



BS1377 - 2 Classification tests

Clause	Sub-clause and Method	Standard	Comment
3	3.2 Water content	EN ISO 17892-1:2014	
	3.3 water saturated moisture content of chalk		
4	4.3 Liquid limit (cone penetrometer)	EN ISO 17892-12:2018	
	4.4 Liquid limit (one point penetrometer)	EN ISO 17892-12:2018	Correction factor not included
	4.5 Liquid limit (Casagrande)	EN ISO 17892-12:2018	
	4.6 Liquid limit (one point Casagrande)	EN ISO 17892-12:2018	
5	5.3 Plastic limit	EN ISO 17892-12:2018	
	5.4 Plasticity index		w _p and I _L covered in BS EN ISO 17892:12
6	6.3 Volumetric strain (definitive method)		Consider withdrawing 6.3 and 6.4 because of mercury hazard. Possibly use a version of ASTM D4943? Research needed?
	6.4 Volumetric strain (subsidiary method)		
	6.5 Linear shrinkage		
7	7.2 Density by linear measurement	EN ISO 17892-2:2014	
	7.3 Density by immersion in water	EN ISO 17892-2:2014	
	7.4 Density by water displacement	EN ISO 17892-2:2014	
8	8.2 Particle density by gas jar method	EN 1097-6	Method already published for aggregates
	8.3 Particle density by small pycnometer	EN ISO 17892-3	EN ISO 17892-3 contains a helium pycnometer method
	8.4 Particle density large pycnometer	EN ISO 17892-3	
9	9.2 Particle size distribution by wet sieving	EN ISO 17892-4	
	9.3 Particle size distribution by dry sieving	EN ISO 17892-4	
	9.4 Particle size distribution (pipette method)	EN ISO 17892-4	
	9.5 Particle size distribution (hydrometer method)	EN ISO 17892-4	

If only those that are likely to be retained BS1377-2 technical text reduces from 64 pages to about 4 pages.

BS1377-6 - Consolidation and permeability test in hydraulic cells with pore pressure measurement

Clause	Sub-clause and Method	Standard	Comment
3	Consolidation properties using hydraulic cell		
4	Permeability in a hydraulic consolidation		
5	Determination of isotropic consolidation properties using a triaxial using a triaxial cell		
6	Determination of permeability in a triaxial cell	EN ISO 17892-11	To be published in 2019

Pages reduce from 64 pages to ~45 pages

BS1377-7 - Shear strength test (total stress)

Clause	Sub-clause and Method	Standard	Comment
3	Shear strength by laboratory vane method		
4	Direct shear (small shear box)	EN ISO 17892-10	Will be published in early to mid 2019
5	Direct shear (large shear box)	EN ISO 17892-10	Will be published in early to mid 2019
6	Small ring shear apparatus (residual strength)	EN ISO 17892-10	Will be published in early to mid 2019
7	Determination of unconfirmed compressive strength	EN ISO 17892-7	
8	Unconsolidated undrained triaxial (definitive method)	EN ISO 17892-8	
9	Multistage unconsolidated undrained triaxial		Could be withdrawn not often used (not a useful test)

BS1377-8 - Shear strength (effective stress)

Clause	Sub-clause and Method	Standard	Comment
All	All	EN ISO 17892-9	EN ISO 17892-9 replaces all of the 1377-8 and also includes anisotropic consolidation tests

BS1377-8 is expected to be withdrawn in its entirety

BS1377-3 - Chemical and Electro-Chemical Tests (Published July 2018)**BS1377-4 - Compaction-related tests**

Clause	Sub-clause and Method	Standard	Comment
3	Determination of dry density/moisture (water) content relationship (2.5 kg, 4.5 kg and vibrating hammer methods)	BS EN 13286-1 to BS EN 13286-5	Review to see if these are suitable replacement methods
4	Determination of maximum and minimum dry densities for granular (coarse) soils		
5	Determination of moisture condition value (MCV)	BS EN 13286-46	Review to see if these are suitable replacement methods
6	Determination of chalk crushing value		
7	Determination of California bearing ratio	BS EN 13286-47	Review to see if these are suitable replacement methods

BS1377-5 - Compressibility, permeability and shrinkage tests

Clause	Sub-clause and Method	Standard	Comment
3	One dimension consolidation properties	EN ISO 17892-5	
4	Swelling and collapse characteristics		
5	Constant head permeability	EN ISO 17892-11	Draft in progress
6	Dispersibility		
7	Determination of frost heave	BS 812-124	BS 1377 already refers the reader out to the other BS