

**Estimating Guide for 5 oz. Cartridge using Threaded Rod – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD IN SOLID BASE MATERIAL																		
		HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3/8	7/16	39	26	20	16	13	11	10	9	8	7	7	6	6	5	5	5	4	4	4
3/8	1/2	25	17	12	10	8	7	6	6	5	5	4	4	4	3	3	3	3	3	2
1/2	9/16	29	19	14	11	10	8	7	6	6	5	5	4	4	4	4	3	3	3	3
1/2	5/8	18	12	9	7	6	5	5	4	4	3	3	3	3	2	2	2	2	2	2
5/8	11/16	21	14	11	8	7	6	5	5	4	4	4	3	3	3	3	2	2	2	2
5/8	3/4	14	9	7	6	5	4	4	3	3	3	2	2	2	2	2	2	2	1	1
3/4	13/16	17	11	8	7	6	5	4	4	3	3	3	3	2	2	2	2	2	2	2
3/4	7/8	11	8	6	5	4	3	3	3	2	2	2	2	2	2	1	1	1	1	1
7/8	15/16	13	9	7	5	4	4	3	3	3	2	2	2	2	2	2	2	1	1	1
7/8	1	10	6	5	4	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1
1	1 1/16	11	7	6	4	4	3	3	2	2	2	2	2	2	1	1	1	1	1	1
1	1 1/8	8	5	4	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1
1 1/8	1 3/16	9	6	5	4	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1
1 1/8	1 1/4	7	5	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1
1 1/4	1 5/16	8	5	4	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1
1 1/4	1 3/8	6	4	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 5 oz. Cartridge using Rebar – Installations per Cartridge**

Rebar Size (no.)	Drill Bit Dia. (in.)	REBAR IN SOLID BASE MATERIAL																		
		HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3	1/2	30	20	15	12	10	8	7	7	6	5	5	5	4	4	4	3	3	3	3
4	9/16	43	29	22	17	14	12	11	10	9	8	7	7	6	6	5	5	5	5	4
4	5/8	23	15	12	9	8	7	6	5	5	4	4	4	3	3	3	3	3	2	2
5	3/4	19	12	9	7	6	5	5	4	4	3	3	3	3	2	2	2	2	2	2
6	7/8	15	10	7	6	5	4	4	3	3	3	2	2	2	2	2	2	2	2	1
7	1	13	9	6	5	4	4	3	3	3	2	2	2	2	2	2	2	1	1	1
8	1 1/8	11	7	6	4	4	3	3	2	2	2	2	2	2	1	1	1	1	1	1
9	1 1/4	10	7	5	4	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1
10	1 3/8	10	7	5	4	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1
11	1 5/8	5	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 5 oz. Cartridge and Steel Screen Tubes – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE																		
		HOLE DEPTH (inches)																		
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17
3/8	9/16	11	10	9	8	7	6	6	6	5	5	4	4							
1/2	1 1/16	7	6	5	5	4	4	4	4	3	3	3	2							
5/8	7/8	4	3	3	3	3	2	2	2	2	2	2	1	1	1	1				
3/4	1	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 5 oz. Cartridge and Plastic Screen Tubes – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE																						
		HOLE DEPTH (inches)																						
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17	18	19	20	21
3/8	9/16	13	11	10	9	8	8	7	7	6	6	5	5											
1/2	1 1/16	7	6	5	5	4	4	4	3	3	3	3	2											
5/8	7/8	5	4	4	3	3	3	2	2	2	2	2	2	1	1	1								
3/4	1	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 8 oz. Cartridge using Threaded Rod – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD IN SOLID BASE MATERIAL HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3/8	7/16	63	42	32	25	21	18	16	14	13	11	11	10	9	8	8	7	7	6	6
3/8	1/2	40	27	20	16	13	11	10	9	8	7	7	6	6	5	5	5	4	4	4
1/2	9/16	46	31	23	18	15	13	11	10	9	8	8	7	7	6	6	5	5	5	5
1/2	5/8	29	19	14	12	10	8	7	6	6	5	5	4	4	4	4	3	3	3	3
5/8	11/16	34	22	17	13	11	10	8	7	7	6	6	5	5	4	4	4	4	4	3
5/8	3/4	23	15	11	9	8	6	6	5	5	4	4	3	3	3	3	3	3	2	2
3/4	13/16	27	18	13	11	9	8	7	6	5	5	4	4	4	4	3	3	3	3	3
3/4	7/8	18	12	9	7	6	5	5	4	4	3	3	3	3	2	2	2	2	2	2
7/8	15/16	21	14	11	9	7	6	5	5	4	4	4	3	3	3	3	3	2	2	2
7/8	1	15	10	8	6	5	4	4	3	3	3	3	2	2	2	2	2	2	2	2
1	1 1/16	18	12	9	7	6	5	4	4	4	3	3	3	3	2	2	2	2	2	2
1	1 1/8	13	8	6	5	4	4	3	3	3	2	2	2	2	2	2	1	1	1	1
1 1/8	1 3/16	15	10	7	6	5	4	4	3	3	3	2	2	2	2	2	2	2	2	1
1 1/8	1 1/4	11	7	5	4	4	3	3	2	2	2	2	2	2	1	1	1	1	1	1
1 1/4	1 5/16	13	9	6	5	4	4	3	3	3	2	2	2	2	2	2	2	1	1	1
1 1/4	1 3/8	10	7	5	4	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 8 oz. Cartridge using Rebar – Installations per Cartridge**

