

RAINWATER CALCULATIONS

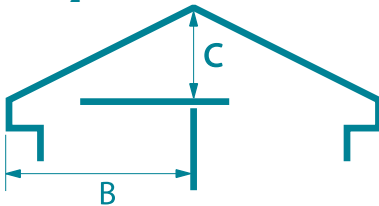
On face value, guttering installation is a piece of cake, but it is amazing how many installers get it wrong.



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

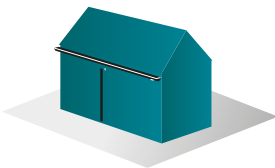
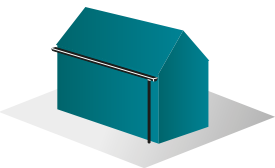
Installation Tips

- 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

Step Two: Select Your CONFIGURATION and Profile

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