

PBD 13 : 1994



PIAWAI BRUNEI DARUSSALAM
BRUNEI DARUSSALAM STANDARD

Specification for

**Methods of test for water
for making concrete**

MINISTRY OF DEVELOPMENT
NEGARA BRUNEI DARUSSALAM

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**Construction Planning and Research Unit
Ministry of Development
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Methods of test for water for making concrete

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First edition

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Attention is drawn to the fact that this Brunei Darussalam Standard does not confer any immunity from legal obligations in any contract for compliance to the Standard.

The Brunei Darussalam Standards are subject to periodical review according to the current needs of the local industries to keep abreast of progress in the industries concerned. Suggestions of amendments will be recorded and in due course brought to the notice of the committees concerned.

Amendments issued since publication

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CONTENTS

	Page
Foreword	4
Committees representation.....	6

Specifications

1. Scope	7
2. Sampling	7
3. Materials for the test	7
4. Initial setting time test	9

Appendices

A. Notes on the suitability of water for making concrete	10
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Table

1. Minimum initial setting time of cement	8
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PBD 13 : 1994

FOREWORD

This Brunei Darussalam Standard was prepared by the Technical Committee on Concrete under the authority of the Standards Committee, Ministry of Development.

This standard was published with all specifications reviewed in accordance to the current needs of the local building industry, and in preparing this standard, references were made to the following: -

- | | |
|---------------------------------|--|
| 1. PBD 14: 1994 | Specification for ordinary and rapid-hardening Portland cements. |
| 2. BS 4027 : 1980` | Specification for sulphate-resisting Portland cement. |
| 3. MS 28: 1985 | Methods of test for water for making concrete (First Revision). |
| 4. BS 146 | Specification for Portland-blastfurnace cement. |
| 5. BS 915 | Specification for high alumina cement. |
| 6. BS 1328 : 1969 (1989) | Method of sampling water used in industry. |
| 7. BS 1370 : 1979 | Low heat Portland cement. |
| 8. BS 6100 : Section 6.2 : 1986 | Concrete |
| 9. BS 6100 : Section 6.3: 1984 | Aggregate |
| 10. BS 4246 | Specification for low heat Portland-blast furnace cement. |
| 11. BS 4248 : 1974 | Specification for supersulphated cement. |

- | | |
|---------------------------|--|
| 12. PBD 6: Part 1: 1993 | Guide to specifying concrete |
| 13. PBD 6: Part 2: 1993 | Methods for specifying concrete mixes |
| 14. PBD 6: Part 3: 1993 | Specification for the procedures to be used
in producing and transporting concrete. |
| 15. PBD 6: Part 4: 1994 | Specification for the procedures to be used in
sampling, testing and assessing compliance
of concrete. |
| 16. BS 8110: Part 1: 1985 | Structural use of concrete
Code of practice for design and construction. |

COMMITTEE REPRESENTATION

The Technical Committee on Concrete was entrusted by the Ministry of Development for the preparation of this Brunei Darussalam Standard. The members of the Technical Committee are as follows:-

1. Pg Hj Matusin Pg Hj Matasan	Ministry of Development
2. Awg Hj Yusop Hj Ibrahim	Ministry of Development
3. Dyg Masni Hj Mohsin	Ministry of Industry & Primary Resources
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6. Awg Chiong Siong Khai	TECA Sdn Bhd
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8. Awg Moo Kwang Yin	Ministry of Defence
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10. Awg Abd Latif Ali	Maktab Teknik Sultan Saiful Rijal
11. Awg Abd Hakim Hj Hanafiah	Housing Development Department
12. Awg Amer Hamzah Hj Abd Karim	Public Works Department
13. Dyg Suzana bte Hj Awg Adenan	Public Works Department
14. Awangku Shariful PSI Pg Hj Ismail	Petroleum Unit, Prime Minister's Department

Specification

1 Scope

This Brunei Darussalam Standard specifies two methods by which water may be tested in respect of its suitability for making concrete. These tests do not give information regarding the long term durability of the concrete and appendix A summarizes the present state of knowledge in the light of which water may be judged as to their suitability for this purpose.

2 Sampling

A sample of water of not less than 5 litres shall be taken by a competent representative of the interested parties. The sample shall be typical of the water as it is to be used, due regard being paid to the effect of seasonal variation. The sample shall not receive any treatment before testing other than that envisaged for the bulk supply before the later is used in concrete. The sample shall be stored in a clean container previously rinsed out with similar water.

NOTE. Guidance on methods of sampling, with particular regard to the factors which may cause variation of composition, will be found in BS 1328 although the refinements necessary for obtaining accurate analytical figures will be out of place here. Elaborate sample collectors are not essential and may be replaced by any clean convenient container.

3 Materials for the test

3.1 Distilled water. Not less than 5 litres of distilled water shall be available for control tests and shall be stored in a clean container. The PH level of the water shall be 7.

NOTE. Deionised water is also suitable