



# RAINWATER CALCULATIONS

# RAINWATER CALCULATIONS

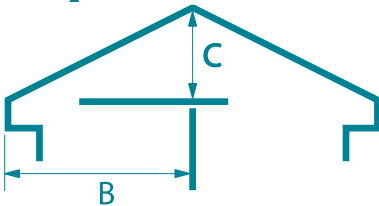
**On face value, guttering installation is a piece of cake, but it is amazing how many installers get it wrong.**



## Step One: Calculate Effective Maximum Roof Area

This can be calculated by using the following formula (see diagram below):

$$B + \frac{C}{2} \times \text{length of roof} = \text{area in m}^2$$



### Calculating effective roof areas where gutter angles are installed

**Effect of angles** – If a length of eaves gutter includes an angle, the flow in the gutter will be impeded and its capacity reduced by 15%. Where an angle occurs in a length of gutter served by two outlets, the reduction factor of 0.85 should only be applied to that part of the gutter in which the angle obstructs the flow. These figures are based on a rainfall intensity of 75mm/hr, roof pitch not exceeding 50°, gutters running full.

Refer to BSEN 12056, Part 3: Roof drainage, layout and calculations.

## GOOD TIP



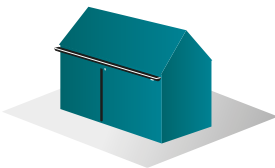
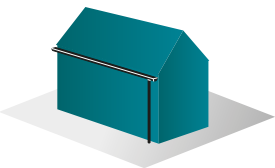
### Installation Tips

- For gutter fixings onto wooden fascias use 25mm x No.10 round head rust proof screws
- For gutter fixings onto PVC fascias use 35mm x 5mm No.10 parallel thread zinc plated or stainless steel, recess pan head, single-start self tapping screws
- For downpipe supports use 32mm x No.10 screws to masonry wall plugs

# It's simple with Hunter Surefit!

An easy to use rainwater calculator can be found on our website [www.hunterplastics.co.uk](http://www.hunterplastics.co.uk)

## Step Two: Select Your CONFIGURATION and Profile

Flow Capacity:		Gutter Fixed Level		Gutter Fixed at 1:350	
		Gutter Flow (Litres/Sec)	Roof Area m <sup>2</sup>	Gutter Flow (Litres/Sec)	Roof Area m <sup>2</sup>
Downpipe at centre  	<b>HALF ROUND</b>				
	76mm	0.7	34	0.8	38
	112mm	1.8	86	2.6	125
	<b>SQUAREFLO</b>	3.2	154	3.8	182
	<b>125</b>				
	68mm (Downpipe)	3.8	182	4.6	221
	82mm (Downpipe)	4.0	191	4.9	235
	<b>REGENCY</b>	4.2	202	4.7	226
	<b>HIGHFLO</b>	5.4	258	6.0	289
	<b>STORMFLO</b>				
	110mm	11.1	534	12.4	598
	160mm	12.5	601	14.0	673
Downpipe at end  	<b>HALF ROUND</b>				
	76mm	0.5	24	0.6	29
	112mm	0.9	43	1.3	62
	<b>SQUAREFLO</b>	1.6	77	2.0	96
	<b>125</b>				
	68mm (Downpipe)	2.1	101	2.4	115
	82mm (Downpipe)	2.2	106	2.5	120
	<b>REGENCY</b>	2.1	101	2.3	110
	<b>HIGHFLO</b>	2.8	136	2.9	137
	<b>STORMFLO</b>				
	110mm	5.9	282	5.9	284
	160mm	6.6	318	6.7	320

## Compatibility Table

	Rainwater			Waste	Soil		Underground	
	Half Round	Squareflo	125	110mm	Push-fit	Solvent	110mm	160mm
Hepworth	✓	✓	✓	✓	✓	✓	✓	✓
Marley	✓	✗	✓	✓	✓	✓	✓	✓
Osma	✓	✗	✓	✓	✓	✓	✓	✓
Polypipe	✓	✓	✓	✓	✓	✓	✓	✓
Brett	✓	✗	✓	✓	✓	✓	✓	✓

Hunter products are compatible with many other manufacturers' systems and with traditional cast iron and aluminium systems.



If you'd like to know more about any of our products or services, contact us using the details below.  
One of our team will be happy to help in any way.

Tel: **01480 461103** Fax: **01480 461102** Email: [info@trimformfabs.co.uk](mailto:info@trimformfabs.co.uk) Website: [trimformfabs.co.uk](http://trimformfabs.co.uk)

Due to a programme of continuous development, Hunter Plastics Ltd. reserve the right to revise or alter any information pertaining to their products without prior notice.

All products are manufactured using a quality management system that has been assessed by BSI as complying with the requirements of BS EN ISO9001:2000

Hunter holds many kitemark licences. Products conforming to the appropriate standards are kitemarked. Additional ranges are covered by BBA certificates or compatible European standards (EN's).

All goods are sold according to Hunter Plastics Ltd standard conditions of sale, which are available on request.

Hunter Plastics Ltd reserves the right, in view of their continuous programme of development, to revise or alter their range of products and prices without prior notice.



### Trimform Products

(A trading division of SIG Trading Limited)  
Harding Way, Somersham Road, St. Ives,  
Huntingdon, Cambridgeshire, PE27 3WR.

