

SmartDitch Flow Calculator

Fixed	12" Trapezoid	24" Trapezoid	115° 1Base, 1Arm	115° 2Base, 1Arm	115° 2Base, 2Arm	135° 1Base, 1Arm	135° 2Base, 1Arm	135° 2Base, 2Arm	Customer Specified
<i>n</i>	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022
<i>Sidewall Angle (degrees)</i>	45	45	65	65	65	45	45	45	65
<i>Sidewall Angle(radians)</i>	0.785	0.785	1.134	1.134	1.134	0.785	0.785	0.785	1.134
<i>Top Width (in)</i>	34.5	59.5	134.0	204.0	241.0	147.0	217.0	279.0	134
<i>Depth (in)</i>	13.5	25	51.0	51.0	88.0	37.0	37.0	68.0	51
<i>Bottom Width (in)</i>	8	12	90	160	160	72	142	142	90
<i>A (in<sup>2</sup>)</i>	286.88	893.75	5712.00	9282.00	17644.00	4051.50	6641.50	14314.00	5712.00
<i>A (ft<sup>2</sup>)</i>	1.99	6.21	39.67	64.46	122.53	28.14	46.12	99.40	39.67
<i>WP (in)</i>	45.83	80.97	202.57	272.57	354.25	176.69	246.69	334.41	202.57
<i>WP (ft)</i>	3.82	6.75	16.88	22.71	29.52	14.72	20.56	27.87	16.88
<i>R (in)</i>	6.26	11.04	28.20	34.05	49.81	22.93	26.92	42.80	28.20
<i>R (ft)</i>	0.52	0.92	2.35	2.84	4.15	1.91	2.24	3.57	2.35

Variable

Slope (ft/ft)

0.0075

Results

Q (cfs)

7.57 34.43 411.21 757.80 1856.10 254.11 463.61 1361.11 411.21