

StormBrake™

Performance Report



Contractor: Walker Ingram Associates

Site: 124.008 - Wyke

Date: 01/03/2023

Created By: adrian bottomley

Device Ref: FPM-SB1-02150-00350-0100

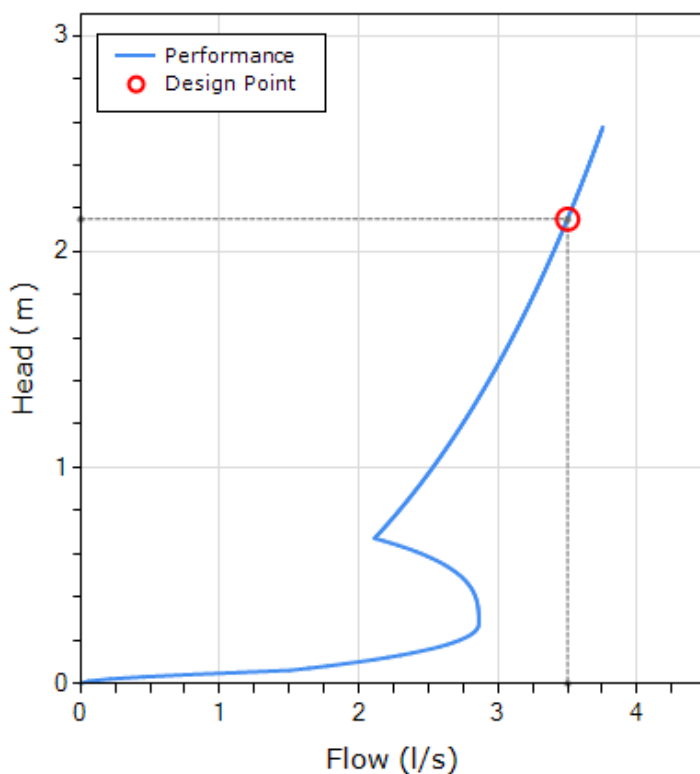
Head(m): 2.15

Flow(l/s): 3.5

Chamber Ref: S8

Mounting Style: LUGS (Default)

StormBrake™ Performance



	Head (m)	Flow (l/s)
Design Point	2.15	3.50
Flush Flow	0.28	2.86
Kick Back	0.67	2.11

