

# ISO 14688-1:2017-12 (E)

## Geotechnical investigation and testing - Identification and classification of soil - Part 1: Identification and description

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>4</b>	<b>General .....</b>	<b>3</b>
<b>5</b>	<b>Identification of soil .....</b>	<b>4</b>
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
<b>6</b>	<b>Description of soil .....</b>	<b>11</b>
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
<b>7</b>	<b>Description of bedding and discontinuities .....</b>	<b>16</b>
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