
**Geotechnical investigation and
testing — Identification and
classification of soil —**

**Part 1:
Identification and description**

*Reconnaissance et essais géotechniques — Identification et
classification des sols —*

Partie 1: Identification et description



Reference number
ISO 14688-1:2017(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General	3
5 Identification of soil	4
5.1 Mineral soil	4
5.1.1 General	4
5.1.2 Composite soils	8
5.1.3 Plasticity	9
5.1.4 Organic content in mineral soils	9
5.2 Organic soils	9
5.3 Carbonate soils	10
5.4 Sulfide soils	10
5.5 Volcanic soils	10
5.6 Loess	10
5.7 Glacial soils	10
5.8 Anthropogenic soil	10
5.9 Origin of deposit	11
5.9.1 General	11
5.9.2 Depositional environment	11
5.9.3 Geological unit	11
6 Description of soil	11
6.1 Description of soil properties	11
6.1.1 Particle size distribution	11
6.1.2 Particle shape	11
6.1.3 Particle strength	12
6.1.4 Mineral composition	12
6.1.5 Fines content	12
6.1.6 Consistency	12
6.1.7 Soil colours	13
6.1.8 Organic content	14
6.1.9 Carbonate content	14
6.1.10 Degree of decomposition of peat	14
6.2 Description of different soil types	15
6.2.1 Volcanic soils	15
6.2.2 Loess	15
6.2.3 Glacial soils	15
6.2.4 Anthropogenic soil	16
7 Description of bedding and discontinuities	16
7.1 Bedding	16
7.2 Discontinuities	17
7.3 Interbedding and mixed soils	17
8 Reporting	17
Annex A (informative) Procedures for identification of the primary fraction in mineral soils	19
Bibliography	23