Anthracite Inside ange



Rainwater Underground & Soil Systems







soil



rainwater

www.kayflow.co.uk

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: 2009 PVC-U Underground Drainage Systems**

P 16 - 21

Soil



KM 664034

- · 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.

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 having a straight forward pricing structure, and a national delivery service with low minimum order levels.

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

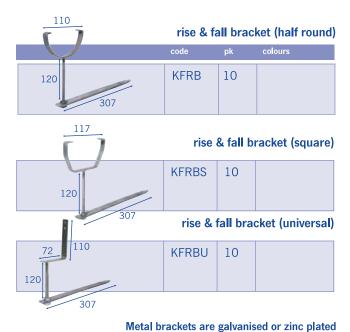
Kayflow installers have a wide choice of rainwater products and the quality and fit of the clipping system is widely regarded as excellent.







accessories

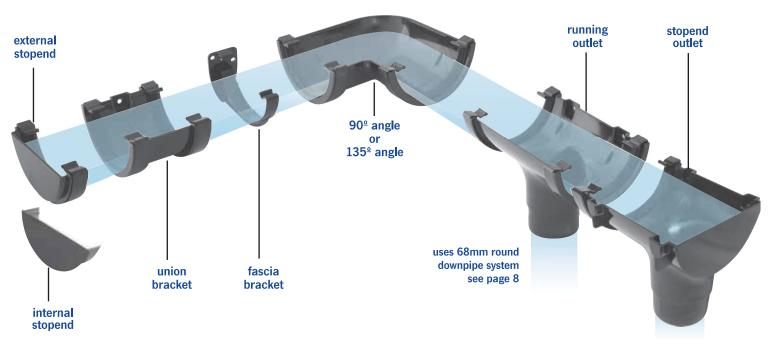


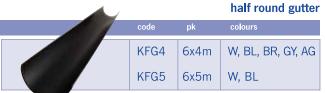
for excellent water resistance.





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





90º angle

KFA1	20	W, BL, BR, GY, AG

135º angle

KFA2	20	W, BL, BR, GY,

external/internal stopends

....

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

union bracket

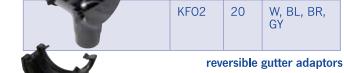
KFU1	30	W, BL, BR, GY, AG

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

running outlet

code	pk	colours
KF01	20	W, BL, BR, GY, AG

stopend outlet



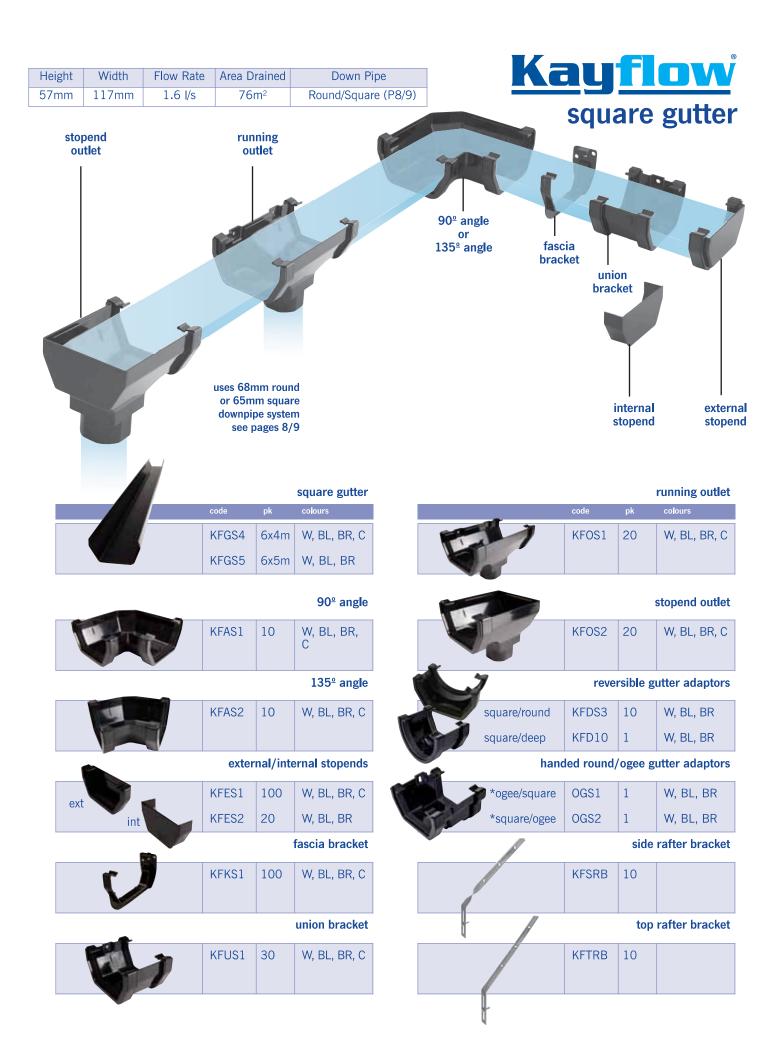
round/square	KFDS3	10	W, BL, BR
round/deep	KFD9	1	W, BL, BR

