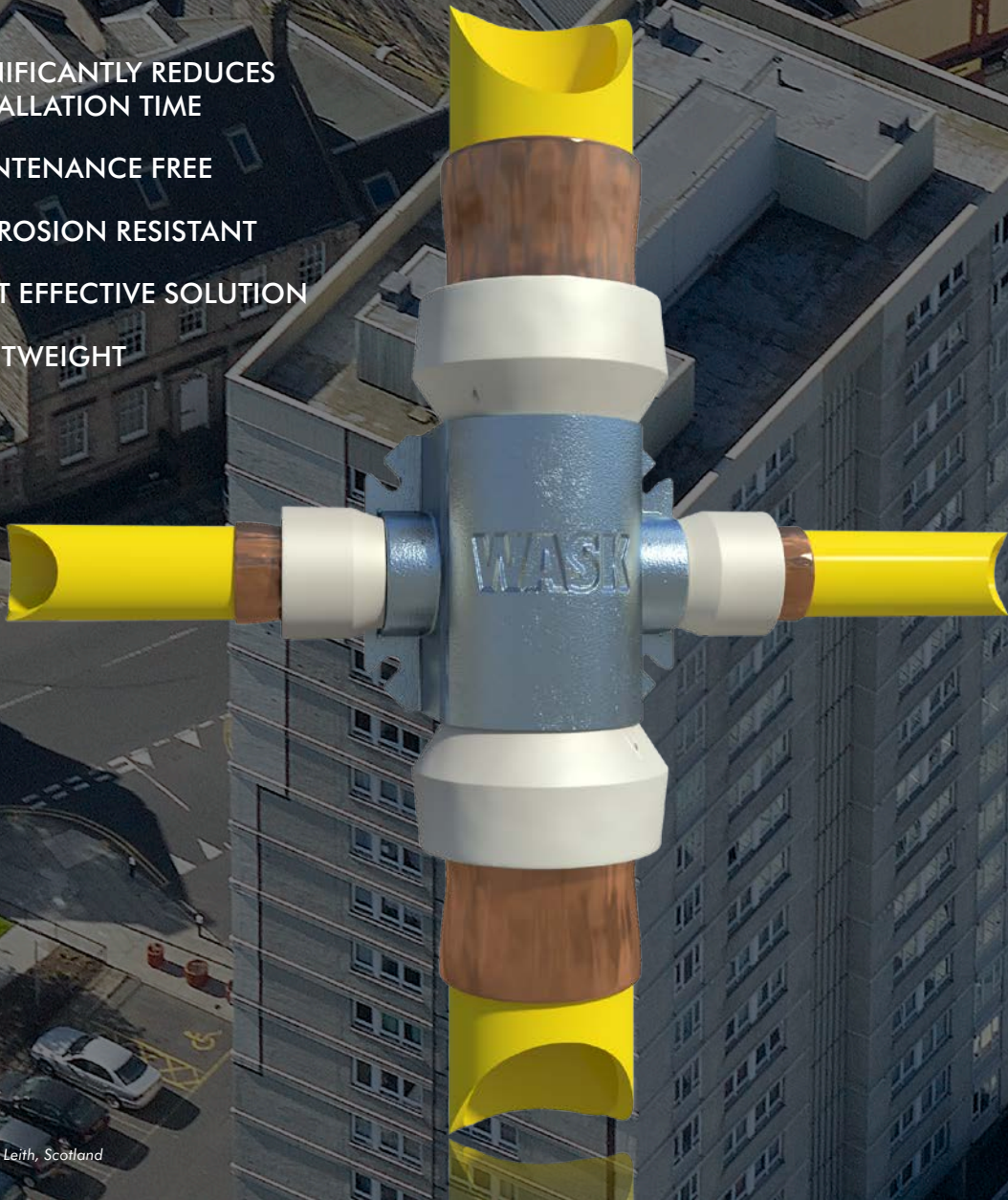


# RISER & LATERAL SYSTEM

UNIQUE MODULAR PE SYSTEM FOR MULTI OCCUPANCY DWELLINGS

- SIGNIFICANTLY REDUCES INSTALLATION TIME
- MAINTENANCE FREE
- CORROSION RESISTANT
- COST EFFECTIVE SOLUTION
- LIGHTWEIGHT



*Kirkgate House, Leith, Scotland*

FROM MAINS TO METER

## FROM MAINS TO METER

The WASK Riser & Lateral system comprises a range of dedicated corrosion resistant metal fittings, which can be attached to the outside wall of a building.

Standard PE pipe connects to each fitting using the WASK site-assembled crimp joint to complete the system. The supply enters each dwelling through an outside wall by means of a WASK house entry tee or house entry elbow.

The PE pipe is protected against sunlight and mechanical damage by means of GRP sleeves retained in place by wall clips. The system is lightweight and does not require skilled welders or pipe-fitters to install. Costs of installing the WASK Riser & Lateral system show savings of around 50% compared

to an all-steel system. The WASK crimp joint is fully approved to British Gas specification GIS/PL3.

