

# PolyDrain Channel Specifications

Channel Number	Channel Only				Channel With PolyWall I				Channel With PolyWall II			
	Overall Depth of Channel		Maximum Flow Rate	Weight	Overall Depth of Channel		Maximum Flow Rate	Weight	Overall Depth of Channel		Maximum Flow Rate	Weight
	Minimum	Maximum	LPM (GPM)	KG (LB)	Minimum	Maximum	LPM (GPM)	KG (LB)	Minimum	Maximum	LPM (GPM)	KG (LB)
10	13.5 (5.3)	14.0 (5.5)	488 (129)	15.4 (34)	31.2 (12.3)	31.8 (12.5)	1874 (495)	38.1 (84)	49.3 (19.4)	49.8 (19.6)	3312 (875)	52.2 (115)
20	14.0 (5.5)	14.7 (5.8)	541 (143)	15.9 (35)	31.8 (12.5)	32.5 (12.8)	1927 (509)	38.6 (85)	49.8 (19.6)	50.6 (19.9)	3365 (889)	52.7 (116)
21	14.7 (5.8)	14.7 (5.8)	564 (149)	15.0 (33)	32.5 (12.8)	32.5 (12.8)	1953 (516)	37.7 (83)	50.6 (19.9)	50.6 (19.9)	3391 (896)	51.8 (114)
30	14.7 (5.8)	15.3 (6.0)	579 (153)	16.3 (36)	32.5 (12.8)	33.0 (13.0)	1968 (520)	39.0 (86)	50.6 (19.9)	51.1 (20.1)	3407 (900)	53.1 (117)
40	15.3 (6.0)	15.8 (6.2)	632 (167)	16.8 (37)	33.0 (13.0)	33.5 (13.2)	2025 (535)	39.5 (87)	51.1 (20.1)	51.6 (20.3)	3463 (915)	53.6 (118)
50	15.8 (6.2)	16.3 (6.4)	674 (178)	16.8 (37)	33.5 (13.2)	34.0 (13.4)	2067 (546)	39.5 (87)	51.6 (20.3)	52.1 (20.5)	3505 (926)	53.6 (118)
60	16.3 (6.4)	17.0 (6.7)	719 (190)	17.3 (38)	34.0 (13.4)	34.8 (13.7)	2112 (558)	40.0 (88)	52.1 (20.5)	52.8 (20.8)	3554 (939)	54.0 (119)
70	17.0 (6.7)	17.5 (6.9)	772 (204)	18.6 (41)	34.8 (13.7)	35.3 (13.9)	2165 (572)	41.3 (91)	52.8 (20.8)	53.3 (21.0)	3607 (953)	55.4 (122)
80	17.5 (6.9)	18.3 (7.2)	818 (216)	18.6 (41)	35.3 (13.9)	36.1 (14.2)	2214 (585)	41.3 (91)	53.3 (21.0)	54.1 (21.3)	3656 (966)	55.4 (122)
90	18.3 (7.2)	18.8 (7.4)	863 (228)	19.1 (42)	36.1 (14.2)	36.6 (14.4)	2263 (598)	41.8 (92)	54.1 (21.3)	54.6 (21.5)	3702 (978)	55.8 (123)
91	18.8 (7.4)	18.8 (7.4)	886 (234)	19.1 (42)	36.6 (14.4)	36.6 (14.4)	2286 (604)	41.8 (92)	54.6 (21.5)	54.6 (21.5)	3724 (984)	55.8 (123)
96	18.8 (7.4)	18.8 (7.4)	878 (232)	10.0 (22)	36.6 (14.4)	36.6 (14.4)	2279 (602)	32.7 (72)	54.6 (21.5)	54.6 (21.5)	3721 (983)	46.8 (103)
100	18.8 (7.4)	19.3 (7.6)	912 (241)	19.5 (43)	36.6 (14.4)	37.1 (14.6)	2313 (611)	42.2 (93)	54.6 (21.5)	55.1 (21.7)	3755 (992)	56.3 (124)
110	19.3 (7.6)	19.8 (7.8)	958 (253)	19.5 (43)	37.1 (14.6)	37.6 (14.8)	2358 (623)	42.2 (93)	55.1 (21.7)	55.6 (21.9)	3800 (1004)	56.3 (124)
120	19.8 (7.8)	20.6 (8.1)	999 (264)	19.5 (43)	37.6 (14.8)	38.4 (15.1)	2400 (634)	42.2 (93)	55.6 (21.9)	56.4 (22.2)	3842 (1015)	56.3 (124)
130	20.6 (8.1)	21.1 (8.3)	1048 (277)	20.0 (44)	38.4 (15.1)	38.9 (15.3)	2453 (648)	42.7 (94)	56.4 (22.2)	56.9 (22.4)	3891 (1028)	56.8 (125)
140	21.1 (8.3)	21.8 (8.6)	1101 (291)	20.0 (44)	38.9 (15.3)	39.6 (15.6)	2506 (662)	42.7 (94)	56.9 (22.4)	57.7 (22.7)	3948 (1043)	56.8 (125)
150	21.8 (8.6)	22.4 (8.8)	1143 (302)	19.5 (43)	39.6 (15.6)	40.1 (15.8)	2551 (674)	42.2 (93)	57.7 (22.7)	58.2 (22.9)	3993 (1055)	56.3 (124)
160	22.4 (8.8)	22.9 (9.0)	1192 (315)	21.3 (47)	40.1 (15.8)	40.6 (16.0)	2597 (686)	44.0 (97)	58.2 (22.9)	58.7 (23.1)	4039 (1067)	58.1 (128)
