

#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017<sup>1</sup>

#### ELEMENT SAUDI ARABIA COMPANY LIMITED Quissim Street / 133 Road II Industrial City Dammam, Kingdom of Saudi Arabia Chona Fuerte Phone: +966 13812 7750 Email: info.saudiarabia@element.com

#### CONSTRUCTION MATERIALS

Valid To: February 28, 2027

Certificate Number: 5669.11

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 one satellite location listed below to perform the following tests:

Test(s):	Test Method(s):
Aggregates	
Soundness of Aggregates by Use of Sodium	ASTM C88 / C88M
Sulfate or Magnesium Sulfate	
Materials Finer than 75-µm (No. 200) Sieve in	ASTM C117
Mineral Aggregates by Washing	
Relative Density (Specific Gravity) and	ASTM C127(Withdrawn)
Absorption of Coarse Aggregate	
Relative Density (Specific Gravity) and	ASTM C128
Absorption of Fine Aggregate	
Resistance to Degradation of Small-Size	ASTM C131/C131M
Coarse Aggregate by Abrasion and Impact in	
the Los Angeles Machine	
Sieve Analysis of Fine and Coarse Aggregates	ASTM C136/C136M
Clay Lumps and Friable Particles in	ASTM C142/C142M
Aggregates	
Resistance to Degradation of Large-Size	ASTM C535
Coarse Aggregate by Abrasion and Impact in	
the Los Angles Machine	
Total Evaporable Moisture Content of	ASTM C566
Aggregate by Drying	
Reducing Samples of Aggregate to Testing	ASTM C702/C702M
Size	
Standard Practice for Sampling Aggregates	ASTM D/5 / D/5M <sup>2</sup>
Methods for Determination of Particle Shape-	BS 812-105.1
Flakiness index	
Methods for Determination of Particle Shape-	BS 812-105.2
Elongation index of coarse aggregate	D0.010.111
Methods for Determination of Ten Percent	BS 812-111
Fines Value (TFV)	

(A2LA Cert. No. 5669.11) 03/19/2024

An

Test(s):	Test Method(s):
Methods For Determination of Aggregate	BS 812-112
Impact Value (AIV)	
Determination Of Particle Shape- Flakiness	BS EN 933-3
Index	
Determination Of Shell Content- Percentage	BS EN 933-7
Of Shells In Coarse Aggregates	DO EN 1007 0
Determination Of Resistance to	BS EN 1097-2
Method	
Tests For Thermal and Weathering Properties	BS EN 1367-2
Of Aggregates – Magnesium Sulfate Test	
<u>Armourstone</u>	
Determination Of Particle Density and Water	BS EN 13383-2
Absorption	
Natural Stone	
Determination Of Uniaxial Compressive	BS EN 1926
Strength	
<b>Bituminous Materials</b>	
Theoretical Maximum Specific Gravity and	ASTM D2041/D2041M
Density of Asphalt Mixtures	
Quantitative Extraction of Asphalt Binder	ASTM D2172/D2172M
from Asphalt Mixtures	
Bulk Specific Gravity and Density of Non-	ASTM D2726/D2726M
Absorptive Compacted Asphalt Mixtures	
Thickness or Height of Compacted Asphalt	ASTM D3549/3549M
Mixture Specimens	
Mechanical Size Analysis of Extracted	ASTM D5444
Aggregate	
Preparation of Asphalt Mixture Specificans	AS1M D0920
Marshall Stability and Flow of Asphalt	4 STM D6927
Mixtures	
Concrete - Hardened	
Compressive Strength of Cylindrical Concrete	ASTM C39/C39M
Specimens	
Obtaining and Testing Drilled Cores and	ASTM C42/C42M <sup>2</sup>
Sawed Beams of Concrete	
Flexural Strength of Concrete (Using Simple	ASTM C78 / C78M
Beam with Third-Point Loading)	
Time of Setting of Concrete Mixtures by	ASTM C403/C403M
Penetration Resistance	
Mixing Rooms, Moist Cabinets, Moist	ASTM C511(Withdrawn)
Rooms, and Water Storage Tanks Used in the	
Testing of Hydraulic Cements and Concretes	
Capping Cylindrical Concrete Specimens	ASTM C617/C617M
Rebound Number of Hardened Concrete	ASTM C805/C805M

