

## contents

### Standard Gutters



· 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



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**



- · User friendly easy fit system
- Lightweight, easy to handle
- Impact resistant and extremely durable
- · A wide range of products and ancillary
- 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\*\* P22 - 23

# Kayflow

## **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.

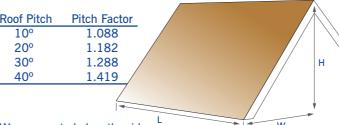
The roof area is multiplied by the amount of water running off each square metre of the roof area in litres per second.

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)



W = eaves to below the ridge

H = vertical height from eaves to ridge

L = length of roof section

### 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**

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

- 1. 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).
- 3. 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.
- 4. Check that there is a fall towards the outlet (1.350 is recommended) to encourage water to drain efficiently.
- 5. 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.
- 6. 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.
- 8. 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
- 10. Cut the last section of gutter to fit using a hacksaw and fit a stopend.

### Downpipe

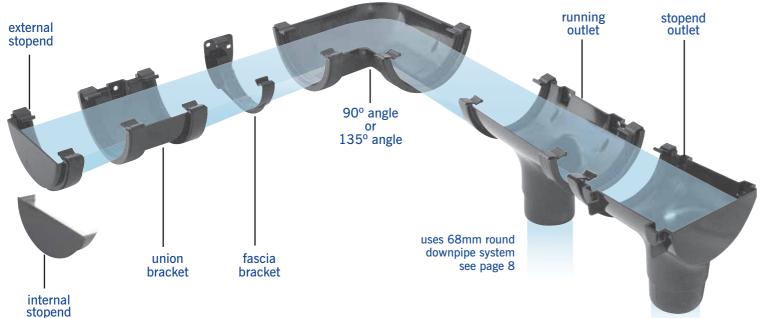
- 1. Using a plumb line, mark a vertical line on the wall from the running outlet to the drain.
- 2. Place an offset bend onto the base of the running outlet. Place a second offset bend on a length of downpipe and measure the section length required to join the two offset bends, cut a suitable length of downpipe - the "swan neck".
- 3. 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.
- 5. Working from the top downwards, install the downpipe. If additional lengths of downpipe are required, join using a socket
- 6. 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
- 7. 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.
- 8. 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.

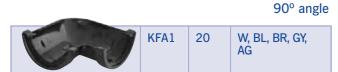
<sup>\*</sup>Excludes Caramel. \*\*For scope refer to the manufacturer.

## **Kayflow** half round gutter

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



135° angle

KFA2	20	W, BL, BR, GY, AG

	6	external/	internal stopends
ext	KFE1	100	W, BL, BR, GY,
int	KFE2	20	AĞ

fascia bracket

-			
	KFK1	100	W, BL, BR, GY, AG

union bracket

KFU1	30	W, BL, BR, GY, AG

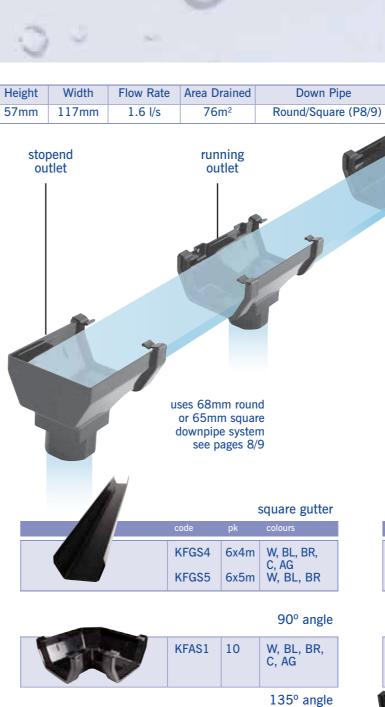
\*Gutter adaptors - description denotes which side each section is on when looking at the building.

				running outle
		code	pk	colours
P	7	KFO1	20	W, BL, BR, GY, AG
				stopend outle
		KF02	20	W, BL, BR, GY
	7	reve	rsible g	utter adaptor
	round/square	KFDS3	10	W, BL, BR
	round/deep	KFD9	1	W, BL, BR
	hand	led round,	ogee g	utter adaptor
	*ogee/round	OGR1	1	W, BL, BR

