



TANZANIA BUREAU OF STANDARDS

Document No. TBS/QMD/PCERT/P05 - G	Title: Specific Scheme for the Certification of Common Cement	Revision: 00	Page 1 of 12
Document Type: SCHEME	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

1. GENERAL

This Specific Scheme Rules for the Certification of Cement product is developed by the Tanzania Bureau of Standards under Product Certification Body (PCB) as scheme owner. This Specific scheme rules for the certification of Cement is operated under scheme type 5 of ISO/IEC 17067 in accordance with TZS 727-2:2018/EAS 18-2 Part 2-Conformity Evaluation. The scheme also shall comply with those clauses of ISO/IEC 17065, ISO/IEC 17020 and ISO/IEC 17025 which are relevant to this scheme. It includes the following functions and activities:

1.1. Selection, includes planning and preparation:

- 1.1.1. Receiving application for product certification,
- 1.1.2. Signing product certification agreement,
- 1.1.3. Specifying standard to respective client application,
- 1.1.4. Payment of certification charges,
- 1.1.5. Communicating the evaluation plan to client.

1.2. Determination, includes:

- 1.2.1. assessment of the production process and audit of other elements of the client's management system critical to managing product conformity through document review and onsite assessment;
- 1.2.2. inspection and testing of the product against TZS 727-1:2018/EAS 18-1.

1.3. Review, includes:

- 1.3.1. Examining the evidence of conformity obtained during the determination stage to establish whether the specified requirements have been met.

1.4. Decision on certification, includes:

- 1.4.1. Granting, maintaining, extending, reducing, suspending and withdrawing certification.

1.5. Licensing, includes:

- 1.5.1. mark of conformity,
- 1.5.2. publicity to applicants/licencees,
- 1.5.3. misuse of certification and marks of conformity.

1.6. Surveillance, includes:

- 1.6.1. inspection and testing of product samples at least two times from the factory and two times from an open market per year.
- 1.6.2. assessment of the production process.



TANZANIA BUREAU OF STANDARDS

Document No. TBS/QMD/PCERT/P05 - G	Title: Specific Scheme for the Certification of Common Cement	Revision: 00	Page 2 of 12
Document Type: SCHEME	Prepared by: PCM <i>[Signature]</i>	Approved by: DQM <i>[Signature]</i>	Effective Date: 2026-03-02

2. SCOPE

This specific scheme rules will cover the scope of cement types as stipulated in table 1 below.

Table 1. Scope of cements in the scheme

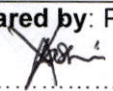
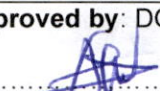
Technical Cluster	Product Category	Products		
Concrete, cement, lime, plaster	Ordinary Common Cements	5 Main Types	Description	Sub-types
		CEM I	Portland cement	n/a
		CEM II	Portland-composite cement,	Portland-slag cement
				Portland-silica fume cement
				Portland-pozzolana cement
				Portland-fly ash cement
				Portland-burnt shale cement
				Portland-limestone cement
				Portland-composite cement
		CEM III	Blast furnace cement	n/a
		CEM IV	Pozzolanic cement	n/a
		CEM V	Composite cement	n/a
	Sulphate Resisting Common Cements	3 Main Types	Description	Sub-types
		CEM I	Sulfate resisting Portland cement	n/a
		CEM III	Sulfate resisting blast furnace cement	n/a
		CEM IV	Sulfate resisting pozzolanic cement	n/a

3. PURPOSE OF SCHEME

The purpose of this scheme is to provide a set of rules which shall be followed in the certification of common cement. The product certification body (PCB) shall conduct its certification services in accordance with ISO/IEC 17065 and with the requirements of this scheme. The clients of the product certification body (PCB) shall comply with the requirements of this scheme and the product certification agreement (scheme of inspection and testing) (TBS/QMD/PCERT/01/F04-005). The clients shall also comply with any requirements that may be imposed by the relevant



TANZANIA BUREAU OF STANDARDS

Document No. TBS/QMD/PCERT/P05 - G	Title: Specific Scheme for the Certification of Common Cement	Revision: 00	Page 3 of 12
Document Type: SCHEME	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

product specification and any applicable country legal requirements.

