

CHAMBER SYSTEMS

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Equivalent Areas

As allowed by DEQ Water Quality Division Policy # 13.41.2, dated November 21, 1994 gravelless leachfield chambers get double infiltrative surface area credit for the bottom area of the chamber. This is allowed because research indicates that chambers provide an optimum infiltrative surface by eliminating the 50% stone masking associated with conventional systems utilizing stone in the leach field. Since these types of chambers are manufactured units with fixed dimensions, an equivalent infiltrative surface area can be precalculated for any make and model of chamber. In a trench configuration, the equivalent area is equal to 2 * (width + effective side wall height) * unit length. In a bed configuration the side wall is not counted, so the equivalent area is equal to 2 * width * unit length. The following table shows the equivalent areas of several types and models of these units for both bed and trench applications:

<u>Make and Model</u>	<u>Nominal Dimensions</u> (length*width*height)	<u>EQUIVALENT AREA: in a</u>	
		<u>Bed Layout</u>	<u>Trench Layout</u>
<u>INFILTRATOR</u> brand:			
Original/Standard Unit	6.25ft * 34in * 12in	35.4 sf	40.0 sf / unit
High Capacity Chamber	6.25ft * 34in * 16in	35.4 sf	45.0 sf
Equalizer 24 (EQ24)	8.42ft * 15in * 11in	21.0 sf	30.0 sf
Equalizer 36 (EQ36)	8.42ft * 22in * 13.5in	30.0 sf	42.0 sf
Standard Sidewinder	6.25ft * 34in * 12in	35.4 sf	40.0 sf
High Capacity Sidewinder	6.25ft * 34in * 16in	35.4 sf	45.0 sf
Quick4 Standard	4.42ft * 34in * 12in	22.5 sf	26.5 sf / unit
Quick4 High Capacity	4.42ft * 34in * 16in	22.5 sf	30.3 sf
Quick4 Standard End Cap Pairs (inlet & back end): 7.0 square feet / pair			
Quick4 "EQ24"	4.42ft * 16in * 11in	10.6 sf	14.6 sf
Quick4 "EQ36"	4.42ft * 22in * 12in	14.6 sf	18.5 sf
<u>HANCOR EnviroChamber</u> brand:			
Standard Unit	6.25ft * 34in * 12in	35.4 sf	42.0 sf / unit
High Capacity Unit	6.25ft * 34in * 17.5in	35.4 sf	48.0 sf
Pro Standard Unit	6.33ft * 34in * 11in	35.8 sf	42.0 sf
Pro High Capacity	6.33ft * 34in * 14in	35.8 sf	45.0 sf
Pro 15" Narrow Chamber	7.25ft * 15in * 12in	18.0 sf	26.0 sf
Pro 22" Narrow Chamber	7.25ft * 22in * 12in	26.5 sf	35.0 sf
Pro ARC Standard Unit	5.0 ft * 34.5in * 13in	28.7 sf	34.7 sf
<u>BIODIFFUSER</u> brand:			
Standard Unit (11" tall)	6.33ft * 34in * 11in	35.8 sf	42.0 sf / unit
14" Tall High Capacity Unit	6.33ft * 34in * 14in	35.8 sf	45.0 sf
16" Tall High Capacity Unit	6.33ft * 34in * 16in	35.8 sf	47.5 sf
Bio 2 Chamber	7.25ft * 15in * 12in	18.0 sf	26.0 sf
Bio 3 Chamber	7.25ft * 22in * 12in	26.5 sf	35.0 sf
ARC 24 Unit	5.58ft * 22.5in * 12in	18.7 sf	23.9 sf
ARC 36	5.25ft * 34.5in * 13in	28.7 sf	34.7 sf
ARC 36HC	5.25ft * 34.5in * 16in	28.7 sf	37.7 sf