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Testing methods for pervious concrete —

Part 2: Density and void content

Méthodes d'essai pour ciments perméables —

Partie 2: Titre manque

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Foreword

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This document was prepared by Technical Committee ISO/TC 71, *Concrete, reinforced concrete and pre-stressed concrete*, Subcommittee SC 1, *Test methods for concrete*.

A list of all parts in the ISO 17785 series can be found on the ISO website.

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Testing methods for pervious concrete —

Part 2:
Density and void content

1 Scope

This document specifies a procedure for testing the density and void content of freshly mixed and hardened pervious concrete specimens for pavement in the laboratory or cored from field placements.

This document also specifies formulae for calculating the density and void content of pervious concrete.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
density
ratio of the mass of a given quantity of concrete to its volume, (kg/m^3)

3.2
void content
percentage (%) of voids

3.3
pervious concrete
concrete which has interconnected voids that allow for water flow through them.

Note 1 to entry: Pervious concrete for pavement is usually made with little or no fine aggregate and contains narrowly graded coarse aggregate typically with the maximum size of 10 mm. The nominal maximum size is 25 mm.

4 Principle

4.1 Freshly mixed pervious concrete

For fresh pervious concrete, a sample is placed and consolidated in a standard measure. The density and void content of the pervious concrete are calculated based on the measured mass of the consolidated concrete specimen, the volume of the measure, and the total mass of materials batched.

The measured fresh density may be used as verification of mixture proportion.

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