

Kay

contents

Standard Gutters



KM 508760

- · Easy to fit with a complete range of colour matched fittings
- Choice of 4 designs
- 10 year guarantee*
- · High gloss finish with a choice of up to 6 colours
- · Lightweight for ease of storage and transportation
- Low maintenance
- · Durable and tough
- Kitemarked

P4-9

SuperDeep 170



KM 508760

- · Exceptionally strong components
- · High capacity super deep system for commercial application
- · Designed for high volume capture
- Market leading flow capacity
- Choice of downpipe sizes
- 10 year guarantee*
- · High gloss finish in black and grey

P 10 - 11

Cast Iron Effect Gutters

- · Authentic cast iron look without the weight or cost
- Choice of 3 designs
- · Square or round downpipes
- · Unique pipe fittings with built in saddle strap
- · Durable and tough
- 10 year guarantee

P 12 - 14

Underground Drainage



KM 655203

- · User friendly easy fit system
- · Lightweight, easy to handle
- Impact resistant and extremely durable in use
- A wide range of products and ancillary fittings
- Tested to BS EN 1401-1: 2019 PVC-U **Underground Drainage Systems****

P 16 - 21

Soil



- · A wide range of profiles and fittings manufactured from PVC-U.
- High gloss PVC-U for low maintenance
- Lightweight, durable and easy to install
- · Compatible with most other **UK** systems
- Choice of 3 colours
- Tested to BS EN 1329-1: 2014 Plastics piping systems for soil and waste discharge**

P 22 - 23

^{*}Excludes Caramel. **For scope refer to the manufacturer.



Specification & Installation Guide for Guttering

How much water?

The gutter system must be able to drain the roof during an unusually heavy rainfall event which lasts at least two minutes.

BS12056 shows how to work out the amount of rainwater (in litres per second) that could run off a roof.

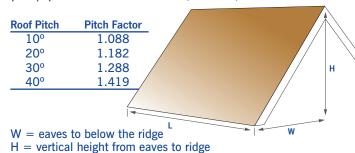
The roof area is multiplied by the amount of water running off each square metre of the roof area in litres per second.

Volume of water coming off a roof $= A \times B$ where:

A = 0.021 litres per second.

B = the effective roof area, calculated as follows:

(W+H/2) x L or L x W x Pitch factor (see table)



Which Gutter to Choose

Compare the result of the calculation (AxB) with the flow capacity of the Kayflow systems available. Please note the following:

- 1. Reduce flow rates of gutters with angles by 15%.
- 2. Gutter sections longer than 50 x the height of water when the gutter is full have a reduced flow rate.
- 3. Gutters are laid level this can be up to 3mm fall per metre.
- 4. Centrally placed outlets drain a much larger volume of water.

Minimum Specification for Fascia brackets

Gutter Type	Normal / Sheltered Areas	Snowfall / Exposed Areas	Max distance between brackets
Round/Square	2 x 25 x 4mm	2 x 25 x 5mm	1m
Deepflow/Ogee	2 x 25 x 4mm	2 x 25 x 5mm	800mm
SuperDeep 170	2 x 25 x 4mm	3 x 32 x 6.5mm	600mm
Cast Effect	2 x 25 x 4mm	3 x 25 x 5mm	As per standard profile

(4mm = 8 gauge, 5mm = 10 gauge, 6.5mm = 12 gauge stainless steel pan head screw)

Snow Loading

L = length of roof section

In locations where heavy snowfall is common, fixing centres for gutter brackets should be reduced to 600mm for all Kayflow systems. In addition all fixing holes should be used on all brackets and the use of snowboards is recommended where appropriate.