handed round/ogee gutter adaptors

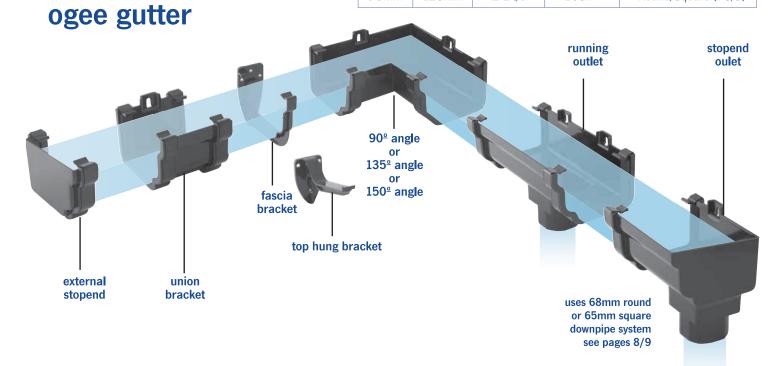
*ogee/rour	nd OGR1	1	W, BL, BR
*round/og	ee OGR2	1	W, BL, BR
	side ra	fter / to	p rafter bracke
	KFSRB	10	
side top	KFTRB	10	
+		hopper	(square/round
	VELIC1	10	W DL DD

KFHS1 10 W, BL, BR, C, GY, AG

h 150 x w 247 x d 165mm



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







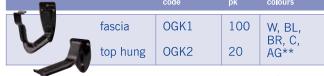
OGA2	10	W, BL, BR, C, AG

135° OGA4 10 W, BL, BR, C, AG**

all to		u	nion bracket
	OGU1	8	W, BL, BR, C, AG

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

gutter brackets code pk colours



		running outle
OGO1	10	W, BL, BR, C, AG

		sto	pend outlets
P. P.	OGO2 (R)	10	W, BL, BR, C
L/H R/H	OGO3 (L)	10	BR, C

handed ogee/deep gutter adaptors

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

handed square/ogee gutter adaptors

*ogee/square *square/ogee	OGS1 OGS2	1	W, BL, BR

handed round/ogee gutter adaptors

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

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

90º external angle

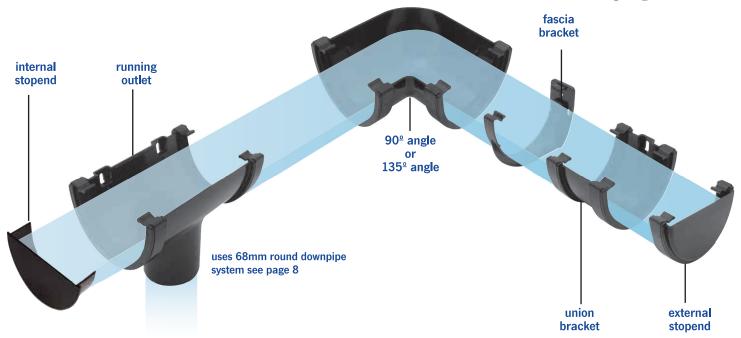
135° & 150° external angles

^{**}Only applicable to OGA4 and OGK1

Height Width Flow Rate Area Drained Down Pipe 114mm 1.8 l/s 86m² Round (P8) 71mm

Kayflow

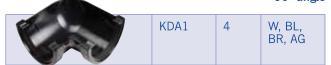
deep gutter





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

90º angle



135º angle



reversible gutter adaptors

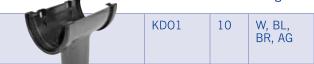
. mark	*/-I	0001	1	
	ha	nded ogee/d	deen gut	ter adaptors
The in	deep/square	KFD10	1	BR
	deep/round	KFD9	1	W, BL,

