



MasterDrain
SW 7.0



<http://www.mstdrain.co.uk>

Seawinds, Carpenters Lane, Brook,
Newport, Isle of Wight PO30 4EU
email: sales@mstdrain.co.uk
Tel: 01983 740064

Job No.		
Sheet no.		1
Date		
24/09/10		
By	Checked	Approved
IJ		

Project	
Title	Roof [protection data for Battle

Data:-

Hydrology:-

Location	= BATTLE	Grid reference	= TQ7515
M5-60 (mm)	= 19.0	SAAR (mm/yr)	= 800
r	= 0.34	Soil	= 0.47
Return period	= 5	Area	= England and Wales

Soil classification for WRAP type 4
Clayey, or loamy over clayey soils with an impermeable layer at shallow depth.

Site values used in design:-

Life of building	= 50 yrs	Time of concentration	= 2 mins
------------------	----------	-----------------------	----------

Results :-

2min-M5 for BATTLE = 106.04mm/hr

Actual depth= 3.53mm

Cat. 1 design rainfall rate=	64mm/hr	-	0.018l/s/m2
Cat. 2 design rainfall rate=	173mm/hr	-	0.048l/s/m2
Cat. 3 design rainfall rate=	211mm/hr	-	0.059l/s/m2
Cat. 4 design rainfall rate=	526mm/hr	-	0.146l/s/m2

Rates are at 2mins into storm.

Definitions:-

- Cat. 1 - Eaves gutters and flat roofs - return period = 1yr
- Cat. 2 - Valley or parapet gutters, or where buildings and contents require additional protection - return period = (1.5 x building life) yrs
- Cat. 3 - A greater degree of security is required than Cat. 2 - return period =(4.5 x building life) yrs
- Cat. 4 - The highest possible security for buildings and contents - return period = 35000 yrs

Calculations derived from formulae in BS EN 12056 - 3:2000
For further information, you are directed to the above document.
N.B. The rainfall rates are calculated using the location specific values above in accordance with the Wallingford procedure.