

DJS 133: 202X

ICS 91.100.30

Draft Jamaican Standard

Specification

for

Ready-mixed concrete



BUREAU OF STANDARDS JAMAICA

Comment period: 10 March 2021 to 9 May 2021

IMPORTANT NOTICE

Jamaican standards are subjected to periodic review. The next amendment will be sent without charge if you cut along the dotted line and return the self-addressed label. If we do not receive this label we have no record that you wish to be kept up-to-date. Our address:

Bureau of Standards Jamaica

6 Winchester Road

P.O. Box 113

Kingston 10

Jamaica W.I.

-----(~~X~~cut along the line)-----

DJS 133: 202X

NAME OR DESIGNATION.....

ADDRESS.....

JBS CERTIFICATION MARK PROGRAMME

The general policies of the JBS Certification Mark Programme are as follows:

- The JBS provides certification services for manufacturers participating in the programme and licensed to use the gazetted JBS Certification Marks to indicate conformity with Jamaican Standards.
- Where feasible, programmes will be developed to meet special requirements of the submitter.
- JBS certification is provided in the interest of maintaining agreed-upon standard requirements. Where applicable, certification may form the basis for acceptance by inspection authorities responsible for enforcement of regulations.
- In performing its functions in accordance with its policies, JBS does not assume or undertake to discharge any responsibility of the manufacturer or any other party.

Participants in the programme should note that in the event of failure to resolve an issue arising from interpretation of requirements, there is a formal appeal procedure.

Further information concerning the details of JBS Certification Mark Programme may be obtained from the Jamaica Bureau of Standards, 6 Winchester Road, Kingston 10.

CERTIFICATION MARKS



Product Certification Marks



Plant Certification Mark



Certification of Agricultural Produce



Jamaica-Made Mark

(CAP) Mark

DJS 133: 202X

ICS 91.100.30

DRAFT
Jamaican Standard Specification

for

Ready-mixed concrete

Bureau of Standards Jamaica
6 Winchester Road
P.O. Box 113
Kingston 10
JAMAICA, W. I.
Tel: (876) 926 -3140-5/ 618 – 1534 / 632- 4275
Fax: (876) 929 -4736
Website: www.bsj.org.jm
E-mail: info@bsj.org.jm

Month 202X

© 2020 Bureau of Standards Jamaica

All rights reserved. Unless otherwise specified, no part of a Bureau of Standards publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including, photocopying microfilm or scanning, without permission in writing.

ISBN XXX-XXX-XXX-XXX-X

Declared by the Bureau of Standards Jamaica to be a standard specification pursuant to section 7 of the Standards Act 1969.

First published Month 202X.

This standard was circulated in the draft form for comment under the reference DJS 133: 202X

Jamaican Standards establish requirements in relation to commodities, processes and practices, but do not purport to include all the necessary provisions of a contract.

The attention of those using this standard specification is called to the necessity of complying with any relevant legislation.

Amendments

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Types of ready-mixed concrete	2
5 Materials	2
6 Measurement of materials	2
7 Mixing	3
7.1 Stationary mixer	3
7.2 Truck mixers or truck agitators	3
7.2.1 Prior to Mixing	3
7.3 Assessment of uniformity	3
8 Delivery	4
8.2 Delivery ticket	4
8.3 Provision of additional spaces on the Delivery ticket	4
9 Basis of supply	5
10 Method of specifying	5
11 Inspection, sampling and testing	5
12 Independent tests	6
13 Tolerances	8
13.1 Slump	8
13.2 Analysis of fresh concrete	8
13.3 Compressive or flexural strength	9
13.4 Batching	9
14 Disposal of non-conforming concrete	9

Foreword

This standard is a revision of and supersedes JS 133: 2015. It establishes the national criterion for the production of ready-mixed concrete in Jamaica. It is based heavily on ASTM C94 while maintaining the general structure and consideration contained in the 2015 edition of the standard.

This standard is intended to be compulsory.

Committee representation

Acknowledgements

Acknowledgement is made to the ASTM International and the British Standards Institution (BSI) for permission to reproduce material from their documents.

