

contents



KM 508760

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



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



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.



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)



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)
- 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.
- 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.
- 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.
- 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.

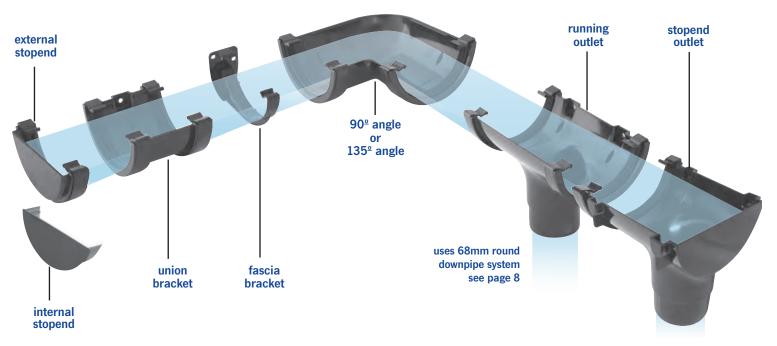
Downpipe

- 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".
- 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 and pipe clip.
- 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 over the joint.
- 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.



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

	KFA2	20	W, BL, BR, GY, AG
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external/internal stopends

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

fascia bracket

<u> </u>	KFK1	100	W, BL, BR, GY, AG	
			7.03	

union bracket

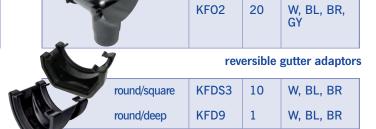
KFU1	30	W, BL, BR, GY, AG

^{*}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



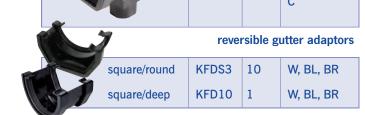
handed round/ogee gutter adaptors

*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

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

KFGS4 6x4m W, BL, BR, C, AG KFOS1 20 W, BL, BR, C, AG <



-08	nanded round/ogee gutter adaptor					
	*ogee/square	OGS1	1	W, BL, BR		
	*square/ogee	OGS2	1	W, BL, BR		

	KFAS1	10	W, BL, BR, C, AG
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135º angle

square gutter

KFAS2	10	W, BL, BR,
		C, AG
		0,710

external/internal stopends

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

fascia bracket

KFKS1	100	W, BL, BR, C, AG

union bracket

KFUS1	30	W, BL, BR, C, AG
		3,113

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

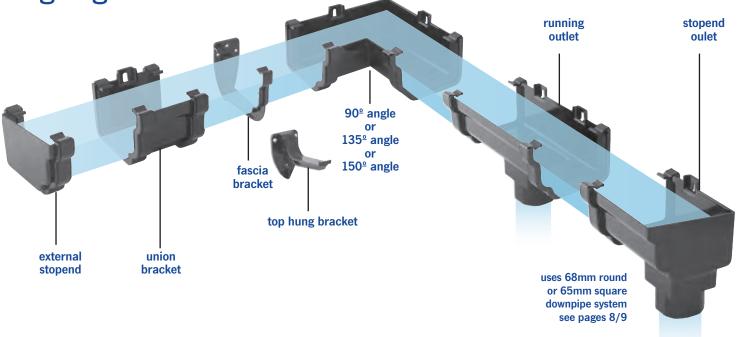
running outlet

colours



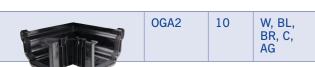
HeightWidthFlow RateArea DrainedDown Pipe70mm120mm2.2 l/s105m²Round/Square (P8/9)

ogee gutter









135º & 150º external angles

10-01	135°	OGA4	10	W, BL, BR, C, AG**
	150°	OGA5	4	o, Au

union bracket

OGU1	8	W, BL, BR, C, AG

external stopend OGE1 (L) 10 W, BL, BR, C, AG

gutter brackets

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

OGO1 10 W, BL, BR, C, AG

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

handed ogee/deep gutter adaptors

7164				
	*ogee/deep	OGD1	1	W. BL.
	*deep/ogee	OGD2	1	BR

handed square/ogee gutter adaptors

		*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

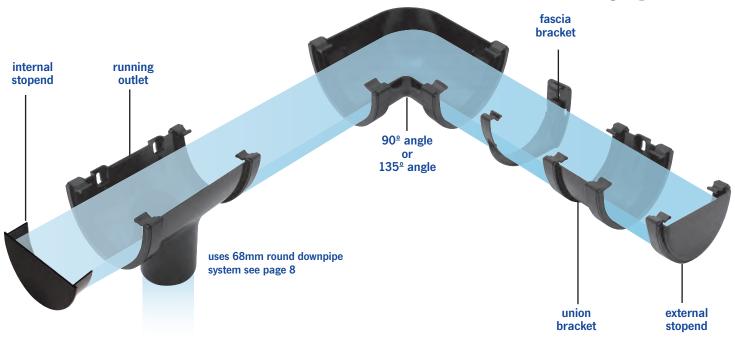
^{*}Gutter adaptors - description denotes which side each section is on when looking at the building.