Installation

Gutter

- Position the running outlet accurately by holding a plumb line against the fascia directly over the drain. Mark the position on the fascia with a pencil. Fit the outlet no more than 50mm below the level of the roof tiles. Fix with 2 x 25mm x 5mm round-head stainless steel screws (don't use countersunk screws as these can be over torqued with cordless drivers and damage mouldings)
- 2. Fit a fascia bracket just below the top of the fascia board at one end of the run of guttering (opposite end to the outlet).
- Tie a plumb line (string) around the base of the bracket and stretch the plumb line from the bracket along the fascia board and tie it to the outlet.
- Check that there is a fall towards the outlet (1.350 is recommended) to encourage water to drain efficiently.
- Mark the position of the fascia brackets, spacing them according to gutter system chosen (see table above) and no more than 150mm from any corner, union, running outlet or stopend.
- In locations where heavy snowfall is common it is recommended that fixing centres for fascia brackets is reduced to 600mm.
- 7. Fix the fascia brackets with 25mm x 5mm stainless steel screws we would recommend using all available fixing holes.
- Starting at the outlet, fit the first length of gutter by tilting the gutter to fit under the back clip and clip in at the front edge.
- 9. Fit a union bracket at the other end of the first length and screw it into the fascia using all available fixing holes, then fit the next length of gutter into it. Continue joining lengths ensuring all joints line up with the "fit to here" depth marked in the fittings.
- 10. Cut the last section of gutter to fit using a hacksaw and fit a stopend.

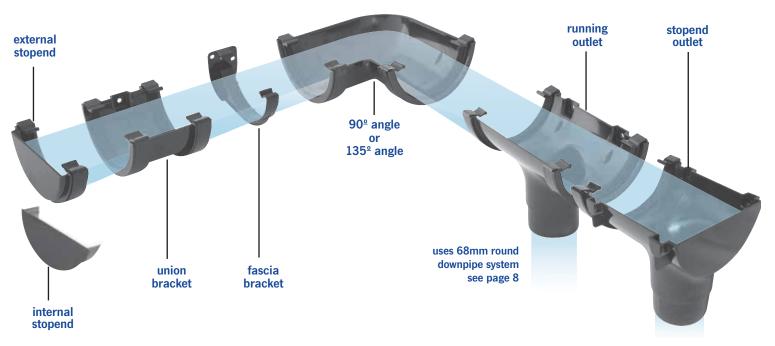
Downpipe

- 1. Using a plumb line, mark a vertical line on the wall from the running outlet to the drain.
- 2. Place an offset bend onto the base of the running outlet. Place a second offset bend on a length of downpipe and measure the section length required to join the two offset bends, cut a suitable length of downpipe the "swan neck".
- Hold a downpipe clip centrally over the plumb line and mark the fixing holes on the wall with a pencil. Repeat down the wall, spacing pipe clips no more than 1.8m apart.
- 4. Drill the fixing holes.
- Working from the top downwards, install the downpipe. If additional lengths of downpipe are required, join using a socket and pipe clip.
- Leave a 10mm gap between the end of the pipe and the bottom of the pipe socket to allow for expansion. Fix a pipe clip over the joint.
- Use wall plugs suitable for the substrate and when fitting pipe clip screws to ensure that the application is secure. Fix pipe/socket clips with 2 x 32mm x 6.5mm round head stainless steel screws.
- Where required, fit a shoe at the bottom of the downpipe so that it directs water into the drain, if required. Fix the joint with a pipe clip.

RECOMMENDED: Use lubricant/silicone spray on all gutter seals for ease of fitting and for improved in-service performance.



