

ECONODRAIN® #6 SYSTEM - HYDRAULIC DATA

Standard Depth & Slope ¹			Radius Bottom Trench (Std.)				Rectangular Trench (Optional Custom)			
EPS Form Number	[Slope [S _t] = 0.5% or 0.005 ft/ft]		Q _{max} ² Flow (cfs)	Q _{max} ² Flow (gpm)	(F _k is not a Flow Rate)		Q _{max} ² Flow (cfs)	Q _{max} ² Flow (gpm)	(F _k is not a Flow Rate)	
	Min. (in)	Max. (in)			F _k ³ (cfs)	F _k ³ (gpm)			F _k ³ (cfs)	F _k ³ (gpm)
0606	6	6 1/2	0.45	200	6.17	2,770	0.50	224	6.91	3,101
0607	6 1/2	7	0.51	228	7.05	3,165	0.56	252	7.78	3,490
0608	7	7 1/2	0.57	257	7.94	3,563	0.62	280	8.65	3,884
0609	7 1/2	8	0.64	286	8.83	3,965	0.69	309	9.54	4,281
0610	8	8 1/2	0.70	315	9.74	4,370	0.75	338	10.43	4,681
0611	8 1/2	9	0.77	345	10.64	4,776	0.82	367	11.33	5,084
0612	9	9 1/2	0.83	374	11.55	5,185	0.88	396	12.23	5,488
0613	9 1/2	10	0.90	404	12.47	5,595	0.95	425	13.13	5,894
0614	10	10 1/2	0.97	433	13.38	6,007	1.01	455	14.04	6,302
0615	10 1/2	11	1.03	463	14.30	6,419	1.08	484	14.95	6,711
0616	11	11 1/2	1.10	493	15.22	6,833	1.15	514	15.87	7,122
0617	11 1/2	12	1.17	523	16.15	7,248	1.21	544	16.78	7,533
0618	12	12 1/2	1.23	553	17.07	7,663	1.28	573	17.70	7,945
0619	12 1/2	13	1.30	583	18.00	8,079	1.34	603	18.62	8,359
0620	13	13 1/2	1.37	613	18.93	8,496	1.41	633	19.55	8,772
0621	13 1/2	14	1.43	643	19.86	8,913	1.48	663	20.47	9,187
0622	14	14 1/2	1.50	673	20.79	9,330	1.54	693	21.39	9,602
0623	14 1/2	15	1.57	704	21.72	9,748	1.61	723	22.32	10,018
0624	15	15 1/2	1.63	734	22.65	10,167	1.68	753	23.25	10,434
0625	15 1/2	16	1.70	764	23.59	10,586	1.74	783	24.18	10,851
0626	16	16 1/2	1.77	794	24.52	11,005	1.81	813	25.11	11,268
0627	16 1/2	17	1.84	824	25.45	11,424	1.88	843	26.04	11,686
0628	17	17 1/2	1.90	855	26.39	11,844	1.95	873	26.97	12,103
0629	17 1/2	18	1.97	885	27.32	12,264	2.01	904	27.90	12,522
0630	18	18 1/2	2.04	915	28.26	12,684	2.08	934	28.83	12,940
0631	18 1/2	19	2.11	946	29.20	13,105	2.15	964	29.76	13,359
0632	19	19 1/2	2.17	976	30.13	13,525	2.22	994	30.70	13,778
0633	19 1/2	20	2.24	1006	31.07	13,946	2.28	1025	31.63	14,197
0634	20	20 1/2	2.31	1037	32.01	14,367	2.35	1055	32.57	14,617
0635	20 1/2	21	2.38	1067	32.95	14,788	2.42	1085	33.50	15,037
0636	21	21 1/2	2.45	1098	33.89	15,209	2.49	1115	34.44	15,456
0637	21 1/2	22	2.51	1128	34.83	15,631	2.55	1146	35.37	15,877
0638	22	22 1/2	2.58	1158	35.76	16,052	2.62	1176	36.31	16,297
0639	22 1/2	23	2.65	1189	36.70	16,474	2.69	1206	37.25	16,717
0640	23	23 1/2	2.72	1219	37.64	16,895	2.76	1237	38.18	17,138
0641	23 1/2	24	2.78	1250	38.58	17,317	2.82	1267	39.12	17,559
0642	24	24 1/2	2.85	1280	39.52	17,739	2.89	1298	40.06	17,979
0643	24 1/2	25	2.92	1311	40.46	18,161	2.96	1328	41.00	18,400
0644	25	25 1/2	2.99	1341	41.40	18,583	3.03	1358	41.93	18,822
0645	25 1/2	26	3.06	1372	42.34	19,005	3.09	1389	42.87	19,243

- Standard Depth is measured from the top of the grate rail to the trench invert.
- Q_{max} is based on Manning's Equation n = 0.13 and S_t = 0.5%. The outlet end depth flow area is utilized and the grate area is excluded. The flow values shown do not include site grade slope.
- F_k is used to include site grade slope in trench flow calculations. The equation is: Flow, Q = F_k × (S_s + S_t)^{1/2} where S_s is the site slope and S_t is the trench form slope (ft/ft), (dimensionless).

MultiDrain Systems, Inc.

1405 Industrial Drive • Statesville, NC 28625 • (704) 508-1010 • (800) 433-1119 • Fax (704) 508-1011 • md.multidrainsystems.com

"DISCLAIMER: The customer and the customer's architects, engineers, consultants and other professionals are completely responsible for the selection, installation, and maintenance of any product purchased from MULTIDRAIN SYSTEMS, INC., and EXCEPT AS EXPRESSLY PROVIDED IN MULTIDRAIN'S STANDARD WARRANTIES, MULTIDRAIN MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY, DESIGN, MERCHANTABILITY, OR FITNESS OF THE PRODUCT FOR CUSTOMER'S APPLICATION. Copies of MultiDrain's standard warranties are available upon request."

MultiDrain Systems, Inc. Trade Mark Products: Alfa Channel®, Alfa Slot®, EconoDrain® and MultiDrain®
These products are protected by one or more U.S. patents.