hu

Test(s):	Test Method(s):
Electrical Indication of Concrete's Ability to	ASTM C1202
Resist Chloride Ion Penetration	
Use of Unbonded Caps in Determination of	ASTM C1231 / C1231M
Compressive Strength of Hardened	ASTM CI2517 CI251W
Cylindrical Concrete Specimens	
Method Of Normal Curing of Test Specimens	BS 1881-111
(20°C Method)	
Determination Of Density of Hardened	BS 1881-114
Mathed For Determination of Community	DC 1991 116
Strength of Concrete Cubes	DS 1881-110
Method Of Determination of Water	BS 1881-122
Absorption	55 1001 122
Depth Of Penetration of Water Under	BS EN 12390-8
Pressure	
Water Permeability of Hardened Concrete	DIN 1048
Chloride Migration Coefficient from Non-	NT Build 492
Steady-State Migration Experiments	
Ultrasonic Pulse Velocity Through Concrete	ASTM C597; BS EN 12504-4
Half-Cell Potential Measurement	ASTM C876
Pull Out Test	BS 1881-207, BS EN 12504-3
Accelerated Chloride Penetration Test	NT Build 443
Concrete - Fresh	
Making and Curing Concrete Test Specimens in the Field	ASTM C31/C31M <sup>2</sup>
Density (Unit Weight), Yield, and Air	ASTM C138/C138M <sup>2</sup>
Content (Gravimetric) of Concrete	
Slump of Hydraulic-Cement Concrete	ASTM C143/C143M <sup>2</sup>
Length Change of Hardened Hydraulic-	ASTM C157/C157M
Cement Mortar and Concrete	
Sampling Freshly Mixed Concrete	ASTM C172/172M <sup>2</sup>
Making and Curing Concrete Test Specimens	ASTM C192/C192M
in the Laboratory	
Air Content of Freshly Mixed Concrete by the	ASTM C231/C231M <sup>2</sup>
Temperature of Erechly Mixed Hydroylic	$\Delta STM C 1064/C 1064M^2$
Cement Concrete	AS1M C1004/C1004M
Monitoring of Heat of Hydration of Concrete	FL-M-OP-CMT-AKB-MD042 <sup>2</sup>
(Temperature Monitoring)	
Paint and Coatings	
Dry Film Thickness	ASTM D1186, ASTM D6012
Pull Off Test	ASTM D4541, ASTM D7234
Mortar / Grout	
Compressive Strength of Hydraulic Cement	ASTM C109/C109M (Compression Only)
Mortars (Using 2-in. or [50 mm] Cube	
sponnons)	

hu

Test(s):	Test Method(s):
Soil	
Moisture–Density Relations of Soils Using a	AASHTO T180
in ) Dron	
Determining In-Place Density and Moisture	AASHTO T399 <sup>2</sup>
Content of Soil and Soil-Aggregate Using	
Complex Impedance Methodology	
Particle Size Analysis of Soils	ASTM D422(Withdrawn)
Laboratory Compaction Characteristics of	ASTM D698
Soil Using Standard Effort (12,400 ft-lbf/ft3	
(600 kN-m/m3))	
Specific Gravity of Soil Solids by Water	ASTM D854
Pycnometer	
Determining the Amount of Material Finer	ASTM D1140
than 75-µm (No. 200) Sieve in Soils by	
Washing	
Repetitive Static Plate Load Tests of Soils and	ASTM D1195/1195M <sup>2</sup>
Flexible Pavement Components, for Use in	
Evaluation and Design of Airport and	
Highway Pavements	$A STM D155(/D155(M^2))$
Density and Unit Weight of Soil in Place by	ASIM D1556/D1556M <sup>2</sup>
Sand-Cone Method	ASTM D1557
Soil Using Modified Effort (56,000 ft lbf/ft3	ASTM D1557
$(2.700 \text{ kN}-\text{m/m}^3))$	
California Bearing Ratio (CBR) of	ASTM D1883
Laboratory-Compacted Soils	
Laboratory Determination of Water	ASTM D2216
(Moisture) Content of Soil and Rock by Mass	
Sand Equivalent Value of Soils and Fine	ASTM D2419
Aggregate	
Classification of Soils for Engineering	ASTM D2487
Purposes (Unified Soil Classification System)	
Maximum Index Density and Unit Weight of	ASTM D4253
Soils Using a Vibratory Table	
Minimum Index Density and Unit Weight of	ASTM D4254
Soils and Calculation of Relative Density	
Liquid Limit, Plastic Limit, and Plasticity	ASTM D4318
Index of Soils	
Particle-Size Distribution (Gradation) of Soils	ASTM D6913/6913M
Using Sieve Analysis	
In-Place Density and Water Content of Soil	AS1M D0938-
and Soll-Aggregate by Nuclear Methods (Shallow Depth)	
Plate Load Test	BS 1377 0 <sup>2</sup> : ASTM D1106 <sup>2</sup>
	DS 15777, ASTWI D1170