170	22.9 (9.0)	23.6 (9.3)	1238 (327)	21.3 (47)	40.6 (16.0)	41.4 (16.3)	2646 (699)	44.0 (97)	58.7 (23.1)	59.4 (23.4)	4088 (1080)	58.1 (128)
180	23.6 (9.3)	24.1 (9.5)	1279 (338)	22.7 (50)	41.4 (16.3)	41.9 (16.5)	2687 (710)	45.4 (100)	59.4 (23.4)	59.9 (23.6)	4129 (1091)	59.5 (131)
190	24.1 (9.5)	24.9 (9.8)	1332 (352)	22.7 (50)	41.9 (16.5)	42.7 (16.8)	2744 (725)	45.4 (100)	59.9 (23.6)	60.7 (23.9)	4186 (1106)	59.5 (131)
191	24.9 (9.8)	24.9 (9.8)	1351 (357)	24.1 (53)	42.7 (16.8)	42.7 (16.8)	2759 (729)	46.8 (103)	60.7 (23.9)	60.7 (23.9)	4201 (1110)	60.8 (134)
200	24.9 (9.8)	25.4 (10.0)	1382 (365)	24.1 (53)	42.7 (16.8)	43.2 (17.0)	2790 (737)	46.8 (103)	60.7 (23.9)	61.2 (24.1)	4232 (1118)	60.8 (134)
210	25.4 (10.0)	25.9 (10.2)	1431 (378)	24.1 (53)	43.2 (17.0)	43.7 (17.2)	2839 (750)	46.8 (103)	61.2 (24.1)	61.7 (24.3)	4281 (1131)	60.8 (134)
220	25.9 (10.2)	26.4 (10.4)	1476 (390)	25.0 (55)	43.7 (17.2)	44.2 (17.4)	2888 (763)	47.7 (105)	61.7 (24.3)	62.2 (24.5)	4330 (1144)	61.7 (136)
230	26.4 (10.4)	27.2 (10.7)	1518 (401)	25.0 (55)	44.2 (17.4)	45.0 (17.7)	2930 (774)	47.7 (105)	62.2 (24.5)	63.0 (24.8)	4372 (1155)	61.7 (136)
240	27.2 (10.7)	27.7 (10.9)	1571 (415)	25.4 (56)	45.0 (17.7)	45.5 (17.9)	2983 (788)	48.1 (106)	63.0 (24.8)	63.5 (25.0)	4425 (1169)	62.2 (137)
250	27.7 (10.9)	28.2 (11.1)	1616 (427)	25.4 (56)	45.5 (17.9)	46.0 (18.1)	3028 (800)	48.1 (106)	63.5 (25.0)	64.0 (25.2)	4470 (1181)	62.2 (137)
260	28.2 (11.1)	29.0 (11.4)	1665 (440)	26.8 (59)	46.0 (18.1)	46.7 (18.4)	3077 (813)	49.5 (109)	64.0 (25.2)	64.8 (25.5)	4519 (1194)	63.6 (140)
270	29.0 (11.4)	29.5 (11.6)	1722 (455)	27.2 (60)	46.7 (18.4)	47.2 (18.6)	3134 (828)	49.9 (110)	64.8 (25.5)	65.3 (25.7)	4576 (1209)	64.0 (141)
280	29.5 (11.6)	30.0 (11.8)	1764 (466)	28.2 (62)	47.2 (18.6)	47.8 (18.8)	3179 (840)	50.9 (112)	65.3 (25.7)	65.8 (25.9)	4621 (1221)	64.9 (143)
290	30.0 (11.8)	30.7 (12.1)	1813 (479)	28.2 (62)	47.8 (18.8)	48.5 (19.1)	3225 (852)	50.9 (112)	65.8 (25.9)	66.6 (26.2)	4671 (1234)	64.9 (143)
291	30.7 (12.1)	30.7 (12.1)	1843 (487)	27.2 (60)	48.5 (19.1)	48.5 (19.1)	3259 (861)	49.9 (110)	66.6 (26.2)	66.6 (26.2)	4701 (1242)	64.0 (141)
300	30.7 (12.1)	31.2 (12.3)	1862 (492)	28.6 (63)	48.5 (19.1)	49.0 (19.3)	3279 (866)	51.3 (113)	66.6 (26.2)	67.1 (26.4)	4720 (1247)	65.4 (144)

Red Channel Numbers Indicate Non-Sloping Channels.

NOTE: Excludes Grate Lip, n=0.008, Average Channel Depth

Use this chart to estimate flow capacities and invert elevations.

Add a minimum of 100 mm (4 in) to overall depths to estimate necessary excavation.

Actual depth of excavation is governed by slab or pavement thickness.

When using the model 510, 520, or 530 Series frame and grate systems, add 31 mm (1.21 in) to the overall depths.

When using model 313 polymer concrete overlay grate, add 50 mm (2 in) to the overall depth.

More detailed information is contained in other PolyDrain publications, if needed.

Note: Subtract 25 mm (1.0 in) from minimum and maximum depths shown to obtain invert elevations.