



RAINWATER, UNDERGROUND & SOIL SYSTEMS





CADCO is an independent family run business providing a full range of U-PVC, PVC-UE Roofline, cladding and window finishing products for the domestic, building and construction sectors.

As a family run business we understand the needs of our customers and place huge value on trust, cooperation and long lasting relationships. We have built a strong and modern brand with items to interest a wide variety of end users.

Proactive decision making and regular communication with our customers, putting them at the heart of what we do, has led to the growth of our business. We aim to take the complications, hassle and supply chain difficulties out of your purchasing process.



www.cadconi.com

## Contents

#### Standard Gutters & Down Pipes ...... 4–9

- ✓ 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

#### SuperDeep 170...... 10–11

- ✓ 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
- ✓ Kitemarked

#### Specification & Installation Guide for Guttering ..... 12–13

#### Underground Drainage..... 14–18

- ✓ 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

#### Soil ...... 19–21

- ✓ 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\*\*

\*Excludes Caramel. \*\*For scope refer to the manufacturer.











## Half Round Gutter



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

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

# **Square Gutter**

Height	Width	Flow Rate	Area Dra	ined Do	own Pipe				
7mm	117mm	1.6 l/s	76m <sup>2</sup>	Round	/Square (P8/9	)			
topen outle	nd t		running outlet	r J		90° angle or	fascia		
		or dov	668mm ro 65mm squ wnpipe sys see pages a	uare stem		35° angle	bracket u	nion acket interr stope	nal extended and stop
		code	pk	square gutte colours	r		code	pk	running outle
		KFGS4	pk 4 6x4m	colours W, BL, BR, C	r		code KFOS1		
			pk 4 6x4m	colours	r			pk	colours
		KFGS4	pk 4 6x4m	colours W, BL, BR, C				рк 20	Colours W, BL, BR, C
		KFGS4	pk       4     6x4m       5     6x5m	colours W, BL, BR, C W, BL, BR				рк 20	Colours W, BL, BR, C
		KFGS4 KFGS	pk       4     6x4m       5     6x5m	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR,	e (		KFOS1 KFOS2	pk       20       20       20	W, BL, BR, C
		KFGS4 KFGS	pk       4     6x4m       5     6x5m       10     10	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C	e (	Square/rour	KFOS1 KFOS2 rever	pk       20       20       20	colours W, BL, BR, C stopend outle W, BL, BR, C
		KFGS4 KFGS1	pk       4     6x4m       5     6x5m       10     10	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C 135° angl	e (	square/rour square/dee	KFOS1 KFOS2 rever nd KFDS3	pk 20 20 20 sible g	Colours W, BL, BR, C stopend outles W, BL, BR, C utter adaptors
		KFGS4 KFGS5 KFAS1	pk       4     6x4m       5     6x5m       10     10       2     10	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C 135° angl	e e	square/dee	KFOS1 KFOS2 rever nd KFDS3 p KFD10	pk       20       20       20       sible g       10       1	colours     W, BL, BR, C     stopend outle     W, BL, BR, C     utter adaptors     W, BL, BR
		KFGS4 KFGS5 KFAS1	pk       4     6x4m       5     6x5m       10     10       2     10       rmal/inte	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C 135° angl W, BL, BR, C	e e	square/dee	KFOS1 KFOS2 rever nd KFDS3 p KFD10 ded round/o	pk       20       20       20       sible g       10       1	colours     W, BL, BR, C     Stopend outles     W, BL, BR, C     W, BL, BR, C     Utter adaptors     W, BL, BR     W, BL, BR     W, BL, BR     W, BL, BR
		KFGS4 KFGS5 KFAS1 KFAS2 exte	pk       4     6x4m       5     6x5m       10     10       2     10       ernal/inte     100	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C 135° angl W, BL, BR, C	e e	square/dee hanc	KFOS1 KFOS2 rever nd KFDS3 p KFD10 ded round/o	pk       20       20       sible g       10       1	colours     W, BL, BR, C     stopend outle     W, BL, BR, C     utter adaptors     W, BL, BR     W, BL, BR     W, BL, BR     utter adaptors     utter adaptors
ext C		KFGS4 KFGS1 KFAS1 KFAS2 exte KFES1	pk       4     6x4m       5     6x5m       10     10       2     10       rrnal/inte     100       2     20	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C 135° angl W, BL, BR, C	e e e e e e e e e e e e e e e e e e e	square/dee hanc	KFOS1 KFOS2 rever nd KFDS3 p KFD10 ded round/o	pk   20   20   20   20   20   20   30   30   10   1   00   1   1	colours     W, BL, BR, C     stopend outles     W, BL, BR, C     Utter adaptors     W, BL, BR
		KFGS4 KFGS1 KFAS1 KFAS2 exte KFES1	pk       4     6x4m       5     6x5m       10     10       2     10       vrnal/inte     100       2     20	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C 135° angl W, BL, BR, C rnal stopend W, BL, BR, C W, BL, BR	e e e e e e e e e e e e e e e e e e e	square/dee hanc	KFOS1 KFOS2 rever nd KFDS3 p KFD10 ded round/o	pk   20   20   20   20   20   20   30   30   10   1   00   1   1	colours     W, BL, BR, C     stopend outle     W, BL, BR, C     W, BL, BR, C     W, BL, BR, C     W, BL, BR, C     W, BL, BR     W, BL, BR
		KFGS4 KFGS5 KFAS1 KFAS2 exte KFES1 KFES2	pk       4     6x4m       5     6x5m       10     10       2     10       2     10       2     20       2     100       2     100       2     100       2     100       2     100	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C 135° angl W, BL, BR, C W, BL, BR, C W, BL, BR fascia bracke W, BL, BR, C	e e e e e e e e e e e e e e e e e e e	square/dee hanc	KFOS1 KFOS2 rever nd KFDS3 p KFD10 ded round/o are OGS1 gee OGS2	pk   20   20   20   20   20   10   1   1   1   1   10   10   10   10   10   10	colours     W, BL, BR, C     stopend outles     W, BL, BR, C     W, BL, BR, C     utter adaptors     W, BL, BR     W, BL, BR     W, BL, BR     W, BL, BR     utter adaptors     W, BL, BR     rafter brackes
×t		KFGS4 KFGS5 KFAS1 KFAS2 exte KFES1 KFES2	pk       4     6x4m       5     6x5m       10     10       2     10       2     10       2     20       2     100	colours W, BL, BR, C W, BL, BR 90° angl W, BL, BR, C 135° angl W, BL, BR, C rnal stopend W, BL, BR, C W, BL, BR	e e e e e e e e e e e e e e e e e e e	square/dee hanc	KFOS1 KFOS2 rever nd KFDS3 p KFD10 ded round/o are OGS1 gee OGS2	pk   20   20   20   20   20   10   1   1   1   1   10   10   10   10   10   10	colours     W, BL, BR, C     stopend outle     W, BL, BR, C     W, BL, BR, C     W, BL, BR, C     W, BL, BR, C     W, BL, BR     W, BL, BR

