



# Rainwater Systems

Issue 1

# Contents



#### **Standard Gutters**

#### Page 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 5 colours
- Lightweight for ease of storage and transportation
- Low maintenance
- Durable and tough
- Kitemarked

#### 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

#### **Cast Iron Effect Gutters 12-14**

- 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

\*Excludes Caramel and Grey.



**Building**Products

Tel: 0845 9000 525 Fax: 0845 9000 524 Email: sales@newplas.co.uk Web: www.newplas.co.uk

Unit 1 Sandown Enterprise Park Sandown Road, Derby DE24 8SR





# NewPlas has an extensive range of Rainwater products

that is ideal for builders merchants and PVC stockists. NewPlas is easy to deal with having a straight forward pricing structure and a national delivery service with low minimum order levels.

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

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



**Rise/Fall Brackets** are galvanised or zinc plated for excellent water resistance.

# YY

Cast Iron Effect complete system with bespoke components for an authentic cast iron appearance.

# Accessories

Side Rafter Bracket

#### **Rise and Fall Bracket (Half Round)**

nise dilu Fa	п ргаскет (п	ali nouliuj		31	ue nait	er bracket
Code	e Pk	Colour	li de la companya de	Code	Pk	Colour
NPKF	RB 1			NPKFSRB	1	
			ł			
Rise ar	d Fall Bracke	et (Square)		Т	op Raft	er Bracket
	RBS 1		F	NPKFTRB	1	
			Ra	inwater Dive	rter and	l Leaf Trap
	Fall Bracket (	(Universal)		NPKFRD1	1	W, BL
NPRF	RBU 1			Норре	er (Squa	re/Round)
Metal brackets plated for exce				NPKFHS1	10	W, BL, BR, C, GY

			Heig			low Rate	Drained	Down Pip	
Half Round (	Gutter		50m	m 112	2mm	0.9 l/s	43m <sup>2</sup>	Round (P8)	
		1	MEL						508760
		-	Ĵ		Ś		· .	running outlet	
	Ĵ					5	1	NR.	1
								J	
				90°		uses 68m round downpipe			
o/tto///ta/	union bracket	fascia bracke	et	or 135° ang	le	system			rnal bend
etopona								,	
		Half Rou	und Gutter					Runi	ning Outlet
	Code	Pk	Colour			7	Code	Pk	Colour
	NPKFG4 NPKFG5	6x4m 6x5m	W, BL, BR, GY, W, BL		Q		NPKFO1	20	W, BL, BR, GY
		o kom							
	NPKFA1	20	90° Angle W, BL,		7		Square/Rou NPKFDS3		_
		20	BR, GY			<b>y</b>	NEM DOS	10	BR
			135° Angle				Round/Oge	e Gutte	r Adaptors
	NPKFA2	20	W, BL, BR, GY		jÌ	*ogee/round *round/ogee	NPKFD7 NPKFD8	1 1	W, BL W, BL
	External/	Internal	Stopends				S	ide Raft	er Bracket
ext int	NPKFE1 NPKFE2	100 20	W, BL, BR, GY	(			NPKFSRB	1	
		Fasc	ia Bracket	ł			1	fop Raft	er Bracket
	NPKFK1	100	W, BL, BR, GY				NPKFTRB	1	
		Unic	on Bracket	Ţ			Норг	per (squ	are/round)
THE P	NPKFU1	30	W, BL, BR, GY	۲	F		NPKFHS1	10	W, BL, BR, C, GY
	ter adaptors - desc section is on wher					h 150 x w	v 247 x d 165mr	n	