\*round/ogee OGR2

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

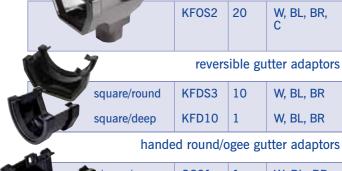
W, BL, BR



	code	рк	colours	code	рк	colours
	KFGS4 KFGS5		W, BL, BR, C, AG W, BL, BR	KFOS1	20	W, BL, BR, C, AG
	Ki GSS	OXJIII	90° angle		S	topend outlet
AT TO	KFAS1	10	W, BL, BR,	KFOS2	20	W, BL, BR,

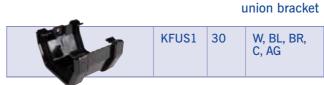
90° angle or 135° angle

Down Pipe



bracket

nd.	hande	ed round/o	ogee gu	tter adaptor
	*ogee/square	OGS1	1	W, BL, BR
Contract of the last of the la	*square/ogee	OGS2	1	W, BL, BR



KFAS2 10

KFES1

KFES2 20

KFKS1 100

W, BL, BR,

W, BL, BR,

C, AG W, BL, BR, AG

fascia bracket

W, BL, BR,

C, AG

C, AG

external/internal stopends

100

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

**Kayflow** 

union

bracket

internal

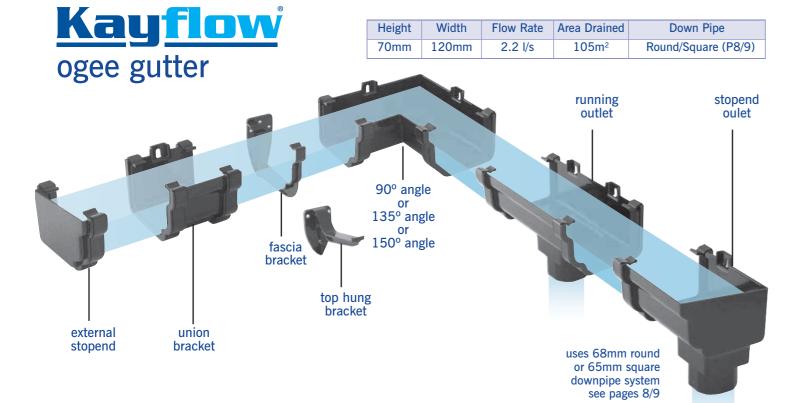
stopend

external

stopend

running outlet

square gutter



			ogee gutter				gut	ter brackets
	code	pk	colours			code	pk	colours
	OGG4	4x4m	W, BL,		fascia	OGK1	100	W, BL,
			BR, C, AG		top hung	OGK2	20	BR, C, AG**
	90° &	135° in	ternal angle	والم			ru	nning outlet
	OGA1	10	W, BL,			0G01	10	W, BL,
	OGA3	10	BR, C, AG					BR, C, AG
		90° ex	ternal angle		1		stop	end outlets
	OGA2	10	W, BL,		1	OGO2 (R)	10	W, BL,
			BR, C, AG	L/H	R/H	OGO3 (L)	10	BR, C
	135° & 1	50° exte	ernal angles	and t	hand	ded ogee/de	ep gut	ter adaptors
135°	OGA4	10	W, BL, BR,		*ogee/deep	OGD1	1	W, BL,
150°	OGA5	4	C, AG**		*deep/ogee	OGD2	1	BR
- 188°		ur	ion bracket	•	hande	d square/og	gee gut	ter adaptors
	OGU1	8	W, BL,		*ogee/square	OGS1	1	W, BL,
			BR, C, AG		*square/ogee	OGS2	1	BR

\*Gutter adaptors - description denotes which side each section is on when looking at the building. 
\*\*Only applicable to OGA4 and OGK1

OGE1 (L) 10 OGE2 (R)

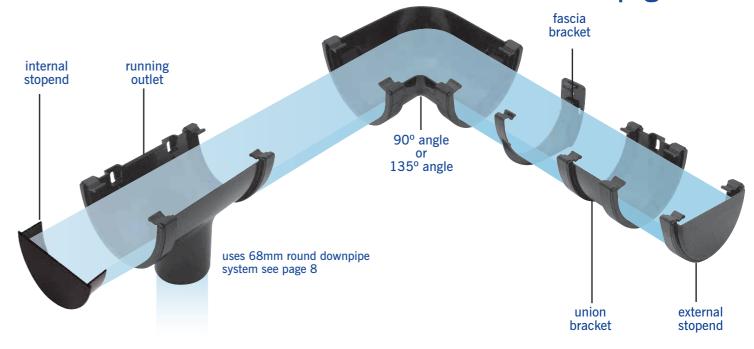
external stopend

W, BL, BR, C, AG HeightWidthFlow RateArea DrainedDown Pipe71mm114mm1.8 l/s86m²Round (P8)

