



INTERNATIONAL
ACCREDITATION
SERVICE®

CERTIFICATE OF ACCREDITATION

This is to attest that

ADVANCED CONSTRUCTION TECHNOLOGY SERVICES – KSA

P.O. BOX 108558
JEDDAH 21351, SAUDI ARABIA

Testing Laboratory TL-591

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date August 21, 2024



International Accreditation Service
Issued under the authority of IAS management

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

ADVANCED CONSTRUCTION TECHNOLOGY SERVICES – KSA

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Accredited to ISO/IEC 17025:2017

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Aggregate	
AASHTO T19 / T19M	Standard method of test for bulk density (unit weight) and voids in aggregate
AASHTO T21	Organic Impurities in Fine Aggregates for Concrete
AASHTO T267	Determination of Organic Content in Soil By Loss on Ignition
ASTM C40	Organic Impurities in Fine Aggregates for Concrete
ASTM C88	Standard test method for soundness of aggregates by use of sodium sulfate or magnesium sulfate
ASTM C117	Standard test method for materials finer than 75-µm (no. 200) sieve in mineral aggregates by washing
ASTM C123/C123M	Standard test method for lightweight particles in aggregate
ASTM C127	Standard test method for relative density (specific gravity) and absorption of coarse aggregate
ASTM C128	Standard test method for relative density (specific gravity) and absorption of fine aggregate
ASTM C131/C131M	Standard test method for resistance to degradation of small-size coarse aggregate by abrasion and impact in the Los Angeles machine
ASTM C136/C136M	Standard test method for sieve analysis of fine and coarse aggregates
ASTM C142/C142M	Standard test method for clay lumps and friable particles in aggregates
ASTM C494	Analysis of Admixture (pH, Solid Contents, Specific Gravity and Chloride)
ASTM C535	Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C566	Standard test method for total evaporable moisture content of aggregate by drying
ASTM C702	Standard Practice for Reducing Samples of Aggregate to Testing Size

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ASTM D75	Standard Practice for Sampling Aggregates
ASTM D4791	Standard test method for flat particles, elongated particles, or flat and elongated particles in coarse aggregate
BS 812-105.1	Determination of particle shape flakiness index
BS 812-105.2	Elongation index of coarse aggregate
BS 812-110	Methods for determination of aggregate crushing value (ACV)
BS 812-111	Methods for determination of ten per cent fines value (TFV)
BS 812-112	Methods for determination of aggregate impact value (AIV)
BS 812-117	Testing aggregates - method for determination of water- soluble chloride salts
BS 812-118	Testing aggregates - methods for determination of sulphate content
BS 1377-3	Soils for civil engineering purposes: Determination of the carbonate content (Cl.6)
BS 1744-1	Water soluble chloride in Aggregate sec. 7
BS EN 933-7	Determination of shell content. Percentage of shells in coarse aggregates
BS EN 1367-4	Tests for thermal and weathering properties of aggregates – determination of drying shrinkage
BS EN 1774-5	Tests for chemical properties of aggregates: determination of acid soluble chloride salts
Asphalt	
AASHTO T48	Standard test method for flash and fire point by Cleveland open cup tester
AASHTO T315	Standard Test Method for Determining Rheological properties of asphalt binder using Dynamic shear Rheometer
ASTM D5	Standard Test Method for Penetration of Bituminous Materials
ASTM D36	Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)
ASTM D70	Standard test method for density of semi-solid asphalt using pycnometer
ASTM D92	Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester
ASTM D1188	Standard test method for bulk specific gravity and density of compacted bituminous mixtures using coated samples
ASTM D2041	Theoretical Maximum Specific Gravity of Bituminous paving mixture
ASTM D2172 / D2172M	Standard test methods for quantitative extraction of bitumen from bituminous paving mixtures