Height	Width	Flow Rate	Area Drained	Down Pipe
50mm	112mm	0.9 l/s	43m²	Round (P8)



half round gutter code pk colours KFG4 6x4m W, BL, BR, GY, AG KFG5 6x5m W, BL

90º angle

	KFA1	20	W, BL, BR, GY, AG

135º angle

external/internal stopends

ext	KFE1	100	W, BL, BR, GY,
int	KFE2	20	AG
Value 1			

fascia bracket

320				i
	KFK1	100	W, BL, BR, GY, AG	

union bracket

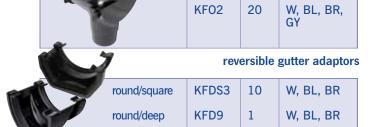
KFU1	30	W, BL, BR, GY, AG

^{*}Gutter adaptors - description denotes which side each section is on when looking at the building.

running outlet

code	pk	colours
KFO1	20	W, BL, BR, GY, AG

stopend outlet



handed round/ogee gutter adaptors

*ogee/round	OGR1	1	W, BL, BR
*round/ogee	OGR2	1	W, BL, BR

We also offer a range of different accessories; you can find out more on page 15

Height Width Flow Rate Area Drained Down Pipe 117mm 57mm 1.6 l/s 76m² Round/Square (P8/9) square gutter stopend running outlet outlet 90º angle or 135° angle fascia bracket union bracket uses 68mm round or 65mm square internal external downpipe system stopend stopend see pages 8/9

90⁰	angle

square gutter

W, BL, BR, C, AG W, BL, BR

	KFAS1	10	W, BL, BR, C, AG
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KFGS4

KFGS5

6x4m

6x5m

135º angle

	KFAS2	10	W, BL, BR,
(C) (C)			C

external/internal stopends

int KFES2 20 W, BL, BR, AG	ext	KFES1	100	W, BL, BR, C, AG
	int	KFES2	20	

fascia bracket

	KFKS1	100	W, BL, BR, C, AG
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union bracket

running outlet

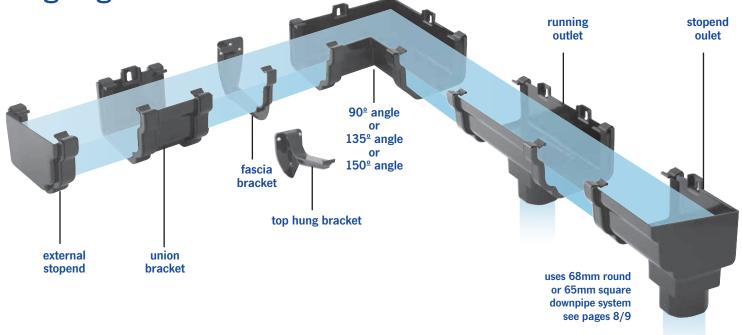
code	pk	colours
KFOS1	20	W, BL, BR, C, AG

	To see			stopend outlet
		KFOS2	20	W, BL, BR, C
	7	revei	rsible g	utter adaptors
	square/round	KFDS3	10	W, BL, BR
	square/deep	KFD10	1	W, BL, BR
OF THE PERSON NAMED IN COLUMN TO PERSON NAME	hand	led round/	ogee gi	utter adaptors
	*ogee/square	OGS1	1	W, BL, BR
	*square/ogee	OGS2	1	W, BL, BR

We also offer a range of different accessories; you can find out more on page 15

HeightWidthFlow RateArea DrainedDown Pipe70mm120mm2.2 l/s105m²Round/Square (P8/9)

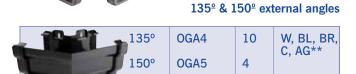
ogee gutter











- 1861 - m			union bracket
A J	OGU1	8	W, BL, BR, C, AG

	CALCI	rnal stopend
L/H R/H OGE1 (L) OGE2 (R)	10	W, BL, BR, C, AG

gutter brackets

		code	pk	colours
U	fascia top hung	OGK1 OGK2	100 20	W, BL, BR, C, AG**

The last	running o			
	0G01	10	W, BL, BR, C, AG	



handed ogee/deep gutter adaptors

ritial				
	*ogee/deep	OGD1	1	W. BL.
	*deep/ogee	OGD2	1	BR

handed square/ogee gutter adaptors

	(A)	*ogee/square *square/ogee	OGS1 OGS2	1	W, BL, BR
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handed round/ogee gutter adaptors

*ogee/round	OGR1	1	W, BL,
*round/ogee	OGR2	1	BR

^{*}Gutter adaptors - description denotes which side each section is on when looking at the building.