## **Kayflow**

deep gutter

fascia bracket



acch gatter	deep	gutter
-------------	------	--------

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

90	o angle	

KDA1	4	W, BL, BR, AG

135° angle

	KDA2	4	W, BL, BR, AG
--	------	---	------------------

## internal/external stopend

	KDE2	10	BŔ, AĠ
	revers	ible gutt	er adaptors
deep/round	KFD9	1	W, BL, BR
deep/square	KFD10	1	, ,
han	ded ogee/d	eep gutt	er adaptors

	1	W, BL, BR
	1	
e/d	eep gutt	er adaptors

*ogee/deep *deep/ogee	OGD1 OGD2	1	W, BL, BR

KDK1	100	W, BL, BR, AG
	rui	nning outlet
KD01	10	W, BL, BR, AG
	ur	nion bracket
KDU1	10	W, BL, BR, AG

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

handed round/ogee gutter adaptors

W, BL, BR

OGR1

OGR2

kogee/round

\*round/ogee

## **Kayflow** round down pipe

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



1 / 1		-		
0.0	- 1	j		
			rou	nd down pipe
		code	pk	colours
	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.	5° offset bend
		KFB1	20	W, BL, BR, GY, AG
			112.	5° offset bend
		KFB2	30	W, BL, BR, GY, AG
				shoe
		KFB3	30	W, BL, BR, GY, AG
				pipe clip
2		KFC1	100	W, BL, BR, GY, AG
		conc	ealed 1	ixing pipe clip
C		OGC3	10	W, BL, BR
		:	square	/round hopper
		KFHS1	10	W, BL, BR, C, GY, AG
				pipe socket
		KFS1	20	W, BL, BR, GY, AG
			1	12.5° branch
		KFY1	10	W, BL, BR, GY, AG
	sq	uare/roun	d dow	n pipe adaptor
		KFDS2	10	W, BL, BR, C
			rour	nd access pipe
		KFAP	1	W, BL, BR

We also offer a range of different accessories;

you can find out more on page 15

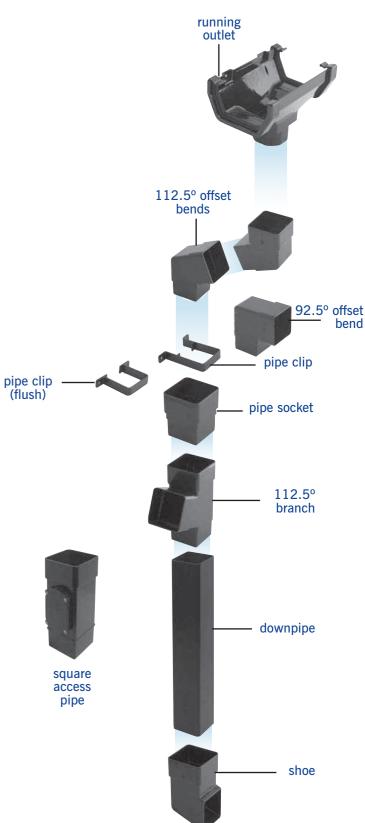
	5	
pipe		
BR,		
R, AG GY, AG		
bend		
BR,		
bend		
BR,		
shoe	<u>.</u>	
BR,		
e clip	)	
BR,		
e clip		
BR		
opper		4
BR, G		
ocket	:	
BR,		
ranch	l	
BR,		
laptor	•	
BR,		
pipe	:	
3R		

	2.5m	KFPS25	6	W, BL, BR, C, AG
	4m	KFPS4	6	W, BL, BR, AG
	5.5m	KFPS55	6	W, BL, BR, C, AG
			9	92.5° offset bend
		KFBS1	20	W, BL, BR, C, AG
			1	12.5° offset bend
		KFBS2	30	W, BL, BR, C, AG
				shoe
		KFBS3	30	W, BL, BR, C, AG
				pipe clip
<b>\$</b>		KFCS1	10 0	W, BL, BR, C, AG
				pipe clip (flush)
<b>\$</b>		KFCS2	100	W, BL, BR, C, AG
-	•		hopp	er (square/round)
		KFHS1	10	W, BL, BR, C, GY, AG
				pipe socket
		KFSS1	20	W, BL, BR, C, AG
				112.5° branch
		KFYS1	10	W, BL, BR, C, AG
	9	square/rou	ınd d	own pipe adaptor
		KFDS2	10	W, BL, BR, C
			SC	quare access pipe
		KFSAP	1	W, BL, BR
W	e also o			fferent accessories; at more on page 15