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

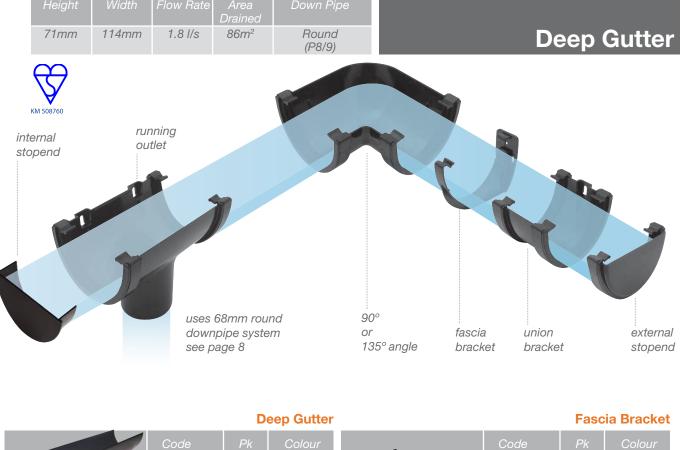
Add suffix as follows for colours: W=White, BL=Black, BR=Brown, C=Caramel, GY=Grey Note: Please order as single items but in multiples of pack quantity only  $% \mathcal{A} = \mathcal{A} = \mathcal{A}$ 

Height Width 57mm 117mm	Flow Rate 1.6 l/s	Area Drained 76m²	Down Pipe Round/Squar (P8/9)		Squ	are	Gutter
KM 508760			(1 0/0)				
stopend outlet	running outlet		7				
	uses 68mm ro or 65mm squa downpipe sys see page 8/9	are			scia union acket bracke	intern et stope	0,110,110,1
		Squ	are Gutter			Runr	ning Outlet
	Code	Pk	Colour		Code	Pk	Colour
		6x4m 6x5m	W, BL, BR, C, W, BL, BR	Ve	NPKFOS1	20	W, BL, BR, C
			90° Angle			Stop	end Outlet
	NPKFAS1	10	W, BL, BR, C		NPKFOS2	20	W, BL, BR, C
• •			135° Angle		Square/Rou	nd Gutt	er Adaptor
	NPKFAS2	10	W, BL, BR, C		NPKFDS3	10	W, BL, BR
	External /	Interna	al Stopend		Square/Oge	e Gutte	r Adaptors
	NPKFES1	100	W, BL, BR, C	*ogee/square		1	W, BL
ext	NPKFES2	20	W, BL, BR	square/ogee	NPKFD6	1	W, BL
•		Fasc	ia Bracket	-	S	ide Raft	er Bracket
V	NPKFKS1	100	W, BL, BR, C		NPKFSRB	1	
		Unic	on Bracket	ų	1	op Raft	er Bracket
	NPKFUS1	30	W, BL, BR, C		NPKFTRB	1	

	_	-	Heig	ht Width	Flow Rate	Area	Down Pij	De
Ogee Gutter			70m	m 120mm	2.2 l/s	Drained 105m <sup>2</sup> R	ound/Sqi	uare
				90°, 135°	use rou squ	runnin outlet	(P8/9) g KM	stopend oulet
onconnan		fascia bracket	top hung bracket	or 150° angle		stem e pages 8/9		
		O	gee Gutter				Extern	al Stopend
	Code	Pk	Colour			Code	Pk	Colour
	NPOGG4	4x4m	W, BL, BR, C	L/H	R/H	NPOGE1(L) NPOGE2(R		W, BL, BR, C
		90° Inte	rnal Angle				Gutte	er Brackets
	NPOGA1	10	W, BL, BR, C		scia top hung	NPOGK1 NPOGK2	100 20	W, BL BR, C
		90° Exte	rnal Angle				Run	ning Outlet
	NPOGA2	10	W, BL, BR, C		7	NPOGO1	10	W, BL, BR, C
	1	35° Inte	rnal Angle		ſ		Stope	end Outlets
	NPOGA3	10	W, BL, BR, C		R/H	NPOGO2(F NPOGO3(L	R) 10	W, BL, BR, C
	135° & 15	0° Exter	nal Angles			Square/Oge	e Gutte	r Adaptors
135° 150°	NPOGA4 NPOGA5	10 4	W, BL, BR, C		*ogee/square square/ogee	NPKFD5 NPKFD6	1 1	W, BL W, BL
		Unic	on Bracket	-		Round/Oge	e Gutte	r Adaptors
	NPOGU1	8	W, BL, BR, C	<b>S</b> il	*ogee/round *round/ogee	NPKFD7 NPKFD8	1 1	W, BL W, BL
*Gut	ter adaptors - d	escription	denotes whic	h side				

\*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 Note: Please order as single items but in multiples of pack quantity only