4. PRE-CERTIFICATION ACTIVITIES

4.1. Legal Application Documents

Every client applying for product certification under this scheme shall be operating legally and shall have the following documents:

4.1.1. Tax Identification Number (TIN) Certificate,

4.1.2. Industrial Business Licence,

Other relevant documents are:

4.1.3. Organization structure including QC/QA section,

4.1.4. Sketch Map for premises location,

4.1.5. Production Process Flow Chat,

4.1.6. List of Raw Materials and source,

4.1.7. Label artwork,

4.1.8. List of outsourced processes,

4.1.9. Human and technical resources (e.g. Laboratories, inspection facilities etc.),

4.1.10. Contact personnel.

4.2. Verification

The TBS Product Certification Body (PCB) reserves the right to verify the authenticity of any documents of certification submitted by an applicant.

4.3. Compliance

The applicant shall ensure that meets the requirements of this product certification scheme before applying for product certification and ongoing basis.

4.4. Product Standard & Statutory and Regulatory requirements

The applicant shall be required to purchase the standard TZS 727-1:2018/EAS 18-1 and TZS 727-2:2018/EAS 18-2 from TBS library or by requesting through info@tbs.go.tz or toll-free number **0800110827**. Furthermore, the applicant shall be required to adhere to the Standard Act Cap 130 and its regulation.

4.5. Competence of Personnel

Personnel involved in quality verification in the client organizations shall be competent in their duties. TBS Product Certification Body (PCB) reserves the right to verify this competency in terms of checking relevant trainings undertaken and performance evaluations.

4.6. Quality System

The applicant shall meet at least the minimum arrangements stipulated below for quality management of its quality system if not ISO 9001:2015 certified:

- Control of non-conforming products,
- Control of monitoring and measuring devices,
- Control of documented information,
- Plan for internal quality checks (identification of points of inspection and testing in the production process),
- Records of internal quality checks,



TANZANIA BUREAU OF STANDARDS

Document No. TBS/QMD/PCERT/P05 - G	Title: Specific Scheme for the Certification of Common Cement	Revision: 00	Page 4 of 12
Document Type: SCHEME	Prepared by: PCM <i>[Signature]</i>	Approved by: DQM <i>[Signature]</i>	Effective Date: 2026-03-02

- f) Procedure for handling customer complaints and records,
- g) Schedule for maintenance of machines and records,
- h) Procedure for product traceability and recall.
- i) Procedure for factory production control.

4.7. Production Process Control Activities

The applicant shall develop and maintain a manufacturing documentation that describes the manufacturing process. The documentation shall also specify aspects tested at all test or inspection points including the final product inspection or testing before dispatch.

The following technical documentation shall be available at the manufacturer's facility for inspection:

- a) The client shall have a documented Quality Management System that is aligned to the requirements of ISO 9001 standard.

NOTE: Having a certificate of ISO 9001 is not a mandatory requirement; however, the structure of the client's QMS shall be in line with its requirements.

- b) The manufacturer's documentation and procedures for factory production control shall be described in Works' quality manual, which shall adequately describe, amongst other things:

- i) the quality aims and the organizational structure, responsibilities and powers of the management with regard to product quality and the means to monitor the achievement of the required product quality and the effective operation of the internal quality control.

- ii) The manufacturing and quality control techniques, processes and systematic actions that will be used

- iii) The inspections and tests that will be carried out before, during and after manufacture, and the frequency with which they will be carried out.

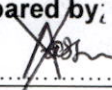
- iv) The Works' quality manual prepared by the manufacturer for each factory shall include an adequate system of documentation

- v) The Works' quality manual shall address and document the procedures operated to ensure that the manufactured cement conforms to the technical specifications. The manual may reference associated documents which provide further details of the auto-control testing of samples and the internal quality control. For the purpose of this scheme, the term Works' quality manual shall be considered to include these associated documents.