square down pipe

# **Kayflow** square down pipe • 65mm x 65mm

• use with square and ogee



Add suffix as follows for colours: W=White  $\bigcirc$ , BL=Black  $\bigcirc$ , BR=Brown  $\bigcirc$ , C=Caramel  $\bigcirc$ , AG=Anthracite Grey (RAL 7016)  $\bigcirc$ , GY=Grey  $\bigcirc$ Note: Please order as single items but in multiples of pack quantity only

www.kayflow.co.uk

## **Kayflow** 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.

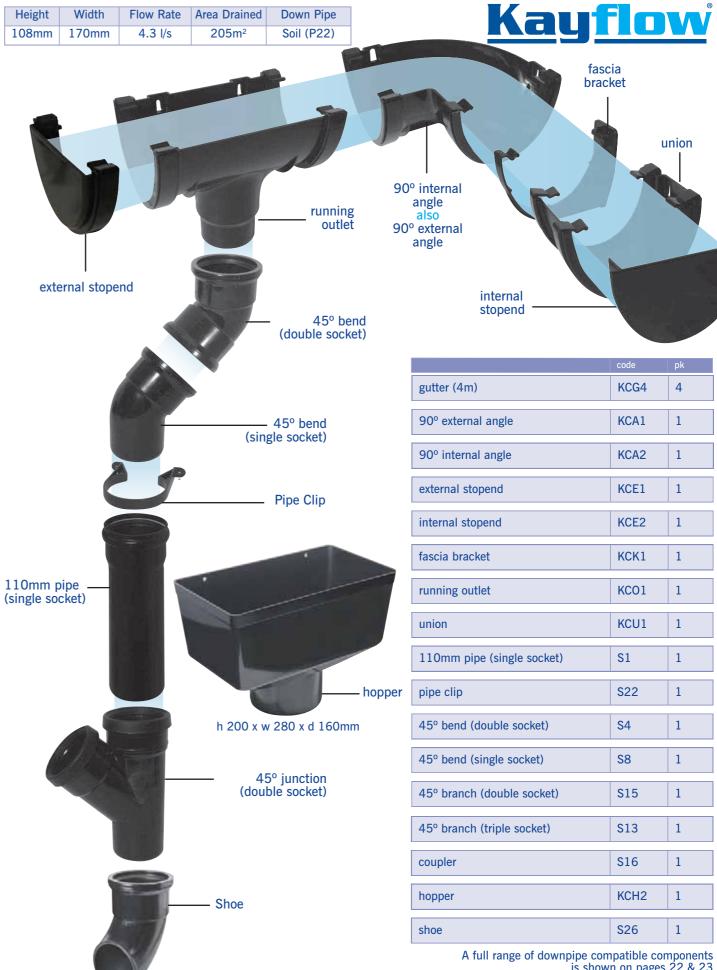
At 170mm from rim to rim SuperDeep 170 has a huge reservoir and is designed to move water rapidly into and down a 100mm or 110mm down pipe.

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







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is shown on pages 22 & 23 Add suffix as follows for colours: BL=Black , GY=Grey

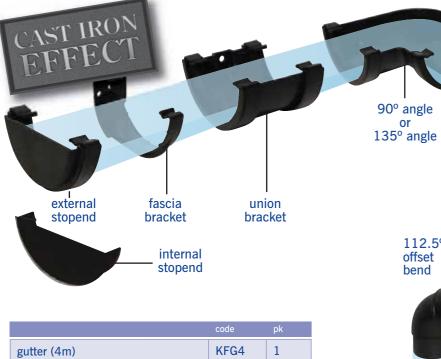


Height	Width	Flow Rate	Area Drained	Down Pipe
50mm	112mm	0.9 l/s	43m <sup>2</sup>	Round

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

running outlet

stopend outlet



	code	pk	
gutter (4m)	KFG4	1	
90° angle	KFA1	1	
135° angle	KFA2	1	pi
external stopend	KFE1	1	
internal stopend	KFE2	1	pi
fascia bracket	KFK1	1	
running outlet	KF01	1	
stopend outlet	KF02	1	
union bracket	KFU1	1	1: br
round downpipe (2.5m)	KFP25	1	
92.5° offset bend	KFB1	1	
112.5° offset bend	KFB2	1	
shoe with lugs	KFB4	1	do