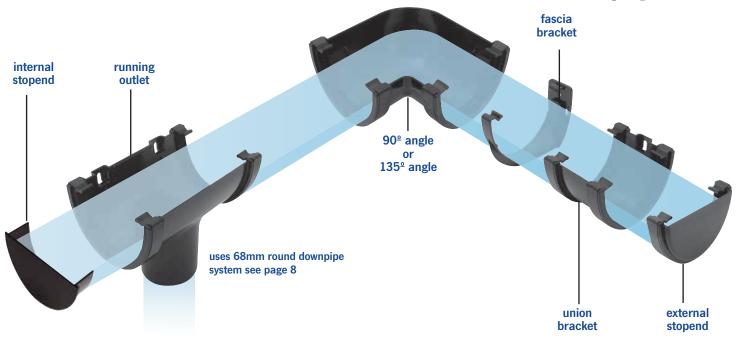
90º external angle

^{**}Only applicable to OGA4 and OGK1

HeightWidthFlow RateArea DrainedDown Pipe71mm114mm1.8 l/s86m²Round (P8)

Kayflow

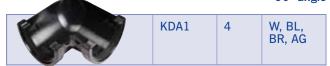
deep gutter



deep gutter

code	pk	colours
KDG4	6x4m	W, BL, BR, AG

90º angle



135º angle

KDA2	4	W, BL, BR, AG

internal/external stopend

4	*	KDE1	10	W, BL,
		KDE2	10	BŔ, AĠ
		rever	sible gut	ter adantors

reversible gutter adaptors

7	р, - ц			
ta	deep/square	KFD10	1	
	deep/round	KFD9	1	W, BL, BR

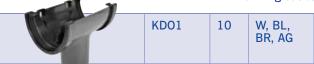
handed ogee/deep gutter adaptors

44				
	*ogee/deep	OGD1	1	W RI
	*deep/ogee	OGD2	1	BR BR

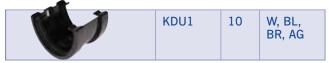
fascia bracket

code	pk	colours
KDK1	100	W, BL, BR, AG

running outlet



union bracket



We also offer a range of different accessories; you can find out more on page 15

round down pipe

- 68mm diameter
- use with half round, square, ogee & deep



			-	
		code	ro pk	und down pipe
	2.5m	KFP25	6	W, BL, BR, GY, AG
	4m	KFP4	6	W, BL, BR, AG
	5.5m	KFP55	6	W, BL, BR, GY, AG
			92	2.5° offset bend
		KFB1	20	W, BL, BR, GY, AG
			112	2.5° offset bend
		KFB2	30	W, BL, BR, GY, AG
				shoe
		KFB3	30	W, BL, BR, GY, AG
		ı	ı	pipe clip
ر		KFC1	100	W, BL, BR, GY, AG
		cor	cealed	fixing pipe clip
C		OGC3	10	W, BL, BR
-		ı	square	e/round hopper
		KFHS1	10	W, BL, BR, C, GY, AG
				pipe socket
		KFS1	20	W, BL, BR, GY, AG
9				112.5° branch
		KFY1	10	W, BL, BR, GY, AG
	S	square/rou	ınd dow	n pipe adaptor
		KFDS2	10	W, BL, BR, C
			rou	ind access pipe
		KFAP	1	W, BL, BR
	We also of			rent accessories; more on page 15



Kayflow square down pipe • 65mm x 65mm use with square and ogee running outlet 112.5º offset bends 92.5º offset bend pipe clip pipe clip (flush) pipe socket 112.5° branch downpipe square access pipe shoe

SuperDeep 170

Kayflow SuperDeep 170 is a super tough, high capacity gutter for use on commercial buildings, hotels, flats and any structure that has a large roof area.

