

# Manitoba Sizing Chart for 60 CM Wide Trench Fields

Soil Type		Perc Rate (min/cm)	App. Rate (lpd/sm)	Number of Bedrooms (lpd shown below bedrooms) - Length of Trench (metres)														
				Stone Trench (60cmW x 30 cmH)					Stone Trench (60cmW x 45cmH)					Stone Trench (60cmW x 60cmH)				
				2 1000	3 1500	4 2000	5 2500	Each Add. BR	2 1000	3 1500	4 2000	5 2500	Each Add. BR	2 1000	3 1500	4 2000	5 2500	Each Add. BR
Coarse to Medium Sand	Modified Surface/ Subsurface Systems	0.4-2	29.35	37	56	75	93	19	32	48	64	80	16	28	42	56	70	14
		2.4-4	29.35	37	56	75	93	19	32	48	64	80	16	28	42	56	70	14
		4.3-6	29.35	37	56	75	93	19	32	48	64	80	16	28	42	56	70	14
		6.3-8	26.91	41	61	81	102	20	35	52	70	87	17	31	46	61	76	15
		8.3-10	24.46	45	67	89	112	22	38	57	77	96	19	33	50	67	84	17
		10.3-11.8	22.02	50	75	99	124	25	43	64	85	106	21	37	56	75	93	19
Silty Loam		12.2-13.8	20.06	55	82	109	136	27	47	70	93	117	23	41	61	82	102	20
		14.2-15.8	18.10	61	91	121	151	30	52	78	104	129	26	45	68	91	113	23
		16.2-17.7	16.63	66	99	131	164	33	57	85	113	141	28	49	74	99	123	25
		18.1-19.7	15.16	72	108	144	180	36	62	93	124	155	31	54	81	108	135	27
		20.1-21.7	13.70	80	120	160	200	40	69	103	137	171	34	60	90	120	150	30
		22-23.6	12.72	86	129	172	215	43	74	111	147	184	37	65	97	129	161	32
Clay Loam		24-25.6	11.74	93	140	186	233	47	80	120	160	200	40	70	105	140	175	35
		26-27.6	10.76	101	152	203	254	51	87	131	174	218	44	76	114	152	191	38
		28-29.5	9.78	112	168	224	279	56	96	144	192	239	48	84	126	168	210	42
		30-31.5	8.80	124	186	248	310	62	107	160	213	266	53	93	140	186	233	47
		Modified System	32-47.2	8.31	131	197	263	329	66	113	169	225	282	56	99	148	197	247
		>47.2	Modified aboveground system. See soil texture classification matrix.															

Length of System (metres)

Table 16: 60cm Stone Trench - Metric

# Manitoba Sizing Chart for 90 CM Wide Trench Fields

Soil Type			Number of Bedrooms (Ipd shown below bedrooms) - Length of Trench (metres)															
			Stone Trench (90cmW x 30cmH)					Stone Trench (90cmW x 45cmH)					Stone Trench (90cmW x 60cmH)					
			2 1000	3 1500	4 2000	5 2500	Each Add. BR	2 1000	3 1500	4 2000	5 2500	Each Add. BR	2 1000	3 1500	4 2000	5 2500	Each Add. BR	
Perc Rate (min/cm)	App. Rate (Ipd/sm)																	
Coarse to Medium Sand  Fine Sand Sandy Loam	Modified Surface/ Subsurface Systems	0.4-2	29.35	28	42	56	70	14	25	37	50	62	12	23	34	45	56	11
		2.4-4	29.35	28	42	56	70	14	25	37	50	62	12	23	34	45	56	11
		4.3-6	29.35	28	42	56	70	14	25	37	50	62	12	23	34	45	56	11
		6.3-8	26.91	32	46	61	76	15	27	41	54	68	14	25	37	49	61	12
		8.3-10	24.46	33	50	67	84	17	30	45	60	75	15	27	40	54	67	13
		10.3-11.8	22.0	37	56	75	93	19	33	50	66	83	17	30	45	60	75	15
Silty Loam		12.2-13.8	20.06	41	61	82	102	20	37	55	73	91	18	33	49	65	82	16
		14.2-15.8	18.10	45	68	91	113	23	40	60	81	101	20	36	54	72	91	18
		16.2-17.7	16.63	49	74	99	123	25	44	66	88	110	22	39	59	79	99	20
		18.1-19.7	15.16	54	81	108	135	27	48	72	96	120	24	43	65	87	108	22
		20.1-21.7	13.70	60	90	120	150	30	53	80	106	133	27	48	72	96	120	24
		22-23.6	12.72	65	97	129	161	32	57	86	115	143	29	51	77	103	129	26
Clay Loam		24-25.6	11.74	70	105	140	175	35	62	93	124	155	31	56	84	112	140	28
		26-27.6	10.76	76	114	152	191	38	68	102	135	169	34	61	91	122	152	30
		28-29.5	9.78	84	126	168	210	42	75	112	149	186	37	67	101	134	168	34
		30-31.5	8.80	93	140	186	233	47	83	124	166	207	41	75	112	149	186	37
		Modified System	32-47.2	8.31	99	148	197	247	49	87	131	175	219	44	79	118	158	197
		>47.2	Modified aboveground system. See soil texture classification matrix.															

