



Bureau de normalisation
du Québec

CAN/BNQ 2501-130/2014 (R 2022)

**Soils — Determination of the Coefficient of
Permeability at the End of a Drill Casing**

scc  ccn



STANDARD

CAN/BNQ 2501-130/2014
(R 2022)

**Soils — Determination of the Coefficient of Permeability
at the End of a Drill Casing**

Sols — Détermination du coefficient de perméabilité au bout d'un tubage de forage

Bureau de normalisation du Québec

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This is a reaffirmation (reapproval) of the edition dated August 6, 2014.

The edition number of this English version was corrected to match that of the French version. Therefore, it has been incremented from the third edition to the fifth edition.

The decision resulting from the systematic review that will enable to determine whether the current document shall be modified, revised, reaffirmed or withdrawn will be implemented no later than at the end of April 2027.

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FOREWORD

This document was developed in compliance with the Standards Council of Canada (SCC)'s Requirements and Guidance for standards development organizations and approved as a reaffirmed National Standard of Canada by the SCC. Its reaffirmation was approved by a Standards Development Committee, whose members were:

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The 2014 edition of this document was approved as a National Standard of Canada by the Standards Council of Canada (SCC). It was approved by a Standards Development Committee, whose voting members were:

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* At the time of publication of this standard, the aforementioned person no longer worked for this organization.

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SOILS — DETERMINATION OF THE COEFFICIENT OF PERMEABILITY AT THE END OF A DRILL CASING

1 PURPOSE AND SCOPE

This standard specifies the test method used to determine the coefficient of permeability of the soil in place at the end of a drill casing driven in by ramming.

NOTES —

- 1 This test method is particularly adapted for soils with a coefficient of permeability greater than 10^{-6} m/s.
- 2 The coefficient of permeability or hydraulic conductivity, in metres per second (m/s), is expressed by the symbol k in geotechnical engineering and by the symbol K in hydrogeology.

2 DEFINITIONS

For the purpose of this document, the following definitions shall apply:

coefficient of permeability (k), n. Proportionality constant, expressed as metres per second (m/s), linking the waterflow velocity to the hydraulic gradient according to Darcy's law. French: *coefficient de perméabilité (k)*.

difference in total head (H), n. Difference between the hydraulic head in a drill casing and the hydraulic head naturally occurring in a soil, which corresponds to the height of the water column in the drill casing above or below the piezometric level. French: *différence de charge hydraulique (H)*.

drill casing, n. Set of steel tubes screwed together, which are used to maintain the stability of the side wall in a borehole. French: *tubage de forage*.

hydraulic fracturing, n. Soil fracturing occurring when an excessive hydraulic head is applied and which results in an abnormal sudden drop of the height of the water column in a drill casing. French: *claquage hydraulique*.

piezometer, n. Instrument installed into a soil layer to measure its piezometric level. French: *piézomètre*.