Tough Construction

SuperDeep 170 has a high material content that ensures it can easily contain the weight of water that could potentially flow into its huge gutter profile. Each fascia bracket is capable of supporting over 125kg and the union can take over half as much again.

The gutter angles have been produced as individual internal and external versions. This allows positive fixing of each unit to the fascia board.

High Capacity

SuperDeep 170 is one of the largest and toughest commercial rainwater systems available.

At 170mm from rim to rim SuperDeep 170 has a huge reservoir and is designed to move water rapidly into and down a 100mm or 110mm down pipe.

SuperDeep 170 has an independently tested, market leading flow rate of 4.3 litres per second.

- · Ultra tough, thick-wall system
- · 170mm high capacity commercial system
- · White core reduces heat absorbtion
- Uses 100mm or 110mm downpipe
- Internal and external versions of angles
- Fix fascia brackets at maximum 600mm centres
- Kitemark KM508760 to BS EN 607:2004 and BS EN 1462:2004

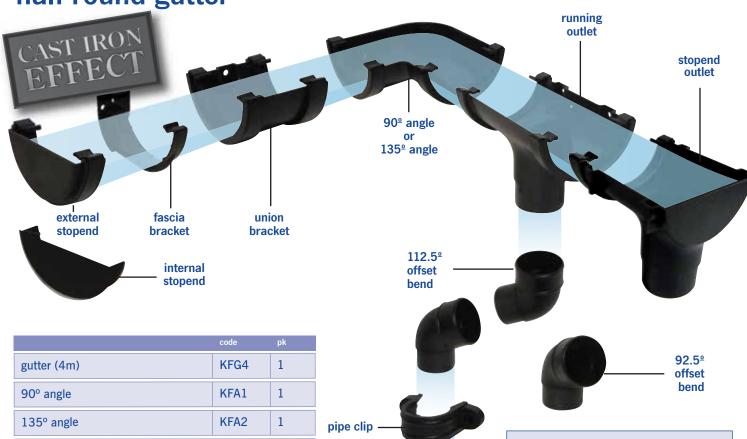






half round gutter

Height	Width	Flow Rate	Area Drained	Down Pipe
50mm	112mm	0.9 l/s	43m ²	Round



pipe socket

112.5° branch

downpipe

shoe

	code	pk
gutter (4m)	KFG4	1
90° angle	KFA1	1
135° angle	KFA2	1
external stopend	KFE1	1
internal stopend	KFE2	1
fascia bracket	KFK1	1
running outlet	KF01	1
stopend outlet	KF02	1
union bracket	KFU1	1
round downpipe (2.5m)	KFP25	1
92.5° offset bend	KFB1	1
112.5° offset bend	KFB2	1
shoe with lugs	KFB4	1
pipe clip with lugs	KFC2	1
hopper with lugs	KFHS2	1
pipe socket with lugs	KFS2	1

We also offer a range of different accessories; you can find out more on page 15



Complete system with bespoke components for an authentic cast iron appearance.





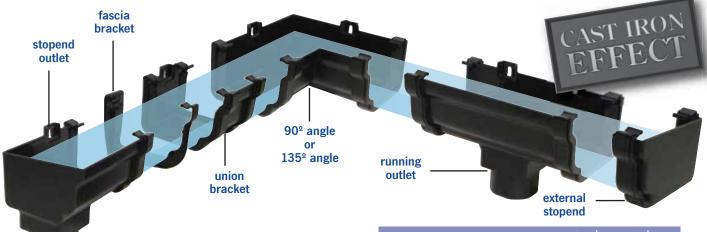
112.5° branch

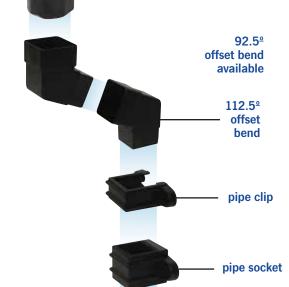
KFY1

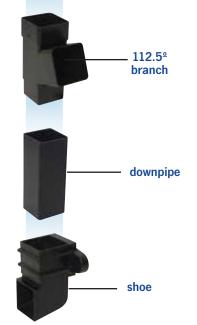
HeightWidthFlow RateArea DrainedDown Pipe70mm120mm2.2 l/s105m²Round/Square

