



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 18674-2:2016

Geotechnical investigation and testing -  
Geotechnical monitoring by field  
instrumentation - Part 2: Measurement of  
displacements along a line: Extensometers  
(ISO 18674-2:2016)

**I.S. EN ISO 18674-2:2016**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN ISO 18674-2:2016 is the adopted Irish version of the European Document EN ISO 18674-2:2016, Geotechnical investigation and testing - Geotechnical monitoring by field instrumentation - Part 2: Measurement of displacements along a line: Extensometers (ISO 18674-2:2016)

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EUROPEAN STANDARD

**EN ISO 18674-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 13.080.20; 93.020

English Version

**Geotechnical investigation and testing - Geotechnical  
monitoring by field instrumentation - Part 2: Measurement  
of displacements along a line: Extensometers (ISO 18674-  
2:2016)**

Reconnaissance et essais géotechniques - Mesures  
géotechniques - Partie 2: Mesure de déplacement le  
long d'une ligne par extensomètre (ISO 18674-2:2016)

Geotechnische Erkundung und Untersuchung -  
Geotechnische Messungen - Teil 2:  
Verschiebungsmessungen entlang einer Messlinie:  
Extensometer (ISO 18674-2:2016)

This European Standard was approved by CEN on 11 September 2016.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**EN ISO 18674-2:2016 (E)**

<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>

## **European foreword**

This document (EN ISO 18674-2:2016) has been prepared by Technical Committee ISO/TC 182 “Geotechnics” in collaboration with Technical Committee CEN/TC 341 “Geotechnical Investigation and Testing” the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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### **Endorsement notice**

The text of ISO 18674-2:2016 has been approved by CEN as EN ISO 18674-2:2016 without any modification.

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**INTERNATIONAL  
STANDARD**

**ISO  
18674-2**

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**Geotechnical investigation and  
testing — Geotechnical monitoring by  
field instrumentation —**

**Part 2:  
Measurement of displacements along  
a line: Extensometers**

*Reconnaissance et essais géotechniques — Mesures géotechniques —  
Partie 2: Mesure de déplacement le long d'une ligne par extensomètre*



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**ISO 18674-2:2016(E)**



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# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Symbols</b> .....	<b>3</b>
<b>5 Instruments</b> .....	<b>4</b>
5.1 General.....	4
5.2 In-place extensometer.....	8
5.2.1 Measuring points.....	8
5.2.2 Connecting elements.....	8
5.2.3 Measuring head and read-out device.....	9
5.3 Probe extensometer.....	10
5.3.1 Measuring points and guide tube.....	10
5.3.2 Probe.....	11
5.5 Tape extensometer (convergence tape).....	12
5.6 Measuring range and accuracy.....	12
<b>6 Installation and measuring procedures</b> .....	<b>13</b>
6.1 Installation.....	13
6.1.1 Surface components.....	13
6.1.2 Installation in boreholes and in fill.....	13
6.1.3 In-place extensometer.....	14
6.1.4 Probe extensometer.....	14
6.1.5 Tape extensometer.....	15
6.2 Carrying out the measurement.....	15
6.2.1 Instrumentation check and calibration.....	15
6.2.2 Measurement.....	15
<b>7 Data processing and evaluation</b> .....	<b>15</b>
<b>8 Reporting</b> .....	<b>16</b>
8.1 Installation report.....	16
8.2 Monitoring report.....	16
<b>Annex A (normative) Measuring and evaluation procedure</b> .....	<b>17</b>
<b>Annex B (informative) Backfill materials</b> .....	<b>26</b>
<b>Annex C (informative) Geo-engineering applications</b> .....	<b>27</b>
<b>Annex D (informative) Measuring examples</b> .....	<b>28</b>
<b>Bibliography</b> .....	<b>46</b>

## ISO 18674-2:2016(E)

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 182, *Geotechnics*.

A list of all part in the ISO 18674 series, published under the general title *Geotechnical investigation and testing – Geotechnical monitoring by field instrumentation*, can be found on the ISO website.

# Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation —

## Part 2: Measurement of displacements along a line: Extensometers

### 1 Scope

This document specifies the measurement of displacements along a line by means of extensometers carried out for geotechnical monitoring. General rules of performance monitoring of the ground, of structures interacting with the ground, of geotechnical fills and of geotechnical works are presented in ISO 18674-1.

If applied in conjunction with ISO 18674-3, this document allows the determination of displacements acting in any direction.

This document is applicable to:

- monitoring the behaviour of soils, fills and rocks;
- checking geotechnical designs in connection with the Observational Design procedure;
- deriving geotechnical key parameters (e.g. from results of pile load tests or trial tunnelling);
- evaluating stability ahead of, during or after construction (e.g. stability of natural slopes, slope cuts, embankments, excavation walls, foundations, dams, refuse dumps, tunnels).

**NOTE** This document fulfils the requirements for the performance monitoring of the ground, of structures interacting with the ground and of geotechnical works by the means of extensometers as part of the geotechnical investigation and testing in accordance with References [5] and [6].

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 18674-1:2015, *Geotechnical investigation and testing — Geotechnical monitoring by field instrumentation — Part 1: General rules*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 18674-1 and the following apply.

#### 3.1

##### **extensometer <geotechnical>**

field instrument for monitoring changes of distance between two or more measuring points located along a measuring line

Note 1 to entry: Monitoring of such changes allows the determination of displacements of measuring points acting in the direction of the measuring line.

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