



Small 60-Degree-V Trapezoidal Flume Discharge Table

80% Submergence Transition

±2-5% Accuracy

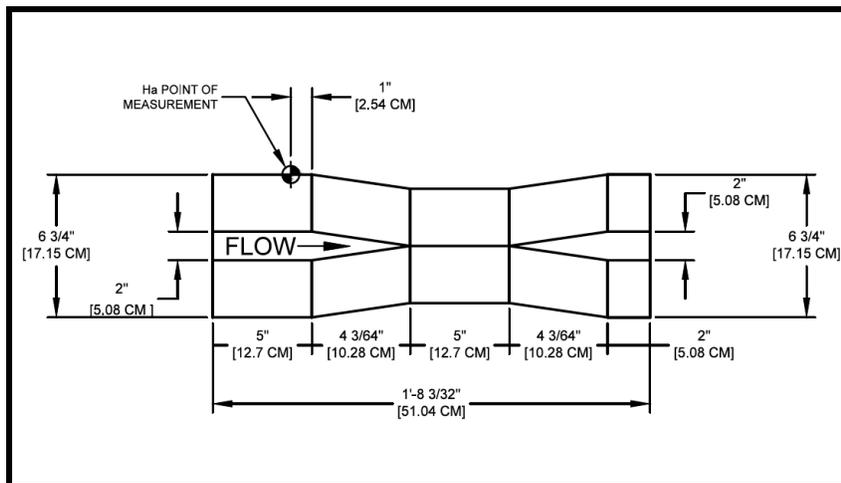
Formulas (H in feet): $CFS = 1.55 H_{ft}^{2.58}$
 Formulas (H in meters): $L/S = 941.2 H_m^{2.58}$

$GPM = 695.6 H_{ft}^{2.58}$
 $M3/HR = 3388 H_m^{2.58}$

$MGD = 1.002 H_{ft}^{2.58}$

FEET	INCHES	METERS	CFS	GPM	MGD	L/S	M3/HR
0.01	0.12	0.0030					
0.02	0.24	0.0061					
0.03	0.36	0.0091					
0.04	0.48	0.0122					
0.05	0.60	0.0152					
0.06	0.72	0.0183					
0.07	0.84	0.0213					
0.08	0.96	0.0244					
0.09	1.08	0.0274	0.0031	1.394	0.0020	0.0880	0.317
0.10	1.20	0.0305	0.0041	1.830	0.0026	0.1155	0.415
0.11	1.32	0.0335	0.0052	2.340	0.0034	0.1476	0.531
0.12	1.44	0.0366	0.0065	2.929	0.0042	0.1848	0.665
0.13	1.56	0.0396	0.0080	3.600	0.0052	0.2272	0.817
0.14	1.68	0.0427	0.0097	4.359	0.0063	0.2751	0.990
0.15	1.80	0.0457	0.0116	5.208	0.0075	0.3287	1.183
0.16	1.92	0.0488	0.0137	6.152	0.0089	0.3882	1.397
0.17	2.04	0.0518	0.0160	7.194	0.0104	0.4539	1.633
0.18	2.16	0.0549	0.0186	8.337	0.0120	0.5261	1.893
0.19	2.28	0.0579	0.0214	9.584	0.0138	0.6048	2.176
0.20	2.40	0.0610	0.0244	10.94	0.0158	0.6904	2.484
0.21	2.52	0.0640	0.0276	12.41	0.0179	0.7830	2.817
0.22	2.64	0.0671	0.0312	13.99	0.0201	0.8828	3.177
0.23	2.76	0.0701	0.0350	15.69	0.0226	0.9901	3.563
0.24	2.88	0.0732	0.0390	17.51	0.0252	1.105	3.976
0.25	3.00	0.0762	0.0434	19.46	0.0280	1.228	4.418
0.26	3.12	0.0792	0.0480	21.53	0.0310	1.358	4.888
0.27	3.24	0.0823	0.0529	23.73	0.0342	1.497	5.388

Excessive error due to fluid-flow properties and boundary conditions



Source: Trapezoidal Flumes for Open-Channel Flow Measurement, *Transactions of the American Society of Agricultural Engineers*, Vol. 3, No. 2, 1960
 Measuring Water in Small Channels with WSC Flume, Washington Agricultural Experiment Station, Circular 200, 1952