



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY ME LIMITED LLC<sup>2</sup>

Building No. 2507

Way No. 6033, Block No. 260

Muscat, Oman

Robert McKenzie Phone: +968 2450 1870

Email: info.oman@element.com

CONSTRUCTION MATERIALS

Valid To: February 28, 2021

Certificate Number: 5669.05

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above as well as the two satellite locations listed below to perform the following tests on construction materials:

<b><u>Test:</u></b>	<b><u>Test Method(s):</u></b>
<b><u>Aggregates:</u></b>	
Particle Size Distribution - washing and sieving	BS 812-103.1
Particle Size Distribution - dry sieving	BS 812-103.1
Flakiness Index	BS 812-105.1; BS EN 933-3
Elongation Index	BS 812-105.2
Moisture Content - oven dry method	BS 812-109
Aggregate Crushing Value - particle size 10mm and greater (Forces from 30 to 3000kN)	BS 812-110
Aggregate Impact Value - dry	BS 812-112
Particle Size Distribution - sieving method	BS EN 933-1
Shape Index	BS EN 933-4
Resistance to Fragmentation by the Los Angeles Test Method	BS EN 1097-2
Loose Bulk Density and Voids	BS EN 1097-3
Water Content	BS EN 1097-5
Particle Density and Water Absorption using Pyknometer Method for Aggregates Particles between 4mm and 31.5mm	BS EN 1097-6

<b><u>Test:</u></b>	<b><u>Test Method(s):</u></b>
Particle density and Water Absorption using Pyknometer Method for Aggregates Particles between 0.063mm and 4mm	BS EN 1097-6
Clay Lumps and Friable Particles in Aggregates	ASTM C142/C142M
<b><u>Cement:</u></b>	
Elemental Analysis by X-ray Fluorescence - Fused Cast Bead Method	EMT-M-OP-CH-MCT-MD151 using X-ray Fluorescence Spectroscopy
<b><u>Concrete – Hardened:</u></b>	
Density	BS 1881-114; BS EN 12390-7
Compressive Strength of Cubes – including curing (Forces from 30 to 3000 kN)	BS 1881-116; BS 1881-111; BS EN 12390-2; BS EN 12390-3
Shape and Dimension of Specimens	BS EN 12390-1
Compressive Strength of Cores (Forces from 60 to 3000 kN)	BS EN 12504-1
<b><u>Soils for Civil Engineering Purposes:</u></b>	
Moisture Content - oven drying method	BS 1377-2
Particle Size Distribution - wet sieving	BS 1377-2
Particle Size Distribution - dry sieving	BS 1377-2
Dry Density/moisture Content Relationship (4.5 kg rammer)	BS 1377-4
CBR (California Bearing Ratio) of Laboratory-compacted soils (Forces from 2 to 40kN)	BS 1377-4
Swelling of Soaked CBR Specimen	BS 1377-4

ELEMENT MATERIALS TECHNOLOGY ME LIMITED LLC<sup>2</sup>  
Plot 23, Road 2, Sohar Industrial Estate  
Sohar, Oman

<b><u>Test:</u></b>	<b><u>Test Method(s):</u></b>
<b><u>Aggregates:</u></b>	
Particle Size Distribution - washing and sieving	BS 812-103.1
Particle Size Distribution - dry sieving	BS 812-103.1
Flakiness Index	BS 812-105.1; BS EN 933-1
Elongation Index	BS 812-105.2

<b><u>Test:</u></b>	<b><u>Test Method(s):</u></b>
Moisture content - oven dry method	BS 812-109
Methods of Reducing Laboratory Samples; - using a riffle box; - reduction by quartering; (to a test portion of a specified mass within a small tolerance)	BS EN 932-2
Particle Size Distribution - sieving method	BS EN 933-1
Shell Content	BS EN 933-7
Sand Equivalent Value	BS EN 933-8
Resistance to Fragmentation by the Los Angeles Test Method	BS EN 1097-2
Particle Density and Water Absorption using Wire Basket Method for Aggregates Particles between 31.5mm and 63mm	BS EN 1097-6
Particle Density and Water Absorption using Pyknometer Method for Aggregates Particles between 4mm and 31.5mm	BS EN 1097-6
Particle Density and Water Absorption using Pyknometer Method for Aggregates Particles between 0.063mm and 4mm	BS EN 1097-6
Magnesium Sulphate Test; Including Annex B size fractions; 20mm - 14mm; 10mm-6.3mm	BS EN 1367-2
Organic Impurities	ASTM C40/C40M
Soundness of Aggregate by use of Magnesium Sulfate	ASTM C88/C88M
Materials Finer than 75µm Sieve by Washing	ASTM C117
Lightweight Particles	ASTM C123/C123M
Specific Gravity and Absorption of Coarse Aggregate	ASTM C127
Specific Gravity and Absorption of Fine Aggregate	ASTM C128
Resistance to Degradation of Small-size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine	ASTM C131/C131M
Sieve Analysis of Fine and Coarse Aggregate	ASTM C136/C136M
Clay Lumps and Friable Particles in Aggregates	ASTM C142/C142M
Reducing Samples of Aggregate to Test Size	ASTM C702/C702M
Sand Equivalent Value	ASTM D2419
Flat and Elongated Particles	ASTM D4791
Percentage of Fractured Particles in Coarse Aggregate	ASTM D5821
Un-compacted Void Content	AASHTO T304

<b><u>Test:</u></b>	<b><u>Test Method(s):</u></b>
<b><u>Concrete – Hardened:</u></b>	
Density	BS 1881-114
Compressive Strength of Cubes – including curing (Forces from 30 to 3000 kN)	BS 1881-116; BS 1881-111
<b><u>Soils for Civil Engineering Purposes:</u></b>	
Density and Unit Weight of Soil in Place by the Sand-cone Method <sup>1</sup>	ASTM D1556/D1556M

ELEMENT MATERIALS TECHNOLOGY ME LIMITED LLC<sup>2</sup>  
Plot No. 414, Route 32  
Duqm, Oman

<b><u>Test:</u></b>	<b><u>Test Method(s):</u></b>
<b><u>Concrete – Hardened:</u></b>	
Density	BS 1881-114; BS EN 12390-7
Compressive Strength of Cubes – including curing (Forces from 30 to 3000 kN)	BS 1881-116; BS 1881-111; BS EN 12390-2; BS EN 12390-3
Shape and Dimension of Specimens	BS EN 12390-1
<b><u>Soils for Civil Engineering Purposes:</u></b>	
Density and Unit Weight of soil in Place by the Sand-cone Method	ASTM D1556/D1556M
Laboratory Determination of Water (content) of Soil and Rock by Mass	ASTM D2216

<sup>1</sup> This laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these tests.

<sup>2</sup> This accreditation covers testing/calibrations performed at all laboratory locations listed in this scope of accreditation



## Accredited Laboratory

A2LA has accredited

**ELEMENT MATERIALS TECHNOLOGY ME LIMITED LLC**

*Muscat, Oman*

for technical competence in the field of

### Construction Materials Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 12<sup>th</sup> day of November 2019.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 5669.05  
Valid to February 28, 2021

*For the tests to which this accreditation applies, please refer to the Construction Materials Scope of Accreditation.*