Rebar Size (no.)	Drill Bit Dia. (in.)	REBAR IN SOLID BASE MATERIAL HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3	1/2	47	32	24	19	16	14	12	11	9	9	8	7	7	6	6	6	5	5	5
4	9/16	70	46	35	28	23	20	17	15	14	13	12	11	10	9	9	8	8	7	7
4	5/8	37	25	18	15	12	11	9	8	7	7	6	6	5	5	5	4	4	4	4
5	3/4	30	20	15	12	10	8	7	7	6	5	5	5	4	4	4	3	3	3	3
6	7/8	24	16	12	10	8	7	6	5	5	4	4	4	3	3	3	3	3	3	2
7	1	21	14	10	8	7	6	5	5	4	4	3	3	3	3	3	2	2	2	2
8	1 1/8	18	12	9	7	6	5	4	4	4	3	3	3	3	2	2	2	2	2	2
9	1 1/4	16	11	8	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2	2
10	1 3/8	16	11	8	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2	2
11	1 5/8	8	5	4	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 8 oz. Cartridge and Steel Screen Tubes – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE HOLE DEPTH (inches)																		
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17
3/8	9/16	18	16	14	12	11	10	10	9	8	8	7	6							
1/2	1 1/16	11	10	9	8	7	7	6	6	5	5	4	4							
5/8	7/8	6	6	5	4	4	4	3	3	3	3	2	2	2	2					
3/4	1	5	4	4	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 8 oz. Cartridge and Plastic Screen Tubes – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE HOLE DEPTH (inches)																						
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17	18	19	20	21
3/8	9/16	18	16	14	12	11	10	10	9	8	8	7	6											
1/2	1 1/16	11	10	9	8	7	7	6	6	5	5	4	4											
5/8	7/8	6	6	5	4	4	4	3	3	3	3	2	2	2	2									
3/4	1	5	4	4	3	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 10oz Cartridge using Threaded Rod - Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD IN SOLID BASE MATERIAL HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3/8	7/16	73	49	36	29	24	21	18	16	15	13	12	11	10	10	9	9	8	8	7
3/8	1/2	46	31	23	18	15	13	12	10	9	8	8	7	7	6	6	5	5	5	5
1/2	9/16	53	35	27	21	18	15	13	12	11	10	9	8	8	7	7	6	6	6	5
1/2	5/8	33	22	17	13	11	10	8	7	7	6	6	5	5	4	4	4	4	4	3
5/8	11/16	39	26	19	16	13	11	10	9	8	7	6	6	6	5	5	5	4	4	4
5/8	3/4	26	17	13	10	9	7	7	6	5	5	4	4	4	3	3	3	3	3	3
3/4	13/16	31	21	16	12	10	9	8	7	6	6	5	5	4	4	4	4	3	3	3
3/4	7/8	21	14	11	8	7	6	5	5	4	4	4	3	3	3	3	2	2	2	2
7/8	15/16	25	17	12	10	8	7	6	6	5	5	4	4	4	3	3	3	3	3	2
7/8	1	18	12	9	7	6	5	4	4	4	3	3	3	3	2	2	2	2	2	2
1	1 1/16	20	14	10	8	7	6	5	5	4	4	3	3	3	3	3	2	2	2	2
1	1 1/8	15	10	7	6	5	4	4	3	3	3	2	2	2	2	2	2	2	2	1
1 1/8	1 3/16	17	11	8	7	6	5	4	4	3	3	3	3	2	2	2	2	2	2	2
1 1/8	1 1/4	13	8	6	5	4	4	3	3	3	2	2	2	2	2	2	1	1	1	1
1 1/4	1 5/16	15	10	7	6	5	4	4	3	3	3	2	2	2	2	2	2	2	2	1
1 1/4	1 3/8	11	8	6	5	4	3	3	3	2	2	2	2	2	2	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 10oz Cartridge using Rebar - Installations per Cartridge**