^{**}Only applicable to OGA4 and OGK1

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

Kayflow

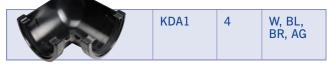
deep gutter



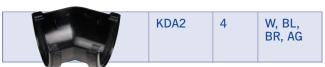
deep gutter

,		and a Barrers
code	pk	colours
KDG4	6x4m	W, BL, BR, AG

90º angle



135º angle



internal/external stopend



reversible gutter adaptors

deep/round	KFD9	1	W, BL, BR
deep/square	KFD10	1	
		_	_

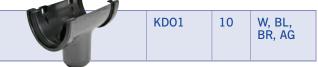
handed ogee/deep gutter adaptors

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

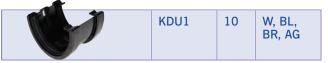
fascia bracket

KDK1 100 W, BL, BR, AG	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



	- 1		-	- 4
round 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
		ı		pipe clip
رے		KFC1	100	W, BL, BR, GY, AG
		con	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
				112.5° branch
		KFY1	10	W, BL, BR, GY, AG
	5	quare/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

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.

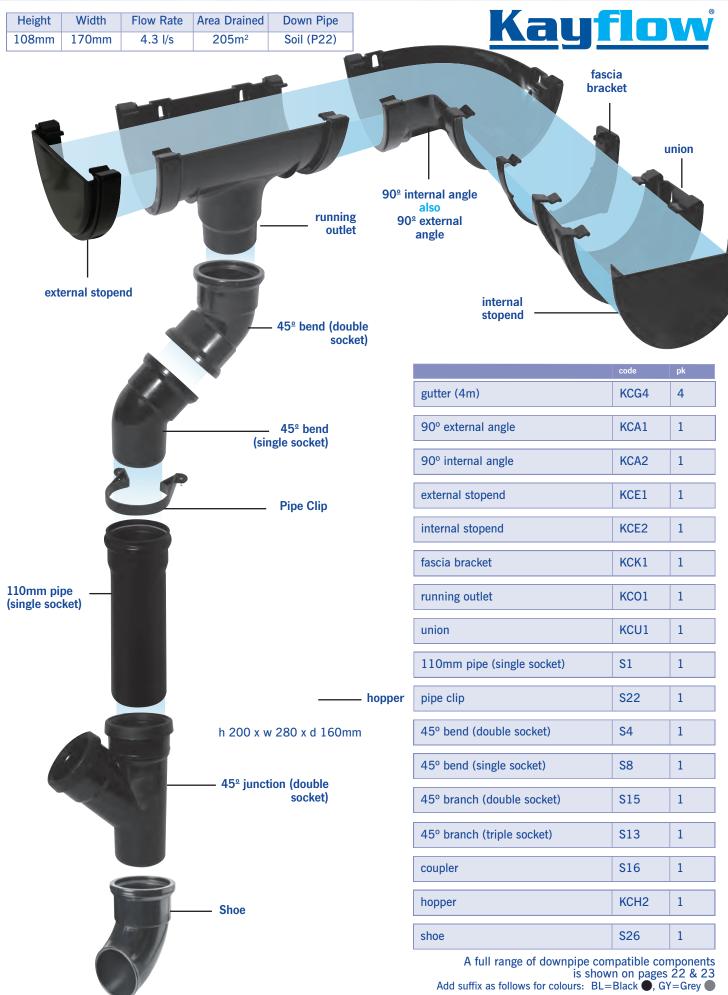
At 170mm from rim to rim SuperDeep 170 has a huge reservoir and is designed to move water rapidly into and down a 100mm or 110mm down pipe.

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







www.kayflow.co.uk

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
112.5° branch	KFY1	1

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

Cast Iron Effect

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

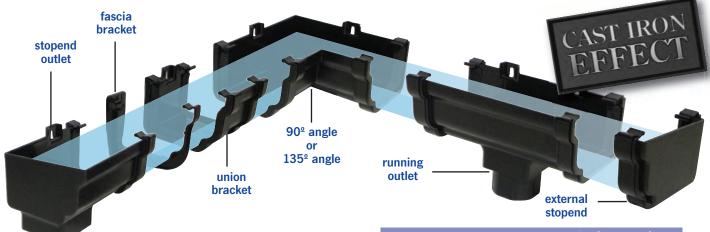


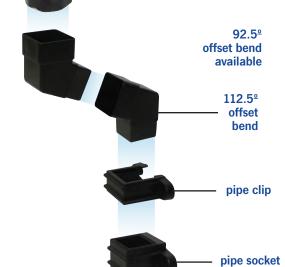


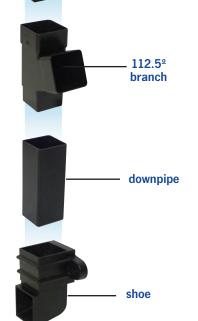
HeightWidthFlow RateArea DrainedDown Pipe70mm120mm2.2 l/s105m²Round/Square

