

- Excellence of service to our customers, delivering on site, in full, on time; in the relentless pursuit of total customer satisfaction.
- Offering quality products and systems. We work with worldwide manufacturing plants (in line with our social and ethical policy) to source the best products for the UK market. We ensure that the products are fit for purpose and comply with the relevant approvals and standards. We also research and develop innovative solutions which will add value to our customers, developers and end users
- To motivate, engage and continuously develop our team by providing training, coaching, knowledge sharing and investment to ensure their absolute competence.
- To continue to invest in technology, working to understand customers' needs and streamline their buying processes to maximise efficiencies via modern technology.

This quality policy is endorsed and regularly reviewed by our Senior Management Team, and its scope is communicated to all Brymec employees via our website and other appropriate methods.

Our vision is to become an essential and indispensable supplier to the Building Services Contractor by providing excellence of service, quality products and continually investing in technology.

In order to achieve our vision, we ensure Brymec is an organisation where people love to work, upholding our core values of excellence, courage and collaboration to actively engage our team in contributing towards providing the highest level of customer satisfaction.

Luke Reiner

Managing Director

Ethical Global Procurement Policy

ETHICAL POLICY - SOURCING

At Brymec we recognise the importance of credibility, integrity and trustworthiness in our success as a business. We are committed to upholding high ethical standards in all our operations, everywhere in the world. We believe in the principles of honesty, fairness, and respect for individual and community freedoms. The ethics of our UK operations are demonstrated through responsible:

- Business processes
- Corporate governance
- Custom and practice
- Quality management
- Safe working practices
- Corporate social responsibility
- Facility management
- Equality and diversity
- Anti-bribery and corruption
- Employee care

The Ethical Trading Initiative Code forms the basis of this policy

Additionally, as we expand our network of suppliers to source products globally, it is increasingly necessary to ensure that the organisations that we undertake business with also meet our expectations of standards of supply.

As a minimum Brymec Ltd expects its supply partners to comply with all local laws and regulations and to respect internationally recognised human and labour rights as well as international initiatives for climate change.

In particular we require that suppliers ensure:

- Working hours and remuneration are reasonable and meet the required local wage and working time laws
- Working conditions are safe and hygienic
- No discrimination is practised
- Employment is freely chosen
- Children are not employed, and local minimum age rules are in place
- Freedom of Association and the right to collective bargaining are respected
- No improper advantage, including the payment of bribes.
- Packaging and waste are subject to recycling and safe disposal guidelines
- That all sourcing of materials and manufacturing processes are subject to sustainability and renewability rules

Brymec carry out initial assessments and, on agreeing terms of business, provide the criteria against which the company has been measured by way of regulating ongoing requirements.

Brymec then carry out periodic on-site audits to ensure that compliance is maintained.

Brymec will work with its suppliers to guide and advise them in maintaining and improving required levels of environmental standards.

The Brymec Sourcing Director has responsibility for this policy and will report to the management meetings on any issues arising.

A copy of the full Ethical trading initiative can be found at **www.ethicaltrade.org.**

Notes