Rebar Size (no.)	Drill Bit Dia. (in.)	REBAR IN SOLID BASE MATERIAL HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3	1/2	55	37	27	22	18	16	14	12	11	10	9	8	8	7	7	6	6	6	5
4	9/16	81	54	40	32	27	23	20	18	16	15	13	12	12	11	10	9	9	8	8
4	5/8	43	28	21	17	14	12	11	9	9	8	7	7	6	6	5	5	5	4	4
5	3/4	34	23	17	14	11	10	9	8	7	6	6	5	5	4	4	4	4	4	3
6	7/8	27	18	14	11	9	8	7	6	5	5	4	4	4	3	3	3	3	3	3
7	1	24	16	12	10	8	7	6	5	5	4	4	4	3	3	3	3	3	3	2
8	1 1/8	21	14	10	8	7	6	5	5	4	4	3	3	3	3	3	2	2	2	2
9	1 1/4	19	12	9	7	6	5	5	4	4	3	3	3	3	2	2	2	2	2	2
10	1 3/8	19	12	9	7	6	5	5	4	4	3	3	3	3	2	2	2	2	2	2
11	1 5/8	9	6	5	4	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 10oz Cartridge and Steel Screen Tubes - Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE HOLE DEPTH (inches)																		
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17
3/8	9/16	20	18	16	14	13	12	11	10	9	9	8	7							
1/2	1 1/16	13	11	10	9	8	7	7	6	6	5	5	4							
5/8	7/8	7	6	5	5	4	4	3	3	3	3	2	2	2	2					
3/4	1	5	4	4	3	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 10oz Cartridge and Opti-Mesh Screen Tubes - Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN OPTI-MESH SCREEN TUBE HOLE DEPTH (inches)																						
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17	18	19	20	21
3/8	9/16	20	17	15	14	12	11	10	10	9	8	7	7											
1/2	1 1/16	11	9	8	7	7	6	5	5	5	4	4	3											
5/8	7/8	7	6	5	5	4	4	4	3	3	3	2	2	2	2									
3/4	1	5	4	4	3	3	3	3	2	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 13 oz. Cartridge using Threaded Rod – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD IN SOLID BASE MATERIAL HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3/8	7/16	103	69	51	41	34	29	26	23	21	19	17	16	15	14	13	12	11	11	10
3/8	1/2	65	43	32	26	22	19	16	14	13	12	11	10	9	9	8	8	7	7	6
1/2	9/16	75	50	37	30	25	21	19	17	15	14	12	12	11	10	9	9	8	8	7
1/2	5/8	47	31	24	19	16	13	12	10	9	9	8	7	7	6	6	6	5	5	5
5/8	11/16	55	37	27	22	18	16	14	12	11	10	9	8	8	7	7	6	6	6	5
5/8	3/4	37	25	18	15	12	11	9	8	7	7	6	6	5	5	5	4	4	4	4
3/4	13/16	44	29	22	18	15	13	11	10	9	8	7	7	6	6	6	5	5	5	4
3/4	7/8	30	20	15	12	10	8	7	7	6	5	5	5	4	4	4	3	3	3	3
7/8	15/16	35	23	17	14	12	10	9	8	7	6	6	5	5	5	4	4	4	4	3
7/8	1	25	17	12	10	8	7	6	6	5	5	4	4	4	3	3	3	3	3	2
1	1 1/16	29	19	14	12	10	8	7	6	6	5	5	4	4	4	3	3	3	3	3
1	1 1/8	21	14	10	8	7	6	5	5	4	4	3	3	3	3	2	2	2	2	2
1 1/8	1 1/4	24	16	12	10	8	7	6	5	5	4	4	3	3	3	3	3	3	3	2
1 1/8	1 1/2	18	12	9	7	6	5	4	4	4	3	3	3	3	2	2	2	2	2	2
1 1/4	1 5/8	21	14	10	8	7	6	5	5	4	4	3	3	3	3	3	2	2	2	2
1 1/4	1 3/4	16	11	8	6	5	5	4	4	3	3	3	2	2	2	2	2	2	2	2