Reference documents

This standard makes reference to the following documents:

- a) ASTM C31 Standard Practice for Making and Curing Concrete Test Specimens in the Field
- b) ASTM C138/C138M Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of concrete
- c) ASTM C143 Standard Test Method for Slump of Hydraulic Cement Concrete
- d) ASTM C172 Standard Practice for Sampling Freshly Mixed Concrete
- e) ASTM C 1602 Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
- f) BS EN 12350-1 Testing fresh concrete – Part 1: Sampling
- g) JS 32 Portland cement (ordinary and rapid-hardening)
- h) JS 124 Aggregates for concrete
- i) JS 303 Physical test methods for hydraulic cements
- j) JS 320 General purpose hydraulic cements
- k) Jamaican National Building Codes

Jamaican Standard Specification for Ready-mixed concrete

1 Scope

This standard specifies the conditions under which ready-mixed concrete shall be made and delivered, and the methods by which the purchaser can specify with his enquiry or order, the properties, of the concrete required. It provides a specification for the production and supply of ready-mixed concrete.

The standard addressed methods of specifying ready-mixed concrete for nominal mixes and specified strength mixes for special purposes, to meet the requirements of Jamaican National Building Codes. The standard also gives guidance on the data to be provided by the purchaser when ordering ready-mixed concrete, the inspection facilities to be provided by the supplier and on the appropriate tests. The routine tests which must be carried out by the supplier and those which are the responsibility of the purchaser are also included.

This standard does not cover the placing, compaction, curing or protection of the concrete after delivery, nor is it to apply to the materials for lean concrete or similar road base materials.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ASTM C31, *Standard Practice for Making and Curing Concrete Test Specimens in the Field*

ASTM C138/C138M, *Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of concrete*

ASTM C143, *Standard Test Method for Slump of Hydraulic Cement Concrete*

ASTM C172, *Standard Practice for Sampling Freshly Mixed Concrete*

ASTM C260, *Standard Specification for Air-Entraining Admixtures for Concrete*

ASTM C494, *Standard Specification for Chemical Admixtures for Concrete*

ASTM C1017, *Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete*

ASTM C1602, *Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete*

BS EN 12350-1, *Testing fresh concrete – Part 1: Sampling*

JS 32, *Portland cement (ordinary and rapid-hardening)*

JS 124, *Aggregates for concrete*

JS 301, *Blended hydraulic cements*

JS 303, *Physical test methods for hydraulic cements*

JS 320, *General purpose hydraulic cements*

3 Terms and definitions

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

3.1

ready-mixed concrete

Concrete delivered at the site, or into the purchaser's vehicle, in a plastic condition and requiring no further treatment before being placed

4 Types of ready-mixed concrete

Ready-mixed concrete shall be mixed and delivered to the site by means of one of the following operations or combination of operations:

- l) **central-mixed concrete** - Mixed completely in a stationary mixer and then transported to the point of delivery in a truck agitator or a truck mixer, operating at agitator speed, or if agreed by the purchaser, in approved non-agitating equipment.
- m) **truck-mixed concrete** - Mixed completely in a truck mixer.

5 Materials

5.1 Unless otherwise agreed between the purchaser and supplier at the time of placing the order, the materials used shall comply with the following requirements:

- a) **Cement** -Cement shall comply with the requirements of JS 32, JS 301 or JS 320.
- b) **Aggregates** - Aggregates shall comply with the requirements of JS 124.
- c) **Water** - The water shall be clean and free from impurities liable to have a deleterious effect on concrete, and any tests made to check the requirement shall be in accordance with the requirements of ASTM C1602.

5.2 In the absence of designated applicable materials specifications, the following materials specifications shall be used:

- a) **Air-Entraining Admixtures** - Air-entraining admixtures shall conform to ASTM C260/C260M.
- b) **Chemical Admixtures** - Chemical admixtures shall conform to either ASTM C494/C494M or C1017/C1017M as applicable.

6 Measurement of materials

6.1 Cement shall be measured by weight or in whole bags (with specified weights) as delivered by the manufacturer.

6.2 Aggregates shall be measured by weight, due allowance being made for free water in the aggregates.

6.3 Water shall be measured by volume or weight.

6.4 Any liquid or paste admixtures shall be measured by volume or weight and any solid admixtures by weight.

7 Mixing

7.1 Stationary mixer

Where a stationary mixer is used for the mixing of the concrete, in order to produce a satisfactory homogenous mix, the mixing time shall be not less than 2 minutes unless the mixing time is specified by the manufacturer of the mixer, when it shall be displayed on the plant and the latter specification shall then be followed. The mixing time shall be measured from the time all materials including water are in the drum of the mixer.