-	*ogee/deep	OGD1	1	W, BL,
	*deep/ogee	OGD2	1	BŔ

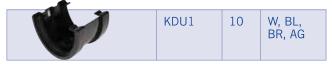
fascia bracket

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

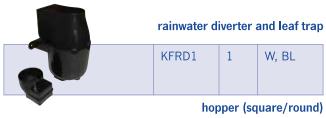
running outlet



union bracket



accessories



Division in the second			
	KFHS1	10	W, BL, BR, C, GY, AG

h 150 x w 247 x d 165mm

round down pipe

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

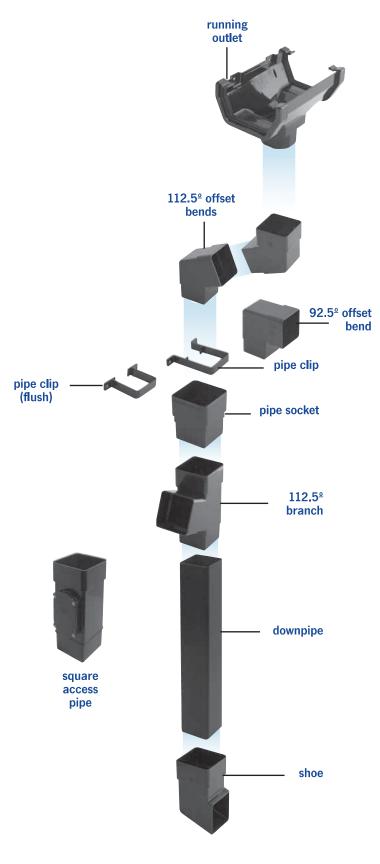


		ro	und down pipe
	code	pk	colours
2.5m	KFP25	6	W, BL, BR, GY, AG
4m	KFP4	6	W, BL, BR, AG
5.5m	KFP55	6	W, BL, BR, GY, AG
		92	2.5° offset bend
	KFB1	20	W, BL, BR, GY, AG
		112	2.5° offset bend
-	KFB2	30	W, BL, BR, GY, AG
			shoe
	KFB3	30	W, BL, BR, GY, AG
			pipe clip
6	KFC1	100	W, BL, BR, GY, AG
	cor	ncealed	fixing pipe clip
0	OGC3	10	W, BL, BR
		square	e/round hoppe
	KFHS1	10	W, BL, BR, C, GY, AG
			pipe socke
	KFS1	20	W, BL, BR, GY, AG
			112.5º brancl
	KFY1	10	W, BL, BR, GY, AG
	่ square/roเ	ınd dov	∟ vn pipe adapto
	KFDS2	10	W, BL, BR, C
		rou	ınd access pipe
	KFAP	1	W, BL, BR
1			





use with square and ogee



KayflowSuperDeep 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.

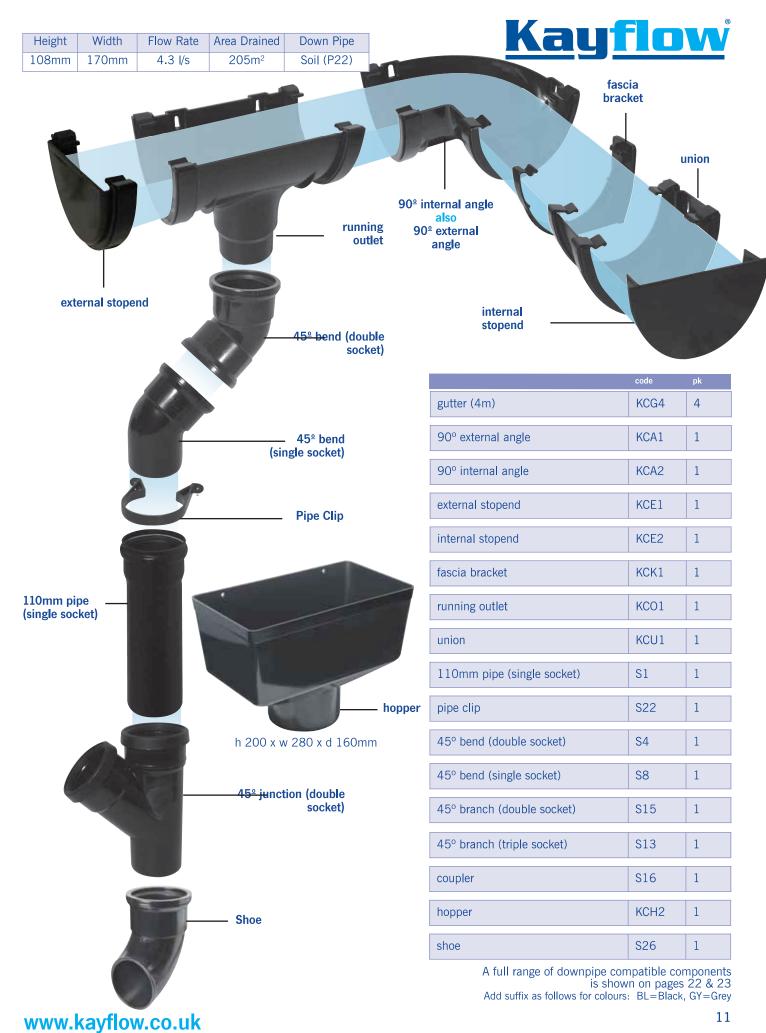
At 170mm from rim to rim SuperDeep 170 has a huge reservoir and is designed to move water rapidly into and down a 100mm or 110mm down pipe.