Code	Pk	Colour	r	Code	Pk	Colour
NPKDG4	6x4m	W, BL, BR	<b>U</b>	NPKDK1	100	W, BL, BR
		90° Angle	•		Runr	ning Outlet
NPKDA1	4	W, BL, BR		NPKDO1	10	W, BL, BR
		135° Angle			Unic	on Bracket
NPKDA2	4	W, BL, BR		NPKDU1	10	W, BL BR
	Externa	al Stopend			Interna	al Stopend
NPKDE1	10	W, BL, BR,		NPKDE2	10	W, BL, BR

# **Acces**sories

# Rainwater Diverter and Leaf Trap Hopper (Square/Round) NPKFRD1 1 W, BL, NPKFHS1 10 W, BL, h 150 x w 247 x d 165mm 10 W, BL, NPKFHS1 10 W, BL,

#### **Round Down Pipe** • 68mm diameter • Use with Half Round, Square, Ogee & Deep Gutter **Round Down Pipe** running hopper 2.5m NPKFP25 6 outlet NPKFP4 6 4m 5.5m NPKFP55 6

# 92.5° Offset Bend

W, BL,

W, BL, BR, GR

BR, C, GY

W, BL, BR

NPKFB1	20	W, BL, BR, C, GY



### **Pipe Clip**

5	NPKFC1	100	W, BL, BR, C, GY
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### **Concealed Fixing Pipe Clip**



NPKFHS1	10	W, BL, BR, C, GY

### **Pipe Socket**

NPKFS1	20	W, BL, BR, C, GY
	112	2.5° Branch

### **Square/Round Down Pipe Adaptor**

	NPKFDS2	10	W, BL, BR, C
	R	ound A	ccess Pipe
rey nultiples	NPKFAP	1	W, BL, BR

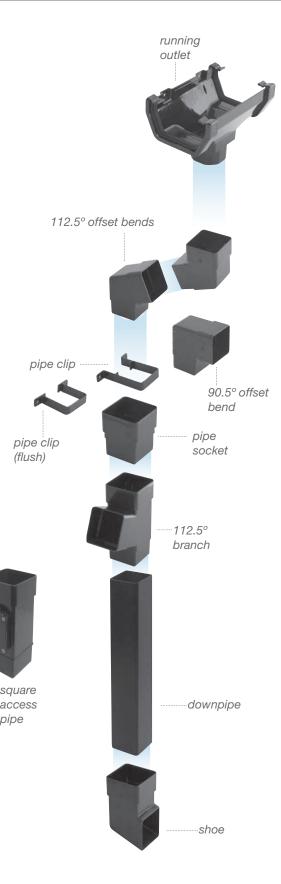


shoe

Add suffix as follows for colours: W=White, BL=Black, BR=Brown, C=Caramel, GY=Gro Note: Please order as single items but in m of pack quantity only

	65mm x 65		
	use with So	-	nd Ogee Gu Down Pipe
	Code	Pk	Colour
2.5m	NPKFPS25	6	W, BL, BR, C
4m 5.5m	NPKFPS4 NPKFPS55	6 6	W, BL, BR W, BL, BR, C
		92.5° O	ffset Bend
	NPKFBS1	20	W, BL, BR, C
	1	12.5° O	ffset Bend
	NPKFBS2	30	W, BL, BR, C
			Shoe
	NPKFBS3	30	W, BL, BR, C
			Pipe Clip
~>	NPKFCS1	100	W, BL, BR, C
		Pipe C	Clip (Flush)
$\sim$	NPKFCS2	100	W, BL, BR, C
	Squa	re/Rou	nd Hopper
	NPKFHS1	10	W, BL, BR, C, GY
		Pi	ipe Socket
	NPKFSS1	20	W, BL, BR, C
		112	.5° Branch
	NPKFYS1	10	W, BL, BR, C
Squa	re/Round Do	own Pip	e Adaptor
	NPKFDS2	10	W, BL, BR, C
	Sq	Juare Ad	ccess Pipe
	NPKFSAP	1	W, BL, BR

# Square Down Pipe



# SuperDeep 170

NewPlas 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 9.4 litres per second when set level, and 10.5 litres per second when set at 1:350.

