SAMPLING METHOD CATEGORIES and SAMPLE QUALITY CLASSES- EUROCODE 7

This is a new discipline covered by Eurocode 7 where **methods of sampling are categorized** depending on the **means** of recovering the sample **and its soil type,** and then stating what **Sample Quality Class** is obtained**, and** what tests are then appropriate for each class..

SAMPLING CATEGORIES ARE DOCUMENTED IN TABLES 2 AND 3 OF BS EN ISO 22475-1 .

There are 3 SAMPLING CATEGORIES : CATEGORY A , B, and C

Category A is the highest order, the methods of sampling vary with different strata

There are 5 QUALITY CLASSES of samples CLASSES 1,2,3,4, and 5

Class 1 samples are the highest order which have the minimum amount of disturbance during sampling and handling.

Table 1 - reproduced from BS EN22475-1:2006 Quality classes of soil samples for lab testing and sample categories that can be used

Quality class of soil sample	1	2	3	4	5
SAMPLING CATEGORIES	A				
				B	
					C

The table shows that only Category **A** sampling methods can recover Class 1 and 2 samples .
A minimum sampling category **B** is required to recover Class 3 and 4 Class samples.
Category **C** sampling can only recover the lowest quality samples, ie -Class 5

Table 3.1 reproduced from BSEN 1997-2 2007 shows which tests can be carried out from the different classes of samples

Soil property / Quality class	1	2	3	4	5
Unchanged soil properties					
Particle size	*	*	*	*	
Water content	*	*	*		
Density, Density index, permeability	*	*			
Compressibility, shear strength	*				
Properties that can be determined					
Sequence of layers	*	*	*	*	*
Boundaries of strata - broad	*	*	*	*	
Boundaries of strata - fine	*	*			
Atterberg Limits, particle density, organic	*	*	*	*	
Water content	*	*	*		
Density, Den Index, porosity permeability	*	*			
Compressibility , shear strength	*				
SAMPLING CATEGORIES	A				
				B	
					C