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ASTM D2726 / D2726M	Standard test method for bulk specific gravity and density of non-absorptive compacted bituminous mixtures
ASTM D2872	Standard Test Method for Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin-Film Oven Test)
ASTM D3203	Air Voids in Compacted Asphalt Mixtures
ASTM D3549	Determination of thickness/height of compacted asphalt core trimming on diamond saw
ASTM D4402	Standard Test Method for Viscosity Determination of Asphalt at Elevated Temperatures Using a Rotational Viscometer
ASTM D5361	Sampling Compacted Asphalt Mixtures
ASTM D6084	Standard Test Method for Elastic Recovery of Asphalt Materials by Ductilometer
ASTM D6521	Standard Practice for Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)
ASTM D6648	Standard Test Method for Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)
ASTM D6925	Standard Test Method for Preparation and Determination of the Relative Density of Asphalt Mix Specimens by Means of the Superpave Gyratory Compactor
ASTM D6926	Standard Practice for Preparation of Asphalt Mixture Specimens Using Marshall Apparatus
ASTM D6927	Standard test method for Marshall stability and flow of asphalt mixtures
ASTM D7175	Standard Test Method for Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer
Chemical	
ASTM C188	Standard Test Method for Density of Hydraulic Cement
ASTM C227	Standard test method for potential alkali reactivity of cement-aggregate combinations (mortar-bar method)
ASTM C289	Standard test method for potential alkali- silica reactivity of aggregates (chemical method)
ASTM C311 / C311M	Standard test methods for sampling and testing fly ash or natural pozzolans for use in Portland-cement concrete
Concrete	
AASHTO T318	Water Content of Freshly Mixed Concrete
ASTM C31/C31M	Standard practice for making and curing concrete test specimens in the field

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ASTM C39 / C39M	Standard test method for compressive strength of cylindrical concrete specimens
ASTM C42 / C42M	Standard test method for obtaining and testing drilled cores and sawed beams of concrete
ASTM C78	Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
ASTM C138	Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C140	Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units
ASTM C143/C143M	Standard test method for slump of hydraulic-cement concrete
ASTM C157	Shrinkage Test of Concrete
ASTM C172/C172M	Standard practice for sampling freshly mixed concrete
ASTM C187	Standard test method for amount of water required for normal consistency of hydraulic cement paste
ASTM C191	Standard test methods for time of setting of hydraulic cement by Vicat needle
ASTM C204	Standard test methods for fineness of hydraulic cement by air-permeability apparatus
ASTM C231/C231M	Standard test method for air content of freshly mixed concrete by the pressure method
ASTM C232	Standard Test Method for Bleeding of Concrete
ASTM C403	Standard Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance
ASTM C469	Standard Test Method for Static Modulus of Elasticity and Poisson's Ratio of Concrete in Compression
ASTM C494 / C494M	Standard specification for chemical admixtures for concrete
ASTM C495	Standard Test Method for Compressive Strength of Lightweight Insulating Concrete
ASTM C496	Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens
ASTM C617	Standard Practice for Capping Cylindrical Concrete Specimens
ASTM C618	Standard specification for coal fly ash and raw or calcined natural pozzolan for use in concrete
ASTM C642	Density, Absorption, and Voids in Hardened Concrete

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ASTM C805/C805M	Standard test method for rebound number of hardened concrete
ASTM C939/C939M	Standard test method for flow of grout for preplaced- aggregate concrete (flow cone method)
ASTM C942	Standard test method for compressive strength of grouts for preplaced- aggregate concrete in the laboratory
ASTM C1064 / C1064M	Standard test method for temperature of freshly mixed hydraulic-cement concrete
ASTM C1090 / C1090M	Standard test method for measuring changes in height of cylindrical specimens of hydraulic-cement grout
ASTM C1202	Standard test method for electrical indication of concrete's ability to resist chloride ion penetration
ASTM C1240	Standard specification for silica fume used in cementitious mixtures
ASTM C1610	Standard Test Method for Static Segregation of Self-Consolidating Concrete Using Column Technique
ASTM C1611	Slump Flow of Self Consolidating Concrete
ASTM C1621	Standard Test Method for Passing Ability of Self-Consolidating Concrete by J- Ring
ASTM D7234	Standard Test Method for Pull-Off Strength of Coatings on Concrete Using Portable Pull-Off Adhesion Testers
BS 1881-122	Testing concrete - method for determination of water absorption
BS 1881-208	Testing concrete - recommendations for the determination of the initial surface absorption of concrete
BS EN 12350-1	Testing fresh concrete- sampling and common apparatus
BS EN 12350-2	Testing fresh concrete - Slump test
BS EN 12350-6	Testing fresh concrete - Density
BS EN 12350-7	Testing fresh concrete - Air content. Pressure methods
BS EN 12390-2	Testing hardened concrete - making and curing specimens for strength tests
BS EN 12390-3	Testing hardened concrete - Compressive strength of test specimens
BS EN 12390-5	Testing hardened concrete - Flexural strength of test specimens
BS EN 12390-7	Testing hardened concrete - Density of hardened concrete
BS EN 12390-8	Testing hardened concrete - Depth of penetration of water under pressure
BS EN 12504-1	Testing concrete in structures - cored specimens - taking, examining and testing in compression

