

Storm Water Dispersal Assessment

Side extension

3 Oriel Close, Barnham, Bognor Regis, PO22 0HN

100% Roof Area (Soakaways to front)

Run off area – 100% run off		46 M ²
100 year 6 hour storm run off		63mm/ M ²
Site run off	46 x 63 / 1000 Average	2.900 M ³ /6 hr <u>0.483M³/hr</u>
Dispersal rate from on site percolation testing 300x300 pit, <u>320 mins</u> to drop 150mm		0.014M ³ /M ² /h
Wavin Aquacell	Volume	0.2 M ³
	Effective Surface Area 50%	0.85 M ²
Assume 42x Aquacell Matrix		
	Dispersal rate = 0.014 x 0.85x42	<u>0.500 M³/hr</u>

Dispersal rate adequate 0.91 M³/hr > 0.746M³/hr

6 hour dispersal rate 0.014 x 42 x 0.85 x 6 3.000 M³

100 year Storm dispersal adequate 3.000 M³ > 2.900 M³

Martin Critchley

Critchley Architecture And Design Ltd.

16th December 2019