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 13 oz. Cartridge using Rebar – Installations per Cartridge**

Rebar Size (no.)	Drill Bit Dia. (in.)	REBAR IN SOLID BASE MATERIAL HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3	1/2	77	52	39	31	26	22	19	17	15	14	13	12	11	10	10	9	9	8	8
4	9/16	114	76	57	45	38	32	28	25	23	21	19	17	16	15	14	13	13	12	11
4	5/8	60	40	30	24	20	17	15	13	12	11	10	9	9	8	8	7	7	6	6
5	3/4	48	32	24	19	16	14	12	11	10	9	8	7	7	6	6	6	5	5	5
6	7/8	39	26	19	16	13	11	10	9	8	7	6	6	5	5	5	4	4	4	4
7	1	34	23	17	14	11	10	8	8	7	6	6	5	5	4	4	4	4	4	3
8	1 1/8	29	19	15	12	10	8	7	6	6	5	5	4	4	4	3	3	3	3	3
9	1 1/4	26	17	13	10	9	7	7	6	5	5	4	4	4	3	3	3	3	3	3
10	1 3/8	26	18	13	11	9	8	7	6	5	5	4	4	4	3	3	3	3	3	3
11	1 5/8	13	9	7	5	4	4	3	3	3	2	2	2	2	2	2	2	1	1	1

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 13 oz. Cartridge and Steel Screen Tubes – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE HOLE DEPTH (inches)																		
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17
3/8	9/16	29	25	23	20	18	17	16	15	14	13	11	10							
1/2	1 1/16	18	16	14	13	12	11	10	9	9	8	7	6							
5/8	7/8	10	9	8	7	7	6	6	5	5	5	4	4	3	3	3				
3/4	1	8	7	6	5	5	4	4	4	4	4	3	3	3	2	2	2	2	2	2

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 13 oz. Cartridge and Plastic Screen Tubes – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE HOLE DEPTH (inches)																						
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17	18	19	20	21
3/8	9/16	34	30	26	24	22	20	18	17	16	15	13	12											
1/2	1 1/16	18	15	14	12	11	10	9	9	8	8	7	6											
5/8	7/8	12	11	9	8	8	7	6	6	6	5	5	4	4	4	3								
3/4	1	9	8	7	6	6	5	5	4	4	4	3	3	3	3	2	2	2	2	2	2	2	2	2