- c) Raw Material characteristics: type of raw material, name of source, typical composition.

- d) Raw material acceptability criteria.



Document No. TBS/QMD/PCERT/P05- G	Title: Specific scheme rules for the certification of cement	Revision: 00	Page 5 of 12
Document Type: PROCEDURE	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

- e) Process description (process steps with key operational parameters):
Proportioning, Raw Mixing, Kiln, Clinker, Addition of Gypsum and additives, finished products packaging and storage.
- f) Finished product characteristics that should be defined as often as possible with target, acceptable limits and rejection limits:
 - Physical properties, for example, fineness, heat of hydration,
 - Chemical properties: loss of ignition, insoluble residue, sulphate content, chloride content, pozzolanicity.
 - Mechanical Properties and durability: Early strength, Standard strength, durability.
 - Packaging parameters (e.g., torque standards, filling levels).
- g) Packaging description (primary, secondary, tertiary packaging)
- h) Shelf-life definition (e.g., Best Before Date definition)
- i) Batch definition and coding rules
- j) Specific handling, storage and transportation requirements
- k) Control plans (or at least reference to the applicable Control Plan)

4.8. Product Testing

Tests on final products shall be conducted for every batch produced. Parameters shall meet TZS 727-1:2018/EAS 18-1 Specification requirements. The manufacture's quality management documents shall stipulate the determined sampling frequency and rationale of the adopted testing frequency. It shall also stipulate when the tests are done, how often they are done, and responsible persons for testing.

4.9. Laboratory

Manufacturer of cement shall have a quality assurance laboratory to carry out factory production control testing to ensure that the cement produced comply with the requirements of the standard specification TZS 727-1:2018/EAS 18-1

A laboratory shall be maintained which shall be suitably equipped and staffed to carry out appropriate chemical, physical and mechanical tests, and durability tests where different tests given in the specification shall be carried out in accordance with the methods given in the specification. The standard testing procedures for all tests shall be documented and maintained.

The manufacturer shall prepare and maintain a calibration plan and records for the test equipment.

4.10. Test Records

The manufacturer shall maintain test records for the tests carried out to establish conformity.



Document No. TBS/QMD/PCERT/P05- G	Title: Specific scheme rules for the certification of cement	Revision: 00	Page 6 of 12
Document Type: PROCEDURE	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

4.11. Sampling and testing

The manufacturer shall operate a system of auto-control testing for each certified cement. This system shall be used to demonstrate conformity to the requirements in the clause entitled "Assessment and verification of constancy of performance – AVCP" in the relevant product specification standard. The properties to be tested, the testing methods, the minimum frequency of auto-control testing during routine testing and initial period testing and the conformity criteria shall be in accordance with the requirements given in the clause entitled "Assessment and verification of constancy of performance – AVCP" in the relevant product specification standard. For cements not being dispatched continuously, the frequency of testing and the point of sampling shall be as specified in the Works' quality manual.

4.12. Product Certification Fees

During product certification process, the client shall be required to pay factory assessment fee, testing charges and annual certification fee as stipulated in The Standards (Fees and Charges) Regulations, available in TBS website www.tbs.go.tz

4.13. Product Certification Process

4.13.1. Application for Product Certification

- a) The applicant shall follow process of obtaining a licence/certificate described in this scheme procedure below.
- b) The electronic application form available in tbs i-SQMT system shall be completed and submitted with the required information at the enquiry stage which include
 - i. Name of product(s) to be certified,
 - ii. Standard or normative document to be used for certification,
 - iii. General features of client including name and address of its physical location,
 - iv. Client activities (process and operations), human resources, technical resources, applied contractual control of outsourced process and operations (if any) and legal obligations detailed in 4.1 above.
- c) The product certification agreement (TBS/QMD/PCERT/01/F04-005) shall be completed after fulfillment of certification application requirements.
- d) The assigned inspector (s) shall come up with an assessment plan for factory assessment as required by the relevant product standard.