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	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

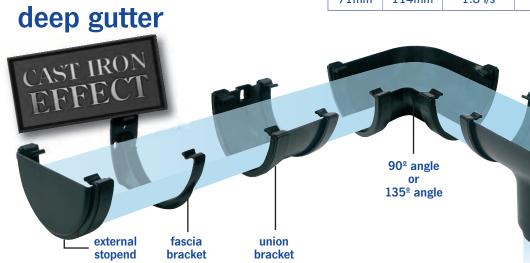
Kayflow[®]

HeightWidthFlow RateArea DrainedDown Pipe71mm114mm1.8 l/s86m²Round

running outlet

internal stopend

92.5° offset bend



Stopend	Dracket	Dracket	
		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.



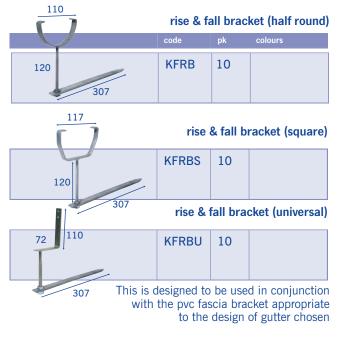
NEW SQUARE additions to the **Anthracite Grey range**

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



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







110mm underground pipe & fittings



110mm underground fittings



1

UG1011



UG107 BUG107 60 UG105 Grid ONLY 1 BUG105 Grid ONLY 200

square hopper

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

rectangular hopper		
UG104 BUG104	1 20	
UG105 Grid ONLY BUG105 Grid ONLY	1 200	

	rodding eye
UG1012 BUG1012	1 20

		level invert reducer		
		UG115 BUG115	1 230	
160 × 110 mm				

160 x 110mm

plastic to cla	y adaptor
UG1009	1

160mm underground pipe & fittings



<u>Kayflow</u>

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



320 square lid adaptor UG1013 20 BUG1013

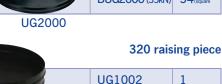


320 manhole cover and frame UG1000 BUG1000 54_(round) UG2000 (35kN) BUG2000 (35kN) 54_{(sqt}

UG1000 1.5tonne/15kN loading

1 x Main Entry

2 x 45° Entries



BUG1002



320 manhole base UG1004 BUG1004 56

99

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

450 manhole cover and frame

Note: Dimensions shown denote the installed height

of each item



200mm

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	/repair coupler
With		S17	1	BL, GY



S1 1x3m WH



90° short access bend (single socket)

S11 BS11	1 20	BL, GY, WH



15º bend (single socket)

S10 BS10	1 40	BL, GY, WH
D310	40	



15º bend (double socket)

S6



30º bend (single socket)

S9 BS9	1 40	BL, GY, WH



30º bend (double socket)

S5 BS5	1 40	BL, GY, WH



45º bend (single socket)

S8 1 BS8 30	BL, GY, WH
----------------	------------



45º bend (double socket)

S4 BS4	1 30	BL, GY, WH



90º bend (single socket)

S7	1	BL, GY, WH
BS7	20	DL, GI, WII

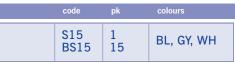


90º bend (double socket)

|--|

110mm soil







45º branch (triple socket)

	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
--	-------------	---------	------------



access junction (double socket)

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



air admittance valve

S24 1 BS24 24 BL	., GY, WH
---------------------	-----------



straight access pipe (single socket)

|--|



S21 BS21 1 40 BL, GY, WH

pipe clip

cowl

50mm strap boss

	S50 BS50	1 10	BL, GY, WH
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40mm adaptor

	S40 BS40	1 10	BL
--	-------------	---------	----



end plug/cap

S20	1	BL, GY
BS20	100	BL

32mm adaptor

	S32 BS32	1 10	BL
--	-------------	---------	----



universa	l pipe l	lu	bricar	ľ
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UPL1	1kg	1
UPL2.5	2.5kg	1

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:

Andy Swain

National Business Development Manager 01827 317200 07778 176354 aswain@swishbp.co.uk

For technical rainwater enquiries, contact:

Technical Department

01827 317200 07901 851765 dosborne@swishbp.co.uk



Pioneer House, Mariner, Lichfield Road Industrial Estate, Tamworth Staffordshire B79 7TF

Tel: 01827 317269 • Fax: 01827 317217

Email: info@kayflow.co.uk

www.kayflow.co.uk