7.2 Truck mixers or truck agitators

A revolution counter shall be provided on all truck mixers used for complete mixing of concrete. Mixing shall continue for not less than 100 revolutions and at a rate of not less than seven revolutions per minute, unless the number and rate of revolutions to produce a satisfactory mix are specified by the manufacturer of the mixer, when they shall be displayed on the vehicles and these latter instructions shall then be followed.

7.2.1 Prior to Mixing

Before new mixes are batched, checks should be made to ensure that the mixing drum is free of all deleterious matters, (harden concrete, organic material, excess water etc.) to ensure that the quality of the concrete is not impaired or the volume of the drum or efficiency is not compromised.

7.2.2 Where a truck mixer or truck agitator is used for transporting concrete which has been mixed in a stationary mixer, the concrete shall be agitated during transport or remixed at the site so that the concrete is of the required quality or consistency.

7.2.3 Truck mixers and agitators shall not be loaded in excess of the manufacturer's rated capacity, which shall be displayed on the vehicle in terms of the volume of mixed concrete clearly indicated as 'maximum rating ...m³'. When a vehicle is capable of being used for both truck mixing and agitation the two respective rated maximum capacities shall be displayed, clearly indicating:

maximum rating

 mixing.....m³

maximum rating

 agitation..... m³

7.3 Assessment of uniformity

When loaded to capacity, stationary or truck mixers shall be capable of combining the ingredients into a thoroughly mixed concrete. The degree of uniformity shall be assessed by the slump test (with concrete having a slump of greater than 25 mm) and shall be taken when approximately $\frac{1}{4}$ and $\frac{3}{4}$ of the batch have been discharged. The difference between the two slumps shall not exceed the following:

Average of two slumps Difference between two slumps

Not exceeding 75 mm 25 mm

Exceeding 75 mm 50mm

8 Delivery

8.1 Where a truck mixer or agitator is used for transporting concrete, the discharge of the concrete shall be completed within 2 hours after either the introduction of the mixing water to the cement and aggregates, or the introduction of cement to the aggregates, whichever period is the longer, unless retarders are used to extend the setting time of the concrete. The time of introduction shall be recorded on the delivery note. Where concrete is transported in non-agitating equipment, discharge shall be completed within 1 hour after mixing unless a longer period is authorized by the purchaser. The time at which mixing was completed shall be recorded on the delivery note.

8.2 Delivery ticket

Before discharging the concrete at the point of delivery, the supplier shall provide the purchaser with a delivery ticket (for each batch of concrete) on which is printed, stamped or written the following minimum information:

- a) name or number of ready-mixed concrete depot;
- b) serial number of ticket;
- c) date;
- d) truck number;
- e) name of purchaser;
- f) name and location of site;
- g) strength (MPa) or mix description of concrete, including minimum cement content if specified;
- h) specified workability (slump in mm);
- i) type of cement, and amount;
- j) nominal maximum size aggregate;
- k) type or name of admixture, if included;
- l) quantity of concrete in m³;
- m) time of loading;
- n) direct pour or pumped

8.3 Provision of additional spaces on the Delivery ticket

Space should be provided for any additional items that have been specified and for the following to be completed on site: arrival and departure times of the truck; time of completion of discharge; slump; additives (including water) at the request of the purchaser of the concrete, or his representative, and his signature.

9 Basis of supply

9.1 The basis of purchase shall be the cubic meter of freshly mixed and unhardened concrete as discharged from the mixer.

9.2 The volume of freshly mixed and unhardened concrete in a given batch shall be determined from the total mass of the batch divided by the density of the concrete. The total mass of the batch shall be calculated either as the sum of the masses of all materials, including water, entering the batch or as the net mass of the concrete in the batch as delivered. The density shall be determined in accordance with ASTM C138/C138M using at least the 6-L container. Each sample shall be taken from the midpoint of the truckload by the procedure outlined in ASTM C172.

9.3 If the purchaser wishes to verify the total weight of the batch he shall obtain it from the gross and tare weights of the vehicle on a BSJ certified weigh-bridge.

NOTE It should be understood that the volume of hardened concrete may be, or appear to be, less than expected due to waste and spillage, over-excavation, spreading forms, some loss of entrained air, or settlement of wet mixtures, none of which are the responsibility of the producer.

