

General Guide Soil Sample Size requirements

Test Description	Test Method	Amount
<i>Classification Testing</i>		
Water Content	ASTM D-2216	Jar, Zip Lock Bag
Sieve & Hydrometer Analysis	ASTM D-422	Jar, Zip Lock Bag
Multi Point Atterberg Limits	ASTM D-4318	Jar, Zip Lock Bag
Specific Gravity	ASTM D-854	Jar, Zip Lock Bag
Loss On Ignition	ASTM D-2974	Jar, Zip Lock Bag
<i>Density Tests</i>		
Standard Proctor	ASTM D-698	5 Gallon Bucket
Modified Proctor	ASTM D-1557	5 Gallon Bucket
One Point Proctor	ASTM D-698,D-1557	1 Gallon Bag
Relative Density Using Vibratory Table	ASTM D-4253,D-4254	5 Gallon Bucket
<i>Permeability</i>		
3" Diameter Flex Wall Permeability (undisturbed)	ASTM D-5084	6 Inch Recovery
3" Diameter Flex Wall Permeability (remolded)	ASTM D-5084	1 Gallon Bag -3/8"
4" Diameter Rigid Wall Permeability On Sands	ASTM D-2434	2 Gallon Bag
6-12 " Diameter Rigid Wall Permeability	ASTM D-2434	Call Laboratory
<i>Strength Testing</i>		
California Bearing Ratio (CBR), 1 Point	ASTM D-1883	5 Gallon Bucket
Unconfined Compression (undisturbed)	ASTM D2166	6 Inch Recovery
Unconfined Compression (remolded)	ASTM D2166	1 Gallon Bag
Peak Direct Shear, 3 points, undisturbed	ASTM D-3080	12 Inch Recovery
Peak Direct Shear, 3 points, remolded	ASTM D-3080	1 Gallon Bag
Residual Direct Shear, 3 points, undisturbed		12 Inch Recovery
Residual Direct Shear, 3 points, remolded		1 Gallon Bag
Peak Direct Shear, 3 points, remolded, 12" Shear Box	ASTM D-3080	5 Gallon Bucket
UU Triaxial, undisturbed	ASTM D-2850	24 Inch Recovery
UU Triaxial, remolded	ASTM D-2850	2 Gallon Bag
CU Triaxial (3 Pt Series undisturbed)	ASTM D-4767	24 Inch Recovery
CU Triaxial (3 Pt Series remolded)	ASTM D-4767	2 Gallon Bag
<i>Consolidation & Swell Potential Testing</i>		
One Dimensional Consolidation	ASTM D-2435	6 Inch Recovery
Remolded One Dimensional Consolidation	ASTM D-2435	1 Gallon Bag
Expansion of Soils, Submerged (6" Dia.)	ASTM D-4829	5 Gallon Bucket
<i>Corrosion Testing</i>		
Minimum Resistivity	PTM-133	6 Jars or 1 Gallon Bag
Soil Chlorides	AASHTO T-291	1 Jar
Soil Sulfates	AASHTO T-290	1 Jar
Soil ph for Corrosion Testing	T-289, G51/D4972	1 Jar

NOTE: The sample volumes noted above are to be used as a general guide for the indicated tests. If you have any questions regarding your project, please contact the laboratory.

Include a separate sealed jar or zip-lock bag sample of soil with larger bucket or bag samples when the "as received moisture content" is a critical property.