### **Ogee Gutter**



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

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

### **Deep Gutter**



h 150 x w 247 x d 165mm

## **Round Down Pipe**



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

# **Square Down Pipe**

		code	SC pk	uare down pipe			
	2 Em			W, BL, BR, C, AG			
	2.5m	KFPS25	6	W, BL, BR, C, AU			
	4m	KFPS4	6	W, BL, BR, AG			
	5.5m	KFPS55	6	W, BL, BR, C, AG			
			9	2.5° offset bend			
		KFBS1	20	W, BL, BR, C, AG			
			11	2.5° offset bend			
		KFBS2	30	W, BL, BR, C, AG			
				shoe			
		KFBS3	30	W, BL, BR, C, AG			
				pipe clip			
$\sim$		KFCS1	100	W, BL, BR, C, AG			
				pipe clip (flush)			
~		KFCS2	100	W, BL, BR, C			
		h	opper	(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			
square/round down pipe adaptor							
		KFDS2	10	W, BL, BR, C			
			sq	uare access pipe			
3		KFSAP	1	W, BL, BR			

- 65mm x 65mm
- use with square and ogee



### SuperDeep 170

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





Add suffix as follows for colours: BL=Black, GY=Grey Note Please order as single items but in multiples of pack quantity only



# 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 x 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).

<b>Roof Pitch</b>	<b>Pitch Factor</b>		
10°	1.088		
20°	1.182		
30°	1.288		
40°	1.419		



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 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.

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	1,000mm	
Square	2 x 25 x 4mm or 1 x 32 x 5mm	2 x 25 x 5mm	1,000mm	
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	800mm	

#### **Minimum Specification for Fascia brackets**

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

#### **System Specifications**

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

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

#### **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

- 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.
- 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 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.
- 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 inservice performance.

# Soil & Underground Systems



# Soil & Underground Systems



# 110mm Underground Pipe & Fittings



# **110mm Underground Fittings**



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

# **160mm Underground Pipe & Fittings**



## **Inspection Chambers**



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

# 110mm Soil Pipe & Fittings



Codes beginning with 'B' denote

the specific BULK quantity shown.

Add suffix as follows for colours: BL=Black, GY=Grey, WH = White Note Please order as single items but in multiples of pack quantity only

# 110mm Soil Fittings

( = 0	hur 1	(dealer
45° code	prancr	n (double socket)
S15 BS15	рк 1 15	BL, GY, WH
90° I	branch	(double socket)
S14 BS14	1 15	BL, GY, WH
-		(double socket)
S18 BS18	1 12	BL, GY, WH
straight acco S25 BS25	ess pip 1 18	e (single socket) BL, GY, WH
		Omm strap boss
S50 BS50	1 10	BL, GY, WH
		40mm adaptor
S40 BS40	1 10	BL
532	1 10	32mm adaptor

### **Anthracite Grey**

### NEW SQUARE additions to the Anthracite Grey range

The Anthracite Grey 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.



# Cadco have a comprehensive range of Rainwater, Soil and Underground drainage products.

The Cadco range is ideal for builders merchants and PVC stockists. Cadco have a straight forward pricing structure, a national delivery service and low minimum order levels.

Our rainwater products can be specified with confidence and the Cadco team are on hand to help with questions concerning flow rates and installation procedures.

Installers have a wide choice of rainwater products and the quality and fit of the clipping system is widely regarded as the best in the market.

# **Channel Drain**

### **Underground Channel Drain**



	Description	Specification	Pack Quantity
Α.	1 metre P/Pro Channel & Grate	5 Tonne	72
В.	P/Pro Channel Drain Block	-	10
C.	P/Pro Channel Drain Outlet	-	50
D.	P/Pro Channel Drain Stop End	-	50



**Tel:** +44 (0)28 6772 2217 **Email:** sales@cadconi.com



www.cadconi.com