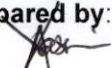
4.14. Evaluation

i. Factory Assessment

- a) The factory assessment shall be conducted at the client's premises. This assessment shall include assessment of premises, production process control activities as per section 4.7, verification of the client's product quality management system and examination of the client's documents as well as a compliance checking



TANZANIA BUREAU OF STANDARDS

Document No. TBS/QMD/PCERT/P05- G	Title: Specific scheme rules for the certification of cement	Revision: 00	Page 7 of 12
Document Type: PROCEDURE	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

of the client's products. The Product Certification Body shall inform the manufacturer in advance when an inspection is to be made.

- b) The inspector (s) shall be guided by the assessment plan (TBS/QMD/PCERT/01/F02-004) and respective factory assessment checklist in carrying out the assessment.
- c) Product samples shall be drawn from production line during the Initial Factory Audit and sent for complete testing for all requirements of the Tanzanian Standard TZS 727-1:2018/EAS 18-1. Cement samples shall be drawn from bulk containers such as silos or at suitable sampling points. No special equipment is required for sampling cements other than a suitable flexible container capable of collecting cement from the nozzle of a pump or sampling point at a silo or points of release from the factory or depot.

The number of samples taken shall be at least six per year for each certified cement dispatched continuously from the factory. For each visit, one sub-sample shall be retained by the manufacturer for testing and one shall be packed, sealed, clearly labeled and forwarded to the product certification body. The third sub-sample shall be sealed and retained by the manufacturer for a minimum period of three months. It is intended for use if: a) one of the first two sub-samples is lost, deteriorates or becomes contaminated.

- d) After assessment activities have been completed, the assigned inspector (s) shall put together all the reports/evidence gathered during the factory assessment and submit to the zonal/certification manager who shall assign certification officer for review.

ii. Testing

- a) The products shall be inspected and tested as per parameters laid down in the standard TZS 727-1:2018/EAS 18-1 as stipulated in table 2 below.

Table 2. Physical, Chemical, Mechanical and durability testing parameters

Property	Parameter	Specification	Final product Tolerance requirements	Frequency of testing
Mechanical properties	Standard Strength	TZS 727-1:2018/EAS 18-1	All should meet minimum requirement	To be determined by the manufacturer and justified in the quality management documents/
	Early Strength	TZS 727-1:2018/EAS 18-1	All Should meet minimum requirements	
Physical properties	Initial Setting time	TZS 727-1:2018/EAS 18-1	All Should meet minimum	Minimum should



TANZANIA BUREAU OF STANDARDS

Document No. TBS/QMD/PCERT/P05- G	Title: Specific scheme rules for the certification of cement	Revision: 00	Page 8 of 12
Document Type: PROCEDURE	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

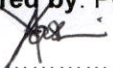
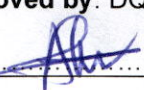
			requirements	meet TZS 727-1:2018/EAS 18-1 requirements
	Soundness	TZS 727-1:2018/EAS 18-1	All Should meet minimum requirements	
	Heat of hydration	TZS 727-1:2018/EAS 18-1	All Should meet minimum requirements	
Chemical Properties	Loss of ignition	TZS 727-1:2018/EAS 18-1	All Should meet minimum requirements	
	Insoluble residue	TZS 727-1:2018/EAS 18-1	All should meet minimum requirements	
	Sulphate content	TZS 727-1:2018/EAS 18-1	All should meet minimum requirements	
	Chloride Content	TZS 727-1:2018/EAS 18-1	All Should meet minimum requirements	
	Pozzolanicity	TZS 727-1:2018/EAS 18-1	All Should meet minimum requirements	
Durability Properties	Durability	TZS 727-1:2018/EAS 18-1	All Should meet minimum requirements	

- b) At the sole discretion of the Tanzania Bureau of Standards, some tests may be carried out by an independent Laboratory that meets the relevant requirements of ISO/IEC 17025.
- c) In any case where the PCB did not test all the parameters as per table 2 above, the PCB may use records of conformity assessment done by the client and previous compliance records (from PCB) to proceed with certification decision.