Kayflow

ogee gutter







	stopend	
	code	pk
gutter (4m)	OGG4	1
90° external angle	OGA2	1
90° internal angle	OGA1	1
135° external angle	OGA4	1
135° internal angle	OGA3	1
external stopend (R/H)	OGE2	1
external stopend (L/H)	OGE1	1
fascia bracket	OGK1	1
running outlet	OGO1	1
stopend outlet (R/H)	OG02	1
stopend outlet (L/H)	OGO3	1
union bracket	OGU1	1
square downpipe (2.5m)	KFPS25	1
112.5° offset bend	KFBS2	1
92.5° offset bend	KFBS1	1
shoe with lugs	KFBS5	1
pipe clip with lugs	KFCS4	1
pipe socket with lugs	KFSS2	1
112.5° branch	KFYS1	1
hopper with lugs	KFHS2	1

We also offer a range of different accessories; you can find out more on page 15

<u>Kayflow</u>

HeightWidthFlow RateArea DrainedDown Pipe71mm114mm1.8 l/s86m²Round





stopend bracket	bracket	
	code	pk
gutter (4m)	KDG4	1
90° angle	KDA1	1
135° angle	KDA2	1
external stopend	KDE1	1
internal stopend	KDE2	1
fascia bracket	KDK1	1
running outlet	KD01	1
union bracket	KDU1	1
round downpipe (2.5m)	KFP25	1
92.5° offset bend	KFB1	1
112.5° offset bend	KFB2	1
shoe with lugs	KFB4	1
pipe clip with lugs	KFC2	1
hopper with lugs	KFHS2	1
pipe socket with lugs	KFS2	1
112.5° branch	KFY1	1

We also offer a range of different accessories; you can find out more on page 15





Kayflow is a comprehensive range of Rainwater, Soil and Underground drainage products.

The Kayflow range is ideal for builders merchants and PVC stockists. Kayflow is easy to deal with and has a straight forward pricing structure, a national delivery service and low minimum order levels.

Kayflow can be specified with confidence. The technical team are on hand to help with questions concerning flow rates and installation procedures.

Kayflow installers have a wide choice of rainwater products and the quality and fit of the clipping system is widely regarded as excellent.

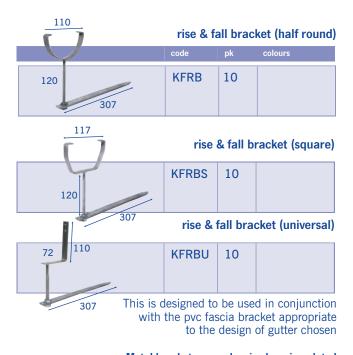
NEW SQUARE additions to the **Anthracite Grey range**

The Kayflow Anthracite Grey (RAL7016) range of products has expanded and now includes a SQUARE gutter system.

These additions join the already popular large range of Round, Ogee and Deep Flow profiles available in the Anthracite Grey rainwater range and provide a match for window, door and fascia systems with the same colour reference.



accessories



side rafter bracket colours **KFSRB** 10 top rafter bracket 235 **KFTRB** 10 rainwater diverter and leaf trap KFRD1 W, BL hopper (square/round) KFHS1 10 W, BL, BR, C, GY, AG





110mm underground pipe & fittings



110mm underground fittings



110mm straight rubber coupler

1

UG1011

4	-0:	ll#\
4:	5º junction (trip	pk
	code	pk
	UG38 BUG38	1 15
90	0º junction (trip	le socket)
	UG39 BUG39	1 15
	with	twin boss
	short hop	per head

