



PERMEAMETER COMPARISON TABLE

Point of Comparison	<u>ETC Simplified Falling Head Permeameter</u>	<u>ETC Pask Constant Head Permeameter</u>
		
Used to determine:	Permeability (K) of imported sand fill material on disturbed soil samples.	Field saturated hydraulic conductivity (Kfs) of <i>in situ</i> soil, also prepared fill materials and constructed soil liners.
Applicable permeability range:	9×10^{-6} m/sec to 7×10^{-3} m/sec	4.0×10^{-9} m/sec to 8.0×10^{-4} m/sec
Typical soil types:	USDA/CSSC: Clean sand, loamy sand. USCS: Sand, silty sand (low silt and clay content).	Virtually any soil type - USDA/CSSC: clay to sand. USCS: Sand, silty sand, silt and clay.
Soils with high silt/clay content?	No	Yes
Method of testing imported fill materials:	Place moistened sample of sandy fill into permeameter.	Auger well hole into raised bed or <i>test pad</i> of imported fill of appropriate density. Refer to CSAB65 standard.
Method of testing natural (<i>in situ</i>) soil:	Not applicable	Auger well hole into soil stratum to be tested.
Test soil with abundant gravel, cobbles or boulders?	No	Generally no, possible if gravel particles are small
Theory and calculations based on:	Nova Scotia On-site Technical Guidelines	Elrick and Reynolds, (1985, 1992), Zang & Parkin (1998)
Kit components:	Falling head permeameter, plastic test container, (2) discs of nylon screen, thermometer, impact block, user guide, quick reference tables. (not included: 5 gallon drop bucket, 2 gallon soil mixing bucket)	Pask Permeameter with custom cap and stainless steel clip, Eijkelkamp Riverside auger, wire well prep brush, user guide, quick reference field calculation tables.
Permeameter dimensions:	375 mm x 75 mm O.D.	1250 mm x 90 mm O.D. (upper reservoir)