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Australian Standard 1012, Part 1—1981

METHODS OF TESTING CONCRETE

METHOD FOR SAMPLING FRESH CONCRETE

DRB ED.

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THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Association of Consulting Engineers, Australia
Cement and Concrete Association of Australia
CSIRO, Division of Building Research
Department of Housing and Construction
Department of Public Works, N.S.W.
National Association of Australian State Road Authorities
National Association of Testing Authorities, Australia
National Ready Mixed Concrete Association of Australia
University of New South Wales

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AMENDMENT No 1
to
AS 1012, METHODS OF TESTING CONCRETE
Part 1—1981 METHOD FOR SAMPLING FRESH CONCRETE

REVISED TEXT

SUMMARY: This amendment applies to Clause 6 and Clause 7.

Published on 2 March 1987.

AMDT No 1 MAR. 1987

Page 6. Clause 6.

Insert new second paragraph to read:

The temperature of the concrete sample shall be measured to the nearest 1 °C by inserting a thermometer into a mix sample of approximately the volume of the slump cone.

AMDT No 1 MAR. 1987

Page 7. Clause 7.

Delete 'Name of sampler.' in Clause 7(k) and *substitute* 'Temperature of concrete sample.'

Delete Note (vii) to Clause 7(k).

Add new Clause 7(l):

(l) Name of sampler.

PREFACE

This edition of this standard was prepared by the Association's Committee on Methods of Testing Concrete as part of its ongoing program to revise the AS 1012 series of standards on the testing of concrete. It supersedes AS 1012, Part 1—1971.

Although extensive rewriting of the 1971 edition has been carried out in an attempt to clarify and update sampling procedures, the technical requirements have not been significantly altered.

The sampling terminology has been changed so that the basic unit of sampling is now the 'sample increment' rather than the 'portion'. For consistence testing and for batches less than 1 m^3, the single sample required has been termed the 'individual sample'; the term 'composite sample' has been retained.

An appendix giving minimum working volumes of concrete required to carry out each of the tests covered by AS 1012 has been included; the data tabulated are intended to assist persons in determining quantities to be sampled which are supplementary to the specified test sample.

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
METHODS OF TESTING CONCRETE

PART 1—METHOD FOR SAMPLING FRESH CONCRETE

1 SCOPE. This standard sets out the method for obtaining samples of freshly mixed concrete either directly from mixers and agitator units or from concrete deposited in readiness for casting or deposited in the forms.

2 DEFINITIONS. For the purposes of this standard, the following definitions apply:

2.1 Sample increment—the basic unit of sampling. Sample increments are taken in approximately equal volumes so that three or more sample increments constitute a composite sample (see Clauses 3, 5 and 6). Each sample increment is not less than 0.005 m^3 (5 L) of concrete.

2.2 Composite sample—three or more sample increments mixed in accordance with Clause 6.

2.3 Individual sample—a single portion of the concrete.

3 TEST SAMPLES. The test sample shall be a composite sample except that individual samples shall be taken when—

(a) the batch volume being sampled is less than 1 m^3; or

(b) the test is for consistence.

(See Clauses 5.1.1 (b) and 5.3.)

The volume of the composite sample shall be sufficient to carry out all the tests required, but in any case shall be not less than 0.015 m^3 (15 L) of concrete.

NOTE: Where the range of tests being conducted on the composite sample requires a volume of concrete greater than 0.015 m^3 (15 L), reference may be made to Appendix A which tabulates minimum working volumes for each of the tests covered by this standard.

4 SAMPLING LOCATIONS. Concrete shall be sampled at one of the following locations:

(a) From the discharge from central or work-site mixers.

(b) From the discharge from truck mixers and agitators.

(c) From concrete deposited in readiness for casting, or deposited in the forms.

NOTE: Selection of the sampling location is a matter for agreement between the parties concerned.