- Ultra tough, thick-wall system
- 170mm high capacity commercial system
- Designed for high volume capture
- 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
- 10 year guarantee\*



Single fascia bracket fixed to cellular PVC fascia with 30mm x No.10 stainless steel screws, supporting approximately 125kg.





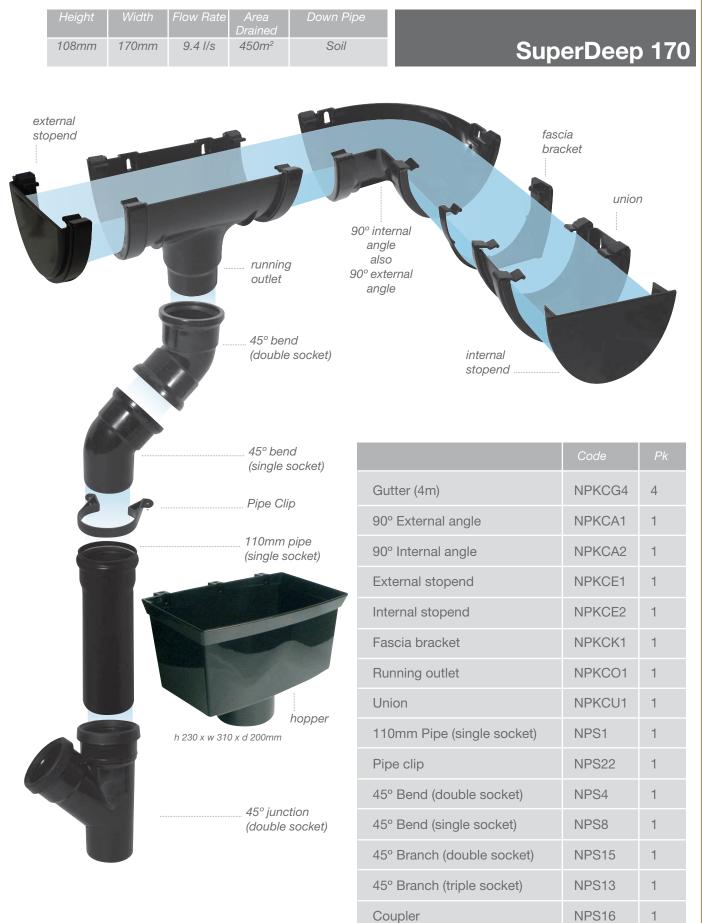
**Deep Flow** (see page 5)

#### SuperDeep 170



10

Add suffix as follows for colours: BI =Black, GY=Grev Note: Please order as single items but in multiples of pack quantity only \*excludes arev



Hopper

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NPKCH1

1

# Cast Iron Effect Half Round Gutter

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

external stopend	union brack	ket	90° or 135° angle		running outlet internal stopend
	Code	Pk			
Gutter (4m)	NPKFG4	1	6		92.5° offset
90° Angle	NPKFA1	1		р.	ipe clip bend
135° Angle	NPKFA2	1			
External stopend	NPKFE1	1		рі	ipe socket
Internal stopend	NPKFE2	1			Cast Iron Effect Complete system with
Fascia bracket	NPKFK1	1			bespoke components for an authentic cast
Running outlet	NPKF01	1		112.5° branch	iron appearance.
Union bracket	NPKFU1	1		Dranch	
Round downpipe (2.5m)	NPKFP2.5	1			
92.5° Offset bend	NPKFB1	1		downpipe	
112.5° Offset bend	NPKFB2	1		downpipe	
Shoe with lugs	NPKFB4	1			
Pipe clip with lugs	NPKFC2	1			
Hopper with lugs	NPKFHS2	1			Charles and the second se
				shoe	2 P
Pipe socket with lugs	NPKFS2	1			