4.15. Review

- a) The certification officer who was not involved in evaluation process shall review evaluation results.
- b) Preparation of licence shall be done if evaluation results comply to the requirements.
- c) Client shall be notified to take corrective actions if evaluation results do not comply with requirements.



Document No. TBS/QMD/PCERT/P05- G	Title: Specific scheme rules for the certification of cement	Revision: 00	Page 9 of 12
Document Type: PROCEDURE	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

4.16. Certification Decision

All product certification decision process shall be initiated after all the certification conditions have been met. All clients are promptly informed through electronic system of the certification decisions made and corrective actions required. Upon receiving notification on corrective action taken by the client, the inspector is sent for verification of non-conformities that had been raised during factory assessment and/or drawing re-test sample(s) and the process proceeds from clause 4.9.2 to 4.9.3.

4.17. Certification Documentation

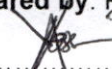
- The licence/certificate and its respective documents which are Facsimile (TBS/QMD/PCERT/01/F04-006) and Schedule A (TBS/QMD/PCERT/01/F04-003) convey all information regarding name and address of Product Certification Body (PCB), the date certification is granted, name and address of the client, type of the product, brand name of the product, expiry date of the licence/certificate, specification used and the obligations pertaining to TBS and the client.
- The authentic TBS licence/certificate the signature of the DG, the TBS seal and electronic mark.
- No formal product certification documentation is issued to the client unless, the decision to grant or extend the scope of certification has been made, certification requirements have been fulfilled and certification agreement has been completed/signed.
- The licence/certificate issued are valid for one year. Licence/certificate shall be renewed annually after re-assessment of the client's product conformity.

5. POST CERTIFICATION ACTIVITIES

5.1. Use of Licences, Certificates and Control of "tbs" quality mark

The Completed Product Certification Agreement (TBS/QMD/PCERT/01/F04-005) and the following conditions shall apply:

- The client may publicize the fact that certification has been granted and use the licence as evidence.
- The client shall not misrepresent the nature, status or scope of certification.
- The client shall strictly adhere to the use of the "tbs" mark of conformity as governed by Section 18 of The Standard Act, Cap 130, Regulation 3 of The Standards (Registration of Premises and Certification of Products) Regulations of 2021 as well as per licence document schedule A (TBS/QMD/PCERT/01/F04-003).
- The client shall mark the certified product with "tbs" standard mark as illustrated by facsimile document (TBS/QMD/PCERT/01/F04-006) for licence and for the certificate the words 'APPROVED BY TBS TPC No.' will be used.
- The conformity mark shall be applied to products manufactured at the premises where certification was conducted and which fall within the scope of certification as stipulated in the license/certificate.

 TANZANIA BUREAU OF STANDARDS			
Document No. TBS/QMD/PCERT/P05- G	Title: Specific scheme rules for the certification of cement	Revision: 00	Page 10 of 12
Document Type: PROCEDURE	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

5.2. Directory of Certified Products

The PCB has in place an electronic system (iSQMT) that serves as directory for certified products and the information is made public through the biannual magazine namely "Announcer" and TBS official website "www.tbs.go.tz".

5.3. Surveillance Activities

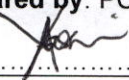
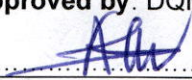
- a) Surveillance for both factory and open market is conducted at least two (2) factory surveillance assessment and (2) market surveillance assessment and should be conducted in the preceded certification cycle. Maintenance of licence/certificate include compliance with conditions of the product certification agreement (TBS/QMD/PCERT/01/F04-005), that provides for the obligations of the licensee and the product certification body (PCB).
- b) Samples for certified products are collected based on risk sampling whereby sample from the factory and openmarket are collected to ensure on-going fulfilment of product certification requirements.
- c) Should the scope include more than four brands/types/class/variant/ etc., the brands/types/class/variant/ etc., not sampled in the previous surveillance will be considered for the next surveillance.
- d) In the event that this is not possible, the licensees will be obliged to provide production status in order to support their continued certification.
- e) The factory surveillance visits may be announced or unannounced depending on the current situation but all market surveillance shall be unannounced. Where a visit shows non-compliance, the licence/certificate holder shall be required to institute corrective actions.
- f) The surveillance on open market shall also be conducted when there is a complaint over certified products. Whenever such assessment is conducted, the manufacturer shall be issued with a copy of the assessment report. Manufacturers shall be requested to disclose their markets to enable open market surveillance to be conducted. Where non-conformities are detected in the open market, the client shall be required to institute corrective actions which may involve product recall or replacement.