The construction of a gas supply to a multi-occupancy building requires special consideration. Whilst the pipe work within each dwelling is the responsibility of the occupier, the communal pipe work presents particular problems.

Recommendations governing the construction of gas systems in multi-occupancy buildings are described in the British Institution of Gas Engineers' document IGE/G/5. The document describes both internal and external piping systems. Fitting the communal pipework to the outside of the building provides several advantages. Internal piping requires dedicated ducts, wall and floor seals and access for maintenance, particularly where the pipes pass through domestic areas. The IGE recommendations therefore permit distribution piping to be fitted outside the building.



Eccles Court, Manchester: British Gas



Frances Street Chester: British Gas



Elmcroft House Birmingham: British Gas



Holyrood Court, Edinburgh: Client SGN



Frinton Court, Frinton on Sea: Client National Grid



## ANDREW WELFARE

WASK Engineering Manager



### WHAT ARE THE KEY PROBLEMS FITTERS FACE?

"The main issues a fitter faces relate to material handling and ease of construction. The PE pipe and GRP cover sleeve are light weight, simple to cut to length and can be easily and quickly joined. Then depending on the height of the building, access can be via a cherry picker or a wall climbing platform rather than traditional scaffolding. Making a Crimp joint is a process most Gas Service Fitters are very conversant with and the new power tool introduced for 63mm PE now means all the joints can be made simply in minutes with minimal physical effort.



corrosion protection introduced with the Mk3 designs ensures installations have a 50 year design life, ideal for even the

most demanding environments such as coastal locations. This means that further maintenance during that period will not be required which substantially reduces the whole life costs of the installation.



### AND, WHAT IS UNIQUE ABOUT THE WASK SYSTEM?

"The WASK system is the only approved method of constructing PE risers to a multi-occupancy dwelling. The latest Mk3 Riser & Laterals design is a modular construction allowing a wide range of fitting variants to be quickly configured to suit the differing types of building architecture encountered around the country. And a big plus is it enables us to react to unplanned emergency works.



### SO, WHY IS IT SUCH AN ATTRACTIVE PROPOSITION?

"The system can be equally applied to new or retro fit installations, the ease and speed of construction being one of the main benefits. This coupled with the enhanced

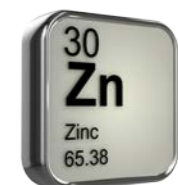


### AND, WHAT ARE THE SAVINGS?

"The main savings are reduced installation budgets and minimising

long term maintenance costs. The system can be built using existing service laying teams, not requiring any steel welding or sub-contract services; there is no requirement for specialist fittings to deal with expansion and contraction; it can be constructed without the need for scaffolding and once erected needs no additional on-site protection as it is factory coated with a resistant zinc finish. This last factor is a significant one as

continued inspection, repair and re-painting of the steel pipework is one of the main costs often overlooked with this type of installation."



RYAN SMITH  
SGN Engineering  
Policy Manager



“Using this riser construction technique SGN has seen benefits in time, manual handling and long term asset assurance”



Corroded Steel Risers

## KIRKGATE HOUSE, LEITH, EDINBURGH

### PROJECT

Upgrade the gas service pipe network to a high rise social housing block to ensure continuous and reliable gas supplies.

### PROBLEM

Replace existing corroded steel risers on north and south side of Kirkgate House, an 18 storey high rise.

### SOLUTION

Install a new polyethylene network of risers and laterals to ensure at least a 50 year lifespan.

The installation and commissioning of each riser took less than a week utilising a cherry picker which made upgrading significantly quicker than the traditional method of scaffolding and offers additional Health and Safety benefits for installers.

New PE Riser

## ADVANTAGES OF PE VERSUS STEEL

SUBJECT	WASK PE SYSTEM	STEEL SYSTEM
Installation Safety	Can usually be installed using a 'Cherry Picker' or lifting platform which are safer to installers & public, as well as enabling a quicker operation.	Almost always needs scaffolding which is more dangerous to installers & public. Potential security issues as installation is in place over more than one night.
Maintenance	Totally Maintenance free.	Likely to need painting or replacement during service life
Resistance to Expansion	Highly resistant as the PE pipe is flexible & the GRP, telescopic. No expansion joints necessary.	In many cases will require expansion joints which are expensive & present a higher leakage risk.
Cathodic Protection	No cathodic reaction as the PE carries no current.	In most cases, will require insulation joints to protect against this.
Rigidity	Not as rigid as steel but highly flexible & resistant to leaks if de-mounted.	Very rigid if bracketed correctly although will fracture easily if de-mounted.
Vandal Resistance	Not as resistant as steel although bottom storeys can be completed in steel to eliminate problem.	Highly resistant when new but decreases as corrosion sets in.



