



PARSHALL FLUME

INTRODUCTION

In irrigation, water and waste water treatment plants, the measurement of water flow in open channels is a common practice. However, in order for flow measurement in open channels to be carried out, the cross sectional area of the particular open channel must be fixed so that the level of water head measured in the fixed cross sectional area can be used to calculate the amount of water flowing through the open channel. Parshall flume is one type of predetermined cross sectional area device that is widely used for open channel flow measurement.

APPLICATION

When properly installed, parshall flumes are used for the measurement of water flow through open channels. Typical applications include raw water pumping and waste water discharge flow rate measurement with the use of piezoresistive or ultrasonic open channel flow transmitters. Generally, parshall flumes are recommended for applications in which moderate concentration of sand, grit or other heavy solids exists and fluid velocity entering the flume are sub-critical. The flume operates with a small energy loss or change in channel grade. However, due to its limitation in accuracy, parshall flumes are not recommended in applications where accurate flow measurements are required.

DESIGN FEATURES

Excellent Corrosion Resistance

Parshall flumes are manufactured in one piece construction from fiberglass reinforced polyester resin and is excellent in corrosion resistance.



Easy Installation and Stable

The parshall flumes are precisely moulded with smooth surface and rigidly supported for casting into concrete structures. In addition, all parshall flumes are furnished with 50mm wide flange on top and at all ends for added rigidity and stability.

Sizes

Our parshall flumes are available in the following throat sizes:

1, 2, 3, 6, 9, 12, 18, 24, 36, 48, 60 and 72 inches

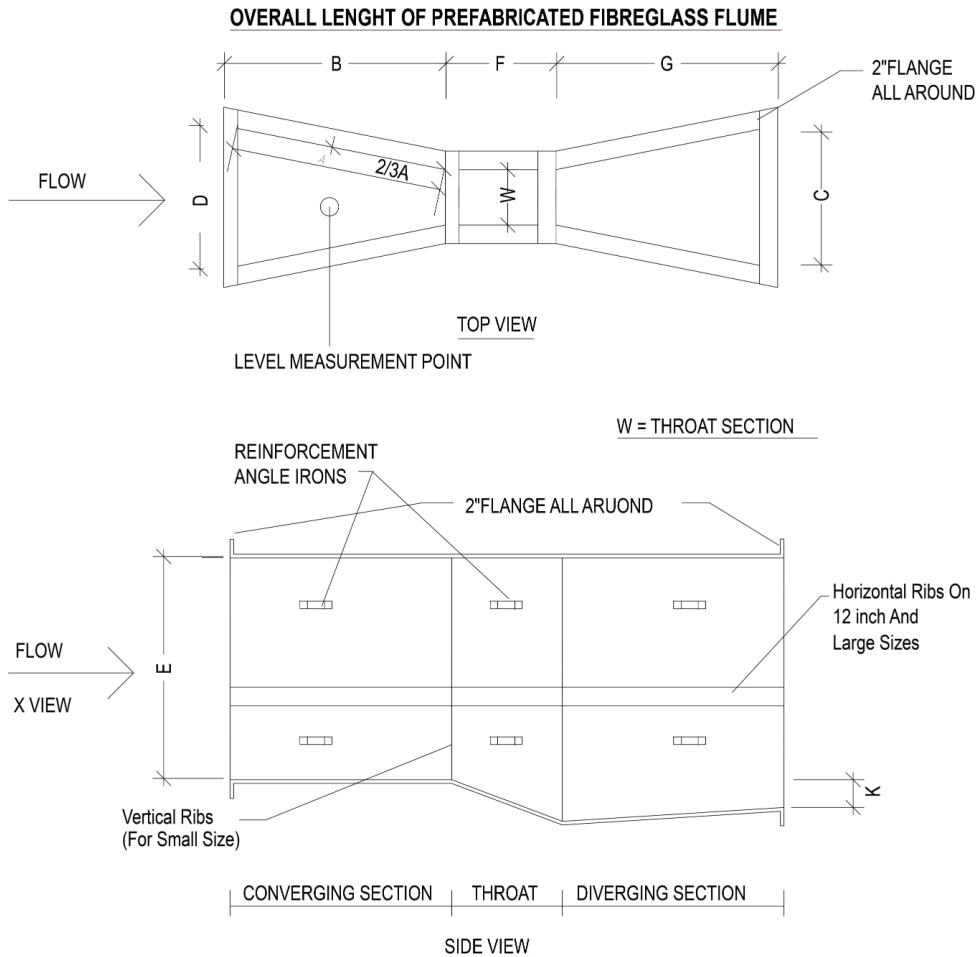
Material of Construction

The parshall flumes are manufactured from high quality fiberglass reinforced polyester resin with embedded mild steel angles as support structures. All exposed support structures are coated with epoxy paint.

DIMENSIONS AND FLOW DATA

THROAT DIAMETER(W) INCHES	MIN FREE FLOW	MAX FREE FLOW	A INCHES	2/3A INCHES	B INCHES	C INCHES	D INCHES	E INCHES	F INCHES	G INCHES	K INCHES
3	0.02 MGD 3.78 M3/H	0.39 MGD 73.86 M3/H	18-3/8	12-1/4	18	7	10-3/32	24	6	12	1
6	0.03 MGD 5.68 M3/H	1.90 MGD 360.00 M3/H	24-7/16	16-5/16	24	15-1/2	15-5/8	24	12	24	3
9	0.06 MGD 11.36 M3/H	3.30 MGD 625.00 M3/H	34-5/8	23-1/8	34	15	22-5/8	30	12	18	3
12	0.26 MGD 49.24 M3/H	10.0 MGD 1894.00 M3/H	54	36	52-7/8	24	33-1/4	36	24	36	3
18	0.32 MGD 60.60 M3/H	15.0 MGD 2840.00 M3/H	57	38	55-7/8	30	40-3/8	36	24	36	3
24	0.45 MGD 85.22 M3/H	21.0 MGD 3977.00 M3/H	60	40	58-7/8	36	47-1/2	36	24	36	3
36	0.65 MGD 123.10 M3/H	32.0 MGD 6060.00 M3/H	66	44	64-3/4	48	61-7/8	36	24	36	3
48	0.84 MGD 159.10 M3/H	44.0 MGD 8333.00 M3/H	72	48	70-5/8	60	76-1/4	36	24	36	3
60	1.40 MGD 265.15 M3/H	56.0 MGD 10606.00 M3/H	78	52	76-1/2	72	90-5/8	36	24	36	3
72	1.70 MGD 322.00 M3/H	67.0 MGD 12670.00 M3/H	84	56	82-3/8	84	105	36	24	36	3

* The discharge capacities are for free flow conditions and do not apply in cases of submerged flow. Free flow conditions exist when the level at the downstream gauge does not exceed more than approximately 2/3 of the level of the upstream measuring point.



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