5.4. Non-Conforming Products

The licence/certificate holder shall have procedure for product traceability and recall which shall be used to trace and recall the product from the market when such product no longer fulfils product certification requirements.

5.5. Termination, Reduction, Suspension and Withdrawal of Certification

TBS Product Certification Body (PCB) reserves the right to terminate, reduce, suspend or withdraw certification under conditions stipulated in the product certification agreement (TBS/QMD/PCERT/01/F04-005).

 TANZANIA BUREAU OF STANDARDS			
Document No. TBS/QMD/PCERT/P05- G	Title: Specific scheme rules for the certification of cement	Revision: 00	Page 11 of 12
Document Type: PROCEDURE	Prepared by: PCM 	Approved by: DQM 	Effective Date: 2026-03-02

5.6. Re-Instatement of Suspended License

PCB may re-instate the suspended license upon request and compliance of the corrective action made.

5.7. Complaints and Appeals

- i. All complaints and appeals related to product certification shall be handled as per customer complaints and appeals handling procedure TBS/QMD/PCERT/P02 and the complainant is informed on the outcome of the investigation.
- ii. Upon receipt of a formal complaint or appeal, which is related to product certification, Product Certification Body (PCB) shall acknowledge receipt of the same through letters, email or electronic system (i-SQMT) and inform the client appropriately.
- iii. The decision in resolving the complaint or appeal is reviewed and approved by personnel who were not involved in the product certification activities related to the complaint or appeal.
- iv. Complainants are informed on the outcome of investigation through letters, email or electronic system (i-SQMT).
- v. Any client who is aggrieved of any Bureau's decision pertaining to product certification is allowed within fourteen days to appeal to the Minister responsible for Industry and Trade.

5.8. Access to Scheme

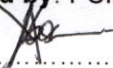
This product certification scheme shall be made available to all interested stakeholders on the TBS website www.tbs.go.tz.

Annex I:

FASCIMILE



TZS 727-1/ EAS 18-1

TANZANIA BUREAU OF STANDARDS			
	Document No. TBS/QMD/PCERT/P05- G	Title: Specific scheme rules for the certification of cement	Revision: 00
Document Type: PROCEDURE	Prepared by: PCM 	Approved by: DQM 	Page 12 of 12
			Effective Date: 2026-03-02

Annex II

SCHEDULE 'A' ADDITIONAL MARKING REQUIREMENT

The additional marking required is as follows:

The product granted with TBS licence shall be marked with 'tbs' standards mark while product granted with Tested Product Certificate shall bear the statement 'APPROVED BY TBS: TPC No...

In order to avoid possibilities of fraudulent use, the 'tbs' standards mark should be applied on the package in such a manner that it gets automatically destroyed when the consumer takes out the article from the package.

Proposed marking format ("tbs mark"/ "Approved by tbs") may be in the following way;

Printing on a label, printing on an anodized name-plate, printed stickers, adhesive tapes, transfix labels, etc., stenciling with paint, embossing or punching, casting where no other specified system exists, use of hologram, woven cloth labels in case of textile products like cotton vests, metal tags, and as a part of the test certificate if individual items cannot be marked, like steel products, emitters etc, printing on products, like PVC cables

Annex III: Normative standards

Normative standards that shall be covered by this scheme

Tanzania Standard Number	Title
TZS 727-1:2018/EAS 18-1	Composition, specification and conformity criteria for common cement
TZS 727-2:2018/EAS 18-2	Conformity evaluation
ISO/IEC 17067	Fundamentals of product certification and guidelines for product certification schemes