CERTIFICATE OF ACCREDITATION

BOTSWANA INSTITUTE FOR TECHNOLOGY RESEARCH AND INNOVATION BUILDING MATERIALS SCIENCE LABORATORY

Company Registration No. BW00000875106

Facility Accreditation Number: TEST-3 0005

is a SADCAS accredited Testing Laboratory provided that all SADCAS conditions are complied with

This certificate is valid as per the scope stated in the accompanying schedule of accreditation,

Annexure "A", bearing the above accreditation number for

CIVIL ENGINEERING

The facility is accredited in accordance with the recognized International Standard

ISO/IEC 17025:2017

The accreditation demonstrates technical competency for a defined scope and the operation of a laboratory quality management system

SADCAS is a subsidiarity organization of SADC. A memorandum of understanding between SADC and SADCAS serves as the basis for the recognition of SADCAS by SADC Member States as a multi-economy accreditation body

Eve C Gadzikwa
SADCAS Chief Executive Officer

Date of Renewal of Accreditation: 23 April 2024
Effective Date (Issue No: 1): 23 April 2024
Certificate Expires: 22 April 2029



ANNEXURE A

SCHEDULE OF ACCREDITATION

CIVIL ENGINEERING

Laboratory Accreditation Number: TEST-3 0005 (ISO/IEC 17025:2017)

Permanent Address of Laboratory

Botswana Institute for Technology Research and Innovation Building Materials Science Laboratory Maranyane House, Plot 50654

Machel Drive Gaborone Botswana

Technical Signatories

: Mr G Basimolodi (Density, Setting Time, Consistency, Soundness & Compressive Strength)

Mr T Bataatweng (Consistency, Setting Time, Soundness & Abrasion)
Ms O J Motlhabi (Transverse Strength, Density, Fineness Soundness)
Mr K R Monageng (Compressive Strength & Transverse Strength)
Mr O Ndeke (Compressive Strength Concrete & Soundness)

: Ms K Phiri

Mr O Amos (Compressive Strength)

Ms K Phiri (Abrasion)

Nominated Representative

Postal Address

Private Bag 0082 Gaborone Botswana

<u>Tel</u> : +267 360 7584

 Cell
 : +267 74 436 965

 Email
 : KPhiri@bitri.co.bw

Issue No: 01Date of Issue: 23 April 2024

Expiry Date : 22 April 2029

| MATERIALS/PRODUCTS TESTED | TYPES OF TESTS/PROPERTIES MEASURED, RANGE OF MEASUREMENT | STANDARD SPECIFICATIONS, EQUIPMENT/TECHNIQUES USED |
|---------------------------|--|---|
| Concrete | Compressive Strength (0 – 3000 kN) | BOS 27:2016 Clause 6.5 using Cube |
| Concrete Pavers | Abrasion | BS – EN 1338: 2003 |
| Concrete Roofing Tiles | Transverse Strength | BOS 24: 2009 |
| Burnt Clay Masonry Units | Soundness (Surface Pot outs) | BOS 28: 2016 |
| Hydraulic Cements | Compressive Strength | BS – EN 196-1: 2016 |
| | Soundness | BS – EN 196-3: 2016 |
| | Density | ASTM C 188-17 |
| | | |

Original date of accreditation: 23 April 2019



ANNEXURE A

Laboratory Accreditation No: TEST-3 0005 (ISO/IEC 17025:2017)

Issue No: 01

Date of Issue: 23 April 2024 Date of Expiry: 22 April 2029

| MATERIALS/PRODUCTS TESTED | TYPES OF TESTS/PROPERTIES MEASURED, RANGE OF MEASUREMENT | STANDARD SPECIFICATIONS, EQUIPMENT/TECHNIQUES USED |
|------------------------------|---|---|
| Hydraulic Cements | Fineness (By sieving) | BS – EN 196-6 2016 |
| | Consistency | BS – EN 196-3: 2016 |
| | Setting Time | BS – EN 196-3: 2016 |
| | | |

Original date of accreditation: 23 April 2019 Page 2 of 2

Pinkie J Malebe SADCAS Technical Manager