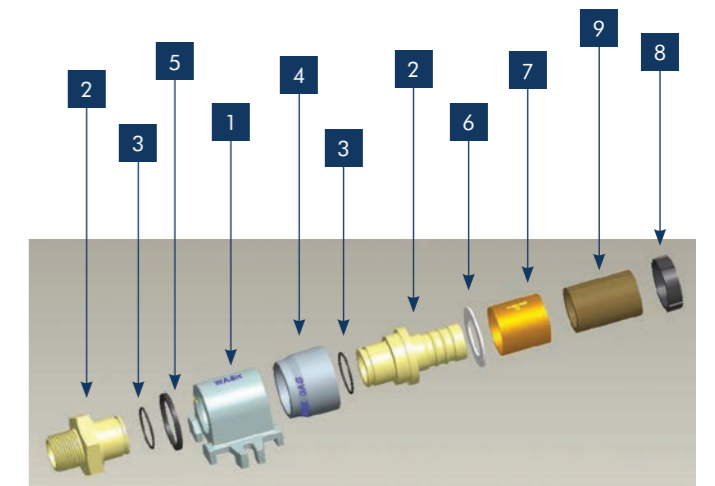
WASK PE System  
(MK2 design installed c. 1990)

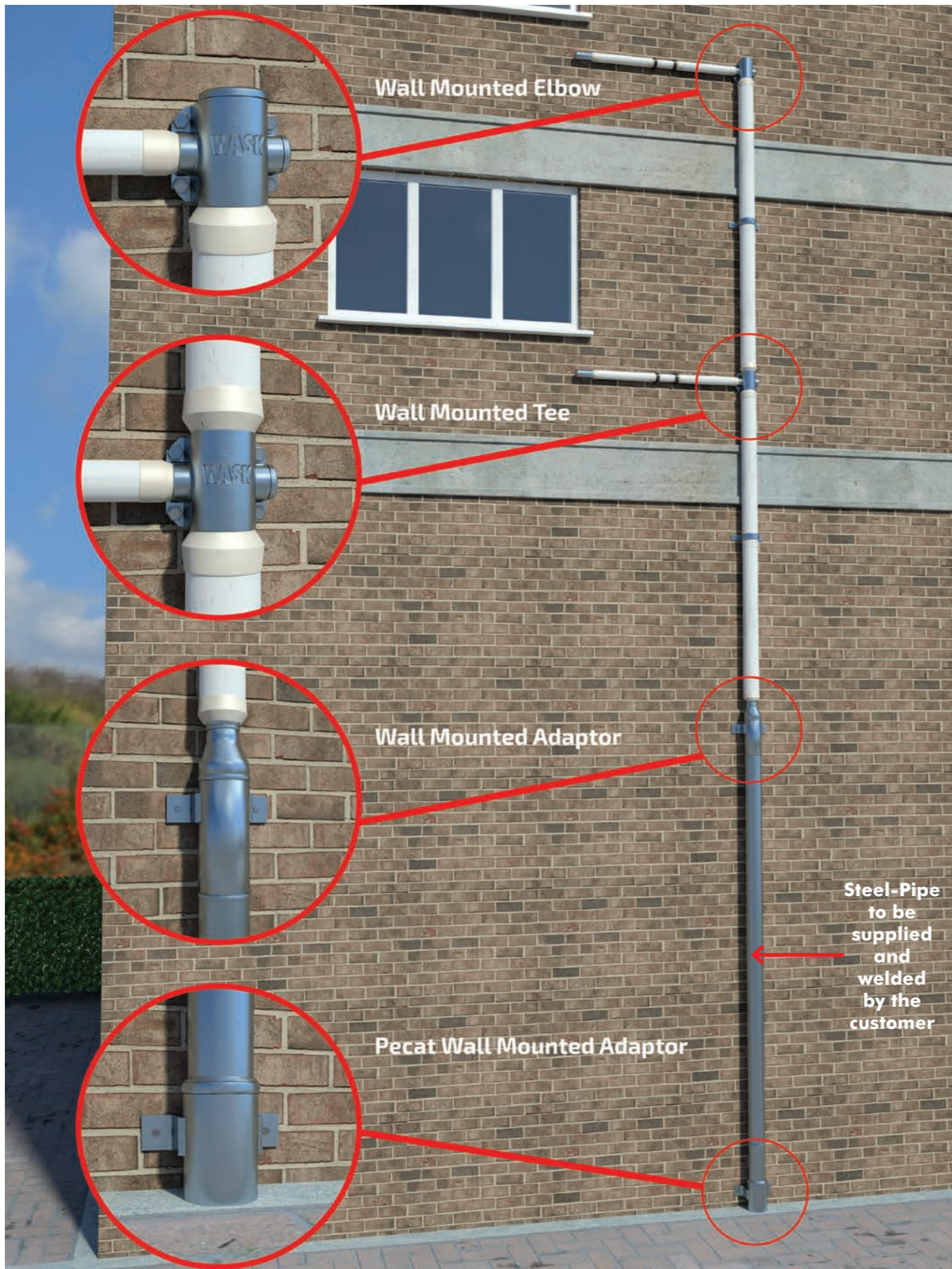


Steel System

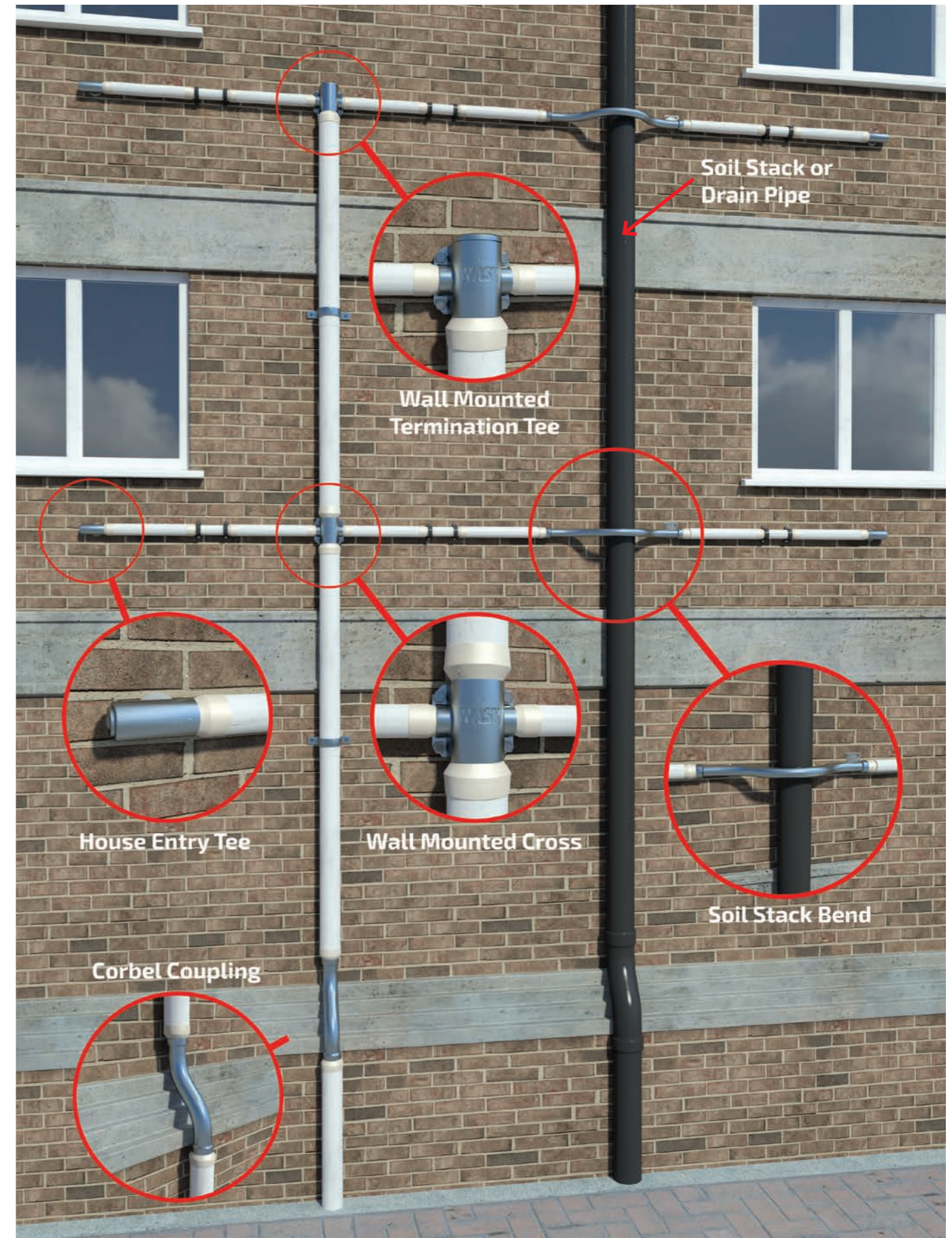
## MATERIALS

NO.	PART	MATERIAL
1	Body Casting	Coating: Hot dip galvanized to BS EN 1461
2	Inserts	Steel to BS EN 10277-3 11SMn30 Coating: Zinc plated to BS EN ISO 2081
3	Primary O' ring seals	BS EN 549 B2 H3 (gas approved)
4	Shroud	Thermoplastic Elastomer with UV stabilisation
5	Insert Seal	EPDM
6	Plastic Washer	Acetal
7	Crimp Ring	Copper
8	Spacer rubber	EPDM
9	Packing ring	Cardboard





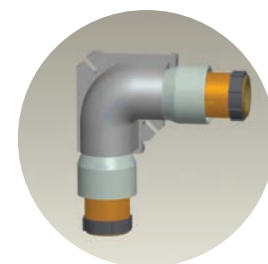
1st floor in steel option for anti-vandalism



Grey GRP shown for illustration purposes. Black GRP also available.