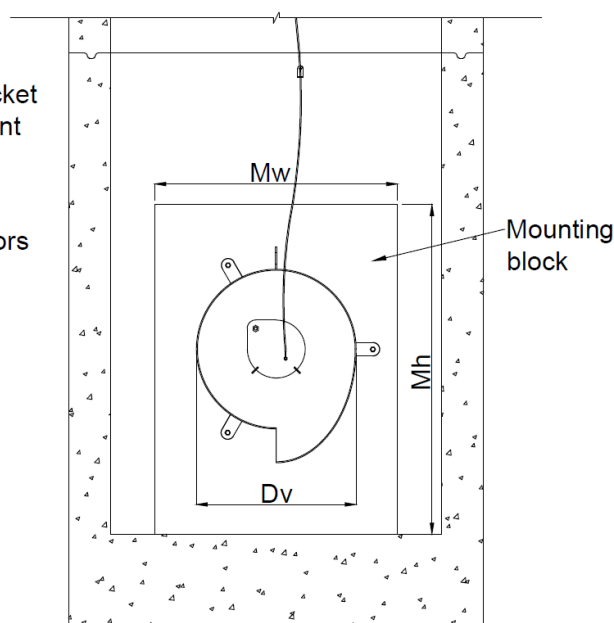
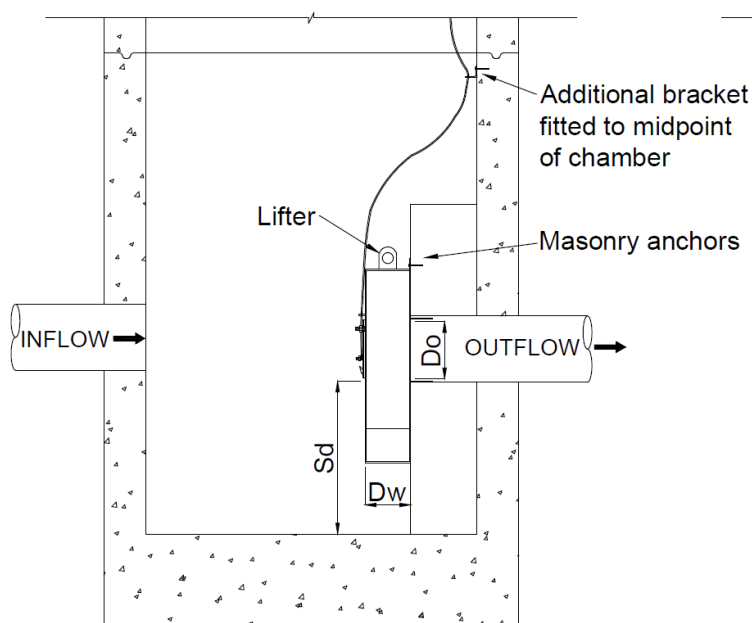
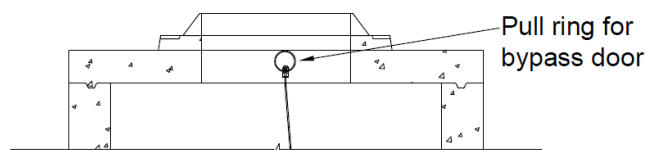
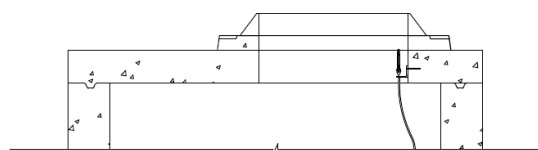
	Dims (mm)
Min. Chamber Diameter	1200
Min. Outlet Pipe Diameter	150
Min. Sump Depth	240

Head (m)	Flow (l/s)
0	0.00
0.09	1.88
0.18	2.62
0.27	2.86
0.36	2.86
0.44	2.80
0.53	2.66
0.62	2.36
0.71	2.17
0.8	2.29
0.89	2.40
0.98	2.51
1.07	2.60
1.16	2.70
1.24	2.79
1.33	2.87
1.42	2.95
1.51	3.03
1.6	3.10
1.69	3.17
1.78	3.24
1.87	3.31
1.95	3.37
2.04	3.43
2.13	3.49
2.22	3.54
2.31	3.60
2.4	3.65
2.49	3.70
2.58	3.75

The unique performance characteristics of this StormBrake™ are derived from extensive dynamic modelling using parametric experimental testing and computational fluid dynamics.

INSTALLATION INSTRUCTIONS

1. Position the StormBrake™ so that the inlet is at the bottom and the device outlet is in line with the chamber outlet pipe.
2. Mark the locations of the mounting points on the chamber/mounting wall.
3. Using the marked locations, drill holes to the required thickness and depth for the supplied masonry anchors (M10 throughbolts require 11 mm holes). Fit the bolts to the holes.
4. Attach the StormBrake™ to the anchor points, ensuring the neoprene gasket is flush with the chamber wall, and fasten the device by tightening the bolts. This will compress the neoprene gasket to provide a watertight seal between the StormBrake™ and the wall.
5. Fix the stainless steel wire cable from the front bypass door to the underside of the manhole cover, vertically above the device. A secondary bracket is supplied and should be fitted halfway up the chamber to guide the bypass door cable to the top.
6. Adjust the length of the bypass door cable accordingly, so that it reaches the ground level whilst ensuring the bypass door can open if required. Ensure the bypass door is closed for normal operating conditions.



Geometry	Annotation	(mm)
Device Vortex Diameter	Dv	388
Device Width	Dw	85
Device Orifice	Do	78
Sump Depth (outlet Ø150mm)	Sd	240
Mounting Block Width	Mw	630
Mounting Block Height	Mh	680

Dimensions quoted are minimum values based on the geometry of this unique StormBrake™ unit. These ensure the device can be fitted to the flow control chamber without restriction and meet the performance specification.