AS 1478.1—2000
Reconfirmed 2018

Australian Standard™

Chemical admixtures for concrete, mortar and grout

Part 1: Admixtures for concrete

Standards Australia

This Australian Standard was prepared by Committee BD/33, Chemical Admixture for Concrete. It was approved on behalf of the Council of Standards Australia on 28 June 2000 and published on 4 October 2000.

The following interests are represented on Committee BD/33:

The Association of Consulting Engineers Australia

Australian Chamber of Commerce and Industry

Australian Concrete Repair Association

Australian Pre-mixed Concrete Association

AUSTROADS

Cement and Concrete Association of Australia

Concrete Institute of Australia

Department of Land and Water Conservation NSW

Institution of Engineers Australia

University of New South Wales

University of Western Sydney

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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 1478.1–2000

Chemical admixtures for concrete, mortar and grout

Part 1: Admixtures for concrete

RECONFIRMATION NOTICE

Major stakeholders of this publication have reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 29 August 2018.

NOTES

Australian Standard™

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Part 1: Admixtures for concrete

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Revised and redesignated AS 1478.1—2000.

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PREFACE

This Standard was prepared by the Standards Australia Committee BD/33, Chemical Admixtures for Concrete, to supersede AS 1478—1992, MP 20.1—1971, Permeability-reducing admixtures, MP 20.2—1975, *Thickening admixtures for use in concrete and mortar,* and MP 20.3—1977, *Expanding admixtures for use in concrete, mortar and grout.*

The objective of this Standard is to provide users and specifiers of chemical admixtures with the requirements for chemical admixtures to be added to concrete mixes incorporating portland and blended cements.

This Revision includes the following changes:

(a) Requirements for compression testing at 1 year have been removed.

(b) Provision has been made for a mid-range water-reducing admixture having performance intermediate between normal and high-range water-reducing admixtures.

(c) Provision has been made for special admixtures having claimed attributes that cannot be verified by current standard tests, with the objective of demonstrating the influence of such admixtures on normal concrete properties.

(d) The three miscellaneous publications MP 20.1, MP 20.2 and MP 20.3 have been revised and added to this document as informative appendices.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for chemical admixtures to be added to concrete mixes incorporating portland and blended cements.

NOTES:

1 Sampling procedures are given in Appendix A.

2 Information on admixtures for use in concrete is given in Appendix B.

3 Guide to determine the chloride ion content in admixtures is given in Appendix C.

4 Information on thickening admixtures is given in Appendix D.

5 Information on shrinkage-reducing and shrinkage-compensating admixtures is given in Appendix E.

6 Information on permeability-reducing admixtures is given in Appendix F.

7 Admixtures that have been acceptance tested and approved to AS 1478—1992 and that meet the requirements of this Standard do not require re-assessment.

1.2 APPLICATION

This Standard shall not be interpreted as preventing the use of cementitious material other than portland and blended cements, such as ground-granulated iron blast furnace slag or pozzolana such as fly ash or silica fume.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS		
1012	Methods of testing concrete	
1012.2	Method 2:	Preparation of concrete mixes in the laboratory
1012.3.1	Method 3.1:	Determination of properties related to the consistency of concrete—Slump test
1012.4	Method 4:	Determination of air content of freshly mixed concrete (all methods)
1012.5	Method 5:	Determination of mass per unit volume of freshly mixed concrete
1012.6	Method 6:	Method for the determination of bleeding of concrete
1012.8.1	Method 8.1:	Method of making and curing concrete—Compression and indirect tensile test specimens
1012.9	Method 9:	Determination of the compressive strength of concrete specimens
1012.13	Method 13:	Determination of the drying shrinkage of concrete for samples prepared in the field or in the laboratory
1012.18	Method 18:	Determination of setting time of fresh concrete, mortar and grout by penetration resistance
1152	Specification for test sieves	