h 258 x w 312 x d 210mm

	Height	Width	Flow Rate	Area Drained	Down Pip	е	Cas	t Iron Ef	ffect
	70mm	120mm	2.2 l/s	105m <sup>2</sup>	Round/Squ	are		ວgee Gເ	
		fascia bracket	bra	13s nion acket	90° or 5° angle	runningoutlet	external stope	end	
		stopen outlet	d					Code	Pk
				92.5° offset bend available		Gutter (4m)		NPOGG4	1
						90° External angle		NPOGA2	1
			offset bend		90° Internal angle		NPOGA1	1	
		offs			135° External angle	Э	NPOGA4	1	
		qiq	pipe clip		135° Internal angle	•	NPOGA3	1	
					External stopend (I	R/H)	NPOGE2	1	
		pipe socket			External stopend (I	L/H)	NPOGE1	1	
			1-1		Fascia bracket		NPOGK1	1	
			1	112.5° branch		Running outlet		NPOGO1	1
		· P				Stopend outlet (R/	H)	NPOGO2	1
						Stopend outlet (L/H	⊣)	NPOGO3	1
					Union bracket		NPOGU1	1	
			downpipe		Square downpipe	(2.5m)	NPKFPS2.5	1	
		-			112.5° Offset bend	I	NPKFBS2	1	
		dov			92.5° Offset bend		NPKFBS1	1	
						Shoe with lugs		NPKFBS5	1
				shoe		Pipe clip with lugs		NPKFCS4	1
			SNC			Pipe socket with lu	igs	NPKFSS2	1
						112.5° Branch		NPKFYS1	1

# www.newplas.co.uk

Hopper with lugs

NPKFHS2 1

# Cast Iron Effect Deep Gutter

Height	Width	Flow Rate	Area Drained	Down Pipe
71 <i>mm</i>	114mm	1.8 l/s	86m <sup>2</sup>	Round

tascia bracket stopend	union brack	ket	yo° angle
	Code	Pk	
Gutter (4m)	NPKDG4	1	92.5° offset
90° Angle	NPKDA1	1	bend pipe clip
External stopend	NPKDE1	1	
Internal stopend	NPKDE2	1	pipe socket
Fascia bracket	NPKDK1	1	
Running outlet	NPKDO1	1	
Union bracket	NPKDU1	1	112.5° branch
Round downpipe (2.5m)	NPKFP2.5	1	
92.5° Offset bend	NPKFB1	1	
112.5° Offset bend	NPKFB2	1	downsting
Shoe with lugs	NPKFB4	1	downpipe
Pipe clip with lugs	NPKFC2	1	
Hopper with lugs	NPKFHS2	1	
Pipe socket with lugs	NPKFS2	1	shoe
112.5° Branch	NPKFY1	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.

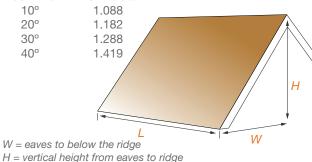
Volume of water coming off a roof =  $A \times B$  where:

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)

#### **Roof Pitch** Pitch Factor



L = length of roof section

#### Which Gutter to Choose

**System Specifications** 

Compare the result of the calculation (AxB) with the flow capacity of the NewPlas 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 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.

#### 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		1m
Square	2 x 25 x 4mm or 1 x 32 x 5mm		1m
Deepflow	2 x 25 x 4mm or 1 x 32 x 5mm	2 x 25 x 5mm	1m
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	1m

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

Gutter Type	Flow rate Central Outlet (gutter laid level)	Area Drained	'Short' length gutter	Downpipe
Round	0.9I/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	9.4l/s	450m <sup>2</sup>	5.45m	100/110mm Round
Cast Effect Round	0.9I/s	43m <sup>2</sup>	2.4m	68mm Round
Cast Effect Ogee	2.2l/s	105m <sup>2</sup>	3.4m	68mm Round, 65mm Square
Cast Effect Deep	1.8l/s	86m <sup>2</sup>	3.4m	68mm Round

Important Information The potentially adverse effects on a poorly secured outter system of high intensity rainfall and periods of standing snow, with prolonged freeze/thaw loading, highlight the importance of following the recommended fixing centres and other gutter positioning advice. For further advice on the specification and installation of NewPlas gutters please email sales@ newplas.co.uk or call 0845 9000 525.



# **Building**Products

Tel: 0845 9000 525 Fax: 0845 9000 524 Email: sales@newplas.co.uk Web: www.newplas.co.uk

Unit 1 Sandown Enterprise Park Sandown Road, Derby DE24 8SR