

**Maximum Single Filter Cell Production<sup>1</sup> (L/h and m<sup>3</sup>/day) as a Function of Surface Loading Rate**

Filter Geometry (Interior)	Surface Area m <sup>2</sup>	Surface Loading Rate L/h/m <sup>2</sup>							
		100	200	300	400	500	600	800	1000
		Typical Range for Slow Sand Filter Applications <sup>2</sup>				Typical Range for Polishing Sand Filter Applications <sup>3</sup>			
8 m x 8 m	64	6,400 L/h 154 m <sup>3</sup> /day	12,800 307.2	19,200 460.8	25,600 614.4	32,000 768	38,400 921.6	51,200 1,228.8	64,000 1,536
4 m x 4 m	16	1,600 38.4	3,200 76.8	4,800 115.2	6,400 153.6	8,000 192	9,600 230.4	12,800 307.2	16,000 384
4 m x 2 m	8	800 19.2	1,600 38.4	2,400 57.6	3,200 76.8	4,000 96	4,800 115.2	6,400 153.6	8,000 192
2 m x 2 m	4	400 9.6	800 19.2	1,200 28.8	1,600 38.4	2,000 48	2,400 57.6	3,200 76.8	4,000 96
2 m x 1 m	2	200 4.8	400 9.6	600 14.4	800 19.2	1,000 24	1,200 28.8	1,600 38.4	2,000 48
1 m x 1 m	1	100 2.4	200 4.8	300 7.2	400 9.6	500 12	600 14.4	800 19.2	1,000 24

1. Maximum filter production for filters with other geometry or surface loading rates may be calculated by multiplying the surface area times the surface loading rate.
2. Typical range of surface loading rates allowed by regulatory agencies for slow sand filters.
3. Surface loading rates for polishing sand filters are determined on a case by case basis based on bench and pilot scale testing. They may be