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







Kayflowhalf round gutter

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



	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
112.5° branch	KFY1	1



pipe socket





Cast Iron Effect

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

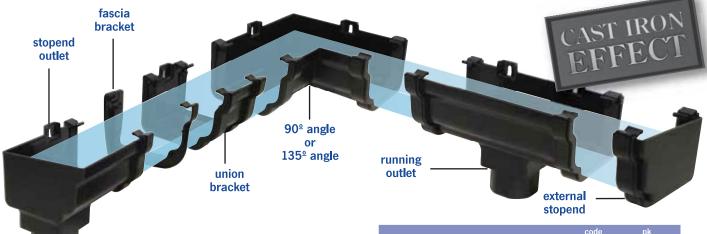


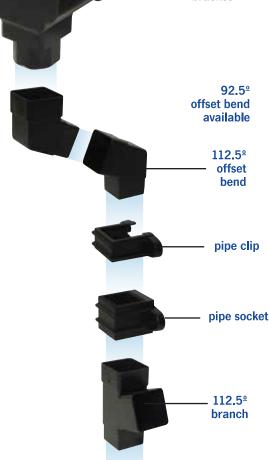


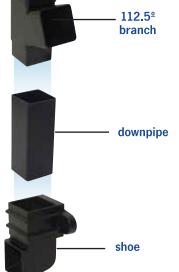
HeightWidthFlow RateArea DrainedDown Pipe70mm120mm2.2 l/s105m²Round/Square



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)	OGO2	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



HeightWidthFlow RateArea DrainedDown Pipe71mm114mm1.8 l/s86m²Round

running outlet

internal stopend

92.5° offset bend





external fasci stopend brack		nion acket
	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





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.

Installation

- Fascia brackets must be used within 150mm of both sides of any gutter fitting.
- Use all fixing positions on all unions, angles and outlets for all systems.
- Whilst it is best practice to make use of all available fixing holes for gutter brackets, the specification in the table (below) may be adopted. Ensure the fixings are long enough to penetrate the rear face of the board. If the cellular PVC fascia board is less than 16mm thick, install a backing board to accept gutter bracket fixings. The gutter should be fitted as high as possible but not such that the outer edge projects above the line of the roof.
- For all gutters, the tile overhang from the fascia board should not be more than 50mm.
- Where over fascia ventilation is used, it may be necessary to use a gutter spacer and height adjuster bracket in conjunction with fascia brackets to ensure the gutter is fitted in the optimum position.
- When installing above conservatories it is recommended that a maximum spacing of 500mm is used on all profiles.

Specifications for gutter bracket fixings

Gutter Type	Normal / Sheltered Areas	Snowfall / Exposed Areas	Max distance between brackets
Round	2 x 25 x 4mm or 1 x 32 x 5mm	2 x 25 x 5mm	1m
Square	2 x 25 x 4mm or 1 x 32 x 5mm	2 x 25 x 5mm	1m
Deepflow	2 x 25 x 4mm or 1 x 32 x 5mm	2 x 25 x 5mm	800mm
Ogee	2 x 25 x 4mm or 1 x 32 x 5mm	2 x 25 x 5mm	800mm
SuperDeep 170	2 x 25 x 4mm or 1 x 32 x 6.5mm	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)

System Specifications (All flow rates have been independently established through physical testing to BS 12056-3:2000)

Gutter Type	Flow rate End Outlet (gutter laid level)	Area Drained	'Short' length gutter	Downpipe
Round	0.9l/s	43m²	2.4m	68mm Round
Square	1.6l/s	76m²	2.7m	68mm Round, 65mm Square
Deepflow	1.8l/s	86m²	3.4m	68mm Round
Ogee	2.2l/s	105m²	3.4m	68mm Round, 65mm Square
SuperDeep 170	4.3l/s	205m ²	5.45m	100/110mm Round
Cast Effect Round	0.9l/s	43m²	2.4m	68mm Round
Cast Effect Ogee	2.2l/s	105m²	3.4m	68mm Round, 65mm Square
Cast Effect Deep	1.8l/s	86m²	3.4m	68mm Round