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Geotech	
ASTM D1143	Standard Test Methods for Deep Foundation Elements Under Static Axial Compressive Load
ASTM D4945	Standard Test Method for High-Strain Dynamic Testing of Deep Foundations
ASTM D5334	Standard Test Method for Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe Procedure
ASTM D5882	Standard Test Method for Low Strain Impact Integrity Testing of Deep Foundations
ASTM D5778	Standard Test Method for Electronic Friction Cone and Piezocone Penetration Testing of Soils
ASTM D5882	Standard Test Method for Low Strain Impact Integrity Testing of Deep Foundations
ASTM D6760	Standard Test Method for Integrity Testing of Concrete Deep Foundations by Ultrasonic Crosshole Testing
ASTM G57	Standard Test Method for Measurement of Soil Resistivity Using the Wenner Four-Electrode Method
BS 1377-9: C3.3	Methods for test for soils for civil engineering purposes. In-situ tests (SPT)
Masonry	
ASTM C97	Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone
ASTM C109/C109M	Standard test method for compressive strength of hydraulic cement mortars (using 2-in. or [50-mm] cube specimens)
Mortar, Grout and Concrete Repair Material	
ASTM D4541	Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
DIN 1048	Water Penetration
Rock	
ASTM D5731	Standard test method for determination of the point load strength index of rock and application to rock strength classifications
ASTM D7012	Standard test methods for compressive strength and elastic moduli of intact rock core specimens under varying states of stress and temperatures
Soil	
ASTM C535	Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

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ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft ³ (600 kN-m/m ³))
ASTM D854	Standard test methods for specific gravity of soil solids by water pycnometer
ASTM D1140	Standard Test Methods for Determining the Amount of Material Finer than 75- μ m (No. 200) Sieve in Soils by Washing
ASTM D1196	Standard Test Method for In Situ Compressive Stress Within Solid Unit Masonry Estimated Using Flatjack Measurements
ASTM D1556	Standard test method for density and in place by the sand-cone method
ASTM D1557	Standard test methods for laboratory compaction characteristics of soil using modified effort (56,000 ft-lbf/ ft ³ (2,700 kN-m/m ³))
ASTM D1883	Standard test method for California bearing ratio (CBR) of laboratory-compacted soils
ASTM D2216	Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D2419	Standard test method for sand equivalent value of soils and fine aggregate
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D2974	Standard Test Methods for Determining the Water (Moisture) Content, Ash Content, and Organic Material of Peat and Other Organic Soils
ASTM D4318	Standard test methods for liquid limit, plastic limit, and plasticity index of soils
ASTM D4718	Standard Practice for Correction of Unit Weight and Water Content for Soils Containing Oversize Particles
ASTM D4972	Standard Test Methods for pH of Soils
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6913	Sieve Analysis Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
ASTM D6938	Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
ASTM D7263	Standard Test Methods for Laboratory Determination of Density and Unit Weight of Soil Specimens
ASTM D7928	Standard Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis
BS 1377-2	Methods of test for soils for civil engineering purposes. Classification tests and determination of geotechnical properties

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BS 1377-4	Methods of test for Soils for civil engineering purposes - Part 4: Compaction-related tests
BS EN 933-1	Tests for geometrical properties of aggregates Part 1: Determination of particle size distribution — Sieving
Steel	
ASTM A370	Standard test methods and definitions for mechanical testing of steel products (tensile and bend test only)
ASTM E415	Standard Test Method for Analysis of Carbon and Low-Alloy Steel by Spark Atomic Emission Spectrometry
Water	
AASHTO T26	Standard Method of Test for Quality of Water to Be Used in Concrete
ASTM D512	Standard Test Methods for Chloride Ion in Water, Method B: Silver Nitrate Titration
ASTM D516	Standard Test Method for Sulfate Ion in Water
ASTM D1293	Standard Method of Test for pH of Industrial Water and Industrial Waste Water

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