<sup>1</sup> This accreditation covers testing performed at the main laboratory, as well as the satellite laboratories listed below.
<sup>2</sup> This laboratory performs field testing activities for these tests.

hu

#### ELEMENT SAUDI ARABIA COMPANY LIMITED Batching Plant Area, NEOM Community <sup>1</sup>, Sharma Tabuk, Kingdom of Saudi Arabia

Test(s):	Test Method(s):
Aggregate	
Resistance to Degradation of Small-Size	AASHTO T96
Coarse Aggregate by Abrasion and Impact in	
the Los Angeles Machine	
Bulk Density ("Unit Weight") and Voids in	ASTM C29/C29M
Aggregate	
Organic Impurities in Fine Aggregates for	ASTM C40/C40M
Concrete	
Soundness of Aggregates by Use of Sodium	ASTM C88/C88M
Sulfate or Magnesium Sulfate	
Materials Finer than 75-um (No. 200) Sieve in	ASTM C117
Mineral Aggregates by Washing	A GTM C 102/C102M
Lightweight Particles in Aggregate	ASTM C 123/C123M
Absorption of Coarse Aggregate	ASTM C127 (wunarawn)
Relative Density (Specific Gravity) and	ASTM C128
Absorption of Fine Aggregate	
Small-Size Coarse Aggregate by Abrasion	ASTM C131/C131M
and Impact in the Los Angeles Machine	
Sieve Analysis of Fine and Coarse Aggregates	ASTM C136/C136M
Clay Lumps and Friable Particles in	ASTM C142/C142M
Aggregates	
Resistance to Degradation of Large-Size	ASTM C535
Coarse Aggregate by Abrasion and Impact in	
the Los Angeles Machine	
I otal Evaporable Moisture Content of	ASIM C566
Aggregate by Drying	A STM C702/C702M
Size	AS1M C/02/C/02M
Standard Practice for Sampling Aggregates	$ASTM D75 / D75M^2$
Flat Particles Flongated Particles or Flat and	ASTM D4791
Elongated Particles in Coarse Aggregate	
Percentage of Fractured Particles in Coarse	ASTM D5821
Aggregate	
Methods for determination of particle shape-	BS 812-105.1
Flakiness index	
Methods for determination of particle shape-	BS 812-105.2
Elongation index of coarse aggregate	
Aggregate Crushing Value (ACV)	BS 812-110
Methods For Determination of Ten Percent	BS 812-111
Fines Value (IFV)	DCEN 022 2
Index	DOEN 700-0