10 Method of specifying

The method of specifying ready-mixed concrete shall be agreed between the purchaser and the supplier, and shall be one of the methods given in table 1. In most cases the data to be provided by the purchaser (given in column 2), and the appropriate inspection and testing facilities (given in column 3) shall apply. Where the purchaser requires special characteristics of the concrete or where concrete is to be supplied to the requirements of the Jamaican National Building Codes. The additional data and tests given in column 4 and 5 shall also apply. When ordering concrete to classification 2 the compressive or flexural strength specified shall be that at 28 days unless otherwise agreed (see NOTES 1, 2 and 3 to table 1).

11 Inspection, sampling and testing

11.1 The supplier shall provide adequate facilities for the purchaser to inspect (to the extent specified in column 3 and column 5. of table 1 when applicable) the materials and the processes used in the manufacture, and the methods of delivery of the concrete and to take samples of the materials used.

11.2 All tests and inspections shall be carried out with a minimum of interference with the manufacture and delivery of the concrete.

11.3 Samples of concrete for test purposes shall be obtained in the manner described in ASTM C172 or BS EN 12350-1. It must be relevant to sampling concrete at a mixer and shall be taken at the point and time of discharge. On the sample so obtained, two slump tests shall be carried out. These tests and any others within the scope of ASTM C143, 172 and 31 or relevant BS EN standards shall be carried out in accordance with that standard. The methods of any tests outside its scope shall be agreed on between the purchaser and the supplier.

11.4 When concrete is supplied to a specified strength, samples should be taken by the purchaser daily if less than 50 m³ for each mix and not less than once for every 50 m³. The strength test shall be carried out on three specimens tested at seven day and three specimens tested at 28 day from any one sample; the specimens shall be cured under laboratory conditions. The average strength of the three specimens shall be the test result. The purchaser shall make the necessary arrangement to afford the inspector all reasonable access to the site where concrete is being poured, for the procurement of samples of fresh concrete at time of placement to determine conformance of it to this specification.

11.6 Samples of concrete shall be obtained in accordance with ASTM C172 or BS EN 12350-1, except when taken to determine uniformity of slump within any one batch or load of concrete

11.7 Slump, air-content, density, and temperature tests shall be made at the time of placement at the option of the inspector or as often as is necessary for control checks. In addition, these tests shall be made when specified and always when strength specimens are made.

11.8 Strength tests as well as slump, temperature, density, and air content tests shall generally be made with a frequency of not less than one test for each 50 m³. Each test shall be made from a separate batch. On each day concrete is delivered, at least one strength test shall be made for each class of concrete.

11.9 If the measured slump or air content, or both is greater than the specified upper limit, a check test shall be made immediately on a new test sample after an additional 30 revolutions, or more, if necessary, of the mixing drum at mixing speed to ensure that a homogenous mixture is attained. In the event the check test fails, the concrete shall be considered to have failed the requirements of the specification.

11.10 In addition to any tests carried out by the purchaser, the supplier shall carry out regular routine tests at frequent intervals and shall record the results. The minimum rate of sampling and testing of concrete shall be in accordance with Table 2. These shall consist of tests of aggregates and tests for workability and compressive or flexural strength of the concrete where applicable. If required by the purchaser the supplier shall furnish certificates, at agreed intervals giving the information.

12 Independent tests

12.1 If the purchaser or his representative requires independent tests, the samples shall be taken at the point and time of discharge, and the tests shall be carried out in accordance with this standard on the written instructions of the purchaser or his representative. The supplier shall be afforded opportunity to inspect the method of curing and testing adopted or if he so desires, he or his representative shall be present at the sampling and testing. Unless otherwise specified in the enquiry and order, the cost of the tests shall be borne as follows:

- a) by the supplier if the results show that the concrete does not comply with the specified requirements.
- b) by the purchaser if the results show that the concrete complies with the specified requirements.