## FITTING LIST

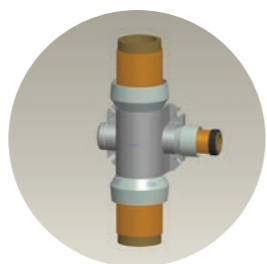
FITTING TYPE	SIZE	WALL MOUNTED		NON-WALL MOUNTED	
		GREY	BLACK	GREY	BLACK
<b>A</b> 90° Elbow (WME & RE)	32 x 25 LH	AD0193	AD0193B	N/A	N/A
	32 x 25 RH	AD0194	AD0194B	N/A	N/A
	63 x 32 LH	AD0195	AD0195B	N/A	N/A
	63 x 32 RH	AD0196	AD0196B	N/A	N/A
	63 x 25 LH	AD0197	AD0197B	N/A	N/A
	63 x 25 RH	AD0198	AD0198B	N/A	N/A
	25	AD0313	AD0313B	AD0191	AD0191B
	32	AD0238	AD0238B	AD0192	AD0192B
	63	AD0263	AD0263B	AD0302	AD0302B
	32 x 3/4" FEM RH	AD0264	AD0264B	N/A	N/A
	32 x 3/4" FEM LH	AD0265	AD0265B	N/A	N/A
	32 x 1" FEM RH	AD0268	AD0268B	N/A	N/A
	32 x 1" FEM LH	AD0269	AD0269B	N/A	N/A
	63 x 2" FEM RH	AD0300	AD0300B	N/A	N/A
	63 x 2" FEM LH	AD0301	AD0301B	N/A	N/A
	32 x 25	N/A	N/A	AD0244	AD0244B
	32 x 3/4" MBA	N/A	N/A	AD0274	AD0274B
	32 x 20	N/A	N/A	AD0303	AD0303B
	25 x 20	N/A	N/A	AD0304	AD0304B
	32 x 3/4" FEM	N/A	N/A	AD0307	AD0307B
32 x 20 RH	AD0311	AD0311B	N/A	N/A	
32 x 20 LH	AD0312	AD0312B	N/A	N/A	
32 x 25 LH	AD0239	AD0239B	N/A	N/A	
32 x 25 RH	AD0240	AD0240B	N/A	N/A	
32	AD0241	AD0241B	AD0243	AD0243B	
32 x 25	N/A	N/A	AD0242	AD0242B	
<b>B</b> 45° Elbow (WME & RE)	63 x 25	AD0199	AD0199B	N/A	N/A
	63 x 32	AD0200	AD0200B	N/A	N/A
	32 x 25	AD0201	AD0201B	AD0246	AD0246B
	32	AD0202	AD0202B	AD0247	AD0247B
	63 x 2" FEM RH	AD0253	AD0253B	N/A	N/A
	63 x 2" FEM LH	AD0254	AD0254B	N/A	N/A
	63	AD0262	AD0262B	N/A	N/A
	32 x 3/4" FEM	AD0296	AD0296B	N/A	N/A
	32 x 1" FEM	AD0299	AD0299B	N/A	N/A
	32 x 3/4" MBA	N/A	N/A	AD0275	AD0275B
	32 x 1" FEM x 3/4" FEM LH	AD0305	AD0305B	N/A	N/A
	32 x 1" FEM x 3/4" FEM RH	AD0306	AD0306B	N/A	N/A
	32 x 20	AD0309	AD0309B	N/A	N/A
	25	AD0314	AD0314B	N/A	N/A
<b>C</b> Tee (WMT & RT)	63 x 32	AD0234	AD0234B	N/A	N/A
	32 x 25	AD0245	AD0245B	N/A	N/A
	63 x 25	AD0293	AD0293B	N/A	N/A
	32 x 20	AD0310	AD0310B	N/A	N/A
<b>D</b> Termination Tee (WMTT)	63 x 32	AD0235	AD0235B	N/A	N/A
	32	AD0236	AD0236B	AD0249	AD0249B
	32 x 25	AD0237	AD0237B	AD0248	AD0248B
<b>E</b> Cross (WMC & RC)	63 x 2" FEM	AD0255	AD0255B	N/A	N/A
	32 x 1" FEM	AD0256	AD0256B	N/A	N/A
	63	AD0261	AD0261B	N/A	N/A
	63 X 25	AD0292	AD0292B	N/A	N/A
	2" MAL x 63 x 32	AD0308	AD0308B	N/A	N/A



**A**  
90° Elbow  
(WME & RE)



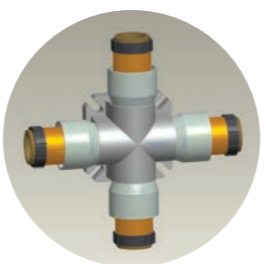
**B**  
45° Elbow  
(WME & RE)