hu

Test(s):	Test Method(s):
Determination of Particle Shape- Shape Index	BS EN 933-4
Determination of Shell Content – Percentage	BS EN 933-7
of Shells in Coarse Aggregates	
Drying Shrinkage	BS EN 1367-4
Particle Size Distribution	BS EN 933-1
Los Angeles Abrasion	BS EN 1097-2
Moisture Content	BS EN 1097-5
Relative Density & Water Absorption	BS EN 1097-6
Soundness	BS EN 1367-2
Bituminous Materials	
Sampling Asphalt Mixtures	4 STM D070/D070M
Theoretical Maximum Specific Gravity and	ASTM D2041/D2041M
Density of Asphalt Mixtures	AS1M D2041/D2041M
Quantitative Extraction of Asphalt Binder	ASTM D2172/D2172M
from Asphalt Mixtures	
Bulk Specific Gravity and Density of Non-	ASTM D2726/D2726M
Absorptive Compacted Asphalt Mixtures	
Application Rate and Residual Application	ASTM D2995
Rate of Bituminous Distributors	
Thickness or Height of Compacted Asphalt	ASTM D3549/D3549M
Mixture Specimens	
Mechanical Size Analysis of Extracted	ASTM D5444
Aggregate	
Asphalt Content of Asphalt Mixture by	ASTM D6307
Ignition Method	
Preparation of Asphalt Mixture Specimens	ASTM D6926
Using Marshall Apparatus	
Marshall Stability and Flow of Asphalt	ASTM D6927
Mixtures	
<u>Concrete - Hardened</u>	
Compressive Strength of Cylindrical Concrete	ASTM C39/C39M
Specimens	
Obtaining and Testing Drilled Cores and	ASTM C42/C42M
Sawed Beams of Concrete	
Flexural Strength of Concrete (Using Simple	ASTM C78/C78M
Beam with Third-Point Loading)	
Time of Setting of Concrete Mixtures by	ASTM C403/C403M
Penetration Resistance	
Mixing Rooms, Moist Cabinets, Moist	ASTM C511 (Withdrawn)
Rooms, and Water Storage Tanks Used in the	
Testing of Hydraulic Cements and Concretes	
Standard Test Method for Pulse Velocity	ASTM C597
I hrough Concrete	
Capping Cylindrical Concrete Specimens	ASTM C01//C01/M
Rebound Number of Hardened Concrete	ASTM C805/C805M
Electrical Indication of Concrete's Ability to	AS1M C1202
Kesist Chloride Ion Penetration	

hu

Test(s):	Test Method(s):
Use of Unbonded Caps in Determination of	ASTM C1231/C1231M
Compressive Strength of Hardened	
Cylindrical Concrete Specimens	
Method of normal curing of test specimens	BS 1881-111
(20°C method)	
Determination Of Density of Hardened	BS 1881-114
Concrete	
Method For Determination of Compressive	BS 1881-116
Strength Of Concrete Cubes	
Method Of Determination of Water	BS 1881-122
Absorption	ASTM C1585
Initial Surface Absorption of Concrete (ISAT)	BS 1881- 208
Testing Hardened Concrete- Compressive	BS EN 12390-3
Strength of Test Specimens	
Density of Hardened Concrete	BS EN 12390-7
Water Permeability of Hardened Concrete	DIN 1048
	BS EN 12390-8
Chloride Migration Coefficient from Non-	NT Build 492
Steady-State Migration Experiments	
Low Strain Pile Integrity Test	ASTM D5882
Porosity	ASTM C642
Tensile Strength	ASTM C496
Compressive strength of young sprayed	BS EN 14488-2
concrete	
Concrete - Fresh	
Making and Curing Concrete Test Specimens	ASTM C31/C31M
in the Field	
Density (Unit Weight), Yield, and Air	ASTM C138/C138M
Content (Gravimetric) of Concrete	
Slump of Hydraulic-Cement Concrete	ASTM C143/C143M
Sampling Freshly Mixed Concrete	ASTM C172/C172M
Air Content of Freshly Mixed Concrete by the	ASTM C231/C231M
Pressure Method	
Temperature of Freshly Mixed Hydraulic-	ASTM C1064/C1064M
Cement Concrete	
Testing Fresh Concrete-Sampling	BSEN 12350-1
Testing Fresh Concrete-Slump Test	BSEN 12350-2
Testing Fresh Concrete-Flow Table Test	BSEN 12350-5
Testing Fresh Concrete-Density	BSEN 12350-6
Air Content of Fresh Concrete	BSEN 12350-7
Monitoring of Heat of Hydration of Concrete	EL M OD CMT NEOM MD $^{2}$
(Temperature Monitoring)	EL-M-OP-CM1-NEOM-MD042 <sup>-</sup>
Mortar Flow	ASTM C1437
Concrete Flow	ASTM C1611
Bleeding of Concrete	ASTM C232
Soils	
Sieve Analysis of Fine and Coarse Aggregates	AASHTO T27