Table 1 — Methods of specifying ready-mixed concrete

1	2	3	4	5
Classification	Data to be provided by the purchaser where applicable	Inspection facilities to be provided by the supplier and appropriate tests which may be made by the purchaser	Additional data which may be provided by the purchaser after agreement with the supplier	Additional data and inspection facilities to be provided by the supplier and tests which may be made by the purchaser appropriate to the data in column 4
1. Nominal mixes	<ul style="list-style-type: none"> a. Mix proportions by weight or by volume or the cement content in kg/m³. b. Either <ul style="list-style-type: none"> i. Slump or other requirement for consistence or workability OR ii. Water/ cement ratio by weight based on the 'free' moisture and excluding water absorbed by the aggregates. c. Type of aggregate. d. Nominal maximum size of aggregate. e. Type of cement. 	<ul style="list-style-type: none"> a. Inspection of materials batching and mixing and tests on materials. b. Slump or test of other requirement for consistence or workability. c. Determination of mix proportions by analysis of fresh concrete. 	<ul style="list-style-type: none"> a. Proportion of fine aggregate in total aggregate. b. Full details of admixtures if any. 	
2. Specified strength concrete	<ul style="list-style-type: none"> a. Minimum permissible compressive or flexural strength. b. Slump or any other requirement for consistence or workability. c. Nominal maximum size of aggregate. d. Type of cement. 	<ul style="list-style-type: none"> a. Inspection of previous and current strength test results for concrete of the strength required. b. Inspection of and tests on materials c. Slump or test of other requirement for consistence or workability. d. Compressive or flexural strength. 	<ul style="list-style-type: none"> a. Type of aggregate (physical and chemical properties). b. Minimum cement content or maximum aggregate/ cement ratio. c. Maximum cement content or minimum aggregate/ cement ratio. d. Maximum water/ cement ratio. e. Proportion of fine aggregate in total aggregate. f. Full details of admixtures if any. 	<ul style="list-style-type: none"> a. Details of mix proportions by weight currently in use. b. Inspection of batching and mixing c. Determination of mix proportions by analysis of fresh concrete.

NOTE 1. Where the requirements for durability are felt not to be met by the minimum compressive or flexural strength necessary for the design stresses under classification 2, limits may be imposed by the use of column 4 b or d.

NOTE 2. In view of the difficulties that may be encountered, it is not advisable to specify definite mix proportions in addition to the minimum strengths without knowledge of the properties of the cement and aggregate to be used. However, by agreement between the purchaser and the supplier, the mix proportions for specified strength concrete can be limited by the use of column 4. Since nominal mixes in Jamaican National Building Codes are required to achieve a specified strength, these mixes can be regarded as specified strength concrete to be obtained from mixes having given mix proportions. These Jamaican National Building Codes can then be specified under classification 2 using the additional columns 4 and 5 with the same value for both the minimum cement content (and maximum and minimum aggregate/cement ratio) in column 4.

NOTE 3. Where the specification is in terms of nominal mixes, the cement content per m³ will vary according to the characteristics of the aggregate and whether the method used for converting volume proportions to batch weights is based on the loose or rodded densities.

Table 2 — Minimum rate of sampling concrete for assessing conformity

Production	Minimum rate of sampling	
	First 50 m ³ of production	Subsequent to first 50 m ³ of production ^a
Initial (until at least 36 individual 28-day test results are obtained)	3 samples	1 sample per 200 m ³ or 2 samples production week
Continuous ^b (when at least 36 test results are available)	N/A	1 sample per 400 m ³ or 1 sample per production week
^a Sampling shall be distributed throughout the production and should not be more than 1 sample within each 25 m ³ .		
^b Where the standard deviation of the last 15 test results exceeds 1,37 σ , the sampling rate shall be increased to that		

required for initial production for the next 36 test results.

Table 3 — Minimum rate of sampling input materials for assessing conformity

Constituent material	Inspection / test	Purpose	Minimum frequency
Cement	Inspection of delivery ticket prior to discharge	To ascertain if the consignment is as ordered and from the correct source	Each delivery
Aggregate	Inspection of delivery ticket prior to discharge	To ascertain if the consignment is as ordered and from the correct source	Each delivery
	Inspection of the aggregate prior to discharge	For comparison with normal appearance with respect to the grading, shape and impurities Where delivery is by belt conveyor, periodically depending on local or delivery conditions	Each delivery
	Test by sieve analysis according to 112 Part 1 JS	To assess compliance with standard or other agreed grading	First delivery from new source where this information is not available from the aggregate supplier In case of doubt following visual inspection Periodically depending on local or delivery conditions
	Water content of aggregates continuous measuring system, drying test or equivalent	To determine the dry mass of aggregate and the water to be added	If not continual, daily, depending on local and weather conditions more or less frequent tests may be required

13 Tolerances

The concrete shall be deemed to comply with the requirements of this standard if the result of tests where applicable lie within the following tolerances:

13.1 Slump

Slump (average of two tests): ± 25 mm or one-third of the slump specified whichever is the greater.