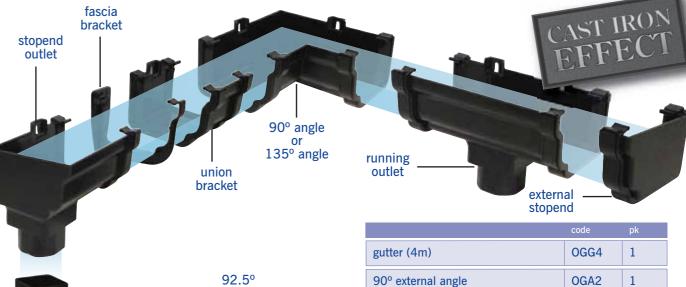
112.5° branch	KFY1
We also offer a range of different acces you can find out more on page 15	sories;

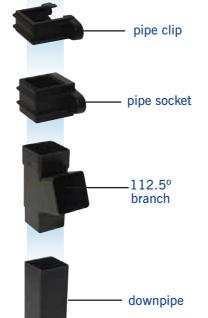
	7			90° angle or 135° angle	
external stopend	fascia bracket		ion cket		
	internal stopend			112.5° offset bend	
		code	pk		
gutter (4m)		KFG4	1		92.5° offset
90° angle		KFA1	1		bend
135° angle		KFA2	1	pipe clip	
external stopend		KFE1	1		Cast Iron Effect
nternal stopend		KFE2	1	pipe socket	Complete system with bespoke
ascia bracket		KFK1	1		components for an authentic cast iron appearance.
unning outlet		KF01	1		
topend outlet		KF02	1		
ınion bracket		KFU1	1	112.5° — branch	
ound downpipe (2.5n	า)	KFP25	1	Dianen	9
92.5° offset bend		KFB1	1		
.12.5° offset bend		KFB2	1		
hoe with lugs		KFB4	1	downpipe —	
pipe clip with lugs		KFC2	1		THE RESIDENCE OF THE PARTY OF T
nopper with lugs		KFHS2	1		TANKS (FINAL)
pipe socket with lugs		KFS2	1		The second of
L12.5° branch		KFY1	1	shoe	

Height	Width	Flow Rate	Area Drained	Down Pipe
70mm	120mm	2.2 l/s	105m <sup>2</sup>	Round/Square

# **Kayflow**

ogee gutter





offset bend available

112.5° offset bend

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	0G01	1
stopend outlet (R/H)	0G02	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

HeightWidthFlow RateArea DrainedDown Pipe71mm114mm1.8 l/s86m²Round

running

outlet



	stopend	bracket	-	acket
			code	pk
gutter (4m)			KDG4	1
90° angle			KDA1	1
135° angle			KDA2	1
external stope	end		KDE1	1
internal stope	end		KDE2	1
fascia bracket	t		KDK1	1
running outle	t		KD01	1
union bracket	i		KDU1	1
round downpi	ipe (2.5m)		KFP25	1
92.5° offset b	oend		KFB1	1
112.5° offset	bend		KFB2	1
shoe with lug	S		KFB4	1
pipe clip with	lugs		KFC2	1
hopper with I	ugs		KFHS2	1
pipe socket w	rith lugs		KFS2	1
112.5° branc	h		KFY1	1

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



## **Kayflow**

# 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 GUTTER BALLOON added to our range

Our new Gutter Balloon has now been added to the Kayflow range of rainwater products to help prevent leaves, twigs and debris from causing blockages in downpipes.

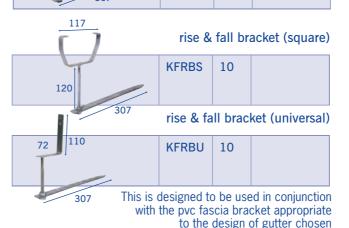
Due to its flexibility, this polypropylene profile fits easily into all running outlets (except Commercial SuperDeep 170) using a push fit application.





120

# rise & fall bracket (half round) code pk colours



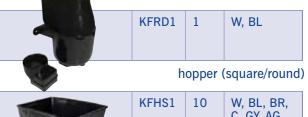
**KFRB** 

10

Metal brackets are galvanised or zinc plated for excellent water resistance.