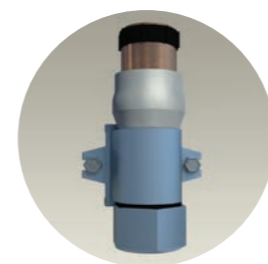
**C**  
Tee (WMT & RT)



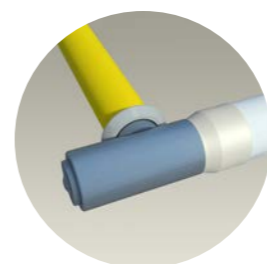
**D**  
Termination  
Tee (WMTT)



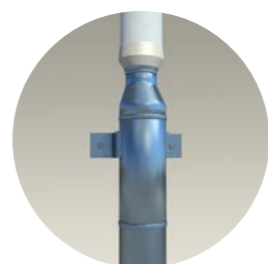
**E**  
Cross (WMC  
& RC)



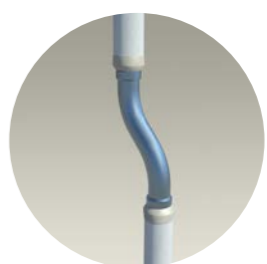
**F**  
Straight  
Transitions (WMA)



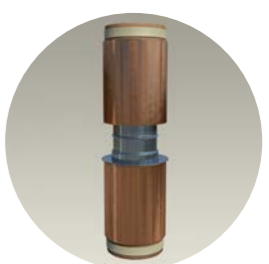
**G**  
House Entry Tee  
(HET)



**H**  
Crimp Steel Weld  
Transitions (WMA)



**I**  
Crimp Corbel  
Couplings (CC)



**J**  
Crimp  
Couplings (CPL)

## FITTING LIST

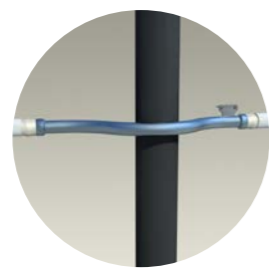
FITTING TYPE	SIZE	WALL MOUNTED		NON-WALL MOUNTED	
		GREY	BLACK	GREY	BLACK
<b>F</b> Straight Transitions (WMA)	32 x 3/4" FEM	BD0053	BD0053B	N/A	N/A
	32 x 1" FEM	BD0054	BD0054B	N/A	N/A
	25 x 3/4" FEM	BD0055	BD0055B	N/A	N/A
	63 x 2" FEM	BD0056	BD0056B	N/A	N/A
	32 x 1" MAL	BC0052	BC0052B	N/A	N/A
	63 x 2" MAL	BC0053	BC0053B	N/A	N/A
	25 x 3/4" MAL	BC0054	BC0054B	N/A	N/A
	25 x 1" MAL	BC0055	BC0055B	N/A	N/A
	32 x 1 x 150	AF0134	AF0134B	N/A	N/A
	32 x 1 x 295	AF0135	AF0135B	N/A	N/A
<b>G</b> House Entry Tee (HET)	32 x 1 x 345	AF0132	AF0132B	N/A	N/A
	32 x 1 x 500	AF0133	AF0133B	N/A	N/A
	32 x 1 x 750	AF0143	AF0143B	N/A	N/A
	25 x 3/4 x 150	AF0138	AF0138B	N/A	N/A
	25 x 3/4 x 295	AF0139	AF0139B	N/A	N/A
	25 x 3/4 x 345	AF0136	AF0136B	N/A	N/A
	25 x 3/4 x 500	AF0137	AF0137B	N/A	N/A
	25 x 3/4 x 610	AF0140	AF0140B	N/A	N/A
	25 x 3/4 x 750	AF0142	AF0142B	N/A	N/A
	<b>H</b> Crimp Steel Weld Transitions (WMA)	2" Steel x 63	AD0297	AD0297B	N/A
3" Steel x 63		AD0298	AD0298B	N/A	N/A
<b>I</b> Crimp Corbel Couplings (CC)	63 x 120 Offset	N/A	N/A	AH0039	AH0039B
	63 x 185 Offset	N/A	N/A	AH0040	AH0040B
	63 x 130 Offset	N/A	N/A	AH0041	AH0041B
	63 x 140 Offset	N/A	N/A	AH0042	AH0042B
	63 x 150 Offset	N/A	N/A	AH0043	AH0043B
	63 x 160 Offset	N/A	N/A	AH0044	AH0044B
	63 x 170 Offset	N/A	N/A	AH0045	AH0045B
	63 x 180 Offset	N/A	N/A	AH0046	AH0046B
	63 x 190 Offset	N/A	N/A	AH0047	AH0047B
	63 x 200 Offset	N/A	N/A	AH0048	AH0048B
	63 x 210 Offset	N/A	N/A	AH0049	AH0049B
	63 x 220 Offset	N/A	N/A	AH0050	AH0050B
	63 x 230 Offset	N/A	N/A	AH0051	AH0051B
	63 x 240 Offset	N/A	N/A	AH0052	AH0052B
63 x 250 Offset	N/A	N/A	AH0053	AH0053B	
<b>J</b> Crimp Couplings (CPL)	20 x 20	AH0014	N/A	N/A	N/A
	25 x 20	AH0015	N/A	N/A	N/A
	32 x 32	AH0016	N/A	N/A	N/A
	63 x 63	AD0267	N/A	N/A	N/A

Lead times available upon request.

