

**APPENDIX E. GRAVEL SUPPORT FOR RAPID RATE SLOW SAND FILTERS  
[REVOKED]**

**APPENDIX E. GRAVEL SUPPORT FOR RAPID RATE **AND** SLOW SAND FILTERS  
[NEW]**

<b>Size</b>	<b>Depth</b>
2½ to 1½ inches	5 to 8 inches
1½ to ¾ inches	3 to 5 inches
¾ to ½ inches	3 to 5 inches
½ to 3/16 inches	2 to 3 inches
3/16 to 3/32 inches	2 to 3 inches

**Appendix E, Table I. Daily design flow**

Motels or Hotel (1 bedroom per unit)	200 GPD
Motels (Kitchen facilities) per unit	250 GPD
Institution per Person:	
Resident workers	100 GPD
Non-resident Workers	20 GPD
Factories per person (excl. Industrial waste) each shift	20 GPD
Day school per pupil	8 GPD
Boarding School per pupil	75 GPD
Restaurants per patron	15 GPD
Trailer Parks per Unit	250 GPD
Drive-In Theater per car space	10 GPD
Self-service laundry (per customer)	50 GPD
Country Club per member	50 GPD
Service station per vehicle served	15 GPD
Retail store per toilet	500 GPD
Urban residence per person	100 GPD
Farm Residence per person	100 GPD
Livestock	
Beef Cow	12 GPD
Dairy Cow	50 GPD
Hog or sheep	4 GPD
Chicken	4 GPD
Turkey	7 GPD

**Appendix E, Table II. Orifice sizing**

Orifice Size (inches)	Head in Feet			
	2	4	6	8
	Gallons of Water Delivered per Day			
1/16	95	135	165	191
1/8	381	539	660	762
3/16	858	1,213	1,485	1,715
1/4	1,525	2,156	2,641	3,049
5/16	2,382	3,369	4,126	4,764
3/8	3,430	4,851	5,941	6,860
7/16	4,669	6,603	8,087	9,338
1/2	6,098	8,624	10,562	12,196
3/4	13,271	19,404	23,765	27,442
1	24,393	34,497	42,249	48,785
1-1/4	38,113	53,901	66,015	76,227
1-1/2	54,884	77,617	95,061	109,767
1-3/4	74,702	105,646	129,389	149,405
2	97,571	137,986	168,998	195,142

$$Q = C_d A (2gh)^{1/2}$$

$$C_d = 0.60$$

$$g = 32.2 \text{ ft/s}^2$$

$$A \text{ is ft}^2, 1 \text{ ft}^2 = 144 \text{ in}^2$$

Appendix E, Figure 1. General Well Design  
 Appendix E. Figure 2. General Well Design

These two figures are drawings that are currently incompatible with the Word format of the other Chapter 626 appendices. See customer assistance for hard copies of these drawings.