13.2 Analysis of fresh concrete.

Aggregate/cement ratio: +one-seventh of the specified value

Water/cement ration: +one-eighth of the specified values

Sand in total aggregate: +4%

These tolerances are laid down in the light of data at present available on the accuracy of the test for analysis of fresh concrete in view of the sampling errors involved. They are not to be used to check the accuracy of weighing, the tolerances for which are set out in 13.4.

Where the results are outside the limits given above for slump or analysis of fresh concrete, the concrete shall be liable to rejection.

13.3 Compressive or flexural strength

When concrete is supplied to classification 2, the test result shall be equal to or greater than the specified strength. No individual specimen strength shall be less than 85% of the specified strength. The action to be taken in the event of test results for compressive or flexural strength not meeting these requirements will vary greatly depending on how low the results are, how frequently such results occur and on the nature of the work for which the concrete is used.

13.4 Batching

Where the mix proportions are specified under classification 1, the batching shall be in accordance with the following tolerances:

- a) accuracy of weighing equipment: $\pm 1.5\%$ of capacity.
- b) accuracy of volumetric measuring equipment: $\pm 3\%$ of indicated quantity.
- c) accuracy by the operator:
 - 1) measurement of cement: $\pm 2\%$ of the weight of cement in batch.
 - 2) measurement of each aggregate: $\pm 2\%$ of the weight of each aggregate in batch.
 - 3) measurement of the amount of added water: $\pm 2\%$ of the total weight of free water in the batch.
 - 4) measurement of admixtures: 5% of the amount to be added.

NOTE 1. When concrete is supplied in accordance with a code of practice or a particular specification, the tolerances allowed therein may be applied.

NOTE 2. In order to achieve the requirements of 12.4 the strength of a number of results should always be considerably higher than the specified strength. Over a long period the margin between the average and specified strengths should be about twice the standard deviation of the test results for a particular class of concrete and this should be borne in mind when a purchaser inspects a supplier's results as allowed in column 3 of table 1.

14 Disposal of non-conforming concrete

Where concrete fails to conform to the requirements of this standard and, upon agreement for disposal of such concrete between the supplier and purchaser, the supplier shall dispose of such waste in a manner acceptable to the local authorities.

Standards Council

The Standards Council is the controlling body of the Bureau of Standards Jamaica and is responsible for the policy and general administration of the Bureau.

The Council is appointed by the Minister in the manner provided for in the Standards Act, 1969. Using its powers in the Standards Act, the Council appoints committees for specified purposes.

The Standards Act, 1969 sets out the duties of the Council and the steps to be followed for the formulation of a standard.

Preparation of standards documents

The following is an outline of the procedure which must be followed in the preparation of documents:

1. The preparation of standards documents is undertaken upon the Standard Council's authorisation. This may arise out of representation from national organisations or existing Bureau of Standards' Committees of Bureau staff. If the project is approved it is referred to the appropriate sectional committee or if none exists a new committee is formed, or the project is allotted to the Bureau's staff.
2. If necessary, when the final draft of a standard is ready, the Council authorises an approach to the Minister in order to obtain the formal concurrence of any other Minister who may be responsible for any area which the standard may affect.
3. The draft document is made available to the general public for comments. All interested parties, by means of a notice in the Press, are invited to comment. In addition, copies are forwarded to those known, interested in the subject.
4. The Committee considers all the comments received and recommends a final document to the Standards Council
5. The Standards Council recommends the document to the Minister for publication.
6. The Minister approves the recommendation of the Standards Council.
7. The declaration of the standard is gazetted and copies placed on sale.
8. On the recommendation of the Standards Council the Minister may declare a standard compulsory.
9. Amendments to and revisions of standards normally require the same procedure as is applied to the preparation of the original standard.

Overseas standards documents

The Bureau of Standards Jamaica maintains a reference library which includes the standards of many overseas standards organisations. These standards can be inspected upon request.

The Bureau can supply on demand copies of standards produced by some national standards bodies and is the agency for the sale of standards produced by the International Organization for Standardization (ISO) members.

Application to use the reference library and to purchase Jamaican and other standards documents should be addressed to: Bureau of Standards

Jamaica
6 Winchester Road
P.O. Box 113,
Kingston 10 JAMAICA, W. I.