Snow Loading

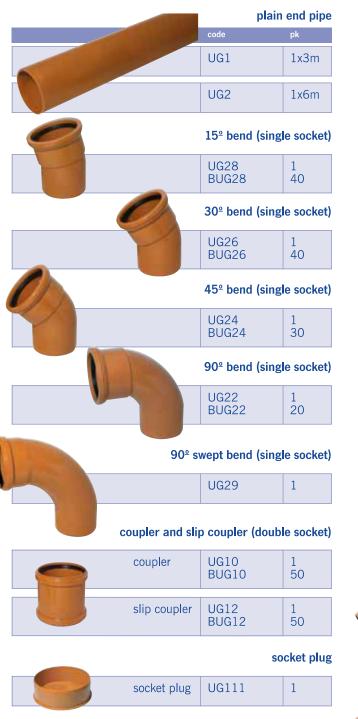
In locations where heavy snowfall is common, fixing centres for gutter brackets should be reduced to 600mm for all Kayflow systems. In addition all fixing holes should be used on all brackets and the use of snowboards is recommended where appropriate. For further advice on the specification and installation of Kayflow gutters please email:info@kayflow.co.uk or call 01827 317200



This drawing is for illustration only - full product range guides available



110mm underground pipe & fittings



	single	socket pipe
	code	pk
	UG3	1x3m
	UG4	1x6m
	15° bend (do	uble socket)
	UG20 BUG20	1 40
	30° bend (do	uble socket)
	UG18 BUG18	1 40
	45° bend (do	uble socket)
	UG16 BUG16	1 30
	90º bend (do	uble socket)
	UG14 BUG14	1 20
90	swept bend (do	uble socket)
	UG21	1
	45° long	radius bend
	UG15 BUG15	1 15
	90° long	radius bend
	UG13 BUG13	1 10



18



110mm underground fittings



110mm straight rubber coupler

1

UG1011



short hopper head

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

square hopper

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



rodding eye

UG1012 1 BUG1012 20		
		1 20



160 x 110mm

plastic to clay a	daptor
UG1009 1	

160mm underground pipe & fittings



Kayflow 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



of each item

320 square lid adaptor UG1013 20 BUG1013









	450 manhole cover and frame		
		code	pk
		UG1001 BUG1001 UG2001(35kN) BUG2001(35kN)	1 52 1 52
UG1001	UG2001	450 rais	ing piece
		UG1003 BUG1003	1 36
		riser seals for	450 base
		UG1007 BUG1007	10 150
		450 man	hole base
		UG1005 BUG1005	1 32
			hole base main run de inlets)
		UG1014 BUG1014	1 24

Kayflow 110mm soil

pipe (single socket)

code	pk	colours
S1	1x3m	GY

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

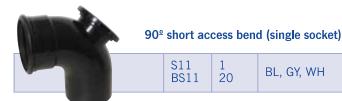


S1 1x3m BL

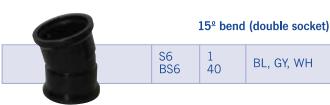
	•		slip	o/repair coupler
410		S17	1	BL, GY



S1 1x3m WH









S9 1 BL, GY, WH

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



45° bend (single socket)

S8 1
BS8 30 BL, GY, WH

	4	45º bend	(double socket)
	S4 BS4	1 30	BL, GY, WH



90° bend (single socket)

S7
BS7
BBL, GY, WH



110mm soil



45º branch (double socket)

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



45° branch (triple socket)

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



90º branch (double socket)

S14 BS14	1 15	BL, GY, WH
-------------	---------	------------



90º branch (triple socket)

	S12 BS12	1 15	BL, GY, WH
--	-------------	---------	------------



access junction (double socket)

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



air admittance valve

S24 BS24	1 24	BL, GY, WH



straight access pipe (single socket)

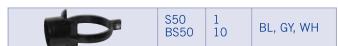
S25 BS25	1 18	BL, GY, WH



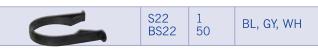
cowl

CONTRACTOR OF THE PARTY OF THE			
	S21 BS21	1 40	BL, GY, WH





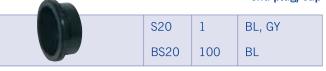




40mm adaptor

|--|

end plug/cap



32mm adaptor

(1)	S32 BS32	1 10	BL
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