

AS 1012.25.1:2020



STANDARDS
Australia



Methods of testing concrete

**Method 25.1: Determination of the fibre content of plastic state concrete
(wash-out test)**



currently in preview, click buy full version

AS 1012.25.1:2020

This Australian Standard® was prepared by BD-042, Methods Of Testing Concrete. It was approved on behalf of the Council of Standards Australia on 23 July 2020.

This Standard was published on 7 August 2020.

The following are represented on Committee BD-042:

- Austrroads
- Cement Concrete & Aggregates Australia
- Concrete Institute of Australia
- National Association of Testing Authorities Australia
- Victorian Construction Materials Laboratories Association

This Standard was issued in draft form for comment as DR AS 1012.25.1:2020.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

ISBN 978 1 76072 942 4

Methods of testing concrete

Method 25.1: Determination of the fibre content of plastic state concrete (wash-out test)

First published as AS 1012.25.1:2020.

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

Preface

This Standard was prepared by the Standards Australia Committee BD-042, Methods of Testing Concrete.

The objective of this Standard is to detail the method for determining the fibre content of plastic state concrete using a wash-out method.

This is the first publication of this test method which has been derived from existing VicRoads Test Method RC 377.01 (March 2019), Copyright © 2019 VicRoads, Melbourne, Victoria.

Currently in preview, click buy full version

Contents

Preface	ii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Apparatus and materials	1
4.1 Measure	1
4.1.1 General	1
4.1.2 Volume check	2
4.2 Balance	2
4.3 Rod	2
4.4 Mallet	2
4.5 Scoop	2
4.6 Glass cover plate	2
4.7 Vibrators	2
4.8 Trowel or float	3
4.9 Magnet	3
4.10 Sieve or filter	3
4.11 Isopropyl alcohol	3
5 Procedure	3
5.1 Sampling	3
5.2 Compaction	3
5.2.1 Compaction by hand	3
5.2.2 Compaction by vibration	4
5.2.3 Compaction of self-compacting concrete	5
5.3 Fibre Collection	5
6 Calculation of fibre content	5
7 Records	5
8 Test report	6
Bibliography	7

NOTES

Currently in preview, click buy full version

Australian Standard®

Methods of testing concrete

Method 25.1: Determination of the fibre content of plastic state concrete (wash-out test)

1 Scope

This Standard sets out the method for determining the fibre content of concrete that is in the plastic state, by using a wash-out process.

A sample is taken from a concrete load, or from concrete made in the laboratory and compacted into a measure of known volume. The steel or synthetic fibres are washed out, separated and dried. The fibre content is determined from the mass of fibre and the measured volume of concrete.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document:

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1012.1, *Methods of testing concrete, Method 1: Sampling of concrete*

AS 1012.2, *Methods of testing concrete, Method 2: Preparing concrete mixes in the laboratory*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in all referenced AS 1012 series documents and those below apply.

3.1

may

indicates the existence of an option

3.2

shall

indicates that a statement is mandatory

3.3

should

indicates a recommendation

4 Apparatus and materials

4.1 Measure

4.1.1 General

The measure shall be made of metal not less than 3 mm thick, be watertight and be sufficiently rigid to maintain its shape with rough usage. The inside surface shall be smooth and free from corrosion. The rim of the measure shall be machined to a plane surface perpendicular to the axis of the cylinder.

NOTE The measure should be provided with carrying handles.

The diameter of the measure shall be between 0.75 and 1.25 times the height.