hu

Test(s):	Test Method(s):
Moisture–Density Relations of Soils Using a	AASHTO T 180
4.54-kg (10-lb) Rammer and a 457-mm (18-	
in.) Drop	
California Bearing Ratio (CBR)	AASHTO T193
Determining In-Place Density and Moisture	AASHTO T 399 <sup>2</sup>
Content of Soil and Soil-Aggregate Using	
Complex Impedance Methodology	
Particles Size Analysis of Soil	ASTM D422 (Withdrawn)
Specific Gravity of Soil Solid by Water	ASTM D854
Pycnometer	
Laboratory Compaction Characteristics of	ASTM D698
Soil Using Standard Effort	
Determining the Amount of Material Finer	ASTM D1140
than 75-µm (No. 200) Sieve in Soils by	
Washing	
Repetitive Static Plate Tests of Soils and	ASTM D1195
Flexible Pavement Components for Use in	
Evaluation and Design of Airport and	
Highway Pavements	
Density and Unit Weight of Soil in Place by	ASTM D1556/D1556M <sup>2</sup>
the Sand – Cone Method	
Laboratory Compaction Characteristics of	ASTM D1557
Soil Using Modified Effort	
CBR (California Bearing Ratio) of	ASTM D1883
Laboratory-Compacted Soils	
Laboratory Determination of Water	ASTM D2216
(Moisture) Content of Soil and Rock by Mass	
Sand Equivalent Value of Soils and Fine	ASTM D2419
Aggregate	
Liquid Limit, Plastic Limit, and Plasticity	ASTM D4318
Index of Soils	
Particle-Size Distribution (Gradation) of Soils	ASTM D6913/D6913M
Using Sieve Analysis	
In-Place Density and Water Content of Soil	ASTM D6938
and Soil Aggregate by Nuclear Methods	
(Shallow Depth)	
Determination of liquid limit – Cone	BS 1377-2
penetrometer. Determination of plastic limit	
and plasticity index	
Dista Land Test	$\Lambda$ STM D1106 <sup>2</sup>
Plate Load Test	ASTM D1190
Classification of Soils for Engineering	ASTM D2487, ASTM D3282
Purposes (Unified Soil Classification System)	
Natural Stone	
Preparing Rock Core as Cylindrical Test	ASTM D4543
Specimens and Verifying Conformance to	
Dimensional and Shape Tolerances	

hu

Test(s):	Test Method(s):
Compressive Strength and Elastic Moduli of	ASTM D7012
Intact Rock Core Specimens under Varying	
States of Stress and Temperatures	
Grout	
Compressive Strength of Hydraulic Cement	ASTM C109 (Compression Only)
Mortars (Using 2-in. or [50-mm] Cube	
Specimens)	
Flow of Grout for Preplaced-Aggregate	ASTM C939/C939M
Concrete (Flow Cone Method)	
Paint And Coatings	
Dry Film Thickness of Nonmagnetic Coatings	ASTM D1186 <sup>2</sup>
Applied to Ferrous Metals and Nonmagnetic,	
Nonconductive Coatings Applied to Non-	
Ferrous Metals	
Pull Off Test	ASTM D 454, ASTM D 7234
Dry Film Thickness	ASTM D6012

<sup>1</sup> This accreditation covers testing performed at the main laboratory, as well as the satellite laboratories listed below.

<sup>2</sup> This laboratory performs field testing activities for these tests.

(A2LA Cert. No. 5669.11) 03/19/2024

hu





# **Accredited Laboratory**

A2LA has accredited

## **ELEMENT SAUDI ARABIA COMPANY LIMITED**

Dammam, Saudi Arabia

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 19th day of March 2025.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 5669.11 Valid to February 28, 2027