Length of System (metres)

Table 17: 90cm Trench - Metric

# Manitoba Infiltrator<sup>®</sup> Chamber Sizing Chart for Trench Fields

Soil Type		Perc Rate (min/cm)	App. Rate (lpd/sm)	Number of Bedrooms (lpd shown below bedrooms) - Length of Trench (metres)														
				Equalizer <sup>®</sup> 36					Standard H-10					High Capacity Sidewinder <sup>®</sup>				
				2 1000	3 1500	4 2000	5 2500	Each Add. BR	2 1000	3 1500	4 2000	5 2500	Each Add. BR	2 1000	3 1500	4 2000	5 2500	Each Add. BR
Coarse to Medium Sand	Modified Surface/ Subsurface Systems	0.4-2	29.35	32	48	64	80	16	26	39	52	65	13	19	35	47	58	16
		2.4-4	29.35	32	48	64	80	16	26	39	52	65	13	19	35	47	58	16
Fine Sand Sandy Loam		4.3-6	29.35	32	48	64	80	16	26	39	52	65	13	19	35	47	58	16
		6.3-8	26.91	35	52	70	87	17	29	43	57	71	14	21	38	51	64	17
		8.3-10	24.46	38	57	77	96	19	31	47	62	78	16	23	42	56	70	19
		10.3-11.8	22.0	43	64	85	106	21	35	52	69	87	17	26	47	62	78	21
Silty Loam		12.2-13.8	20.06	47	70	93	117	23	38	57	76	95	19	28	51	68	85	23
		14.2-15.8	18.10	52	78	104	129	26	42	63	84	105	21	32	57	76	94	25
		16.2-17.7	16.63	57	85	113	141	28	46	69	92	115	23	35	62	82	103	27
		18.1-19.7	15.16	62	93	124	155	31	50	75	101	126	25	38	68	90	113	30
		20.1-21.7	13.70	69	103	137	171	34	56	84	111	139	28	42	75	100	125	33
		22-23.6	12.72	74	111	147	184	37	60	90	120	150	30	45	81	107	134	36
Clay Loam		24-25.6	11.74	80	120	160	200	40	65	97	130	162	32	48	87	116	146	39
		26-27.6	10.76	87	131	174	218	44	71	106	142	177	35	53	95	127	159	42
		28-29.5	9.78	96	144	192	239	48	78	117	156	195	39	58	105	140	175	47
		30-31.5	8.80	107	160	213	266	53	87	130	173	217	43	64	116	155	194	52
		Modified System	32-47.2	8.31	113	169	225	282	56	92	138	183	229	46	68	123	164	205
		>47.2	Modified aboveground system. See soil texture classification matrix.															

Length of System (metres)

 Table 18: Infiltrator<sup>®</sup> Chamber - Metric

# Manitoba Sizing Chart for Total Area Fields Square Metres and Cubic Metres of Stone

Soil Type		Perc Rate (min/cm)	App. Rate (lpd/sm)	Number of Bdrms (lpd below bdrms) - Area of Field (m <sup>2</sup> ) + cu metres of stone									
				Stone Total Area System					Chamber Total Area System				
				2 1000	3 1500	4 2000	5 2500	Each Add. BR	2 1000	3 1500	4 2000	5 2500	Each Add. BR
Coarse to Medium Sand	Modified Surface/ Subsurface Systems	0.4-2	29.35	68 55	102 85	136 110	170	34	51	77	102	128	26
		Fine Sand Sandy Loam	2.4-4	29.35	68 55	102 85	136 110	170	34	51	77	102	128
		4.3-6	29.35	68 55	102 85	136 110	170	34	51	77	102	128	26
		6.3-8	26.91	74 60	111 90	149 120	186	37	56	84	111	139	28
		8.3-10	24.46	82 65	123 100	164 130	204	41	61	92	123	153	31
		10.3-11.8	22.0	91 75	136 110	182 145	227	45	68	102	136	170	34
Silty Loam		12.2-13.8	20.06	100 80	150 120	199 160	249	50	75	112	150	187	37
		14.2-15.8	18.10	111 90	166 130	221 180	276	55	83	124	166	207	41
		16.2-17.7	16.63	120 100	180 145	240 195	301	60	90	135	180	225	45
		18.1-19.7	15.16	132 110	198 160	264 210	330	66	99	148	198	247	49
		20.1-21.7	13.70	146 120	219 180	292 235	365	73	109	164	219	274	55
		22-23.6	12.72	157 130	236 190	314 255	393	79	118	177	236	295	59

 Area of System (m<sup>2</sup>)

Table 20: Total Area - Metric