## FITTING LIST

FITTING TYPE	SIZE	WALL MOUNTED		NON-WALL MOUNTED		
		GREY	BLACK	GREY	BLACK	
K Crimp Soil Stack Bends (SSB)	25 x 25 x 118mm Offset	AH0076	AH0076B	N/A	N/A	
	25 x 25 x 128mm Offset	AH0077	AH0077B	N/A	N/A	
	25 x 25 x 138mm Offset	AH0078	AH0078B	N/A	N/A	
	25 x 25 x 148mm Offset	AH0079	AH0079B	N/A	N/A	
	25 x 25 x 158mm Offset	AH0080	AH0080B	N/A	N/A	
	25 x 25 x 168mm Offset	AH0081	AH0081B	N/A	N/A	
	25 x 25 x 178mm Offset	AH0082	AH0082B	N/A	N/A	
	25 x 25 x 188mm Offset	AH0083	AH0083B	N/A	N/A	
	25 x 25 x 198mm Offset	AH0084	AH0084B	N/A	N/A	
	25 x 25 x 208mm Offset	AH0085	AH0085B	N/A	N/A	
	25 x 25 x 218mm Offset	AH0086	AH0086B	N/A	N/A	
	32 x 32 x 118mm Offset	AH0066	AH0066B	N/A	N/A	
	32 x 32 x 128mm Offset	AH0067	AH0067B	N/A	N/A	
	32 x 32 x 138mm Offset	AH0068	AH0068B	N/A	N/A	
	32 x 32 x 148mm Offset	AH0069	AH0069B	N/A	N/A	
	32 x 32 x 158mm Offset	AH0054	AH0054B	N/A	N/A	
	32 x 32 x 168mm Offset	AH0070	AH0070B	N/A	N/A	
	32 x 32 x 178mm Offset	AH0071	AH0071B	N/A	N/A	
	32 x 32 x 188mm Offset	AH0072	AH0072B	N/A	N/A	
	32 x 32 x 198mm Offset	AH0073	AH0073B	N/A	N/A	
	32 x 32 x 208mm Offset	AH0074	AH0074B	N/A	N/A	
	32 x 32 x 218mm Offset	AH0075	AH0075B	N/A	N/A	
	63 x 63 x 158mm Offset	AH0055	AH0055B	N/A	N/A	
	63 x 63 x 118mm Offset	AH0056	AH0056B	N/A	N/A	
	63 x 63 x 128mm Offset	AH0057	AH0057B	N/A	N/A	
	63 x 63 x 138mm Offset	AH0058	AH0058B	N/A	N/A	
	63 x 63 x 148mm Offset	AH0059	AH0059B	N/A	N/A	
	63 x 63 x 168mm Offset	AH0060	AH0060B	N/A	N/A	
	63 x 63 x 178mm Offset	AH0061	AH0061B	N/A	N/A	
	63 x 63 x 188mm Offset	AH0062	AH0062B	N/A	N/A	
	63 x 63 x 198mm Offset	AH0063	AH0063B	N/A	N/A	
	63 x 63 x 208mm Offset	AH0064	AH0064B	N/A	N/A	
	63 x 63 x 218mm Offset	AH0065	AH0065B	N/A	N/A	
	L PECAT Wall Mounted Adaptor (PWMA)	63 x 2" Steel - Weld	AD2119	N/A	N/A	N/A
		90 x 3" Steel - Weld	AD2120	N/A	N/A	N/A
		62 x 2" Fem	AD2124	N/A	N/A	N/A
	M GRP Kits	82 x 4m	DY0136	DY0327	N/A	N/A
		82 x 2m	DY0331	DY0333	N/A	N/A
		82 x 2m Extension	DY0332	DY0334	N/A	N/A
		82 x 3m	DY0341	DY0342	N/A	N/A
	N GRP Tube	38 x 3m x 5 length bundle	JK0218-5	JK0195-5	N/A	N/A
		44 x 3m x 5 length bundle	JK0219-5	JK0196-5	N/A	N/A
	O Fixings	82 x 3m	JK0207	JK0197	N/A	N/A
		38 mm GRP Kit	DY0307	DY0329	N/A	N/A
		44mm GRP Kit	DY0308	DY0330	N/A	N/A
		44 Bracket kit	DY0322	N/A	N/A	N/A
		82 Bracket (63)	DY0326	DY0328	N/A	N/A
	P Tools	Rawl bolt box (x50)	JL0109	N/A	N/A	N/A
20mm PE80 - Ratchet type		BE0042	N/A	N/A	N/A	
25mm PE80 - Ratchet type		BE0043	N/A	N/A	N/A	
32mm PE80 - Ratchet type		BE0044	N/A	N/A	N/A	
63mm - REMS type		BE0036	N/A	N/A	N/A	
REMS Power Pack	AC0296	N/A	N/A	N/A		
REMS Battery	AC0297	N/A	N/A	N/A		

Lead times available upon request.



