


Barratt Homes Manchester		Page 1
4 Brindley Road City Park Manchester M16 9HQ	Chipping Lane Longridge	
Date 10.08.16 File SW Network 1, Rev C.mdx	Designed by CD Checked by SG	
Micro Drainage	Network 2014.1.1	

Online Controls for SW1.SWS

Hydro-Brake Optimum® Manhole: 13, DS/PN: 1.012, Volume (m³): 92.9

Unit Reference MD-SHE-0278-5000-2200-5000
 Design Head (m) 2.200
 Design Flow (l/s) 50.0
 Flush-Flo™ Calculated
 Objective Minimise upstream storage
 Diameter (mm) 278
 Invert Level (m) 102.093
 Minimum Outlet Pipe Diameter (mm) 300
 Suggested Manhole Diameter (mm) 2100

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	2.200	49.8	Kick-Flo®	1.423	40.4
Flush-Flo™	0.654	49.7	Mean Flow over Head Range	-	43.0

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake Optimum® as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	8.7	1.200	46.1	3.000	57.9	7.000	87.3
0.200	28.6	1.400	41.3	3.500	62.3	7.500	90.3
0.300	45.1	1.600	42.7	4.000	66.5	8.000	93.1
0.400	47.7	1.800	45.2	4.500	70.4	8.500	95.9
0.500	49.1	2.000	47.6	5.000	74.1	9.000	98.6
0.600	49.7	2.200	49.8	5.500	77.6	9.500	101.3
0.800	49.4	2.400	51.9	6.000	81.0		
1.000	48.3	2.600	54.0	6.500	84.2		