## accessories







## 110mm underground pipe & fittings



coupler and slip	coupler (double	e socket)
coupler	UG10 BUG10	1 50
slip coupler	UG12	1

		SOC	ket p	lug
socket plug	UG111		1	





### Codes beginning with 'B' denote the specific BULK quantity shown.

## **Kayflow**

## 110mm underground fittings



rainwater adaptor

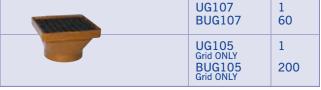
UG1015

110mm straight rubber coupler

UG1011



## short hopper head

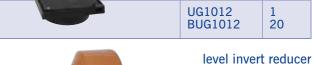


### square hopper

UG103 BUG103	1 24
UG105 Grid ONLY BUG105 Grid ONLY	1 200

HIIII	rectangu	lar hopper
-0	UG104 BUG104	1 20
	UG105 Grid ONLY BUG105 Grid ONLY	1 200

## rodding eye

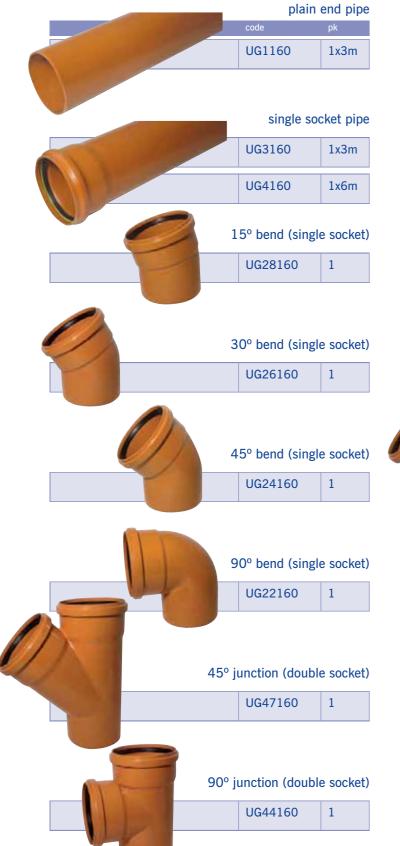


## **UG115** BUG115 230

160 x 110mm

	plastic to cla	y adaptor
	UG1009	1
01111		

## 160mm underground pipe & fittings





# **Kayflow** inspection chambers



www.kayflow.co.uk

UG1004

BUG1004

It is recommended that all joints require generous lubrication, which is also available from Kayflow - please

1 56

see pages 18, 20 & 23

24

UG1014

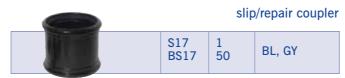
BUG1014

## 110mm soil

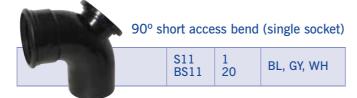
## pipe (single socket) S1 1x3m GY

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

:	S1	1x3m	BL

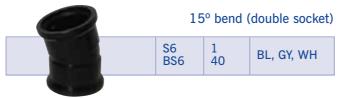






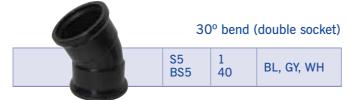


15° bend (single socket) S10 BL, GY, WH BS10





30° bend (single socket) S9 BS9 1 40 BL, GY, WH





4	5° bend	(single socket)
S8 BS8	1 30	BL, GY, WH







## **Kayflow** 110mm soil

S13

BS13

S12 1 BS12 15

15



45° branch (double socket) S15 BS15 1 15 BL, GY, WH



90° branch (double socket)

S14 BL, GY, WH BS14



access junction (double socket)

S18 1 BS18 12 BL, GY, WH



air admittance valve

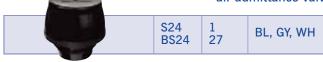
45° branch (triple socket)

90° branch (triple socket)

BL, GY, WH

BL, GY, WH

pipe clip





straight access pipe (single socket)

BL, GY, WH BS25 18

		COW
S21 BS21	1 40	BL, GY, WH

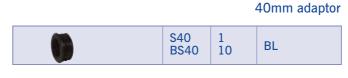


S50 BS50	1 10	BL, GY, WH

S22 BS22	1 50	BL, GY, WH

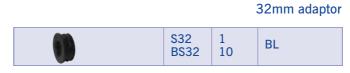
45° bend (double socket)

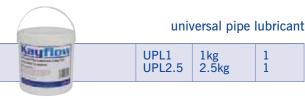
S4 1 BS4 30 B	L, GY, WH
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			end plug/cap
10	S20	1	BL, GY
	BS20	100	BL







## **Useful Kayflow contacts:**

To speak to our customer services team or to place your orders, please contact **01827 317 200** and choose **Option 1** or e-mail sales.orders@swishbp.co.uk.

For drainage product queries, contact:

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For technical rainwater enquiries, contact:

### **Technical Department**

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