K  
Crimp Soil Stack Bends (SSB)

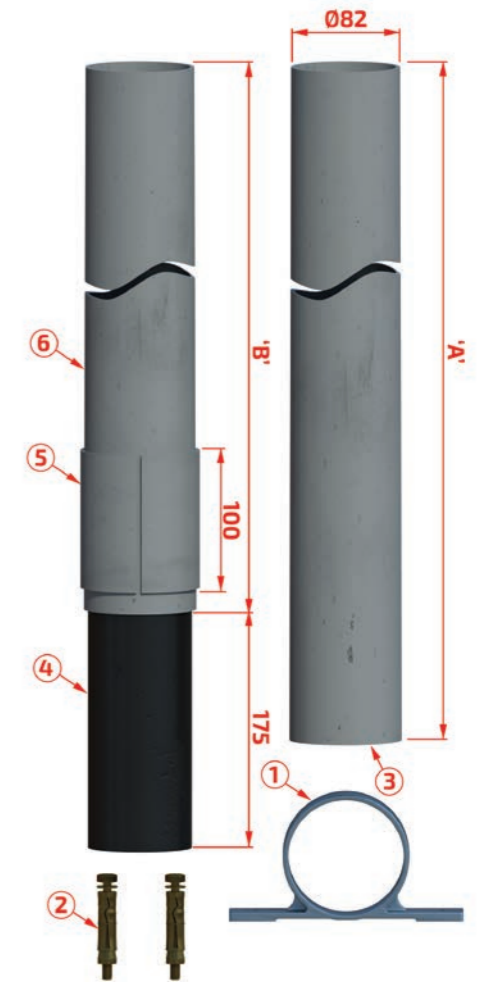


L  
PECAT Wall Mounted Adaptor (PWMA)

## GRP KITS FOR 63mm

NUMBER	DESCRIPTION
1	Ø82 GRP SUPPORT BRACKET
2	2 OFF Rawl Bolt M6x25mm Long
3	Ø82 x 3 Black GRP Tube
4	Ø75 PVC Insert
5	Ø82 Split Black GRP Tube x 100 Long
6	Ø82 x 3 Black GRP Tube

A	B	GREY	BLACK	LENGTH
N/A	1.9m	DY0331	DY0334	2.0m
1.0m	0.9m	DY0331	DY0333	2.0m
1.5m	1.4m	DY0341	DY0342	3.0m
2.0m	1.9m	DY0136	DY0327	4.0m



## FIXING KIT CONTENTS - EXAMPLE

QTY	DY0308 - GR
2	Ø38 Snap-on Saddle pipe clip: Ellis Patents 90 -09 black
2	Stainless steel A2 screws: No. 8 x 1 ½" long countersink Poz. (DIN 7982)
4	Red plastic RAWL plugs no. 67-600
2	Wask 44mm shroud - JA0288

## FIXING KIT - USAGE

**DY0307/DY0329:** This is used on 25mm or 20mm PE runs which are predominantly 38mm GRP, it includes a 44mm Shroud as there is still a short piece of 44mm GRP required to allow telescoping between the 2 fixed points. (Note – this kit is effectively half of a 44mm GRP KIT).

**DY0308/DY0330:** This is used on 32mm PE runs, risers or laterals which are predominantly 44mm GRP but contain a short length of 38mm GRP to allow telescoping

**DY0322:** This is the kit for securing 44mm GRP so contains 44mm CLIPS and doesn't include any Shrouds, this is normally used to support Non-Wall Mounted types of fittings.

## CRIMPING TOOLS

SUBJECT	PART NO.	SIZE	FOR USE WITH PIPE	PAINT
<p>One piece malleable iron tools with ratchet style handle for the rapid construction of a crimp joint. Features a metal to metal stop for accurate joint construction.</p>	BE0043	Tool Crimp 25mm	PE80 Only	Blue
	BE0044	Tool Crimp 32mm	PE80 Only	Yellow
	<p>Lightweight electric tooling with final lock positioning to complete a secure crimp joint in seconds. Bespoke crimp jaws are manufactured from forged and specially-hardened steel.</p>	BE0036	Tool Crimp 63mm*	PE80 Only
N/A				



To visit our Video Library go to:  
[www.youtube.com/user/CraneBSU](http://www.youtube.com/user/CraneBSU)



Visit our website to view our new video



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FM311  
ISO 9001

- Designed and manufactured under quality management systems in accordance with BS EN ISO 9001-2008

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