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 30 oz. Cartridge using Threaded Rod – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD IN SOLID BASE MATERIAL HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3/8	7/16	237	158	119	95	79	68	59	53	47	43	40	37	34	32	30	28	26	25	24
3/8	1/2	150	100	75	60	50	43	37	33	30	27	25	23	21	20	19	18	17	16	15
1/2	9/16	173	115	86	69	58	49	43	38	35	31	29	27	25	23	22	20	19	18	17
1/2	5/8	109	73	54	44	36	31	27	24	22	20	18	17	16	15	14	13	12	11	11
5/8	11/16	127	84	63	51	42	36	32	28	25	23	21	19	18	17	16	15	14	13	13
5/8	3/4	85	57	43	34	28	24	21	19	17	15	14	13	12	11	11	10	9	9	9
3/4	13/16	102	68	51	41	34	29	25	23	20	18	17	16	15	14	13	12	11	11	10
3/4	7/8	68	46	34	27	23	20	17	15	14	12	11	11	10	9	9	8	8	7	7
7/8	15/16	81	54	40	32	27	23	20	18	16	15	13	12	12	11	10	9	9	8	8
7/8	1	58	38	29	23	19	16	14	13	12	10	10	9	8	8	7	7	6	6	6
1	1 1/16	66	44	33	27	22	19	17	15	13	12	11	10	9	9	8	8	7	7	7
1	1 1/8	47	32	24	19	16	14	12	11	9	9	8	7	7	6	6	6	5	5	5
1 1/8	1 1/4	55	37	27	22	18	16	14	12	11	10	9	8	8	7	7	6	6	6	5
1 1/8	1 1/2	41	27	20	16	14	12	10	9	8	7	7	6	6	5	5	5	5	4	4
1 1/4	1 5/8	48	32	24	19	16	14	12	11	10	9	8	7	7	6	6	6	5	5	5
1 1/4	1 3/4	37	25	18	15	12	11	9	8	7	7	6	6	5	5	5	4	4	4	4

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 30 oz. Cartridge using Rebar – Installations per Cartridge**

Rebar Size (no.)	Drill Bit Dia. (in.)	REBAR IN SOLID BASE MATERIAL HOLE DEPTH (inches)																		
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
3	1/2	178	119	89	71	59	51	45	40	36	32	30	27	25	24	22	21	20	19	18
4	9/16	262	175	131	105	87	75	65	58	52	48	44	40	37	35	33	31	29	28	26
4	5/8	139	92	69	55	46	40	35	31	28	25	23	21	20	18	17	16	15	15	14
5	3/4	112	74	56	45	37	32	28	25	22	20	19	17	16	15	14	13	12	12	11
6	7/8	89	60	45	36	30	26	22	20	18	16	15	14	13	12	11	11	10	9	9
7	1	78	52	39	31	26	22	19	17	16	14	13	12	11	10	10	9	9	8	8
8	1 1/8	67	45	33	27	22	19	17	15	13	12	11	10	10	9	8	8	7	7	7
9	1 1/4	60	40	30	24	20	17	15	13	12	11	10	9	9	8	8	7	7	6	6
10	1 3/8	61	40	30	24	20	17	15	13	12	11	10	9	9	8	8	7	7	6	6
11	1 5/8	31	20	15	12	10	9	8	7	6	6	5	5	4	4	4	4	3	3	3

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 30 oz. Cartridge and Steel Screen Tubes – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE HOLE DEPTH (inches)																		
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17
3/8	9/16	67	59	52	47	43	39	36	33	31	29	26	23							
1/2	1 1/16	42	37	33	30	27	25	23	21	20	19	16	15							
5/8	7/8	24	21	19	17	15	14	13	12	11	10	9	8	8	7	6				
3/4	1	18	16	14	12	11	10	10	9	8	8	7	6	6	5	5	4	4	4	4

Tables are estimations. Actual usage may vary depending on waste.

**Estimating Guide for 30 oz. Cartridge and Plastic Screen Tubes – Installations per Cartridge**

Rod Dia. (in.)	Drill Bit Dia. (in.)	THREADED ROD INSERTED IN SCREEN TUBE HOLE DEPTH (inches)																						
		3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	9	10	11	12	13	14	15	16	17	18	19	20	21
3/8	9/16	78	69	61	55	50	46	42	39	37	34	31	27											
1/2	1 1/16	41	36	32	28	26	24	22	20	19	18	16	14											
5/8	7/8	28	24	22	19	18	16	15	14	13	12	11	10	9	8	7								
3/4	1	20	18	16	14	13	12	11	10	9	9	8	7	6	6	5	5	4	4	4	4	4	4	3

Tables are estimations. Actual usage may vary depending on waste.