UG107 BUG107	1 60
UG105 Grid ONLY BUG105 Grid ONLY	1 200

square hopper

UG103 BUG103	24
UG105 Grid ONLY BUG105	1 200
	BUG103 UG105

MININ	rectangu	ılar hopper
-0	UG104 BUG104	1 20
	UG105 Grid ONLY BUG105 Grid ONLY	1 200

rodding eye UG1012 BUG1012 20

	level inv	ert reducer
	UG115 BUG115	1 230
	1.0	0 110

160 x 110mm

plastic to cla	y adaptor
UG1009	1

160mm underground pipe & fittings





inspection chambers

320 inspection chamber

450 inspection chamber



1 x Main Entry 2 x 90° Entries 2 x 45° Entries 4 x Blanking Plugs Max. Depth 1200mm All Sockets 110mm

BS EN 1329; 1:2014



Note: Dimensions shown denote the installed height of each item

320 square lid adaptor UG1013 20 BUG1013



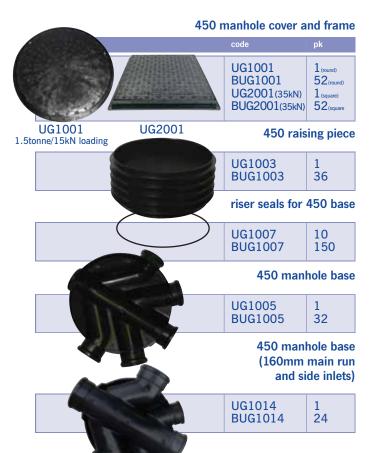
UG1000 1.5tonne/15kN loading

UG2000 320 raising piece

1	02011	aising picci
	UG1002 BUG1002	1 99



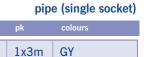
It is recommended that all joints require generous lubrication, which is also available from Kayflow - please see pages 18, 20 & 23



200mm

Kayflow 110mm soil

S1



		coupler
code	pk	colours
S16 BS16	1 50	BL, GY, WH

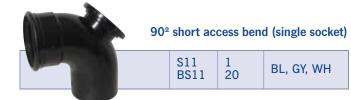


S1 1x3m BL

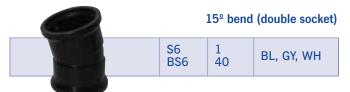
•		slip	/repair coupler
	S17	1	BL, GY



S1 1x3m WH









S9 1 BL, GY, WH

	30º bend	(double socket)
S5 BS5	1 40	BL, GY, WH



45° bend (single socket)

S8 1
BS8 30 BL, GY, WH

		45º bend	(double socket)
\	S4 BS4	1 30	BL, GY, WH



90° bend (single socket)

S7 1
BS7 20 BL, GY, WH



110mm soil



code	pk	colours
S15 BS15	1 15	BL, GY, WH





code	pk	colours
S13 BS13	1 15	BL, GY, WH



90º branch (double socket)

S14 1 BS14 15	BL, GY, WH
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90º branch (triple socket)

S12 BS12	1 15	BL, GY, WH
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access junction (double socket)

S18	1	BL, GY, WH
BS18	12	,,,



air admittance valve

S24 BS24	1 24	BL, GY, WH



straight access pipe (single socket)

BS25 18 B2, 31, W1



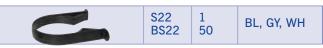
cowl

	S21 BS21	1 40	BL, GY, WH

50mm strap boss

S50 BS50	1 10	BL, GY, WH





40mm adaptor

•	\$40 B\$40	1 10	BL
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end plug/cap

S20	1	BL, GY
BS20	100	BL

32mm adaptor

	S32 BS32	1 10	BL
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universal pipe lubricant

	un	iivei sai pipi	- lubilicani
Lauflow	UPL1 UPL2.5	1kg 2.5kg	1 1

