

## 10.6 Scope of Accreditation

Issue No: 02/ Issue Date: 25-04-2022  
File Manager: M. Al-Sowailem



ACCREDITED  
**TESTING**  
ISO/IEC 17025:2017  
No. ATL 0100

### Testing Laboratory Accreditation No. ATL 0100

is accredited by the GCC Accreditation Center (GAC) in accordance with the recognised International Standard ISO/IEC 17025:2017, "General requirements for the competence of testing and calibration laboratories"

<b>Materials Engineering Laboratories, Material Engineering Directorate, Ministry of Works, Municipalities Affairs and Urban Planning</b>	
Address.  P.O BOX 5, Building 1221, Road 4226, Block 342, Juffair, Manama, Kingdom of Bahrain	Contact Person: Mr Ahmed Yusuf Al Hadi Tel: +973 1781 2474; c/p +973 3997 8587 Fax: +973 1781 2419 Email: AhmedYAR@works.gov.bh Web Address: <a href="https://www.works.gov.bh/English">https://www.works.gov.bh/English</a>

#### **Locations where testing activities covered by the above Accreditation Standard are undertaken**

1- address: P.O BOX 5, Building 1221, Road 4226, Block 342, Juffair, Manama, Kingdom of Bahrain

#### **For the following scope:**

##### **Scope:**

#### **2. Construction Material Testing:**

Version: 3.7

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Date: 10<sup>th</sup> March 2022

Approved by: Brahim Houla

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- 2.12 Concrete
- 2.16 Aggregates
- 2.18 Soils
- 2.18.21 Chemical tests
- 7. Chemical Testing:**
- 7.66 Waters
- 7.66.99 Other waters

Scope details are as follows:

TEST CATEGORY	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS / PARAMETERS OR PROPERTIES, COMPONENTS, CHARACTERISTICS TESTED	SPECIFICATION, STANDARD TEST METHOD OR TECHNIQUE USED	Remarks
Construction material-Chemical Testing	Sand and Aggregate	Acid soluble Chloride	BS EN 812, Part 117:1988 Appendix C	As lab needs to follow ministry standards and ministry standards have obsolete versions of standard, obsolete
	Sand and Aggregate	Acid soluble Sulphate	BS EN 812, Part 118:1988 Clause 6	
	Soil	Acid soluble Chloride	BS 1377 Part 3:1990 Clause 7.3	
	Soil	Acid soluble Sulphate	BS 1377 Part 3:1990 Clause 5.5	
	Concrete	Chloride content	BS 1881, Part 124:1988 Clause 10.2	
	Concrete	Sulphate content	BS 1881, Part 124:1988 Clause 10.3	

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<b>Chemical Testing</b>	Mixing and Curing water	Sulphite (SO <sub>3</sub> <sup>2-</sup> )	BS 1377 Part 3: 1990 Clause 5.5	version of standard is followed by the lab and reflected in the scope
	Mixing and Curing water	Alkalinity	BS 1427:2009	
	Mixing and Curing water	Chloride(Mohr's method)	BS 6068-2.37:1990	
	Mixing and Curing water	Chloride	Inhouse Test method MED-BMCALS-WI-006(using Ion Selective electrode)	
<b>Construction Material Testing</b>	Concrete	Compression test of concrete cubes	BS EN 12390-3:2019	
	Concrete	Density determination of hardened concrete	BS EN 12390-7:2019	
	Concrete	Making and curing specimens for strength tests	BS EN 12390-2:2019	
	Concrete	Shape, dimensions and other requirements for specimens and moulds	BS EN 12390:1:2012	
	Masonry units & Segmental pavers	Concrete Paving blocks -Tensile splitting test	BS EN 1338 :2003 Corrigendum No. 1 Clause 5.3.3	
	Masonry units & Segmental pavers	Cconcrete kerb- Bending strength test of	BS EN 1340 :2003 Corrigendum No. 1 Clause 5.3.3	
	Masonry units & Segmental pavers	Determination of compressive strength masonry units	BS EN 772-1:2011+A1:2015	
	Masonry units & Segmental pavers	Determination of water absorption of aggregate concrete, autoclaved aerated concrete	BS EN 772-11:2011	

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	Masonry units & Segmental pavers	Determination of net and gross dry density of masonry units	BS EN 772-13:2000	
	Masonry units & Segmental pavers	Determination of dimensions-masonry units	BS EN 772-16:2011	
	Soil	Determination of Liquid limit	BS 1377 Part 2:1990 Clause 4.3	
	Soil	Determination of Plastic limit and Plasticity index	BS 1377 Part 2:1990 Clause 5.0	
	Soil	Determination of Linear Shrinkage of soil	BS 1377 Part 2:1990 Clause 6.5	
	Soil	Determination of Moisture Content of Soil	BS 1377 Part 2:1990 Clause 3.2	
	Aggregates	Particle size distribution test	BS 812 Part 103.1:1985	As lab needs to follow ministry standards and ministry standards have obsolete versions of standard, obsolete version of standard is followed by the lab and reflected in the scope
	Aggregates	Flakiness Index of Coarse aggregates	BS 812 Part 105.1:1989	
	Aggregates	Determination of relative density (Specific gravity)	ASTM C 127-15	

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		and absorption of coarse aggregate		
	Aggregates	Compaction fraction Test	BS 8301:1985 Appendix D	
	Aggregates	Standard Test Method for Clay Lumps and Friable Particles in Aggregates	ASTM C142/C142M-17	
	Bituminous materials	Marshall Stability and flow of Asphalt mixtures	ASTM D 6927-15	
	Bituminous materials	Standard test method for bulk specific gravity and density of non-absorptive compacted bituminous mixture	ASTM D 2726-21	

**Note:** the text in blue indicates the new scope OR update in the Edition of a test method in this issue of the scope of accreditation.

### Log of Suspended Scopes:

TEST CATEGORY	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS / PARAMETERS OR PROPERTIES, COMPONENTS, CHARACTERISTICS TESTED	SPECIFICATION, STANDARD TEST METHOD OR TECHNIQUE USED	Date Suspended	Date Reinstated

### Log of Withdrawn Scopes:

Version: 3.7

Date: 10<sup>th</sup> March 2022

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Chemical Testing	Mixing and Curing water	pH	BS ISO 10523:2008	14-03-2022
	Mixing and Curing water	TDS and Electrical Conductivity	BS 1427:2009	14-03-2022

**END**

Status of this accreditation can be checked in the GAC's website to confirm the validity of this accreditation - <https://www.gac.org.sa/en/>